ÚSTAV POLYMÉROV SAV, BRATISLAVA

SPRÁVA O ČINNOSTI ZA ROK 2015

Bratislava, január 2016

Obsah Správy o činnosti Ústavu polymérov SAV za rok 2015

1. Základné údaje o organizácii

1.1. Kontaktné údaje

Názov: Ústav polymérov SAV
Riaditeľ: Ing. Igor Lacík, DrSc.
1. zástupca riaditeľa: Mgr. Jaroslav Mosnáček, PhD.
2. zástupca riaditeľa: Ing. Zuzana Hloušková
Vedecký tajomník: Ing. Mária Omastová, DrSc.
Predseda vedeckej rady: RNDr. Peter Cifra, DrSc.
Člen snemu SAV: neuvedený
Adresa: Dúbravská cesta 9, 845 41 Bratislava 45

http://www.polymer.sav.sk

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Fax: 02/ 5477 5923
E-mail: upolsekr@savba.sk
Názvy a adresy detašovaných pracovísk:

- **Detašované pracovisko Ústavu polymérov SAV**
  ul. Gen. Svobodu 1069/4, 958 01 Partizánske

Vedúci detašovaných pracovísk:

- **Detašované pracovisko Ústavu polymérov SAV**
  Prof. Ing. Ivan Chodák, DrSc.

Typ organizácie: Príspevková od roku 1993

1.2. Údaje o zamestnancoch

Tabuľka 1a Počet a štruktúra zamestnancov

Štruktúra zamestnancov	K	K		K do 35 rokov		F	P	T
		M	Ž	M	Ž			
Celkový počet zamestnancov	83	29	54	5	23	80	58,8	43,58
Vedeckí pracovníci	42	20	22	0	13	39	32,26	32,26
Odborní pracovníci VŠ	26	6	20	5	10	26	12,52	11,32
Odborní pracovníci ÚS	11	1	10	0	0	11	11,22	0
Ostatní pracovníci	4	2	2	0	0	4	2,8	0

K – kmeňový stav zamestnancov v pracovnom pomere k 31.12.2015 (uvádzať zamestnancov v pracovnom pomere, vrátane riadnej materskej dovolenky, zamestnancov pôsobiacich v zahraničí, v štátnych funkciách, členov Predsedníctva SAV, zamestnancov pôsobiacich v zastupiteľských zboroch)
F – fyzický stav zamestnancov k 31.12.2015 (bez riadnej materskej dovolenky, zamestnancov pôsobiacich v zahraničí v štátnych funkciách, členov Predsedníctva SAV, zamestnancov pôsobiacich v zastupiteľských zboroch)
P – celoročný priemerný prepočítaný počet zamestnancov
T – celoročný priemerný prepočítaný počet riešiteľov projektov
M, Ž – muži, ženy

Tabuľka 1b Štruktúra vedeckých pracovníkov (kmeňový stav k 31.12.2015)

Rodová skladba	Pracovníci s hodnosťou				Vedeckí pracovníci v stupňoch		
	DrSc.	CSc./PhD.	prof.	doc.	I.	IIa.	IIb.
Muži	7	13	2	0	7	10	3
Ženy	1	21	0	0	1	2	19

Tabuľka 1c Štruktúra pracovníkov podľa veku a rodu, ktorí sú riešiteľmi projektov

Veková štruktúra (roky)	< 31	31-35	36-40	41-45	46-50	51-55	56-60	61-65	> 65
Muži	5	0	4	5	1	1	1	4	3
Ženy	15	8	5	0	1	2	5	3	0

Tabuľka 1d Priemerný vek zamestnancov organizácie k 31.12.2015

	Kmeňoví zamestnanci	Vedeckí pracovníci	Riešitelia projektov
Muži	47,5	51,1	46,2
Ženy	41,4	35,5	38,6
Spolu	43,6	42,9	41,5

1.3. Iné dôležité informácie k základným údajom o organizácii a zmeny za posledné obdobie (v zameraní, v organizačnej štruktúre a pod.)

V roku 2015 sa skončilo funkčné obdobie vedúceho Oddelenia syntézy a charakterizácie polymérov Štefana Chmelu, DrSc, ktorý dosiahol vek 65 a preto nemohol naďalej zastávať túto funkciu. Na základe konkurzu, ktorý uskutočnil v máji 2015, bol od 1.06.2015 vymenovaný za vedúceho oddelenia Mgr. Jaroslav Mosnáček, PhD, ktorý bol jediným kandidátom.

V roku 2015 sa Ústav polymérov SAV opäť podieľal na príprave niekoľkých projektov v rámci Horizont 2020, avšak zatiaľ žiaden z nich nebol podporený pre financovanie. Tieto projekty všeobecne predstavujú kvalitatívny rast pre zúčastnených vedeckých pracovníkov a doktorandov a tiež prispievajú k ekonomickej situácii ústavu. Preto i pre rok 2016 podávanie projektov v rámci nového programu EU pre podporu vedy a výskumu Horizont 2020 bude predstavovať jednu z priorít pre budúci rast ústavu. Okrem toho bolo v novembri podaných celkovo 24 APVV projektov (z toho v 9 je ÚPo nositeľom projektu a v 15 sa zmluvne podieľa na riešení projektu), ktoré budú vyhodnotené v prvej polovici roku 2016. Vedeckí pracovníci ÚPo riešili dva projekty spolupráce SAV s Tureckom, resp. Taiwanom, a podieľali sa na príprave troch M-ERA.NET projektov.

V rámci snahy o zefektívnenia vedeckej ale i vzdelávacej spolupráce so slovenskými univerzitami sa uskutočnila prezentácia nových trendov v polymérnej chémii a syntetických tém riešených na ÚPo SAV študentom chémie na PriF UK v období rozhodovania sa o výbere témy ich bakalárskej práce. Na základe tejto prezentácie sa podarilo získať na ústav jednu študentku na bakalársku prácu a dve študentky ako vedeckú pomocnú silu. Do budúcnosti je potrebné zvážiť akým spôsobom aktívnejšie a efektívnejšie prezentovať ÚPo SAV medzi študentami vysokých škôl a zefektívniť získavanie kvalitných doktorandov z ich radov.

Riaditeľ ÚPo SAV inicioval vznik Externej rady riaditeľa ako ďalšej aktívnej zložky štruktúry ústavu s cieľom kontinuálneho externého pohľadu na činnosť ústavu. Členstvo v tejto rade prijali Prof. Dr. Christos N. Likos z University of Vienna, Dr. František Rypáček z ÚMCh AV ČR, v.v.i. Praha, Prof. György Marosi z University of Technology and Economics Budapešť, Prof. Robert Liska z Vienna University of Technology a Dr. Jozef Krištofčák zo Saneca Pharmaceuticals a.s.

Hlohovec. Počas zasadnutia Externej rady na ÚPo SAV jej členovia ocenili pozíciu, v akej sa ústav nachádza, a poskytli odporučenia pre ústav, ktoré je možné zhrnúť do nasledovných bodov: (i) znížiť prílišnú projektovú diverzitu a početnosť, (ii) definovať kmeňové témy a excelentnosť, (iii) zmeniť personálnu štruktúru (malý počet doktorandov a dočasných post-doktorandov), (iv) zvýšiť zviditeľnenie ústavu cez kvalitné projekty, kvalitné publikácie, prezentácie na kvalitných konferenciách, organizáciu konferencií, spoluprácu s priemyslom a (v) mať reálne ambície.

Na podnet P SAV bola zadefinovaná misia ÚPo SAV:

- Misiou Ústavu polymérov SAV je excelentný výskum v oblasti syntetických polymérov, prírodných polymérov a polymérnych materiálov, ktorý je zameraný na prepojenie základného a aplikovaného výskumu v aktuálnych témach polymérnej chémie a prispieva v globálnom meradle k poznatkom v tejto oblasti.
- Ústav je výskumným a vzdelávacím centrom, ktorý paralelne s výskumnou činnosťou pôsobí ako externá vzdelávacia inštitúcia v oblasti makromolekulovej a fyzikálnej chémie ako aj v ďalších relevantných vedeckých odboroch.
- Ústav zároveň poskytuje špecializovaný odborný servis zahrňujúci odborné konzultácie, infraštruktúru a inovatívne riešenia pre akademických, univerzitných a priemyselných partnerov v národnom aj medzinárodnom prostredí.
- V národnom prostredí ústav predstavuje významný pilier výskumu v oblasti polymérnej chémie a zabezpečuje informovanosť verejnosti o výskumných aktivitách, získaných výsledkoch a aplikáciách.

2. Vedecká činnosť

2.1. Domáce projekty

Tabuľka 2a Počet domácich projektov riešených v roku 2015

ŠTRUKTÚRA PROJEKTOV	Počet projektov		Čerpané financie za rok 2015 (v €)		
			A		B
	A	B	spolu	pre organi-záciu	
1. Vedecké projekty, ktoré boli r. 2015 financované VEGA	18	0	109851	-	-
2. Projekty, ktoré boli r. 2015 financované APVV	6	10	139112	-	98711
3. Projekty OP ŠF	0	1	-	-	32054
4. Projekty centier excelentnosti SAV	0	1	-	-	-
5. Iné projekty (FM EHP, ŠPVV, Vedecko-technické projekty, ESF, na objednávku rezortov a pod.)	0	1	-	-	39070

A - organizácia je nositeľom projektu *B - organizácia sa zmluvne podieľa na riešení projektu*

Tabuľka 2b Počet návrhov domácich projektov podaných v roku 2015

Štruktúra projektov	Miesto podania	Organizácia je nositeľom projektu	Organizácia sa zmluvne podieľa na riešení projektu
1. Účasť na nových výzvach APVV r. 2015	-	**9**	**15**
2. Projekty výziev OP ŠF podané r. 2015	Bratislava		
	Regióny		

2.2. Medzinárodné projekty

2.2.1. Medzinárodné projekty riešené v roku 2015

Tabuľka 2c Počet medzinárodných projektov riešených v roku 2015

ŠTRUKTÚRA PROJEKTOV	Počet projektov		Čerpané financie za rok 2015 (v €)		
	A	B	A		B
			spolu	pre organi-záciu	
1. Projekty 7. Rámcového programu EÚ	0	1	-	-	-
2. Multilaterálne projekty v rámci vedeckých programov COST, ERANET, INTAS, EUREKA, ESPRIT, PHARE, NATO, UNESCO, CERN, IAEA, ESF (European Science Foundation), ERDF a iné	2	8	8750	-	24960
3. Projekty v rámci medzivládnych dohôd o vedecko-technickej spolupráci	0	0	-	-	-
4. Bilaterálne projekty	13	2	4000	2350	17940
5. Podpora medzinárodnej spolupráce z národných zdrojov (MVTS, APVV,..)	3	7	31080	-	21531
6. Iné projekty financované alebo spolu-financované zo zahraničných zdrojov	3	2	76591	-	106327

A - organizácia je nositeľom projektu *B - organizácia sa zmluvne podieľa na riešení projektu*

2.2.2. Medzinárodné projekty v 7. RP EÚ a Horizont 2020 podané v roku 2015

Tabuľka 2d Počet projektov 7. RP EÚ a Horizont 2020 v roku 2015

	A	B
Počet podaných projektov Horizont 2020	0	6

A - organizácia je nositeľom projektu *B - organizácia sa zmluvne podieľa na riešení projektu*

2.2.3. Zámery na čerpanie štrukturálnych fondov EÚ v ďalších výzvach

1. Ústav polymérov SAV je zapojený do projektu SAV 664337 CEMEA Building-up Centre of Excellence/ for advanced materials application, starting date 01/06/2015, call H2020-WIDESPREAD-2014-1 (zapojené sú tri oddelenia: OPVB, OSChP, OKM)
2. Oddelenie pre výskum biomateriálov je zapojené do prípravy Dlhodobého strategického výskumného programu pre konkrétnu oblasť špecializácie z pohľadu dostupných vedeckých a výskumných kapacít RIS3 SK, oblasť Biotechnológia a biomedicína.

2.3. Najvýznamnejšie výsledky vedeckej práce

2.3.1. Základný výskum

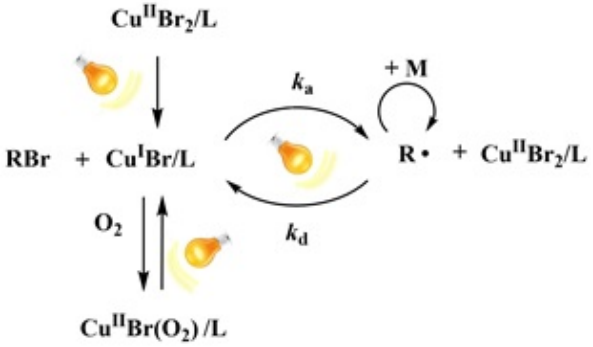
1) Názov: **Fotochemicky indukovaná radikálová polymerizácia s prenosom atómu (fotoATRP) v prítomnosti limitovaného množstva vzduchu.**
Photochemically induced atom transfer radical polymerization (photoATRP) in the presence of limited amount of air.

Ústav polymérov SAV

Mená riešiteľov J. Mosnáček, K. Borská, A. Eckstein, D. Moravčíková

Projekty v rámci ktorých sa výsledok dosiahol: CE FUN-MAT

V hodnotenom období sa optimalizovali podmienky fotochemicky indukovanej ATRP (met)akrylátov v prítomnosti vzduchu. Ukázalo sa, že fotoATRP je možné uskutočniť i za prítomnosti malého množstva vzduchu, keďže CuBr/L katalyzátor, ktorý sa v prítomnosti kyslíka oxiduje na CuBr(1/2O_2) je možné spätne fotochemicky redukovať na CuBr/L, pričom dochádza k postupnému spotrebovaniu kyslíka v systéme. Následná polymerizácia potom prebieha bez výrazného narušenia kontroly nad molekulovými charakteristikami polyméru alebo živosti koncov polymérneho reťazca. Polymerizácia nabieha po indukčnej perióde, počas ktorej sa kyslík v systéme spotrebúva. Indukčnú periódu je možné výrazne skrátiť pridaním nadbytku ligandu L, na báze terciárneho amínu, ktorý sa pravdepodobne zúčastňuje fotochemickej redukcie zoxidovaného katalyzátora v systéme. Tento výsledok má veľký priemyselný význam, keďže nie je potrebné uskutočňovať časovo ale i finančne náročné odvzdušňovanie polymerizačného systému.



Navrhnutý mechanizmus pre fotochemicky indukovanú radikálovú polymerizáciu s prenosom atómu (fotoATRP)v prítomnosti kyslíka

Výstupy:

1. MOSNÁČEK, Jaroslav - ECKSTEIN-ANDICSOVÁ, Anita - BORSKÁ, Katarína. Ligand effect and oxygen tolerance studies in photochemically induced copper mediated reversible deactivation radical polymerization of methyl methacrylate in dimethyl sulfoxide. In *Polymer Chemistry*, 2015, vol. 6, p. 2523-2530. (5.520 - IF2014). ISSN 1759-9954. Typ: ADCA
2. BORSKÁ, Katarína – MORAVČÍKOVÁ, Daniela – ECKSTEIN-ANDICSOVÁ, Anita – MOSNÁČEK, Jaroslav. Study of photochemically induced atom transfer radical polymerization of (meth)acrylates in the presence of oxygen. *In 67. Zjazd Chemikov* : *Starý Smokovec, Slovensko, 9-11 September, 2015, program and book of abstracts*. - ChemZi 11/1 (2015), 3P02. ISSN 1336-7242. Typ: AFH
3. MOSNÁČEK, Jaroslav. Atom transfer radical polymerization (ATRP): Development of photoATRP and hybrid materials prepared by ATRP. *Prezentácia na dvoch Taiwanských univerzitách – National Chung Cheng University, Chia-Yi a National Chung Hsing University, Taichung*

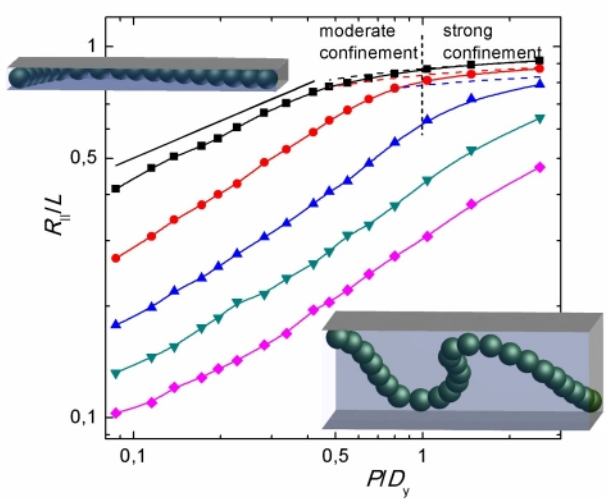
2) Názov: **Nanoštruktúra v makromolekulových systémoch indukovaná stesnaním**.
Nanostructure in macromolecular systems induced by confinement.

Ústav polymérov SAV

Mená riešiteľov: Z. Benková, P. Cifra, P. Námer

Projekty v rámci ktorých sa výsledok dosiahol: APVV-0451-11

V náväznosti na štúdie lineárnych makromolekúl a ich linearizácie v nanokanáloch s asymetrickým profilom až v limite úzkych pásikov bolo vyšetrené správanie dlhých cyklických makromolekúl. Vo všetkých geometriách sa potvrdilo očakávanie silnejšieho relatívneho vystierania makrocyklov oproti lineárnym polymérom, ktoré vyplýva zo silnejšieho vylúčeného objemu v cykloch stiesnených kanálom. V prípade makrocyklu stiesneného v kanáli vo forme úzkeho pásiku sa toto vystieranie ešte zosilňuje vplyvom prechodu ku dvojrozmernému systému, ktorý taktiež prispieva ku zosilnenej linearizácii a je už popísaný pre lineárne polyméry. Tieto zistenia budú mať implikácie pre jednomolekulové charakterizácie makrocyklickej DNA v nanofluidných zariadeniach.



Predĺženie lineárnej makromolekluly v nanokanáli v závislosti od dvoch smerov obmedzovania.

Výstupy:

1. BENKOVÁ, Zuzana - NÁMER, Pavol - CIFRA, Peter. From stripe to slab confinement for linearization of macromolecules in nanochannels. In *Soft Matter*, 2015, vol. 11, p. 2279-2289, (4.151- IF2014). Typ: ADCA

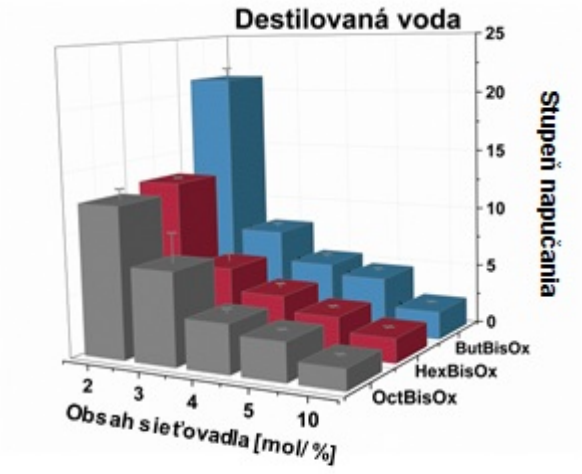
3) Názov: **Hydrogély na báze poly(2-oxazolínov) s nastaviteľnými vlastnosťami**.
Hydrogels based on poly(2-oxazolines) with adjustable properties.

Ústav polymérov SAV

Mená riešiteľov: A. Zahoranová, J. Kronek, Z. Kroneková

Projekty v rámci ktorých sa výsledok dosiahol: VEGA 2/0163/15 a 2/0156/15

V uplynulom období bolo naše úsilie zamerané na prípravu a charakterizáciu hydrogélov presietených bis(2-oxazolínovými) sieťovadlami. V rámci tejto štúdie sa pripravili série hydrogélov s rôznou dĺžkou alifatického spojovníka (butylén, hexylén a oktylén) a rôznou hustotou siete, pričom sledoval sa vplyv týchto štruktúrnych parametrov na výsledné vlastnosti hydrogélov. Zistilo sa, že kombináciou dĺžky alifatického spojovníka a hustoty siete je možné pripraviť hydrogély s rovnovážnym stupňom napučnia vo vode od 2 do 20 a Youngovým modulom v rozmedzí 10 až 100 kPa. Pripravené hydrogély boli tiež



Stupeň napučania hydrogélov v závislosti od obsahu sieťovadla a jeho typu

hodnotené z hľadiska interakcie s bunkovými líniami. Zistilo sa, že hydrogély pripravené z butylénového sieťovadla preukazovali najnižšiu mieru toxicity a najvyššiu mieru viability buniek počas kultivácie v štruktúre hydrogélu. Použitie bis(2-oxazolínových) sieťovadiel s rôznou dĺžkou alifatického reťazca umožňuje presnejšiu kontrolu nad vlastnosťami hydrogélov (stupeň napučania, Youngov modul) a takéto gély môžu slúžiť ako platforma na kultiváciu neadherentných bunkových línií.

Výstupy:

1. ZAHORANOVÁ, Anna – KRONEKOVÁ, Zuzana – ZAHORAN, M. – CHORVÁT, Jr., D. – JANIGOVÁ, Ivica - KRONEK, Juraj. Poly(2-oxazoline) hydrogels crosslinked with aliphatic bis(2-oxazolines): Properties, cytotoxicity, and cell cultivation. In Journal of Polymer Science, Part A: Polymer Chemistry2015, online verzia, DOI 10.1002/pola.28009, ISSN 0887-624X, Typ: ADCA.
2. ZAHORANOVÁ, Anna - KRONEK, Juraj. Hydrogels based on poly(2-oxazolines) for pharmaceutical applications, InHandbook of Polymers for Pharmaceutical Technologies, Wiley-Scrivener, 2015, volume4, chapter 10, p. 231-258. ISBN 9781119041467, Typ: ABC.
3. ZAHORANOVÁ, Anna - KRONEKOVÁ, Zuzana - ZAHORAN, M. - CHORVÁT, D. Jr. - KRONEK, Juraj. 2-Ethyl-2-oxazoline-based hydrogels as matrices for cell cultivation. In Epf DRESDEN 2015. European Polymer Congress: Book of abstracts. - Dresden, 2015, p. 180. Typ: AFG

2.3.2. Aplikačný typ

1) Názov: **Kinetika radikálovej polymerizácie a stanovenie rýchlostných konštánt so zameraním na polymerizáciu vo vodnej fáze**.
Kinetics of radical polymerization and determination of rate coefficients focused on polymerization in aqueous solutions.

Ústav polymérov SAV

Mená riešiteľov: I. Lacík, A. Chovancová, E. Hipká.

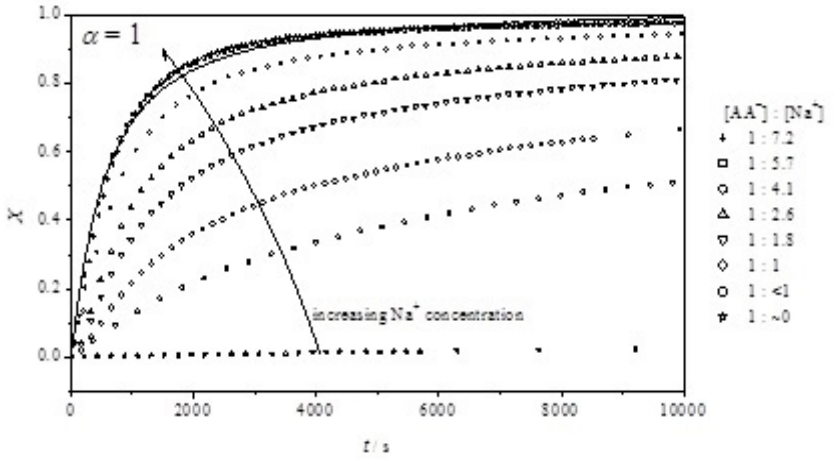
Projekty v rámci ktorých sa výsledok dosiahol: BASF SE kontraktová spolupráca, VEGA 2/0198/14

Bol publikovaný článok v rámci IUPAC konzorcia, ktorého výstupom je doporučenie analýzy kyseliny polyakrylovej a polymetakrylovej metódou gélovej permeačnej chromatografie. Ukončili sa práce venované mechanizmu polymerizácie akrylamidu a neionizovanej kyseliny akrylovej vo vodnej fáze. Porovnanie experimentálnych a modelovaných konverzných kriviek a distribúcií mólových hmotností so zahrnutím prenosových reakcií typických pre polymerizáciu akrylátových monomérov ukázalo dobrú zhodu. Tiež sa ukázala dôležitosť prítomnosti alkalických kovov na polymerizáciu kyseliny akrylovej v ionizovanej forme. Protiióny tienia náboj na rastových radikáloch a ich koncentrácia určuje rýchlosť polymerizácie ionizovanej kyseliny akrylovej. Miera vplyvu je daná typom protiiónov, pričom menšie protiióny poskytujú efektívnejšie tienenie záporného náboja rastových radikálov.

Výstupy:

1. DRAWE, P. - BUBACK, M. - LACÍK, Igor. Radical polymerization of alkali acrylates in aqueous solution. In *Macromolecular Chemistry and Physics*, 2015, vol. 216, p. 1333-1340. (2.616 - IF2014). ISSN 1022-1352. Typ: ADCA
2. LACÍK, Igor - *STACH, Marek* - *KASÁK, Peter* - SEMAK, V. - UHELSKÁ, Lucia - CHOVANCOVÁ, Anna - REINHOLD,G. - KILZ, P. - DELAITTRE, G. - CHARLEUX, B. - CHADUC, I. - D´AGOSTO, F. -LANSALOT, M. - GABORIEAU, M. - CASTIGNOLLES, P.e - GILBERT, R. G. - SZABLAN, Z. -BARNER-KOWOLLIK, Ch. - HESSE, P. - BUBACK, Ml. SEC analysis of poly(acrylic acid) andpoly(methacrylic acid). In *Macromolecular Chemistry and Physics*, 2015, vol. 216, p. 23-37. (2.616 - IF2014). ISSN1022-1352. Typ: ADCA
3. WITTENBERG, N. F. G. - PREUSSER, C. - KATTNER, H. - *STACH, Marek* - LACÍK, Igor, HUTCHINSON, R. A. - BUBACK M. Modelling acrylic acid radical polymerization in aqueous

solution. *Macromolecular Reaction Engineering,* **2015**, early view, DOI: 10.1002/mren.201500017.



Typ: ADCA

Vplyv prídavku Na^+ na rýchlosť polymerizácie akrylátu sodného (AA^-). Plná čiara zodpovedá polymerizácii neionizovanej kyseliny akrylovej.

2) Názov: **CASSETTE: Konjugovaný antisense systém pre selektívne a špecifické umlčanie *BCR - ABL*: Inovatívna stratégia pre liečbu CML.**
CASSETTE: *C*onjugated *A*ntisense system for *S*elective and *S*pecific *BCR-ABL* suppr*E*ssion: An innova*T*ive stra*T*egy for CML treatment.

Ústav polymérov SAV

Mená riešiteľov: F. Rázga, V. Némethová, D. Moravčíková, L. Kleščíková, R. Baran, I. Lacík

Projekty v rámci ktorých sa výsledok dosiahol: SASPRO 0057/01/02 a VEGA 2/0094/15

Nakoľko je projekt *CASSETTE* zameraný na selektívne a špecifické potlačenie expresie onkoproteínu BCR-ABL pomocou konjugovaného antisense systému a jeho realizácia začala v hodnotenom období *de facto* od nuly, príprava a syntéza pilotného systému sa dominantne opierala o *in silico* design a syntézu základných blokov, z ktorých výsledný systém pozostáva. Boli navrhnuté cieľové rozpoznávacie interakčné miesta a výsledná štrukturálna podoba pilotného systému. Zo syntetického hľadiska sme pripravili základné stavebné bloky, osvojili sme si čiastkové reakcie a úspešne sme zvládli spojenie do väčších štrukturálnych celkov. Takisto sa nám pomocou ATRP podarilo pripraviť polymérny komponent požadovanej mólovej hmotnosti. Všetky tieto dielčie výsledky konvergujú k zosyntetizovaniu prototypu, ktorý bude v následnom období validovaný pomocou metód molekulárnej biológie. V sumáre, projekt inovatívneho terapeutického riešenia pre CML sa podarilo uspokojivo rozbehnúť a aktivity smerujúce k dosiahnutiu projektových zámerov v rámci projektov VEGA 2/0094/15 a SASPRO 0057/01/02 sa vyvíjajú želaným smerom v súlade s naplánovaným časovým harmonogramom. Navyše, navrhovaný koncept bol podstúpený na posúdenie patentovému úradu v rámci patentovej prihlášky F. Rázga, V. Némethová: A method for altering the functional state of mRNA allowing its selective and specific recognition PP-50065-2015, ktorá predstavuje najvýznamnejší výstup projektu v hodnotiacom období. Boli pripravené tri publikácie, ktoré však neboli v hodnotiacom období odoslané do prislúchajúcich redakcií, nakoľko po dohode s právnou kanceláriou, ktorá predmetnú inováciu zastupuje v patentovom konaní, bolo dohodnuté ich účelové pozastavenie.

Výstupy:

1. RÁZGA, Filip – NÉMETHOVÁ, Veronika. A method for altering the functional state of mRNA allowingits selective and specific recognition. Patentová prihláška, PP-50065-2015

3) Názov: **Hydrofilizácia dreva a kompozitov na báze dreva.**
Hydrophilization of wood and wood-based composites.

Ústav polymérov SAV

Mená riešiteľov: I. Novák, M. Valentin, J. Prachár, M. Mičušík, A. Kleinová, I. Janigová

Projekty v rámci ktorých sa výsledok dosiahol: VEGA 02/0199/14, spolupráca s Drevárskou fakultou TU vo Zvolene

Pri skúmaní povrchových vlastností bukového dreva upraveného rádiofrekvenčnou (RF) plazmou (300 W, 120 sekúnd, tlak P = 100 Pa) sa zistilo na základe výsledkov AFM meraní, že povrchová drsnosť dreva po úprave mierne klesá. ATR-FTIR spektrá potvrdili rast polarity bukového dreva v priebehu modifikácie RF plazmou. Rast polarity dreva sa prejavil zvýšením koncentrácie – OH skupín na povrchu dreva. Obsah kyslíka a dusíka naviazaného na povrchu dreva počas modifikácie RF plazmou rástol a obsah uhlíka naopak klesal. Koncentrácia COOH, C–O and C=O skupín v priebehu modifikácie bukového dreva RF plazmou výrazne rástla. Polárna zložka povrchovej energie bukového dreva sa po modifikácii plazmou výrazne zvýšila o 60%. Po 28 dňoch starnutia sa zistil pokles povrchovej energie bukového dreva upraveného RF plazmou o 12%. Pevnosť adhézneho spoja bukového dreva modifikovaného RF plazmou s polyuretánovým adhezívom vzrástla o 50%.

Výstupy:

1. NOVÁK, Igor - *POPELKA, Anton* - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - OMASTOVÁ, Mária - VALENTIN, Marian - SEDLIAČIK, J. - JANIGOVÁ, Ivica - KLEINOVÁ, Angela - ŠLOUF, M. Investigation of beech wood modified by radio-frequency discharge plasma. In *Vacuum*, 2015, vol. 119, p. 88-94. (1.858 - IF2014). (2015 - Current Contents). ISSN 0042-207X. Typ: ADCA
2. NOVÁK, Igor - SEDLIAČIK, J. - ŽIGO, Ondrej - *VALENTIN, Marian* - PRACHÁR, Jozef - MATYAŠOVSKÝ, J. - JURKOVIČ, P. Oak wood modification using cold plasma. In Annals of Warsaw University of Life Sciences - SGGW : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 90, p. 134-137. ISSN 1898-5912. Typ: AEC
3. NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - *POPELKA, Anton* - PRACHÁR, Jozef - MATYAŠOVSKÝ, J. - JURKOVIČ, P. Antibacterial modification of polymer veneers. In Annals Warsaw University of Life Sciences : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 307-311. ISSN 1898-5912. Typ: AECA
4. NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - PRACHÁR, Jozef - JURKOVIČ, P. - MATYAŠOVSKÝ, J. Pre-treatment of polyester-based veneers. In Annals Warsaw University of Life Sciences : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 312-315. ISSN 1898-5912. Typ: AECA

2.3.3. Medzinárodné vedecké projekty

1) Názov**: Mikrokapsuly pre alogénnu transplantáciu enkapsulovaných ostrovčekov v predklinickom modeli nehumánnych primátov.**
Microcapsules for allogeneic islet transplantation in a comprehensive, preclinical non-human primate model.

Ústav polymérov SAV

Mená riešiteľov: I. Lacík, L. Uhelská, D. Treľová, F. Rázga, V. Némethová, Z. Kroneková, J. Kronek, A. Mihalová, P. Mazancová, L. Kleščíková, R. Baran, E. Hipká, Z. Cseriová

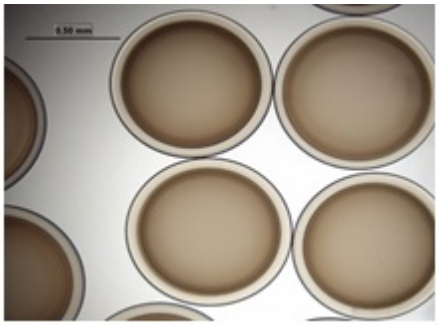
Projekty v rámci ktorých sa výsledok dosiahol: CDP projekt, JDRF project, project APVV-14-0858

Polymérne PMCG mikrokapsuly slúžiace ako imunitná ochrana pre enkapsulované pankreatické ostrovčeky prešli od začiatku JDRF projektu v novembri 2014 zásadnou zmenou týkajúcou sa protokolu prípravy. Doposiaľ používaný spôsob prípravy neposkytoval dostatočnú kvalitu

mikrokapsúl, ktorá je daná mierou homogenity, odolnosťou voči kompresii, (ne)prítomnosťou povrchových defektov. Z tohto dôvodu sa pristúpilo k modifikácii procesu, ktorá viedla k novému typu PMCG mikrokapsúl s výrazne lepšími vlastnosťami v porovnaní s tými, ktoré sa pripravili v minulosti. Základným predpokladom úspechu PMCG mikrokapsúl je schopnosť ich dlhodobo a opakovane pripravovať s reprodukovateľnými vlastnosťami. Tieto mikrokapsule sa aktuálne testujú v predklinickom modeli nehumánnych primátov (makaky) a v myšiach v spolupráci s univerzitou v Chicagu v rámci JDRF projektu. Významným prínosom je implementácia konfokálnej Ramanovej mikroskopie pre charakterizáciu mikrokapsúl v spolupráci s Fyzikálnym ústavom SAV.

Výstupy:

1. VEISEH, O. - DOLOFF, J. C. - MA, M. - VEGAS, A. J. - TAM, H. H. - BADER, A. R. - LI, J. - LANGAN, E. - WYCKOFF, J. - LOO, W. S. - JHUNJHUNWALA, S. - CHIU, A. - SIEBERT, S. - TANG, K. - HOLLISTER-LOCK, J. - ARESTA-DASILVA, S. - BOCHENEK, M. - MENDOZAELIAS, J. - WANG, Y. - QI, M. - LAVIN, D. M. - CHEN, M. - DHOLAKIA, N. - THAKRAR, R. - LACÍK, Igor - WEIR, G. C. - OBERHOLZER, J. - GREINER, D. L. - LANGER, R. - ANDERSON, D. G. Size- and shape-dependent foreign body immune response to materials implanted in rodents and non-human primates. In *Nature Materials*, 2015, vol. 14, p. 643-651. (36.503 - IF2014). ISSN 1476-1122. Typ: ADCA
2. NÉMETHOVÁ, Veronika - LACÍK, Igor - RÁZGA, Filip. Vibration technology for microencapsulation: The restrictive role of viscosity. In *Journal of Bioprocessing and Biotechniques :* an open access journal, 2015, vol. 5, iss. 1, art.no. 1000199. (2015 - Scopus). ISSN 2155-9821 Typ: ADEB



PMCG mikrokapsuly s vylepšenými vlastnosťami pripravené modifikovaným protokolom prípravy, určené pre testovanie v zvieracích modeloch

2) Názov: **Ťahové senzory na báze vodivých polymérnych nanokompozitov.**
Strain sensors on the base of conducting polymeric nanocomposites.

Ústav polymérov SAV

Mená riešiteľov: M. Omastová, K. Czaniková, M. Mičušík, J. Kuliček, J. Tabačiarová, I. Chodák

Projekty v rámci ktorých sa výsledok dosiahol: APVV SK-GR-0029-11 a VEGA 02/0149/14

Pripravili sa nanokompozity s polyvinylidenfluoridovou (PVDF) matricou plnenou mnohostennými uhlíkovými nanotrubičkami (MWCNT), ktoré sa použili na sledovanie zmeny elektrického odporu počas ťahovej deformácie. Séria vzoriek bola pripravená zamiešaním MWCNT o koncentrácii 0,5 hm.% až 8 hm.% do polymérnej taveniny, pričom bola získaná dobrá dispergácia nanoplniva v polymérnej matrici, ako to potvrdilo SEM štúdium pripravených nanokompozitov. Perkolačný prah sa dosiahol pri zamiešaní 1,2 hm.% MWCNT. Študoval sa vplyv obsahu nanoplniva na senzorické vlastnosti. Deformačné snímanie vodivých vzoriek bolo študované pomocou in-situ meraní elektrických vodivostí počas ťahového zaťaženia. Vlastnosti týchto nanokompozitov sa porovnávali s kompozitmi obsahujúcimi sadze. Výsledky ukázali, že elektricky vodivé PVDF/MWCNT nanokompozity môžu byť použité ako citlivé senzory na monitorovanie

deformačných zmien v nanokompozitoch.

Výstupy:

1. GEORGOUIS, G. - PANDIS, C. - KALAMIOTIS, A. - GEORGIOPOULOS, P. - KYRITSIS, A. - KONTOU, E. - PISSIS, P. - MIČUŠÍK, Matej - CZANIKOVÁ, Klaudia - KULIČEK, Jaroslav - OMASTOVÁ, Mária. Strain sensing in polymer/carbon nanotube composites by electrical resistance measurement. In *Composites Part B: Engineering*, 2015, vol. 68, p. 162-169. (2.983 - IF2014). ISSN 1359-8368. Typ: ADCA
2. GEORGOUSIS, G. - PANDIS, C. - CHATZIMANOLIS-MOUSTAKAS, C. - KYRITSIS, A. - KONTOU, E. - PISSIS, P. - *KRAJČI, Juraj* - CHODÁK, Ivan - TABAČIAROVÁ, Jana - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Study of the reinforcing mechanism and strain sensing in a carbon black filled elastomer. In *Composites Part B: Engineering*, 2015, vol. 80, p. 20-26. (2.983 - IF2014). ISSN 1359-8368. Typ: ADCA
3. PISSIS, P. - GEORGOUSIS, G. - PANDIS, C. - GEORGIOPOULOS, P. - KYRITSIS, A. - KONTOU, E. - MIČUŠÍK, Matej - CZANIKOVÁ, Klaudia - OMASTOVÁ, Mária. Strain and damage sensing in polymer composites and nanocomposites with conducting fillers. In *Procedia Engineering*, 2015, vol. 114, p. 590-597. (2015 - SCOPUS). ISSN 1877-7058. Typ: ADMB

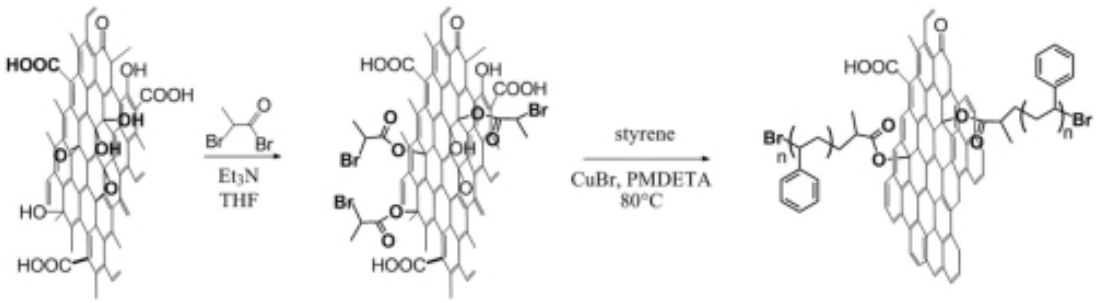
3) Názov: **Redukcia povrchu grefén oxidu grafenu počas radikálovej polymerizácie s prenosom atómu.**
Reduction of graphene oxide during atom transfer radical polymerization.

Ústav polymérov SAV

Mená riešiteľov: M. Ilčíková, M. Mrlík, Z. Špitalský, M. Mičušík, K. Csomorová, A. Kleinová, J. Mosnáček,

Projekty v rámci ktorých sa výsledok dosiahol: CE FUN-MAT

Elektricky vodivé hybridné materiály z grafén oxidu (GO) modifikovaného polystyrenovými reťazcami (GO-PS) sa pripravili redukciou GO *in situ* počas polymerizácie styrénu z povrchu GO použitím radikálovej polymerizácie s prenosom atómu (ATRP). V porovnaní s GO, elektrická vodivost GO-PS hybridu vzrástla až o 8 rádov, v závislosti na dobe polymerizácie. Redukcia bola spôsobená *N*,*N*,*N*‘,*N*‘,*N*‘‘-pentametyldietyléntriamínom (PMDETA), ktorý sa pri ATRP používa ako ligand komlexujúci katalyzátor. Zistilo sa, že PMDETA sa zúčastňuje oboch procesov, t.j. redukcie GO a katalýzy polymerizácie, ktorá z tohto dôvodu môže prebiehať až od určitého pomeru PMDETA/GO. Tento poznatok sa využil pre prípravu elektroreologickej suspenzie na báze GO poly(glycidyl metakrylátom). Vhodným nastavením pomeru GO a PMDETA sa v jednom reakčnom kroku pripravil materiál ľahko dispergovateľný v nosnom médiu a zároveň s vhodnou elektrickou vodivosťou pre aplikáciu v elektroreologických suspenziách.



Modifikácia GO iniciátorom ATRP a následná simultánna redukcia povrchu GO a modifikácia GO povrchu reťazcami polystyrénu.

Výstupy:

1. ILČÍKOVÁ, Markéta - MRLÍK, M. - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - CSOMOROVÁ,

Katarína - SASINKOVÁ, V. - KLEINOVÁ, Angela - MOSNÁČEK, Jaroslav. A tertiary amine in two competitive processes: Reduction of graphene oxide vs. catalysis of atom transfer radical polymerization. In *RSC Advances*, 2015, vol. 5, p. 3370-3376. (3.840 - IF2014). ISSN 2046-2069.Typ: ADCA

2. MRLÍK, M . – ILČÍKOVÁ, Markéta – PLACHÝ, T. – PAVLÍNEK, V. – ŠPITALSKÝ, Zdenko – MOSNÁČEK, Jaroslav. Graphene oxide reduction during surface-initiated atom transfer radical polymerization of glycidyl methacrylate: Controlling electro-responsive properties. In *Chemical Engineering Journal*, 2016, vol. 283, pp. 717-720. (4.321 - IF2014). ISSN 1385-8947. Typ: ADCA

2.4. Publikačná činnosť (úplný zoznam je uvedený v Prílohe C)

Tabuľka 2e Štatistika vybraných kategórií publikácií

PUBLIKAČNÁ A EDIČNÁ ČINNOSŤ	A Počet v r. 2015/ doplnky z r. 2014	B Počet v r. 2015/ doplnky z r. 2014	C Počet v r. 2015/ doplnky z r. 2014
1. Vedecké monografie vydané v domácich vydavateľstvách (AAB, ABB)	**0 / 0**	**0 / 0**	**0 / 0**
2. Vedecké monografie vydané v zahraničných vydavateľstvách (AAA, ABA)	**1 / 0**	**0 / 0**	**0 / 0**
3. Odborné monografie, vysokoškolské učebnice a učebné texty vydané v domácich vydavateľstvách (BAB, ACB, CAB)	**0 / 0**	**0 / 0**	**0 / 0**
4. Odborné monografie a vysokoškolské učebnice a učebné texty vydané v zahraničných vydavateľstvách (BAA, ACA, CAA)	**0 / 0**	**0 / 0**	**0 / 0**
5. Kapitoly vo vedeckých monografiách vydaných v domácich vydavateľstvách (ABD)	**0 / 0**	**0 / 0**	**0 / 0**
6. Kapitoly vo vedeckých monografiách vydaných v zahraničných vydavateľstvách (ABC)	**2 / 1**	**0 / 0**	**0 / 0**
7. Kapitoly v odborných monografiách, vysokoškolských učebniciach a učebných textoch vydaných v domácich vydavateľstvách (BBB, ACD)	**0 / 0**	**0 / 0**	**0 / 0**
8. Kapitoly v odborných monografiách, vysokoškolských učebniciach a učebných textoch vydaných v zahraničných vydavateľstvách (BBA, ACC)	**0 / 0**	**0 / 0**	**0 / 0**
9. Vedecké a odborné práce evidované v CCC a vedecké práce evidované vo WOS Core Collection a Scopus (ADCA, ADCB, ADDA, ADDB, ADMA, ADMB, ADNA, ADNB, CDCA, CDCB, CDDA, CDDB, BDCA, BDCB, BDDA, BDDB)	**71 / 2**	**0 / 0**	**0 / 0**
10. Vedecké a odborné práce v časopisoch neevidovaných v CCC, WoS Core Collection, SCOPUS (ADEA, ADEB, ADFA, ADFB, CDEA, CDEB, CDFA, CDFB, BDE, BDEA, BDEB, BDF, BDFA, BDFB)	**7 / 0**	**0 / 0**	**0 / 0**
11. Vedecké a odborné práce v zborníkoch			
a/ recenzované práce a publikované pozvané príspevky (AECA, AECB, AEDA, AEDB, AFA, AFB, BEC, BED)	**6 / 0**	**0 / 0**	**1 / 1**
b/ nerecenzované práce (BEE, BEF, CEC, CED)	**0 / 0**	**0 / 0**	**0 / 0**
12. Vydané periodiká evidované v CCC, WoS Core Collection, SCOPUS	**0**	**0**	**0**
13. Ostatné vydané periodiká	**0**	**0**	**0**
14. Vydané alebo editované zborníky z vedeckých podujatí (FAI)	**0 / 0**	**0 / 0**	**0 / 0**
15. Práce uverejnené na internete (GHG)	**0 / 0**	**0 / 0**	**0 / 0**
16. Preklady vedeckých a odborných textov (EAJ)	**0 / 0**	**0 / 0**	**0 / 0**
17. Heslá v *Encyklopédii Beliana* a iných encyklopédiách a terminologických slovníkoch (BDA, BDB)	**0 / 0**	**0 / 0**	**0 / 0**

A - pracovisko SAV je uvedené ako pracovisko (adresa) autora, alebo je súčasťou kolaborácie alebo iného združenia, ktoré je uvedené ako pracovisko (adresa) autora
B - pracovisko SAV nie je na publikácii uvedené, pretože prameň údaj o pracovisku autora neobsahuje, práca ale vznikla na pracovisku SAV
C - pracovisko SAV je uvedené ako materské pracovisko autora odlišné od pracoviska, na ktorom práca vznikla (napr. „on leave...“, „permanent address...“, „present address...“)

Tabuľka 2f Ohlasy

OHLASY	**A** **Počet v r. 2014/ doplnky z r. 2013**	**B** **Počet v r. 2014/ doplnky z r. 2013**
Citácie vo WoS Core Collection (1.1, 2.1)	1580 / 0	1 / 0
Citácie v SCOPUS (1.2, 2.2)	218 / 1	0 / 0
Citácie v iných citačných indexoch a databázach (9, 10, 3.2, 4.2)	0 / 0	0 / 0
Citácie v publikáciách neregistrovaných v citačných indexoch (3, 4, 3.1, 4.1)	7 / 0	0 / 0
Recenzie na práce autorov z organizácie (5, 6, 7, 8)	0 / 0	0 / 0

A - pracovisko SAV je uvedené ako pracovisko (adresa) autora, alebo je súčasťou kolaborácie alebo iného združenia, ktoré je uvedené ako pracovisko (adresa) autora, alebo pracovisko SAV nie je na publikácii uvedené, pretože prameň údaj o pracovisku autora neobsahuje, práca ale vznikla na pracovisku SAV
B - pracovisko SAV je uvedené ako materské pracovisko autora odlišné od pracoviska, na ktorom práca vznikla (napr. „on leave...“, „permanent address...“, „present address...“)

2.5. Aktívna účasť na vedeckých podujatiach

Tabuľka 2g Vedecké podujatia

Prednášky a vývesky na medzinárodných vedeckých podujatiach	**131**
Prednášky a vývesky na domácich vedeckých podujatiach	**33**

2.6. Vyžiadané prednášky

2.6.1. Vyžiadané prednášky na medzinárodných vedeckých podujatiach

1. KRONEK, Juraj – ZAHORANOVÁ, Anna – *MIKULEC, Marcel* – KRONEKOVÁ, Zuzana. Hydrogels based on poly(2-oxazoline)s, 3rd CEEPN Workshop, 23. – 26. 09. 2015, Iasi, Rumunsko, p. 5-6
2. LACÍK, Igor. Microcapsules for immunoprotection of transplanted islets of Langerhans. 79th Prague Meeting on Macromolecules; Functional polymers at bio-material interfaces 2015, 28 June – 02 July, Prague, Czech Republic, Book of Abstracts, p. 30
3. LACÍK Igor. Kinetics and mechanism of radical polymerization in aqueous solutions" SEC characterization for polyacrylic acid, polyacrylamide and their copolymers. Danube Vltava Sava Polymer Meeting 2015, Gmunden, Austria, 11-13.5.2015, In *Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science*. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 6. ISBN 978-3-99033-491-1.
4. MATYAŠOVSKÝ, J. - SEDLIAČIK, J. - NOVÁK, Igor - JURKOVIČ, P. - DUCHOVIČ, P. Lowering of formaldehyde emission from modified UF resin with colagen polymers. XXIXth International Scientific Conference "Wood – Material of the XXIst Century", November 16 – 19, 2015, Rogow, Poland. In *Annals Warsaw University of Life Sciences : Forestry and Wood Technology*. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 284-288. ISSN 1898-5912.
5. NOVÁK, Igor - SEDLIAČIK, J. - ŽIGO, Ondrej - *VALENTIN, Marian* - PRACHÁR, Jozef - MATYAŠOVSKÝ, J. - JURKOVIČ, P. Oak wood modification using cold plasma. XXIXth International Scientific Conference "Wood – Material of the XXIst Century", November 16 – 19, 2015,

Rogow, Poland. In *Annals of Warsaw University of Life Sciences - SGGW : Forestry and Wood Technology*. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 90, p. 134-137. ISSN 1898-5912.

6. NOVÁK, Igor - SEDLIAČIK, J. - *VALENTIN, Marian* - ŽIGO, Ondrej - PRACHÁR, Jozef - JURKOVIČ, Peter - MATYAŠOVSKÝ, Ján. Antibacterial modification of polyolefin veneers. XXIXth International Scientific Conference "Wood – Material of the XXIst Century", November 16 – 19, 2015, Rogow, Poland. In *Annals of Warsaw University of Life Sciences - SGGW : Forestry and Wood Technology*. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 90, p. 138-142. ISSN 1898-5912.
7. NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - *POPELKA, Anton* - PRACHÁR, Jozef - MATYAŠOVSKÝ, J. - JURKOVIČ, P. Antibacterial modification of polymer veneers. XXIXth International Scientific Conference "Wood – Material of the XXIst Century", November 16 – 19, 2015, Rogow, Poland. In *Annals Warsaw University of Life Sciences : Forestry and Wood Technology*. - Warsaw, Poland: Warsaw University of Life Sciences Press, 2015, no. 92, p. 307-311. ISSN 1898-5912.
8. NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - PRACHÁR, Jozef - JURKOVIČ, P. - MATYAŠOVSKÝ, J. Pre-treatment of polyester-based veneers. XXIXth International Scientific Conference "Wood – Material of the XXIst Century", November 16 – 19, 2015, Rogow, Poland. In *Annals Warsaw University of Life Sciences : Forestry and Wood Technology*. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 312-315. ISSN 1898-5912.

2.6.2. Vyžiadané prednášky na domácich vedeckých podujatiach

2.6.3. Vyžiadané prednášky na významných vedeckých inštitúciách

1. BENKOVÁ, Zuzana – NÁMER, Pavol – CIFRA, Peter. From stripe to slab confinement for DNA linearization in nanochannels. 29.05.2015, Katedra experimentálnej fyziky, FMFI UK, Bratislava.
2. BENKOVÁ, Zuzana. Úvod do metód počítačovej chémie. 10.06.2015, Ústav polymérov SAV, Bratislava
3. LACÍK, I. 150 years of BASF innovations. Oslava 150. výročia založenia BASF pre strednú a východnú Európu. 28.5.2015, Brno, Česká republika.
4. LUKEŠOVÁ,Miroslava - ŠVAJDLENKOVÁ, Helena - SIPPEL, P. - REUTER, D. – MACOVÁ, Eva - BEREK, Dušan - ZALESKI, M. - EDELMANN, M. - LOIDL, A.- BARTOŠ, Josef. Structure and Dynamics in bulk and confined systems. EP V CEKM, , November 05, 2015, Universität Augsburg, Germany. Prednáška (Lukešová)
5. MOSNÁČEK, Jaroslav. Atom transfer radical polymerization (ATRP): Development of photoATRP and hybrid materials prepared by ATRP. National Chung Cheng University, Chia-Yi a National Chung Hsing University, Taichung, November 2015, Taiwan. Dve prednášky (Mosnáček)
6. NÉMETHOVÁ, Veronika –LACÍK, Igor - RÁZGA, Filip. Polymérmi proti rakovine. 18.02.2015, KHaT Nemocnica Antolská, Bratislava
7. NOVÁK, Igor. Povrchové a adhézne vlastnosti polymérov a polymérnych adhezív. 18.05.2015 Prednáška v rámci bilaterálnej spolupráce ÚPo SAV a Ústavom polymérov, Fakulta technologická VŠCHT, Praha, ČR pre pracovníkov Ústavu polymérov, Fakulta technologická VŠCHT, Praha, ČR.
8. OMASTOVÁ, Mária - ŠPITÁLSKY, Zdenko. Polymérne kompozity s uhlíkovými nanočasticami a ich aplikácie. 20.02.2015, Elektrotechnický ústav SAV, prednáška v rámci seminárov

9. ŠPITÁLSKY, Zdenko. Organic materials and nanocomposites. Conference: 2nd Symposium on Innovation, Cooperation in Technology and International Transfer of Technology China + 16 CEEC Format, At Bratislava, Slovakia, volume: 2, prednáška.

2.7. Patentová a licenčná činnosť na Slovensku a v zahraničí v roku 2015

2.7.1. Vynálezy, na ktoré bol udelený patent

Na Slovensku - počet patentov: 2

Číslo PV: 5830163 (Japan Patent Office)
Mená autorov: CHODÁK, Ivan - ALEXY, P - BAKOŠ, D. - BUGAJ, P. - PAVLAČKOVÁ, M. - TOMANOVÁ, K. - BENOVIČ, F. - -LAVEC, R. - MIHALÍK, M. – BOTOŠOVÁ, M
Názov vynálezu: Biologically degradable polymeric composition with high deformability
Majiteľ / spolumajiteľ: Ústav polymérov SAV

Číslo PV: WO-2014-209241
Mená autorov: LUKÁČ, Ivan – *HUSÁR, Branislav – KÓSA, Csaba – FÁRYOVÁ, Janka*
Názov vynálezu: Method for cross-linking of polymer films.
Majiteľ / spolumajiteľ: Ústav polymérov SAV

2.7.2. Prihlásené vynálezy

Na Slovensku - počet patentov: 5

Číslo PV: PP 50017-2014
Mená autorov: BEREK, Dušan – *NOVÁK, Ivan* – MUNKA, K. - KARACSONYOVÁ, M.
Názov vynálezu: Spôsob prípravy kompozitného sorbenta na odstraňovanie kontaminantov z vôd
Majiteľ / spolumajiteľ: Ústav polymérov SAV

Číslo PV: PP 97-2015
Mená autorov: CHODÁK, Ivan - JOCHEC MOŠKOVÁ, Daniela - SEDNIČKOVÁ, Michaela – KOMADEL, P. – JANKOVIČ, Ľ.
Názov vynálezu: Gumárenská zmes na báze polymérnej kompozície s obsahom nanoplniva.
Majiteľ / spolumajiteľ: Ústav polymérov SAV

Číslo PV: D2_8-0-1-2014 - PP in India
Mená autorov: BEREK, Dušan - MEHTA, R. - PANKIL, S. - UPPDHYAY, N. S. (Thapar University, Punjab, India)
Názov vynálezu: Polylactic acid and process for preparation there of
Majiteľ / spolumajiteľ: Ústav polymérov SAV

Číslo PV: PCT/SK2015/050003 – medzinárodná prihláška
Mená autorov: BEREK, Dušan – *NOVÁK, Ivan* - MUNKA, K. - VARGA, S. - KARÁCSONYOVÁ, M.
Názov vynálezu: Method for preparing composite sorbent for removing contaminants from water
Majiteľ / spolumajiteľ: Ústav polymérov SAV

Číslo PV: PP-50065-2015
Mená autorov: RÁZGA, Filip – NÉMETHOVÁ, Veronika
Názov vynálezu: A method for altering the functional status of mRNA allowing its selective and specific recognition;
Majiteľ / spolumajiteľ: Ústav polymérov SAV

2.7.3. Predané licencie

2.7.4. Realizované patenty

2.8. Účasť expertov na hodnotení národných projektov (APVV, VEGA a iných)

Tabuľka 2h Experti hodnotiaci národné projekty

Meno pracovníka	Typ programu/projektu/výzvy	Počet hodnotených projektov
Chodák Ivan	VEGA	1
Novák Igor	APVV	1
Novák Igor	VEGA	1
Omastová Mária	APVV	2
Rychlý Jozef	VEGA	1
Špitálsky Zdenko	VEGA	1

2.9. Účasť na spracovaní hesiel do encyklopédie Beliana

Počet autorov hesiel: 0

2.10. Iné informácie k vedeckej činnosti.

Hodnotenie organizačných útvarov ústavu Vedeckou radou sa už po piatykrát uskutočnilo formou dvojdňového kolokvia, ktoré sa konalo v polovici decembra 2015 v zasadačke Ústavu polymérov. V priebehu tohto kolokvia malo každé zo štyroch oddelení priestor na prezentáciu vedeckej, vedecko-organizačnej, popularizačnej a inej činnosti uskutočnenej v priebehu roku 2014. Kolokvium bolo organizované a vedené Vedeckou radou ústavu a pre každé oddelenie boli určení dvaja vnútroústavní hodnotitelia, pričom jedným z nich pre každé oddelenie bol mladý vedecký pracovník. Podkladom pre hodnotenie oddelení bol písomný materiál štrukturovaný podľa zásad definovaných Vedeckou radou. Cieľom hodnotenia bolo získať komplexný prehľad jednak o činnosti jednotlivých oddelení a zároveň o príspevku vedeckých a vedeckotechnických pracovníkov do výstupov oddelení v kontexte posledných troch rokov. Pri vyhodnotení kolokvia sa dospelo k názoru, že hodnotenie je postavené najmä na štatistických údajoch a nie úplne spĺňa účel prezentovania kvalitného výskumu jednotlivých oddelení. Diskutovalo sa o možnosti vytvorenia kolokvia na nových základoch, tak aby sa stalo lákavejším pre pracovníkov ústavu.
Zameranie ústavu pokračuje v tradičných témach popri rozvíjaní nových tém hlavne v oblasti bioaplikácií polymérov a nanotechnológiách. Tematický profil pracoviska je v štyroch základných oblastiach reflektujúcich tematiku štyroch oddelení: syntéza a modifikácia polymérov, biomateriály a bioaplikácie, polymérne kompozity a modelovanie. Kvantitatívne a kvalitatívne vedecké, projektové a popularizačné výstupy − počty publikácií, citácií, projektov a projektových spoluprác, popularizačných článkov, popularizačných akcií a vystúpení v médiách, ako aj iné ukazovateľe sú celkovo uspokojivé. Doleuvedená Tabuľka dokumentuje vývoj počtu publikácií a citácií za posledných 5 rokov. V budúcnosti by sa mali formovať ďalšie vedúce osobnosti tímov z mladšej generácie vedeckých pracovníkov, ktorí by mali postupne významnejšie prispievať k počtu publikácií a zastúpiť odchádzajúcu silnú generáciu starších vedeckých pracovníkov.

Rok	CC publikácie	Monografie/Kapitoly v knihách	Citácie WOS, Scopus
2011	44	0/4	1015
2012	62	0/2	1307
2013	48	0/2	1296
2014	65	0/2	1664
2015	66	1/3	1816

Vedecká rada organizuje semináre vedeckých pracovníkov ústavu a pravidlom sú i vedecké prednášky zahraničných hostí organizované ad-hoc v priebehu ich návštev ústavu prevažne v rámci projektovej spolupráce. Inicioval sa cyklus pravidelných pozvaných prednášok zahraničných vedeckých osobností; v aktívnejšej organizácii tohto cyklu sa bude pokračovať v r. 2016.

V roku 2015 sa po tretíkrát uskutočnilo hodnotenie mladých vedeckých pracovníkov, ktorým končila v roku 2015 pracovná zmluva. Základom pre hodnotenie bol vyplnený formulár s doterajšími výstupmi a vedecko-organizačnými aktivitami a krátka prezentácia doterajších najvýznamnejších výsledkov a plánovaného budúceho zamerania. Cieľom hodnotenia je selekcia mladých vedeckých pracovníkov na základe ich vedeckých výsledkov a schopností samostatne pracovať a rozvíjať výskum. Malo by viesť k zamestnávaniu kvalitnejších vedeckých pracovníkov, ktorí budú schopní rozvíjať výskum na ÚPo SAV a zvyšovať jeho konkurencieschopnosť a povedomie doma i v zahraničí.

3. Doktorandské štúdium, iná pedagogická činnosť a budovanie ľudských zdrojov pre vedu a techniku

3.1. Údaje o doktorandskom štúdiu

Tabuľka 3a Počet doktorandov v roku 2015

Forma	Počet k 31.12.2015				Počet ukončených doktorantúr v r. 2015					
	Doktorandi				Ukončenie z dôvodov					
	celkový počet		z toho novoprijatí		ukončenie úspešnou obhajobou		predčasné ukončenie		neúspešné ukončenie	
	M	Ž	M	Ž	M	Ž	M	Ž	M	Ž
Interná zo zdrojov SAV	5	7	1	2	1	2	0	2	1	0
Interná z iných zdrojov	0	0	0	0	0	0	0	0	0	0
Externá	0	1	0	0	1	0	0	0	0	0
Spolu	5	8	1	2	2	2	0	2	1	0
Súhrn	13		3		4		2		1	

3.2. Zmena formy doktorandského štúdia

Tabuľka 3b Počty preradení

Z formy	Interná z prostriedkov SAV	Interná z prostriedkov SAV	Interná z iných zdrojov	Interná z iných zdrojov	Externá	Externá
Do formy	**Interná z iných zdrojov**	**Externá**	**Interná z prostriedkov SAV**	**Externá**	**Interná z prostriedkov SAV**	**Interná z iných zdrojov**
Počet	0	0	0	0	0	0

3.3. Zoznam doktorandov, ktorí ukončili doktorandské štúdium úspešnou obhajobou

Tabuľka 3c Menný zoznam ukončených doktorandov v roku 2015 úspešnou obhajobou

Meno doktoranda	Forma DŠ	Mesiac, rok nástupu na DŠ	Mesiac, rok obhajoby	Číslo a názov študijného odboru	Meno a organizácia školiteľa	Fakulta udeľujúca vedeckú hodnosť
Ing. Michal Lacko	externé štúdium	09/2011	08/2015	5.2.21 technológia makromolekulových látok	Ing. Igor Novák PhD., Ústav polymérov SAV	Fakulta chemickej a potravinárskej technológie STU
Ing. Miroslava Lukešová	interné štúdium hradené z prostriedkov SAV	09/2011	08/2015	4.1.18 fyzikálna chémia	Ing. Josef Bartoš DrSc., Ústav polymérov SAV	Fakulta chemickej a potravinárskej technológie STU

Mgr. Marcel Mikulec	interné štúdium hradené z prostriedkov SAV	09/2010	08/2015	4.1.19 makromolekulová chémia	Mgr. Juraj Kronek PhD., Ústav polymérov SAV	Fakulta chemickej a potravinárskej technológie STU
Ing. Jana Tabačiarová	interné štúdium hradené z prostriedkov SAV	09/2011	08/2015	4.1.19 makromolekulová chémia	Ing. Mária Omastová DrSc., Ústav polymérov SAV	Fakulta chemickej a potravinárskej technológie STU

Zoznam interných a externých doktorandov je uvedený v Prílohe A.

3.4. Zoznam akreditovaných študijných programov s uvedením VŠ

Tabuľka 3d Zoznam akreditovaných študijných programov s uvedením univerzity/vysokej školy a fakulty

Názov študijného programu (ŠP)	**Názov študijného odboru (ŠO)**	**Číslo ŠO**	**Univerzita/vysoká škola a fakulta**
Fyzikálna chémia	fyzikálna chémia	4.1.18	Fakulta chemickej a potravinárskej technológie STU, Prírodovedecká fakulta UK
Makromolekulová chémia	makromolekulová chémia	4.1.19	Fakulta chemickej a potravinárskej technológie STU
Technológia polzmérnzch materiálov	technológia makromolekulových látok	5.2.21	Fa kulta chemickej a potravinárskej technológie STU

Tabuľka 3e Účasť na pedagogickom procese

Menný prehľad pracovníkov, ktorí boli menovaní do odborových komisií študijných programov doktorandského štúdia	**Menný prehľad pracovníkov, ktorí pôsobili ako členovia vedeckých rád univerzít, správnych rád univerzít a fakúlt**	**Menný prehľad pracovníkov, ktorí získali vyššiu vedeckú, pedagogickú hodnosť alebo vyšší kvalifikačný stupeň**
doc. Ing. Dušan Berek, DrSc. (analytická chémia)	prof., RNDr. Ignác Capek, DrSc. (Fakulta priemyselných technológií TnUAD v Púchove)	Ing. Miroslava Lukešová, PhD. (PhD., Fakulta chemickej a potravinárskej technológie STU)
Prof. Ing. Tomáš Bleha, DrSc. (fyzikálna chémia)	Ing. Igor Lacík, DrSc. (Fakulta chemickej a potravinárskej technológie STU)	Mgr. Marcel Mikulec (PhD., Fakulta chemickej a potravinárskej technológie STU)
Prof., RNDr. Ignác Capek, DrSc. (technológia makromolekulových látok)	Ing. Igor Lacík, DrSc. (Univerzita T. Bati, Zlín, Česká Republika)	Ing. Jana Tabačiarová (PhD., Fakulta chemickej a potravinárskej technológie STU)
RNDr. Peter Cifra, DrSc. (makromolekulová chémia)	Ing. Mária Omastová, DrSc. (Fakulta prírodných vied UCM)	

Mgr. Martin Danko, PhD. (technológia makromolekulových látok)		
Štefan Chmela, DrSc. (makromolekulová chémia)		
Prof. Ing. Ivan Chodák, DrSc. (technológia makromolekulových látok)		
Ing. Ivica Janigová, PhD. (technológia makromolekulových látok)		
Ing. Igor Lacík, DrSc. (makromolekulová chémia)		
Mgr. Jaroslav Mosnáček, PhD. (technológia makromolekulových látok)		
Ing. Igor Novák, PhD. (odbor v zahraničí)		
Ing. Mária Omastová, DrSc. (makromolekulová chémia)		
Ing. Lýdia Rychlá, DrSc. (fyzikálna chémia)		
Ing. Jozef Rychlý, DrSc. (makromolekulová chémia)		

3.5. Údaje o pedagogickej činnosti

Tabuľka 3f Prednášky a cvičenia vedené v roku 2015

PEDAGOGICKÁ ČINNOSŤ	Prednášky		Cvičenia a semináre	
	doma	v zahraničí	doma	v zahraničí
Počet prednášateľov alebo vedúcich cvičení	**7**	**1**	**3**	**0**
Celkový počet hodín v r. 2015	**60**	**30**	**412**	**0**

Tabuľka 3g Aktivity pracovníkov na VŠ

1.	**Počet pracovníkov, ktorí pôsobili ako vedúci alebo konzultanti diplomových a bakalárskych prác**	**6**
2.	**Počet vedených alebo konzultovaných diplomových a bakalárskych prác**	**8**
3.	**Počet pracovníkov, ktorí pôsobili ako školitelia doktorandov (PhD.)**	**11**
4.	**Počet školených doktorandov (aj pre iné inštitúcie)**	**16**
5.	**Počet oponovaných dizertačných a habilitačných prác**	**7**
6.	**Počet pracovníkov, ktorí oponovali dizertačné a habilitačné práce**	**4**
7.	**Počet pracovníkov, ktorí pôsobili ako členovia komisií pre obhajoby DrSc. prác**	**2**
8.	**Počet pracovníkov, ktorí pôsobili ako členovia komisií pre obhajoby PhD. prác**	**12**
9.	**Počet pracovníkov, ktorí pôsobili ako členovia komisií, resp. oponenti v inauguračnom alebo habilitačnom konaní na vysokých školách**	**3**

3.6. Iné dôležité informácie k pedagogickej činnosti

Vedeckí pracovníci Ústavu polymérov sa aktívne podieľajú aj na výchove študentov a doktorandov. V roku 2015 pracovníci ústavu pôsobili pedagogicky ako prednášatelia semestrálnych prednášok a seminárov pre študentov na Prírodovedeckej fakulte UK, Fakulte chemickej a potravinárskej technológie STU v Bratislave, Materiálovotechnickej fakulte STU so sídlom v Trnave a na Fakulte priemyselnych technologií TnU AD v Púchove.
Do riešenia parciálnych vedeckých problémov sa v pozícii VPS zapojili aj študenti bakalárskeho stupňa, čo je dobrým predpokladom pre ich následné získanie na PhD štúdium. Vedecká výchova doktorandov pokračovala úspešne aj v poslednom roku. Pracovisko bolo i v roku 2015 akreditované v troch odboroch pri Fakulte chemickej a potravinárskej technológie STU v Bratislave: Makromolekulová chémia, Technológia makromolekulových látok a Fyzikálna chémia, a pri Prírodovedeckej fakulte UK v Bratislave v odbore Fyzikálna chémia V roku 2015 sme získali troch nových doktorandov zo slovenských univerzít. Nepodarilo sa nám zatiaľ získať doktorandov z iných krajín EU, pre ktorých platia rovnaké podmienky pri nástupe ako u domácich doktorandov.
Vedeckí pracovníci ústavu prispievajú k výchove doktorandov aj ako prednášatelia v prednáškových kurzoch a ako vedúci dizertačných prác doktorandov. V rámci Vedeckej rady ÚPo SAV pokračovali diskusie o skvalitnení prípravy doktorandov, kde sa predpokladá zorganizovanie ďalších odborných prednášok a prehĺbenie vedomostí zapojením pracovníkov ústavu a pozvaných hostí ako prednášateľov do špeciálnych kurzov pre doktorandov. Vedenie ústavu a Vedecká rada kladú veľký dôraz na kvalitnú prípravu PhD študentov, ktorej súčasťou sú každoročné hodnotenia doktorandov, ktoré sa v roku 2015 konali čiastočne v septembri a čiastočne v novembri, pričom doktorandi prezentovali výsledky dosiahnuté v priebehu ukončeného akademického roka 2014/2015. Motiváciou v tomto štádiu prípravy je vyhodnotenie najlepších doktorandov za posledný akademický rok, ktorí získajú pravidelnú mesačnú finančnú prémiu k štipendiu. Doktorandské štúdium obhajobou dizertačných prác ukončili traja doktorandi.

V roku 2015 sme opätovne zorganizovali pre širokú verejnosť a pre študentov stredných a vysokých škôl Deň otvorených dverí, ktorý, ako každý rok, sa stretol s veľkým záujmom. Počas tohto podujatia bola zriadená Polymérna čajovňa, v ktorej stredoškoláci a vysokoškoláci diskutovali s kolegami z nášho ústavu Ing. Danielou Moravčíkovou, PhD., Ing. Igorom Novákom, PhD., Ing. Klaudiou Czanikovou, PhD. a Mgr. Jozefom Kollárom, PhD. o rôznych témach týkajúcich sa polymérov. Okrem Polymérnej čajovne mali návštevníci možnosť zistiť viac o polyméroch i pracovisku pri návštevách oddelení ústavu a malých prezentáciách vo vstupnej hale.

4. Medzinárodná vedecká spolupráca

4.1. Medzinárodné vedecké podujatia

4.1.1. Medzinárodné vedecké podujatia, ktoré organizácia SAV organizovala v roku 2015 alebo sa na ich organizácii podieľala, s vyhodnotením vedeckého a spoločenského prínosu podujatia

EUPOC 2015 - Vodivé polyméry, Gargano, Lago di Garda, Taliansko, 75 účastníkov, 24.05.-28.05.2015

Od roku 1998 Európska polymérna federácia (EPF) usporadúva každoročne sériu Europolymer konferencií (EUPOC), ktoré reflektujú aktuálne vedecké témy. Tradičným miestom konania je mestečko Gargnano pri jazere Lago di Garda, kde vo ville Palazzo Feltrinelli patriacej Univerzite v Miláne medzinárodná komunita nájde príjemné prostredie na výmenu vedeckých poznatkov. Vedecký program sa skladá z pozvaných prednášok, prenášok a prezentácie posterov. V tomto roku bola konferencia venovaná tématike vodivých polymérnych materiálov. Hlavnými organizátormi EUPOC 2015 boli Ing. Mária Omastová, DrSc. z Ústavu polymérov SAV, zastupujúca zároveň aj Slovenskú chemickú spoločnosť a prof. Soren Hvilsted z Technical University of Denmark v Lyngby, ktorý je zároveň aj zástupcom Dánskej spoločnosti pre polymérnu technológiu. Konferencia sa konala od 24.5. do 28.5.2015.

Cieľom konferencie bolo poskytnúť najmä mladým vedeckým pracovníkom a doktorandom prehľad o najnovších trendoch v oblasti vodivých polymérnych materiálov a ich aplikáciach. Tento cieľ sa podarilo dosiahnuť prostredníctvom prezentácií pozvaných popredných vedeckých odborníkov a diskusií nielen počas postrovej sekcie.

Vodivosť polymérnych materiálov je spôsobená pohybom elektricky nabitých častíc, iónov, protónov a elektrónov. Polyméry, v ktorých sú elektróny časticami, podieľajúcimi sa na prenose náboja, sú tzv. vnútorne (intrinsically) vodivé. V takýchto polyméroch je elektrická vodivosť výsledkom prítomných delokalizovaných elektrónov pozdĺž reťazca polyméru, najznámejšími sú polyanilín, polypyrol, tiofén, a poly(3,4-etyléndioxytiofén): polystyrén sulfonát (PEDOT:PSS). O význame týchto materiálov svedčí aj udelenie Nobelovej ceny za chémiu v roku 2000, kedy Alan Heeger, Alan MacDiarmid, a Hideki Shirakawa získali toto ocenenie "za objav a vývoj vodivých polymérov". Protónová vodivosť polymérov je vo veľkej miere využívaná v palivových článkoch. Systémy palivových článkov sú v súčasnej dobe komerčne dostupné a využívané, napr. v alternatívnych zdrojoch na pohon automobilov. Rozsiahle výskumné aktivity sú v súčasnosti zamerané na vývoj nových generácií polymérnych elektrolytov a membrán, ktoré by nahradili existujúce membrány vyrobené z Nafionu, ktoré majú vedúce postavenie na trhu. Rýchlo dobíjateľné mikročlánky na báze metanolu sú súčasťou batérií do novej generácie načúvacích prístrojov. Vodivé polymérne kompozity na báze izolačnej polymérnej matrice, napr. elastoméru s vodivými plnivami sa testujú ako súčasti umelých svalov, alebo zariadení na uchovávanie energie. Iónová vodivosť (typickým príkladom sú soli iónov rozpustených v polymérnych matriciach) je základom aplikácií napr. vo flexibilnej elektronike a v lítiových iónových batériách.

Hlavnými témami konferencie EUPOC 2015 boli vodivé polyméry s elektrónovou vodivosťou, iónovo vodivé polyméry, vodivé polymérne kompozity a aplikácie vodivých polymérnych materiálov.

Program EUPOC bol organizovaný tematicky a začal sa dvoma plenárnymi prednáškami v rámci témy polymérne materiály pre bioniku. V prvej z nich profesor Gordon G. Wallace z University of Wollongong, Austrália diskutoval povrchy a rozhrania organickej bioniky. V tejto súvislosti uviedol príklady reálnych zariadení pre klinické aplikácie, ako sú implantáty náhrad nervov, regenerácia svalov a implantovaného bionického zariadenia na detekciu a kontrolu epilepsie. Druhá plenárna prednáška profesora Edwina Jagera z University of Linköking, Švédsko bola venovaná prípravám elektroaktívnych látok pre tkanivové inžinierstvo a mäkké časti robotických zariadení. Predstavil elektricky vodivé polyméry, polypyrolom pokryté nanovlákna pre srdcové tkanivové inžinierstvo.

Na podujatí odznelo celkovo 11 pozvaných plenárnych prednášok, 28 kratších prednášok a odprezentovaných bolo 27 postrov. Na konferencii sa zúčastnilo 75 odborníkov z 27 krajín všetkých piatich kontinentov.

6th International Conference Polymeric Materials in Automotive PMA& 22nd Slovak Rubber Conference, Hotel Park Inn, Bratislava, Slovenská republika, 150 účastníkov, 26.05.-28.05.2015

V dňoch 26.-28. mája 2015 sa uskutočnil v Bratislave 6. ročník medzinárodnej konferencie „Polymeric Materials in Automotive - PMA 2015" spolu s 22. ročníkom medzinárodnej gumárenskej konferencie „Slovak Rubber Conference - SRC 2015".

Cieľom konferencie bolo prezentovať dosiahnuté výsledky výskumu a vývoja v oblasti plastov a elastomérov a upriamiť pozornosť na možnosti a potenciál výskumu a vývoja na Slovensku v oblasti polymérnych materiálov aplikovaných najmä v automobilovom priemysle.

Programovo bola konferencia rozdelená do niekoľkých blokov - úvodného a záverečného bloku plenárnych prednášok a ďalších blokov prednášok prebiehajúcich paralelne v dvoch sekciách:

-sekcii plastov – Plastics in Automotive - PMA 2015

-sekcii gumárenských surovín a výrobkov - Slovak Rubber Conference 2015.

Na úvod programu konferencie odznela netradične prednáška úspešného slovenského dizajnéra doc. Kleina z VŠVÚ v Bratislave podčiarkujúca nevyhnutnosť vývoja nových technológií a materiálov na báze polymérov pre úplne nový segment vozidiel – aeromobily. Prednáška naznačila trendy rozvoja aeromobilov vo svete, v rámci Európskej únie a na Slovensku najmä z hľadiska významu tohto rozbiehajúceho sa segmentu odvetvia automobilovej výroby, ktorý môže vzhľadom na inovatívnosť konštrukcie aeromobilu znamenať v budúcnosti veľký potenciál pre hospodársky rast Slovenska. Úvodný blok pokračoval plenárnou prednáškou prof. M. M. Saina z Univerzity v Toronte o nových ľahkých konštrukciách pre automobilový priemysel založených na nanotechnológiách a kompozitných materiáloch vystužených uhlíkovými vláknami a končil prezentáciou zástupcu firmy JEOL o súčasných možnostiach elektrónovej mikroskopie v štúdiu štruktúry nových polymérnych konštrukčných materiálov.

V odpoludňajšom spoločnom bloku prednášok sa s veľkým ohlasom stretli plenárne prednášky prof. Nishiho z Centra materiálového výskumu v Tokiu o nanotechnológiách pre prípravu elastomérnych, vysoko progresívnych materiálov a prof. Schustera, ktorý prezentoval možnosti aplikácie iónových tekutín ako základu pre nové typy elastomérnych materiálov.

Záverečný časť úvodného dňa konferencie bola venovaná novým postupom a metódam hodnotenia spracovateľnosti polymérov na základe merania reologických vlastností. Ďalšie prezentácie upriamili pozornosť účastníkov na možnosti výskumu v novom technologickom centre firmy Continental v Púchove, ako aj na nové typy meracích a testovacích zariadení pre hodnotenie vlastností polymérnych materiálov. Veľkej pozornosti sa tešila aj skupina prednášok o nových typoch polymérov, spracovateľských prísadách, nanomateriáloch pre konštrukčné aplikácie, možnostiach modifikácie ich vlastností, biopolyméroch a kompozitoch využívajúcich ako zložky biodegradovateľné polyméry, nových technologických aspektoch prípravy zmesí na báze kaučukov, ako aj nových metódach a technológiách recyklácie odpadov z plastov zo starých automobilov, obalov používaných v automobilovom priemysle, ako aj odpadov z gumy, najmä ojazdených plášťov.

V rámci oboch programových sekcií zaujali prezentácie nových metód a postupov analýzy polymérov jednak počas druhého dňa konferencie, ako aj v záverečný deň rokovania. Blok prednášok zameraných na testovanie vlastností bol ukončený vystúpením prof. Wranu, ktorý uviedol úplne nové možnosti hodnotenia termických a dynamicko-mechanických vlastností polymérov.

Na záver konferencie priblížil prof. Giese z DIK v Hannoveri účastníkom konferencie problematiku chemických reakcií, mechanizmov a hodnotenia procesu degradácie, ako aj možností ochrany sieťovaných elastomérnych systémov a prof. Wang z Pekinskej Univerzity chemickej technológie zakončil rokovanie konferencie prednáškou o elastoméroch na báze biopolymérov a polymérov z

obnoviteľných surovín pre technické aplikácie, čím podčiarkol smerovanie výskumu aj v oblasti elastomérov do čoraz širšieho využívania surovín z obnoviteľných zdrojov a biopolymérov.
Spoločným úsilím organizátorov z Ústavu prírodných a syntetických polymérov FCHPT STU v Bratislave a Ústavu polymérov SAV v Bratislave sa podarilo zabezpečiť vysokú úroveň odborného programu konferencie, ktorá si počas desiatich rokov získala pevné miesto medzi medzinárodnými vedeckými a odbornými podujatiami zameranými na gumárske a plastikárske produkty využívané hlavne v oblasti automobilizmu v európskom meradle.
K dobrému priebehu konferencie prispela aj výrazná podpora zo strany sponzorských organizácií najmä firiem JEOL, JD Dvořák, Compuplast, ale aj Recyklačného fondu a firiem Mettler Toledo, Continental a Pragolab. Propagácii konferencie a zvýrazneniu jej dôležitosti výrazne prospela aj účasť mediálnych partnerov z radov zahraničných a domácich vedeckých a odborných časopisov (KGK, Gumárske listy, Strojárstvo a tiež podpora zo strany internetového portálu Plastic Portal.
V rámci konferencie odznelo celkovo 10 plenárnych prednášok, 15 kľúčových prednášok a 21 krátkych prednášok v oboch programových sekciách. Program konferencie bol doplnený sekciou 28 posterov a celkový rámec podujatia umocnila aj prezentácia viacerých firiem vyrábajúcich laboratórnu techniku a zariadenia na testovanie vlastností polymérnych materiálov. Časový program konferencie vytvoril priestor aj na širokú výmenu názorov, rozvinutie osobných kontaktov, ako aj možnosť dohodnutia spolupráce pri tvorbe nových projektov.
Veľkým plusom konferencie bola prítomnosť veľkého počtu zahraničných účastníkov - z celkového počtu 119 aktívnych účastníkov bolo viac ako 50 % registrovaných účastníkov zo 16 krajín prakticky z celého sveta, čo svedčí o skutočnosti, že konferencia sa stala zaujímavým odborným a vedeckým fórom nielen v európskom meradle.
Popri odbornom programe poskytli organizátori účastníkom priestor a možnosť na spoznanie kultúrnych tradícií Slovenska vystúpením folklórnej zložky súboru Technik. Výkony slovenských umelcov očarili prítomných a určite boli významnou podporou pozvaniu na budúci 7. ročník konferencie PMA 2017, ktorý sa spolu s 23. ročníkom gumárskej konferencie SRC 2017 bude konať v apríli, resp. v máji 2017 v Bratislave.

67. zjazd chemikov, GRAND HOTEL BELLEVUE, Horný Smokovec, Vysoké Tatry Slovenská republika, 270 účastníkov, 07.09.-11.09.2015

4.1.2. Medzinárodné vedecké podujatia, ktoré usporiada organizácia SAV v roku 2016 (anglický a slovenský názov podujatia, miesto a termín konania, meno, telefónne číslo a e-mail zodpovedného pracovníka)

1. BYPoS 2016 - 6th Bratislava Young Polymer Scientists workshop (Šiesty bratislavský workshop mladých vedcov so zameraním na celú oblasť polymérnej chémie)**,** Hotel Bachledka***, Vysoké Tatry, Slovensko, ca 40 účastníkov, 14.03.-18.03.2016, (Alena Šišková, 02/ 3229 4301, alena.siskova@savba.sk)
Už po šiestykrát Rada mladých vedcov pri Ústave polymérov SAV organiyuje workshop mladých, šikovných a nádejných vedcov. Tento ročník BYPoSu je vsadený do krásneho prostredia Vysokých Tatier. Konferencia sa bude konať 14.–18.03.2016 v hoteli Bachledka vo Vysokých Tatrách.
Pozvanie organizačného výboru na úvodné prednášky prijali prof. Christian Paulik z Johannes Kepler Universität Linz v Rakúsku, Dr. Jürgen Pionteck z Leibniz-Institut für Polymerforschung Dresden, Nemecko,Dr. Juraj Kronek, Polymer Institute of the Slovak Academy of Sciences, Bratislava, Slovensko a Dr. Karoly Renner, Budapest University of Technology and Economics, Budapest, Maďarsko. Podrobnejšie informácie o prednáškach nájdete na www.polymer.sav.sk/bypos.

2**. New trends in solar cells and WG and MC meeting of COST MP 1307,** Lindner Hotel Gallery Central, Bratislava, Slovensko, ca 120 účastníkov, 19.04.-22.04.2016, (Mária Omastová, 02/ 3229

4312, maria.omastova@savba.sk)
The conference will focus on recent progress, current challenges and future directions for solar-cell technologies and characterization.

Major Topics (preliminary):

Organic solar cells
Dye-sensitised solar cells
Perovskite solar cells
Organic-inorganic hybrid solar cells
Device modeling

3. **9th Slovak – Czech Conference Polymers 2016 /IX. Slovensko-Česká konferencia Polyméry 2016,** Hotel Academia – KC Stará Lesná, 08.06.-10.06.2016, (Peter Cifra, 02/ 3229 4313, peter.cifra@savba.sk)

4. **BIMac 2016 - XXII. Bratislava international conference on Macromolecules - 22. Bratislavská konferencia o makromolekulách**, Hotel Holday Inn, Bratislava, Slovensko, ca 130 účastníkov, 06.09.-09.09.2016, (Jaroslav Mosnáček, 02/ 3229 4353, Jaroslav.mosnacek@savba.sk)

4.1.3. Počet pracovníkov v programových a organizačných výboroch medzinárodných konferencií

Tabuľka 4a Programové a organizačné výbory medzinárodných konferencií

Typ výboru	Programový	Organizačný	Programový i organizačný
Počet členstiev	5	5	1

4.2. Členstvo a funkcie v medzinárodných orgánoch

4.2.1. Členstvo a funkcie v medzinárodných vedeckých spoločnostiach, úniách a národných komitétoch SR

Doc. Ing. Dušan Berek, DrSc.

Medzinárodný vedecký výbor Sympózií o separačných vedách (funkcia: tajomník)
Central European Group of Separation Sciences (funkcia: tajomník riadiaceho výboru)

Mgr. Peter Kasák, PhD.

Bioadhesive Research Group a COST TD0906 (funkcia: člen)

Mgr. Juraj Kronek, PhD.

Society for Biomedical Polymers and Polymeric Biomaterials (funkcia: člen)
Spoločné poľsko-slovenské laboratórium SYNADPOL (funkcia: koordinátor)

Ing. Igor Lacík, DrSc.

Associate Member IUPAC (funkcia: člen)
Bioencapsulation research Group (funkcia: člen)
European Association for the Studies of Diabetes (funkcia: člen)
IUPAC Subcommittee Subcommittee Modeling of Polymerization Kinetics and Processes (funkcia: člen)

Mgr. Jaroslav Mosnáček, PhD.

Americká chemická spoločnosť (funkcia: člen)

Ing. Igor Novák, PhD.

Society of Plastics Engineers, Antwerpy, Belgicko (funkcia: člen)

Ing. Mária Omastová, DrSc.

European Polymer Federation (funkcia: národný reprezentant SR)

Ing. Filip Rázga, PhD.

CELL - The Czech leukemia study group for life (funkcia: člen)

4.3. Účasť expertov na hodnotení medzinárodných projektov (EÚ RP, ESF a iných)

Tabuľka 4b Experti hodnotiaci medzinárodné projekty

Meno pracovníka	Typ programu/projektu/výzvy	Počet hodnotených projektov
Chodák Ivan	APVV oponentúra bilaterálneho projektu SK-PL	1
Chodák Ivan	Czech Science Foundation	1
Chodák Ivan	National Research Foundation of South Africa	1
Mosnáček Jaroslav	National Science Centre (Narodowe Centrum Nauki – NCN), Poľsko	1
Novák Igor	Poľská academia vied	1
Omastová Mária	Grantová agentúra ČR	1

4.4. Najvýznamnejšie prínosy MVTS ústavu vyplývajúce z mobility a riešenia medzinárodných projektov a iné informácie k medzinárodnej vedeckej spolupráci

Cifra Peter	Hodnotenie ústavov AV ČR- posudzovanie 25 výstupov v účasti na I.fáze hodnotenia
Danko Martin	Technologické centrum AV ČR - hodnotenie 4 výstupov vedeckej organizácie v ČR- METODIKA CZ

Prehľad údajov o medzinárodnej mobilite pracovníkov organizácie je uvedený v Prílohe E.
Prehľad a údaje o medzinárodných projektoch sú uvedené v kapitole 2 a Prílohe B.

5. Vedná politika

Účasť ústavu na rozvoji vednej politiky sa realizovala a realizuje cez člena SKVH Ing. Igora Lacíka, DrSc. a zastúpením pracovníkov ústavu v predsedníctve SAV, Sneme SAV, v Rade riaditeľov II. Oddelenia vied a ďalších komisiách SAV a mimo SAV, ako aj v komisiách grantových agentúr VEGA a APVV.

6. Spolupráca s univerzitami/vysokými školami, štátnymi a neziskovými inštitúciami okrem aktivít uvedených v kap. 2, 3, 4

6.1. Spolupráca s univerzitami/VŠ (fakultami)

Názov univerzity/vysokej školy a fakulty: Prírodovedecká fakulta UK
Druh spolupráce (spoločné pracovisko alebo iné): Chemický ústav-neformálna spolupráca, spoločné výsledky a publikácie
Začiatok spolupráce: 2010
Zameranie: spektrálna charakterizácia organických molekúl v roztokoch a polymérových matriciach pre aplikácie vo fotonike a senzorike
Zhodnotenie: Spolupráca v roku 2015 vyústila do komplexnej fotofyzikálnej charakterizácie derivátov s benzo(tris)tiazolínovým akceptorom a aminoarylovým donorom v polymérnych matriciach polyvinylchloridu a aniónového polystyrén sulfonátu. Spoločná práca bude v najbližšej dobe odoslaná do SCI časopisu.

Názov univerzity/vysokej školy a fakulty: Fakulta chemickej a potravinárskej technológie STU
Druh spolupráce (spoločné pracovisko alebo iné): spoločné pracovisko
Začiatok spolupráce: 2008
Zameranie: výskum biodegradovateľných plastov
Zhodnotenie: Spolupráca je veľmi plodná, v roku 2015 bola zameraná predovšetkým na intenzívnu činnosť pri zavádzaní spoločného patentu do priemyselnej praxe. Úsilie sa venovalo technologickým otázkam súvisiacim so zamýšľanou komerčnou výrobou granulátu na báze zmesi biodegradovateľných plastov polyhydroxybutyrát / kyselina polymliečna, alesúčasne sa riešilo viacero ekonomických a legislatívnych otázok súvisiacich s prebiehajúcim procesom patentovej ochrany v EU a vo viacerých ďalších krajinách.Začali sa práce na detailnej charakterizácii materiálov na báze biodegradovateľných plastov metódou NMR. Tieto merania priniesli nové poznatky týkajúce sa vplyvu plastifikátora na pohyblivosť makromolekúl, ktoré umožňujú lepšie pochopiť dôvod pre relatívne vysokú húževnatosť nami patentovanej zmesi v porovnaní s krehkými materiálmi s veľmi podobným zložením. Spoločná publikácia vyšla v impaktovanom časopise: OLČÁK, D. - HRONSKÝ, V. - KOVAĽAKOVÁ, M. - VRÁBEL, P. - CHODÁK, Ivan - ALEXY, P. High-resolution solid-state NMR characteriz

Názov univerzity/vysokej školy a fakulty: Materiálovotechnologická fakulta STU v Trnave
Druh spolupráce (spoločné pracovisko alebo iné): Ústav výrobných technológií -bilaterálna spolupráca
Začiatok spolupráce: 2012
Zameranie: Výskum vlastností vybraných typov adhéznych spojov.
Zhodnotenie: Boli skúmané povrchové úpravy ocele použitím rôznych chemických modifikačných metód a bol skúmaný vplyv týchto úprav na pevnosť adhéznych spojov. Použitím nitrooxidačnej modifikačnej metódy na povrchovú úpravu ocele sa dosiahlo zníženie povrchovej energie ocele o 30%, pričo nastal rast pevnosti adhéznych spojov v závislosti od typu použitého adhezíva až o 60%. Ukázalo sa, že najvyšší prírastok pevnosti adhézneho spoja bol pre oceľ upravenú nitrooxidáciou dosiahnutý pri použiti epodových adhezív. Rast pevnosti adhéznych spojov porovnateľný s použitím nitrooxidácie bol dosiahnutý pri modifikácii povrchu ocele nízkoteplotnou koplanárnou bariérovou plazmou.

Názov univerzity/vysokej školy a fakulty: Fakulta záhradníctva a krajinného inžinierstva SPU
Druh spolupráce (spoločné pracovisko alebo iné): katedra zeleninárstva -spolupráca na VEGA projekte č. 2/0167/14
Začiatok spolupráce: 2014

Zameranie: Výskum biodegradovateľnej mulčovacej fólie a jej využitie v oblasti pôdohospodárstva

Zhodnotenie: Štúdium degradácie mulčovacej fólie na báze PLA-PHB (poly(lactic acid)-poly(3-hydroxybutyrate)). Degradácia bola sledovaná v reálnych podmienkach pri pestovaní papriky ako aj pri umelom UV ožarovaní. Fólia sa podrobila testu degradácie v reálnych i umelých podmienkach a stanovili sa mechanické vlastnosti v rôznych časoch degradácie ako aj v závislosti od umiestnenia fólie pri samotnom mulčovaní (pod rastlinou, v pôde, resp. nekrytá). Starnutie fólie bolo sledované pomocou GPC a mechanické vlastnosti pomocou DSC. Reálne vzorky ako aj vzorky použité pri UV ožarovaní preukazovali nárast elastického modulu. Ťahové skúšky potvrdili zmenu ťahového napätia i predĺženia po 60 dňoch okrem vzoriek, ktoré sa nachádzali zakopané v pôde. Preukázal sa pozitívny efekt mulčovacej fólie na úrodu sladkej papriky, čo sa prejavilo nárastom hmotnosti plodu a väčším množstvom karotenoidov pri zachovaní koncentrácie vitamínu C.

Názov univerzity/vysokej školy a fakulty: Vysoká škola výtvarných umení v Bratislave

Druh spolupráce (spoločné pracovisko alebo iné): Oddelenie textilu -spolupráca v rámci projektu

Začiatok spolupráce: 2015

Zameranie: Prepojenie textilných technológii s abstraktným umením

Zhodnotenie: téma spolupráce „Svetlo priestoru 2“ o prepojení textilných technológii s abstraktným umením sa riešila v rámci projektu Centrum aplikovaného výskumu nových materiálov a transferu technológií, ITMS 26240220088, kde participujú aj ďalšie ústavy SAV. Výsledkom spolupráce boli diela prezentované a vystavované na:•ART WEEKEND, 15.-17. máj 2015, vernisáž študentských prác. Štúdio Art of Textile, VŠVU, Drotárska 44, Bratislava.•TEXTILE ART OF TODAY, medzinárodná putovná výstava súčasnej umeleckej textilnej tvorby pod záštitou ministrov kultúry krajín V4. Slovenské národné múzeum - Historické múzeum - Bratislavský hrad, september – december 2015.•Vernisáž NEW FUTURE, galéria Vestředu, Plzeň 11.11.2015. Práca bola inštalovaná ako súčasť výstavy v spomenutej galérii v termíne od 11.11.2015 – 28.11.2015

6.2. Významné aplikácie výsledkov výskumu v spoločenskej praxi alebo vyriešenie problému pre štátnu alebo neziskovú inštitúciu

Zadávateľ, odberateľ, zmluvný partner: ECOSON, s.r.o., Nové Mesto nad Váhom

Názov aplikácie/objekt výskumu: Lepenie UZ meničov

Začiatok spolupráce: 2009

Stručný opis aplikácie/výsledku: lepenie generátorov ultrazvuku na vaničky z chrómniklovej ocele

Zhodnotenie (uviesť i finančný efekt z aplikácie v € pre organizáciu SAV): povrchovo upravené UZ meniče sa lepia epoxidovým adhezívom na upravený povrch chrómniklovešj ocele. Lepenie generátorov ultrazvuku bolo v roku 2015 realizované bez reklamácie zo strany odberateľov - príjem pre ÚPo 3 892.04 €

Zadávateľ, odberateľ, zmluvný partner: SOS Electronic spol. s r.o., Košice

Názov aplikácie/objekt výskumu: Elektricky vodivé adhezívum Gravipol Electro

Začiatok spolupráce: 2009

Stručný opis aplikácie/výsledku: elektricky vodivé jednozložkové ekologické adhezívum

Zhodnotenie (uviesť i finančný efekt z aplikácie v € pre organizáciu SAV): jednozložkové elektricky vodivé adhezívum Gravipol Electro sa dodáva na opravy mikroelektronoky. Finančný efekt v roku 2015: 1 760.0 €

6.3. Iná činnosť využiteľná pre potreby spoločenskej praxe

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7. Spolupráca s aplikačnou a hospodárskou sférou okrem aktivít uvedených v kap. 2, 3, 4

7.1. Spoločné pracoviská s aplikačnou sférou

7.2. Kontraktový – zmluvný výskum (vrátane zahraničných kontraktov)

Názov kontraktu: New materials for adhesive polymers in dental composites.

Partner(i): IVOCLAR VIVADENT, AG. Schaan, Liechtenstein.

Začiatok spolupráce (v súlade s podpísaným kontraktom): 2014

Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2015

Objem získaných prostriedkov v bežnom roku (€): 27173

Stručný opis výstupu/výsledku: Štúdium kinetiky homopolymerizácie a kopolymerizácie s metylmetakrylátom troch nových monomérov určených pre adhezíva aplikované do "self-etching" dentálnych kompozitov. V prípade kopolymerizácie sa okrem kinetiky polymerizácie jednalo aj o určenie kopolymerizačných parametrov. Vypracovanie a obhájenie výskumnej správy; spísanie a odoslanie rukopisu z predchádzajúcich výsledkov za rok 2013/2014 - publikácia CHMELA, Štefan – PAVLINEC, Juraj – FIEDLEROVÁ, Agnesa – CATEL, Y. – MOSZNER, N. Determination of homopolymerization kinetics of 10-(N-methylacrylamido)-decylphosphonic acid, its diethyl ester, and 10-(methacryloyloxy)-decylphosphonic acid, and their copolymerization with methyl methacrylate. In Macromolecular Chemistry and Physics, DOI: 10.1002/macp.201500237; diskusia o budúcej náplni v rámci plánovaného predĺženia projektu.

Zhodnotenie: Zachovanie kontinuity spolupráce s Ivoclar Vivadent bolo významným vedeckým ako aj finančným prínosom pre ÚPo.

Názov kontraktu: Meranie horľavosti PUR pien

Partner(i): Borcad Fryčovice, ČR

Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015

Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2015

Objem získaných prostriedkov v bežnom roku (€): 247

Stručný opis výstupu/výsledku: Pomocou kónického kalorimetra bola testovaná horľavosť rozličným spôsobom upravených polyuretánových pien pre kreslá a lôžka v železničnej preprave.

Názov kontraktu: Meranie horľavosti PUR pien

Partner(i): Kingspan Hradec Králové, ČR

Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015

Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2015

Objem získaných prostriedkov v bežnom roku (€): 396

Stručný opis výstupu/výsledku: Pomocou kónického kalorimetra bola testovaná horľavosť rozličným spôsobom upravených polyuretánových pien pre kreslá a lôžka v zdravotníctve.

Názov kontraktu: Opis horľavosti epoxidových živíc

Partner(i): Univerzita Pardubice

Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015

Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2015

Objem získaných prostriedkov v bežnom roku (€): 365

Stručný opis výstupu/výsledku: Pomocou kónického kalorimetra bola testovaná horľavosť rozličným spôsobom upravených epoxidov

Názov kontraktu: Recenzia slovensko, nemecko, anglického slovníka chemických výrazov
Partner(i): Fakulta chemickej a potravinárskej technológie STU
Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015
Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2015
Objem získaných prostriedkov v bežnom roku (€): 3200
Stručný opis výstupu/výsledku: Recenzia slovensko, nemecko, anglického slovníka chemických výrazov

Názov kontraktu: Termická oxidácia polyamidov študovaná chemiluminiscenciou
Partner(i): Clariant Hamburg
Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015
Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2015
Objem získaných prostriedkov v bežnom roku (€): 671
Stručný opis výstupu/výsledku: Neizotermickou chemiluminiscenciou bola otestovaná termická stabilita 17 vzoriek polyamidov stabilizovaných zmesnými systémami fenolických antioxidantov.

Názov kontraktu: Štúdium vplyvu zvýšenej teploty na mechanické vlastnosti membránových zmesí na báze butylkaučuku ako dôsledku úbytku zmäkčovadiel.
Partner(i): Continental, a.s. Púchov
Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015
Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2016
Objem získaných prostriedkov v bežnom roku (€): 0
Stručný opis výstupu/výsledku: V prvej fáze riešenia sa vybrali, otestovali a prispôsobili experimentálne metódy pre meranie termickej stability materiálu membrány v laboratórnych podmienkach a otestovala sa stabilita v súčasnosti používanej zmesi v úlohe referenčného materiálu.
Zhodnotenie: K dispozícii sú základné experimentálne údaje, s ktorými možno porovnávať účinok prirpavovaných modifikácií.

Názov kontraktu: Stanovenie rýchlostných konštánt a modelovanie súčasných v budúcnosti študovaných polymerizačných procesov a systémov v BASF. (Kinetic coefficients and models for existing and future polymerization processes and systems at BASF).
Partner(i): BASF SE Ludwigshafen (Nemecko), Queen's University, Kingston (Kanada)
Začiatok spolupráce (v súlade s podpísaným kontraktom): 2015
Ukončenie spolupráce (ak ide o spoluprácu v krátkom období): 2018
Objem získaných prostriedkov v bežnom roku (€): 8750
Stručný opis výstupu/výsledku: získanie individuálnych rýchlostných konštánt pre rôzne homopolymerizačné a kopolymerizačné systémy.
Zhodnotenie: v spolupráci s partnermi sa zadefinovali systémy, ktoré budú študované, a navrhli sa spôsoby charakterizácie kinetiky polymerizácie a podmienky charakterizácie molekulových hmotností metódou SEC.

7.3. Iná činnosť využiteľná pre potreby hospodárskej praxe

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8. Aktivity pre Národnú radu SR, vládu SR, ústredné orgány štátnej správy SR a iné organizácie

8.1. Členstvo v poradných zboroch vlády SR, Národnej rady SR, ministerstiev SR, orgánoch EÚ, EP, NATO a pod.

Tabuľka 8a Členstvo v poradných zboroch Národnej rady SR, vlády SR, ministerstiev SR, orgánoch EÚ, EP, NATO a pod.

Meno pracovníka	Názov orgánu	Funkcia
prof. Ing. Ivan Chodák, DrSc.	Ministerstvo školstva SR	člen štátnej skúšobnej komisie pre študijný odbor Polymérne materiály, 0120 Plasty a kaučuk (FCHPT STU)
Ing. Igor Lacík, DrSc.	Ministerstvo školstva SR	člen Slovenskej komisie pre vedecké hodnosti SKVH
Ing. Igor Lacík, DrSc.	Ministerstvo zdravotníctva SR	konzultant pre Strategický výskumný program biotechnológie a biomedicína

8.2. Expertízna činnosť a iné služby pre štátnu správu a samosprávy

Názov expertízy: expert pre akreditáciu skúšobných laboratórií pre SNAS
Adresát expertízy: Slovenská národná akreditačná služba
Spracoval: prof. Ing. Ivan Chodák, DrSc.

Názov expertízy: člen technickej komisie 39 PLASTY
Adresát expertízy: Slovenský ústav technickej normalizácie
Spracoval: Ing. Igor Novák, PhD.

8.3. Členstvo v radách štátnych programov a podprogramov ŠPVV a ŠO

Tabuľka 8b Členstvo v radách štátnych programov a podprogramov ŠPVV a ŠO

Meno pracovníka	Názov orgánu	Funkcia
Ing. Igor Lacík, DrSc.	Rada APVV pre prírodné vedy	člen

8.4. Prehľad aktuálnych spoločenských problémov, ktoré riešilo pracovisko v spolupráci s Kanceláriou prezidenta SR, s vládnymi a parlamentnými orgánmi alebo pre ich potrebu

9. Vedecko-organizačné a popularizačné aktivity

9.1.Vedecko-popularizačná činnosť

9.1.1. Najvýznamnejšia vedecko-popularizačná činnosť pracovníkov organizácie SAV

Tabuľka 9a Vedecko-popularizačná činnosť pracovníkov organizácie SAV

Meno	Spoluautori	Typ[1]	Názov	Miesto zverejnenia	Dátum alebo počet za rok
Mgr. Zuzana Benková, PhD.		EX	Zasimulujme si	Deň otvorených dverí, ÚPo SAV	11.11.2015
Mgr. Zuzana Benková, PhD.		PB	Zasimulujme si	Deň otvorených dverí, ÚPo SAV	11.11.2015
Ing. Katarína Borská, PhD.	Šišková Alena, Moravčíková Daniela	EX	Inšpirácie z prírody	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015
Ing. Katarína Borská, PhD.	Šišková Alena, Moravčíková Daniela	PB	Inšpirácie z prírody	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015
Ing. Klaudia Czaniková, PhD.		PB	Polymérna čajovňa	Deň otvorených dverí, ÚPo SAV	11.11.2015
prof. Ing. Ivan Chodák, DrSc.		TV	Krátke vyjadrenie k transformácii SAV na v.v.i.	RTVS - hlavné správy dĺžka cca 1 min	20.11.2015
prof. Ing. Ivan Chodák, DrSc.		TL	TOP 25 inovátorov Slovenska	Týždenník Trend	16.7.2015
prof. Ing. Ivan Chodák, DrSc.		RO	Vyjadrenie k bezpečnosti jazdy pri starých pneumatikách.	Regina RTVS	2015
Ing. Lucia Kleščíková, PhD.		PB	Polymérna čajovňa	Deň otvorených dverí, ÚPo SAV	11.11.2015
Mgr. Jozef Kollár, PhD.		PB	Polymérna čajovňa Hydrogély - polyméry pre život	Deň otvorených dverí, ÚPo SAV	11.11.2015
Mgr. Jozef Kollár, PhD.	Moravčíková Daniela	PB	Hydrogély, polyméry a svetlo	Veda má budúcnosť 2015, ÚPo SAV	5.6.2015
Mgr. Jozef Kollár, PhD.	Moravčíková Daniela	EX	Hydrogély, polyméry a svetlo	Veda má budúcnosť 2015, ÚPo SAV	5.6.2015
Mgr. Juraj Kronek, PhD.		EX	Farebné do modra	Galéria ÚĽUV	2015
Mgr. Zuzana Kroneková, PhD.	Šrámková Petra, Zahoranová Anna	EX	Bunky a polyméry	Deň otvorených dverí, ÚPo SAV	11.11.2015
Mgr. Zuzana Kroneková, PhD.	Šrámková Petra, Zahoranová Anna	PB	Bunky a polyméry	Deň otvorených dverí, ÚPo SAV	11.11.2015
Ing. Igor Lacík, DrSc.		RO	Magazín	Regina RTVS	7.9.2015
Ing. Igor Lacík, DrSc.		TV	Na pohovke s Igorom Lacíkom	Dúbravská televízia	2015

Ing. Igor Lacík, DrSc.		RO	Nočná pyramída – liečba diabetu	SRO1 RTVS	10.6.2015
Ing. Igor Lacík, DrSc.		PB	Skúsenosti s popularizáciou vedy z pohľadu vedcov.	Workshop PopVaT I. - Popularizácia a komunikácia vo vede, CVTI, Bratislava	22.4.2015
Ing. Igor Lacík, DrSc.		PB	Zdravie a medicína budúcnosti	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015
Ing. Daniela Moravčíková, PhD.		PB	Polymérna čajovňa Hydrogély - polyméry pre život	Deň otvorených dverí, ÚPo SAV	11.11.2015
Mgr. Jaroslav Mosnáček, PhD.		PB	Ústav polymérov SAV – história polymérov a polymérnych materiálov, súčasný výskum	Projekt Veda má budúcnosť pre žiakov stredných škôl - ÚPo	18.5.2015
Mgr. Veronika Némethová	Rázga Filip	PB	Polymérmi proti rakovine	KHaT – Nemocnica Antolská	18.2.2015
Ing. Igor Novák, PhD.		PB	Polymérna čajovňa	Deň otvorených dverí, ÚPo SAV	11.11.2015
Ing. Mária Omastová, DrSc.		PB	Polymérne nanokompozity a ich aplikácie.	CVTI, Bratislava	29.10.2015
Ing. Filip Rázga, PhD.		IN	Klub akčných hrdinov	CVTI, Bratislava	2015
Ing. Filip Rázga, PhD.	Uhelská Lucia, Treľová Dušana, Némethová Veronika, Kleščíková Lucia, Mazancová Petra	EX	Liečba diabetu ponovom	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015
Ing. Filip Rázga, PhD.	Uhelská Lucia, Treľová Dušana, Némethová Veronika, Kleščíková Lucia, Mazancová Petra	PB	Liečba diabetu ponovom	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015
Ing. Alena Šišková, PhD.	Číková Eliška	PB	Polyméry z prírody	Deň otvorených dverí, ÚPo SAV	11.11.2015
Ing. Alena Šišková, PhD.	Číková Eliška	EX	Polyméry z prírody	Deň otvorených dverí, ÚPo SAV	11.11.2015
Ing. Alena Šišková, PhD.	Moravčíková Daniela	PB	Výrobky elektro-statického zvlákňovania a ich využitie	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015
Ing. Alena Šišková, PhD.	Moravčíková Daniela	EX	Výrobky elektro-statického zvlákňovania a ich využitie	Európska noc výskumníka – 9. ročník, stánok ÚPo SAV pre verejnosť, Stará tržnica	25.9.2015

Mgr. Zdenko Špitálsky, PhD.		EX	Elektricky vodivé poly- mérne nanokompozity	Projekt Veda má budúcnosť pre žiakov stredných škôl- ÚPo	18.5.2015
Mgr. Zdenko Špitálsky, PhD.		PB	Elektricky vodivé poly- mérne nanokompozity	Projekt Veda má budúcnosť pre žiakov stredných škôl- ÚPo	18.5.2015
Mgr. Anna Zahoranová		RO	Fokus - doktorandi	RTVS	10.12.2015
Ing. Igor Lacík, DrSc.		iné	Výskum enkapsulovaných ostrovčekov pokračuje	Diabetik, 2015, roč. 14, č. 1-2, s. 28-29	1
Ing. Igor Novák, PhD.		PB	Špeciálne adhezíva.	(www.incheba.sk)	4
Ing. Igor Novák, PhD.		IN	Špeciálne adhezíva.	www.agrokomplex.sk	4
Ing. Igor Novák, PhD.	Žigo Ondrej, Valentín Marian	iné	Polymérne materiály a ich využitie pri výrobe automobilov.	Plastics Production, 2015, roč. X, č. 1, s. 52-54. ISSN 1802-1549	1
Ing. Igor Novák, PhD.	Žigo Ondrej, Valentín Marian, Prachar Jozef	iné	Aplikácie polymérov a využitie lepenia pri výrobe automobilov pri súčasnej výrobe automobilov.	Plastics Production, 2015, roč. X, č. 2, s.66-68. ISSN 1802-1549	1

[1] PB - prednáška/beseda, TL - tlač, TV - televízia, RO - rozhlas, IN - internet, EX - exkurzia, PU - publikácia, MM - multimédiá, DO - dokumentárny film

9.1.2. Súhrnné počty vedecko-popularizačných činností organizácie SAV

Tabuľka 9b Súhrnné počty vedecko-popularizačných činností organizácie SAV

Typ	Počet	Typ	Počet	Typ	Počet
prednášky/besedy	19	tlač	1	TV	2
rozhlas	4	internet	2	exkurzie	9
publikácie	3	multimediálne nosiče	0	dokumentárne filmy	0
iné	0				

9.2. Vedecko-organizačná činnosť

Tabuľka 9c Vedecko-organizačná činnosť

Názov podujatia	Domáca/ medzinárodná	Miesto	Dátum konania	Počet účastníkov
EUPOC 2015 - Vodivé polyméry	medzinárodná	Gargano, Lago di Garda, Taliansko	24.05.-28.05.2015	75
6th International Conference Polymeric Materials in Automotive PMA &22nd Slovak Rubber Conference	medzinárodná	Hotel Park Inn, Bratislava, Slovenská republika	26.05.-28.05.2015	150
67. zjazd chemikov	medzinárodná	Hotel Bellevue, Horný Smokovec, Vysoké Tatry Slovenská republika	07.09.-11.09.2015	270

9.3. Účasť na výstavách

Názov výstavy: Vernisáž NEW FUTURE
Miesto konania: galéria Vestředu, Plzeň - práca bola inštalovaná ako súčasť výstavy
Dátum: 11.-28.11.2015
Zhodnotenie účasti: Diela, ktoré vznikli v rámci projektu Centrum aplikovaného výskumu nových materiálov a transferu technológií, ITMS 26240220088 a sú výsledkom spolupráce s oddelením textilu VŠVU na tému Svetlo priestoru 2 - Prepojenie textilných technológii s abstraktným umením (zodpovedná pracovníčka – Šišková Alena):

Názov výstavy: TEXTILE ART OF TODAY, medzinárodná putovná výstava súčasnej umeleckej textilnej tvorby pod záštitou ministrov kultúry krajín V4.
Miesto konania: Slovenské národné múzeum - Historické múzeum - Bratislavský hrad
Dátum: 09.2015
Zhodnotenie účasti: Diela, ktoré vznikli v rámci projektu Centrum aplikovaného výskumu nových materiálov a transferu technológií, ITMS 26240220088 a sú výsledkom spolupráce s oddelením textilu VŠVU na tému Svetlo priestoru 2 - Prepojenie textilných technológii s abstraktným umením (zodpovedná pracovníčka – Šišková Alena):

Názov výstavy: 42. medzinárodná poľnohospodárska a potravinárska výstava Agrokomplex 2015
Miesto konania: stánok SAV, výstavisko Agrokomplex, Nitra
Dátum: 8.2015
Zhodnotenie účasti: inštalácie a propagácie špeciálnych adhezív z Ústavu polymérov (zodpovedný pracovník - Novák Igor)

Názov výstavy: 17. medzinárodná zdravotnícka výstava Slovmedica 2015
Miesto konania: stánok SAV, výstavisko Incheba Expo, Bratislava
Dátum: 10.2015
Zhodnotenie účasti: inštalácie a propagácie špeciálnych adhezív z Ústavu polymérov (zodpovedný pracovník - Novák Igor)

Názov výstavy: 23. medzinárodný veľtrh strojov, nástrojov, zariadení a technológií
Miesto konania: stánok Slovenskej zváračskej spoločnosti, výstavisko Agrokomplex, Nitra
Dátum: 05.2015
Zhodnotenie účasti: inštalácie a propagácie špeciálnych adhezív z Ústavu polymérov (zodpovedný pracovník - Novák Igor)

Názov výstavy: ART WEEKEND- vernisáž študentských prác
Miesto konania: Štúdio Art of Textile, VŠVU, Drotárska 44, Bratislava.
Dátum: 15.5.2015
Zhodnotenie účasti: Diela, ktoré vznikli v rámci projektu Centrum aplikovaného výskumu nových materiálov a transferu technológií, ITMS 26240220088 a sú výsledkom spolupráce s oddelením textilu VŠVU na tému Svetlo priestoru 2 - Prepojenie textilných technológii s abstraktným umením -(zodpovedná pracovníčka – Šišková Alena)

Názov výstavy: 36. medzinárodný veľtrh Coneco 2015 a 25. ročník veľtrhu Racioenergia
Miesto konania: výstavisko Incheba Expo, Bratislava
Dátum: 3.2015
Zhodnotenie účasti: inštalácie a propagácie špeciálnych adhezív z Ústavu polymérov (zodpovedný pracovník - Novák Igor)

9.4. Účasť v programových a organizačných výboroch národných konferencií

Tabuľka 9d Programové a organizačné výbory národných konferencií

Typ výboru	Programový	Organizačný	Programový i organizačný
Počet členstiev	0	2	2

9.5. Členstvo v redakčných radách časopisov

Doc. Ing. Dušan Berek, DrSc.

Chemistry and Chemical Technology (Ukraina) (funkcia: člen edičnej rady)
International Journal of Polymeric Materials (USA) (funkcia: člen edičnej rady)
Macromolecules - An Indian Journal (India) (funkcia: člen edičnej rady)

Ing. Zuzana Hloušková

ChermZi (funkcia: člen redakčnej rady)

Prof. Ing. Ivan Chodák, DrSc.

Open Macromolecules Journal (TOMAC), Bentham Open (funkcia: člen redakčnej rady)
Plasty a kaučuk (ČR) (funkcia: člen edičnej rady)

Mgr. Jaroslav Mosnáček, PhD.

časopis ISRN Polymer Science (funkcia: člen edičnej rady)
Frontiers in Materials: Composite Materials (funkcia: review editor časopisu)

Ing. Igor Novák, PhD.

CHEMagazín (ČR) (funkcia: externý člen edičnej rady)
Urob si sám (funkcia: člen redakčnej rady)

Ing. Mária Omastová, DrSc.

ChemZi (funkcia: členka redakčnej rady)

9.6. Činnosť v domácich vedeckých spoločnostiach

Doc. Ing. Dušan Berek, DrSc.

Slovenkej chemickej spoločnosti (funkcia: čestný člen)
Slovenský národný komitét chémie pre IUPAC (funkcia: podpredseda)
výbor odborných skupín Polyméry a Chromatografia SCHS (funkcia: člen)

Mgr. Martin Danko, PhD.

SCHS (funkcia: člen výboru odbornej skupiny Polyméry)

RNDr. Agnesa Fiedlerová

SCHS (funkcia: tajomníčka výboru odbornej skupiny Polyméry)

Štefan Chmela, DrSc.

SCHS (funkcia: člen výboru odbornej skupiny Polyméry)

Mgr. Juraj Kronek, PhD.

SCHS (funkcia: Podpredseda odbornej skupiny Polyméry)

Ing. Igor Lacík, DrSc.

Slovenský národný komitét IUPAC (funkcia: člen)

Ing. Mária Omastová, DrSc.

SCHS (funkcia: podpredsedníčka výboru odbornej skupiny Polyméry)
SCHS (funkcia: predsedníčka)

9.7. Iné dôležité informácie o vedecko-organizačných a popularizačných aktivitách

V r. 2015 Ústav polymérov SAV organizoval a spoluorganizoval jedno národné a dve medzinárodné vedecké podujatia:

- 67. Zjazd chemikov, 7. – 11. septembra 2015, Grand Hotel Bellevue, Vysoké Tatry
- 6th International Conference on Polymeric Materials in Automotive & 22nd Slovak Rubber Conference, 26. – 28. mája 2015, Hotel Park Inn Danube, Bratislava
- Europolymer Conference EUPOC 2015 Conducting Polymeric Materials, 24. – 28. mája 2015, Gargnano, Italy

Ústav polymérov SAV pokladá za významné vedecko-popularizačné aktivity v rôznych médiách v zmysle súčasných trendov SAV. Propagácia sa v roku 2015 týkala mnohých vystúpení formou tlače, rozhlasu, televízie, internetu, osobných stretnutí a pod. Projekty a celková činnosť ústavu boli opäť úspešne prezentované na Noci výskumníka, v rámci Týždna vedy a techniky a tiež v rôznych diskusných stretnutiach s odbornou a laickou verejnosťou. Ústav polymérov SAV bol zviditeľnený i vďaka Zlatej medaily SAV udelenej Ing. Jozefovi Rychlému DrSc., oceneniu Ing. Igorovi Lacíkovi, DrSc. a kolektívu Oddelenia pre výskum biomateriálov ÚPo SAV za vedecko-popularizačnú a vzdelávaciu činnosť, oceneniu prof. Ing. Chodákovi, DrSc. za propagáciu významu vedy a presadzovanie jej rozvoja ako i udeleniu Diplomu Zlatej Incheby Ing. Igorovi Novákovi, PhD. a Mgr. Zdenkovi Špitalskému, PhD. za vývoj superhydrofóbnych biodegradovateľných materiálov pre medicínske aplikácie. V spolupráci s chemickou firmou BASF Slovensko je ústav spolupropagátorom akcie Futur city http://chemgeneration.com/sk/futurecity.html), ktorej cieľom je stimulovať mladú generáciu k štúdiu chémie. Práca na téme liečby cukrovky je propagovaná cez neinvestičný fond Cukrovka n.f. (www.cukrovkanf.sk)

10. Činnosť knižnično-informačného pracoviska

10.1. Knižničný fond

Tabuľka 10a Knižničný fond

Knižničné jednotky spolu		**10 969**
z toho	knihy a zviazané periodiká	**10 823**
	audiovizuálne dokumenty	**0**
	elektronické dokumenty (vrátane digitálnych)	**0**
	mikroformy	**0**
	iné špeciálne dokumenty - dizertácie, výskumné správy	**146**
Počet titulov dochádzajúcich periodík		**3**
z toho zahraničné periodiká		**1**
Ročný prírastok knižničných jednotiek		**7**
v tom	kúpou	**7**
	darom	**0**
	výmenou	**0**
	bezodplatným prevodom	**0**
Úbytky knižničných jednotiek		**0**
Knižničné jednotky spracované automatizovane		**0**

10.2. Výpožičky a služby

Tabuľka 10b Výpožičky a služby

Výpožičky spolu		**550**
z toho	odborná literatúra pre dospelých	**512**
	výpožičky periodík	**35**
	prezenčné výpožičky	**3**
MVS iným knižniciam		**2**
MVS z iných knižníc		**0**
MMVS iným knižniciam		**0**
MMVS z iných knižníc		**0**
Počet vypracovaných bibliografií		**0**
Počet vypracovaných rešerší		**162**

10.3. Používatelia

Tabuľka 10c Užívatelia

Registrovaní používatelia	**55**
Návštevníci knižnice spolu (bez návštevníkov podujatí)	**73**

10.4. Iné údaje

Tabuľka 10d Iné údaje

On-line katalóg knižnice na internete (1=áno, 0=nie)	**0**
Náklady na nákup knižničného fondu v €	**1028.38**

10.5. Iné informácie o knižničnej činnosti

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11. Aktivity v orgánoch SAV

11.1. Členstvo vo Výbore Snemu SAV

11.2. Členstvo v Predsedníctve SAV a vo Vedeckej rade SAV

Ing. Mária Omastová, DrSc.

- členka Predsedníctva SAV, zástupkyňa Vedeckého sekretára
- členka Vedeckej rady SAV

11.3. Členstvo vo vedeckých kolégiách SAV

RNDr. Peter Cifra, DrSc.

- VK SAV pre chemické vedy (člen)

Ing. Igor Lacík, DrSc.

- VK SAV pre chemické vedy (člen)

Ing. Mária Omastová, DrSc.

- VK SAV pre chemické vedy (člen)

11.4. Členstvo v komisiách SAV

Prof. Ing. Tomáš Bleha, DrSc.

- Komisia SAV pre vyhodnocovanie medzinárodných projektov (člen)

Prof. Ing. Ivan Chodák, DrSc.

- Komisia SAV pre duševné vlastníctvo, inovácie a technologický transfer (člen)
- Rada programu centier excelentnosti SAV (člen)

Mgr. Jaroslav Mosnáček, PhD.

- Komisia SAV pre infraštruktúru a štrukturálne fondy (člen)

Ing. Mária Omastová, DrSc.

- Akreditačná komisia SAV (predsedníčka)
- Komisia SAV pre medzinárodnú vedecko-technickú spoluprácu (predsedníčka)

11.5. Členstvo v orgánoch VEGA

Mgr. Jaroslav Mosnáček, PhD.

- člen komisie VEGA č. 3 pre chemické vedy, chemické inžinierstvo a biotechnológie (člen)

Ing. Mária Omastová, DrSc.

- komisia VEGA č.3 pre chemické vedy, chemické inžinierstvo a biotechnológie (člen)

12. Hospodárenie organizácie

12.1. Výdavky PO SAV

Tabuľka 12a Výdavky PO SAV (v €)

V ý d a v k y	Skutočnosť k 31.12.2015 spolu	v tom:			
		zo ŠR od zriaďovateľa	z vlastných zdrojov	z iných zdrojov	z toho: ŠF EÚ
Výdavky spolu	2 301 151	1 195 304	968 609		
Bežné výdavky	2 163 913	1 165 404	998 509		
v tom:					
mzdy (610)	841 512	657 259	184 253		
poistné a príspevok do poisťovní (620)	295 237	228 693	66 544		
tovary a služby (630)	928 398	182 215	746 183		
z toho: časopisy					
VEGA projekty	112 780	112 780			
MVTS projekty	51 191	51 191			
CE					
vedecká výchova	98 766	97 237	1 529		
bežné transfery (640)	97 237	97 237			
z toho: štipendiá	93 126	91 597	1 529		
transfery partnerom projektov	110 726		110 726		
Kapitálové výdavky	137 238	64 635	72 603		
v tom:					
obstarávanie kapitálových aktív	72 603		72 603		
kapitálové transfery	64 635	64 635			
z toho: transfery partnerom projektov					

12.2. Príjmy PO SAV

Tabuľka 12b Príjmy PO SAV (v €)

P r í j m y	**Skutočnosť k 31.12.2015 spolu**	**v tom:**	
		rozpočtové	**z mimorozp. zdrojov**
Príjmy spolu	2 329 669	1 195 304	1 134 365
Nedaňové príjmy			
v tom:			
príjmy z prenájmu	28 809		28 809
príjmy z predaja výrobkov a služieb	272 689		272 689
iné	850		850
Granty a transfery (mimo zdroja 111)	830 017		830 017
v tom:			
tuzemské	389 333		389 333
z toho: APVV	344 759		344 759
iné	470 578		470 578
zahraničné	372 332		372 332
z toho: projekty rámcového programu EÚ			
iné	98 245		98 245

13. Nadácie a fondy pri organizácii SAV

Názov: Neinvestičný fond Cukrovka n.f. (www.cukrovkanf.sk)

Zameranie: Podpora výskumu spojeného s liečbou cukrovky transplantáciou pankreatických ostrovčekov

Opis: Neinvestičný fond Cukrovka n.f. s cieľom získať prostriedky najmä na:

- podporu výskumu a všetkých aktivít spojených s liečbou cukrovky transplantáciou pankreatických ostrovčekov, ktoré sú enkapsulované v polymérnej membráne,
- podporu vzdelávania a informovania verejnosti vo forme podávania informácií o nových trendoch v liečbe cukrovky,
- podporu študijných pobytov, školení, prednášok, konferencií,
- podporu tvorby prístrojovej infraštruktúry

14. Iné významné činnosti organizácie SAV

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15. Vyznamenania, ocenenia a ceny udelené pracovníkom organizácie v r. 2015

15.1. Domáce ocenenia

15.1.1. Ocenenia SAV

Chodák Ivan
Cena SAV za vedecko-popularizačnú a vzdelávaciu činnosť
Oceňovateľ: SAV
Opis: Cena SAV za vedecko-popularizačnú a vzdelávaciu činnosť, 29.06.2015, Smolenice – odovzdávanie najvýznamnejších vedeckých ocenení na Slovensku

Lacík Igor
Cena SAV za popularizáciu vedy
Oceňovateľ: SAV
Opis: Lacík Igor a kolektív Oddelenia pre výskum biomateriálov – Cena SAV za popularizáciu vedy, 29.06.2015, Smolenice – odovzdávanie najvýznamnejších vedeckých ocenení na Slovensku

Rychlý Jozef
Zlatá medaila SAV
Oceňovateľ: SAV
Opis: ocenenie, ktoré menovanému dňa 14.04.2015 udelilo P SAV za celoživotné vedecké dielo v oblasti vedy o polyméroch.

15.1.2. Iné domáce ocenenia

Novák Igor
diplom Zlatá Incheba
Oceňovateľ:
Opis: z výstavy SLOVMEDICA a NON-HANDICAP 2015 za exponát s názvom: Superhydrophobic biodegradable polymeric materials for medicinal applications.

Omastová Mária
medaila Daniela Belluša
Oceňovateľ: Slovenská chemická spoločnosť
Opis: udelená Slovenskou chemickou spoločnosťou

Špitálsky Zdenko
diplom Zlatá Incheba
Oceňovateľ:
Opis: z výstavy SLOVMEDICA a NON-HANDICAP 2015 za exponát s názvom: Superhydrophobic biodegradable polymeric materials for medicinal applications.

15.2. Medzinárodné ocenenia

16. Poskytovanie informácií v súlade so zákonom č. 211/2000 Z. z. o slobodnom prístupe k informáciám v znení neskorších predpisov (Zákon o slobode informácií)

Na pracovisku nebola zaznamenaná žiadna požiadavka o poskytnutie informácií v zmysle uvedeného zákona.

17. Problémy a podnety pre činnosť SAV

V r. 2015 pretrvávali nejasnosti ohľadne postupu transformácie SAV spojené aj s reštrukturalizáciou. S nástupom nového predsedníctva SAV na začiatku roka 2015 sa situácia zdala byť prehľadnejšia, avšak v priebehu roka a vyskytli prekážky, ktoré neumožnili urobiť legislatívne kroky k plánovanej transformácii inštitúcií SAV na verejno-výskumné inštitúcie od r. 2016. Vedenie ústavu podporuje transformáciu a veríme, že sa ju podarí uskutočniť v priebehu roka 2016. Za posledné roky sa nám podarilo vytvoriť pomerne kvalitné podmienky z pohľadu infraštruktúry, avšak rozvoj ústavu (a SAV), ďalšie financovanie, kvalita projektov a kvalita výstupov je kriticky podmienená kvalitou ľudských zdrojov. Veríme, že jednou zo základných naplnených priorít bude vytvorenie podmienok pre podporu a udržanie mladej generácie kvalitných vedeckých pracovníkov pre budúcnosť SAV. Pozitívnym znakom je i to, že po úspešnom prvom kole, Ústav polymérov bol úspešný i v druhom a treťom kole výzvy SASPRO, ktorá je čiastočne financovaná z Európskej únie a je zameraná na podporu výskumu kvalitných mladých vedeckých pracovníkov na slovenských vedeckých inštitúciách.

Správu o činnosti organizácie SAV spracoval(i):

Ing. Katarína Csomorová, 02/ 3229 4307
Ing. Zuzana Hloušková, 02/ 3229 4328
Ing. Angela Kleinová, 02/ 3229 4368
Mgr. Monika Majerčíková, 02/ 3229 4319
Ing. Mária Omastová, DrSc., 02/ 3229 4312
Ing. Nadežda Petrenčíková, 02/ 3229 4371
Mgr. Zdenko Špitálsky, PhD., 02/ 3229 4325

Riaditeľ organizácie SAV	**Predseda vedeckej rady**
.....	.....
Ing. Igor Lacík, DrSc.	RNDr. Peter Cifra, DrSc.

Príloha A

Zoznam zamestnancov a doktorandov organizácie k 31.12.2015

Zoznam zamestnancov podľa štruktúry (nadväzne na údaje v Tabuľke 1a)

	Meno s titulmi	Úväzok (v %)	Ročný prepočítaný úväzok
Vedúci vedeckí pracovníci DrSc.			
1.	Ing. Josef Bartoš, DrSc.	100	1.00
2.	Prof., RNDr. Ignác Capek, DrSc.	90	0.90
3.	RNDr. Peter Cifra, DrSc.	100	1.00
4.	Štefan Chmela, DrSc.	100	1.00
5.	Prof. Ing. Ivan Chodák, DrSc.	100	1.00
6.	Ing. Igor Lacík, DrSc.	100	1.00
7.	Ing. Mária Omastová, DrSc.	50	0.54
8.	Ing. Jozef Rychlý, DrSc.	40	0.40
Samostatní vedeckí pracovníci			
1.	Mgr. Zuzana Benková, PhD.	100	1.00
2.	Mgr. Martin Danko, PhD.	100	1.00
3.	RNDr. Dušan Chorvát, PhD.	20	0.17
4.	Ing. Ivica Janigová, PhD.	100	1.00
5.	Mgr. Jozef Kollár, PhD.	100	1.00
6.	Mgr. Juraj Kronek, PhD.	100	1.00
7.	Ing. Matej Mičušík, PhD.	100	1.00
8.	Mgr. Jaroslav Mosnáček, PhD.	100	1.00
9.	Ing. Igor Novák, PhD.	100	1.00
10.	Ing. Dušan Račko, PhD.	100	0.00
11.	Ing. Filip Rázga, PhD.	110	1.08
12.	Mgr. Zdenko Špitálsky, PhD.	100	1.00
Vedeckí pracovníci			
1.	Ing. Katarína Borská, PhD.	100	1.00
2.	Ing. Klaudia Czaniková, PhD.	100	1.00
3.	Ing. Anita Eckstein, PhD.	100	0.00
4.	Ing. Gabriela Hloušková, PhD.	100	0.00
5.	Ing. Markéta Ilčíková, PhD.	100	0.38
6.	Ing. Daniela Jochec Mošková, PhD.	80	0.80
7.	Ing. Lucia Kleščíková, PhD.	100	0.33
8.	Mgr. Zuzana Kroneková, PhD.	100	1.00
9.	Ing. Miroslava Lukešová, PhD.	100	0.40
10.	Ing. Marta Malíková, PhD.	50	0.50
11.	Mgr. Zoran Markovic, PhD.	100	0.08
12.	Ing. Andrea Mihálová, PhD.	70	0.23

13.	Ing. Daniela Moravčíková, PhD.	100	1.00
14.	Mgr. Katarína Mosnáčková, PhD.	100	0.96
15.	Mgr. Silvia Podhradská, PhD.	100	1.00
16.	Ing. Michaela Sedničková, PhD.	100	1.00
17.	Ing. Alena Šišková, PhD.	100	1.00
18.	Ing. Helena Švajdlenková, PhD.	100	0.75
19.	Ing. Dušana Treľová, PhD.	100	1.00
20.	Ing. Lucia Uhelská, PhD.	100	1.00
21.	Ing. Marian Valentin, PhD.	10	0.70
22.	Ing. Ondrej Žigo, PhD.	100	1.00
Odborní pracovníci s VŠ vzdelaním			
1.	Mgr. Rastislav Baran	50	0.33
2.	Ing. Nikola Bugárová	10	0.03
3.	Ing. Zuzana Cseriová	100	0.17
4.	Ing. Katarína Csomorová	100	1.00
5.	Ing. Eliška Číková	10	0.10
////6.	RNDr. Agnesa Fiedlerová	100	1.00
7.	Ing. Dominika Hlásna	100	0.08
8.	Ing. Zuzana Hloušková	100	1.00
9.	Ing. Ana Hološ	100	0.16
10.	Ing. Ľudmila Hrčková	100	1.00
11.	Ing. Anna Chovancová	10	0.10
12.	Ing. František Ivanič	10	0.03
13.	Ing. Angela Kleinová	100	1.00
14.	Mgr. Igor Koreň	20	0.20
15.	Ing. Jaroslav Kuliček	20	0.20
16.	Ing. Eva Macová	100	1.00
17.	Mgr. Monika Majerčíková	100	1.00
18.	Mgr. Petra Mazancová	10	0.03
19.	Mgr. Veronika Némethová	10	0.10
20.	Ing. Zuzana Nógellová	100	1.00
21.	Ing. Nadežda Petrenčíková	100	1.00
22.	Mgr. Jozef Prachár	10	0.10
23.	RNDr. Michal Procházka	100	0.33
24.	Ing. Mária Šivová	100	1.00
25.	Mgr. Petra Šrámková	10	0.10
26.	Mgr. Anna Zahoranová	10	0.10
Odborní pracovníci ÚSV			
1.	Katarína Cinová	100	1.00
2.	Nadežda Danková	100	1.00
3.	Eva Hipká	100	1.00

4.	Ivona Hrodeková	100	1.00
5.	Sidónia Kalinová	100	1.00
6.	Jozef Kandráč	80	0.80
7.	Viera Karlíková	100	1.00
8.	Marcela Kimličková	100	1.00
9.	Zuzana Kuželová	100	1.00
10.	Marta Mitošinková	100	1.00
11.	Iveta Nestarcová	100	1.00
Ostatní pracovníci			
1.	Peter Kečkéš	40	0.40
2.	Apostol Todorov Nedelčev	40	0.40
3.	Zuzana Ondrušová	100	1.00
4.	Daniela Pírová	100	1.00

Zoznam zamestnancov, ktorí odišli v priebehu roka

	Meno s titulmi	**Dátum odchodu**	**Ročný prepočítaný úväzok**
Samostatní vedeckí pracovníci			
1.	RNDr. Dušan Chorvát, PhD.	31.12.2015	-
2.	Mgr. Peter Kasák, PhD.	30.11.2015	0.00
3.	Ing. Igor Krupa, PhD.	31.8.2015	0.00
Vedeckí pracovníci			
1.	Mgr. Peter Palenčár, PhD.	31.8.2015	0.04
Odborní pracovníci s VŠ vzdelaním			
1.	Ing. Slávka Ďurkáčová	31.10.2015	0.08
2.	Ing. Martina Hudáková	30.9.2015	0.07
3.	Mgr. Pavol Námer	30.6.2015	0.05
4.	Ing. Szabolcs Szalai	31.5.2015	0.04
5.	Ing. Jana Tabačiarová	17.8.2015	0.06
6.	Ing. Dominika Vnuková	31.8.2015	0.06
Odborní pracovníci ÚSV			
1.	Alena Ďurišová	31.5.2015	0.42

Zoznam doktorandov

	Meno s titulmi	Škola/fakulta	Študijný odbor
Interní doktorandi hradení z prostriedkov SAV			
1.	Ing. Nikola Bugárová	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
2.	Ing. Eliška Číková	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
3.	Ing. Anna Chovancová	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
4.	Ing. František Ivanič	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
5.	Ing. Jaroslav Kuliček	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
6.	Mgr. Petra Mazancová	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
7.	Mgr. Pavol Námer	Fakulta chemickej a potravinárskej technológie STU	4.1.18 fyzikálna chémia
8.	Ing. Veronika Némethová	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
9.	Mgr. Jozef Prachár	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
10.	Ing. Szabolcs Szalai	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
11.	Mgr. Petra Šrámková	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
12.	Mgr. Anna Zahoranová	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia
Interní doktorandi hradení z iných zdrojov			
organizácia nemá interných doktorandov hradených z iných zdrojov			
Externí doktorandi			
1.	Ing. Martina Hudáková	Fakulta chemickej a potravinárskej technológie STU	4.1.19 makromolekulová chémia

Príloha B

Medzinárodné projekty

Programy: Medziakademická dohoda (MAD)

1. Štúdium povrchových vlastností vybraných funkcionalizovaných polyolefínov.
(Study of surface properties of selected functionalized polyolefins.)

Zodpovedný riešiteľ:	Igor Novák
Trvanie projektu:	1.1.2014 / 31.12.2018
Evidenčné číslo projektu:	-
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Česko: 1
Čerpané financie:	

Dosiahnuté výsledky:

V roku 2015 boli skúmané povrchové a adhézne vlastnosti vybraných polyolefínov (LDPE, HDPE, iPP) funkcionalizovaných maleínanhydridom, kyselinou akrylovou a kyselinou itakonovou. Povrchové vlastnosti pripravených funkcionalizovaných polyolefínov boli analyzované meraním kontaktných uhlov sady testovacích kvapalín s rôznou polaritou a tiež meraním parametrov visiacej kvapky polymérov v tavenine. Najvyšší rast hydrofilnosti bol v prípade LDPE a iPP dosiahnutý v prípade funkcionalizácie kyselinou itakonovou, ktorá poskytla aj adhézne spoje s najvyššou pevnosťou.

2.) Príprava a elektrické vlastnosti vodivých polymérnych kompozitov a nanokompozitov.
(Preparation and electrical properties of conducting polymer composites and nanocomposites.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.1.2012 / 31.12.2016
Evidenčné číslo projektu:	-
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Česko: 1
Čerpané financie:	

Dosiahnuté výsledky:

Polymérne nanokompozity a hybridy sa pripravili modifikáciou mnohostenných uhlíkových nanotrubičiek (MWCNT) použitím chemickej oxidačnej polymerizácie pyrolu a anilínu. Pripravené hybridy sa testovali ako protielektródy v solárnych článkoch. Hybridné materiály s obsahom polypyrolu (PPy) 70 hm. % dosiahli veľmi dobré výsledky pri testovaní vo farbivom senzitizovaných solárnych článkoch. MWCNT pokryté polyanilínom sa testujú podobne ako protielektródy v solárnych článkoch.

Výstupy:

1. OMASTOVÁ, Mária - KULIČEK, Jaroslav - STEJSKAL, J. - OKSUZ, A. U. Conducting composites with polypyrrole and their application. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 19. ISBN 978-3-99033-491-1

3.) Charakterizácia chromatograficky zložitých polymérov pokročilými metódami kvapalinovej chromatografie: MD-SEC a LC LCD.
(Characterization of chromatographically-complex polymers by advanced liquid chromatography methods: MD-SEC and LC LCD.)

Zodpovedný riešiteľ:	Alena Šišková
Trvanie projektu:	1.1.2013 / 30.6.2015
Evidenčné číslo projektu:	MAD
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Argentína: 1
Čerpané financie:	

Dosiahnuté výsledky:

V roku 2015 bola testovaná metóda na spracovávanie dát a analýzu frakcií získaných pomocou dvoj-dimenzionálnej kvapalinovej chromatografie. Overoval sa matematický model predikcie molekulovej štruktúry vzoriek navrhnutého v Santa Fe. Model rieši automatickú korekciu rozširovania píkov z kvapalinovej chromatografie pri limitných podmienkach desorpcie a tiež synchronizáciu medzi prvou a druhou dimenziou pri charakterizácii viaczložkových polymérnych systémov.

Výstupy:

1. ŠIŠKOVÁ, Alena - CLEMENTI, L. - VEGA, J. - MEIRA, G. – BEREK, Dušan. Sequenced two-dimensional liquid chromatography of polymer blends. Source of errors in the data treatment procedure. XI Simposio Argentino de Polímeros – SAP 2015, 20 – 23 october 2015, Santa Fe – Argentina. Web page: http://www.unl.edu.ar/sap2015/. Výveska
2. CLEMENTI, L. - VEGA, J. - ŠIŠKOVÁ, Alena - MEIRA, G. – BEREK, Dušan. Sequenced Two-Dimensional Liquid Chromatography: Molar mass distributions in a binary polymer blend, 21st International Symposium on Separation Sciences, June 30- July 3, 2015, Ljubljana, Slovenia. Výveska

Programy: COST

4.) Dlhodobo udržateľné retardanty horenia pre textil a príbuzné materiály na báze nanočastíc nahradzujúcich konvenčné chemické látky.
(Sustainable flame retardancy for textiles and related materials based on nanoparticles substituting conventional chemicals.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.5.2012 / 31.5.2016
Evidenčné číslo projektu:	MP1105
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Centre for Materials Science and Engineering (CSME), University Gent, Gent, Belgium
Počet spoluriešiteľských inštitúcií:	19 - Fínsko: 2, Francúzsko: 2, Veľká Británia: 3, Taliansko: 3, Litva: 3, Poľsko: 2, Portugalsko: 4
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 4000 €

Dosiahnuté výsledky:

V ďalších krokoch projektu boli textílie stabilizované proti horľavosti vo firme Inotex nimi

vyvinutou emulziou na báze "zelených retardérov" teda bez prítomnosti zlúčenín brómu. Výsledky experimentov, ktoré sa uskutočnili na Ústave polymérov v kónickom kalorimetri ukázali, že parametre ako čas do vznietenia, rýchlosť uvoľňovania tepla, celková spotreba kyslíka a pod. boli výrazne znížené, teda horľavosť materiálu bola potlačená, bavlna nezahorela vôbec. Súčasne bola na Ústave experimentálnej botaniky ČAV testovaná ekotoxicita týchto retardérov. Ďalším krokom bude aplikácia vodivej povrchovej vrstvy na textílie súčasne s protihorľavostnou vrstvou a následne sa bude testovať termostabilita a horľavosť na našom pracovisku.

Výstupy:

1. MALÍKOVÁ, Marta - CSOMOROVÁ, Katarína - ŠESTÁK, J.- OMASTOVÁ, Mária. Thermal stability and flammability of smart textiles based on expanded graphite-polymeric nanocomposites. In Eurofillers Polymer Blend 2015 : Montpellier, France, April 26th - 30th, 2015 : book of abstracts. - Montpellier, France : Universite Montpellier, 2015, non p., P5.8.
2. MALÍKOVÁ, Marta - ŠPITALSKÝ, Zdenko - ŠESTÁK, J. - OMASTOVÁ, Mária. Conductivity and flammability of smart textiles based on expanded graphite-polymeric nanocomposites. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 15.

5.) Nové materiály a zariadenia na báze vodivých polymérov a ich kompozitov – Etapa 2. *(New materials and devices based on conducting polymers and their composites.)*

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.9.2015 / 31.1.2016
Evidenčné číslo projektu:	MVTS - COST Polycon01DS15015
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Brandenburg University of Technology Cottbus–Senftenberg
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 465 €

Dosiahnuté výsledky:

Počas septembra a októbra doktorand J. Kulíček bol na pracovnom pobyte v Nemecku v Senftenbergu na Fakulte vied, BUT, v rámci projektu Danube network. Pokračoval s prípravou elektród, na ktoré sa nanášala iónová kvapalina s obsahom kovových nanočastíc, a na nanášanie nanokoloidu na elektródu použil aj metódu Surface Plasmon Resonance. Pripravené elektródy sa testovali ako senzory.

Výstupy:

1. KULIČEK, Jaroslav - MIČUŠÍK, Matej - SCHERBAHN, V. - MIRSKÝ, V. M. - OMASTOVÁ, Mária. Electrodes decorated by metal nanoparticles for sensing application. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 84. ISSN 1336-7242.

6.) Stabilizovaná fotovoltaika ďalšej generácie: objasnenie mechanizmov degradácie organických solárnych článkov komplementárnymi charakterizačnými technikami StableNextSol). *(Stable Next-Generation Photovoltaics: Unraveling degradation mechanisms of Organic Solar Cells by complementary characterization techniques (StableNextSol).)*

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.2.2015 / 31.3.2018
Evidenčné číslo projektu:	MVTS - COST MP 1307

Organizácia je koordinátorom projektu:	nie
Koordinátor:	Fundaci Institut Catal De Nanocicia I Nanotecnologia, Barcelona
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 3666 €

Dosiahnuté výsledky:

Na Ústave polymérov SAV (UPo SAV) v Bratislave sa zaoberáme prípravou elektricky vodivých kompozitných materiálov na báze uhlíkových nanočastíc a vodivých polymérov, predovšetkým polypyrolu a polytiofénu, ktoré sú na spolupracujúcich ústavoch použité ako elektródy v solárnych článkov. Dlhodobé skúsenosti tímu z UPo SAV sú aj v oblasti charakterizácie povrchov materiálov pomocou rontgenovej fotoelektrónovej spektroskopie (XPS), ktoré využívajú pre riešenie cieľov projektu, ako je pochopenie mechanizmu degradácie organických solárnych článkov.

7.) Inovatívne aplikácie vlákien z regenerovanej celulózy.
(Innovative application of regenerated wood cellulose fibers.)

Zodpovedný riešiteľ:	Alena Šišková
Trvanie projektu:	1.5.2013 / 31.5.2017
Evidenčné číslo projektu:	MVTS - COST MP 1205
Organizácia je koordinátorom projektu:	nie
Koordinátor:	SP Wood Technology Sweden
Počet spoluriešiteľských inštitúcií:	1 - Švédsko: 1
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 4000 €

Dosiahnuté výsledky:

V hodnotenom období sa optimalizovala príprava alkylovaného pesticídu 4-amino-6-tert-butyl-3-methylsulfanyl-1,2,4-triazin-5-one a optimalizovali sa podmienky modifikácie vlákenných vrstiev z vodného roztoku PVA, pripravených pomocou elektrostatického zvlákňovania a tiež filmy z mikrokryštalickej celulózy pripravené rozpúšťaním celulózy v iónovej kvapaline, vylievaním a následnou koaguláciou počas premývania destilovanou vodou. Vlákenné vrstvy a filmy boli povrchovo modifikované pomocou „click“ reakcie. Výsledky FTIR a DSC preukázali úspešnú povrchovú modifikáciu PVA a celulózy.

Výstupy:

1. ŠIŠKOVÁ, Alena - DUBAJ, T.- KLEINOVÁ, Angela - ECKSTEIN ANDICSOVÁ, Anita. Modification of cellulose films for controlled release system with potential use in agriculture. In Advances in cellulose processing and applications - research goes to industry: COST FP1205 Joint Working Groups and Management Committee Meetings: Iasi, Romania, March 10-11, 2015: program and book of abstracts. - Iasi, Romania: Editura Tehnopress, 2015, p. 60. ISBN 978-606-687-185-3.

Programy: 7RP

8.) Molekulové a atomické próbovanie série elastomérov v relácii k relaxačnej dynamike zo širokopásmovej dielektrickej spektroskopie.
(Molecular and atomic probing a series of elastomers in relation to relaxation dynamics from broadband dielectric spectroscopy.)

Zodpovedný riešiteľ:	Josef Bartoš
Trvanie projektu:	1.1.2015 / 31.12.2015
Evidenčné číslo projektu:	FP7 of EU – ESMI E150100651, MVTS No. E13010033
Organizácia je koordinátorom projektu:	nie
Koordinátor:	CFM - UPV/EHU San Sebastian
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 4000 €

Dosiahnuté výsledky:

V rámci ESMI 2015 projektu na CFM UPV/EHU, San Sebastian, Španielsko sa finalizovali detailné BDS merania a analýza dielektrických spektier 1,2- a 1,4-poly(butadién)ov (1,2-PBD a 1,4-PBD) s cieľom identifikácie relevantného pohybového módu, ktorý spôsobuje prechod spinovej sondy TEMPO z pomalého do rýchleho režimu pri T50G. Zistilo sa, že tento základný prechod v 1,4-PBD s T50G > Tg súvisí s nástupom primárnej alfa relaxácie, zatiaľčo v prípade 1,2-PBD s T50G < Tg je kontrolovaný sekundárnou beta relaxáciou 2) pokračovanie v systematickom merania dynamických vlastností hydrogenizovaného a deuterovaného poly(dimetylsiloxán)u (PDMS) so zámerom ich ďaľšieho využitia pri interpretácii ESR dát spinovej sondy TEMPO v bulk stave s výhľadom ich štúdia v uväznenom stave vo vhodne zvolenej rigidnej matrici.

Programy: Multilaterálne - iné

9.) Molekulovo-dynamické štúdium zmáčavosti silikátového povrchu pokrytého polymérmi.
(Molecular simulation study of the wetting behaviour of polymer grafted silica surface.)

Zodpovedný riešiteľ:	Zuzana Benková
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	INT/PORTUGAL/P-05/2013
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Katedra chémie a biochémie Fakulta prírodných vied Univerzita v Porte
Počet spoluriešiteľských inštitúcií:	1 - India: 1
Čerpané financie:	

Dosiahnuté výsledky:

Hydrofilicita/hydrofobicita bola kvantifikovaná pomocou kontaktného uhla vodnej kvapky na povrchu PNIPAAm vrstvy. Boli stanovené zmeny štruktúrnych, dynamických a termodynamických vlastností, ktoré sprevádzali kolaps PNIPAAm reťazcov dôsledkom zvyšovania teploty.

Výstupy:

1. BHANDARY, D. - BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. - SINGH, J. K. Molecular dynamics study of wetting behavior of grafted thermo-responsive PNIPAAm. odoslané do Soft Matter, ID: SM-ART-10-2015-002684, IF = 4.151

2. BHANDARY, D. - BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. - SINGH, J. K. Wetting on grafted thermo-responsive polymer brushes: a molecular dynamics study, In Book of Abstracts of Thermodynamics 2015, 15. 9.-18. 9. 2015, Copenhagen, Dánsko, p. 61.

10.) Stanovenie rýchlostných konštánt a modelovanie súčasných a v budúcnosti študovaných polymerizačných procesov a systémov v BASF.
(Kinetic coefficients and models for existing and future polymerization processes and systems at BASF.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.9.2015 / 31.8.2018
Evidenčné číslo projektu:	projekt BASF AG, Ludwigshafen, Nemecko
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Nemecko: 1
Čerpané financie:	

Dosiahnuté výsledky:
Opísaná kinetika a mechanizmus polymerizácie akrylamidu, kyseliny akrylovej, zwiteriónových monomérov vo vodnom prostredí. Nastavenie podmienok pulznej laserovej polymerizácie a gélovej permeačnej chromatografie.

Výstupy:

1. DRAWE, P. - BUBACK, M. - LACÍK, Igor. Radical polymerization of alkali acrylates in aqueous solution. In Macromolecular Chemistry and Physics, 2015, vol. 216, p. 1333-1340. (2.616 - IF2014). ISSN 1022-1352.
2. LACÍK, Igor - *STACH, Marek - KASÁK, Peter* - SEMAK, V. - UHELSKÁ, Lucia - CHOVANCOVÁ, Anna - REINHOLD, G. - KILZ, P. - DELAITTRE, G. - CHARLEUX, B. - CHADUC, I. - D´AGOSTO, F. -LANSALOT, M. - GABORIEAU, M. - CASTIGNOLLES, P. - GILBERT, R. G. - SZABLAN, Z. - BARNER-KOWOLLIK, Ch. - HESSE, P. - BUBACK, M. SEC analysis of poly(acrylic acid) andpoly(methacrylic acid). In Macromolecular Chemistry and Physics, 2015, vol. 216, p. 23-37. (2.616 - IF2014). ISSN1022-1352, Podiel: 0,2 (F).
3. WITTENBERG, N. F. G. - PREUSSER, C. - KATTNER, H. - *STACH, Marek* - LACÍK, Igor - HUTCHINSON, R. A. - BUBACK M. Modelling acrylic acid radical polymerization in aqueous solution. Macromol. React. Eng.,2015, early view, DOI: 10.1002/mren.201500017
4. PREUSSER, C. - CHOVANCOVÁ, Anna - LACÍK, Igor - HUTCHINSON, R. A. Modeling the radical batch homopolymerization of acrylamide in aqueous solution. Macromol. React. Eng., odoslané dec 2015

11.) The Chicago Diabetes Project: Globálna spolupráca pre funkčnú liečbu cukrovky.
(The Chicago Diabetes Project: Global collaboration for a functional cure.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.5.2007 /
Evidenčné číslo projektu:	
Organizácia je koordinátorom projektu:	nie
Koordinátor:	University of Illinois, Chicago
Počet spoluriešiteľských inštitúcií:	5 - Austrália: 1, Švajčiarsko: 1, Taliansko: 1, Nórsko: 1, USA: 1
Čerpané financie:	

Dosiahnuté výsledky:

Nový proces pripravy mikrokapsúl, vývoj nových metodík pre charakterizáciu mikrokapsúl.

Výstupy:

1. VEISEH, O. - DOLOFF, J. C. - MA, M. - VEGAS, A. J. - TAM, H. H. - BADER, A. R. - LI, J. - LANGAN, E. - WYCKOFF, J. - LOO, W. S. - JHUNJHUNWALA, S. - CHIU, A. - SIEBERT, S. - TANG, K. - HOLLISTER-LOCK, J. - ARESTA-DASILVA, S. - BOCHENEK, Matthew - MENDOZAELIAS, J. - WANG, Y. - QI, M. - LAVIN, D. M. - CHEN, M. - DHOLAKIA, N. - THAKRAR, R. - LACÍK, Igor - WEIR, G. C. - OBERHOLZER, J. - GREINER, D. L. - LANGER, R. - ANDERSON, D. G. Size- and shape-dependent foreign body immune response to materials implanted in rodents and non-human primates. In Nature Materials, 2015, vol. 14, p. 643-651. (36.503 - IF2014). ISSN 1476-1122.
2. NÉMETHOVÁ, Veronika - LACÍK, Igor - RÁZGA, Filip. Vibration technology for micro-encapsulation: The restrictive role of viscosity. In Journal of Bioprocessing and Biotechniques : an open access journal, 2015, vol. 5, iss. 1, art.no. 1000199. (2015 - Scopus). ISSN 2155-9821.

12.) Určenie rýchlostných konštánt radikálovej polymerizácie vodorozpustných monomérov so špeciálnym dôrazom na nabité a ionizovateľné monoméry.
(Determination of rate coefficients of water-soluble monomers with special emphasis on charged/ionizable monomers)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.6.2004 / 31.5.2015
Evidenčné číslo projektu:	projekt BASF AG, Ludwigshafen, Nemecko
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	2 - Kanada: 1, Nemecko: 1
Čerpané financie:	mobilita

Dosiahnuté výsledky:

13.) Nano-vlákna pripravené elektrostatickým zvlákňovaním pre pre bio-inšpirované kompozitné materiály a ich inovatívne priemyselné aplikácie.
(Electrospun nano-fibres for bio-inspired composite materials and innovative industrial applications.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.5.2012 / 31.5.2017
Evidenčné číslo projektu:	MVTS - COST MP 1206
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Kemyk, 7000 Eisenstadt
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 4000 €

Dosiahnuté výsledky:

Na pracovisku sa elektrostaticky zvlákňoval polykaprolaktón (PCL). Príprava bola zameraná na sledovanie rôznych vplyvov na pripravené netkané textílie ako napr. vplyv použitého rozpúšťadla, koncentrácie roztoku, napätia, atď. Následne sa tieto vzorky pokrývali vodivým

polymérom polypyrolom. Pri takejto povrchovej úprave sa venuje zvýšená pozornosť a snaha o kompletné obalenie jednotlivých vlákien a zároveň odolnosti vrstvy voči oderu. Preto sa pri príprave použili rôzne spôsoby a výsledná morfológia vlákna bola vyhodnotená pomocou SEM analýzy. Pre charakterizáciu sa využilo aj XPS, DMA, meranie kontaktného uhla a pod.

Výstupy:

1. ČÍKOVÁ, Eliška - ŠIŠKOVÁ, Alena - OPÁLEK, A. - OMASTOVÁ, Mária. Electronspun poly(e-caprolactone) fibers: Effects of processing on fiber morphology. In Applications of Electrospinning in Composites, Nanofabrication, Food, Packaging, Pharma and Controlled Release : COST MP1206 Electrospinning : Novi Sad, Serbia, 25th-27th March 2015 : program and book of abstracts. - Novi Sad, Serbia : Tehnološki fakultet, 2015, p. 81. ISBN 978-86-6253-043-1.
2. ČÍKOVÁ, Eliška - MIČUŠÍK, Matej - ŠIŠKOVÁ, Alena - OMASTOVÁ, Mária. Conducting electrospun polycaprolactone/polypyrrole fibers. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 49.

Programy: Bilaterálne - iné

14.) Charakterizácia uväznených organických systémov pomocou externých prób.

(External probe characterization of the confined organics.)

Zodpovedný riešiteľ:	Josef Bartoš
Trvanie projektu:	1.1.2014 / 31.12.2015
Evidenčné číslo projektu:	DAAD-SAV 2014
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Experimental Physik V, CEKM, Universität Augsburg, Nemecko
Počet spoluriešiteľských inštitúcií:	1 - Nemecko: 1
Čerpané financie:	

Dosiahnuté výsledky:

V rámci DAAD 2015 grantu sa dokončilo v systematickom vyšetrovaní dvoch organických médií tj. nepolárnom n-hexadekáne (n-HXD) a polárnom 1-propanole (1-PrOH) v objemovom (bulk) stave ako aj priestorovo-limitovaných (uväznených) stavoch série silikagélov s rôznou veľkosťou pórov pomocou ESR a DSC techník. Spektrálne a dynamické parametre spinovej sondy TEMPO v obidvoch stavoch vyšetrovaných médií sa porovnali s makroskopickými termodynamickými charakteristikami týchto systémov. Zistilo sa, že dynamika TEMPA v nepolárnom n-HXD je veľmi silne spomalená po jeho priestorovom obmedzení oproti polárnemu 1-PrOH, avšak relatívna citlivosť k veľkosti pórov vykazuje opačný trend. Na základe komplexnej analýzy ESR a DSC dát v spojení s ďalšími relevantnými experimentálnymi a teoretickými informáciami z literatúry sa uzavrelo, že toto spomalenie v n-HXD súvisí so preferenčnou interakciou polárnej spinovej sondy TEMPO so silanolovými skupinami SG matríc.Tento záver je podporený pomocou polárneho 1-PrOH s vyššou afinitiou k povrchu SG matríc v porovnaní s nepolárnym n-HXD.

Výstupy:

1. LUKEŠOVÁ, Miroslava - ZGARDZINSKA, B. - ŠVAJDLENKOVÁ, Helena - ZALESKI, R. - CHARMAS, B. - BARTOŠ, Josef. Spin probe dynamics in relation to free volume in crystalline organics from ESR and PALS: N-tridecane. In Physica B: Condensed Matter, 2015, vol. 476, p. 100-108. (1.319 - IF2014). ISSN 0921-4526

2. LUKEŠOVÁ, Miroslava - ŠVAJDLENKOVÁ,Helena - SIPPEL, P. - REUTER, D. - MACOVÁ, Eva - BEREK, Dušan - ZALESKI, R. - EDELMANN, M. - LOIDL, A. - BARTOŠ, Josef. Spin probe dynamics of n-hexadecane and n-propanol in bulk and confined geometry. In XXVI.International EPR Seminar 2015, Graz University of Technology, Graz, June 8.-10.2015. Prednáška-O/P 36

15.) Molekulovo-dynamické simulácie PEO-modifikovaných povrchov ponorených v matrici homopolymérnych tavenín alebo roztokov.
(Molecular dynamics simulations of PEO-modified surfaces immersed in a matrix of homopolymer melts or solutions.)

Zodpovedný riešiteľ:	Zuzana Benková
Trvanie projektu:	1.4.2013 / 31.12.2020
Evidenčné číslo projektu:	SFRH/BPD/90265/2012
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Katedra chémie a biochémie Fakulta prírodných vied Univerzita v Porte
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	

Dosiahnuté výsledky:

K vypudzovaniu voľných PEO reťazcov prítomných v kondenzovanej fáze z PEO modifikovaných povrchov dochádza pri povrchových hustotách naviazaných PEO reťazcov ~3.5 nm–2, čo je hustota zatiaľ experimentálne nedosiahnuteľná. Z toho vyplýva, že dva povrchy ireverzibilne pokryté PEO reťazcami sa budú v prítomnosti voľných približne rovnako dlhých PEO reťacov odpudzovať.

Výstupy:

1. BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. Molecular dynamics simulations of poly(ethylene oxide) grafted onto silica immersed in melt of homopolymers. In Langmuir, 2015, vol. 31, p. 10254-10264, (4.457 – IF 2014)
2. BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. Molecular dynamics simulations of poly(ethylene oxide) grafted onto silica immersed in melt of homopolymers. In Book of Abstracts of CCP5 Annual Meeting 2015, 6. 9.-9. 9. 2015, Lancaster, UK, p. 9.

16.) Teoretické a experimentálne štúdium polymérnych vrstiev zakotvených na povrchoch ako ochrana proti adsorpcii proteínov.
(Theoretical and experimental study of polymer layers confined on surfaces as a protection against polymer adsorbtion.)

Zodpovedný riešiteľ:	Zuzana Benková
Trvanie projektu:	1.4.2013 / 30.4.2015
Evidenčné číslo projektu:	SK-PT-0015-12
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	

Dosiahnuté výsledky:

17.) (Ko)-polymerizácia s otvorením kruhu butyrolaktónových monomérov.
(Ring-opening (co)-polymerization of butyrolactone based monomers.)

Zodpovedný riešiteľ:	Martin Danko
Trvanie projektu:	1.1.2013 / 31.12.2015
Evidenčné číslo projektu:	bilaterálny slovensko-poľský
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Poľsko: 1
Čerpané financie:	

Dosiahnuté výsledky:

Pokračovali experimenty kopolymerizácie päťčlánkového laktónu alfa-metylén-gama-butyrolaktónu (MBL, Tulipalín A) s epsilon-kaprolaktónom v podmienkach ROP iniciáciou AlIII(OiPr)3. Štúdie ROP pri rôznych pomeroch monomérov potvrdili vznik polyméru s Mn = 4 000-42 000 g mol-1 v závislosti na pomere monomér/iniciátor a s pomerne nízkym koeficientom disperzity (? = 1.15-1.30), pričom obsah MBL v kopolyméri bol 4-17%. Najväčší obsah MBL v kopolyméri bol v násadách s vyšším pomerom MBL/CL. Pri vyššom podiely CL bol obsah MBL vo výslednom kopolyméri max. 6 %. V polymerizačnej zmesi po rýchlej polymerizácii CL zostatkový MBL s aktívnym MBL* koncom prakticky nepolymerizuje. Naopak pri vysokom pomere MBL/CL je polymerizácia pomalá, ale aktívny CL* koniec má vyššiu pravdepodobnosť reagovať s MBL monomérom. Zvýšením teploty (130°C) a/alebo zmenou rozpúšťadla (THF za toluén) bol okrem ko-polyesterov pozorovaný vznik akrylátového homopolyméru PMBL (obyčajne okolo 5%), ktorý bol pomocou TEMPO lapača radikálov minimalizovaný, čím sa potvrdil radikálový mechanizmus jeho vzniku.

Výstupy:

1. ĎURKÁČOVÁ, Slávka - DANKO, Martin - MOSNÁČEK, Jaroslav. Preparation of functional copolymers of alpha-methylene-gamma-butyrolactone and epsilon-caprolactone. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 179-180. ISBN 978-80-970923-7-5. Prednáška

17.) Charakterizácia polymérov citlivých na vonkajšie podnety s rôznou topológiou pomocou vodnej gélovej permeačnej chromatografie.
(Characterization of stimuli sensitive polymers with different topology by aqueous gel permeation chromatography.)

Zodpovedný riešiteľ:	Juraj Kronek
Trvanie projektu:	1.1.2013 / 31.12.2015
Evidenčné číslo projektu:	
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Poľsko: 1
Čerpané financie:	

Dosiahnuté výsledky:

Príprava nového typu hypervetvených polymérov ako makroiniciátorov pre katiónovú polymerizáciu 2-etyl-2-oxazolínu.

19.) LCP BLENDS: Multifázové systémy obsahujúce kvapalnokryštalické polyméry.
(Study of liquid-crystalline polymers and their composites.)

Zodpovedný riešiteľ:	Juraj Kronek
Trvanie projektu:	1.1.2014 / 31.12.2015
Evidenčné číslo projektu:	APVV-SK-CZ-2013-0234
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	3 880.00 € (APVV)

Dosiahnuté výsledky:

Pripravili sa kvapalnokryštalické poly(esteramidy) s nižšími teplotami teplotných prechodov. Zistila sa závislosť dielektrických, termických a kryštalografických vlastností od štruktúry poly(esteramidov).

20.) (Bio)polymers and bioinspired materials for biomedicine.
(Bio)polyméry a bio-inšpirované polyméry pre biomedicínu.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.1.2014 / 31.12.2015
Evidenčné číslo projektu:	APVV-SK-CZ-2013-0206
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 4 000,00 €

Dosiahnuté výsledky:

Získali sa kopolyméry obsahujúce poly(2-etyl-2-oxazolínové) segmenty vyznačujúce sa vysokou biokompatibilitou a polyetylénimínové jednotky, ktoré sú polyelektrolytom. Taktiež sa pripravili kopolyméry poly(2-izopropenyl-2-oxazolínu) s N-vinylpyrolidónom.

Výstupy:

1. SHAH, R. - KRONEKOVÁ, Zuzana - ZAHORANOVÁ, Anna - ROLLER, L. - SAHA, N. - SAHA, P. - KRONEK, Juraj. In vitro study of partialy hydrolyzed poly(2-ethyl-2-oxazolines) as materials for biomedical applications. In Journal of Materials Science: Materials in Medicine, 2015, vol. 26, iss. 4, art.no. 157.

21.) Antibakteriálne vlastnosti polymérov modifikovaných nízkoteplotnou plazmou.
(Antibacterial properties of polymers modified by low-temperature plasma.)

Zodpovedný riešiteľ:	Igor Novák
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	-
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Česko: 1
Čerpané financie:	

Dosiahnuté výsledky:

Boli skúmané povrchové vlastnosti a chemické zloženie nízkohustotného polyetylénu (LDPE) očkovaného kyselinou polyakrylovou účinkom bariérovej plazmy pri atmosférickom tlaku. Na povrch LDPE očkovaný kyselinou polyakrylovou boli následne imobilizované benzalkóniumchlorid a bronopol. FTIR a XPS merania potvrdili, že rast hydrofilnosti LDPE bol spôsobený zavedením polárnych funkčných skupín prítomných v antibakterálnych látkach. Antibakteriálny účinok imobilizovaného benzalkóniumchloridu a bronopolu proti bakteriálnym kmeňom S. Aureus a E. Coli bol rozdielny, pričom vyššia účinnosť antibakteriálne upraveného LDPE bola dosiahnutá proti pôsobeniu baktérií S. aureus v porovnaní s E. coli.

22.) Štúdium povrchových a adhéznych vlastností polyimidu a jeho kopolymérov.
(Study of surface and adhesive properties of polyimide and its copolymers.)

Zodpovedný riešiteľ:	Igor Novák
Trvanie projektu:	1.1.2012 / 31.12.2016
Evidenčné číslo projektu:	-
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Česko: 1
Čerpané financie:	

Dosiahnuté výsledky:

Boli skúmané povrchové a adhézne vlastnosti syntetizovaných blokových kopolymérov polyimidu s polysiloxánom (PIS). Súčasne sa študovala povrchová drsnosť a chemické zloženie PIS (XPS, ToF SIMS). PIS blokové kopolyméry sa odlišovali dĺžkou polysiloxánových reťazcov. Potvrdilo sa, že, pri väčšej dĺžke polysiloxánových blokov v PIS sa dosiahlo pokrytie povrchu kopolyméru pri nižšej koncentrácii polysiloxánu ako v prípade kratších blokov polysiloxánu.

23.) Farbivami modifikované uhlíkové nanotrubičky pre optotepelnú aktuáciu nanokompozitov.
(Dye-labelled carbon nanotubes for optothermal actuation of nanocomposites.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.1.2013 / 31.12.2015
Evidenčné číslo projektu:	SK-FR-2013-0033
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Francúzsko: 1
Čerpané financie:	APVV: 2 600,00 €

Dosiahnuté výsledky:

Na francúzskom pracovisku sa modifikovali MWCNT troma rôznymi farbičkami (Azure A, Congo Red, Neutral Red). Na Ústave polymérov sme z modifikovaných CNT a EVA kopolyméru prípravili kompozity zamiešaním v tavenine. V ďalšom kroku sme sa zaoberali štúdiom ich foto-aktuačných odoziev pomocou DMA, ďalej na našom ústave boli študované aj XPS merania modifikovaných nanočastíc. Získané výsledky sú spísané do odborného článku, ktorý sa odošle do konca hodnotiaceho obdobia.

Výstupy:

1. CZANIKOVÁ, Klaudia - KRUPA, Igor - SGHAIER, A. B. - CHEHIMI, M. M. - OMASTOVÁ, Mária. Photo-thermal actuation of ethylene vinyl acetate nanocomposites containing carbon nanotubes. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 63.
2. CZANIKOVÁ, Klaudia - SGHAIER, A. B. - CHEHIMI, M. M. - OMASTOVÁ, Mária. Actuators on the base of ethylene vinyl acetate/carbon nanotubes/dyes nanocomposites. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 156. ISSN 1336-7242.

24.) Fotovoltaické a senzorické vlastnosti grafénu a uhlíkových nanotrubičiek funkcionalizovaných plazmou a chemicky.
(Photovoltaic and sensor properties of plasma and chemical functionalized graphene and carbon nanotubes.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.12.2014 / 30.11.2017
Evidenčné číslo projektu:	SAS - TÜBITAK JRP 2014 /2
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Turecko: 1
Čerpané financie:	24 600,00 €

Dosiahnuté výsledky:

V prvej etape sa na našom pracovisku pripravili kompozity s uhlíkovými nanotrubičkami (MWCNT) a grafén oxidom (GO) pokryté vodivým polymérom polypyrolom (PPY) a na tureckom pracovisku boli použité ako protielektródy v pripravovaných solárnych článkoch (DSSC). PPY/MWCNT nanokompozity boli pripravené in situ chemickou oxidačnou polymerizáciou pyrolu v prítomnosti MWCNT (30 hmotn.% až 50 hmotn.%.). Morfológia modifikovaných uhlíkových nanoštruktúr bola skúmaná pomocou riadkovacej elektrónovej mikroskopie. Röntgenova fotoelektronová spektroskopia PPY/MWCNT nanokompozitov poskytla informácie o stupni MWCNT pokrytia PPY. Cyklická voltametria bola použitá na charakterizáciu prípravených elektród a vodivosti. Fotovoltaické vlastnosti DSSCs s PPY/MWCNT ako protielektródou boli charakterizované pomocou I-V meraní. Prvé získané výsledky ukázali, že GO častice modifikované PPY sú menej atraktívne pre použitie v DSSC v porovnaní s modifikovanými MWCNT. Fotovoltaické vlastnosti DSSC sa znižovali s rastúcim obsahom MWCNT v MWCNT/PPY kompozitoch.

Výstupy:

1. OMASTOVÁ, Mária - KULIČEK, Jaroslav - STEJSKAL, J. - OKSUZ, A. U. Conducting composites with polypyrrole and their application. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 19. ISBN 978-3-99033-491-1.

25.) TRAnsparentné elektricky vodivé polymérne nanKOmpozity na báze nanoštruktúrneho GRafitu.
(Transparent, electrically conductive polymeric nanocomposites on the base of nanostructured graphite.)

Zodpovedný riešiteľ:	Zdenko Špitálsky
Trvanie projektu:	1.1.2015 / 31.12.2016
Evidenčné číslo projektu:	SK-SRB-2013-0044

Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 2350 €

Dosiahnuté výsledky:

Podarila sa zvládnuť výroba dispergovaných koloidných častíc grafénu vo vode metódou elektrochemickej exfoliácie. Zároveň sa pripravili uhlíkové kvantové bodky metódou spaľovania organických látok. Materiály boli charakterizované metódami XPS a AFM. Zároveň sa začali pripravovať prvé transparentne polymérne kompozity plnené pripravenými uhlíkovými plnivami, ktorých charakterizácia bude tvoriť hlavnú činnosť druhého roku.

Výstupy:

1. PREKODRAVAC, J. - MARKOVIĆ, Z. - JOVANOVIĆ, S. - HOLCLAJTNER-ANTUNOVIĆ, I. - PAVLOVIĆ, V. - TODOROVIĆ-MARKOVIĆ, B. Raman spectroscopy study of graphene thin films synthesized from solid precursor, Quantum Optics and Electronics, submitted.
2. MARKOVIĆ, Z. – BUDIMIR, M. - HOLCLAJTNER-ANTUNOVIĆ, I. – PERUŠKO, D. – PAVLOVIĆ, V. - TODOROVIĆ-MARKOVIĆ, B. Large and flat graphene flakes produced by exfoliation of highly oriented pyrolytic graphite: Raman spectroscopy study, Quantum Optics and Electronics, submitted.

Programy: ERANET

26.) M2 Neural: Multifunkčné materiály na rozhraní neurónových systémov.
(M2Neural: Multifunctional Materials for advanced Neural interfaces.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.11.2014 / 30.10.2017
Evidenčné číslo projektu:	
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Superiore Sant'Anna
Počet spoluriešiteľských inštitúcií:	1 - Taliansko: 1
Čerpané financie:	COST: 24 960,00 €

Dosiahnuté výsledky:

V priebehu roku 2015 sa získali vhodné podmienky prípravy hydrogélovej vrstvy na báze zwitteriónov kovalentne naviazané na polyimid. Taktiež sa pripravili hydrogély na báze 2-oxazolínov s nastaviteľnými mechanickými vlastnosťami.

Výstupy:

1. SALGARELLA, AR - RICOTTI, L. - GIUDETTI, G. - KRONEK, Juraj - RIGHI, M. - CUTRONE, A. - CAFARELLI, A. - ZAHORANOVÁ, Anna - ŠRAMKOVÁ, Petra - TREĽOVÁ, Dušana- BOSSI, S. - MICERA, S.- LACÍK, Igor - MENCIASSI, A. Advanced nano-doped materials for long-term neural interfaces, ID 337, 2015, IEEE 15th International Conference on Nanotechnology, Roma, Italy

Programy: Iné

27.) Viackomponentné mikrokapsuly pre alogénnu transplantáciu pankreatických ostrovčekov v predklinickom modeli nehumánnych primátov.
(Multicomponent microcapsules for allogeneic islet transplantation in a comprehensive, preclinical non-human primate model.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.11.2014 / 30.10.2017
Evidenčné číslo projektu:	JDRF 2-SRA-2014-288-Q-R
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Juvenile Diabetes Research Foundation, University of Illinois Chicago
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	Podpora medzinárodnej spolupráce z národných zdrojov: 1400 €

Dosiahnuté výsledky:

Získala sa nová verzia polymérnej mikrokapsule pripravenej na báze polyelektrolytovej komplexácie modifikovaným procesom enkapsulácie.

Výstupy:

1. VEISEH, O. - DOLOFF, J. C. - MA, M. - VEGAS, A. J. - TAM, H. H. - BADER, A. R. - LI, J. - LANGAN, E. - WYCKOFF, J. - LOO, W. S. - JHUNJHUNWALA, S. - CHIU, A. - SIEBERT, S. - TANG, K. - HOLLISTER-LOCK, J. - ARESTA-DASILVA, S. - BOCHENEK, Matthew - MENDOZAELIAS, J. - WANG, Y. - QI, M. - LAVIN, D. M. - CHEN, M. - DHOLAKIA, N. - THAKRAR, R. - LACÍK, Igor - WEIR, G. C. - OBERHOLZER, J. - GREINER, D. L. - LANGER, R. - ANDERSON, D. G. Size- and shape-dependent foreign body immune response to materials implanted in rodents and non-human primates. In Nature Materials, 2015, vol. 14, p. 643-651. (36.503 - IF2014). ISSN 1476-1122.
2. NÉMETHOVÁ, Veronika - LACÍK, Igor - RÁZGA, Filip. Vibration technology for micro-encapsulation: The restrictive role of viscosity. In Journal of Bioprocessing and Biotechniques : an open access journal, 2015, vol. 5, iss. 1, art.no. 1000199. (2015 - Scopus). ISSN 2155-9821

28.) *ANTIGRPONANO: Antibakteriálne polymérne nanokompozity na báze grafénu.*
(ANTIbacterial GRaphene/POlymer NANOcomposite.)

Zodpovedný riešiteľ:	Zoran Markovic
Trvanie projektu:	1.12.2015 / 30.11.2018
Evidenčné číslo projektu:	SASPRO 1237/02/02 (co-funded by Maria Curie Actions)
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	EU: 1 167.20 € ; SAV: 1 744.80 €

Dosiahnuté výsledky:

29.) Syntéza dobre definovaných nových kopolymérov pomocou živých polymerizačných metód a pokročilých chromatografických techník.
(The synthesis of well-defined new copolymers using living polymerization methods and advanced chromatographic techniques.)

Zodpovedný riešiteľ:	Jaroslav Mosnáček
Trvanie projektu:	1.1.2015 / 31.12.2017
Evidenčné číslo projektu:	SAV-MOST Taiwan JRP 2014
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Taiwan: 1
Čerpané financie:	25 000,00 €

Dosiahnuté výsledky:

V rámci spoločného výskumného projektu s dvomi univerzitami v Taiwane sa riešili dve rôzne témy. 1) vyvíjala sa photochemicky indukovaná radikálová polyadícia s prenosom atómu za účelom prípravy polymérov s hydrolyzovateľným hlavným reťazcom. Ako monomér sa použil 4-vinylbenzyl 2-bromo-2-phenylacetát, ktorý okrem vinylovej väzby obsahuje v svojej štruktúre i iniciačnú alkyl bromidovú skupinu a teda slúži ako monomér i ako iniciátor. PhotoATRPA katalyzovaná systémom CuBr/L umožnila prípravu polyméru za oveľa kratší čas a z nižším množstvom katalyzátora v porovnaní s ATRPA katalyzovanou systémom CuBr/L/Cu0. 2) vyvíjala sa metóda kombinácie aniónovej a RDRP polymerizácie pre prípravu triblokových amfifilných blokových kopolymérov obsahujúcich okrem hydrofóbneho a hydrofilného bloku aj elastický blok, za účelom prípravy nových typov materiálov aplikovateľných ako náplaste. V prvom roku sa podarilo pripraviť diblokové kopolyméry, pričom v ďalšom roku sa budú polymerizácie optimalizovať na prípravu triblokových kopolymérov.

Výstupy:

1. ILČÍKOVÁ, Markéta - MRLÍK, M. - MOSNÁČEK, Jaroslav. Chapter 6: Thermoplastic elastomers with photoactuating properties. Thermoplastic Elastomers - Synthesis and Applications. InTech d.o.o, Rijeka, Croatia. Edited by Chapal Kumar Das, ISBN 978-953-51-2223-4, 176 pages, Publisher: InTech, Chapters published November 26, 2015 under CC BY 3.0 license.

30.) CASSETTE: Konjugovaný anti-sense systém pre selektívne a špecifické umlčanie BCR - ABL: Inovatívna stratégia pre liečbu CLM.
(Conjugated Antisense system for Selective and Specific BCR-ABL supprEssion: An innovaTive straTegy for CML treatment.)

Zodpovedný riešiteľ:	Filip Rázga
Trvanie projektu:	1.4.2015 / 31.3.2018
Evidenčné číslo projektu:	SASPRO 0057/01/02 (co-funded by Maria Curie Actions)
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	EU: 20 447.00 € ; SAV: 28 232.00 €

Dosiahnuté výsledky:

i)In silico modeling pilotného systému
ii)Syntéza základných výstavbových blokov
iii)Syntéza polymérneho komponentu

Výstupy:

1. RÁZGA, Filip – NÉMETHOVÁ, Veronika. A method for altering the functional status of mRNA allowing its selective and specific recognition. PP-50065-2015, podaná prihláška

31.) Nové materiály prechádzajúce fázovou premenou so zlepšeným prestupom tepla.
(New Phase Change Materials with improved heat transfer properties.)

Zodpovedný riešiteľ:	Zdenko Špitálsky
Trvanie projektu:	1.11.2011 / 31.3.2015
Evidenčné číslo projektu:	NPRP No. : 4 – 465 – 2 -173
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Qatar University
Počet spoluriešiteľských inštitúcií:	1 - Katar: 1
Čerpané financie:	

Dosiahnuté výsledky:

Pripravili sa materiály meniace skupenstvo (angl. Phase Change Materials (PCM)) s vylepšenou tepelnou vodivosťou z lineárneho nízkohustotného polyetylénu, parafínového vosku s teplotou topenia približne 42°C a expandovaného grafitu a študovali sa ich fyzikálne vlastnosti. Absorpcia tepelnej energie je realizovaná fázovými prechodmi v štruktúre vosku, tj. prechodom tuhá – tuhá fáza medzi rôznymi kryštalickými štruktúrami vosku ale predovšetkým prechodom tuhá fáza - kvapalina. Zlepšenie tepelnej vodivosti polymérnych materiálov sa získalo zabudovaním expandovaného grafitu do polymérnej zmesi. Expandovaný grafit má zosilňujúci účinok na PCM, čo vedie k zvýšeniu húževnatosti materiálu. Negatívom je, že samotný vosk vyteká z polymérnej matrice, ale prítomnosť grafitu významne znižuje straty vosku zo vzoriek.

Výstupy:

1. *KRUPA, Igor* - NÓGELLOVÁ, Zuzana - ŠPITALSKÝ, Zdenko - MALÍKOVÁ, Marta - *SOBOLČIAK, Patrik* - ABDELRAZEQ, H. W. - OUEDERNI, M. - KARKRI, M. - JANIGOVÁ, Ivica - AL-MAADEED, M. A. S. A. Positive influence of expanded graphite on the physical behavior of phase change materials based on linear low-density polyethylene and paraffin wax. In *Thermochimica Acta*, 2015, vol. 614, p. 218-225. (2.184 - IF2014). ISSN 0040-6031.

2. KARKRI, M. - LACHHEB, M. - NÓGELLOVÁ, Zuzana - BOH, B. - SUMIGA, B. - ALMAADEED, M. A. - FETHI, A. - *KRUPA, Igor*. Thermal properties of phase-change materials based on high-density polyethylene filled with micro-encapsulated paraffin wax for thermal energy storage. In *Energy and Buildings*, 2015, vol. 88, p. 144-152. (2.884 - IF2014). ISSN 0378-7788.

Projekty národných agentúr

Programy: VEGA

1.) Štrukturálno-dynamická charakterizácia objemových a priestorovo limitovaných sklotvorných a kryštalizujúcich materiálov pomocou ESR techniky.
(Structure-dynamic characterization of bulk and space-limited glass-forming and crystallizing materials by means of ESR technique)

Zodpovedný riešiteľ:	Josef Bartoš
Trvanie projektu:	1.1.2012 / 31.12.2015
Evidenčné číslo projektu:	2/0017/12
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 3 748,00 €

Dosiahnuté výsledky:

V komplementárnom ESR a PALS štúdiu komplexných organických médií v objemovom stave sa v neformálnej spolupráci s poľským partnerom testovali naše empirické pravidlá nájdené pre spinovú sondu TEMPO v amorfných látkach: tau3(T50G) = const.1 a tau3 (TX1fast) = const.2 na ďalšej kryštalickej organickej substancii tj. nepárnom n-alkáne n-tridekane (n-TRD) v porovnaní s párnym n-alkánom, n-hexadekánom (n-HXD). Našlo sa, že okrem 1. pravidla spojeného s tzv. solid-solid prechodom pri Tss ako aj 2. pravidla súvisiaceho so solid-liquid prechodom pri Tm existujú aj ďalšie špecifické štrukturálno-dynamické prechody v kryštalickej fázach nedetegovateľné pomocou klasickej DSC pre obidva n-alkány.

Výstupy:

1. LUKEŠOVÁ, Miroslava - ZGARDZINSKA, B. - ŠVAJDLENKOVÁ, Helena - ZALESKI, R. - CHARMAS, B. - BARTOŠ, Josef. Spin probe dynamics in relation to free volume in crystalline organics from ESR and PALS: N-tridecane. In *Physica B: Condensed Matter*, 2015, vol. 476, p. 100-108. (1.319 - IF2014). ISSN 0921-4526.
2. ŠVAJDLENKOVÁ, Helena - ZGARDZINSKA, B. - EDELMANN, M. Spin probe dynamics in crystalline organics and its relationships to free volume using ESR and PALS. The case of odd vs. even n-alkanes. In *XXVI.I nternational EPR Seminar 2015*, Graz University of Technology, Graz, June 8.-10.2015. Prednáška-O/P 21

2.) Simulácie skladania a agregácie polypeptidov.
(Simulations of folding and aggregation in polypetides)

Zodpovedný riešiteľ:	Tomáš Bleha
Trvanie projektu:	1.1.2012 / 31.12.2015
Evidenčné číslo projektu:	2/0079/12
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 2 986,00 €

Dosiahnuté výsledky:

Pri molekulových simuláciach mechanických vlastností helikálnych polymérov sa zistilo, že

ich kompresia prebieha pomocou hladkému ohybu vlákna len po bod kritického vybočenia (buckling). V bode bucklingovej nestability dochádza k lokálnemu roztopeniu závitnice a k jej zlomeniu (kinku), čo spôsobí efektívne mechanické „zmäkčenie“ helixu. Tento typ mechanického zlyhania môže významne ovplyvňovať biofunkcie rôznych nanoškálových helikálnych objektov ako sú alfa-závitnice a DNA. Simulácie poskytli presvedčivý obraz o stochastickej dynamike bucklingového procesu a o detailoch jeho mechanizmu na atomistickej úrovni.

Výstupy:

1. PALENČÁR, Peter - BLEHA, Tomáš. Bending and kinking in helical polymers. In *Journal of Polymer Science. Part B. Polymer Physics* 2015, vol. 53, 1345-1357.

3.) Kompozitné a smart nanočastice a nanomateriály: príprava, modifikácia a kolektívne vlastnosti.
(Composite and smart nanoparticles and nanomaterials: preparation, modification and collective properties.)

Zodpovedný riešiteľ:	Ignác Capek
Trvanie projektu:	1.1.2014 / 31.12.2017
Evidenčné číslo projektu:	2/0040/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 2 707,00 €

Dosiahnuté výsledky:

Zvláštna pozornosť je venovaná nanočasticiam so štruktúrou jadro-obal. Vyznačujú sa zlepšenými koloidnými vlastnosťami a netradične vysokou funkčnosťou, spôsobenou blízkosťou funkčne rozdielnych zložiek. Tieto štruktúry nie sú ideálne len pre štúdium efektu blízkosti funkčných skupín, ale sú taktiež vhodné na štruktúrnu stabilizáciu, nakoľko obalová vrstva chráni jadro pred oxidáciou. Navyše, organická vrstva obalu zabezpečuje miesto pre modifikáciu a funkcionalizáciu povrchu, ako napr. pripojenie anorganického jadra k organickým a iným povrchom, čím sa zlepšujú ich pôvodné optické vlastnosti a stávajú sa potenciálne biokompatibilnými. S použitím monoméru s rôznou rozpustnosťou v disperznej a miniemulznej polymerizácii sa dosiahne požadovaná povrchová funkcionalizácia. Napr. kyselina akrylová poskytuje príležitosť pre ďaľšiu funkcionalizáciu s amino-látkami pre cieľové použitie nanočastíc.

4.) Štrukturálne prechody stiesnených semiflexibilných makromolekúl.
(Structural transitions of confined semi-flexible macromolecules.)

Zodpovedný riešiteľ:	Peter Cifra
Trvanie projektu:	1.1.2012 / 31.12.2015
Evidenčné číslo projektu:	2/0093/12
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 5 861,00 €

Dosiahnuté výsledky:

Vyšetrili sme prednedávnom navrhnuté linearizačné experimenty s výhodnou analýzou v tenkých pásikových kanáloch použitím Monte Carlo simulácií. Zvýšené natiahnutie reťazcov v

takýchto kanáloch spôsobené zvýšeným vylúčeným objemom v dvojrozmernom systéme sa podstatne znižuje prechodom ku zatiaľ experimentálne dostupným kanálom v tvare štrbiny. V úzkych pásikových kanáloch sme potvrdili typický režim charakteristický pre dvojrozmerné systémy. Rozšírením kanálu v smere kolmom na plochu pásika, teda prechodom ku štrbinovému kanálu, sa znižuje výhodné natiahnutie reťazcov a pre menej ohybné reťazce nie príliš dlhé reťazce pozorujeme Gausssovský režim. Pseudoidealita reťazcov je podporená nezávisle z kriviek natiahnutia, zmenami natiahnutia so zmenou tuhosti reťazcov, z porovnania predpovedaných a pozorovaných hraníc režimu v konkrétnom vyšetrovanom systéme a zo správania štruktúrneho faktoru reťazcov. Správanie v hranatom kanáli sa pozoruje ak kanál-pásik (pôvodne hrúbky jedného monoméru) dosiahne hrúbku väčšiu ako približne jednej pätiny veľkosti perzistentnej dĺžky reťazca. Takáto maximálna hrúbka prúžkového kanálu pre zachovanie výhody tohoto usporiadania je veľmi malá a má dopad na realizáciu DNA linearizačných experimentov v nanofluidných zariadeniach. Táto analýza má však aj širšie implikácie pre stesnané polyméry.

Výstupy:

1. BENKOVÁ, Zuzana - NÁMER, Pavol – CIFRA, Peter. From stripe to slab confinement for DNA linearization in nanochannels. In Soft Matter, 2015, vol. 11, p. 2279-2289. (4,151 – IF2014)

5.) Fotochemicky aktívne systémy a značky pre polymérny výskum.
(Photochemically active systems and probes for polymer research.)

Zodpovedný riešiteľ:	Martin Danko
Trvanie projektu:	1.1.2013 / 31.12.2016
Evidenčné číslo projektu:	2/0112/13
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 10 727,00 €

Dosiahnuté výsledky:

V problematike spektrálnej charakterizácie donorno-akceptorných chromofórov sa pokračovalo v charakterizácií katiónových derivátov s benzo(tris)tiazolínovým akceptorom a aminoarylovým donorom pripravených v rámci spolupráce s Dr. Cigáňom a prof. Gáplovským z PriF UK. Deriváty vykazujú veľmi zaujímavé zvýšenie kvantového výťažku fluorescencie v niektorých prípadoch až o dva rády v polymérnych matriciach neutrálneho PVC a aniónového poly(styrén-sulfonátu) sodného oproti hodnotám v roztokoch. Táto intenzívna fluorescencia bola pozorovaná napriek zachovaniu výrazného komplexu s prenosom náboja (ICT) v základnom stave (UV spektrá), ktorý je zvyčajne neradiačný.

Charakterizovali sa singletové stavy aduktov pyrén-tetramethylpiperidínových amínov (NH) alebo nitroxidov (NO) spojených –CH=N- imínovým mostíkom a jeho redukovanou metyl-amínovou formou –CH2-NH-. Tradičné pyrénové UV a emisné spektrá sú pre tieto deriváty batochrómne posunuté, pričom v emisných spektrách pri nízkych koncentráciách látok sa objavuje excimérna emisia, ktorá môže byť pripísaná iba tvorbe špecifických agregátov (dimérov). Najviac sa to prejavuje pre imínový NH derivát v protickom metanole, ale neočakávane aj v nekonjugovanom metyl-amíne. V nepolárnom cyklohexáne toto pozorované nebolo. V časovo-rozlíšených spektrách naviac vidno dynamický charakter diméru počas veľmi krátkej doby života excitovaného stavu. Fluorescenčné nitroxidy sú zaujímavou skupinou senzorických látok využívaných pri štúdiu radikálových (degradácia materiálov, radikálový atak DNA) alebo oxidačných procesov (oxidačný stres v bunke, metabolizmus vitamínu C), pričom daný jav môže byť užitočný na rozhraní vnútro-bunkových priestorov a membrán, kde sa mení polarita prostredia.

Výstupy:

1. DANKO, Martin - *KASÁK, Peter* - HRDLOVIČ, Pavol. The interactions of probes based on substituted pyrene derivatives in polymer matrices, spectral study. In *Journal of Photochemistry and Photobiology A : polymer chemistry*, 2015, vol. 307, p. 79-87. (2.495 - IF2014). ISSN 1010-6030.
2. ILČÍKOVÁ, Markéta - MRLÍK, M. - SEDLÁČEK, T. - DOROSHENKO, M. - KOYNOV, K. - DANKO, Martin - MOSNÁČEK, Jaroslav. Tailoring of viscoelastic properties and light-induced actuation performance of triblock copolymer composites through surface modification of carbon nanotubes. In *Polymer : the International Journal for the Science and Technology of Polymers*, 2015, vol. 72, p. 368-377. (3.562 - IF2014). ISSN 0032-3861.
3. ILČÍKOVÁ, Markéta - MRLÍK, M. - MOSNÁČEK, Jaroslav. Chapter 6: Thermoplastic elastomers with photoactuating properties. Thermoplastic Elastomers - Synthesis and Applications. InTech d.o.o, Rijeka, Croatia. Edited by Chapal Kumar Das, ISBN 978-953-51-2223-4, 176 pages, Publisher: InTech, Chapters published November 26, 2015 under CC BY 3.0 license.
4. *KÓSA, Csaba* - SEDLAČÍK, M. - FIEDLEROVÁ, Agnesa - CHMELA, Štefan - BORSKÁ, Katarína - MOSNÁČEK, Jaroslav. Photochemically cross-linked poly(epsilon-caprolactone) with accelerated hydrolytic degradation. In *European Polymer Journal*, 2015, vol. 68, p. 601-608. (3.005 - IF2014). ISSN 0014-3057.
5. MOSNÁČEK, Jaroslav - ECKSTEIN-ANDICSOVÁ, Anita - BORSKÁ, Katarína. Ligand effect and oxygen tolerance studies in photochemically induced copper mediated reversible deactivation radical polymerization of methyl methacrylate in dimethyl sulfoxide. In *Polymer Chemistry*, 2015, vol. 6, p. 2523-2530. (5.520 - IF2014). ISSN 1759-9954.
6. ILČÍKOVÁ, Markéta - MRLÍK, M. - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - CSOMOROVÁ, Katarína - SASINKOVÁ, V. - KLEINOVÁ, Angela - MOSNÁČEK, Jaroslav. A tertiary amine in two competitive processes: Reduction of graphene oxide vs. catalysis of atom transfer radical polymerization. In *RSC Advances*, 2015, vol. 5, p. 3370-3376. (3.840 - IF2014). ISSN 2046-2069.
7. DANKO, Martin - *KASÁK, Peter* - HRDLOVIČ, Pavol. Spectral study of interactions of pyrene based probes in polymer matrices. In *ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015*. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 141-142. ISSN 1336-7242. Prednáška

6.) Mikro- a nanovlákna z prírodných zdrojov na báze sacharidov a bielkovín pripravené elektrostatickým zvlákňovaním.
(Micro- and nanofibers from natural resources on the base of sacharides and proteins prepared by electrospinning.)

Zodpovedný riešiteľ:	Anita Eckstein
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	2/0142/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 4 164.00 €

Dosiahnuté výsledky:

V hodnotenom období sa optimalizovali podmienky elektrostatického zvlákňovania surového hodvábu pre prípravu vhodného vlákenného produktu, určeného na charakterizáciu, prípadne ďalšiu modifikáciu pomocou vybraného liečiva a to sodnej soli 2-[(2,6-dichlorofenyl)amino]benzen-acetátovej kyseliny známej pod názvom diklofenak. Vlákna boli modifikované prevažne fyzikálne, inkorporáciou liečiva do štruktúry vlákna a následne podrobené štúdiu uvoľňovania liečiva z vlákennej vrstvy, pričom sa zistila maximálna doba uvoľňovania na 6-7 dní pričom najväčsie množstvo liečiva sa uvoľnilo do 48 hodín. Vlákenné vrstvy sa podrobili aj štúdiu vplyvu

uvoľňovaného liečiva na životnosť niekoľkých typov buniek ako sú myšie fibroblasty (MRC 5) a rakovinové bunky typu HELA a Ca SKI. Bola pritom dokázaná až 50% úmrtnosť rakovinových buniek, pričom liečivo ako aj samotná vlákenná hodvábna vrstva neovplyvňuje životnosť fibroblastov.

Výstupy:

1. ŠIŠKOVÁ, Alena – DUBAJ, T. – OPÁLEK, A. – KLEINOVÁ, Angela – RYCHTER, P. – ECKSTEIN, Anita. Functionalizing electrospun fibres with active molecules. In Challenges in Science and Technology of Polymer Materials, Polinnova: Bansko, Bulgaria, 19-23 May, 2015: Book of abstracts. http://challenges2015.polymer.bas.bg/.

7.) Relaxačné a časovo závislé efekty pri deformácii viacfázových systémov na báze polymérnej matrice.
(Relaxation and time dependent effects at deformation of multiphase systems with polymeric matrix.)

Zodpovedný riešiteľ:	Ivan Chodák
Trvanie projektu:	1.1.2014 / 31.12.2017
Evidenčné číslo projektu:	2/0108/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 9 364,00 €

Dosiahnuté výsledky:

Pokračovalo sa v prácach na charakterizácii stužujúcej fyzikálnej siete plniva pomocou on-line meraní zmien elektrickej vodivosti počas uniaxiálnej mechanickej deformácie. Podrobnejšie sa skúmali zákonitosti zmien počas cyklickej deformácie, kde sa zistilo, že zmeny elektrickej vodivosti presne korelujú so zmenami mechanického napätia vynaloženého na deformáciu. Tieto práce naznačujú súvislosti s fenoménom Payneeovho efektu a predpokladáme, že metodiku budeme môcť v priebehu ďalšieho riešenia využiť na detailnejšie popísanie uvedeného javu na nadmolekulovej úrovni.
Urobili sa ďalšie práce týkajúce sa štúdia sieťovania termoplastov. V roku 2015 sa ukončilo štúdium sieťovania polyamidov a kompozitov na báze polyamidov plnených skleným vláknom, kde sieťovanie bolo iniciované gama lúčmi. Ukázali sa niektoré zaujímavé javy pri porovnaní sieťovania na vzduchu a v inertnej atmosfére, ktoré súvisia s oxidáciou polyméru následkom ožiarenia.

Výstupy:

1. PODHRADSKÁ, Silvia - OMASTOVÁ, Mária - CHODÁK, Ivan. Effect of uniaxial deformation and relaxation of rubber-carbon black composites on their electrical properties. In KGK - Kautschuk Gummi Kunstoffe, 2015, vol. 68, no. 5, p. 45-51. (0.212 - IF2014). ISSN 0948-3276.
2. PORUBSKÁ, M. - BABIĆ, D. – JANIGOVÁ, Ivica - ŠLOUF, M. – JOMOVÁ, K. - CHODÁK, Ivan. The effect of gamma irradiation in air and inert atmosphere on structure and properties of virgin or glass fibre-reinforced polyamide 6. Polymer Bulletin, prijaté do tlače.
3. CHODÁK, Ivan - *KRAJČI, Juraj* - ŠPITALSKÝ, Zdenko. Similarities between elastomeric and thermoplastic matrices in the structure of reinforcing carbon black filler network. In Eurofillers Polymer Blend 2015 : Montpellier, France, April 26th - 30th, 2015 : book of abstracts. - Montpellier, France : Universite Montpellier, 2015, non p.

8.) Predoxidácia polymérov na ich ceste k biodegradácii.
(Pre-oxidation of polymers on their route to biodegradation.)

Zodpovedný riešiteľ:	Ivica Janigová
Trvanie projektu:	1.1.2015 / 31.12.2017
Evidenčné číslo projektu:	1/0122/15
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 3 718,00 €

Dosiahnuté výsledky:

Pôsobenie UV svetla na Ecoflex ako biodegradovateľný polymér ukázalo výraznejšie posuny hodnôt termických charakteristík smerom k nižším hodnotám po 56 dňoch pôsobenia UV svetla. Pozorovania pomocou elektrónovej mikroskopie potvrdili výrazné zmeny na povrchu polyméru.

9.) Biodegradovateľné polyméry a ich využitie v oblasti pôdohospodárstva a obalových aplikáciách.
(Biodegradable polymers for agricultural applications and food packaging.)

Zodpovedný riešiteľ:	Jozef Kollár
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	2/0167/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 6 363,00 €

Dosiahnuté výsledky:

Štúdium degradácie mulčovacej fólie na báze PLA-PHB (poly(lactic acid)-poly(3-hydroxybutyrate)). Degradácia bola sledovaná v reálnych podmienkach pri pestovaní papriky ako aj pri umelom UV ožarovaní. Starnutie fólie bolo sledované pomocou GPC a mechanické vlastnosti pomocou DSC. Reálne vzorky ako aj vzorky použité pri UV ožarovaní preukazovali nárast elastického modulu. Ťahové skúšky potvrdili zmenu ťahového napätia i predĺženia po 60 dňoch okrem vzoriek, ktoré sa nachádzali zakopané v pôde. Preukázal sa pozitívny efekt mulčovacej fólie na úrodu sladkej papriky (nárast hmotnosti plodu, väčšie množstvo karotenoidov pri zachovaní koncentrácie vitamínu C).

10.) Polyméry na báze 2-oxazolínov pre cielený transport liečiv a kontrolovanú adhéziu buniek.
(Polymers based on 2-oxazolines for targeted drug delivery and controlled cell adhesion.)

Zodpovedný riešiteľ:	Juraj Kronek
Trvanie projektu:	1.1.2015 / 31.12.2017
Evidenčné číslo projektu:	2/0163/15
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV

Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: VEGA: 7 655,00 €

Dosiahnuté výsledky:

V uplynulom období bolo naše úsilie zamerané na prípravu a charakterizáciu hydrogélov presietených bis(2-oxazolínovými) sieťovadlami. Použitie bis(2-oxazolínových) sieťovadiel s rôznou dĺžkou alifatického reťazca (butylén,hexametylén, oktametylén) umožňuje presnejšiu kontrolu nad vlastnosťami hydrogélov (stupeň napučania, Youngov modul) a takéto gély môžu slúžiť ako platforma na kultiváciu neadherentných bunkových línií.

Výstupy:

1. ZAHORANOVÁ, Anna – KRONEKOVÁ, Zuzana – ZAHORAN, M. – CHORVÁT, Jr., D. – JANIGOVÁ, Ivica - KRONEK, Juraj. Poly(2-oxazoline) hydrogels crosslinked with aliphatic bis(2-oxazolines): Properties, cytotoxicity, and cell cultivation. In Journal of Polymer Science - Polymer Chemistry, 2015, v tlači, DOI 10.1002/pola.20150791
2. ZAHORANOVÁ, Anna - KRONEK, Juraj. Hydrogels based on poly(2-oxazolines) for pharmaceutical applications, In Handbook of Polymers for Pharmaceutical Technologies, Ed. V. Kumar, Wiley-Scrivener, 2016, Vol. 4, p. 231-258

11.) Štúdium biokompatibility polymérov a polymérnych materiálov určených pre biomedicínske aplikácie in vitro analýzou cytotoxicity a bunkovej odpovede na molekulovej úrovni signálnych dráh.

(Biocompatibility study of polymers and polymeric materials suitable for biomedical applications. In vitro analysis of cytotoxicity and cell response at the signal transduction level.)

Zodpovedný riešiteľ: Zuzana Kroneková
Trvanie projektu: 1.1.2015 / 31.12.2017
Evidenčné číslo projektu: 2/0156/15
Organizácia je koordinátorom projektu: áno
Koordinátor: Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií: 0
Čerpané financie: VEGA: 6 078,00 €

Dosiahnuté výsledky:

V prvom roku riešenia sme sa zamerali na hodonotenie biokompatibility polymérov a hydrogélov na báze 2-oxazolínov. Ukázalo sa, že nové typy hydrogélov sú biokompatibilné a vhodné na kultiváciu buniek. Zamerali sme sa aj na charajterizaciu biokompatibility peptidom modifikovaných PMCG mikrokapsúl a preukázali ich funkčnosť pri vychytávaní cytotoxických molekúl in vitro.

Výstupy:

1. ZAHORANOVÁ, Anna – KRONEKOVÁ, Zuzana – ZAHORAN, M. – CHORVÁT, Jr., D. – JANIGOVÁ, Ivica - KRONEK, Juraj. Poly(2-oxazoline) hydrogels crosslinked with aliphatic bis(2-oxazolines): Properties, cytotoxicity, and cell cultivation. In Journal of Polymer Science - Polymer Chemistry, 2015, v tlači, DOI 10.1002/pola.20150791
2. KRONEKOVÁ, Zuzana – MIHÁLOVÁ, Andrea – SLÁVIKOVÁ, M. – UHELSKÁ, Lucia – LACÍK, Igor. Functionalization of hydrogels with thiol-terminated peptides for enhancing immuno-protection of encapsulated cells. In European Polymer Congress (EPF 2015), Dresden, Nemecko, 2015, 21. - 26. 6. 2015: Book of Abstracts, p. 195, BIO-L-81.

3. ZAHORANOVÁ, Anna - KRONEKOVÁ, Zuzana - ZAHORAN, M. - CHORVÁT JR., D.- KRONEK, Juraj. 2-Ethyl-2-Oxazoline-based Hydrogels as Matrices for Cell Cultivation. In Proceedings of EPF Congress, Dresden, Nemecko, BIO-L-22, p. 180
4. KRONEK, Juraj – ZAHORANOVÁ, Anna – *MIKULEC, Marcel* – KRONEKOVÁ, Zuzana. Hydrogels based on poly(2-oxazoline)s. In 3rd CEEPN Workshop, 23. – 26. 9. 2015, Iasi, Rumunsko, p. 5-6.

12.) Kinetika a bioaplikácie zwitteriónových polymérov.
(Kinetics and bioapplications of zwitterionic polymers.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	2/0198/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 11 777,00 €

Dosiahnuté výsledky:

Opísanie kinetiky a mechanizmu homopolymerizácie metakrylátových sulfobetaínových monomérov. Využitie karboxybetaínových polymérov pre pokrývanie neurálnych elektród.

Výstupy:

1. LACÍK, Igor - *SOBOLČIAK, Patrik - STACH, Marek* - CHORVÁT, D. - *KASÁK Peter.* Propagation rate coefficient for sulfobetaine monomers by PLP−SEC. *Polymer*, odoslané 2015

13.) Oxidačné a hydrolytické starnutie celulózy ako dôležitý faktor zmien ich horľavosti. *(Oxidative and hydrolytic ageing of cellulose derivatives as an important factor of flammability changes.)*

Zodpovedný riešiteľ:	Marta Malíková
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	2/0161/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 2 544,00 €

Dosiahnuté výsledky:

Zatiaľčo degradácia celulózy podľa neizotermickej termogravimetrie v kyslíku prebieha rýchlejšie ako v dusíku, v prípade nitrocelulózy sú rozdiely zanedbateľné (Obr.1). Zistilo sa, že starnutím pri 130 oC na vzduchu v rozsahu 0 – 16 dní výrazne narastá zvyšok po degradácii, čo sa odráža na zmenách pozorovaných dvoch píkov neizotermickej chemiluminiscencie v kyslíku, kedy prvý zodpovedá svetelnej emisii z degradácie samotnej nitrocelulózy a druhý oxidácii vzniknutého uhlíkatého zvyšku. Súčasne sa podľa DSC znižuje maximálna rýchlosť uvoľňovania tepla.
Dva typy nitrocelulózy s obsahom dusíka 10.9 a 12.0 hm% boli degradované za neizotermických podmienok od 40 do 220 °C pri rýchlostiach ohrevu 2.5-10 °C/min a izotermicky v rozsahu 160-210°C v dusíku a v kyslíku. Zaujímavým zistením je, že Irganox 1010 ako inhibítor radikálovych reakcií pozorované neizotermické priebehy vôbec neovplyvňuje. V kónickom kalorimetri tieto vzorky prudko horia už po zapálení zapaľovačom, pričom spalné teplo je iba okolo 12 kJ/g.

Výstupy:

1. HUDÁKOVÁ, Martina. Popis horenia organických rozpúšťadiel ako východiskový prístup pre hodnotenie horľavosti zložitejších systémov. In *Proceedings of Advances in Fire & Safety Engineering 2015*, Zvolen 22.-23.10.2015, ISBN 978-80-228-2823-9. Výveska

14.) Skúmanie povrchových, adhéznych a antibakteriálnych vlastností vybraných medicinálnych polymérov upravených nízkoteplotnou plazmou.
(Investigation of surface, adhesive and antibacterial properties of selected medicinal polymers modified by low-temperature plasma.)

Zodpovedný riešiteľ:	Igor Novák
Trvanie projektu:	1.1.2014 / 31.12.2016
Evidenčné číslo projektu:	2/0199/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 5 300,00 €

Dosiahnuté výsledky:

PLA fólie s rôznou kryštalinitou boli povrchovo modifikované účinkom nízkoteplotnej mikrovlnovej plazmy a potom boli očkované v parách dvoch vybraných prekurzorov (v alylalkohole a alylamíne). Na povrch PLA očkovaný účinkom plazmy boli imobilizované vybrané antibakteriálne látky - chitosan a pektín, triclosan, chlórhexidín a kyselina alginová. Antibakteriálne modifikovaná PLA bola študovaná z hľadiska povrchových a bakteriostatických vlastností. Potvrdila sa závislosť bakteriostatického efektu chitosanu, triclosanu a kyseliny alginovej po imobilizácii na polymérny povrch od použitého prekurzora. Podľa druhu použitého prekurzora bol pre antibakteriálnu látku imobilizovanú na polymérny povrch zistený odlišný antibakteriálny účinok. Skúmalo sa očkovanie povrchu PP organosilánmi v podmienkach vysoko-energetického plazmového výboja. Množstvo viazaných silánov na očkovanom povrchu vzrástlo po následnej post-plazmovej expozícii v parách primárneho amínu. Pripravil sa povrch PP s polárnymi Si-O väzbami. Silánom očkovaný PP povrch bol chemicky modifikovaný organosilánmi s rôznymi funkčnými skupinami (kyano, merkapto, amido a amino skupinami) s cieľom funkcionalizácie PP pre bioaplikácie. Najefektívnejšou funkcionalizáciou silánom očkovaného PP bola reakcia s 3-kyanopropyltrichlórsilánom, ktorá umožnila permanentne zaviesť kyanoskupiny na povrch vo výťažku 10 kyanoskupín na 100 atómov uhlíka.

Výstupy:

1. NOVÁK, Igor - *POPELKA, Anton* - LEHOCKÝ, M. - VALENTIN, Marian - CHODÁK, Ivan - PRACHÁR, Jozef. Antibacterial pre-treatment of polyethylene using cold plasma. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 92-93. ISBN 978-80-970923-7-5.
2. NOVÁK, Igor - SEDLIAČIK, J. - VALENTIN, Marian - ŽIGO, Ondrej - PRACHÁR, Jozef – JURKOVIČ, P. - MATYAŠOVSKÝ, J. Antibacterial modification of polyolefin veneers. In Annals of Warsaw University of Life Sciences - SGGW : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 90, p. 138-142. ISSN 1898-5912.
3. VALENTIN, Marian - NOVÁK, Igor - *KRUPA, Igor* - OMASTOVÁ, Mária. Nanoindentation and its application for the study of nanomechanical properties of plasma treated poly(lactic acid) samples with different crystallinity. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria: Trauner Verlag Univesität, 2015, p. 82. ISBN 978-3-99033-491-1.

4. NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - *POPELKA, Anton* - PRACHÁR, Jozef - MATYAŠOVSKÝ, J. - JURKOVIČ, P. Antibacterial modification of polymer veneers. In Annals Warsaw University of Life Sciences : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 307-311. ISSN 1898-5912.

15.) Polymérne nanokompozity a hybridy a ich aplikácie ako senzory a aktuátory.
(Polymeric nanocomposites and hybrids and their applications as sensors and actuators.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.1.2014 / 31.12.2017
Evidenčné číslo projektu:	2/0149/14
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 16 000,00 € + 2929,00 €

Dosiahnuté výsledky:

Pripravili sa vodivé kompozitné materiály na báze poly(metylmetakrylátu) a mnohostenných uhlíkových nanotrubičiek (PMMA/MWCNT) použitím roztokových metód a zamiešania v tavenine. Na štúdium elektrickej vodivosti a perkolačného prahu, v závislosti od druhu prípravy kompozitu sa použili širokopásmová dielektrická spektroskopia a 4-bodová metóda merania elektrickej vodivosti. Zistilo sa, že najnižšiu perkoláciu, t.j. 0,03 obj. % možno dosiahnuť pre kompozity pripravené odlievaním z roztoku použitím toluénu a chloroformu. Najvyššia elektrická vodivosť 1,57×10-1 S/cm bola nameraná pre kompozit pripravený roztokovou metódou v toluéne použitím 3,67 obj. % MWCNTs. Štúdium morfológie prostredníctvom rastrovacej elektrónovej mikroskopie potvrdilo dobrú distribúciu uhlíkových nanotrubičiek v kompozite. Pripravila sa séria nanokompozitov, ktoré boli testované ako aktuátory. Študovalo sa starnutie polypyrolu a vplyv tenzidov pri jeho syntéze.

Výstupy:

1. TABAČIAROVÁ, Jana - MIČUŠÍK, Matej - FEDORKO, P. - OMASTOVÁ, Mária. Study of polypyrrole aging by XPS, FTIR and conductivity measurements. In Polymer Degradation and Stability, 2015, vol. 120, p. 392-401. (3.163 - IF2014). (2015 - Current Contents). ISSN 0141-3910.
2. WINTER, A. D. - CZANIKOVÁ, Klaudia - LARIOS, E. - VISHNYAKOV, V. - JAYE, Ch. - FISCHER, D. A. - OMASTOVÁ, Mária - CAMPO, E. M. Interface dynamics in strained polymer nanocomposites: Stick-slip wrapping as a prelude to mechanical backbone twisting derived from sonication-induced amorphization. In Journal of Physical Chemistry C, 2015, vol. 119, no. 34, p. 20091-20099. (4.772 - IF2014). ISSN 1932-7447.
3. MOSNÁČKOVÁ, Katarína - ŠPITALSKÝ, Zdenko - KULIČEK, Jaroslav - PROKEŠ, J. - SKARMOUTSOU, A. - CHARITIDIS, C. A. - OMASTOVÁ, Mária. Influence of preparation methods on the electrical and nanomechanical properties of poly(methyl methacrylate)/multiwalled carbon nanotubes composites. In Journal of Applied Polymer Science, 2015, vol. 132, art.no. 41721. (1.768 - IF2014). ISSN 0021-8995.

16.) Nanoštrukturované polyméry a nanoštruktúra v polyméroch.
(Nanostructured polymers and polymer nanostructure.)

Zodpovedný riešiteľ:	Dušan Račko
Trvanie projektu:	1.1.2013 / 31.12.2016
Evidenčné číslo projektu:	2/0068/13
Organizácia je koordinátorom projektu:	áno

Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 834,00 €

Dosiahnuté výsledky:

Študovali sme štruktúru a dynamiku hviezdicových polymérov pomocou hrubozrnných molekulovo-dynamických simulácií a analyzovali sme štruktúrne prechody polo-tuhých makromolekúl uzavretých v nano-kanáloch. Konformácie hviezdicových polymérov v úzkych kanáloch sú dané šírkou kanálu, tuhosťou ramien a počtom ramien stesnaných spoločne v danom regióne pozdĺž kanála. Zamerali sme sa na konformačný prechod, kde sú všetky ramená na začiatku v jednom smere úzkeho kanála. Zistili sme, že únik ramien nepostupuje od konca ramien, ale postupuje vytvorením slučky od stredu hviezdice. Únik ramien je stupňovitý proces a hnacia sila je úmerná sile stesnania ramien v kanáli.

Výstupy:

1. RAČKO, Dušan - CIFRA, Peter. Arm retraction and escape transition in semi-flexible star polymer under cylindrical confinement. In Journal of Molecular Modeling, 2015, vol. 21, art.no. 186. (1.736 - IF2014). ISSN 1610-2940. 10.1007/s0089-015-2735-9.

17.) Modelovanie a syntéza hybridného konjugovaného systému pre protinádorovú terapiu.
(Modeling and synthesis of hybrid conjugated systems for anticancer therapy.)

Zodpovedný riešiteľ:	Filip Rázga
Trvanie projektu:	1.1.2015 / 31.12.2018
Evidenčné číslo projektu:	2/0094/15
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 4 977,00 €

Dosiahnuté výsledky:

i)In silico modeling pilotného systému
ii)Syntéza základných výstavbových blokov
iii)Syntéza polymérneho komponentu

Výstupy:

1. RÁZGA, Filip - NÉMETHOVÁ, Veronika. A method for altering the functional status of mRNA allowing its selective and specific recognition. PP-50065-2015, patentová prihláška

18.) Grafénové polymérne nanokompozity pre environmentálne monitorovanie.
(Graphene containing polymer nanocomposites for environmental monitoring.)

Zodpovedný riešiteľ:	Zdenko Špitálsky
Trvanie projektu:	1.1.2012 / 31.12.2015
Evidenčné číslo projektu:	2/0119/12
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	VEGA: 5 048,00 €

Dosiahnuté výsledky:

Štúdium elektricky vodivých kompozitov založených na báze elastomérnej matrice a expandovaného grafitu ako plniva. Pomocou komerčného motorového oleja bola skúmaná potenciálna aplikácia ako environmentálnych detektorov. Sledoval sa vplyv veľkosti častíc plniva, hrúbky filmu, dĺžky detektora, teploty a množstva oleja na odozvu detektora. Na štúdium adhézie kompozitného filmu na vybraných materiáloch boli použité peel testy. S rastúcou hrúbkou filmu detektora rástla doba odozvy. Avšak pre tenké vzorky mal prechádzajúci prúd príliš nízke hodnoty a bol ovplyvnený šumom signálu. Pri sledovaní vplyvu dĺžky detektora sa čas odozvy predlžoval. S klesajúcou teplotou klesala rýchlosť odozvy detektora, avšak aj pri nižších teplotách bola stále v praktickom časovom rozmedzí. Navrhnutý detektor nebol schopný rozlíšiť rôzne množstvá oleja, a preto môže byť použitý len na získavanie kvalitatívnych informácií. Peel testy ukázali, že pripravené filmy mali dostatočnú adhéziu k rôznym povrchom. Zo získaných dát usudzujeme, že navrhnutý detektor je vhodný pre použitie v praxi. Použitý materiál po nanesení na poróznu textíliu je možné využiť aj ako detektor rôznych pár plynov.

Výstupy:

1. OLEJNIK, R. - ŠPITALSKÝ, Zdenko - PROSTREDNÝ, M. - SLOBODIAN, P. Sensing element on the base of graphene/styre-isopren copolymer for VOC detection in industry. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava: STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 238-241. ISBN 978-80-970923-7-5.
2. ŠPITALSKÝ, Zdenko - PROSTREDNÝ, M. - *KRUPA, Igor*. Electrically conductive composites based on an elastomeric matrix filled with expanded graphite as a potential oil sensing material. In PMA 2015 & SRC 2015: book of proceedings. – Bratislava: STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 126-127. ISBN 978-80-970923-7-5.
3. Diplomová práca Martin Prostredný - Príprava a charakterizácia nových elektricky vodivých nanokompozitov na báze grafénu, FCHPT STU, úspešne obhájená, cena rektora aj cena dekana
4. PASZKIEWICZ, S. - PAWELEC, I. - SZYMCZYK, A. - ŠPITALSKÝ, Zdenko - MOSNÁČEK, Jaroslav - KOCHMANSKA, A. - ROSLANIEC, Z.. Effect of exfoliated graphite nanoplatelets´size on the phase structure, electrical and barrier properties of poly(trimethylene terephthalate)-based nanocoposite. In Polymer Engineering and Science, 2015, vol. 55, p. 2222-2230.
5. ŠPITALSKÝ, Zdenko - *KRATOCHVÍLA, Ján* - CSOMOROVÁ, Katarína - *KRUPA, Igor* - GRACA, M. P. F. - COSTA, L. C. Mechanical and electrical properties of styrene-isoprene-styrene copolymer doped with explanded graphite nanoplatelets. In Journal of Nanomaterials, vol. 2015, art ID 168485, 9 p. ISSN 1687-4110.

Programy: APVV

18.) Fotoaktívne hybridné nanomateriály s luminiscenčnými a antimikrobiálnymi vlastnosťami.

(Photoactive hybrid nanomaterials with luminescent and antimicrobial properties.)

Zodpovedný riešiteľ:	Juraj Bujdák
Zodpovedný riešiteľ v organizácii SAV:	Martin Danko
Trvanie projektu:	1.7.2012 / 31.12.2015
Evidenčné číslo projektu:	APVV-0291-11
Organizácia je koordinátorom projektu:	nie
Koordinátor:	
Počet spoluriešiteľských inštitúcií:	3 - Slovensko: 3
Čerpané financie:	APVV: 16596 €

Dosiahnuté výsledky:

Pripravil sa fluorescenčne značený polyetylénglykol neutrálnym benzotioxantónom. Tento polymér bude použitý na prípravu anorganicko/organických hybridných materiálov s fluorescenčnými vlastnosťami z vrstevnatých silikátov. Dokončila sa štúdia agregácie pyrén-cholesterolových derivátov v polymérnych matriciach, ktoré môžu byť dobrým kompatibilizátorom uhlíkových anorganických nanomateriálov ako grafén, uhlíkové nanodoty a uhlíkové nanorúrky v polymérnych kompozitoch.

Výstupy:

1. SAS, S. - DANKO, Martin - LANG, K. - BUJDÁK, J. Photoactive hybrid material based on kaolinite intercalated with a reactive fluorescent silane. In Applied Clay Science, 2015, vol. 108, p. 208-2014. (2.467 - IF2014). ISSN 0169-1317.
2. DANKO, Martin - KASÁK, Peter - HRDLOVIČ, Pavol. The interactions of probes based on substituted pyrene derivatives in polymer matrices, spectral study. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2015, vol. 307, p. 79-87. (2.495 - IF2014). ISSN 1010-6030
3. DANKO, Martin - KASÁK, Peter - HRDLOVIČ, Pavol. Spectral study of interactions of pyrene based probes in polymer matrices. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 141-142. ISSN 1336-7242.

20.) Biodekorované kompozitné magnetické nanočastice: Príprava, kolektívne vlastnosti a ich aplikácie.
(Biodecorated composite magnetic nanoparticles: Preparation, collective properties and applications.)

Zodpovedný riešiteľ:	Ignác Capek
Trvanie projektu:	1.7.2012 / 31.12.2015
Evidenčné číslo projektu:	APVV-0125-11
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	2 - Slovensko: 2
Čerpané financie:	APVV: 21 821,93 €

Dosiahnuté výsledky:

V tomto roku sme sa venovali príprave plasmonicko-magnetických nanočastíc s rôznou veľkosťou, tvarom a morfológiou (jadro-obal, doménovou štruktúrou, zliatina,...) multi-stupňovým redukcia/stabilizácia procesom, klasickou a templátovou (násadovou) mikroemulznou polymerizáciou. Tieto nanočastice s hydrofilnou koronou sa vyznačujú vysokou reaktivitou a biokompatibilitou k rôznym biomolekulám, mikroorganizmom a bunkám, umožňujúc tvorbu požadovaných nanokonjugátov (nanosenzorov). Chemické, mechanické a fyzikálne vlastnosti nanomateriálov a ich konjugátov sú monitorované priamymi a nepriamymi spôsobmi a technikami. Medzi tie patria napríklad TEM, SEM, SQUID magnetometria a suspektometria, GISAXS štúdie, štúdie tvorby reaktívnych radikálov a fragmentov a ich účasť v reakčných a polymerizačných mechanizmoch, distribúciou atómov rozdielnych kovov medzi jadro a obal nanočastíc.

21.) Nanoštruktúra v makromolekulových systémoch indukovaná stesnaním.
(Nanostructure in macromolecular systems induced by confinement.)

Zodpovedný riešiteľ:	Peter Cifra
Trvanie projektu:	1.7.2012 / 31.12.2015

Evidenčné číslo projektu:	APVV-0451-11
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 38 760,50 €

Dosiahnuté výsledky:

V náväznosti na predošlé štúdie lineárnych makromolekúl a ich linearizácie v nanokanáloch s asymetrickým profilom až v limite úzkych pásikov sme vyšetrili správanie dlhých cyklických makromolekúl. Vo všetkých geometriách sa potvrdilo očakávanie silnejšieho relatívneho vystierania makrocyklov oproti lineárnym polymérom, ktoré vyplýva zo silnejšieho vylúčeného objemu v cykloch stiesnených kanálom. V prípade makrocyklu stiesneného v kanáli vo forme úzkeho pásiku sa toto vystieranie ešte zosilňuje vplyvom prechodu ku dvojrozmernému systému, ktorý taktiež prispieva ku zosilnenej linearizácii a je už popísaný pre lineárne polyméry. Tieto zistenia budú mať implikácie pre jednomolekulové charakterizácie makrocyklickej DNA v nanofluidných zariadeniach.

Výstupy:

1. RAČKO, Dušan - CIFRA, Peter. Arm retraction and escape transition in semi-flexible star polymer under cylindrical confinement. In Journal of Molecular Modeling , 2015, vol. 21, p. 186 (1.867 -IF2014
2. BENKOVÁ, Zuzana - NÁMER, Pavol - CIFRA, Peter. From stripe to slab confinement for linearization of macromolecules in nanochannels. In Soft Matter, 2015, vol. 11, p. 2279-2289, (4.151- IF2014)

22.) Technológia prípravy tenkých vrstiev karbidu kremíka: Výskum a vývoj technológií prípravy tenkých vrstiev karbidu kremíka pre aplikácie v solárnych článkoch a v tenkovrstvových súčiastkách.
(Silicon carbide thin film technologies: Research and development of silicon carbide thin film technologies for application in solar cells and thin film devices.)

Zodpovedný riešiteľ:	Jozef Huran
Zodpovedný riešiteľ v organizácii SAV:	Angela Kleinová
Trvanie projektu:	1.10.2013 / 31.12.2016
Evidenčné číslo projektu:	APVV-0443-12
Organizácia je koordinátorom projektu:	nie
Koordinátor:	
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 6723 €

Dosiahnuté výsledky:

V uplynulom roku sa využila technika FTIR na charakterizáciu materiálov upravených nanesením vrstiev karbidu vápnika. Následne sa získané výsledky zloženia povrchovej vrstvy využili na optimalizácu prípravy.

Výstupy:

1. KLEINOVÁ, Angela - HURAN, J. - SASINKOVÁ, V. - PERNÝ, M. - ŠÁLY, V. - PACKA, J. FTIR spectroscopy of silicon carbide thin films prepared PECVD technology for solar cell application. 2015 Optics + Photonics – Reliability of Photovoltaic Cells, Modules, Components and SystemsVIII – proceedings of SPIE 9563. San Diego, California, USA, 9-13 August 2015

23.) Gumárenské zmesi s novými netradičnými plnivami pre špeciálne aplikácie.
(Rubber compounds with new types of fillers for special applications.)

Zodpovedný riešiteľ:	Ivan Chodák
Trvanie projektu:	1.10.2013 / 30.9.2016
Evidenčné číslo projektu:	APVV-0694-12
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Fakulta chemickej a potravinárskej technológie STU, Bratislava
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 18648 €

Dosiahnuté výsledky:

V projekte sme pôsobili predovšetkým ako servisné pracovisko pre špeciálne merania zmesí, pripravených na pracovisku koordinátora. Merali sme detailne dynamické mechanické vlastnosti metódou DMTA a pre charakterizáciu magnetických vlastností sa merali aj odozvy metódou dielektrickej spektroskopie. Tieto výsledky sa vyhodnocovali na pracovisku koordinátora a korelovali s ďalšími charakteristikami, súvisiacimi predovšetkým s magnetickými vlastnosťami gumárskych zmesí, čo bol jeden z dvoch hlavných cieľov projektu.

Výstupy:

1. CHODÁK, Ivan - *KRAJČI, Juraj*. Structure of reinforcing filler network determined by on-line measurement of electrical conductivity of the polymer/carbon black composite. In ICCS18 - International Conference on Composite Structures : book of abstracts. - Porto, Portugal : Universidade do Porto, 2015, p. 68 -69.
2. CHODÁK, Ivan – *KRAJČI, Ju*raj – OMASTOVÁ, Mária. Structure of reinforcing carbon black filler network in polymer composites determined from electrical conductivities, 16th Austrian Chemistry Days, Innsbruck 21.-24.9.2015, Zborník OP-42. Prednáška

24.) METALLOCENE: Nereaktívne tavné lepidlá na báze metalocénových polymérov pre priemyselné aplikácie.
(Unreactive melt adhesives based on metallocene polymers for industrial applications.)

Zodpovedný riešiteľ:	Ivan Chodák
Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-14-0566
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 14 123.00 €

Dosiahnuté výsledky:

V prvej fáze proejktu sa urobil výber materiálov na báze metalocénových polyolefínov pre základné matrice adhezív. Tieto polyméry sa charakterizovali z hľadiska primárnych vlastností, ako sú mólové hmotnosti a distribúcia mólových hmotností, viskozita, kryštalinita a niektoré ďalšie.

25.) NANOSEN: Nanočasticové sensory pre plynné biomarkery chorôb.
(Nanoparticles-based sensors of gaseous biomarkers of diseases.)

Zodpovedný riešiteľ:	Ján Ivančo
Zodpovedný riešiteľ v organizácii SAV:	Jaroslav Mosnáček

Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-14-0891
Organizácia je koordinátorom projektu:	nie
Koordinátor:	
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 8 195,00 €

Dosiahnuté výsledky:

Pripravili sa nanočastice oxidov železa s C18 alkylovou obálkou. Zároveň sa pripravil ATRP iniciátor na báze dopamínu a hľadali sa podmienky pre prípravu poly(n-butyl akrylát)ového reťazca pomocou fotoATRP z dopamínu. Oligoméry s dopamínovým koncom by sa následne mali použiť ako obálka pre nanočastice oxidov železa, pričom by mala byť kontrolovaná hrúbka obálky. Ukázalo sa, že ATRP z dopamínu nebeží, pravdepodobne z dôvodu komplexácie katalyzátora dopamínom. Následne sa vyskúšajú dva postupy: 1.) naviazanie dopamínového iniciátora na nanočastice oxidov železa a následná ATRP z povrchu nanočastíc; 2.) ochránenie fenolových skupín dopamínu za účelom potlačenia komplexácie katalyzátora a následna fotoATRP.

26.) BIOGLYKO: Biočipy a biosenzory pre glykorozpoznávanie, ich vývoj, príprava a využitie pri výskume rakoviny.
(Biochips and biosenzors for glycorecognition, their development, preparation and application in cancer research.)

Zodpovedný riešiteľ:	Jaroslav Katrlík
Zodpovedný riešiteľ v organizácii SAV:	Jaroslav Mosnáček
Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-143-0753
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Chemický ústav SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 3125 €

Dosiahnuté výsledky:

V rámci projektu sa modifikovali kremíkové povrchy sulfobetaínmi a karboxybetaínmi. Modifikácia sa uskutočnila dvomi spôsobmi: 1.) klik reakciou tiolových skupín na povrchu s vinylovymi skupinami zwiteriónovych monomérov; 2.) modifikáciou povrchu ATRP iniciátorom a následnou photoATRP zwiteriónových monomérov z povrchu. V oboch prípadoch sa podarilo povrchy modifikovať, čo bolo dokázané meraním uhla zmáčania ako i pomocou AFM.

27.) Využitie biofonických nanotechnológií k štúdiu mechanizmov bunkovej smrti s cieľom zvýšenia citlivosti detekcie a selektivity liečby nádorov.
(Towards increased sensitivity of cancer detection and selectivity of cancer treatment: biophotonic nanotechnology applications.)

Zodpovedný riešiteľ:	**Pavol Miškovský**
Zodpovedný riešiteľ v organizácii SAV:	Juraj Kronek
Trvanie projektu:	1.7.2012 / 31.12.2015
Evidenčné číslo projektu:	APVV-0242-11

Organizácia je koordinátorom projektu:	nie
Koordinátor:	Prírodovedecká fakulta UPJŠ Košice
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 6302 €

Dosiahnuté výsledky:

Príprava amfifilných kopolymérov obsahujúce cholesterolovú a stearovú jednotku.

Výstupy:

1. KRONEK, Juraj - KRONEKOVÁ, Zuzana - *MIKULEC, Marcel* - ZAHORANOVÁ, Anna - PETRENČÍKOVÁ, Nadežda - ŠRAMKOVÁ, Petra - PAULOVIČOVÁ, E. - PAULOVIČOVÁ, L. Polymers based on unsaturated 2-oxazolines as building blocks for biomedical materials. 2nd Annual Conference of International Society for Biomedical Polymers and Polymeric Biomaterials (ISBPPB), Orlando, FA, USA,júl 2015, USB memory stick, IL-03

28.) MEREDIT: Materiály a procesy pre funkčnú enkapsuláciu pankreatických ostrovčekov v liečbe diabetu.
(MEDERIT: Materials and processes for functional encapsulation of pancreatic islets in diabetes treatment.)

Zodpovedný riešiteľ:	Igor Lacík
Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-14-0858
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	1 - Slovensko: 1
Čerpané financie:	APVV: 20 362,00 €

Dosiahnuté výsledky:

Zavedenie nových metodík charakterizácie mikrokapsúl (konfokálna Ramanova mikroskopia, cryo-SEM). Nový spôsob prípravy PMCG mikrokapsúl.

29.) Nanoštruktúrne materiály pre senzoriku.
(Nanostructured materials for sensorics.)

Zodpovedný riešiteľ:	Peter Lobotka
Zodpovedný riešiteľ v organizácii SAV:	Matej Mičušík
Trvanie projektu:	1.7.2012 / 31.12.2015
Evidenčné číslo projektu:	APVV-0593-11
Organizácia je koordinátorom projektu:	nie
Koordinátor:	
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 15607 €

Dosiahnuté výsledky:

Pokúšali sme sa optimalizovať nanášanie nanokoloidov iónovej kvapaliny (IL) s Cu-Mn nanočasticami metódou Layer-by-layer. Bohužiaľ sa nám zatiaľ nepodarilo úspešne reprodukovať

naše prvé úspešné pokusy. Navyše po ca roku dochádzalo aj k čiastočnej oxidácii medi v IL, čo nám dosť narušilo náš koncept naniesť kovové nanočastice na detekčné zlaté elektródy pre potenciálne neenzymatické senzory glukózy. Skúšali sme aj iné IL než len našu pôvodnú EMIMBF4, no bez výraznejšieho úspechu. Začali sme aj nanášanie na ploché elektródy, ktoré by sa dali potom použiť ako sensory na báze Surface Plasmon Resonance. V tejto práci ešte budeme pokračovať, napriek tomu, že projekt tento rok končí.
Popritom sme uzavreli štúdiu ohľadne starnutia chemicky pripraveného polypyrolu (PPy) pomocou XPS metódy, ktorá bola prijatá a opublikovaná v časopise Polymer Degradation and Stability. Úspešne sa uzavrela práca ohľadne prípravy senzorických materiálov na báze elastomérnych kompozitov s uhlíkatými vodivými plnivami. Časť s kompozitmi na báze styrén-butadiénového kaučuku (SBR) plneného s uhlíkovými nanotrubičkami (CNT) a sadzami (CB) bola prijatá do časopisu Macromolecular Chemistry and Physics. Druhá časť venovaná kompozitom na báze kopolymérov styrén-izoprén-styrén, styrén-etylén/butylén-styrén s maleinanhydridom (SEBS-MA) a SEBS-MA modifikovaný polyetylén glykolom plnených CNT a ich senzorickej odozve na rôzne rozpúšťadlá sa práve spisuje na zaslanie do CC časopisu.

Výstupy:

1. TABAČIAROVÁ, Jana - MIČUŠÍK, Matej - FEDORKO, P. - OMASTOVÁ, Mária. Study of polypyrrole aging by XPS, FTIR and conductivity measurements. In Polymer Degradation and Stability, 2015, vol. 120, p. 392-401. (3.163 - IF2014). (2015 - Current Contents). ISSN 0141-3910.
2. TABAČIAROVÁ, Jana - *KRAJČI, Juraj* - PIONTECK, J. - REUTER, U. – OMASTOVÁ, Mária - MIČUŠÍK, Matej. Styrene butadiene rubber/carbon filler-based vapor sensors. In Macromolecular Chemistry and Physics, 2015, DOI: 10.1002/macp.201500298, (2.616 - IF2014). (2015 - Current Contents).

30.) GONanoplatform: Grafénová nanoplatforma na detekciu rakoviny.

(Graphene-based nanoplatform for detection of cancer.)

Zodpovedný riešiteľ:	Mária Omastová
Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-14-0120
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 9 044,00 €

Dosiahnuté výsledky:

Pripravili sa grafén oxidové (GO) častice chemickou oxidačnou exfoliáciou grafitu. Veľkosť vločiek oxidu grafénu závisí na veľkosti zŕn východiskového grafitového zdroja. Pripravený GO bol čiastočne redukovaný, aby sa získal materiál s rôznou úrovňou funkčných skupín na povrchu. Základná charakteristika GO a RGO, pokiaľ ide o stupeň oxidácie, exfoliácie a veľkosti nanočastíc sa študovala pomocou malouhlového rozptylu röntgenového žiarenia (SAXS) a XPS metódou. Superparamagnetické nanočastice (MNPS) s priemerom 10 nm boli pripravené vo vodnom roztoku. Na povrch týchto častíc sa aplikovali aminokyseliny ako lyzín, ktoré sú schopné reagovať s GO. Monoklonálne protilátky (MAb), najmä získané z média hybridómových buniek sú proteíny, a preto majú voľné NH2 a COOH skupiny. Skupina COOH bude použitá na naviazanie na GO.

Výstupy:

1. OMASTOVÁ, Mária - ŠPITALSKÝ, Zdenko - ŠIFFALOVIČ, P. - KONERACKÁ, M. - PASTOREKOVÁ, S. Surface modification of carbon nanostructures for advanced application. In The Košice, 26.-28.10.2015. - Košice : NFA, 2015, p. 59. ISBN 978-80-8152-312-0.

31.) Karbonická anhydráza IX ako funkčný komponent nádorovej progresie: úloha v epitelovo - mezenchýmovej tranzícii a v prenose medzibunkových signálov.
(Carbonic anhydrase IX as a functional component of cancer progression: the role in epithelial-mesenchymal transition and intercellular signaling.)

Zodpovedný riešiteľ:	Silvia Pastoreková
Zodpovedný riešiteľ v organizácii SAV:	Igor Lacík
Trvanie projektu:	1.7.2012 / 31.12.2015
Evidenčné číslo projektu:	APVV-0658-11
Organizácia je koordinátorom projektu:	nie
Koordinátor:	
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 23537 €

Dosiahnuté výsledky:

Odoslal sa článok, ktorého princípom je kontrolované uvoľňovanie protilátky voči karbonickej anhydráze CA-IX. Pokračovalo sa v charakterizovaní podmienok, ktoré podmieňujú prípravu koloidne stabilných chitozánových submikrónových častíc ako potenciálnych ďalších nosičov pre protilátky pre CA-IX. Bol pripravený koncept článku, ktorý sa podrobne venuje tejto tematike a v ktorom sme poukázali na chýbajúce poznanie v literatúre. Identifikovali sme najzásadnejšie faktory vplývajúce na samotný process sieťovania, ktoré sú v dostupnej literatúre takmer nepopísané, prípadne ich interpretácia je nekorektná.

Výstupy:

1. TAKÁČOVÁ, M - HLOUŠKOVÁ, Gabriela - ZAŤOVIČOVÁ, M. - BENEJ, M. – SEDLÁKOVÁ, O. - KOPÁČEK, J. - PASTOREK, J. - LACÍK, Igor – PASTOREKOVÁ, S. Encapsulation of anti-carbonic anhydrase IX antibody in hydrogel microspheres for tumor targeting. Eur. J. Pharm. Biopharm., v posudzovaní
2. VNUKOVÁ, Dominika – RÁZGA, Filip – NÉMETHOVÁ, Veronika – MORAVČÍKOVÁ, Daniela – LACÍK, Igor. Preparation of stable chitosan sub-micron particles: Factors affecting their size and colloidal stability. 79th Prague Meeting on Macromolecules; Functional polymers at bio-material interfaces 2015, 28 June – 02 July, Prague, Czech Republic, Book of Abstracts, p. 58 (vyveska)

32.) NANOSIMKA: Účinok nanoenkapsulovaného simvastatínu na kardiovaskulárny systém pri experimentálnom metabolickom syndróme.
(Effects of nanoencapsulated simvastatin on cardiovascular system in experimental metabolic syndrome.)

Zodpovedný riešiteľ:	Oľga Pecháňová
Zodpovedný riešiteľ v organizácii SAV:	Jaroslav Mosnáček
Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-14-0932
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Ústav normálnej a patologickej fyziológie SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 3930 €

Dosiahnuté výsledky:

V rámci projektu sme sa zamerali na prípravu nanočastíc zapuzdrením kurkumínu. Na puzdro bol použitý syntetizovaný kopolymér N-isopropylakrylamidu (NIPAAM), N-vinyl-2-pyrolidónu (VP) a poly(etylénglykol)monometakrylát (PEG360) alebo poly(etylénglykol) monoakrylát (PEG2000). Kopolymerizácia sa uskutočnila voľnoradikálovou polymerizáciou za vzniku zosieťovaných micelárnych agregátov. Optimalizovalo sa zloženie a postup prípravy na získanie nanočastíc s reprodukovateľnou veľkosťou a distribúciou. Následne sa študovala i stabilita pripravených nanočastíc v kyslom prostredí a rýchlosť uvoľňovania kurkumínu z nanočastíc. Následne sa tento typ nanočastíc použije na enkapsuláciu simvastatínu a jeho uvoľňovanie in vitro a in vivo.

33.) PLAZTEXNANO: Výskum vplyvu nízkoteplotnej plazmy na zvýšenie povrchovej permanentnosti úpravy textilných materiálov s použitím nanosólov.
(Research of the impact of low temperature PLASma on increase the surface treatment permanence of TEXtile materials using NANOsols.)

Zodpovedný riešiteľ:	Zdenko Špitálsky
Trvanie projektu:	1.7.2015 / 30.6.2019
Evidenčné číslo projektu:	APVV-14-0518
Organizácia je koordinátorom projektu:	áno
Koordinátor:	Ústav polymérov SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 35 000,00 €

Dosiahnuté výsledky:

Použitím nízkoteplotnej plazmy sme sledovali generovanie a stabilitu vzniknutých radikálov na povrchu polyesterovej textílie. Na charakterizáciu aktivovaného povrchu sa použila UV spektroskopia, XPS analýza, nanoindentácia, chemiluminiscencia a FTIR spektroskopia. Bolo potvrdené, že koncentrácia vznikajúcich radikálov na povrchu textílie rastie s rastúcim výkonom použitej plazmy, pričom radikály exponenciálne zanikajú s časom.

34.) Príprava nanoštrukturovaných filmov, ich integrácia s biorozpoznávacími elementami a ich následné využitie.
(Preparation of nanostructured interphases, their integration with bioelements and subsequent use.)

Zodpovedný riešiteľ:	Ján Tkáč
Zodpovedný riešiteľ v organizácii SAV:	Jaroslav Mosnáček
Trvanie projektu:	1.7.2012 / 31.12.2015
Evidenčné číslo projektu:	APVV-0282-11
Organizácia je koordinátorom projektu:	nie
Koordinátor:	Chemický ústav SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	APVV: 4243 €

Dosiahnuté výsledky:

V rámci projektu sa viackrokovou syntézou pripravili sulfobetaíny obsahujúce tiolovú skupinu, ktorou sa následne naviažu na zlaté povrchy.

Programy: Štrukturálne fondy EÚ Výskum a vývoj

35.) Výskum aplikačného potenciálu obnovitelných a recyklovaných materiálov a informačných technológií v gumárenskom priemysle.
(Research on application potential of renewable and recycled materials and information technologies in rubber industry.)

Zodpovedný riešiteľ:	Jozef Preťo
Zodpovedný riešiteľ v Organizácii SAV:	Ivan Chodák
Trvanie projektu:	1.7.2012 / 31.5.2015
Evidenčné číslo projektu:	828524, kód výzvy OPVaV-2011/2.2/07-SORO
Organizácia je koordinátorom projektu:	nie
Koordinátor:	VIPO a.s., Partizánske
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	32 054,25 €

Dosiahnuté výsledky:

Najdôležitejším výsledkom dosiahnutým na pracovisku spoluriešiteľa ÚPo SAV bolo vyvinutie a verifikácia komplexného postupu analýzy gumovej drviny z neznámeho zdroja. Pre tento cieľ sa použili metódy DMTA a TGA pre stanovenie kvality kaučukovej matrice a to aj pre zmesné receptúry založené na viacerých kaučukoch. Metóda TGA sa ďalej využila pre stanovenie obsahu sadzí a anorganických neuhlíkových plnív, keďže sa jednoznačne preukázalo, že tieto dve zložky možno odlíšiť porovnaním priebehov TGA v inertnej atmosfére (argón) a v kyslíku. Výsledky sa prezentovali na viacerých konferenciách a v publikácii zaslanej do Chemical papers, pričom sa pripravuje ešte jedna publikácia.

Výstupy:

1. PODHRADSKÁ, Silvia - OMASTOVÁ, Mária - CHODÁK, Ivan. Effect of uniaxial deformation and relaxation of rubber-carbon black composites on their electrical properties. In KGK - Kautschuk Gummi Kunstoffe, 2015, vol. 68, no. 5, p. 45-51. (0.212 - IF2014). ISSN 0948-3276.
2. HRONKOVIČ, J. - PREŤO, J. - ORAVEC, J. - VEREŠ, J. - CHODÁK, Ivan. The appropriate composition to modify rubber crumb and its application in rubber compounds. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 196-199. ISBN 978-80-970923-7-5.
3. HRONKOVIČ, J. - PREŤO, J. - VANKO, V. - HUDEC, I. - CHODÁK, Ivan. Antioxidant effect of lignosulfonate in sidewall rubber compound. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 193-195. ISBN 978-80-970923-7-5.

Programy: Centrá excelentnosti SAV

36.) Centrum Excelentnosti pre Funkcionalizované viacfázové materiály – FUN-MAT.
(Center of Excellence for Functionalized Multiphase Materials – FUN-MAT.)

Zodpovedný riešiteľ:	Marián Krajčí
Zodpovedný riešiteľ v organizácii SAV:	Jaroslav Mosnáček
Trvanie projektu:	1.8.2011 / 31.7.2015
Evidenčné číslo projektu:	
Organizácia je koordinátorom projektu:	nie

Koordinátor: Fyzikálny ústav SAV
Počet spoluriešiteľských inštitúcií: 5 - Slovensko: 5
Čerpané financie:

Dosiahnuté výsledky:

V rámci projektu s modifikovali rôzne typy nanočastíc pomocou z povrchu iniciovanej radikálovej polymerizácie s prenosom atómu (SI ATRP) za účelom prípravy nových funkčných materiálov z požadovanými vlastnosťami. Uhlíkové nanotrubičky sa modifikovali blokovými kopolymérmi za účelom zýšenia kompatibility s elastomérnou matricou a zavedenia fotoaktuujúcich vlastností. GO častice sa modifikovali SI ATRP, pričom dochádzalo k súčasnej in situ redukcii GO. Hlbšou štúdiou sa ukázalo že za redukciu je zodpovedný terciárny amín – PMDETA, ktorý sa používa na komplexáciu kovového katalyzátora pri ATRP.Túto metódu možno použiť na kontrolovanú redukciu GO, za účelom kontroly vodivosti. Častice karbonylového železa sa taktiež modifikovali pomocou SI ATRP za účelom potlačenia sedimentácie v magnetoreologických suspenziách. Zároveň modifikácia viedli i k zvýšeniu stability CI častíc voči oxidácii. V rámci projektu sa taktiež vyvinula metóda fotochemicky indukovanej ATRP aplikovateľnej pri nízkej koncentrácii kyslíka. Jej výhoda je z technologického hľadiska, kedy nie je potrebné odstraňovať vzduch z polymerizačnej zmesi, prítomný kyslík sa in situ spotrebuje bez výraznejsšieho vplyvu na kontrolu molekulových charakteristík polymérov a živosť koncov polymérnych reťazcov.

Výstupy:

1. ILČÍKOVÁ, Markéta - MRLÍK, Miroslav - MOSNÁČEK, Jaroslav. Chapter 6: Thermoplastic elastomers with photoactuating properties. Thermoplastic Elastomers - Synthesis and Applications. InTech d.o.o, Rijeka, Croatia. Edited by Chapal Kumar Das, ISBN 978-953-51-2223-4, 176 pages, Publisher: InTech, Chapters published November 26, 2015 under CC BY 3.0 license.
2. CVEK, M. - MRLÍK, M. - ILČÍKOVÁ, Markéta - PLACHY, T. - SEDLAČIK, M. - MOSNÁČEK, Jaroslav - PAVLINEK, V. A facile controllable coating of carbonyl iron particles with poly(glycidyl methacrylate): a tool for adjusting MR response and stability properties. In Journal of Materials Chemistry C, 2015, vol. 3, p. 4646-4656. (4.696 - IF2014). (2015 - Current Contents, SCI). ISSN 2050-7526.
3. CVEK, M. - MRLÍK, M. - ILČÍKOVÁ, Markéta - MOSNÁČEK, Jaroslav - BABAYAN, V. - KUCEKOVÁ, Z. - HUMPOLÍČEK, P. - PAVLÍNEK, V. The chemical stability and cytotoxicity of carbonyl iron particles grafted with poly(glycidyl methacrylate) and the magnetorheological activity of their suspensions. In RSC Advances, 2015, vol. 5, p. 72816-72824. (3.840 - IF2014). ISSN 2046-2069.
4. ILČÍKOVÁ, Markéta – MRLÍK, M. - SEDLÁČEK, T. - DOROSHENKO, M. - KOYNOV, K. - DANKO, Martin - MOSNÁČEK, Jaroslav. Tailoring of viscoelastic properties and light-induced actuation performance of triblock copolymer composites through surface modification of carbon nanotubes. Polymer, 2015, 72, 368-377. doi:10.1016/j.polymer.2015.03.060
5. KÓSA, Csaba - SEDLAČÍK, M. - FIEDLEROVÁ, Agnesa - CHMELA, Štefan - BORSKÁ, Katarína - MOSNÁČEK, Jaroslav. Photochemically cross-linked poly(epsilon-caprolactone) with accelerated hydrolytic degradation. In European Polymer Journal, 2015, vol. 68, p. 601-608. (3.005 - IF2014). ISSN 0014-3057.
6. MOSNÁČEK, Jaroslav - ECKSTEIN-ANDICSOVÁ, Anita - BORSKÁ, Katarína. Ligand effect and oxygen tolerance studies in photochemically induced copper mediated reversible deactivation radical polymerization of methyl methacrylate in dimethyl sulfoxide. In Polymer Chemistry, 2015, vol. 6, p. 2523-2530. (5.520 - IF2014). ISSN 1759-9954.
7. ILČÍKOVÁ, Markéta - MRLÍK, M. - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - CSOMOROVÁ, Katarína - SASINKOVÁ, V. - KLEINOVÁ, Angela - MOSNÁČEK, Jaroslav. A tertiary amine in two competitive processes: Reduction of graphene oxide vs. catalysis of atom transfer radical polymerization. In RSC Advances, 2015, vol. 5, p. 3370-3376. (3.840 - IF2014). ISSN 2046-2069.

Programy: Iné projekty

37.) Centrum aplikovaného výskumu nových materiálov a transferu technológií.

(Centre for applied research of new materials and technology transfer.)

Zodpovedný riešiteľ:	Pavol Šajgalík
Zodpovedný riešiteľ v organizácii SAV:	Mária Omastová
Trvanie projektu:	1.9.2013 / 31.8.2015
Evidenčné číslo projektu:	kód ITMS projektu 262 402 200 88
Organizácia je koordinátorom projektu:	nie
Koordinátor:	P SAV
Počet spoluriešiteľských inštitúcií:	0
Čerpané financie:	P SAV: 39070 €

Dosiahnuté výsledky:

Laboratórium využitia nanomateriálov sa zameralo na výskum a vývoj nanočastíc a nanočasticových súborov a na výskum a vývoj nanokompozitov. V rámci pripravovaného projektu UPo SAV pripravilo elektrostatickým zvlákňovaním nanoštrukturované polymérne materiály, ktoré sa počas alebo po príprave modifikovali vodivým polymérom polypyrolom. Pripravila sa séria polymérnych kompozitov a nanokompozitov, ktoré sa testovali ako senzory plynov.

Výstupy:

1. OMASTOVÁ, Mária - MIČUŠÍK, Matej - MOSNÁČKOVÁ, Katarína. Conductive textiles modified by polypyrrole. In 6th International Technical Textile Congress. - Izmir, Turkey : Dokuz Eylul University, 2015, p. 185-188. ISBN 978-975-441-448-6.

Príloha C

Publikačná činnosť organizácie (*generovaná z ARL*)

AAA Vedecké monografie vydané v zahraničných vydavateľstvách

AAA01 RÁZGA, Filip. Structure and dynamics of rRNA: A computational study : Kirk-turn motif as a flexible molecular hinge. Saarbrucken, Germany : Scholar´s Press, 2015, 157 P. ISBN 978-3-639-76604-2.

ABC Kapitoly vo vedeckých monografiách vydané v zahraničných vydavateľstvách

ABC01 ILČÍKOVÁ, Markéta - MRLÍK, M. - MOSNÁČEK, Jaroslav. Thermoplastic elastomers with photo-actuating properties. Edited by Chapal Kumar Das. In Thermoplastic elastomers - synthesis and applications. - Rijeka, Croatia : InTech, 2015, chapter. 6, P. 115-143. ISBN 978-953-51-2223-4. Dostupné na internete: <http://dx.doi.org/10.5772/59647>.

ABC02 ROLLET, M. - PELLETIER, B. - BEREK, Dušan - MARIA, S. - PHAN, T. N. T. - GIGMES, D.Separation of parent homopolymers from poly(ethylene oxide) and polystyrene based block copolymers by liquid chromatography under limiting conditions of desorption. 2. Studies of samples obtained from ATRP and NMP. In Controlled radical polymerization : Materials. - Washington, US : American Chemical Society, May 1, 2015, aCS Symposium Series, vol. 1188, chapter 20, P. 327-347. ISBN 9780841230514.

ABC03 WINTER, A. D. - LARIOS, E. - JAYE, Ch. - OMASTOVÁ, Mária - FISCHER, D. A. - CAMPO, E. M. Noncovalent interactions in polymer nanocomposites. In New horizons in nanoscience and engineering. - SPIE, 31 July 2015, chapter 4, p. 147-190. ISBN 9781628417951.

ADCA Vedecké práce v zahraničných karentovaných časopisoch impaktovaných

ADCA01 BENEDETTI, F. - JAPARIDZE, A. - DORIER, J. - RAČKO, Dušan - KWAPICH, R. - BURNIER, Y. - DIETLER, G. - STASIAK, A. Effects of physiological self-crowding of DNA on shape and biological properties of DNA molecules with various levels of supercoiling. In Nucleic acids research, 2015, vol. 43, no. 4, p. 2390-2399. (9.112 - IF2014). (2015 - Current Contents). ISSN 0305-1048.

ADCA02 BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. Molecular dynamics simulations of poly(ethylene oxide) grafted onto silica immersed in melt of homopolymers. In Langmuir, 2015, vol. 31, p. 10254-10264. (4.457 - IF2014). (2015 - Current Contents). ISSN 0743-7463.

ADCA03 BENKOVÁ, Zuzana - NÁMER, Pavol - CIFRA, Peter. Stripe to slab confinement for the linearization of macromolecules in nanochannels. In Soft Matter, 2015, vol. 11, p. 2279-2289. (4.029 - IF2014). (2015 - Current Contents). ISSN 1744-683X.

ADCA04 BEREK, Dušan - MACOVÁ, Eva. Liquid chromatography under limiting conditions of desorption 6: Separation of a four-component polymer blend. In Journal of Separation Science, 2015, vol. 38, p. 543-549. (2.737 - IF2014). (2015 - Current Contents). ISSN 1615-9306.

ADCA05 BOČA, M. - RAKHMATULLIN, A. - MLYNÁRIKOVÁ, J. - HADZIMOVÁ, E. - VASKOVÁ, Z. - MIČUŠÍK, Matej. Differences in XPS and solid state NMR spectral data and thermo-chemical properties of iso-structural compounds in the

series KTaF6, K2TaF7 and K3TaF8 and KNbF6, K2NbF7 and K3NbF8. In Dalton Transactions, 2015, vol. 44, p. 17106-17117. (4.197 - IF2014). (2015 - Current Contents). ISSN 1477-9226.

ADCA06 BÓNOVÁ, L. - ZAHORANOVÁ, A. - KOVÁČIK, D. - ZAHORAN, M. - MIČUŠÍK, Matej - ČERNÁK, M. Atmospheric pressure plasma treatment of flat aluminium surface. In Applied Surface Science, 2015, vol. 331, p. 79-86. (2.711 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0169-4332.

ADCA07 CABEZA, L. F. - BARRENECHE, C. - MARTORELL, I. - MIRÓ, L. - SARI-BEY, S. - FOIS, M.- PAKSOY, H. O. - SAHAN, N. - WEBER, R. - CONSTANTINESCU, M. - ANGHEL, E. M. - MALÍKOVÁ, Marta - KRUPA, Igor - DELGADO, M. - DOLADO, P. - FURMANSKI, P. - JAWORSKI, M. - HAUSSMANN, T. - GSCHWANDER, S. - FERNÁNDEZ, A. I. Unconventional experimental technologies available for phase change materials (PCM). Part 1. Thermophysical properties. In Renewable and Sustainable Energy Reviews, 2015, vol. 43, p. 1399-1414. (5.901 - IF2014). (2015 - Current Contents). ISSN 1364-0321.

ADCA08 CAPEK, Ignác. Viral nanoparticles, noble metal decorated viruses and their nanoconjugates. In Advances in colloid and interface science, 2015, vol. 222, p. 119-134. (7.776 - IF2014). (2015 - Current Contents). ISSN 0001-8686.

ADCA09 CLEMENTI, L. A. - MEIRA, G. R. - BEREK, Dušan - RONCO, L. I. - VEGA, J. R. Molar mass distributions in homopolymer blends from multimodal chromatograms obtained by Sec/Gpc with a concentration detector. In Polymer Testing, 2015, vol. 43, p. 58-67. (2.240 - IF2014). (2015 - Current Contents). ISSN 0142-9418.

ADCA10 COROBEA, M. C. - CAPEK, Ignác - IANCHIS, R. - DONESCU, D. - SOMOGHI, R. - GHIUREA, M. - NISTOR, C. L. - PURCAR, V. - CINTEZA, Ludmila Otilia - RADOVICI, C. - PRODAN, G. Silica nanowires obtained on clay mineral layers and their influence on mini-emulsion polymerisation. In Applied Clay Science, 2014, vol. 95, p. 232-242. (2.703 - IF2013). (2014 - Current Contents). ISSN 0169-1317.

ADCA11 CVEK, M. - MRLIK, M. - ILČÍKOVÁ, Markéta - PLACHY, T. - SEDLACIK, M. - MOSNÁČEK, Jaroslav - PAVLINEK, V. A facile controllable coating of carbonyl iron particles with poly(glycidyl methacrylate): a tool for adjusting MR response and stability properties. In Journal of Materials Chemistry C, 2015, vol. 3, p. 4646-4656. (4.696 - IF2014). (2015 - Current Contents, SCI). ISSN 2050-7526.

ADCA12 CVEK, M. - MRLÍK, M. - ILČÍKOVÁ, Markéta - MOSNÁČEK, Jaroslav - BABAYAN, V. - KUCEKOVÁ, Z. - HUMPOLÍČEK, P. - PAVLÍNEK, V. The chemical stability and cytotoxicity of carbonyl iron particles grafted with poly(glycidyl methacrylate) and the magnetorheological activity of their suspensions. In RSC Advances, 2015, vol. 5, p. 72816-72824. (3.840 - IF2014). (2015 - Current Contents). ISSN 2046-2069.

ADCA13 DANKO, Martin - KASÁK, Peter - HRDLOVIČ, Pavol. The interactions of probes based on substituted pyrene derivatives in polymer matrices, spectral study. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2015, vol. 307, p. 79-87. (2.495 - IF2014). (2015 - Current Contents). ISSN 1010-6030.

ADCA14 DRAWE, P. - BUBACK, M. - LACÍK, Igor. Radical polymerization of alkali acrylates in aqueous solution. In Macromolecular Chemistry and Physics, 2015, vol. 216, p. 1333-1340. (2.616 - IF2014). (2015 - Current Contents). ISSN 1022-1352.

ADCA15 ANDICSOVÁ-ECKSTEIN, Anita - KOZMA, E - PUTEROVÁ-TOKÁROVÁ, Z - VÉGH, D. Direct trifluoroacetylation of mono- and disubstituted thiophene derivatives. In Journal of Fluorine Chemistry, 2015, vol. 180, p. 272-275. (1.948 - IF2014). (2015 - Current Contents). ISSN 0022-1139.

ADCA16 FERNÁNDEZ, A. I. - SOLÉ, A. - GIRÓ-PALOMA, J. - MARTÍNEZ, M. - HADJIEVA, M. - BOUDENNE, A. - CONSTANTINESCU, M. - ANGHEL, E. M.- MALÍKOVÁ, Marta - *KRUPA, Igor* - PENALOSA, C. - LÁZARO, A. - PAKSOY, H. O. - CELLAT, K. - VECSTAUDŽA, J. - BAJARE, D. - SUMIGA, B. - BOH, B. - HAUSSMANN, T. - GSCHWANDER, S. - WEBER, R. - FURMANSKI, Piotr - JAWORSKI, M. - CABEZA, L. F. Unconventional experimental technologies used for phase change materials (PCM) characterization: part 2 - morphological and structural characterization, physico-chemical stability and mechanical properties. In Renewable and Sustainable Energy Reviews, 2015, vol. 43, p. 1415-1426. (5.901 - IF2014). (2015 - Current Contents). ISSN 1364-0321.

ADCA17 FULAJTÁROVÁ, K. - SOTÁK, T. - HRONEC, M. - VÁVRA, I. - DOBROČKA, E. - OMASTOVÁ, Mária. Aqueous phase hydrogenation of furfural to furfural alcohol over Pd-Cu catalysts. In Applied Catalysis A: General, 2015, vol. 502, p. 78-85. (3.942 - IF2014). (2015 - Current Contents). ISSN 0926-860X.

ADCA18 GALAMBOŠ, M. - DAŇO, M. - VÍGLAŠOVÁ, E. - KRIVOSUDSKÝ, L. - ROSSKOPFOVÁ, O. - NOVÁK, Ivan - BEREK, Dušan - RAJEC, P. Effect of competing anions on pertechnetate adsorption by activated carbon. In Journal of Radioanalytical and Nuclear Chemistry-Articles, 2015, vol. 304, p. 1219-1224. (1.034 - IF2014). (2015 - Current Contents). ISSN 0236-5731.

ADCA19 GEMEINER, P. - KULIČEK, Jaroslav - MIKULA, M. - HATALA, M. - ŠVORC, Ľ. - HLAVATÁ, L. - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Polypyrrole-coated multi-walled carbon nanotubes for the simple preparation of counter electrodes in dye-sensitized solar cells. In Synthetic Metals, 2015, vol. 210, p. 323-331. (2.252 - IF2014). (2015 - Current Contents). ISSN 0379-6779.

ADCA20 GEORGOUIS, G. - PANDIS, C. - KALAMIOTIS, A. - GEORGIOPOULOS, P. - KYRITSIS, A. - KONTOU, E. - PISSIS, P. - MIČUŠÍK, Matej - CZANIKOVÁ, Klaudia - KULIČEK, Jaroslav - OMASTOVÁ, Mária. Strain sensing in polymer/carbon nanotube composites by electrical resistance measurement. In Composites Part B: Engineering, 2015, vol. 68, p. 162-169. (2.983 - IF2014). (2015 - Current Contents). ISSN 1359-8368.

ADCA21 GEORGOUSIS, G. - PANDIS, C. - CHATZIMANOLIS-MOUSTAKAS, C. - KYRITSIS, A. - KONTOU, E. - PISSIS, P. - *KRAJČI, Juraj* - CHODÁK, Ivan - TABAČIAROVÁ, Jana - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Study of the reinforcing mechanism and strain sensing in a carbon black filled elastomer. In Composites Part B: Engineering, 2015, vol. 80, p. 20-26. (2.983 - IF2014). (2015 - Current Contents). ISSN 1359-8368.

ADCA22 HROBÁRIK, P. - HROBÁRIKOVÁ, V. - SEMAK, Vladislav - *KASÁK, Peter* - RAKOVSKÝ, E. - POLYZOS, I. - FAKIS, M. - PERSEPHONIS, P. Quadrupolar benzobisthiazole-cored arylamines as highly efficient two-proton absorbing fluorophores. In Organic Letters, 2014, vol. 16, p. 6358-6361. (6.324 - IF2013). (2014 - Current Contents). ISSN 1523-7060.

ADCA23 CHMELA, Štefan - KOLLÁR, Jozef - HRČKOVÁ, Ľudmila. Fluorescent dye-labeled TIPNO type regulator for nitroxide mediated reversible-deactivation radical polymerization. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2015, vol. 307, p. 123-130. (2.495 - IF2014). (2015 - Current Contents). ISSN 1010-6030.

ADCA24 CHMELA, Štefan - PAVLINEC, Jiří - FIEDLEROVÁ, Agnesa - CATEL, Y - MOSZNER, N. Determination of homopolymerization kinetics of 10-(N-methylacrylamido)-decylphosphonic acid, its diethyl ester, and 10-(methacryloyloxy)-decylphosphonic acid, and their copolymerization with methyl

methacrylate. In Macromolecular Chemistry and Physics, 2015, vol. 216, p. 2386-2397. (2.616 - IF2014). (2015 - Current Contents). ISSN 1022-1352.

ADCA25 ILČÍKOVÁ, Markéta - MRLÍK, M. - SEDLÁČEK, T. - DOROSHENKO, Mikheil - KOYNOV, K. - DANKO, Martin - MOSNÁČEK, Jaroslav. Tailoring of viscoelastic properties and light-induced actuation performance of triblock copolymer composites through surface modification of carbon nanotubes. In Polymer : the International Journal for the Science and Technology of Polymers, 2015, vol. 72, p. 368-377. (3.562 - IF2014). (2015 - Current Contents). ISSN 0032-3861.

ADCA26 ILČÍKOVÁ, Markéta - MRLÍK, M. - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - CSOMOROVÁ, Katarína - SASINKOVÁ, V. - KLEINOVÁ, Angela - MOSNÁČEK, Jaroslav. A tertiary amine in two competitive processes: Reduction of graphene oxide vs. catalysis of atom transfer radical polymerization. In RSC Advances, 2015, vol. 5, p. 3370-3376. (3.840 - IF2014). (2015 - Current Contents). ISSN 2046-2069.

ADCA27 JANKOVIČ, Ľ. - KRONEK, Juraj - MADEJOVÁ, J. - HRONSKÝ, V. (9,10-Dihydroxyoctadecyl)ammonium: A structurally unique class of clay intercalable surfactants. In European Journal of Inorganic Chemistry, 2015, p. 2841-2850. (2.942 - IF2014). (2015 - Current Contents). ISSN 1434-1948.

ADCA28 JLASSI, K. - CHANDRAN, S. - MIČUŠÍK, Matej - BENNA-ZAYANI, M. - YAGCI, Y.- THOMAS, S.- CHEHIMI, M. M. Poly(glycidyl methacrylate)-grafted clay nanofiller for highly transparent and mechanically robust epoxy composites. In European Polymer Journal, 2015, vol. 72, p. 89-101. (3.005 - IF2014). (2015 - Current Contents). ISSN 0014-3057.

ADCA29 KARKRI, M. - LACHHEB, M. - NÓGELLOVÁ, Zuzana - BOH, B. - SUMIGA, B. - ALMAADEED, M.A. - FETHI, A. - KRUPA, Igor. Thermal properties of phase-change materials based on high-density polyethylene filled with micro-encapsulated paraffin wax for thermal energy storage. In Energy and Buildings, 2015, vol. 88, p. 144-152. (2.884 - IF2014). (2015 - Current Contents). ISSN 0378-7788.

ADCA30 KASZA, Gyorgy - MOSNÁČKOVÁ, Katarína - NÁDOR, Attila - OSVÁTH, Zsófia - STUMPHAUSER, Tímea - SZARKA, Gyorgyi - CZANIKOVÁ, Klaudia - RYCHLÝ, Jozef - CHMELA, Štefan - IVÁN, Béla - MOSNÁČEK, Jaroslav. Synthesis of hyperbranched poly(ethyleneimine) based macromolecular antioxidants and investigation of their efficiency in stabilization of polyolefins. In European Polymer Journal, 2015, vol. 68, p. 609-617. (3.005 - IF2014). (2015 - Current Contents). ISSN 0014-3057.

ADCA31 KLUKOVÁ, Ľ. - BERTÓK, T. - PETRÍKOVÁ, M. - ŠEDIVÁ, A. - MISLOVIČOVÁ, D. - KATRLÍK, J. - VIKARTOVSKÁ, A., Welwardová - FILIP, J. - KASÁK, Peter - ANDICSOVÁ-ECKSTEIN, Anita - MOSNÁČEK, Jaroslav - LUKÁČ, J. - ROVENSKÝ, J. - IMRICH, R. - TKÁČ, J. Glycoprofiling as a novel tool in serological assays of systemic sclerosis: A comparative study with three bioanalytical methods. In Analytica Chimica Acta, 2015, vol. 853, p. 555-562. (4.513 - IF2014). (2015 - Current Contents). ISSN 0003-2670.

ADCA32 KÓSA, Csaba - SEDLAČÍK, Michal - FIEDLEROVÁ, Agnesa - CHMELA, Štefan - BORSKÁ, Katarína - MOSNÁČEK, Jaroslav. Photochemically cross-linked poly(epsilon-caprolactone) with accelerated hydrolytic degradation. In European Polymer Journal, 2015, vol. 68, p. 601-608. (3.005 - IF2014). (2015 - Current Contents). ISSN 0014-3057.

ADCA33 KOUMOULOS, E. P. - VALENTIN, Marian - DRAGATOGIANNIS, D. A. - CHARITIDIS, C. A. - KRUPA, Igor - NOVÁK, Igor. Nanomechanical properties of plasma treated polylactic acid. In Plastics, Rubber and Composites : Macromolecular

Engineering, 2015, vol. 44, no. 8, p. 322-329. (0.583 - IF2014). (2015 - Current Contents). ISSN 1465-8011.

ADCA34 KRONEK, Juraj - PETRENČÍKOVÁ, Nadežda - MIKULEC, Marcel - BORSKÁ, Katarína - CHRISTOVA, D. Structure analysis and thermosensitive properties of copolymers prepared from 2-ethyl-2-oxazoline and 2-(4-aminophenyl)-2-oxazoline. In Polymer Bulletin, 2015, vol. 72, p. 1081-1094. (1.438 - IF2014). (2015 - Current Contents). ISSN 0170-0839.

ADCA35 *KRUPA, Igor* - NÓGELLOVÁ, Zuzana - ŠPITALSKÝ, Zdenko - MALÍKOVÁ, Marta - *SOBOLČIAK, Patrik* - ABDELRAZEQ, H. W. - OUEDERNI, Mabrouk - KARKRI, M. - JANIGOVÁ, Ivica - AL-MAADEED, M. A. S. A. Positive influence of expanded graphite on the physical behavior of phase change materials based on linear low-density polyethylene and paraffin wax. In Thermochimica Acta, 2015, vol. 614, p. 218-225. (2.184 - IF2014). (2015 - Current Contents). ISSN 0040-6031.

ADCA36 KUZMÍK, J. - HAŠČÍK, Š. - KUČERA, M.- KÚDELA, R. - DOBROČKA, E. - ADIKIMENAKIS, A. - MIČUŠÍK, Matej - GREGOR, M. - PLECENIK, A. - GEORGAKILAS, A. Elimination of surface band bending on N-polar InN with thin GaN capping. In Applied Physics Letters, 2015, vol. 107, 191605. (3.302 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0003-6951.

ADCA37 LACÍK, Igor - STACH, Marek - *KASÁK, Peter* - SEMAK, V. - UHELSKÁ, Lucia - CHOVANCOVÁ, Anna - REINHOLD, G. - KILZ, P. - DELAITTRE, G. - CHARLEUX, B. - CHADUC, I. - D´AGOSTO, F. - LANSALOT, M. - GABORIEAU, M. - CASTIGNOLLES, P. - GILBERT, R. G. - SZABLAN, Z. - BARNER-KOWOLLIK, Ch. - HESSE, P. - BUBACK, M. SEC analysis of poly(acrylic acid) and poly(methacrylic acid). In Macromolecular Chemistry and Physics, 2015, vol. 216, p. 23-37. (2.616 - IF2014). (2015 - Current Contents). ISSN 1022-1352.

ADCA38 LUKEŠOVÁ, Miroslava - ŠVAJDLENKOVÁ, Helena - SIPPEL, P. - MACOVÁ, Eva - BEREK, Dušan - LOIDL, A. - BARTOŠ, Josef. Spin probe dynamics of n-hexadecane in confined geometry. In European Physical Journal B, 2015, vol. 88, art.no. 46. (1.345 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 1434-6028.

ADCA39 LUKEŠOVÁ, Miroslava - ZGARDZINSKA, B. - ŠVAJDLENKOVÁ, Helena - ZALESKI, R. - CHARMAS, B. - BARTOŠ, Josef. Spin probe dynamics in relation to free volume in crystalline organics from ESR and PALS: N-tridecane. In Physica B: Condensed Matter, 2015, vol. 476, p. 100-108. (1.319 - IF2014). (2015 - Current Contents, WOS, SCOPUS). ISSN 0921-4526.

ADCA40 LUKEŠ, V. - ANDICS ECKSTEIN, Anita - VÉGH, D. - WEITER, M. Electronic structure and spectroscopic properties of (2S,3S)-2,3-diphenyl-5,6-diheteroaryl-2,3-dihydropyrazines and their model oligomers. In Synthetic Metals, 2015, vol. 199, p. 319-328. (2.252 - IF2014). (2015 - Current Contents). ISSN 0379-6779.

ADCA41 MAŤKO, I. - ŠAUŠA, O. - MACOVÁ, Eva - BEREK, Dušan. Combined study of confined water in controlled pore glasses by differential scanning calorimetry and positron annihilation lifetime spectroscopy. In Journal of Thermal Analysis and Calorimetry, 2015, vol.121, p. 163-168. (2.042 - IF2014). (2015 - Current Contents). ISSN 1388-6150.

ADCA42 MOSNÁČEK, Jaroslav - ECKSTEIN-ANDICSOVÁ, Anita - BORSKÁ, Katarína. Ligand effect and oxygen tolerance studies in photochemically induced copper mediated reversible deactivation radical polymerization of methyl methacrylate in dimethyl sulfoxide. In Polymer Chemistry, 2015, vol. 6, p. 2523-2530. (5.520 - IF2014). (2015 - Current Contents). ISSN 1759-9954.

ADCA43 MOSNÁČKOVÁ, Katarína - ŠPITALSKÝ, Zdenko - KULIČEK, Jaroslav - PROKEŠ, J. - SKARMOUTSOU, A. - CHARITIDIS, C. A. - OMASTOVÁ, Mária. Influence of preparation methods on the electrical and nanomechanical properties of poly(methyl methacrylate)/multiwalled carbon nanotubes composites. In Journal of Applied Polymer Science, 2015, vol. 132, no.13, art.no. 41721. (1.768 - IF2014). (2015 - Current Contents). ISSN 0021-8995.

ADCA44 NOVÁK, Igor - *POPELKA, Anton* - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - OMASTOVÁ, Mária - VALENTIN, Marian - SEDLIAČIK, J. - JANIGOVÁ, Ivica - KLEINOVÁ, Angela - ŠLOUF, Miroslav. Investigation of beech wood modified by radio-frequency discharge plasma. In Vacuum, 2015, vol. 119, p. 88-94. (1.858 - IF2014). (2015 - Current Contents). ISSN 0042-207X.

ADCA45 OLČÁK, D. - HRONSKÝ, V. - KOVAĽAKOVÁ, M. - VRÁBEL, P. - CHODÁK, Ivan - ALEXY, P. High-resolution solid-state NMR characterization of morphology in annealed polylactic acid. In International journal of polymer analysis and characterisation, 2015, vol. 20, no. 5, p. 396-405. (1.264 - IF2014). (2015 - Current Contents). ISSN 1023-666X.

ADCA46 PALENČÁR, Peter - BLEHA, Tomáš. Bending and kinking in helical polymers. In Journal of Polymer Science. Part B.Polymer Physics, 2015, vol. 53, p. 1345-1357. (3.830 - IF2014). (2015 - Current Contents). ISSN 0887-6266.

ADCA47 PASZKIEWICZ, S. - PAWELEC, I. - SZYMCZYK, A. - ŠPITALSKÝ, Zdenko - MOSNÁČEK, Jaroslav - KOCHMANSKA, A. - ROSLANIEC, Z. Effect of exfoliated graphite nanoplatelets´size on the phase structure, electrica, and barrier properties of poly(trimethylene terephthalate)-based nanocoposite. In Polymer Engineering and Science, 2015, vol. 55, p. 2222-2230. (1.520 - IF2014). (2015 - Current Contents). ISSN 0032-3888.

ADCA48 PIONTECK, J. - VALDEZ, E. M. M. - PIANA, F. - OMASTOVÁ, Mária - LUYT, A. S. - VOIT, B. Reduced percolation concentration in polypropylene/expanded graphite composites: Effect of viscosity and polypyrrole. In Journal of Applied Polymer Science, 2015, vol. 132, art.no. 41994. (1.768 - IF2014). (2015 - Current Contents). ISSN 0021-8995.

ADCA49 PLAŠIENKA, D. - CIFRA, Peter - MARTOŇÁK, R. Structural transformation between long and short-chain form of liquid sulfur from ab initio molecular dynamics. In Journal of Chemical Physics, 2015, vol. 142, art. no. 154502. (2.952 - IF2014). (2015 - Current Contents). ISSN 0021-9606.

ADCA50 PODHRADSKÁ, Silvia - OMASTOVÁ, Mária - CHODÁK, Ivan. Effect of uniaxial deformation and relaxation of rubber-carbon black composites on their electrical properties. In KGK - Kautschuk Gummi Kunstoffe, 2015, vol. 68, no. 5, p. 45-51. (0.212 - IF2014). (2015 - Current Contents). ISSN 0948-3276.

ADCA51 *POPELKA, Anton* - NOVÁK, Igor - LEHOCKÝ, M. - BÍLEK, F. - KLEINOVÁ, Angela - MOZETIČ, M. - ŠPÍRKOVÁ, M. - CHODÁK, Ivan. Antibacterial treatment of LDPE with halogen derivatives via cold plasma. In Express Polymer Letters, 2015, vol. 9, no. 5, p. 402-411. (2.761 - IF2014). (2015 - Current Contents). ISSN 1788-618X.

ADCA52 PORUBSKÁ, M. - HANZLÍKOVÁ, Z. - BRANIŠA, J. - KLEINOVÁ, Angela - HYBLER, P. - FULOP, M. - ONDRUŠKA, J. - JOMOVÁ, K. The effect of electron beam on sheep wool. In Polymer Degradation and Stability, 2015, vol. 111, p. 151-158. (3.163 - IF2014). (2015 - Current Contents). ISSN 0141-3910.

ADCA53 RAČKO, Dušan - BENEDETTI, F. - DORIER, J. - BURNIER, Y. - STASIAK, A. Generation of supercoils in nicked and grapped DNA drives DNA unknotting and

postreplicative decatenation. In Nucleic acids research, 2015, vol. 43, no. 15, p. 7229-7236. (9.112 - IF2014). (2015 - Current Contents). ISSN 0305-1048.

ADCA54 RAČKO, Dušan - CIFRA, Peter. Arm retraction and escape transition in semi-flexible star polymer under cylindrical confinement. In Journal of molecular modeling, 2015, vol. 21, art.no. 186. (1.736 - IF2014). (2015 - Current Contents). ISSN 1610-2940.

ADCA55 RAJEC, P. - GALAMBOŠ, M. - DAŇO, M. - ROSSKOPFOVÁ, O. - ČAPLOVIČOVÁ, M. - HUDEC, P. - HORŇÁČEK, M. - *NOVÁK, Ivan* - BEREK, Dušan. Preparation and characterization of adsorbent based on carbon for pertechnetate adsorption. In Journal of radioanalytical and nuclear chemistry, 2015, vol. 303, p. 277-286. (1.034 - IF2014). (2015 - Current Contents). ISSN 0236-5731.

ADCA56 ROLLEROVA, E. - JURČOVIČOVÁ, J. - MLYNARČÍKOVÁ, A. - SADLONOVA, I. - BILANICOVA, D. - WSOLOVA, L. - KISS, A. - KOVRIZNYCH, J. - KRONEK, Juraj - ČIAMPOR, F. - VÁVRA, I. - SCSUKOVÁ, S. Delayed adverse effects of neonatal exposure to polymeric nanoparicle poly (ethylene glycol)-block-polylactide methyl ether on hypothalamic-pituitary-ovarian axis development and function in Wistar rats. In Reproductive Toxicology : official journal of the European Teratology Society, 2015, vol. 57, p. 165-175. (3.227 - IF2014). (2015 - Current Contents). ISSN 0890-6238.

ADCA57 ROLLET, M. - PELLETIER, B. - ALTOUNIAN, A.- BEREK, Dušan - MARIA, S. - PHAN, T. N. T. - GIGMES, D. Separation of parent homopolymers from poly(ethylene oxide) and polystyrene-based block copolymers by liquid chromatography under limiting conditions of desorption. 1. Determination of the suitable molar mass range and optimalization of chromatographic conditions. In Journal of Chromatography A : international Journal on Chromatography, Electrophoresis and Related Methods, 2015, vol. 1392, p. 37-47. (4.169 - IF2014). (2015 - Current Contents). ISSN 0021-9673.

ADCA58 ROONEY, T. R. - MAVROUDAKIS, E. - LACÍK, Igor - HUTCHINSON, R.A. - MOSCATELLI, D. Pulsed-laser and quantum mechanics study of n-butyl cyanoacrylate and methyl methacrylate free-radical copolymerization. In Polymer Chemistry, 2015, vol. 6, p. 1594-1603. (5.520 - IF2014). (2015 - Current Contents). ISSN 1759-9954.

ADCA59 RYCHLÝ, Jozef - MOSNÁČKOVÁ, Katarína - RYCHLÁ, Lýdia - FIEDLEROVÁ, Agnesa - KASZA, G. - NÁDOR, A. - OSVÁTH, Z. - STUMPHAUSER, T. - SZARKA, G. - CZANIKOVÁ, Klaudia - CHMELA, Štefan - IVÁN, B. - MOSNÁČEK, Jaroslav. Comparison of the UV stabilisation effect of commercially available processing stabilizers Irganox HP 136 and Irganox 1010. In Polymer Degradation and Stability, 2015, vol. 118, p. 10-16. (3.163 - IF2014). (2015 - Current Contents). ISSN 0141-3910.

ADCA60 SAS, S. - DANKO, Martin - LANG, K. - BUJDÁK, J. Photoactive hybrid material based on kaolinite intercalated with a reactive fluorescent silane. In Applied Clay Science, 2015, vol. 108, p. 208-2014. (2.467 - IF2014). (2015 - Current Contents). ISSN 0169-1317.

ADCA61 SHAH, R. - KRONEKOVÁ, Zuzana - ZAHORANOVÁ, Anna - ROLLER, L. - SAHA, N. - SAHA, P. - KRONEK, Juraj. In vitro study of partialy hydrolyzed poly(2-ethyl-2-oxazolines) as materials for biomedical applications. In Journal of Materials Science: Materials in Medicine, 2015, vol. 26, iss. 4, art.no. 157. (2.587 - IF2014). (2015 - Current Contents). ISSN 0957-4530.

ADCA62 SZYMCZYK, A. - PASZKIEWICZ, S. - PAWELEC, I. - LISIECKI, S. - JOTKO, M. - ŠPITALSKÝ, Zdenko - MOSNÁČEK, Jaroslav - ROSLANIEC, Z. Oxygen barrier properties and melt crystallization behavior of poly(ethylene

terephthalate)/graphene oxide nanocomposites. In Journal of Nanomaterials, vol. 2015, art ID 382610, 10 p. ISSN 1687-4110.

ADCA63 ŠPITALSKÝ, Zdenko - KRATOCHVÍLA, Ján - CSOMOROVÁ, Katarína - *KRUPA, Igor* - GRACA, M. P. F. - COSTA, L. C. Mechanical and electrical properties of styrene-isoprene-styrene copolymer doped with explanded graphite nanoplatelets. In Journal of Nanomaterials, vol. 2015, art ID 168485, 9 p. ISSN 1687-4110.

ADCA64 TABAČIAROVÁ, Jana - MIČUŠÍK, Matej - FEDORKO, P. - OMASTOVÁ, Mária. Study of polypyrrole aging by XPS, FTIR and conductivity measurements. In Polymer Degradation and Stability, 2015, vol. 120, p. 392-401. (3.163 - IF2014). (2015 - Current Contents). ISSN 0141-3910.

ADCA65 VEISEH, O. - DOLOFF, J. C. - MA, M. - VEGAS, A. J. - TAM, H. H. - BADER, A. R. - LI, J. - LANGAN, E. - WYCKOFF, J. - LOO, W. S. - JHUNJHUNWALA, S. - CHIU, A. - SIEBERT, S. - TANG, K. - HOLLISTER-LOCK, J. - ARESTA-DASILVA, S. - BOCHENEK, M. - MENDOZA-ELIAS, J. - WANG, Y. - QI, M. - LAVIN, D. M. - CHEN, M. - DHOLAKIA, N. - THAKRAR, R. - LACÍK, Igor - WEIR, G. C. - OBERHOLZER, J. - GREINER, D. L. - LANGER, R. - ANDERSON, D. G. Size- and shape-dependent foreign body immune response to materials implanted in rodents and non-human primates. In Nature Materials, 2015, vol. 14, p. 643-651. (36.503 - IF2014). (2015 - Current Contents). ISSN 1476-1122.

ADCA66 WINTER, A. D. - CZANIKOVÁ, Klaudia - LARIOS, E. - VISHNYAKOV, V. - JAYE, Ch. - FISCHER, D. A. - OMASTOVÁ, Mária - CAMPO, E. M. Interface dynamics in strained polymer nanocomposites: Stick-slip wrapping as a prelude to mechanical backbone twisting derived from sonication-induced amorphization. In Journal of Physical Chemistry C, 2015, vol. 119, no. 34, p. 20091-20099. (4.772 - IF2014). (2015 - Current Contents). ISSN 1932-7447.

ADCB Vedecké práce v zahraničných karentovaných časopisoch neimpaktovaných

ADCB01 CAPEK, Ignác. Polymer-decorated plasmonic nanoparticles. In Polymer - Plastics Technology and Engineering, 2015, vol. 54, iss.14, p. 1513-1523. (2015 - Current Contents). ISSN 0360-2559.

ADCB02 HANUSOVÁ, J. - KOVÁČIK, D. - STUPAVSKÁ, M. - ČERNÁK, M. - NOVÁK, Igor. Atmospheric pressure plasma treatment of polyamide-12 foils. In Open Chemistry, 2015, vol. 13, p. 382-388. (2015 - Current Contents, WOS). ISSN 2391-5420.

ADEB Vedecké práce v ostatných zahraničných časopisoch neimpaktovaných

ADEB01 CAPEK, Ignác. Plasmonic nanoparticle and their conjugates: Preparation, optical properties and antimicrobial activity. In Journal of Nanotechnology and Materials Science : open access, 2015, vol. 2, iss. 1, p. 1-18. ISSN 2377-1372.

ADEB02 CAPEK, Ignác. Smart biodecorated hybrid nanoparticles. In Current Bionanotechnology, 2015, vol. 1, no. 1, p. 60-78. ISSN 2213-5294.

ADEB03 CAPEK, Ignác. On biodecorated gold nanoparticles distributed within tissues and cells. In Journal of Nanomedicine Research : open access journal, 2015, vol. 2, iss. 1, art.no. 00020. ISSN 2377-4282.

ADEB04 NÉMETHOVÁ, Veronika - LACÍK, Igor - RÁZGA, Filip. Vibration technology for microencapsulation: The restrictive role of viscosity. In Journal of Bioprocessing and Biotechniques : an open access journal, 2015, vol. 5, iss. 1, art.no. 1000199. ISSN 2155-9821.

ADMB Vedecké práce v zahraničných neimpaktovaných časopisoch registrovaných v databázach Web of Science Core Collection alebo SCOPUS

ADMB01 CZANIKOVÁ, Klaudia - KRUPA, Igor - RAČKO, Dušan - ŠMATKO, V. - CAMPO, E. M. - PAWLOVA, E. - OMASTOVÁ, Mária. In situ electron microscopy of Braille microsystems: photoactuation of ethyene vinyl acetate/carbon nanotube composites. In Materials Research Express, 2015, vol. 2, art.no. 025601. (2015 - SCOPUS). ISSN 2053-1591.

ADMB02 PISSIS, P. - GEORGOUSIS, G. - PANDIS, C. - GEORGIOPOULOS, P. - KYRITSIS, A. - KONTOU, E. - MIČUŠÍK, Matej - CZANIKOVÁ, Klaudia - OMASTOVÁ, Mária. Strain and damage sensing in polymer composites and nanocomposites with conducting fillers. In Procedia Engineering, 2015, vol. 114, p. 590-597. (2015 - SCOPUS). ISSN 1877-7058.

ADMB03 *POPELKA, Anton* - *KRUPA, Igor* - NOVÁK, Igor - OUEDERNI, M. - ABDULAQDER, F. - AL-YAZEDI, S. - AL-GUNAID, T. - AL-SENANI, T. Adhesion improvement between polyethylene and aluminium using eco-friendly plasma treatment. In Mema 2015 : TMS Middle East - Mediterranean Materials Congress on Energy and Infrastructure Systems : Doha, Quatar, January 11-15, 2015 : program and abstracts. - Doha, Quatar : University of Quatar, 2015, p. 267-271.

ADMB04 ŠAUŠA, O. - MAŤKO, I. - MACOVÁ, Eva - BEREK, Dušan. Confined water in controlled pore glass CPG-10-120 studied by positron annihilation lifetime spectroscopy and differential scanning calorimetry. In Journal of Physics: Conference Series, 2015, vol. 618, art.no. 012041. (2015 - WOS, SCOPUS). ISSN 1742-6588.

ADMB05 WINTER, A. D. - JAYE, Ch. - FISCHER, D.- OMASTOVÁ, Mária - CAMPO, E. M. Molecular disorder in prestrained nanocomposites: Effects of processing on durability of thermally-active ethylene-vinyl acetate /PyChol/ multiwall carbon nanotubes. In Materials Research Society Symposium Proceedings, 2015, vol. 1718, p. 21-26. (2015 - SCOPUS). ISSN 0272-9172.

AECA Vedecké práce v zahraničných recenzovaných zborníkoch a kratšie kapitoly / state v zahraničných vedeckých monografiách alebo vysokoškolských učebniciach

AECA01 MATYAŠOVSKÝ, J. - SEDLIAČIK, J. - NOVÁK, Igor - JURKOVIČ, P. - DUCHOVIČ, P. Lowering of formaldehyde emission from modified UF resin with colagen polymers. In Annals Warsaw University of Life Sciences : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 284-288. ISSN 1898-5912.

AECA02 NOVÁK, Igor - SEDLIAČIK, Ján - ŽIGO, Ondrej - VALENTIN, Marian - PRACHÁR, Jozef - MATYAŠOVSKÝ, Ján - JURKOVIČ, Peter. Oak wood modification using cold plasma. In Annals of Warsaw University of Life Sciences - SGGW : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 90, p. 134-137. ISSN 1898-5912.

AECA03 NOVÁK, Igor - SEDLIAČIK, J. - VALENTIN, Marian - ŽIGO, Ondrej - PRACHÁR, Jozef - JURKOVIČ, P. - MATYAŠOVSKÝ, J. Antibacterial modification of polyolefin veneers. In Annals of Warsaw University of Life Sciences - SGGW : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 90, p. 138-142. ISSN 1898-5912.

AECA04 NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - *POPELKA, Anton* - PRACHÁR, Jozef - MATYAŠOVSKÝ, J. - JURKOVIČ, P. Antibacterial modification of polymer veneers. In Annals Warsaw University of Life Sciences :

Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 307-311. ISSN 1898-5912.

AECA05 NOVÁK, Igor - CHODÁK, Ivan - SEDLIAČIK, J. - PRACHÁR, Jozef - JURKOVIČ, P. - MATYAŠOVSKÝ, J.. Pre-treatment of polyester-based veneers. In Annals Warsaw University of Life Sciences : Forestry and Wood Technology. - Warsaw, Poland : Warsaw University of Life Sciences Press, 2015, no. 92, p. 312-315. ISSN 1898-5912.

AECA06 NOVÁK, Igor - MATYAŠOVSKÝ, J. - JURKOVIČ, P.- LEHOCKÝ, M. - VESEL, A. - ŠOLTÉS, L. Polyvinylchloride antibacterial pre- treated by barrier plasma. In Engineering of polymers and chemical complexity, Volume II.: New approaches, limitations and control. - Toronto : Apple Academic Press, 2014, p. 287-296. ISBN 978-1-926895-87-1.

AECA07 NOVÁK, Igor - MICHALEC, Ivan - VALENTIN, Marian - MARÓNEK, Milan - ŠOLTÉS, Ladislav - MATYAŠOVSKÝ, Jan - JURKOVIČ, Peter. Steel surface modification. In Analysis and performance of engineering materials: Key research and development. - Toronto : Apple Academic Press, 2015, p. 45-58. ISBN 9781771880855.

AECA08 TEIXEIRA, S. S. - GRACA, M. P. F. - DIONISIO, M. - ILČÍKOVÁ, Markéta - MOSNÁČEK, Jaroslav - ŠPITALSKÝ, Zdenko - KRUPA, Igor - COSTA, L. C. Electrical properties of lithium ferrite nanoparticles dispersed in a styrene-isoprene-styrene copolymer matrix. In Nanoscience Advances in CBRN Agents Detection, Information and Energy Security : NATO Science for Peace and Security Series A : Chemistry and Biology. - Dordrecht, NL : Springer Netherlands, 2015, chapter 27, P. 273-279. ISBN 978-94-017-9696-5. ISSN 1874-6489.

AFC Publikované príspevky na zahraničných vedeckých konferenciách

AFC01 HURAN, J. - HRUBČÍN, L. - BOHÁČEK, P. - BORZAKOV, S. B. - SKURATOV, V. A. - KOBZEV, A. P. - KLEINOVÁ, Angela - SASINKOVÁ, V. The effect of xe ion and neutron irradiation on the properties of SiC and SiC(N) film prepared by PECVD technology. In RAD 2015 : proceedings Third International Conference on Radiation and Applications in Various Fields of Research. Ed. G. Rastič ; rev. A.A. Ajayi-Banji, A.A. Antsiferova et al. - Niš : RAD Association, 2015, p. 399-403. ISBN 978-86-80300-01-6.

AFC02 MAŤKO, I. - ŠAUŠA, O. - MACOVÁ, Eva. Comparison of thermal behaviour of hexadecane and water confined in nanoporous matrix. In TAS 2015 : Sborník příspěvku Termoanalytického semináře, 18. červen, 2015, Pardubice, Česká republika. - Pardubice : Univerzita Pardubice, 2015, s. 115-119. ISBN 978-80-7395-888-6.

AFC03 OLEJNIK, R. - SLOBODIAN, P. - ŠPITALSKÝ, Zdenko - MATYAS, J. The sensing element for organic vapors detection on the base of styrene-isoprene-styrene (SIS) block copolymer/carbon nanotubes on the interdigitated electrode. In NANOCON 2015 : proceedings of abstacts. - Ostrava, Czech Republic : TANGER Ltd., 2015, pA22, 5p. Dostupné na internete: <http://www.nanocon.eu/files/proceedings/23/papers/4295.pdf>.

AFC04 OMASTOVÁ, Mária - MIČUŠÍK, Matej - MOSNÁČKOVÁ, Katarína. Conductive textiles modified by polypyrrole. In 6th International Technical Textile Congress. - Izmir, Turkey: Dokuz Eylul University, 2015, p. 185-188. ISBN 978-975-441-448-6.

AFC05 SALGARELLA, A. R. - RICOTTI, L. - GIUDETTI, G. - KRONEK, Juraj - RINGHI, M. - CUTRONE, A. - CAFARELLI, A. - ZAHORANOVÁ, Anna - ŠRÁMKOVÁ, Petra - TREĽOVÁ, Dušana - BOSSI, S. - MICERA, S. - LACÍK,

Igor - MENCIASSI, A. Advanced nano-doped materials for long-term neural interfaces. In IEEE NANO 2015 Proceedings. - Danvers : The Institute of Electrical and Electronics Engineers, Inc., 2015, iD 337, 3p. ISBN 978-1-4673-8156-7.

AFC06 SZYMCZYK, A. - ZOLNIERKIEWICZ, G. - TYPEK, J. - GUSKOS, N. - PAWELEC, I. - PASZKIEWICZ, S. - ŠPITALSKÝ, Zdenko - MOSNÁČEK, Jaroslav. Magnetic properties of PTT-PTMO/graphene oxide-Fe3O4 nanocomposite. In Joint Conference on Advanced Materials and Technologies : abstract book. - Gdansk, Poland : Task Publishing, 2015, p. 51-54. ISBN 978-83-937979-5-0.

AFC07 ŠIŠKOVÁ, Alena - CLEMENTI, L. A. - VEGA, J. R. - MEIRA, G. R. - BEREK, Dušan. Sequenced two-dimensional liquid chromatography of polymer blend. Source of errors in the data treatment procedure. In SAP 2015 : Simposio Argentino de Polimeros : book of abstracts. - Santa Fe, Argentina : Centre de Convenciones Estacion Belgrano, 2015, 6 p.

AFD Publikované príspevky na domácich vedeckých konferenciách

AFD01 DUBECKÝ, F. - KINDL, D. - HUBÍK, P. - OSWALD, J. - MIČUŠÍK, Matej - GOMBIA, E. - BOHÁČEK, P. - SEKÁČOVÁ, M. - ZAŤKO, B. - ŠAGÁTOVÁ, A. Peculiarities of metal contacts on semi-insulating GaAs: electrical, photoelectronic and XPS characterization. In APCOM 2015 : Proceedings of the 21st International Conference on Applied Physics of Condensed Matter. Eds. J. Vajda, I. Jamnický ; rev. J. Sitek, P. Ballo et al. - Bratislava : STU, 2015, p. 216-220. ISBN 978-80-227-4373-0.

AFD02 GUCMANN, F. - KÚDELA, R. - DOBROČKA, E. - MIČUŠÍK, Matej - ROSOVÁ, A. - NOVÁK, J. - GREGUŠOVÁ, D. III-As heterostructure field-effect transistors with recessed ex-situ gate oxide. In 18. Škola vákuovej techniky : Nanosvet s vákuom. - Bratislava : SVS, 2015, s. 27-30. ISBN 978-80-971179-6-2.

AFD03 HRONKOVIČ, Ján - PREŤO, Jozef - ORAVEC, Ján - VEREŠ, Juraj - CHODÁK, Ivan. The appropriate composition to modify rubber crumb and its application in rubber compounds. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 196-199. ISBN 978-80-970923-7-5.

AFD04 HURAN, J. - BALALYKIN, N. I. - FESHCHENKO, A. A. - KOBZEV, A. P. - SASINKOVÁ, V. - KLEINOVÁ, Angela - ARBET, J. Transmission photocathodes based on quartz glass coated with N or P-doped SiC thin films prepared by HWCVD technology. In Proceedings of the 3th International Conference on Advances in Electronic and Photonic Technologies : ADEPT 2015. Eds. D. Pudiš, I. Lettrichová, J. Kováč, jr. - Žilina : Univ. Žilina, 2015, p. 186-189. ISBN 978-80-554-1033-3.

AFD05 HURAN, J. - MIKOLÁŠEK, M. - BOHÁČEK, P. - KLEINOVÁ, Angela - SASINKOVÁ, V. - KOBZEV, A.P. - SEKÁČOVÁ, M. - ARBET, J. HWCD technology of silicon carbide thin films: properties. In Proceedings of the 3th International Conference on Advances in Electronic and Photonic Technologies : ADEPT 2015. Eds. D. Pudiš, I. Lettrichová, J. Kováč, jr. - Žilina : Univ. Žilina, 2015, p. 104-107. ISBN 978-80-554-1033-3.

AFD06 JOKRLLOVÁ, J. - ČÍK, G. - ŠVAJDLENKOVÁ, Helena - LUKEŠOVÁ, Miroslava - ŠERŠEŇ, F. Fotoreduction of CO2 and ROS production by modified zeolites. In 42th International Conference of SSCHI : proceedings. - Košice : SSCHI, 2015, p. 31-38. ISBN 978-80-89475-14-8.

AFD07 MOSNÁČKOVÁ, Katarína - ŠPITALSKÝ, Zdenko - KULIČEK, Jaroslav - PROKEŠ, J. - OMASTOVÁ, Mária. Electrical properties of poly(methyl methacrylate)/multiwalled carbon nanotubes composites as a function of preparation

methods. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 80-86. ISBN 978-80-970923-7-5.

AFD08 OLEJNIK, R. - ŠPITALSKÝ, Zdenko - PROSTREDNÝ, Martin - SLOBODIAN, P. Sensing element on the base of graphene/styure-isopren copolymer for VOC detection in industry. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 238-241. ISBN 978-80-970923-7-5.

AFE Abstrakty pozvaných príspevkov zo zahraničných konferencií

AFE01 LACÍK, Igor. Microcapsules for immunoprotection of transplanted islets of Langerhans. In Functional Polymers at Bio-Material Interfaces : 79th Prague Meeting on MAcromolecules : book of abstracts and programme. - Prague, Czech Republic : Institute of Macromolecular Chemistry, 2015, p. 30. ISBN 978-80-85009-82-8.

AFE02 LACÍK, Igor. Kinetics and mechanism of radical polymerization in aqueous solutions. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 6. ISBN 978-3-99033-491-1.

AFE03 OMASTOVÁ, Mária. Carbon nanofillers composites for advanced applications. In Eurofillers Polymer Blend 2015 : Montpellier, France, April 26th - 30th, 2015 : book of abstracts. - Montpellier, France : Universite Montpellier, 2015, non p., KN14.

AFE04 OMASTOVÁ, Mária - ASWAL, D. K. - CHEHIMI, M. M. Conductive Polymer Hybrids: The role of coupling agents and surfactants. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 3.

AFG Abstrakty príspevkov zo zahraničných konferencií

AFG01 BARTOŠ, Josef - LUKEŠOVÁ, Miroslava - ŠVAJDLENKOVÁ, Helena - ZGARZINSKA, B. - ZALESKI, R. - CHARMAS, B. - EDELMANN, M. Spin probe dynamics in crystalline organics and its relationship to free volume using ESR and PALS. The cas of odd vs. even n-alkanes. In XXVI International EPR Seminar 2015 : book of abstracts. - Graz, Austria : Graz University of Technology, 2015, p. 31-32.

AFG02 BENKOVÁ, Zuzana - NÁMER, Pavol - CIFRA, Peter. From stripe to slab confinement for DNA linearization in nanochannels. In Thermodynamics : Copenhagen, 15-18 September, 2015 : book of abstracts. - Lyngby, Denmark : DTU Chemical Engineering, 2015, p. 159.

AFG03 BENKOVÁ, Zuzana - NÁMER, Pavol - CIFRA, Peter. From stripe to slab confinement for DNA linearization in nanochannels. In (bio)Macromolecular ionic systems : Český Krumlov 2015 : book of abstracts. - 2015, non p.

AFG04 BENKOVÁ, Zuzana. Molecular dynamics simulations of poly(ethylene oxide) grafted onto silica immersed in melt of homopolymers. In CCP5 AGM 2015 : Lancaster,England, 7th - 9th September, 2015. - Lancaster, England : Lancaster University, 2015, p. 9.

AFG05 BEREK, Dušan - NOVÁK, Ivan - MUNKA, K. - KARÁCSONYOVÁ, M. - VARGA, S. Príprava, vlastnosti a aplikácie nanopórových uhlíkových vlákien pripravených karbonizáciou celulózy pri úprave vody. In Voda Zlín 2015 : sborník prispévkú. - Olomouc, ČR : Moravská vodárenská a.s., 2015, p. 133-135.

AFG06 BEREK, Dušan. Modern liquid chromatography methods for molecular characterization of advanced synthetic polymers. In 21th International Symposium on Separation Sciences : book of abstracts. - Ljubljana, Slovenia : National Institute of Chemistry, 2015, p. 7. ISBN 978-961-6104-28-9.

AFG07 BHANDARY, D. - BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. - SINGH, J. K. Wetting on grafted thermo-responsive polymer brushes: A molecular dynamics study. In Thermodynamics : Copenhagen, 15-18 September, 2015 : book of abstracts. - Lyngby, Denmark : DTU Chemical Engineering, 2015, p. 61.

AFG08 CLEMENTI, L. - VEGA, J. - ŠIŠKOVÁ, Alena - MEIRA, G. - BEREK, Dušan. Sequenced two-dimensional liquid chromatography: molar mass distributions in a binary polymer blend. In 21th International Symposium on Separation Sciences : book of abstracts. - Ljubljana, Slovenia : National Institute of Chemistry, 2015, p. 228. ISBN 978-961-6104-28-9.

AFG09 CZANIKOVÁ, Klaudia - *KRUPA, Igor* - SGHAIER, A. B. - CHEHIMI, M. M. - OMASTOVÁ, Mária. Photo-thermal actuation of ethylene vinyl acetate nanocomposites containing carbon nanotubes. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 63.

AFG10 CZANIKOVÁ, Klaudia - *KRUPA, Igor* - ILČÍKOVÁ, Markéta - MOSNÁČEK, Jaroslav - CAMPO, E. - RAČKO, Dušan - OMASTOVÁ, Mária. Photo-thermal actuation study of elastomer/carbon nanotubes nanocomposites. In The 3rd CEEPN Workshop on Polymer Science : proceedings. - Iasi, Romania : Petru Ponti Institute of Macromolecular Chemistry, 2015, p. 26-27.

AFG11 CZANIKOVÁ, Klaudia - *KRUPA, Igor* - OMASTOVÁ, Mária. Photo-thermal actuation of ethylene vinyl acetate nanocomposites filled with carbon nanotubes. In Frontiers in polymer science : Fourth International Symposium : in association with the journal Polymer : Riva del Garda, Italy , 20 - 22 May 2015. - Elsevier, 2015, non p., P3.053.

AFG12 CZANIKOVÁ, Klaudia - KRUPA, Igor - OMASTOVÁ, Mária. Photo-thermal actuation study of ethylene vinyl acetate nanocomposites filled with modified multi-wall carbon nanotubes. In Wurzburg Summer School on Supramolecular Nanosystem : book of abstracts. - Wurzburg, Germany : Julius-Maximilians-University, 2015, p. 27.

AFG13 ČÍKOVÁ, Eliška - ŠIŠKOVÁ, Alena - OPÁLEK, A. - OMASTOVÁ, Mária. Electronspun poly(e-caprolactone) fibers: Effects of processing on fiber morphology. In Applications of Electrospinning in Composites, Nanofabrication, Food, Packaging, Pharma and Controlled Release : COST MP1206 Electrospinning : Novi Sad, Serbia, 25th-27th March 2015 : program and book of abstracts. - Novi Sad, Serbia : Tehnološki fakultet, 2015, p. 81. ISBN 978-86-6253-043-1.

AFG14 ČÍKOVÁ, Eliška - MIČUŠÍK, Matej - ŠIŠKOVÁ, Alena - OMASTOVÁ, Mária. Conducting electrospun polycaprolactone/polypyrrole fibers. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 49.

AFG15 FLORIÁN, Štepán - NOVÁK, Igor - ŽIGO, Ondrej - VALENTIN, Marian. Surface and adhesion properties of wood treated by low-temperature plasma. In TVIP 2015 : Hustopeče, čr, 18. - 20. 3. 2015. - Praha, ČR : CEMC, 2015, non.p. ISBN 978-80-85990-26-3.

AFG16 GÁBELOVÁ, A. - MESÁROŠOVÁ, M. - BÁBELOVÁ, A. - KOZICS, K. - SEDLÁČKOVÁ, E. - PASTOREK, M. - NÉMETHOVÁ, Veronika -

BULIAKOVÁ, B. - RÁZGA, Filip - MORAVČÍKOVÁ, Daniela - ZÁVIŠOVÁ, V. - KONERACKÁ, M. - URSÍNYOVÁ, M. - ČIAMPOR, F. - MAŇKA, J. - CIGÁŇ, A. The interactions of surface modified magnetic iron oxide nanoparticles with human lung cells in vitro. In GlowBrain final conference : Stem cell and biomaterial applications for brain repair. - Zagreb : GlowBrain, 2015, p. 53. VEGA no. 2/0051/09, 2/0143/13, 2/0152/13, 2/0113/15 and APVV-0658-11.

AFG17 GÁBELOVÁ, A. - MESÁROŠOVÁ, M. - BÁBELOVÁ, A. - KOZICS, Katarína - SEDLÁČKOVÁ, E. - PASTOREK, M. - NÉMETHOVÁ, Veronika - BULIAKOVÁ, B. - RÁZGA, Filip - ZÁVIŠOVÁ, V. - KONERACKÁ, M. - URSÍNYOVÁ, M. - ČIAMPOR, F. The surface modified magnetic iron oxide nanoparticles, interactions of nanoparticles with cells in vitro. In Bridges in life sciences 10th annual scientific conference. - RECOOP HST association, 2015, p. 90. ISBN 978-963-12-2210-4. VEGA no. 2/0051/09, 2/0143/13 and 2/0113/15, APVV-0658-11.

AFG18 CHODÁK, Ivan - *KRAJČI, Ju*raj - ŠPITALSKÝ, Zdenko. Similarities between elastomeric and thermoplastic matrices in the structure of reinforcing carbon black filler network. In Eurofillers Polymer Blend 2015 : Montpellier, France, April 26th - 30th, 2015 : book of abstracts. - Montpellier, France : Universite Montpellier, 2015, non p.

AFG19 CHODÁK, Ivan - *KRAJČI, Juraj*. Structure of reinforcing filler network determined by on-line measurement of electrical conductivity of the polymer/carbon black composite. In ICCS18 - International Conference on Composite Structures : book of abstracts. - Porto, Portugal : Universidade do Porto, 2015, p. 68 -69.

AFG20 CHODÁK, Ivan - *KRAJČI, Juraj* - OMASTOVÁ, Mária. Structure of reinforcing carbon black filler network in polymer composites determined from electrical conductivites. In 16. Osterreichische Chemietage : book of abstracts. - Innsbruck, Austria : Austria Chemical Society - GOCH, 2015, non p., OP42.

AFG21 CHOVANCOVÁ, Anna - LACÍK, Igor. SEC characterization for polyacrylic acid, polyacrylamide and their copolymers. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 103. ISBN 978-3-99033-491-1.

AFG22 JANIGOVÁ, Ivica - CSOMOROVÁ, Katarína - RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Degradation of biopolymers based on cellulose by different thermal analyses. In Epf DRESDEN 2015. European Polymer Congress. : Book of abstracts. - Dresden, 2015, p. 194.

AFG23 KLEINOVÁ, Angela - HURAN, J. - SASINKOVÁ, V. - PERNÝ, M. - ŠÁLY, V. - PACKA, J. FTIR spectroscopy of silicon carbide thin films prepared PECVD technology for solar cell application. In Proceedings of SPIE, San Diego, California, USA, 9-13 August 2015. - San Diego : San Diego Convention Center, 2015, vol. 9563.

AFG24 KOMADEL, P. - MADEJOVÁ, J.- JANKOVIČ, Ľ. - BIZOVSKÁ, V. - PETRA, L. - JOCHEC MOŠKOVÁ, Daniela - CHODÁK, Ivan. Key properties of selected organo-clay-polymer nanocomposites. In EUROCLAY 2015. International conference on clay science and technology, 5th - 10th july 2015, Edinburgh, Scotland : programme & abstracts. - Scotland, 2015.

AFG25 KRONEK, Juraj - ZAHORANOVÁ, Anna - *MIKULEC, Marcel* - KRONEKOVÁ, Zuzana. Hydrogels based on poly(2-oxazoline)s. In The 3rd CEEPN Workshop on Polymer Science : proceedings. - Iasi, Romania : Petru Ponti Institute of Macromolecular Chemistry, 2015, p. 5-6.

AFG26 KRONEKOVÁ, Zuzana - MIHÁLOVÁ, Andrea - SLÁVIKOVÁ, M. - UHELSKÁ, Lucia - LACÍK, Igor. Functionalization of hydrogels with thiol-terminated peptides for enhancing immuno-protection of encapsulated cells. In Epf DRESDEN 2015. European Polymer Congress. : Book of abstracts. - Dresden, 2015, p. 195, BIO-L-81.

AFG27 *KRUPA, Igor* - CZANIKOVÁ, Klaudia - OMASTOVÁ, Mária. Active nanocomposite materials for photo-mechanical actuation. In Mema 2015 : The TMS Middle East - Mediterranean Materials Congress on Energy and Infrastructure Systems : Doha, Quatar, january 11-14, 2015 : program and abstracts. - Doha, Quatar : Univerity of Quatar, 2015, p. 25.

AFG28 KULIČEK, Jaroslav - MIČUŠÍK, Matej - ŠPITALSKÝ, Zdenko - GEMEINER, P. - ŠVORC, Ľ. - OMASTOVÁ, Mária. Carbon based nanoparticles/polypyrrole hybrids for solar cell application. In Eurofillers Polymer Blend 2015 : Montpellier, France, April 26th - 30th, 2015 : book of abstracts. - Montpellier, France : Universite Montpellier, 2015, non p., P8-9.1.

AFG29 KULIČEK, Jaroslav - MIČUŠÍK, Matej - SCHERBAHN, V. - MIRSKY, V.M. - LOBOTKA, Peter - RADNÓCZI, G. - OMASTOVÁ, Mária. Layer-by-layer deposition of metal ionic liquid nanocolloids on the electrode surface. In 16th European Conference on Application of Surface and Interface Analysis : Ecasia ´15: Granada, Spain, September 23th - October 1st 2015 : book of abstracts. - Granada, Spain, 2015, p. 376, P2-FC-02. Dostupné na internete: <www.ecasia2015.com>.

AFG30 LUKEŠOVÁ, Miroslava - ŠVAJDLENKOVÁ, Helena - SIPPEL, P. - REUTER, D. - MACOVÁ, Eva - BEREK, Dušan - ZALESKI, R. - EDELMANN, M. - LOIDL, A. - BARTOŠ, Josef. Spin probe dynamics of n-hexadecane and n-propanol in bulk and confined geometry. In XXVI International EPR Seminar 2015 : book of abstracts. - Graz, Austria : Graz University of Technology, 2015, p. 55.

AFG31 MALÍKOVÁ, Marta - CSOMOROVÁ, Katarína - ŠESTÁK, J. - OMASTOVÁ, Mária. Thermal stability and flammability of smart textiles based on expanded graphite-polymeric nanocomposites. In Eurofillers Polymer Blend 2015 : Montpellier, France, April 26th - 30th, 2015 : book of abstracts. - Montpellier, France : Universite Montpellier, 2015, non p., P5.8.

AFG32 MALÍKOVÁ, Marta - ŠPITALSKÝ, Zdenko - ŠESTÁK, J. - OMASTOVÁ, Mária. Conductivity and flammability of smart textiles based on expanded graphite-polymeric nanocomposites. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 15.

AFG33 MIČUŠÍK, Matej - TABAČIAROVÁ, Jana - FEDORKO, P. - OMASTOVÁ, Mária. Conducting filler ageing: XPS, FTIR and electrical conductivity study. In EUPOC 2015 : Conducting Polymeric Materials : Gargnano, Italy, 24 - 28 May 2015 : abstract booklet & list of participants. - Pisa, Italy : University of Pisa, 2015, p. 29.

AFG34 NÁMER, Pavol - BENKOVÁ, Zuzana - CIFRA, Peter. From stripe to slab confinement in macromolecules linearization in nanochannels. In Computation Trends in Solvation and Transport in Liquids : Julich, Germany, 23-27 March 2015. - Julich, Germany : Julich Forschungszentrum GmbH, 2015, p. 57.

AFG35 NOVÁK, Igor - ŽIGO, Ondrej - VALENTIN, Marian - PRACHÁR, Jozef. Electrical, thermal and surface properties of nickel-based composites. In TVIP 2015 : Hustopeče, ČR, 18. - 20. 3. 2015. - Praha, ČR : CEMC, 2015, non p. ISBN 978-80-85990-26-3.

AFG36 OMASTOVÁ, Mária - KULIČEK, Jaroslav - STEJSKAL, J. - OKSUZ, A. U. Conducting composites with polypyrrole and their application. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer

science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 19. ISBN 978-3-99033-491-1.

AFG37 OMASTOVÁ, Mária. Polypyrrole nanocomposites for advanced applications. In Epf DRESDEN 2015. European Polymer Congress. : Book of abstracts. - Dresden, 2015, p. 304.

AFG38 PALMIERO, U. C. - CHOVANCOVÁ, Anna - STORTI, G. - LACÍK, Igor - MOSCATELLI, D. The raft copolymerization and its use for the production of SEC copolymer standards: Procedure and case studies. In Polymer Reaction Engineering IX : book of abstracts. - New York : ECI Engineering Conferences International, 2015, p47.

AFG39 PALMIERO, U. C. - CHOVANCOVÁ, Anna - LACÍK, Igor - MOSCATELLI, D. PLP-SEC study of the propagation rate of N-(2-hydoxypropyl)-methacrylamide in aqueous solution. In Polymer Reaction Engineering IX : book of abstracts. - New York : ECI Engineering Conferences International, 2015, p9.

AFG40 PRACHÁR, Jozef - NOVÁK, Igor. Surface modification of polypropylene with organosilanes by plasma. In Epf DRESDEN 2015. European Polymer Congress. : Book of abstracts. - Dresden, 2015, p. 147.

AFG41 SASINKOVÁ, V. - HURAN, J. - KLEINOVÁ, Angela - BOHÁČEK, P. - ARBET, J. - SEKÁČOVÁ, M. Raman spectroscopy study of SiC thin films prepared by PECVD for solar cell working in hard environment. In Proceedings of SPIE, San Diego, California, USA, 9-13 August 2015. - San Diego : San Diego Convention Center, 2015, vol. 9563, 7p.

AFG42 SAS, S. - DANKO, Martin - BUJDÁK, J. Photoactive hybrid material based on kaolinite grafted wuth a reactive laser dye. In EUROCLAY 2015. International conference on clay science and technology, 5th - 10th july 2015, Edinburgh, Scotland : programme & abstracts. - Scotland, 2015, p. 375.

AFG43 ŠIŠKOVÁ, Alena - DUBAJ, T. - KLEINOVÁ, Angela - ECKSTEIN ANDICSOVÁ, Anita. Modification of cellulose films for controlled release system with potential use in agriculture. In Advances in cellulose processing and applications - research goes to industry : COST FP1205 Joint Working Groups and Management Committee Meetings : Iasi, Romania, March 10-11, 2015 : program and book of abstracts. - Iasi, Romania : Editura Tehnopress, 2015, p. 60. ISBN 978-606-687-185-3.

AFG44 ŠIŠKOVÁ, Alena - DUBAJ, T. - OPÁLEK, A. - KLEINOVÁ, Angela - RYCHTER, P. - ECKSTEIN, Anita. Functionalizing electrospun fibers with active molecules. In Challenges in Science and Technology of Polymer Materials : Bansko, Bulgaria, May 19-23, 2015 : BOOK OF ABSTRACTS. - Bansko, Bulgaria, 2015, non p., O19.

AFG45 ŠRÁMKOVÁ, Petra - KRONEK, Juraj. Preparation and characterization of hyperbranched macro-initiators for cationic ring-opening polymerization (CROP) of 2-oxazolines. In Wurzburg Summer School on Supramolecular Nanosystem : book of abstracts. - Wurzburg, Germany : Julius-Maximilians-University, 2015, p. 50.

AFG46 ŠVAJDLENKOVÁ, Helena - ŠAUŠA, O. - GORSCHE, Ch. - LIŠKA, R. Micro structural PALS study of dimethacrylate networks. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 75. ISBN 978-3-99033-491-1.

AFG47 VALENTIN, Marian - NOVÁK, Igor - *KRUPA, Igor* - OMASTOVÁ, Mária. Nanoindentation and its application for the study of nanomechanical properties of plasma treated poly(lactic acid) samples with different crystallinity. In Danube Vltava Sava Polymer Meeting : DVSPM 2015 : proceedings of a conference on polymer science. - Linz, Austria : Trauner Verlag Univesitat, 2015, p. 82. ISBN 978-3-99033-491-1.

AFG48 VNUKOVÁ, Dominika - RÁZGA, Filip - NÉMETHOVÁ, Veronika - LACÍK, Igor. Preparation of stable chitosan sub-micron particles: Factors affecting their size and colloidal stability. In Functional Polymers at Bio-Material Interfaces : 79th Prague Meeting on MAcromolecules : book of abstracts and programme. - Prague, Czech Republic : Institute of Macromolecular Chemistry, 2015, p. 58. ISBN 978-80-85009-82-8.

AFG49 ZAHORANOVÁ, Anna - KRONEKOVÁ, Zuzana - ZAHORAN, M. - CHORVÁT, D. Jr. - KRONEK, Juraj. 2-Ethyl-2-oxazoline-based hydrogels as matrices for cell cultivation. In Epf DRESDEN 2015. European Polymer Congress. : Book of abstracts. - Dresden, 2015, p. 180.

AFH Abstrakty príspevkov z domácich konferencií

AFH01 BORSKÁ, Katarína - MORAVČÍKOVÁ, Daniela - ECKSTEIN-ANDICSOVÁ, Anita - MOSNÁČEK, Jaroslav. Study of photochemically induced atom transfer radical polymerization of (meth)acrylates in the presence of oxygen. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 83. ISSN 1336-7242.

AFH02 CAPEK, Ignác - CAPEK, P. - HLOUŠKOVÁ, Zuzana. Biodecorated quantum dots and their conjugates. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 147. ISSN 1336-7242.

AFH03 CZANIKOVÁ, Klaudia - SGHAIER, A. B. - CHEHIMI, M. M. - OMASTOVÁ, Mária. Actuators on the base of ethylene vinyl acetate/carbon nanotubes/dyes nanocomposites. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 156. ISSN 1336-7242.

AFH04 ČÍKOVÁ, Eliška - MIČUŠÍK, Matej - ŠIŠKOVÁ, Alena - FEDORKO, P. - OMASTOVÁ, Mária. Vodivé nanovlákenné kompozity pripravené elektrostatickým zvlákňovaním. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 172. ISSN 1336-7242.

AFH05 DANKO, Martin - *KASÁK, Peter* - HRDLOVIČ, Pavol. Spectral study of interactions of pyrene based probes in polymer matrices. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 141-142. ISSN 1336-7242.

AFH06 ĎURKÁČOVÁ, Slávka - DANKO, Martin - MOSNÁČEK, Jaroslav. Preparation of functional copolymers of alpha-methylene-gamma-butyrolactone and epsilon-caprolactone. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 179-180. ISBN 978-80-970923-7-5.

AFH07 HRČKOVÁ, Ľudmila - KOLLÁR, Jozef - CHMELA, Štefan - MACOVÁ, Eva - ŠIŠKOVÁ, Alena - BEREK, Dušan. Syntéza makroiniciátorov a príprava diblokových kopolymérov. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11.

september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 148. ISSN 1336-7242.

AFH08 HRONKOVIČ, J. - PREŤO, J. - VANKO, V. - HUDEC, I. - CHODÁK, Ivan. Antioxidant effect of lignosulfonate in sidewall rubber compound. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 193-195. ISBN 978-80-970923-7-5.

AFH09 JANIGOVÁ, Ivica - RYCHLÝ, Jozef - CSOMOROVÁ, Katarína - RYCHLÁ, Lýdia. Degradácia celulózy a jej derivátov. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 149-150. ISSN 1336-7242.

AFH10 JOKRLLOVÁ, J. - ČÍK, G. - ŠERŠEŇ, F. - ŠVAJDLENKOVÁ, Helena - LUKEŠOVÁ, Miroslava. Využitie modifikovaných zeolitov na fotokatalytickú redukciu CO2. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 168-169. ISSN 1336-7242.

AFH11 KULIČEK, Jaroslav - MIČUŠÍK, Matej - SCHERBAHN, V. - MIRSKÝ, V. M. - OMASTOVÁ, Mária. Electrodes decorated by metal nanoparticles for sensing application. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 84. ISSN 1336-7242.

AFH12 KULIČEK, Jaroslav - MIČUŠÍK, Matej - SCHERBAHN, V. - MIRSKY, V. M. - LOBOTKA, P. - RADNÓCZI, G. - OMASTOVÁ, Mária. Layer-by -layer deposition of metal ionic nanocolloids on the gold electrode surface. In The 2nd International conference on nanomaterials: Fundamentals and aaplications : Book of abstracts. Košice, 26.-28.10.2015. - Košice : NFA, 2015, p. 35. ISBN 978-80-8152-312-0.

AFH13 MORAVČÍKOVÁ, Daniela - KOLLÁR, Jozef - MRLÍK, M. - KRONEKOVÁ, Zuzana - LACÍK, Igor - MOSNÁČEK, Jaroslav. Tulips as a source of monomer for superabsorbent hydrogels. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 91. ISSN 1336-7242.

AFH14 NÓGELLOVÁ, Zuzana - JOCHEC MOŠKOVÁ, Daniela - SEDNIČKOVÁ, Michaela - CHODÁK, Ivan. Vlastnosti nanokompozitov na báze termoplastickej matrice. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 156. ISSN 1336-7242.

AFH15 NOVÁK, Igor - *POPELKA, Anton* - LEHOCKÝ, M. - VALENTIN, Marian - CHODÁK, Ivan - PRACHÁR, Jozef. Antibacterial pre-treatment of polyethylene using cold plasma. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 92-93. ISBN 978-80-970923-7-5.

AFH16 OMASTOVÁ, Mária - ŠPITALSKÝ, Zdenko - ŠIFFALOVIČ, P. - KONERACKÁ, M. - PASTOREKOVÁ, S. Surface modification of carbon nanostructures for advanced application. In The 2nd International conference on nanomaterials: Fundamentals and aaplications : Book of abstracts. Košice, 26.-28.10.2015. - Košice : NFA, 2015, p. 59. ISBN 978-80-8152-312-0.

AFH17 PIDLUZHNA, A. - PODHRADSKÁ, Silvia - MATULKA, D. - OMASTOVÁ, Mária. New composite electrode materials for lithium batteries. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 157. ISSN 1336-7242.

AFH18 PODHRADSKÁ, Silvia - MIČUŠÍK, Matej - ŠIVOVÁ, Mária - IVANIČ, František - CHODÁK, Ivan. Correlation of electrical conductivity and mechanical properties of electroconductive composites based on elastometric or thermoplastic matrices. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 220-222. ISBN 978-80-970923-7-5.

AFH19 RÁZGA, Filip - NÉMETHOVÁ, Veronika - MORAVČÍKOVÁ, Daniela - RACIL, Z. - ZACKOVA, D. - DVORAKOVA, D. - JURCEK, T. - MAYER, J. Can we predict resistance in CML? - A single center experience. In XVII. Slovensko-český hematologický a transfuziologický zjazd : 24. 27. september 2015, Bratislava : abstrakty prednášok. - Bratislava : A-medi management, 2015, s. 61. ISBN 978-80-89797-02-8.

AFH20 SEDNIČKOVÁ, Michaela - JOCHEC MOŠKOVÁ, Daniela - JANIGOVÁ, Ivica - JANKOVIČ, Ľ. - CHODÁK, Ivan. Influence of surface modification of montmorillonite on rubber composites. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 159. ISSN 1336-7242.

AFH21 ŠPITALSKÝ, Zdenko. Grafén - polymérne nanokompozity na povrchovú úpravu textílií. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 91. ISSN 1336-7242.

AFH22 ŠPITALSKÝ, Zdenko - PROSTREDNÝ, M. - *KRUPA, Igor*. Electrically conductive composites based on an elastomeric matrix filled with expanded graphite as a potential oil sensing material. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 126-127. ISBN 978-80-970923-7-5.

AFH23 ŠRÁMKOVÁ, Petra - KRONEK, Juraj. Príprava hypervetvených poly(esteramidov) a poly(éteramidov) ako mikroiniciátorov pre katiónovú polymerizáciu 2-oxazolínov. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel : 67. Zjazd chemikov : Horný Smokovec, 7.- 11. september 2015. - Bratislava : Slovenská chemická spoločnosť, 2015, 2015, roč.11, č. 1, s. 92. ISSN 1336-7242.

AFH24 VALENTIN, Marian - NOVÁK, Igor - OMASTOVÁ, Mária - CHODÁK, Ivan - PRACHÁR, Jozef - ŽIGO, Ondrej. Study of nanomechanical properties of plasma treated poly(lactic acid) samples with different crystallinity content. In PMA 2015 & SRC 2015 : book of proceedings. - Bratislava : STU, Faculty of Chemical and Food Technology & Polymer Institute of SAS, 2015, p. 138. ISBN 978-80-970923-7-5.

BDF Odborné práce v ostatných domácich časopisoch

BDF01 LACÍK, Igor. Výskum enkapsulovaných ostrovčekov pokračuje. In Diabetik, 2015, roč. 14, č. 1-2, s. 28-29. ISSN 1336-0426.

BDF02 NOVÁK, Igor - ŽIGO, Ondrej - VALENTIN, Marian. Polymérne materiály a ich využitie pri výrobe automobilov. In Plastics Production, 2015, roč. X, č. 1, s. 52-54. ISSN 1802-1549.

BDF03 NOVÁK, Igor - ŽIGO, Ondrej - VALENTIN, Marian - PRACHÁR, Jozef. Aplikácie polymérov a využitie lepenia pri výrobe automobilov pri súčasnej výrobe automobilov. In Plastics Production, 2015, roč. X, č. 2, s.66-68. ISSN 1802-1549.

GII Rôzne publikácie a dokumenty, ktoré nemožno zaradiť do žiadnej z predchádzajúcich kategórií

GII01 HVILSTED, S. - OMASTOVÁ, Mária. Conduction polymeric materials - EUPOC 2015. In La Chimica e l´Industria, 2015, vol. 2, no.7, 3 p. ISSN 2283-5458.

Ohlasy (citácie):
(mená pracovníkov ústavu sú podčiarknuté; mená bývalých pracovníkov sú fondom kurzíva)

ABC Kapitoly vo vedeckých monografiách vydané v zahraničných vydavateľstvách

ABC01 CHODÁK, Ivan. Polyhydroxyalkanoates : Origin, properties and applications. In Monomers, polymers and composites from renewable resources. - Oxford : Elsevier, 2008, chapter. 22, P. 451 - 477. ISBN 978-0-08-045316-3.

Citácie:

1. [1.1] CRETOIS, R. - FOLLAIN, N. - DARGENT, E. - SOULESTIN, J. - BOURBIGOT, S. - MARAIS, S. - LEBRUN, L. Microstructure and barrier properties of PHBV/organoclays bionanocomposites. In JOURNAL OF MEMBRANE SCIENCE. ISSN 0376-7388, OCT 1 2014, vol. 467, p. 56-66., WOS

2. [1.1] OKOS, M.R. The generic extrusion process I: Thermomechanical plasticating of polymers and polymer melt forming. In EXTRUSION PROCESSING TECHNOLOGY: FOOD AND NON-FOOD BIOMATERIALS. 2014, p. 125-171., WOS

3. [1.1] ZHANG, D.N. Lightweight Materials from Biofibers and Biopolymers. In LIGHTWEIGHT MATERIALS FROM BIOPOLYMERS AND BIOFIBERS. ISSN 0097-6156, 2014, vol. 1175, p. 1-20., WOS

4. [1.2] BOUVIER, J.M.- CAMPANELLA, O.H. Extrusion Processing Technology: Food and Non-Food Biomaterials. (2014) Extrusion Processing Technology: Food and Non-Food Biomaterials, p. 1-518. DOI: 10.1002/9781118541685, Scopus

5. [1.2] GANDINI, A.- LACERDA, T.M. From monomers to polymers from renewable resources: Recent advances. (2014) Progress in Polymer Science, 48, p. 1-39. DOI: 10.1016/j.progpolymsci.2014.11.002, Scopus

ABC02 MOULIK, S. P. - RAKSHIT, A. K. - CAPEK, Ignác. Microemulsions as templates for nanomaterials. Editor Cosima Stubenrauch. In Microemulsions: background, new concepts, applications, perspectives. - Oxford : Wiley - Blackwell Publishing, 2009, p. 180 - 210. ISBN 978-1-4051-6782-6.

Citácie:

1. [1.2] CHIN, S.F.- AZMAN, A.- PANG, S.C. Size controlled synthesis of starch nanoparticles by a microemulsion method. (2014) Journal of Nanomaterials, 2014, art. no. 763736, DOI: 10.1155/2014/763736, Scopus

ADCA Vedecké práce v zahraničných karentovaných časopisoch impaktovaných

ADCA01 ACHIMSKY, I. - AUDOUIN, L. - VERDU, J. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia. On a transition at 80 C. in polypropylene oxidation kinetics. In Polymer Degradation and Stability, 1997, vol. 58, p. 283- 289. (0.653 - IF1996). (1997 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] BAJER, K. - BRAUN, U. Different aspects of the accelerated oxidation of polypropylene at increased pressure in an autoclave with regard to temperature, pretreatment and exposure media. In POLYMER TESTING. ISSN 0142-9418, AUG 2014, vol. 37, p. 102-111., WOS

2. [1.1] FRANCOIS-HEUDE, A. - RICHAUD, E. - DESNOUX, E. - COLIN, X. Influence of temperature, UV-light wavelength and intensity on polypropylene photothermal oxidation. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, FEB 2014, vol. 100, p. 10-20., WOS

3. [1.1] GRABMAYER, K. - WALLNER, G.M. - BEISSMANN, S. - BRAUN, U. -

STEFFEN, R. - NITSCHE, D. - RODER, B. - BUCHBERGER, W. - LANG, R.W. Accelerated aging of polyethylene materials at high oxygen pressure characterized by photoluminescence spectroscopy and established aging characterization methods. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, NOV 2014, vol. 109, SI, p. 40-49., WOS

4. [1.1] XIANG, K.W. - WANG, X.A. - HUANG, G.S. - ZHENG, J. - HUANG, J.Y. - LI, G.X. Thermogravimetric studies of styrene-butadiene rubber (SBR) after accelerated thermal aging. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, JAN 2014, vol. 115, no. 1, p. 247-254., WOS

ADCA02 ACHIMSKY, L. - AUDOUIN, L. - VERDU, J. - RYCHLÁ, Lýdia - RYCHLÝ, Jozef. The effect of oxygen pressure on the rate of polypropylene oxidation determined by chemiluminescence. In European Polymer Journal, 1999, vol. 35, p. 557-563. (0.600 - IF1998). (1999 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.2] AGUIRRE-VARGAS, F.- KIRKPATRICK, D. Accelerated aging of fusion bonded epoxy coatings (Part II). (2014) NACE - International Corrosion Conference Series, 9 p., Scopus

ADCA03 ALEXY, P. - FERANC, J. - KRAMÁROVÁ, Z. - HAJŠOVÁ, M. - ĎURAČKA, M. - JOCHEC MOŠKOVÁ, Daniela - CHODÁK, Ivan - ILISCH, S. Application of lignins in rubber compounds. In KGK - Kautschuk Gummi Kunstoffe, 2008, no. Januar/Februar, p. 26-32. (0.364 - IF2007). (2008 - Current Contents). ISSN 0948-3276.

Citácie:

1. [1.1] BAHL, K. - JANA, S.C. Surface modification of lignosulfonates for reinforcement of styrene-butadiene rubber compounds. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, APR 5 2014, vol. 131, no. 7., WOS

2. [1.2] BAHL, K.- SWANSON, N.- PUGH, C.- JANA, S.C. Polybutadiene-g-polypentafluorostyrene as a coupling agent for lignin-filled rubber compounds. (2014) Polymer (United Kingdom), 55 (26), p. 6754-6763. DOI: 10.1016/j.polymer.2014.11.008, Scopus

3. [1.2] ZHOU, M.S.- MO, X.K.- LOU, H.M.- YANG, D.J.- QIU, X.Q. Effects of different pretreated enzymatic hydrolysis lignins on reinforcement of acrylonitrile butadiene rubber. (2014) Gao Xiao Hua Xue Gong Cheng Xue Bao/Journal of Chemical Engineering of Chinese Universities, 28 (4), p. 830-836. DOI: 10.3969/j.issn.1003-9015.2014.04.022, Scopus

ADCA04 ALEXY, P. - LACÍK, Igor - ŠIMKOVÁ, B. - *BAKOŠ, Dušan* - PRÓNAYOVÁ, N. - LIPTAJ, T. - HANZELOVÁ, S. - VÁROŠOVÁ, M. Effect of melt processing on thermo-mechanical degradation of poly(vinyl alcohol)s. In Polymer Degradation and Stability, 2004, vol. 85, p. 823 - 830. (1.405 - IF2003). (2004 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] GONG, X.H. - TANG, C.Y. - PAN, L. - HAO, Z.H. - TSUI, C.P. Characterization of poly(vinyl alcohol) (PVA)/ZnO nanocomposites prepared by a one-pot method. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, APR 2014, vol. 60, p. 144-149., WOS

2. [1.1] LANG, B. - MCGINITY, J.W. - WILLIAMS, R.O. Hot-melt extrusion - basic principles and pharmaceutical applications. In DRUG DEVELOPMENT AND INDUSTRIAL PHARMACY. ISSN 0363-9045, SEP 2014, vol. 40, no. 9, p. 1133-1155., WOS

ADCA05 ALMAADEED, M. A. - NÓGELLOVÁ, Zuzana - MIČUŠÍK, Matej - NOVÁK, Igor - *KRUPA, Igor*. Mechanical. sorption and adhesive properties of composites based on low density polyethylene filled with date palm wood powder. In Materials and Design, 2014, vol. 53, p. 29 - 37. (3.171 - IF2013). (2014 - Current Contents). ISSN 0261-3069.

Citácie:

1. [1.1] ESSABIR, H. - BENSALAH, M.O. - BOUHFID, R. - QAISS, A. Fabrication and characterization of apricot shells particles reinforced high density polyethylene based bio-composites: Mechanical and thermal properties. In JOURNAL OF BIOBASED MATERIALS AND BIOENERGY. ISSN 1556-6560, JUN 2014, vol. 8, no. 3, p. 344-351., WOS

2. [1.1] KHORAMISHAD, H. - RAZAVI, S.M.J. Metallic fiber-reinforced adhesively bonded joints. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, DEC 2014, vol. 55, p. 114-122., WOS

3. [1.1] LUO, X.G. - LI, J.W. - FENG, J. - YANG, T.T. - LIN, X.Y. Mechanical and thermal performance of distillers grains filled poly(butylene succinate) composites. In MATERIALS & DESIGN. ISSN 0261-3069, MAY 2014, vol. 57, p. 195-200., WOS

4. [1.1] SPIRIDON, I. I. Natural fiber-polyolefin composites. Mini-review. In CELLULOSE CHEMISTRY AND TECHNOLOGY. ISSN 0576-9787, JUL-AUG 2014, vol. 48, no. 7-8, p. 599-611., WOS

ADCA06 ALMAADEED, M. A. - NÓGELLOVÁ, Zuzana - JANIGOVÁ, Ivica - *KRUPA, Igor*. Improved mechanical properties of recycled linear low-density polyethylene composites filled with date palm wood powder. In Materials and Design, 2014, vol. 58, p. 209-216. (3.171 - IF2013). (2014 - Current Contents). ISSN 0261-3069.

Citácie:

1. [1.1] BENMANSOUR, N. - AGOUDJIL, B. - GHERABLI, A. - KARECHE, A. - BOUDENNE, A. Thermal and mechanical performance of natural mortar reinforced with date palm fibers for use as insulating materials in building. In ENERGY AND BUILDINGS. ISSN 0378-7788, 2014, vol. 81, p. 98-104., WOS

ADCA07 ALVAREZ-MANCENIDO, F. - LANDIN, M. - LACÍK, Igor - MARTÍNEZ-PACHECO, R. Konjac glucomannan and konjac glucomannan/xanthan gum mixtures as excipients for controlled drug delivery systems. Diffusion of small drugs. In International Journal of Pharmaceutics, 2008, vol. 349, p.11-18. (2.408 - IF2007). (2008 - Current Contents). ISSN 0378-5173.

Citácie:

1. [1.1] LIU, Y. - SHANG, Y. - SHAN, G.R. Infinite dilution diffusion coefficients of chlorinated methane in poly(ethylene terephthalate) by inverse gas chromatography. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, DEC 17 2014, vol. 53, no. 50, p. 19533-19539., WOS

2. [1.1] LUO, Y.C. - WANG, Q. Recent development of chitosan-based polyelectrolyte complexes with natural polysaccharides for drug delivery. In INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES. ISSN 0141-8130, MAR 2014, vol. 64, p. 353-367., WOS

3. [1.1] MARRAS-MARQUEZ, T. - PENA, J. - VEIGA-OCHOA, M.D. Agarose drug delivery systems upgraded by surfactants inclusion: Critical role of the pore architecture. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, MAR 15 2014, vol. 103, p. 359-368., WOS

4. [1.1] PAQUET, E. - HUSSAIN, R. - BAZINET, L. - MAKHLOUF, J. - LEMIEUX, S. - TURGEON, S.L. Effect of processing treatments and storage conditions on stability of fruit juice based beverages enriched with dietary fibers alone and in mixture with xanthan gum. In LWT-FOOD SCIENCE AND

TECHNOLOGY. ISSN 0023-6438, JAN 2014, vol. 55, no. 1, p. 131-138., WOS
5. [1.1] SHAHBUDDIN, M. - BULLOCK, A.J. - MACNEIL, S. - RIMMER, S. Glucomannan-poly(N-vinyl pyrrolidinone) bicomponent hydrogels for wound healing. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, 2014, vol. 2, no. 6, p. 727-738., WOS
6. [1.1] SOSNIK, A. - DAS NEVES, J. - SARMENTO, B. Mucoadhesive polymers in the design of nano-drug delivery systems for administration by non-parenteral routes: A review. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, DEC 2014, vol. 39, no. 12, p. 2030-2075., WOS
7. [1.1] YE, T. - WANG, L. - XU, W. - LIU, J.J. - WANG, Y.T. - ZHU, K.K. - WANG, S.J. - LI, B. - WANG, C. An approach for prominent enhancement of the quality of konjac flour: Dimethyl sulfoxide as medium. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, JAN 2 2014, vol. 99, p. 173-179., WOS

ADCA08 ASADINEZHAD, A. - NOVÁK, Igor - LEHOCKÝ, M. - BÍLEK, F. - VESEL, A. - JUNKAR, I. - SÁHA, P. - POPELKA, Anton. Polysaccharides coatings on medical-grade PVC: A probe into surface characteristics and the extent of bacterial adhesion. In Molecules, 2010, vol. 15, p. 1007 - 1027. (1.738 - IF2009). (2010 - Current Contents). ISSN 1420-3049.

Citácie:
1. [1.1] CAO, B. - LI, L.L. - WU, H.Y. - TANG, Q. - SUN, B.B. - DONG, H. - ZHE, J. - CHENG, G. Zwitteration of dextran: a facile route to integrate antifouling, switchability and optical transparency into natural polymers. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2014, vol. 50, no. 24, p. 3234-3237., WOS
2. [1.1] TRENTIN, D.S. - BONATTO, F. - ZIMMER, K.R. - RIBEIRO, V.B. - ANTUNES, A.L.S. - BARTH, A.L. - SOARES, G.V. - KRUG, C. - BAUMVOL, I.J.R. - MACEDO, A.J. N-2/H-2 plasma surface modifications of polystyrene inhibit the adhesion of multidrug resistant bacteria. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, APR 25 2014, vol. 245, p. 84-91., WOS

ADCA09 ASADINEZHAD, A. - NOVÁK, Igor - LEHOCKÝ, M. - SEDLAŘÍK, V. - VESEL, A.- JUNKAR, I. - SÁHA, P. - CHODÁK, Ivan. A physicochemical approach to render antibacterial surfaces on plasma-treated medical-grade PVC: Irgasan coating. In Plasma Processes and Polymers, 2010, vol. 7, p. 504 - 514. (4.037 - IF2009). (2010 - Current Contents). ISSN 1612-8850.

Citácie:
1. [1.1] HADJESFANDIARI, N. - YU, K. - MEI, Y. - KIZHAKKEDATHU, J.N. Polymer brush-based approaches for the development of infection-resistant surfaces. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, AUG 21 2014, vol. 2, no. 31, p. 4968-4978., WOS
2. [1.1] KRISHNAMOORTHY, M. - HAKOBYAN, S. - RAMSTEDT, M. - GAUTROT, J.E. Surface-initiated polymer brushes in the biomedical field: Applications in membrane science, biosensing, cell culture, regenerative medicine and antibacterial coatings. In CHEMICAL REVIEWS. ISSN 0009-2665, NOV 12 2014, vol. 114, no. 21, p. 10976-11026., WOS
3. [1.1] MINARIK, A. - RAFAJOVA, M. - RAJNOHOVA, E. - SMOLKA, P. - MRACEK, A. Self-organised patterns in polymeric films solidified from diluted solutions - The effect of the substrate surface properties. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, NOV 2014, vol. 78, p. 615-623., WOS
4. [1.2] QIAO, Y.- LIU, X. Biocompatible coating. (2014) Comprehensive Materials Processing, 4, p. 425-447. DOI: 10.1016/B978-0-08-096532-1.00418-0, Scopus

ADCA10 ASADINEZHAD, A. - NOVÁK, Igor - LEHOCKÝ, M. - SEDLAŘÍK, V. - VESEL, A. - JUNKAR, I. - SÁHA, P. - CHODÁK, Ivan. An in vitro bacterial adhesion assesment of surface-modified medical-grade PVC. In Colloids and Surfaces B, 2010, vol. 77, p. 246-256. (2.600 - IF2009). (2010 - Current Contents). ISSN 0927-7765.

Citácie:

1. [1.1] GRATZL, G. - PAULIK, C. - HILD, S. - GUGGENBICHLER, J.P. - LACKNER, M. Antimicrobial activity of poly(acrylic acid) block copolymers. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, MAY 1 2014, vol. 38, p. 94-100., WOS

2. [1.1] KRISHNAMOORTHY, M. - HAKOBYAN, S. - RAMSTEDT, M. - GAUTROT, J.E. Surface-initiated polymer brushes in the biomedical field: Applications in membrane science, biosensing, cell culture, regenerative medicine and antibacterial coatings. In CHEMICAL REVIEWS. ISSN 0009-2665, NOV 12 2014, vol. 114, no. 21, p. 10976-11026., WOS

3. [1.1] MINARIK, A. - RAFAJOVA, M. - RAJNOHOVA, E. - SMOLKA, P. - MRACEK, A. Self-organised patterns in polymeric films solidified from diluted solutions - The effect of the substrate surface properties. In INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER. ISSN 0017-9310, NOV 2014, vol. 78, p. 615-623., WOS

4. [1.1] VAZQUEZ-GONZALEZ, B. - MELENDEZ-ORTIZ, H.I. - DIAZ-GOMEZ, L. - ALVAREZ-LORENZO, C. - CONCHEIRO, A. - BUCIO, E. Silicone rubber modified with methacrylic acid to host antiseptic drugs. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, OCT 2014, vol. 299, no. 10, p. 1240-1250., WOS

5. [1.2] QIAO, Y.- LIU, X. Biocompatible coating. (2014) Comprehensive Materials Processing, 4, p. 425-447. DOI: 10.1016/B978-0-08-096532-1.00418-0, Scopus

ADCA11 ATTIA, M. F. - AZIB, T. - SALMI, Z. - SINGH, A. - DECORSE, P. - BATTAGLINI, N. - LECOQ, H. - OMASTOVÁ, Mária - HIGAZY, A. A. - ELSHAFEI, A. M. - HASHEM, M. M. - CHEHIMI, M. M. One-step UV-induced modification of cellulose fabrics by polypyrrole/silver nanocomposite films. In Journal of Colloid and Interface Science, 2013, vol. 393, p. 130 - 137. (3.172 - IF2012). (2013 - Current Contents). ISSN 0021-9797.

Citácie:

1. [1.1] MA, M.G. - DENG, F. - YAO, K. Manganese-containing cellulose nanocomposites: The restrain effect of cellulose treated with NaOH/urea aqueous solutions. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, OCT 13 2014, vol. 111, p. 230-235., WOS

2. [1.1] TAKEOKA, H. - FUKUI, N. - SAKURAI, S. - NAKAMURA, Y. - FUJII, S. Nanomorphology characterization of sterically stabilized polypyrrole-palladium nanocomposite particles. In POLYMER JOURNAL. ISSN 0032-3896, OCT 2014, vol. 46, no. 10, p. 704-709., WOS

ADCA12 BAHATTAB, M A. - MOSNÁČEK, Jaroslav - BASFAR, A. A. - SHUKRI, T M. Cross-linked poly(ethylene vinyl acetate) (EVA)/low density polyethylene(LDPE)/metal hydroxides composites for wire and cable applications. In Polymer Bulletin, 2010, vol. 64, p. 569 - 580. (1.014 - IF2009). (2010 - Current Contents). ISSN 0170-0839.

Citácie:

1. [1.1] CABRERA-ALVAREZ, E.N. - RAMOS-DEVALLE, L.F. - SANCHEZ-VALDES, S. - CANDIA-GARCIA, A. - SORIANO-CORRAL, F. - RAMIREZ-VARGAS, E. - IBARRA-ALONSO, M. - PATINO-SOTO, P. Study of the silane

modification of magnesium hydroxide and their effects on the flame retardant and tensile properties of high density polyethylene Nanocomposites. In POLYMER COMPOSITES. ISSN 0272-8397, JUN 2014, vol. 35, no. 6, p. 1060-1069., WOS
2. [1.1] CHANG, M.K. - HWANG, S.S. - LIU, S.P. Flame retardancy and thermal stability of ethylene-vinyl acetate copolymer nanocomposites with alumina trihydrate and montmorillonite. In JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY. ISSN 1226-086X, JUL 25 2014, vol. 20, no. 4, p. 1596-1601., WOS
3. [1.1] JIA, C.X. - QIAN, Y. - CHEN, X.L. - LIU, Y. Flame retardant ethylene-vinyl acetate composites based on layered double hydroxides with zinc hydroxystannate. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, DEC 2014, vol. 54, no. 12, p. 2918-2924., WOS
4. [1.1] LIU, S.P. Flame retardant and mechanical properties of polyethylene/magnesium hydroxide/montmorillonite nanocomposites. In JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY. ISSN 1226-086X, JUL 25 2014, vol. 20, no. 4, p. 2401-2408., WOS
5. [1.1] PAN, J. - MU, J. - WU, Z.X. - ZHANG, X.T. Effect of nitrogen-phosphorus fire retardant blended with Mg(OH)(2)/Al(OH)(3) and nano-SiO2 on fire-retardant behavior and hygroscopicity of poplar. In FIRE AND MATERIALS. ISSN 0308-0501, DEC 2014, vol. 38, no. 8, p. 817-826., WOS
6. [1.2] SABET, M.- SOLEIMANI, H.- HASSAN, A.- RATNAM, C.T. Electron beam irradiation of LDPE filled with calcium carbonate and metal hydroxides. (2014) Polymer - Plastics Technology and Engineering, 53 (13), p. 1362-1366. DOI: 10.1080/03602559.2013.854385, Scopus
7. [1.2] SABET, M.- SOLEIMANI, H.- HASSAN, A.- RATNAM, C.T. The effect of addition EVA and LDPE-g-MAH on irradiated LDPE filled with metal hydroxides. (2014) Polymer - Plastics Technology and Engineering, 53 (8), p. 775-783. DOI: 10.1080/03602559.2014.886041, Scopus

ADCA13 BARNER-KOWOLLIK, Ch. - BEUERMANN, S. - BUBACK, M. - CASTIGNOLLES, P. - CHARLEUX, B. - COOTE, M. L. - HUTCHINSON, R. A. - JUNKERS, T. - LACÍK, Igor - RUSSELL, G. T. - STACH, Marek - VAN HERK, A. M. Critically evaluated rate coefficients in radical polymerization.- 7. Secondary-radical propagation rate coefficients for methyl acrylate in the bulk. In Polymer Chemistry, 2014, vol. 5, p. 204 - 212. (5.368 - IF2013). (2014 - Current Contents). ISSN 1759-9954.

Citácie:

1. [1.1] BARTOSZEK, N. - SAWICKI, P. - KADLUBOWSKI, S. - ULANSKI, P. - ROSIAK, J.M. Determination of propagation rate coefficient for the polymerization of N-vinylpyrrolidone in aqueous solution by pulsed electron polymerization and size exclusion chromatography. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 639-642., WOS
2. [1.1] MOGHADAM, N. - SRINIVASAN, S. - GRADY, M.C. - RAPPE, A.M. - SOROUSH, M. Theoretical study of chain transfer to solvent reactions of alkyl acrylates. In JOURNAL OF PHYSICAL CHEMISTRY A. ISSN 1089-5639, JUL 24 2014, vol. 118, no. 29, p. 5474-5487., WOS

ADCA14 BARTHET, C. - ARMES, S.P. - CHEHIMI, M.M. - BILEM, C. - OMASTOVÁ, Mária. Surface characterization of polyaniline-coated polystyrene latexes. In Langmuir, 1998, vol.14, no.18, p. 5032 - 5038. (2.852 - IF1997). (1998 - Current Contents, SCOPUS). ISSN 0743-7463.

Citácie:

1. [1.2] TAGHIPOUR, Z.- EISAZADEH, H.- TANZIFI, M. Modification of polyaniline/polystyrene and polyaniline/metal oxide structure by surfactant.

(2014) International Journal of Engineering, Transactions B: Applications, 27 (2), p. 227-238. DOI: 10.5829/idosi.ije.2014.27.02b.07, Scopus

ADCA15 *BARTOŇ, Jaroslav* - KAWAMOTO, S. - FUJIMOTO, K. - KAWAGUCHI, H. - CAPEK, Ignác. Preparation of partly hydrophobized, crosslinked polyacrylamide particles by terpolymerization of acrylamide/N,N-methylenebisacrylamide/styrene in inverse microemulsion. In Polymer International, 2000, vol. 49, p. 358-366. (0.820 - IF1999). (2000 - Current Contents). ISSN 0959-8103.

Citácie:

1. [1.1] ASUA, J.M. Challenges for industrialization of miniemulsion polymerization. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, OCT 2014, vol. 39, no. 10, SI, p. 1797-1826., WOS

2. [1.1] MOLLA, M.R. - MARCINKO, T. - PRASAD, P. - DEMING, D. - GARMAN, S.C. - THAYUMANAVAN, S. Unlocking a caged lysosomal protein from a polymeric nanogel with a pH trigger. In BIOMACROMOLECULES. ISSN 1525-7797, NOV 2014, vol. 15, no. 11, p. 4046-4053., WOS

ADCA16 BARTOŠ, Josef - ŠAUŠA, O. - BANDŽUCH, P. - ZRUBCOVÁ, J. - KRIŠTIAK, Jozef. Free volume factor in supercooled liquid dynamics. In Journal of Non-Crystalline Solids. - Amsterdam : Elsevier Science, 2002, vol. 307, sEP, p. 417-425. (1.363 - IF2001). (2002 - Current Contents, SCOPUS). ISSN 0022-3093.

Citácie:

1. [1.1] ROUSSENOVA, M. - ALAM, M. A. - TOWNROW, S. - KILBURN, D. - SOKOL, P. E. - GUILLET-NICOLAS, R. - KLEITZ, F. A nano-scale free volume perspective on the glass transition of supercooled water in confinement. In NEW JOURNAL OF PHYSICS. ISSN 1367-2630, 2014, vol. 16, OCT, 103030., WOS

ADCA17 BARTOŠ, Josef - *TIŇO, Jozef*. Study of the mechanism of macroradical reactions in solid polymers. 2. Decay of alkyl macroradicals in linear polyethylene at low-temperatures. In Polymer : the International Journal for the Science and Technology of Polymers, 1986, vol. 27, no. 2, p. 281 - 289. (1986 - Current Contents, SCOPUS). ISSN 0032-3861.

Citácie:

1. [1.1] ADDIEGO, F. - MIHAI, I. - MARTI, D. - WANG, K. - TONIAZZO, V. - RUCH, D. Polyaniline as potential radical scavenger for ultra-high molecular weight polyethylene. In SYNTHETIC METALS. ISSN 0379-6779, DEC 2014, vol. 198, p. 196-202., WOS

ADCA18 BARTOŠ, Josef - *TIŇO, Jozef*. Study of the mechanism of macroradical reactions. 1. Molecular aspects of reactivity and activation energy model of reactions. In Polymer : the International Journal for the Science and Technology of Polymers, 1984, vol. 25, no.2, p.274 - 278. ISSN 0032-3861.

Citácie:

1. [1.1] ADDIEGO, F. - MIHAI, I. - MARTI, D. - WANG, K. - TONIAZZO, V. - RUCH, D. Polyaniline as potential radical scavenger for ultra-high molecular weight polyethylene. In SYNTHETIC METALS. ISSN 0379-6779, DEC 2014, vol. 198, p. 196-202., WOS

ADCA19 BARTOŠ, Josef - ŠAUŠA, O. - KRIŠTIAK, J. - BLOCHOWICZ, T. - RÖSSLER, E. Free-volume microstructure of glycerol and its supercooled liquid-state dynamics. In Journal of Physics: Condensed Matter, 2001, vol. 13, no. 50, p. 11473-11484. (1.608 - IF2000). (2001 - Current Contents, WOS, SCOPUS). ISSN 0953-8984.

Citácie:

1. [1.1] ROUSSENOVA, M. - ALAM, M. A. - TOWNROW, S. - KILBURN, D. - SOKOL, P. E. - GUILLET-NICOLAS, R. - KLEITZ, F. A nano-scale free volume perspective on the glass transition of supercooled water in confinement. In NEW JOURNAL OF PHYSICS. ISSN 1367-2630, 2014, vol. 16, 103030., WOS

ADCA20 BARTOŠ, Josef. Positron annihiation response and viscosity of a glass-forming system within the two-order parameter model of liquids. In Journal of Physics: Condensed Matter, 2008, vol. 20, 285101, 5 p. (1.886 - IF2007). (2008 - Current Contents, WOS, SCOPUS). ISSN 0953-8984.

Citácie:

1. [1.1] ROUSSENOVA, M. - ALAM, M.A. - TOWNROW, S. - KILBURN, D. - SOKOL, P.E. - GUILLET-NICOLAS, R. - KLEITZ, F. A nano-scale free volume perspective on the glass transition of supercooled water in confinement. In NEW JOURNAL OF PHYSICS. ISSN 1367-2630, OCT 20 2014, vol. 16., WOS

ADCA21 BARTOŠ, Josef - ŠAUŠA, O. - SCHWARTZ, G. A. - ALEGRÍA, A. - ALBERDI, J. M. - ARBE, A. - KRIŠTIAK, J. - COLMENERO, J. Positron annihilation and relaxation dynamics from dielectric spectroscopy and nuclear magnetic resonance: Cis-trans-1,4-poly(butadiene). In Journal of Chemical Physics, 2011, vol.134, art.no.164507 p.1-10. (2.921 - IF2010). (2011 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] NGAI, K.L. - HABASAKI, J. An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T-c or T-B. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 21 2014, vol. 141, no. 11., WOS

2. [1.1] ROUSSENOVA, M. - ALAM, M.A. - TOWNROW, S. - KILBURN, D. - SOKOL, P.E. - GUILLET-NICOLAS, R. - KLEITZ, F. A nano-scale free volume perspective on the glass transition of supercooled water in confinement. In NEW JOURNAL OF PHYSICS. ISSN 1367-2630, OCT 20 2014, vol. 16., WOS

3. [1.1] WU, X.B. - LIU, C.S. - NGAI, K.L. Origin of the crossover in dynamics of the sub-Rouse modes at the same temperature as the structural alpha-relaxation in polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 46, p. 9324-9333., WOS

ADCA22 BARTOŠ, Josef - BANDŽUCH, P. - ŠAUŠA, O. - KRIŠTIAKOVÁ, K. - KRIŠTIAK, J. - KANAYA, T. - JENNINGER, W. Free volume microstructure and its relationship to the chain dynamics in cis-1,4-poly(butadiene) as seen by positron annihilation lifetime spectroscopy. In Macromolecules, 1997, vol. 30, no. 22, p. 6906 - 6912. (3.331 - IF1996). (1997 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] NGAI, K.L. - HABASAKI, J. An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T-c or T-B. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 21 2014, vol. 141, no. 11., WOS

ADCA23 BARTOŠ, Josef - KRIŠTIAK, J. Free volume aspects of the strong-fragile classification of polymer liquids. In Journal of Non-Crystalline Solids, 1998, vol. 235, p. 293 -295. (1.017 - IF1997). (1998 - Current Contents, WOS, SCOPUS). ISSN 0022-3093.

Citácie:

1. [1.1] NGAI, K.L. - HABASAKI, J. An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T-c or T-B. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 21 2014, vol. 141, no. 11., WOS

2. [1.1] WU, X.B. - LIU, C.S. - NGAI, K.L. Origin of the crossover in dynamics of the sub-Rouse modes at the same temperature as the structural alpha-relaxation in polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 46, p. 9324-9333., WOS

ADCA24 BARTOŠ, Josef - *KLIMOVÁ, Marta*. A relationship between macroradical decay kinetics and alfa-segmental dynamics in glassyamorphous polymers. In Journal of Polymer Science: Part A - Polymer Chemistry, 1996, vol. 34, p. 1741-1746.

Citácie:
1. [1.1] RAO, N.R. - RAO, T.V. - REDDY, S.V.S.R. - RAO, B.S. Influence of gamma irradiation on chemical structure and thermal properties of polyethylene maleic anhydride. In JOURNAL OF POLYMER MATERIALS. ISSN 0973-8622, OCT-DEC 2014, vol. 31, no. 4, p. 503-515., WOS

ADCA25 BARTOŠ, Josef - MAJERNÍK, V. - ISKROVÁ, M. - ŠAUŠA, O. - KRIŠTIAK, J. - LUNKENHEIMER, P. - LOIDL, A. Positron annihilation response and broadband dielectric spectroscopy: Propylene carbonate. In Journal of Non-Crystalline Solids, 2010, vol. 356, p. 794 - 799. (1.252 - IF2009). (2010 - Current Contents, SCOPUS). ISSN 0022-3093.

Citácie:
1. [1.1] NGAI, K.L. - HABASAKI, J. An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T-c or T-B. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 21 2014, vol. 141, no. 11., WOS
2. [1.1] ROUSSENOVA, M. - ALAM, M.A. - TOWNROW, S. - KILBURN, D. - SOKOL, P.E. - GUILLET-NICOLAS, R. - KLEITZ, F. A nano-scale free volume perspective on the glass transition of supercooled water in confinement. In NEW JOURNAL OF PHYSICS. ISSN 1367-2630, OCT 20 2014, vol. 16., WOS
3. [1.1] WU, X.B. - LIU, C.S. - NGAI, K.L. Origin of the crossover in dynamics of the sub-Rouse modes at the same temperature as the structural alpha-relaxation in polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 46, p. 9324-9333., WOS

ADCA26 BARTOŠ, Josef - ŠVAJDLENKOVÁ, Helena - YU, Y. - DLUBEK, G. - KRAUSE-REHBERG, R. Molecular probe dynamics and free volume in glass-formers: 1,2- and 2,4-poly(butadiene)s. In Chemical Physics Letters, 2013, vol. 584, p. 88 - 92. (2.145 - IF2012). (2013 - Current Contents). ISSN 0009-2614.

Citácie:
1. [1.1] WU, X.B. - LIU, C.S. - NGAI, K.L. Origin of the crossover in dynamics of the sub-Rouse modes at the same temperature as the structural alpha-relaxation in polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 46, p. 9324-9333., WOS

ADCA27 BARTOŠ, Josef - ISKROVÁ, M. - KOHLER, M. - WEHN, R. - ŠAUŠA, O.- LUNKENHEIMER, P. - KRIŠTIAK, J. - LOIDL, A. Positron annihilation response and broadband dielectric spectroscopy: Salol. In European Physical Journal E : Soft Matter and Biological Physics, 2011, vol. 34, p. 104 - 114. (2.096 - IF2010). (2011 - Current Contents, WOS, SCOPUS). ISSN 1292-8941.

Citácie:
1. [1.2] RICHERT, R. Supercooled liquids and glasses by dielectric relaxation spectroscopy. (2014) Advances in Chemical Physics, 156, p. 101-195. DOI: 10.1002/9781118949702.ch4, Scopus

ADCA28 BARTOŠ, Josef - ŠAUŠA, O. - RAČKO, Dušan - KRIŠTIAK, J. - FONTANELLA, J. J. Positron annihilation lifetime response and relaxation dynamics in glycerol. In Journal of Non-Crystalline Solids, 2005, vol. 351, no. 33-36, p. 2599-2604. (1.433 - IF2004). (2005 - Current Contents, SCOPUS). ISSN 0022-3093.

Citácie:
1. [1.1] NGAI, K. L. - HABASAKI, J. An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T-c or T-B. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, 2014, vol. 141, no. 11, 114502., WOS
2. [1.1] WU, Xuebang - LIU, C. S. - NGAI, K. L. Origin of the crossover in dynamics of the sub-Rouse modes at the same temperature as the structural

alpha-relaxation in polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 46, pp. 9324., WOS

3. [1.2] ROUSSENOVA, M.- ALAM, M.A.- TOWNROW, S.- KILBURN, D.- SOKOL, P.E.-GUILLET-NICOLAS, R.- KLEITZ, F. A nano-scale free volume perspective on the glass transition of supercooled water in confinement. (2014) New Journal of Physics, 16, art. no. 103030, DOI: 10.1088/1367-2630/16/10/103030, Scopus

ADCA29 BASFAR, A. A. - MOSNÁČEK, Jaroslav - SHUKRI, T. M. - BAHATTAB, M. A. - NOIREAUX, P. - COUDREUSE, A. Mechanical and thermal properties of blends of low-density polyethylene and ethylene vinyl acetate crosslinked by both dicumyl peroxide and ionizing radiation for wire and cable applications. In Journal of Applied Polymer Science, 2008, vol. 107, p. 642 - 649. (1.008 - IF2007). (2008 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] LIU, L. - LIU, J.L. - CHEN, X.L. - JIAO, C.M. Synergistic effect between hollow glass beads and aluminium hydroxide in flame retardant EVA composites. In PLASTICS RUBBER AND COMPOSITES. ISSN 1465-8011, APR 2014, vol. 43, no. 3, p. 77-81., WOS

2. [1.1] LUJAN-ACOSTA, R. - SANCHEZ-VALDES, S. - RAMIREZ-VARGAS, E. - RAMOS-DEVALLE, L.F. - ESPINOZA-MARTINEZ, A.B. - RODRIGUEZ-FERNANDEZ, O.S. - LOZANO-RAMIREZ, T. - LAFLEUR, P.G. Effect of Amino alcohol functionalized polyethylene as compatibilizer for LDPE/EVA/clay/flame-retardant nanocomposites. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, AUG 14 2014, vol. 146, no. 3, p. 437-445., WOS

3. [1.1] ZHANG, X.H. - YANG, H.M. - SONG, Y.H. - ZHENG, Q. Influence of crosslinking on crystallization, rheological, and mechanical behaviors of high density polyethylene/ethylene-vinyl acetate copolymer blends. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, DEC 2014, vol. 54, no. 12, p. 2848-2858., WOS

4. [1.2] THERAVALAPPIL, R.- SVOBODA, P.- AKHTHAR, M.N. Effect of octene content on thermal and mechanical properties of crosslinked ethylene-octene copolymers. (2014) Society of Plastics Engineers - Technical Conference and Exhibition of the Society of Plastics Engineers, ANTEC DUBAI 2014, p. 44-49., Scopus

ADCA30 BENDLER, J. T. - FONTANELLA, J. J. - SHLESINGER, M. F. - BARTOŠ, Josef - ŠAUŠA, O. - KRIŠTIAK, J. Free-volume dynamics in glasses and supercooled liquids. In Physical Review E, 2005, vol. 71, no. 3, 031508. (2005 - Current Contents, SCOPUS). ISSN 1063-651-X.

Citácie:

1. [1.1] WANG, Yi-zhen - CHEN, Lan - WANG, Hai-yan - ZHANG, X. Frank - FU, Jun - XIONG, Xiao-min - ZHANG, Jin-xiu. Development of "fragility" in relaxor ferroelectrics. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, 2014, vol. 115, no. 5, 054106., WOS

ADCA31 BENKOVÁ, Zuzana - CIFRA, Peter. Simulation of semiflexible cyclic and linear chains moderately and strongly confined in nanochannels. In Macromolecules, 2012, vol. 45, p. 2597 - 2608. (5.167 - IF2011). (2012 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] DOLGUSHEV, M. - GUERIN, T. - BLUMEN, A. - BENICHOU, O. - VOITURIEZ, R. Gaussian semiflexible rings under angular and dihedral restrictions. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, JUL 7 2014, vol. 141, no. 1., WOS

2. [1.1] GAO, J. - TANG, P. - YANG, Y.L. - CHEN, J.Z.Y. Free energy of a long semiflexible polymer confined in a spherical cavity. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 26, p. 4674-4685., WOS
3. [1.1] MICHELETTI, C. - ORLANDINI, E. Knotting and unknotting dynamics of DNA strands in nanochannels. In ACS MACRO LETTERS. ISSN 2161-1653, SEP 2014, vol. 3, no. 9, p. 876-880., WOS
4. [1.1] MURALIDHAR, A. - TREE, D.R. - WANG, Y.W. - DORFMAN, K.D. Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, FEB 28 2014, vol. 140, no. 8., WOS

ADCA32 BENKOVÁ, Zuzana - SZEFCZYK, B. - CORDEIRO, M. N. D. S. Molecular dynamics study of hydrated poly(ethylene oxide) chains grafted on siloxane surface. In Macromolecules, 2011, vol. 44, p. 3639 - 3648. (4.838 - IF2010). (2011 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] KAMERLIN, N. - EKHOLM, T. - CARLSSON, T. - ELVINGSON, C. Construction of a closed polymer network for computer simulations. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, OCT 21 2014, vol. 141, no. 15., WOS
2. [1.1] WANG, H. - ZHANG, H. - YUAN, S.L. - LIU, C.B. - XU, Z. Molecular dynamics study of the adsorption of anionic surfactant in a nonionic polymer brush. In JOURNAL OF MOLECULAR MODELING. ISSN 1610-2940, JUN 2014, vol. 20, no. 6., WOS

ADCA33 BENKOVÁ, Zuzana - CORDEIRO, M. Natália D. S. Molecular dynamics study of water interacting with siloxane surface modified by poly(ethylene oxide) chains. In Journal of Physical Chemistry C, 2011, vol. 115, p. 18740 - 18751. (4.524 - IF2010). (2011 - Current Contents). ISSN 1932-7447.

Citácie:

1. [1.1] CHABAN, V.V. - KHANDELIA, H. Distribution of neutral lipids in the lipid droplet core. In JOURNAL OF PHYSICAL CHEMISTRY B. ISSN 1520-6106, SEP 25 2014, vol. 118, no. 38, p. 11145-11151., WOS
2. [1.1] CHEN, S. - WANG, J.D. - CHEN, D.R. States of a water droplet on nanostructured surfaces. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, AUG 14 2014, vol. 118, no. 32, p. 18529-18536., WOS

ADCA34 BENKOVÁ, Zuzana - CORDEIRO, M. N. D. S. Molecular dynamics study of poly(ethylene oxide) chains densely grafted on siloxane surface in dry conditions. In Journal of Physical Chemistry C, 2012, vol. 116, p. 5576 - 3584. (4.805 - IF2011). (2012 - Current Contents). ISSN 1932-7447.

Citácie:

1. [1.1] HAMERTON, I. - TANG, W.N. - ANGUITA, J.V. - SILVA, S.R.P. Towards the rational design of polymers using molecular simulation: Predicting the effect of cure schedule on thermo-mechanical properties for a cycloaliphatic amine-cured epoxy resin. In REACTIVE & FUNCTIONAL POLYMERS. ISSN 1381-5148, JAN 2014, vol. 74, p. 1-15., WOS

ADCA35 BEREK, Dušan - HUNKELER, D. Liquid chromatography of macromolecules under limiting conditions of adsorption. I. Principles of the method. In Journal of Liquid Chromatography & Related Technologies, 1999, vol. 22, no. 19, p. 2867 - 2878. (1999 - Current Contents). ISSN 1082-6076.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

2. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA36 BEREK, Dušan. Two-dimensional liquid chromatography of synthetic polymers. In Analytical and Bioanalytical Chemistry, 2010, vol. 396, p. 421 - 441. (3.480 - IF2009). (2010 - Current Contents). ISSN 1618-2642.

Citácie:

1. [1.1] FU, C. - ZHU, Y.T. - SHI, D. Separation and characterization of block copolymers by liquid chromatography at the critical condition. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, JAN 2014, vol. 26, no. 1, p. 140-151., WOS

2. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA37 BEREK, Dušan. Adsorption and enthalpic partition retention mechanisms in liquid chromatography of non-charged synthetic polymers. In Chromatographia, 2003, vol. 57, p. 45 - 54. (1.230 - IF2002). (2003 - Current Contents). ISSN 0009-5893.

Citácie:

1. [1.1] SOMAN, A. - JERFY, M. Determination of caprolactam and residual vinyl caprolactam monomer in soluplus by mixed mode gel permeation chromatography. In JOURNAL OF CHROMATOGRAPHIC SCIENCE. ISSN 0021-9665, MAY-JUN 2014, vol. 52, no. 5, p. 413-417., WOS

ADCA38 BEREK, Dušan. Critical conditions and limiting conditions in liquid chromatography of synthetic polymers. In Macromolecular Symposia, 2006, vol. 231, p. 134 - 144. (0.913 - IF2005). ISSN 1022-1360.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

2. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA39 BEREK, Dušan - KITAYAMA, T. - HATADA, K. - IHARA, H. - CAPEK, Ignác - BORSIG, Eberhard. Liquid chromatography under limiting conditions of desorption IV. Separation of macromolecules according to their stereoregularity. In Polymer Journal, 2009, vol. 41, no.12, p. 1144 - 1151. ISSN 0032-3896.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA40 BEREK, Dušan. Separation of parent homopolymers from diblock copolymers by liquid chromatography under limiting conditions of desorption. 3. Role of column packing. In Polymer : the International Journal for the Science and Technology of Polymers, 2010, vol. 51, p. 587 - 596. (3.573 - IF2009). (2010 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

2. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

3. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA41 BEREK, Dušan. Liquid Chromatography of Macromolecules under Limiting Conditions of Desorption.1. Principles of the Method. In Macromolecules, 1998, vol. 31, p. 8517-8521. (3.500 - IF1997). (1998 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] FU, C. - ZHU, Y.T. - SHI, D. Separation and characterization of block copolymers by liquid chromatography at the critical condition. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, JAN 2014, vol. 26, no. 1, p. 140-151., WOS

2. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

3. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA42 BEREK, Dušan - *TARBAJOVSKÁ, Jana*. Evaluation of high-performance liquid chromatography column retentivity using macromolecular probes. In Journal of Chromatography A : international Journal on Chromatography, Electrophoresis and Related Methods, 2002, vol. 976, no. 1 -2, p. 27 - 37. (2.793 - IF2001). (2002 - Current Contents). ISSN 0021-9673.

Citácie:

1. [1.1] MALIK, M.I. - MAHBOOB, T. - AHMED, S. Characterization of poly(2-vinylpyridine)-block-poly(methyl methacrylate) copolymers and blends of their homopolymers by liquid chromatography at critical conditions. In ANALYTICAL AND BIOANALYTICAL CHEMISTRY. ISSN 1618-2642, OCT 2014, vol. 406, no. 25, p. 6311-6317., WOS

ADCA43 BEREK, Dušan. Separation of parent homopolymers from diblock copolymers by liquid chromatography under limiting conditions of desorption. 4. Role of eluent and temperature. In Journal of Separation Science, 2010, vol. 33, p. 3476 - 3493. (2.551 - IF2009). (2010 - Current Contents). ISSN 1615-9306.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

2. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA44 BEREK, Dušan. Size exclusion chromatography - A blessing and a curse of science and technology of synthetic polymers. In Journal of Separation Science, 2010, vol. 33, iss. 3, p. 315 - 335. (2.551 - IF2009). (2010 - Current Contents). ISSN 1615-9306.

Citácie:

1. [1.1] CHEN, T. - LI, H.M. - ZOU, D.L. - DU, Y.Z. - SHEN, Y.H. - LI, Y.L. Preparation of two flavonoid glycosides with unique structures from barley seedlings by membrane separation technology and preparative high-performance liquid chromatography. In JOURNAL OF SEPARATION SCIENCE. ISSN 1615-9306, DEC 2014, vol. 37, no. 24, p. 3760-3766., WOS

2. [1.1] GU, B. - BURGESS, D.J. Polymeric materials in drug delivery. In NATURAL AND SYNTHETIC BIOMEDICAL POLYMERS. 2014, p. 333-349., WOS
3. [1.1] HILLER, W. - SINHA, P. - HEHN, M. - PASCH, H. Online LC-NMR - From an expensive toy to a powerful tool in polymer analysis. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, 2014, vol. 39, no. 5, p. 979-1016., WOS
4. [1.1] ITO, T. Block copolymer-derived monolithic polymer films and membranes comprising self-organized cylindrical nanopores for Chemical Sensing and Separations. In CHEMISTRY-AN ASIAN JOURNAL. ISSN 1861-4728, OCT 2014, vol. 9, no. 10, p. 2708-2718., WOS
5. [1.1] LI, Q.J. - TU, X.Y. - YE, J. - BIE, Z.J. - BI, X.D. - LIU, Z. Nanoconfining affinity materials for pH-mediated protein capture-release. In CHEMICAL SCIENCE. ISSN 2041-6520, 2014, vol. 5, no. 10, p. 4065-4069., WOS
6. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS
7. [1.1] OTTE, D.A.L. - BORCHMANN, D.E. - LIN, C. - WECK, M. - WOERPEL, K.A. C-13 NMR spectroscopy for the quantitative determination of compound ratios and polymer end groups. In ORGANIC LETTERS. ISSN 1523-7060, MAR 21 2014, vol. 16, no. 6, p. 1566-1569., WOS
8. [1.1] PODZIMEK, S. Truths and myths about the determination of molar mass distribution of synthetic and natural polymers by size exclusion chromatography. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, APR 5 2014, vol. 131, no. 7., WOS
9. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA45 BEREK, Dušan - *JANČO, Miroslav* - HATADA, K. - KITAYAMA, T. - FUJIMOTO, N. Separation of poly(methyl methacrylate)s according to their tacticity. In Polymer Journal, 1997, vol. 29, no.12, p. 1029 - 1033. (1997 - Current Contents). ISSN 0032-3896.

Citácie:

1. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA46 BEREK, Dušan. Liquid chromatography of macromolecules at the point of exclusion-adsorption transition. In Materials Research Innovation. - Heidelberg : Springer-Verlag, 2001, vol. 4, p. 365-374. (2001 - Current Contents). ISSN 1432-8917.

Citácie:

1. [1.1] FU, C. - ZHU, Y.T. - SHI, D. Separation and characterization of block copolymers by liquid chromatography at the critical condition. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, JAN 2014, vol. 26, no. 1, p. 140-151., WOS

ADCA47 BEREK, Dušan. Strategies in two-dimensional liquid chromatographic separation of complex polymer systems. In Macromolecular Symposia, 2001, vol. 174, p. 413 - 434. (0.406 - IF2000). (2001 - Current Contents). ISSN 1022-1360.

Citácie:

1. [1.1] GU, B. - BURGESS, D.J. Polymeric Materials in Drug Delivery. In NATURAL AND SYNTHETIC BIOMEDICAL POLYMERS. 2014, p. 333-349., WOS

ADCA48 BEREK, Dušan. Liquid chromatography of macromolecules at the point of exclusion - adsorption transition. Principle, experimental procedures and queries concerning feasibility of method. In Macromolecular Symposia, 1996, vol. 110, p. 33-56.

Citácie:

1. [1.1] FU, C. - ZHU, Y.T. - SHI, D. Separation and characterization of block copolymers by liquid chromatography at the critical condition. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, JAN 2014, vol. 26, no. 1, p. 140-151., WOS

2. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA49 BEREK, Dušan. Separation of parent homopolymers from diblock copolymers by liquid chromatography under limiting conditions of desorption. In Macromolecular Chemistry and Physics, 2008, vol. 209, p. 2213 - 2222. (2.046 - IF2007). (2008 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

2. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA50 BEREK, Dušan. Separation of parent homopolymers from diblock copolymers by liquid chromatography under limiting conditions desorption. In Macromolecular Chemistry and Physics, 2008, vol. 209, p. 695 - 706. (2.046 - IF2007). (2008 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

2. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA51 BEREK, Dušan. Coupled liquid chromatographic techniques for the separation of complex polymers. In Progress in Polymer Science : an International Review Journal, 2000, vol. 25, no.7, p. 873 - 908. (2000 - Current Contents). ISSN 0079-6700.

Citácie:

1. [1.1] ALGHYAMAH, A. - SOARES, J.B.P. Fractionation of ethylene/1-octene copolymers by high-temperature thermal gradient interaction chromatography. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, JUN 4 2014, vol. 53, no. 22, p. 9228-9235., WOS

2. [1.1] GUTIERREZ, C.G. - MINARI, R.J. - GUGLIOTTA, L.M. - MEIRA, G.R. - VEGA, J.R. Analysis by size exclusion chromatography of the graft terpolymer present in MBS. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, DEC 10 2014, vol. 22, no. 1., WOS

3. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

4. [1.1] PASCH, H. - MALIK, M.I. Column-based chromatographic techniques. In ADVANCED SEPARATION TECHNIQUES FOR POLYOLEFINS. 2014, p. 75-145., WOS

5. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA52 BEREK, Dušan. Separation of minor macromolecular constituents from multicomponent polymer system by means of liquid chromatography under limiting conditions of enthalpic interactions. In European Polymer Journal, 2009, vol. 45, p. 1798 - 1810. (2.143 - IF2008). (2009 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

2. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

3. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA53 BERTÓK, T. - KLUKOVA, L.- SEDIVA, A. - *KASÁK, Peter* - SEMAK, Vladislav - MIČUŠÍK, Matej - OMASTOVÁ, Mária - CHOVANOVÁ, L. - VLČEK, M. - IMRICH, R. - VIKARTOVSKÁ, A., Welwardová - TKÁČ, J. Ultrasensitive impedimetric lectin biosensors with efficient antifouling properties applied in glycoprofiling of human serum samples. In Analytical Chemistry, 2013, vol. 85, p.7324 - 7332. (5.695 - IF2012). (2013 - Current Contents). ISSN 0003-2700.

Citácie:

1. [1.1] HUANG, B.Y. - YANG, C.K. - LIU, C.P. - LIU, C.Y. Stationary phases for the enrichment of glycoproteins and glycopeptides. In ELECTROPHORESIS. ISSN 0173-0835, AUG 2014, vol. 35, no. 15, p. 2091-2107., WOS

2. [1.1] LIU, L. - XING, Y. - ZHANG, H. - LIU, R.L. - LIU, H.J. - XIA, N. Amplified voltammetric detection of glycoproteins using 4-mercaptophenylboronic acid/biotin-modified multifunctional gold nanoparticles as labels. In INTERNATIONAL JOURNAL OF NANOMEDICINE. ISSN 1178-2013, 2014, vol. 9, p. 2619-2626., WOS

3. [1.1] SANTOS, A. - CARVALHO, F.C. - ROQUE-BARREIRA, M.C. - BUENO, P.R. Impedance-derived electrochemical capacitance spectroscopy for the evaluation of lectin-glycoprotein binding affinity. In BIOSENSORS & BIOELECTRONICS. ISSN 0956-5663, DEC 15 2014, vol. 62, p. 102-105., WOS

4. [1.1] SHAH, A.K. - HILL, M.M. - SHIDDIKY, M.J.A. - TRAU, M. Electrochemical detection of glycan and protein epitopes of glycoproteins in serum. In ANALYST. ISSN 0003-2654, NOV 21 2014, vol. 139, no. 22, p. 5970-5976., WOS

5. [1.1] SVAROVSKY, S.A. - JOSHI, L. Cancer glycan biomarkers and their detection - past, present and future. In ANALYTICAL METHODS. ISSN 1759-9660, 2014, vol. 6, no. 12, p. 3918-3936., WOS

6. [1.2] YANG, H.- GONG, Q.- MA, L.- SUN, Y.- ZHANG, W. Ultrasensitive impedimetric lectin biosensor with efficient antifouling properties applied in

determination of α-fetoprotein on mixed self-assembled monolayer on gold. (2014) Asian Journal of Chemistry, 26 (19), p. 6357-6363., Scopus

ADCA54 BEUERMANN, S. - BUBACK, M. - DAVIS, T. P. - GARCIA, N. - GILBERT, R. G. - HUTCHINSON, R. A. - KAJIWARA, A. - KAMACHI, M. - LACÍK, Igor - RUSSELL, G. T. Critically evaluated rate coefficients for free-radical polymerization. In Macromolecular Chemistry and Physics, 2003, vol. 204, no.10, p. 1338 - 1350. (1.359 - IF2002). (2003 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] BARTOSZEK, N. - SAWICKI, P. - KADLUBOWSKI, S. - ULANSKI, P. - ROSIAK, J.M. Determination of propagation rate coefficient for the polymerization of N-vinylpyrrolidone in aqueous solution by pulsed electron polymerization and size exclusion chromatography. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 639-642., WOS

2. [1.1] HAEHNEL, A.P. - SCHNEIDER-BAUMANN, M. - ARENS, L. - MISSKE, A.M. - FLEISCHHAKER, F. - BARNER-KOWOLLIK, C. Global trends for k(p)? The influence of ester side chain topography in alkyl (meth)acrylates - completing the data base. In MACROMOLECULES. ISSN 0024-9297, MAY 27 2014, vol. 47, no. 10, p. 3483-3496., WOS

ADCA55 BEUERMANN, S. - BUBACK, M. - HESSE, P. - LACÍK, Igor. Free radical propagation rate coefficient of nonionized methacrylic acid in aqueous solution from low monomer concentrations to bulk polymerization. In Macromolecules, 2006, vol. 39, no. 1, p. 184 - 193. (4.024 - IF2005). (2006 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] BARTOSZEK, N. - SAWICKI, P. - KADLUBOWSKI, S. - ULANSKI, P. - ROSIAK, J.M. Determination of propagation rate coefficient for the polymerization of N-vinylpyrrolidone in aqueous solution by pulsed electron polymerization and size exclusion chromatography. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 639-642., WOS

2. [1.1] OZALTIN, T.F. - DERELI, B. - KARAHAN, O. - SALMAN, S. - AVIYENTE, V. Solvent effects on free-radical copolymerization of styrene and 2-hydroxyethyl methacrylate: a DFT study. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, JAN 2014, vol. 38, no. 1, p. 170-178., WOS

3. [1.1] REED, W.F. Applications of ACOMP (II). In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 271-294., WOS

4. [1.1] SALIAN, V.D. - WHITE, C.J. - BYRNE, M.E. Molecularly imprinted polymers via living radical polymerization: Relating increased structural homogeneity to improved template binding parameters. In REACTIVE & FUNCTIONAL POLYMERS. ISSN 1381-5148, MAY 2014, vol. 78, p. 38-46., WOS

ADCA56 BEUERMANN, S. - BUBACK, M. - HESSE, P. - KUCHTA, F.–D. - LACÍK, Igor - VAN HERK, A. M. Critically evaluated rate coeficients for free-radical polymerization. In Pure and Applied Chemistry, 2007, vol. 79, no. 8, p. 1463-1469. (1.920 - IF2006). ISSN 0033-4545.

Citácie:

1. [1.1] REED, W.F. Applications of ACOMP (II). In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 271-294., WOS

ADCA57 BEUERMANN, Sabine - BUBACK, Michael - HESSE, Pascal - HUTCHINSON, Robin A. - KUKUČKOVÁ, Silvia - LACÍK, Igor. Termination kinetics of the free-radical polymerization of nonionized methacrylic acid in aqueous solution. In

Macromolecules, 2008, vol. 41, p. 3513 - 3520. (4.411 - IF2007). (2008 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] REED, W.F. Applications of ACOMP (II). In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 271-294., WOS

ADCA58 BLEHA, Tomáš - CIFRA, Peter. Free energy and confinement force of macromolecules in a slit at full equilibrium with a bulk solution. In Polymer : the International Journal for the Science and Technology of Polymers, 2003, vol. 44, no. 13, p. 3745 - 3752. (1.383 - IF2002). (2003 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] MILKEVYCH, V. - BATSTONE, D.J. Controlling mechanisms in directional growth of aggregated archaeal cells. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 48, p. 9615-9625., WOS

ADCA59 BLEHA, Tomáš - CIFRA, Peter. Depletion potential between two attractive plates mediated by polymers. In Polymer : the International Journal for the Science and Technology of Polymers, 2005, vol. 46, no.24, p. 10996 - 11002. (2.433 - IF2004). (2005 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] CHEN, Y.L. - LIN, Y.H. - CHANG, J.F. - LIN, P.K. Dynamics and conformation of semiflexible polymers in strong quasi-1D and-2D confinement. In MACROMOLECULES. ISSN 0024-9297, FEB 11 2014, vol. 47, no. 3, p. 1199-1205., WOS

ADCA60 BLEHA, Tomáš - *BAKOŠ, Dušan* - BEREK, Dušan. Estimation of thermodynamic quality of solvent from concentration effect in gel-permeation chromatography of polymers. In Polymer : the International Journal for the Science and Technology of Polymers, 1977, vol. 18, no. 9, p. 897. ISSN 0032-3861.

Citácie:

1. [1.1] JEON, B.J. - MUTHUKUMAR, M. Determination of molecular weights in polyelectrolyte mixtures using polymer translocation through a protein nanopore. In ACS MACRO LETTERS. ISSN 2161-1653, SEP 2014, vol. 3, no. 9, p. 911-915., WOS

ADCA61 BLEHA, Tomáš - VALKO, L. Theoretical estimation of the effect of solvent on unperturbed dimensions: 1. Isotactic poly(vinyl alcohol). In Polymer : the International Journal for the Science and Technology of Polymers, 1976, vol. 17, no. 4, p. 298-302. ISSN 0032-3861.

Citácie:

1. [1.2] HAMIDI, N.- BEST, T. Characteristics of poly(3,5-dimethylphenylacrylate) in ethyl acetate at 25 and 30°C. (2014) Journal of Macromolecular Science, Part B: Physics, 53 (5), p. 931-955. DOI: 10.1080/00222348.2013.874311, Scopus

ADCA62 BLINOVA, N. V. - STEJSKAL, J. - TRCHOVÁ, M. - PROKEŠ, J. - OMASTOVÁ, Mária. Polyaniline and polypyrrole: a comparative study of the preparation. In European Polymer Journal, 2007, vol. 43, p. 2331 - 2341. (2.113 - IF2006). (2007 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] ABUSHAMMALA, H. - WINTER, H. - KROSSING, I. - LABORIE, M.P. On the prevalence of side reactions during ionosolv pulping of Norway spruce with 1-butyl-3-methylimidazolium acesulfamate. In CELLULOSE. ISSN 0969-0239, DEC 2014, vol. 21, no. 6, p. 4607-4619., WOS

2. [1.1] CIRIC-MARJANOVIC, G. - MENTUS, S. - PASTI, I. - GAVRILOV, N. - KRSTIC, J. - TRAVAS-SEJDIC, J. - STROVER, L.T. - KOPECKA, J. -

MORAVKOVA, Z. - TRCHOVA, M. - STEJSKAL, J. Synthesis, characterization, and electrochemistry of nanotubular polypyrrole and polypyrrole-derived carbon nanotubes. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, JUL 10 2014, vol. 118, no. 27, p. 14770-14784., WOS

3. [1.1] DENG, J.X. - WANG, X. - GUO, J.S. - LIU, P. Effect of the oxidant/monomer ratio and the washing post-treatment on electrochemical properties of conductive polymers. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, SEP 3 2014, vol. 53, no. 35, p. 13680-13689., WOS

4. [1.1] FENG, J.T. - LI, J.J. - LV, W. - XU, H. - YANG, H.H. - YAN, W. Synthesis of polypyrrole nano-fibers with hierarchical structure and its adsorption property of Acid Red G from aqueous solution. In SYNTHETIC METALS. ISSN 0379-6779, MAY 2014, vol. 191, p. 66-73., WOS

5. [1.1] GORAL-KURBIEL, M. - DRELINKIEWICZ, A. - KOSYDAR, R. - DEMBINSKA, B. - KULESZA, P.J. - GURGUL, J. Palladium content effect on the electrocatalytic activity of palladium-polypyrrole nanocomposite for cathodic reduction of oxygen. In ELECTROCATALYSIS. ISSN 1868-2529, JAN 2014, vol. 5, no. 1, p. 23-40., WOS

6. [1.1] GORAL-KURBIEL, M. - DRELINKIEWICZ, A. - KOSYDAR, R. - GURGUL, J. - DEMBINSKA, B. - KULESZA, P.J. The effect of Nafion ionomer on electroactivity of palladium-polypyrrole catalysts for oxygen reduction reaction. In JOURNAL OF SOLID STATE ELECTROCHEMISTRY. ISSN 1432-8488, MAR 2014, vol. 18, no. 3, p. 639-653., WOS

7. [1.1] GVOZDENOVIC, M.M. - JUGOVIC, B.Z. - STEVANOVIC, J.S. - GRGUR, B.N. Electrochemical synthesis of electroconducting polymers. In HEMIJSKA INDUSTRIJA. ISSN 0367-598X, NOV-DEC 2014, vol. 68, no. 6, p. 673-684., WOS

8. [1.1] MERLINI, C. - ALMEIDA, R.D. - D'AVILA, M.A. - SCHREINER, W.H. - BARRA, G.M.D. Development of a novel pressure sensing material based on polypyrrole-coated electrospun poly(vinylidene fluoride) fibers. In MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS. ISSN 0921-5107, JAN 2014, vol. 179, p. 52-59., WOS

9. [1.1] MERLINI, C. - BARRA, G.M.D. - ARAUJO, T.M. - PEGORETTI, A. The effect of compressive stress on the electrically resistivity of poly(vinylidene fluoride)/polypyrrole blends. In SYNTHETIC METALS. ISSN 0379-6779, OCT 2014, vol. 196, p. 186-192., WOS

10. [1.1] MERLINI, C. - BARRA, G.M.O. - ARAUJO, T.M. - PEGORETTI, A. Electrically pressure sensitive poly(vinylidene fluoride)/polypyrrole electrospun mats. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 30, p. 15749-15758., WOS

11. [1.1] MERLINI, C. - BARRA, G.M.O. - SCHMITZ, D.P. - RAMOA, S.D.A.S. - SILVEIRA, A. - ARAUJO, T.M. - PEGORETTI, A. Polyaniline-coated coconut fibers: Structure, properties and their use as conductive additives in matrix of polyurethane derived from castor oil. In POLYMER TESTING. ISSN 0142-9418, SEP 2014, vol. 38, p. 18-25., WOS

12. [1.1] POSUDIEVSKY, O.Y. - KOZARENKO, O.A. - KOTENKO, I.E. - BOIKO, O.P. - SHKAVRO, A.G. - KOSHECHKO, V.G. - POKHODENKO, V.D. Metallic conductivity of mechanochemically doped polyaniline. In THEORETICAL AND EXPERIMENTAL CHEMISTRY. ISSN 0040-5760, SEP 2014, vol. 50, no. 4, p. 197-203., WOS

13. [1.1] RANGEL-VAZQUEZ, N.A. - SANCHEZ-LOPEZ, C. - FELIX, F.R. Spectroscopy analyses of polyurethane/polyaniline IPN using computational

simulation (Amber, MM+ and PM3 Method). In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, 2014, vol. 24, no. 4, p. 453-463., WOS
14. [1.1] SHAHNAVAZ, Z. - LORESTANI, F. - ALIAS, Y. - WOI, P.M. Polypyrrole-ZnFe2O4 magnetic nano-composite with core-shell structure for glucose sensing. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, OCT 30 2014, vol. 317, p. 622-629., WOS
15. [1.1] SONG, G.P. - LIU, L. - HAN, J. - WANG, C.Y. - WANG, G.X. Polypyrrole single and double-shelled nanospheres templated by pyrrole-Hg(II) complex: Synthesis, characterization, formation mechanism and electrochemical performance. In SYNTHETIC METALS. ISSN 0379-6779, NOV 2014, vol. 197, p. 126-133., WOS
16. [1.1] TIAN, Z.F. - YU, H.J. - WANG, L. - SALEEM, M. - REN, F.J. - REN, P.F. - CHEN, Y.S. - SUN, R.L. - SUN, Y.B. - HUANG, L. Recent progress in the preparation of polyaniline nanostructures and their applications in anticorrosive coatings. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 54, p. 28195-28208., WOS
17. [1.1] XIONG, X.H. - DING, D. - WANG, Z.X. - HUANG, B. - GUO, H.J. - LI, X.H. Surface modification of LiNi0.8Co0.1Mn0.1O2 with conducting polypyrrole. In JOURNAL OF SOLID STATE ELECTROCHEMISTRY. ISSN 1432-8488, SEP 2014, vol. 18, no. 9, p. 2619-2624., WOS
18. [1.1] YANG, C. - MO, H.D. - ZANG, L.M. - QIU, J.H. - YOU, H. - YANG, X. Structural investigation of anionic functional poly(vinyl alcohol) doped polypyrrole nanospheres. In FIBERS AND POLYMERS. ISSN 1229-9197, OCT 2014, vol. 15, no. 10, p. 2019-2025., WOS
19. [1.1] YU, K. - KUMAR, N. - ROINE, J. - PESONEN, M. - IVASKA, A. Synthesis and characterization of polypyrrole/H-Beta zeolite nanocomposites. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 62, p. 33120-33126., WOS
20. [1.1] YU, Q.Z. - CHEN, H.Z. The magnetic, spinning and electrical properties of poly(aniline-pyrrole) copolymers. In INTERNATIONAL CONFERENCE ON MATERIAL SCIENCE AND MATERIAL ENGINEERING (MSME 2014). 2014, p. 561-569., WOS
21. [1.1] ZHANG, X. - ZENG, X.Z. - YANG, M. - QI, Y.X. Investigation of a branchlike MoO3/Polypyrrole hybrid with enhanced electrochemical performance used as an electrode in supercapacitors. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, JAN 22 2014, vol. 6, no. 2, p. 1125-1130., WOS
22. [1.2] BOBER, P.- LIU, J.- MIKKONEN, K.S.- IHALAINEN, P.- PESONEN, M.- PLUMED-FERRER, C.- VON WRIGHT, A.- LINDFORS, T.- XU, C.- LATONEN, R.M. Biocomposites of Nanofibrillated cellulose, polypyrrole, and silver nanoparticles with electroconductive and antimicrobial properties. (2014) Biomacromolecules, 15 (10), p. 3655-3663. DOI: 10.1021/bm500939x, Scopus
23. [1.2] GERGELY, A.- PÁSZTI, Z.- BERTÓTI, I.- MIHÁLY, J.- DROTÁR, E. - TÖRÖK, T. Hybrid zinc-rich paint coatings: The impact of incorporation of nano-size inhibitor and electrical conducting particles. (2014) Intelligent Coatings for Corrosion Control, p. 195-249. DOI: 10.1016/B978-0-12-411467-8.00006-4, Scopus
24. [1.2] PATIL, B.H.- BULAKHE, R.N.- LOKHANDE, C.D. Supercapacitive performance of chemically synthesized polypyrrole thin films: Effect of monomer to oxidant ratio. (2014) Journal of Materials Science: Materials in Electronics, 25 (5), p. 2188-2198., Scopus
25. [1.2] QUINTANILHA, R.C.- ORTH, E.S.- GREIN-IANKOVSKI, A.- RIEGEL-VIDOTTI, I.C.- VIDOTTI, M. The use of gum Arabic as "Green" stabilizer of poly(aniline) nanocomposites: A comprehensive study of spectroscopic,

morphological and electrochemical properties. (2014) Journal of Colloid and Interface Science, 434, p. 18-27. DOI: 10.1016/j.jcis.2014.08.006, Scopus

ADCA63 BOČA, M. - BARBORÍK, P.- MIČUŠÍK, Matej - OMASTOVÁ, Mária. X-ray photoelectron spectroscopy as detection tool for coordinated or uncoordinated fluorine atoms demonstrated on fluoride systems NaF, K2TaF7, K3TaF8, K2ZrF6, Na7Zr6F31 and K3ZrF7. In Solid State Sciences, 2012, vol. 14, p. 828 - 832. (1.856 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 1293-2558.

Citácie:

1. [1.1] OUMAHI, C. - LOMBARD, J. - CASALE, S. - CALERS, C. - DELANNOY, L. - LOUIS, C. - CARRIER, X. Heterogeneous catalyst preparation in ionic liquids: Titania supported gold nanoparticles. In CATALYSIS TODAY. ISSN 0920-5861, OCT 15 2014, vol. 235, p. 58-71., WOS

ADCA64 BONNEFOND, A. - MIČUŠÍK, Matej - PAULIS, M. - LEIZA, J. R. - TEIXEIRA, Roberto F. A. - BON, S. A.F. Morphology and properties of waterborne adhesives made from hybrid polyacrilic/montmorillonite clay colloidal dispersions showing improved tack and shear resistance. In Colloid and Polymer Science, 2013, vol. 291, p. 167 - 180. (2.161 - IF2012). (2013 - Current Contents). ISSN 0303-402X.

Citácie:

1. [1.1] ASUA, J.M. Mapping the morphology of polymer-inorganic nanocomposites synthesized by miniemulsion polymerization. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, MAR 2014, vol. 215, no. 5, p. 458-464., WOS

2. [1.1] CHIU, C.W. - HUANG, T.K. - WANG, Y.C. - ALAMANI, B.G. - LIN, J.J. Intercalation strategies in clay/polymer hybrids. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, MAR 2014, vol. 39, no. 3, p. 443-485., WOS

ADCA65 BORSIG, Eberhard - FIEDLEROVÁ, Agnesa - *LAZÁR, Milan*. Efficiency of chemical crosslinking of polypropylene. In Journal of Macromolecular Science : Part A: Pure & Applied Chemistry, 1981, vol. A16, p. 513 - 528. ISSN 1060-1325.

Citácie:

1. [1.1] ALMAADEED, M.A. - NOGELLOVA, Z. - JANIGOVA, I. - KRUPA, I. Improved mechanical properties of recycled linear low-density polyethylene composites filled with date palm wood powder. In MATERIALS & DESIGN. ISSN 0261-3069, JUN 2014, vol. 58, p. 209-216., WOS

2. [1.1] ARDAKANI, F. - JAHANI, Y. - MORSHEDIAN, J. Effect of electron beam irradiation dose on the rheology, morphology, and thermal properties of branched polypropylene/polybutene-1 blend. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, AUG 2014, vol. 54, no. 8, p. 1747-1756., WOS

3. [1.1] GU, J.Q. - XU, H.Y. - WU, C.F. The effect of benzoyl peroxide and divinyl benzene on the properties of cross-linked recycled polyolefin blends. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, 2014, vol. 53, no. 12, p. 1777-1785., WOS

4. [1.1] PATTERSON, R. - KANDELBAUER, A. - MULLER, U. - LAMMER, H. Crosslinked thermoplastics. In HANDBOOK OF THERMOSET PLASTICS, 3RD EDITION. 2014, p. 697-737., WOS

ADCA66 BORSIG, Eberhard - HRČKOVÁ, Ľudmila - FIEDLEROVÁ, Agnesa - *LAZÁR, Milan* - RATZSCH, M. - HESSE, A. Degradation of polypropylene under the effect of the low-molecular-mass organic peroxides below the melting temperature of the polymer. In Journal of Macromolecular Science : Part A: Pure & Applied Chemistry, 1998, vol. A35, no. 7- 8, p. 1313 - 1326. (0.571 - IF1997). (1998 - Current Contents). ISSN 1060-1325.

Citácie:

1. [1.1] VORONOV, S. - KOHUT, A. - TARNAVCHYK, I. - VORONOV, A.

Advances in reactive polymeric surfactants for interface modification. In CURRENT OPINION IN COLLOID & INTERFACE SCIENCE. ISSN 1359-0294, APR 2014, vol. 19, no. 2, p. 95-121., WOS

ADCA67 BORSIG, Eberhard - *LAZÁR, Milan - ČAPLA, Milan* - *FLORIÁN, Štepán*. Reinitiation reactions of poly(methyl methacrylate) with labile bound fragments of initiators. In Die Angewandte Makromolekulare Chemie, 1969, vol. 9, p. 89. ISSN 0003-3146.

Citácie:

1. [1.1] MATYJASZEWSKI, K. From cationic ring-opening polymerization to atom transfer radical polymerization. In POLIMERY. ISSN 0032-2725, JAN 2014, vol. 59, no. 1, p. 24-37., WOS

ADCA68 BORSIG, Eberhard - *LAZÁR, Milan* - FIEDLEROVÁ, Agnesa - HRČKOVÁ, Ľudmila - RATZSCH, M. - MARCINČIN, A. Solid-state polypropylene grafting as an effective chemical method of modification. In Macromolecular Symposia, 2001, vol. 176, p. 289 - 298. (0.406 - IF2000). (2001 - Current Contents). ISSN 1022-1360.

Citácie:

1. [1.1] SHABANI, A. - COLIN, X. - MARQUE, G. - MONCHY-LEROY, C. Peroxide cross-linking of EPDMs having high fractions of ethylenic units. In RUBBER CHEMISTRY AND TECHNOLOGY. ISSN 0035-9475, OCT-DEC 2014, vol. 87, no. 4, p. 679-702., WOS

ADCA69 BORSIG, Eberhard - *LAZÁR, Milan - ČAPLA, Milan*. Polymerization of methyl methacrylate initiated by 3,3,4,4-tetraphenyl hexane and 1,1,2,2-tetraphenyl cyclopentane. In Die Makromolekulare Chemie, 1967, vol. 105, p. 212.

Citácie:

1. [1.1] MATYJASZEWSKI, K. From cationic ring-opening polymerization to atom transfer radical polymerization. In POLIMERY. ISSN 0032-2725, JAN 2014, vol. 59, no. 1, p. 24-37., WOS

ADCA70 BORSIG, Eberhard - VAN DUIN, M. - GOTSIS, A.D. - PICCHIONI, F. Long chain branching on linear polypropylene by solid state reactions. In European Polymer Journal, 2008, vol. 44, p. 200 - 212. (2.248 - IF2007). (2008 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] CHEN, J. - WEI, W. - QIAN, Q.R. - XIAO, L.R. - LIU, X.P. - XU, J. - HUANG, B.Q. - CHEN, Q.H. The structure and properties of long-chain branching poly(trimethylene terephthalate). In RHEOLOGICA ACTA. ISSN 0035-4511, JAN 2014, vol. 53, no. 1, p. 67-74., WOS

2. [1.1] DAHAL, P. - KIM, J.H. - KIM, Y.C. Effects of linear low density polyethylene on physical properties and irradiation effectiveness of polypropylene. In KOREAN JOURNAL OF CHEMICAL ENGINEERING. ISSN 0256-1115, JAN 2014, vol. 31, no. 1, p. 1-5., WOS

3. [1.1] DIOP, M.F. - BURGHARDT, W.R. - TORKELSON, J.M. Well-mixed blends of HDPE and ultrahigh molecular weight polyethylene with major improvements in impact strength achieved via solid-state shear pulverization. In POLYMER. ISSN 0032-3861, SEP 15 2014, vol. 55, no. 19, p. 4948-4958., WOS

4. [1.1] JI, D.Y. - LIU, Z.Y. - LAN, X.R. - WU, F. - XIE, B.H. - YANG, M.B. Morphology, rheology, crystallization behavior, and mechanical properties of poly(lactic acid)/poly(butylene succinate)/dicumyl peroxide reactive blends. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 5 2014, vol. 131, no. 3., WOS

5. [1.1] ZHANG, Y. - TIWARY, P. - GUI, H. - KONTOPOULOU, M. - PARENT, J.S. Crystallization of coagent-modified polypropylene: Effect of polymer architecture and cross-linked nanoparticles. In INDUSTRIAL & ENGINEERING

CHEMISTRY RESEARCH. ISSN 0888-5885, OCT 15 2014, vol. 53, no. 41, p. 15923-15931., WOS

6. [1.1] ZHANG, Y.J. - GAN, T. - HU, H.Y. - HUANG, Z.Q. - HUANG, A.M. - ZHU, Y.Q. - FENG, Z.F. - YANG, M. A green technology for the preparation of high fatty acid starch esters: Solid-phase synthesis of starch laurate assisted by mechanical activation with stirring ball mill as reactor. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, FEB 12 2014, vol. 53, no. 6, p. 2114-2120., WOS

7. [1.2] CARR, J.M.- FARAH, M.- DE AZEREDO, A.P. Rheological analysis of branched-polypropylene produced through reactive extrusion. (2014) Annual Technical Conference - ANTEC, Conference Proceedings, 3 (January), p. 2166-2170., Scopus

8. [1.2] GU, J.- XU, H.- WU, C. The effect of benzoyl peroxide and divinyl benzene on the properties of cross-linked recycled polyolefin blends. (2014) Journal of Macromolecular Science, Part B: Physics, 53 (12), p. 1777-1785. DOI: 10.1080/00222348.2013.861297, Scopus

9. [1.2] SHI, J.- QIN, Y.- NIU, H.- DONG, J. A new strategy to prepare high-melt-strength polypropylene with branched structure using ziegler-natta catalyst. (2014) Shiyou Huagong/Petrochemical Technology, 43 (6), p. 618-624., Scopus

ADCA71 BOUKERMA, K. - OMASTOVÁ, Mária - FEDORKO, P. - CHEHIMI, M. M. Surface properties and conductivity of bis(2-ethylhexyl) sulfosuccinate-containing polypyrrole. In Applied Surface Science, 2005, vol. 249, no.1-4, p. 303 - 314. ISSN 0169-4332.

Citácie:

1. [1.1] DIAW, A.K.D. - FALL, M. - GNINGUE-SALL, D. - AARON, J.J. - YASSAR, A. Synthesis and electropolymerization of new phenylene-substituted dipyrridyls: Electrochemical and spectroscopic characterization. In ASIAN JOURNAL OF CHEMISTRY. ISSN 0970-7077, SEP 2014, vol. 26, no. 18, B, p. 5973-5980., WOS

2. [1.1] GURSOY, O. - CELIK, G. - GURSOY, S.S. electrochemical biosensor based on surfactant doped polypyrrole (PPy) matrix for lactose determination. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAY 5 2014, vol. 131, no. 9., WOS

ADCA72 BOUKERMA, K. - PIQUEMAL, J. Y. - CHEHIMI, M. M. - *MRAVČÁKOVÁ, Miroslava* - OMASTOVÁ, Mária - BEAUNIER, P. Synthesis and interfacial properties of montmorillonite/polypyrrole nanocomposites. In Polymer : the International Journal for the Science and Technology of Polymers, 2006, vol. 47, no. 2, p. 569 - 576. (2.849 - IF2005). (2006 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] ABOLGHASEMI, M.M. - PARASTARI, S. - YOUSEFI, V. Polypyrrole-montmorillonite nanocomposite as sorbent for solid-phase microextraction of phenolic compounds in water. In JOURNAL OF SEPARATION SCIENCE. ISSN 1615-9306, DEC 2014, vol. 37, no. 23, p. 3526-3532., WOS

2. [1.1] CCEDIL;ELIK, M. - OUML;NAL, M. Polythiophene/Na-montmorillonite composites via intercalative polymerization. In JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS. ISSN 0892-7057, FEB 2014, vol. 27, no. 2, p. 145-159., WOS

3. [1.1] DA SILVA RAMOA, S.D.A. - MERLINI, C. - DE OLIVEIRA BARRA, G.M. - SOARES, B.G. The Preparation of montmorillonite/polypyrrole nanocomposites: The effect of surfactant incorporation on the structure and properties. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, JUL 2014, vol. 24, SI, p. 57-62., WOS

4. [1.1] KARAKEHYA, N. - BILGIC, C. Surface characterisation of montmorillonite/PVC nanocomposites by inverse gas chromatography. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, JUN 2014, vol. 51, p. 140-147., WOS
5. [1.1] KOC, Z. - CELIK, M. - ONAL, M. - SARIKAYA, Y. - ONER, Y. - ACIK, L. Study on the synthesis and properties of polyacrylamide/Na-montmorillonite nanocomposites. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, FEB 2014, vol. 48, no. 4, p. 439-446., WOS
6. [1.1] MANIVEL, P. - KANAGARAJ, S. - BALAMURUGAN, A. - PONPANDIAN, N. - MANGALARAJ, D. - VISWANATHAN, C. Rheological behavior - electrical and thermal properties of polypyrrole/graphene oxide nanocomposites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, AUG 15 2014, vol. 131, no. 16., WOS
7. [1.1] MANIVEL, P. - KANAGARAJ, S. - BALAMURUGAN, A. - PONPANDIAN, N. - MANGALARAJ, D. - VISWANATHAN, C. Rheological behavior and electrical properties of polypyrrole/thermally reduced graphene oxide nanocomposite. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, JAN 20 2014, vol. 441, p. 614-622., WOS
8. [1.1] ZAHRA, M. - ZULFIQAR, S. - YAVUZ, C.T. - KWEON, H.S. - SARWAR, M.I. Conductive nanocomposite materials derived from SEBS-g-PPy and surface modified clay. In COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, AUG 21 2014, vol. 100, p. 44-52., WOS

ADCA73 BRISSOVÁ, M. - LACÍK, Igor - POWERS, A. C. - ANILKUMAR, A. V. - WANG, T. Control and measurement of permeability for design of microcapsule cell delivery system. In Journal of Biomedical Materials Research : Part A, 1998, vol. 39, no. 1, p. 61 -70. ISSN 1549-3296.

Citácie:
1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS
2. [1.1] HUANG, J.X. - LI, W.B. - LI, Y. - LUO, C.D. - ZENG, Y.C. - XU, Y.H. - ZHOU, J.H. Generation of uniform polymer eccentric and core-centered hollow microcapsules for ultrasound-regulated drug release. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, OCT 21 2014, vol. 2, no. 39, p. 6848-6854., WOS
3. [1.1] NAFEA, E.H. - POOLE-WARREN, L.A. - MARTENS, P.J. Structural and permeability characterization of biosynthetic PVA hydrogels designed for cell-based therapy. In JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION. ISSN 0920-5063, NOV 2 2014, vol. 25, no. 16, p. 1771-1790., WOS
4. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS

ADCA74 BRIŠŠOVÁ, M. - PETRO, M. - LACÍK, Igor - POWERS, A. C. - WANG, T. Evaluation of Microkapsule Permeability via Inverse Size Exclusion Chromatography. In Analytical Biochemistry, 1996, vol. 242, p.104-111.

Citácie:
1. [1.1] GATTAS-ASFURA, K.M. - VALDES, M. - CELIK, E. - STABLER, C.L. Covalent layer-by-layer assembly of hyperbranched polymers on alginate microcapsules to impart stability and permselectivity. In JOURNAL OF

MATERIALS CHEMISTRY B. ISSN 2050-750X, 2014, vol. 2, no. 46, p. 8208-8219., WOS
2. [1.1] KADAM, S. - GRACIAS, D.H. Natural and synthetic nanoporous membranes for cell encapsulation therapy. In BIOENGINEERED NANOMATERIALS. 2014, p. 199-223., WOS
3. [1.1] WANG, Z.X. - MARCUS, R.K. Determination of pore size distributions in capillary-channeled polymer fiber stationary phases by inverse size-exclusion chromatography and implications for fast protein separations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, JUL 18 2014, vol. 1351, p. 82-89., WOS
4. [1.2] SPASOJEVIC, M.- BHUJBAL, S.- PAREDES, G.- DE HAAN, B.J.- SCHOUTEN, A.J.- DE VOS, P. Considerations in binding diblock copolymers on hydrophilic alginate beads for providing an immunoprotective membrane. (2014) Journal of Biomedical Materials Research - Part A, 102 (6), p. 1887-1896. DOI: 10.1002/jbm.a.34863, Scopus

ADCA75 *BROSKA, Rastislav* - RYCHLÝ, Jozef - CSOMOROVÁ, Katarína. Carboxylic acid assisted oxidation of polypropylene studied by chemiluminescence. In Polymer Degradation and Stability, 1999, vol. 63, p. 231-236. (0.854 - IF1998). (1999 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] MIYAZAKI, K. - ARAI, T. - NAKATANI, H. Polypropylene plasticization and photodegradation with a TiO2/poly(ethylene oxide)/methyl linoleate paint photocatalyst system. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS
2. [1.1] MIYAZAKI, K. - SATO, H. - KIKUCHI, S. - NAKATANI, H. Dehydrochlorination of poly(vinyl chloride) modified with titanium dioxide/poly(ethylene oxide) based paint photocatalysts. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, SEP 15 2014, vol. 131, no. 18., WOS
3. [1.1] MIYAZAKI, K. - SATO, H. - WATANABE, T. - NAKATANI, H. Photodegradation of Herbaceous Lignin and Unsaturated Polyester with a Novel TiO2 Photocatalyst System. In JOURNAL OF POLYMERS AND THE ENVIRONMENT. ISSN 1566-2543, DEC 2014, vol. 22, no. 4, p. 494-500., WOS

ADCA76 *BROSKA, Rastislav* - RYCHLÝ, Jozef. Double stage oxidation of polyethylene as measured by chemiluminescence. In Polymer Degradation and Stability, 2001, vol. 72, no. 2, p. 271-278. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] ABDI, D. - JAHAN, M.S. - BOATRIGHT, W.L. - WALTERS, B.M. - LEI, Q.X. Thermally stimulated luminescence in powdered soy proteins. In JOURNAL OF FOOD SCIENCE. ISSN 0022-1147, JAN 2014, vol. 79, no. 1, p. C25-C31., WOS
2. [1.1] ZAPATA, P.A. - RABAGLIATI, F.M. - LIEBERWIRTH, I. - CATALINA, F. - CORRALES, T. Study of the photodegradation of nanocomposites containing TiO2 nanoparticles dispersed in polyethylene and in poly(ethylene-co-octadecene). In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, NOV 2014, vol. 109, SI, p. 106-114., WOS

ADCA77 BRZEZINSKI, M. - BOGUSLAWSKA, M. - ILČÍKOVÁ, Markéta - MOSNÁČEK, Jaroslav - BIELA, T. Unusual thermal properties of polylactides and polylactide stereocomplexes containing polylactide-functionalized multi-walled carbon nanotubes. In Macromolecules, 2012, vol. 45, p. 8714 - 8721. (5.167 - IF2011). (2012 - Current Contents). ISSN 0024-9297.

Citácie:
1. [1.1] BAO, R.Y. - YANG, W. - WEI, X.F. - XIE, B.H. - YANG, M.B. Enhanced formation of stereocomplex crystallites of high molecular weight poly(L-lactide)/Poly(D-lactide) blends from melt by using poly(ethylene glycol). In ACS SUSTAINABLE CHEMISTRY & ENGINEERING. ISSN 2168-0485, OCT 2014, vol. 2, no. 10, p. 2301-2309., WOS
2. [1.1] GE, H. - ZHU, Z.G. - YIN, H.H. - ZHANG, X.Q. - WANG, R. Fabrication and properties of sc-PLA/SiO2 composites. In 2014 GLOBAL CONFERENCE ON POLYMER AND COMPOSITE MATERIALS (PCM 2014). ISSN 1757-8981, 2014, vol. 62., WOS
3. [1.1] LI, W. - MA, Y. - LI, Y.X. - FAN, Z.Y. Three-arm stereocomplexed PPO-PDLA-PLLA copolymer with high molecular weight. In CHEMICAL JOURNAL OF CHINESE UNIVERSITIES-CHINESE. ISSN 0251-0790, JUL 10 2014, vol. 35, no. 7, p. 1553-1558., WOS
4. [1.1] LIU, Y.L. - SHAO, J. - SUN, J.R. - BIAN, X.C. - FENG, L.D. - XIANG, S. - SUN, B. - CHEN, Z.M. - LI, G. - CHEN, X.S. Improved mechanical and thermal properties of PLLA by solvent blending with PDLA-b-PEG-b-PDLA. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, MAY 2014, vol. 101, p. 10-17., WOS
5. [1.1] PURNAMA, P. - KIM, S.H. Bio-based composite of stereocomplex polylactide and cellulose nanowhiskers. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, NOV 2014, vol. 109, SI, p. 430-435., WOS
6. [1.1] PURNAMA, P. - KIM, S.H. Synergism of cellulosic nanowhiskers and graft structure in stereocomplex-based materials: formation in solution and a stereocomplex memory study. In CELLULOSE. ISSN 0969-0239, AUG 2014, vol. 21, no. 4, p. 2539-2548., WOS
7. [1.1] SAEIDLOU, S. - HUNEAULT, M.A. - LI, H.B. - PARK, C.B. Poly(lactic acid) stereocomplex formation: Application to PLA rheological property modification. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, NOV 15 2014, vol. 131, no. 22., WOS

ADCA78 BUBACK, M. - HESSE, P. - LACÍK, Igor. Propagation rate coefficient and fraction of mid-chain radicals for acrylic acid polymerization in aqueous solution. In Macromolecular Rapid Communications, 2007, vol. 28, p. 2049-2054. (3.164 - IF2006). (2007 - Current Contents). ISSN 1022-1336.

Citácie:
1. [1.1] CHEVREL, M.C. - BRUN, N. - HOPPE, S. - MEIMAROGLOU, D. - FALK, L. - CHAPRON, D. - BOURSON, P. - DURAND, A. In situ monitoring of acrylic acid polymerization in aqueous solution using rheo-Raman technique. Experimental investigation and theoretical modelling. In CHEMICAL ENGINEERING SCIENCE. ISSN 0009-2509, MAR 17 2014, vol. 106, p. 242-252., WOS
2. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA79 BUBACK, M. - FELDERMANN, A. - BARNER-KOWOLLIKIK, Ch. - LACÍK, Igor. Propagation rate coefficients of acrylate-methacrylate free-radical bulk copolymerizations. In Macromolecules, 2001, vol. 34, p. 5439-5448. (3.697 - IF2000). (2001 - Current Contents). ISSN 0024-9297.

Citácie:
1. [1.1] ELGAMMAL, M. - PREVOST, S. - SCHWEINS, R. - SCHNEIDER, R. -

GRADZIELSKI, M. "Nanosized latexes for textile printing applications obtained by miniemulsion polymerization". In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, JUL 2014, vol. 292, no. 7, p. 1487-1500., WOS
2. [1.1] LIANG, K. - ROONEY, T.R. - HUTCHINSON, R.A. Solvent effects on kinetics of 2-hydroxyethyl methacrylate semibatch radical copolymerization. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, MAY 7 2014, vol. 53, no. 18, p. 7296-7304., WOS

ADCA80 BUBACK, M. - HESSE, P. - HUTCHINSON, R. A. - *KASÁK, Peter* - LACÍK, Igor - *STACH, Marek* - UTZ, I. Kinetics and modeling of free-radical batch polymerization of nonionized methacrylic acid in aqueous solution. In Industrial & Engineering Chemistry Research, 2008, vol. 47, p. 8197 - 8204. (1.749 - IF2007). (2008 - Current Contents). ISSN 0888-5885.

Citácie:

1. [1.1] LAZZARI, S. - PFISTER, D. - DIEDERICH, V. - KERN, A. - STORTI, G. Modeling of acrylamide/N,N'-methylenebisacrylamide solution copolymerization. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, JUN 4 2014, vol. 53, no. 22, p. 9035-9048., WOS

ADCA81 *BÚCSI, Alexander* - *SZÖCS, Ferenc*. Kinetics of radical generation in PVC with benzoyl peroxide utilizing high-pressure technique. In Macromolecular Chemistry and Physics, 2000, vol. 201, no. 4, p. 435-438. (1.530 - IF1999). (2000 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] NABIL, H. - ISMAIL, H. - RATNAM, C.T. Simultaneous enhancement of mechanical and dynamic mechanical properties of natural rubber/recycled ethylene-propylene-diene rubber blends by electron beam irradiation. In INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION. ISSN 1023-666X, APR 3 2014, vol. 19, no. 3, p. 272-285., WOS
2. [1.1] NABIL, H. - ISMAIL, H. Enhancing the thermal stability of natural rubber/recycled ethylene-propylene-diene rubber blends by means of introducing pre-vulcanised ethylene-propylene-diene rubber and electron beam irradiation. In MATERIALS & DESIGN. ISSN 0261-3069, APR 2014, vol. 56, p. 1057-1067., WOS
3. [1.1] POLAT, K. - SEN, M. Curing kinetics of styrene-(ethylene-butylene)-styrene (SEBS) copolymer by peroxides in the presence of co-agents. In JOURNAL OF POLYMER ENGINEERING. ISSN 0334-6447, DEC 2014, vol. 34, no. 9, p. 787-792., WOS

ADCA82 *BÚCSIOVÁ, Ľubica* - HRDLOVIČ, Pavol - CHMELA, Štefan. Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix. In Journal of Photochemistry and Photobiology A : Polymer Chemistry. - Amsterdam : Elsevier Science, 2001, vol. 143, p. 59-68. ISSN 1010-6030.

Citácie:

1. [1.1] BIVER, E. - BERTA, M. - D'ALEO, A. - PHAN, T. - MARIA, S. - FAGES, F. - GIGMES, D. - SENTIS, M. - DELAPORTE, P. Influence of Pyrene Grafting on PMMA Nanosecond Laser Ablation at 248 nm. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, JAN 8 2014, vol. 6, no. 1, p. 41-48., WOS
2. [1.1] FLAMHOLC, R. - PLAZUK, D. - ZAKRZEWSKI, J. - METIVIER, R. - NAKATANI, K. - MAKAL, A. - WOZNIAK, K. A new class of pyrenyl solid-state emitters: 1-pyrenyl ynones. Synthesis via the Friedel-Crafts route, molecular and electronic structure and photophysical properties. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 60, p. 31594-31601., WOS
3. [1.1] STREHMEL, V. - BERDZINSKI, S. - STRAUCH, P. - HOFFMANN-

JACOBSEN, K. - STREHMEL, B. Investigation of molecular solvents and ionic liquids with a dual probe. In ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS. ISSN 0942-9352, MAR 2014, vol. 228, no. 2-3, SI, p. 155-169., WOS

ADCA83 BUČKO, M. - MISLOVIČOVÁ, D. - NAHÁLKA, J. - VIKARTOVSKÁ, A., Welwardová - ŠEFČOVIČOVÁ, J. - KATRLÍK, J. - TKÁČ, J. - GEMEINER, P. - LACÍK, Igor - ŠTEFUCA, V. - POLAKOVIČ, M. - ROSENBERG, M. - REBROŠ, M. - ŠMOGROVIČOVÁ, D. - ŠVITEL, J. Immobilization in biotechnology and biorecognition: from macro- to nanoscale systems. In Chemical papers, 2012, vol. 66, no. 11, p. 983 - 998. (1.096 - IF2011). (2012 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] BAHAR, T. Clinoptilolite particles as a carrier for biocatalysts immobilization: invertase immobilization and characterization. In ASIA-PACIFIC JOURNAL OF CHEMICAL ENGINEERING. ISSN 1932-2135, JAN 2014, vol. 9, no. 1, p. 31-38., WOS

2. [1.1] CAO, H. - YE, H. - LI, C. - ZHENG, L.L. - LI, Y. - OUYANG, Q.F. Effect of microencapsulated cell preparation technology and conditions on the catalytic performance of Penicillium purpurogenum Li-3 strain cells. In PROCESS BIOCHEMISTRY. ISSN 1359-5113, MAY 2014, vol. 49, no. 5, p. 791-796., WOS

3. [1.1] DEZFOULI, M. - VICKOVIC, S. - IGLESIAS, M.J. - NILSSON, P. - SCHWENK, J.M. - AHMADIAN, A. Magnetic bead assisted labeling of antibodies at nanogram scale. In PROTEOMICS. ISSN 1615-9853, JAN 2014, vol. 14, no. 1, p. 14-18., WOS

4. [1.1] GARAY-FLORES, R.V. - SEGURA-CENICEROS, E.P. - DE LEON-GAMEZ, R. - BALVANTIN-GARCIA, C. - MARTINEZ-HERNANDEZ, J.L. - BETANCOURT-GALINDO, R. - RAMIREZ, A.R.P. - AGUILAR, C.N. - ILYINA, A. Production of glucose oxidase and catalase by Aspergillus niger free and immobilized in alginate-polyvinyl alcohol beads. In JOURNAL OF GENERAL AND APPLIED MICROBIOLOGY. ISSN 0022-1260, 2014, vol. 60, no. 6, p. 262-269., WOS

5. [1.1] KREGIEL, D. - BERLOWSKA, J. Effect of quaternary ammonium silane coating on adhesive immobilization of industrial yeasts. In CHEMICAL PAPERS. ISSN 0366-6352, MAR 2014, vol. 68, no. 3, p. 308-315., WOS

6. [1.1] LIU, Y. - LI, Q. - FENG, Y.Y. - JI, G.S. - LI, T.C. - TU, J. - GU, X.D. Immobilisation of acid pectinase on graphene oxide nanosheets. In CHEMICAL PAPERS. ISSN 0366-6352, JUN 2014, vol. 68, no. 6, p. 732-738., WOS

ADCA84 BUČKO, M. - VIKARTOVSKÁ, A., Welwardová - LACÍK, Igor - HLOUŠKOVÁ, Gabriela - GEMEINER, P. - PÄTOPRSTÝ, V. - BRYGIN, M. Immobilization of a whole-cell epoxide-hydrolyzing biocatalyst in sodium alginate-cellulose sulfate-poly(methylene-co-guanidine) capsules using a controlled encapsulation process. In Enzyme and Microbial Technology. - New York : Elsevier Inc., 2005, vol. 36, p.118-126. ISSN 0141-0229.

Citácie:

1. [1.1] CHENG, Y.Q. - PAN, H.F. - BAO, W.N. - SUN, W.R. - XIE, Z.P. - ZHANG, J.G. - ZHAO, Y.H. Cloning, homology modeling, and reaction mechanism analysis of a novel cis-epoxysuccinate hydrolase from Klebsiella sp.. In BIOTECHNOLOGY LETTERS. ISSN 0141-5492, DEC 2014, vol. 36, no. 12, p. 2537-2544., WOS

2. [1.1] CHENG, Y.Q. - WANG, L. - PAN, H.F. - BAO, W.N. - SUN, W.R. - XIE, Z.P. - ZHANG, J.G. - ZHAO, Y.H. Purification and characterization of a novel

cis-epoxysuccinate hydrolase from Klebsiella sp. that produces L(+)-tartaric acid. In BIOTECHNOLOGY LETTERS. ISSN 0141-5492, NOV 2014, vol. 36, no. 11, p. 2325-2330., WOS

3. [1.1] WANG, Z.Q. - WANG, Y.S. - SHI, H. - SU, Z.G. Improvement of the production efficiency of L-(+)-Tartaric acid by heterogeneous whole-cell bioconversion. In APPLIED BIOCHEMISTRY AND BIOTECHNOLOGY. ISSN 0273-2289, APR 2014, vol. 172, no. 8, p. 3989-4001., WOS

4. [1.1] ZHANG, J.F. - LIU, Z.Q. - ZHANG, X.H. - ZHENG, Y.G. Biotransformation of iminodiacetonitrile to iminodiacetic acid by Alcaligenes faecalis cells immobilized in ACA-membrane liquid-core capsules. In CHEMICAL PAPERS. ISSN 0366-6352, JAN 2014, vol. 68, no. 1, p. 53-64., WOS

ADCA85 BUČKO, M. - SCHENKMAYEROVÁ, A. - GEMEINER, P.- VIKARTOVSKÁ, A., Welwardová - MIHOVILOVIČ, M. D. - LACÍK, Igor. Continuous testing system for Baeyer-Villiger biooxidation using recombinant Escherichia coli expressing cyclohexanone monooxygenase encapsulated in polyelectrolyte complex capsules. In Enzyme and Microbial Technology, 2011, vol. 49, p. 284 - 288. (2.287 - IF2010). (2011 - Current Contents). ISSN 0141-0229.

Citácie:

1. [1.1] CECCOLI, R.D. - BIANCHI, D.A. - RIAL, D.V. Flavoprotein monooxygenases for oxidative biocatalysis: recombinant expression in microbial hosts and applications. In FRONTIERS IN MICROBIOLOGY. ISSN 1664-302X, FEB 6 2014, vol. 5., WOS

2. [1.1] MELGAREJO-TORRES, R. - CASTILLO-ARAIZA, O. - LOPEZ-ORDAZ, P. - TORRES-MARTINEZ, D. - GUTIERREZ-ROJAS, M. - LYE, G.J. - HUERTA-OCHOA, S. Kinetic mathematical model for ketone bioconversion using Escherichia coli TOP10 pQR239. In CHEMICAL ENGINEERING JOURNAL. ISSN 1385-8947, MAR 15 2014, vol. 240, p. 1-9., WOS

3. [1.2] MELGAREJO-TORRES, R.- CASTILLO-ARAIZA, C.O.- DUTTA, A.- BÉNY, G.- TORRES-MARTINEZ, D.-GUTIÉRREZ-ROJAS, M.- LYE, G.J.- HUERTA-OCHOA, S. Mathematical model of a three phase partitioning bioreactor for conversion of ketones using whole cells. (2014) Chemical Engineering Journal, 260, p. 765-775. DOI: 10.1016/j.cej.2014.08.097, Scopus

ADCA86 BUJDÁK, J. - CHORVÁT, Dušan Jr. - IYI, N. Resonance energy transfer between rhodamine molecules adsorbed on layered silicate particles. In Journal of Physical Chemistry C, 2010, vol. 114, no. 2, p. 1246-1252. (4.224 - IF2009). (2010 - Current Contents). ISSN 1932-7447.

Citácie:

1. [1.1] CAO, Qiong - XIAO, Shuzhang - LI, Ruohan - LIN, Qifei - YANG, Changying - ZOU, Kun - DAN, Feijun. Solid-emissive rhodamine: hydrogen bonding-assisted efficient intermolecular fluorescence resonance energy transfer in the solid state. In SUPRAMOLECULAR CHEMISTRY. ISSN 1061-0278, 2014, vol. 26, no. 2, pp. 104., WOS

2. [1.1] OHTANI, Yuta - ISHIDA, Yohei - ANDO, Yuka - TACHIBANA, Hiroshi - SHIMADA, Tetsuya - TAKAGI, Shinsuke. Adsorption and photochemical behaviors of the novel cationic xanthene derivative on the clay surface. In TETRAHEDRON LETTERS. ISSN 0040-4039, 2014, vol. 55, no. 5, pp. 1024., WOS

3. [1.1] SUZUKI, Yasutaka - SUGIHARA, Hiroyuki - SATOMI, Koichiro - TOMINAGA, Makoto - MOCHIDA, Shuhei - KAWAMATA, Jun. Two-photon absorption properties of an acetylene derivative confined in the interlayer space of a smectite. In APPLIED CLAY SCIENCE. ISSN 0169-1317, 2014, vol. 96, no., pp. 116., WOS

ADCA87 BUSZEWSKI, B. - BEREK, Dušan - GARAJ, J. - *NOVÁK, Ivan* - SUPRYNOWICZ, Z. Influence of porous silica gel structure on the coverage density of a chemically bonded C18 phase for high-performance liquid chromatography. In Journal of Chromatography, 1988, vol. 446, p. 191 - 201. ISSN 0021-9673.

Citácie:

1. [1.1] GOMEZ, J.E. - NAVARRO, F.H. - SANDOVAL, J.E. Novel 3-hydroxypropyl-bonded phase by direct hydrosilylation of allyl alcohol on amorphous hydride silica. In ELECTROPHORESIS. ISSN 0173-0835, SEP 2014, vol. 35, no. 18, p. 2579-2586., WOS

ADCA88 BUSZEWSKI, B. - JEZIERSKA, M. - WELNIAK, M. - BEREK, Dušan. Survey and trends in the preparation of chemically bonded silica phases for liquid chromatographic analysis. In HRC - Journal of High Resolution Chromatography, 1998, vol. 21, no. 5, p. 267 - 281. ISSN 0935-6304.

Citácie:

1. [1.1] CULKOVA, E. - TOMCIK, P. - SVORC, L. - CINKOVA, K. - CHOMISTEKOVA, Z. - DURDIAK, J. - RIEVAJ, M. - BUSTIN, D. Indirect voltammetric sensing platforms for fluoride detection on boron-doped diamond electrode mediated via [FeF6](3-) and [CeF6](2-) complexes Formation. In ELECTROCHIMICA ACTA. ISSN 0013-4686, DEC 1 2014, vol. 148, p. 317-324., WOS

2. [1.1] MIGNOT, M. - TCHAPLA, A. - MERCIER, O. - COUVRAT, N. - TISSE, S. - CARDINAEL, P. - PEULON-AGASSE, V. High-density octadecyl chemically bonded core-shell silica phases for HPLC: Comparison of microwave-assisted and classical synthetic routes, structural characterization and chromatographic evaluation. In CHROMATOGRAPHIA. ISSN 0009-5893, DEC 2014, vol. 77, no. 23-24, p. 1577-1588., WOS

ADCA89 CANDAU, F. - VOLPERT, E. - LACÍK, Igor - SELB, J. Free radical polymerizaion in micellar media: effect of microenvironment. In Macromolecular Symposia, 1996, vol. 111, p. 85 - 94. ISSN 1022-1360.

Citácie:

1. [1.1] GUO, Y.J. - LIANG, Y. - YANG, X.S. - FENG, R.S. - SONG, R.T. - ZHOU, J.D. - GAO, F.L. Hydrophobic microblock length effect on the interaction strength and binding capacity between a partially hydrolyzed microblock hydrophobically associating polyacrylamide terpolymer and surfactant. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, AUG 15 2014, vol. 131, no. 16., WOS

ADCA90 CAPEK, Ignác - *FIALOVÁ, Lenka* - BEREK, Dušan. On the kinetics of inverse emulsion polymerization of acrylamide. In Designed Monomers and Polymers, 2008, vol.11, p. 123 -137. (0.732 - IF2007). (2008 - Current Contents). ISSN 1385-772X.

Citácie:

1. [1.1] TOMOVSKA, R. - DE LA CAL, J.C. - ASUA, J.M. Reactions in heterogeneous media: Emulsion, miniemulsion, microemulsion, suspension, and dispersion polymerization. In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 59-77., WOS

ADCA91 CAPEK, Ignác. On inverse miniemulsion polymerization of conventional water-soluble monomers. In Advances in colloid and interface science, 2010, vol. 156, p. 35 - 61. (5.675 - IF2009). (2010 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] ASUA, J.M. Challenges for industrialization of miniemulsion polymerization. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, OCT

2014, vol. 39, no. 10, SI, p. 1797-1826., WOS
2. [1.1] CARDOSO, P.B. - MUSYANOVYCH, A. - LANDFESTER, K. - SAYER, C. - DE ARAUJO, P.H.H. - MEIER, M.A.R. ADMET Reactions in miniemulsion. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, MAY 1 2014, vol. 52, no. 9, p. 1300-1305., WOS
3. [1.1] COLMAN, M.M.E. - CHICOMA, D.L. - GIUDICI, R. - ARAUJO, P.H.H. - SAYER, C. Acrylamide inverse miniemulsion polymerization: In situ, real-time monitoring using nir spectroscopy. In BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING. ISSN 0104-6632, OCT-DEC 2014, vol. 31, no. 4, p. 925-933., WOS
4. [1.1] KO, Y.S. - CIRCU, M.V. - GEIGER, T. - DUNKI, S. - NUESCH, F.A. - OPRIS, D.M. Synthesis of poly(ethylene-co-butylene)-block-poly(ethylene oxide) surfactant and its use in the synthesis of polyhydroxyethyl methacrylate nanoparticles containing azo-dye. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 66, p. 35027-35034., WOS
5. [1.1] LI, W.F. - HUANG, H.J. - LI, Y. - DENG, J.P. Particles of polyacetylene and its derivatives: preparation and applications. In POLYMER CHEMISTRY. ISSN 1759-9954, FEB 21 2014, vol. 5, no. 4, p. 1107-1118., WOS
6. [1.1] MA, Y.J. - THIELE, J. - ABDELMOHSEN, L. - XU, J.G. - HUCK, W.T.S. Biocompatible macro-initiators controlling radical retention in microfluidic on-chip photopolymerization of water-in-oil emulsions. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2014, vol. 50, no. 1, p. 112-114., WOS
7. [1.1] TOMOVSKA, R. - DE LA CAL, J.C. - ASUA, J.M. Reactions in heterogeneous media: Emulsion, miniemulsion, microemulsion, suspension, and dispersion polymerization. In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 59-77., WOS

ADCA92 CAPEK, Ignác. On the role of oil-soluble initiators in the radical polymerization of micellar systems. In Advances in colloid and interface science, 2001, vol. 91, no. 2, p. 295 - 334. (2001 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] ZHANG, Y. - LANDFESTER, K. - TADEN, A. A Facile route toward structured hybrid particles based on liquid-solid assembly. In MACROMOLECULES. ISSN 0024-9297, FEB 11 2014, vol. 47, no. 3, p. 1030-1038., WOS

ADCA93 CAPEK, Ignác - CHERN, Ch.-S. Radical polymerization in direct mini-emulsion systems. In Advances in Polymer Science, 2001, vol. 155, p. 101-165. (5.446 - IF2000). (2001 - Current Contents).

Citácie:

1. [1.1] ASUA, J.M. Challenges for industrialization of miniemulsion polymerization. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, OCT 2014, vol. 39, no. 10, SI, p. 1797-1826., WOS
2. [1.1] ASUA, J.M. Mapping the morphology of polymer-inorganic nanocomposites synthesized by miniemulsion polymerization. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, MAR 2014, vol. 215, no. 5, p. 458-464., WOS
3. [1.1] BORZENKOV, M. - HEVUS, O. Polymerization behavior of surface-active monomers. In SURFACE ACTIVE MONOMERS: SYNTHESIS, PROPERTIES, AND APPLICATION. ISSN 2192-1091, 2014, p. 39-55., WOS
4. [1.1] DANILOSKA, V. - CARRETERO, P. - TOMOVSKA, R. - ASUA, J.M. High performance pressure sensitive adhesives by miniemulsion photopolymerization in a continuous tubular reactor. In POLYMER. ISSN 0032-3861, SEP 26 2014, vol. 55, no. 20, p. 5050-5056., WOS

5. [1.1] DANILOSKA, V. - CARRETERO, P. - TOMOVSKA, R. - PAULIS, M. - ASUA, J.M. High-performance adhesives resulting from spontaneous formation of nanogels within miniemulsion particles. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, MAR 12 2014, vol. 6, no. 5, p. 3559-3567., WOS
6. [1.1] TOMOVSKA, R. - DE LA CAL, J.C. - ASUA, J.M. Reactions in heterogeneous media: Emulsion, miniemulsion, microemulsion, suspension, and dispersion polymerization. In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 59-77., WOS
7. [1.1] ZHANG, Z.Q. - JI, X. - WANG, P. Preparation of polystyrene latex particles by miniemulsion polymerization using a predissolved fluorinated block copolymer as the sole co-stabilizer. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, JAN 20 2014, vol. 441, p. 510-516., WOS

ADCA94 CAPEK, Ignác. Dispersion of polymer ionomers. In Advances in colloid and interface science, 2004, vol. 112, no. 1 - 3, p. 1-29. (4.057 - IF2003). ISSN 0001-8686.

Citácie:

1. [1.1] AKYOL, E. - KIRBOGA, S. - ONER, M. Polyelectrolyte: Science and application. In POLYELECTROLYTES: THERMODYNAMICS AND RHEOLOGY. ISSN 1612-1317, 2014, p. 87-112., WOS
2. [1.1] KOWALONEK, J. The influence of UV-irradiation or plasma on ionomer surfaces. In MOLECULAR CRYSTALS AND LIQUID CRYSTALS. ISSN 1542-1406, FEB 11 2014, vol. 590, no. 1, p. 11-16., WOS
3. [1.1] THIEMANN, S. - SACHNOV, S.J. - GRUBER, M. - GANNOTT, F. - SPALLEK, S. - SCHWEIGER, M. - KRUCKEL, J. - KASCHTA, J. - SPIECKER, E. - WASSERSCHEID, P. - ZAUMSEIL, J. Spray-coatable ionogels based on silane-ionic liquids for low voltage, flexible, electrolyte-gated organic transistors. In JOURNAL OF MATERIALS CHEMISTRY C. ISSN 2050-7526, 2014, vol. 2, no. 13, p. 2423-2430., WOS
4. [1.1] WATERS, S.M. - MCCOY, J.D. - FRISCHKNECHT, A.L. - BROWN, J.R. Simulation of a small molecule analogue of a lithium ionomer in an external electric field. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, JAN 7 2014, vol. 140, no. 1., WOS

ADCA95 CAPEK, Ignác. Surface active properties of polyoxyethylene macromonomers and their role in radical polymerization in disperse systems. In Advances in colloid and interface science, 2000, vol. 88, no. 3, p. 295 - 357. (1.550 - IF1999). (2000 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] ADESINA, S.K. - WIGHT, S.A. - AKALA, E.O. Optimization of the fabrication of novel stealth PLA-based nanoparticles by dispersion polymerization using D-optimal mixture design. In DRUG DEVELOPMENT AND INDUSTRIAL PHARMACY. ISSN 0363-9045, NOV 2014, vol. 40, no. 11, p. 1547-1556., WOS
2. [1.1] BORZENKOV, M. - HEVUS, O. Synthesis of surface active monomers. In SURFACE ACTIVE MONOMERS: SYNTHESIS, PROPERTIES, AND APPLICATION. ISSN 2192-1091, 2014, p. 1-22., WOS
3. [1.1] WANG, X.R. - SHEN, Y.D. - LAI, X.J. - LIU, G.J. - DU, Y. Micromorphology and thermal properties of polyurethane/polyacrylate soap-free emulsion in the presence of functional monomers. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, FEB 13 2014, vol. 21, no. 3., WOS

ADCA96 CAPEK, Ignác. The inverse mini-emulsion polymerization of acrylamide. In Designed Monomers and Polymers, 2003, vol. 6, no. 4, p. 399 - 409. (0.610 -

IF2002). ISSN 1385-772X.

Citácie:

1. [1.1] COLMAN, M.M.E. - CHICOMA, D.L. - GIUDICI, R. - ARAUJO, P.H.H. - SAYER, C. Acrylamide inverse miniemulsion polymerization: In situ, real-time monitoring using nir spectroscopy. In BRAZILIAN JOURNAL OF CHEMICAL ENGINEERING. ISSN 0104-6632, OCT-DEC 2014, vol. 31, no. 4, p. 925-933., WOS

ADCA97 CAPEK, Ignác. Photopolymerization of alkyl(meth)acrylates and polyoxyethylene macromonomers in fine emulsions. In European Polymer Journal, 2000, vol. 36, no. 2, p. 255 - 263. (0.720 - IF1999). (2000 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] ROOSE, P. - BERLIER, M. - DE DONCKER, P. - BAURANT, J.N. - WALTERS, P. UV-nanoparticles: Photopolymerized polymer colloids from aqueous dispersions of acrylated oligomers. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, OCT 2014, vol. 77, no. 10, SI, p. 1569-1576., WOS

ADCA98 CAPEK, Ignác - *KOCSISOVÁ, Teodora*. On the preparation of composite poly(butyl acrylate)/ carbon nanotube nanoparticles by miniemulsion polymerization of butyl acrylate. In Polymer Journal, 2011, vol. 43, p. 700 - 707. (1.133 - IF2010). (2011 - Current Contents). ISSN 0032-3896.

Citácie:

1. [1.1] DONESCU, D. - COROBEA, M.C. - PETCU, C. - SPATARU, C.I. - GHIUREA, M. - SOMOGHI, R. - GABOR, R. - THOMASSIN, J.M. - ALEXANDRE, M. - JEROME, C. Nanocomposites based on MWCNT and polystyrene, styrene-acrylonitrile copolymer, or polymethylmethacrylate, obtained by miniemulsion polymerization. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, DEC 5 2014, vol. 131, no. 23., WOS

ADCA99 CAPEK, Ignác - *JURANIČOVÁ, Viera* - *BARTOŇ, Jaroslav* - ASUA, J. M. - ITO, K. Microemulsion Radical Polymerization of Alkyl Acrylates. In Polymer International, 1997, vol. 43, no. 1, p. 1-7.

Citácie:

1. [1.1] JENSEN, A.T. - SAYER, C. - ARAUJO, P.H.H. - MACHADO, F. Emulsion copolymerization of styrene and acrylated methyl oleate. In EUROPEAN JOURNAL OF LIPID SCIENCE AND TECHNOLOGY. ISSN 1438-7697, JAN 2014, vol. 116, no. 1, SI, p. 37-43., WOS

ADCA100 CAPEK, Ignác. Photopolymerization of butyl acrylate microemulsions 1. Post-polymerization. In Polymer International, 1996, vol. 40, no. 1, p. 41-49.

Citácie:

1. [1.1] LOBRY, E. - JASINSKI, F. - PENCONI, M. - CHEMTOB, A. - LEY, C. - CROUTXE-BARGHORN, C. - OLIVEROS, E. - BRAUN, A.M. - CRIQUI, A. Absorption and scattering in concentrated monomer miniemulsions: Static and dynamic investigations. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, JUN 2014, vol. 215, no. 12, p. 1201-1211., WOS

ADCA101 CAPEK, Ignác - KOSTRUBOVÁ, J. - *BARTOŇ, Jaroslav*. Effect of a bi-unsaturated monomer on the emulsion polymerization of ethyl acrylate. In Die Makromolekulare Chemie: Macromolecular Symposia, 1990, vol. 31, p. 213 - 226.

Citácie:

1. [1.1] SHUKLA, S. - RAI, J.S.P. Synthesis and characterizations of waterborne poly(acrylate) latexes. In HIGH PERFORMANCE POLYMERS. ISSN 0954-0083, SEP 2014, vol. 26, no. 6, SI, p. 653-659., WOS

ADCA102 CAPEK, Ignác - *JURANIČOVÁ, Viera*. On kinetics of microemulsion

copolymerization of butyl acrylate and acrylonitrile. In Journal of Polymer Science: Part A - Polymer Chemistry, 1996, vol. 34, p. 575-585.

Citácie:

1. [1.1] OVANDO-MEDINA, V.M. - CORONA-RIVERA, M.A. - MARQUEZ-HERRERA, A. - LARA-CENICEROS, T.E. - MANRIQUEZ-GONZALEZ, R. - PERALTA, R.D. Heterophase polymerization of different methacrylates: Effect of alkyl ester group on kinetics and colloidal behavior. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, 2014, vol. 131, no. 8., WOS

ADCA103 CAPEK, Ignác - *CHUDEJ, Jakub* - *JANÍČKOVÁ, Silvia*. Sterically stabilized emulsion polymerization of styrene: Pseudo-semicontinuous approach. In Journal of Polymer Science. Part A.Polymer Chemistry, 2003, vol. 41, no. 6, p. 804 - 820. (2.371 - IF2002). (2003 - Current Contents). ISSN 0887-624X.

Citácie:

1. [1.1] ZHANG, F.A. - LUO, M. - CHEN, Z.J. - WEI, Z.B. - PINNAVAIA, T.J. Effects of mesoporous silica particles on the emulsion polymerization of methyl methacrylate. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, DEC 2014, vol. 54, no. 12, p. 2746-2752., WOS

ADCA104 CAPEK, Ignác. Microemulsion polymerization of styrene in the presence of anionic emulsifier. In Advances in Colloid and Interface Science, 1999, vol. 82, p. 253-273. (2.113 - IF1998). (1999 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] JUNEJA, R. - ROY, I. Surface modified PMMA nanoparticles with tunable drug release and cellular uptake. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 84, p. 44472-44479., WOS

ADCA105 CAPEK, Ignác. Emulsion polymerization of butyl acrylate IV. Effects of initiator type and concentration. In Polymer Journal, 1994, vol. 26, no. 10, p. 1154-1162.

Citácie:

1. [1.1] SHUKLA, S. - RAI, J.S.P. Synthesis and characterizations of waterborne poly(acrylate) latexes. In HIGH PERFORMANCE POLYMERS. ISSN 0954-0083, SEP 2014, vol. 26, no. 6, SI, p. 653-659., WOS

ADCA106 CAPEK, Ignác - *JANÍČKOVÁ, Silvia* - DONESCU, D. - SAROV, Y. - RANGELOW, I. W. Microemulsion polymerization of butyl acrylate under ultrasound irradiation. In Polymer Journal, 2006, vol. 38, no. 3, p. 264-276. ISSN 0032-3896.

Citácie:

1. [1.1] EBRAHIMI, R. - EBRAHIMI, M. The stimuli-response characters of hydrogels prepared using ultrasound. In JOURNAL OF POLYMER ENGINEERING. ISSN 0334-6447, SEP 2014, vol. 34, no. 7, p. 625-632., WOS

2. [1.1] EBRAHIMI, R. - NIYARAKI, F.S. - JIRANDEH, A.B. Ultrasonic irradiated synthesis of acrylic acid-co-acrylamide as pH and salt sensitive hydrogel. In JOURNAL OF POLYMER MATERIALS. ISSN 0973-8622, APR-JUN 2014, vol. 31, no. 2, p. 159-167., WOS

ADCA107 CAPEK, Ignác. Nature and properties of ionomer assemblies. In Advances in colloid and interface science, 2005, vol.118, no.1-3, p. 73 - 112. ISSN 0001-8686.

Citácie:

1. [1.1] DATTA, P. - GUHA, C. - SARKHEL, G. Effect of Na-ionomer on dynamic rheological, dynamic mechanical and creep properties of acrylonitrile styrene acrylate (ASA)/Na+1 poly (ethylene-co-methacrylic acid) ionomer blend. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, DEC 2014, vol. 25, no. 12, p. 1454-1463., WOS

2. [1.1] DATTA, P. - GUHA, C. - SARKHEL, G. Study of dynamic rheological,

dynamic mechanical and creep properties of acrylonitrile styrene acrylate (ASA)/Zn(+2)poly(ethylene-co-methacrylic acid) ionomer blend. In JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY. ISSN 1060-1325, 2014, vol. 51, no. 10, p. 820-830., WOS
3. [1.1] GANESH, S.D. - PAI, V.K. - KARIDURAGANAVAR, M.Y. - JAYANNA, M.B. Fluorinated poly(arylene ether-1,3,4-oxadiazole)s containing a 4-bromophenyl pendant group and its phosphonated derivatives: synthesis, spectroscopic characterization, thermal and dielectric Studies. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, JAN 2 2014, vol. 53, no. 1, p. 97-105., WOS
4. [1.1] JIAO, Y. - PARRA, J. - AKCORA, P. Effect of ionic groups on polymer-grafted magnetic nanoparticle assemblies. In MACROMOLECULES. ISSN 0024-9297, MAR 25 2014, vol. 47, no. 6, p. 2030-2036., WOS
5. [1.1] KOWALONEK, J. The influence of UV-irradiation or plasma on ionomer surfaces. In MOLECULAR CRYSTALS AND LIQUID CRYSTALS. ISSN 1542-1406, FEB 11 2014, vol. 590, no. 1, p. 11-16., WOS
6. [1.1] NI, Y.P. - BECQUART, F. - TAHA, M. - MAJESTE, J.C. - CHEN, J.D. Poly(butyl methacrylate-co-methacrylic acid) copolymers with calcium carbonate supramolecular networks. In INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS. ISSN 0091-4037, MAY 24 2014, vol. 63, no. 8, p. 405-415., WOS
7. [1.1] TUNGCHAIWATTANA, S. - MUSA, M.S. - YAN, J.F. - LOVELL, P.A. - SHAW, P. - SAUNDERS, B.R. The role of acrylonitrile in controlling the structure and properties of nanostructured ionomer films. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 26, p. 4725-4734., WOS
8. [1.1] WATERS, S.M. - MCCOY, J.D. - FRISCHKNECHT, A.L. - BROWN, J.R. Simulation of a small molecule analogue of a lithium ionomer in an external electric field. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, JAN 7 2014, vol. 140, no. 1., WOS

ADCA108 CAPEK, Ignác. Microemulsion polymerization of styrene in the presence of a cationic emulsifier. In Advances in Colloid and Interface Science, 2001, vol. 92, p. 195-233. (2001 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] ABD EL-GHAFFAR, M.A. - KANTOUCH, F.A. - MAHMOUD, Z.M. - HAGGAG, K. - HASHEM, A.I. - RAMADAN, A.A. Micro-emulsion co-polymerisation of butyl acrylate with acrylic acid as binder for textile pigment printing. In PIGMENT & RESIN TECHNOLOGY. ISSN 0369-9420, 2014, vol. 43, no. 2, p. 84-91., WOS
2. [1.1] RAMOS, J. - FORCADA, J. - HIDALGO-ALVAREZ, R. Cationic polymer nanoparticles and nanogels: From synthesis to biotechnological applications. In CHEMICAL REVIEWS. ISSN 0009-2665, JAN 8 2014, vol. 114, no. 1, p. 367-428., WOS
3. [1.1] WANG, F. - FANG, K.J. Effect of molecular structures of Gemini and polymerizable emulsifiers on cationic emulsion copolymerization of styrene and butyl acrylate. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, JUN 2014, vol. 292, no. 6, p. 1449-1455., WOS

ADCA109 CAPEK, Ignác. Dispersions based on noble metal nanoparticles-DNA conjugates. In Advances in Colloid and Interface Science, 2011, vol. 163, no. 2, p.123–143. (8.651 - IF2010). (2011 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] HAN, Q.Y. - LI, G.A. - WANG, D.X. - HE, E.J. - DONG, J. - GAO, W. -

LI, J.N. - LIU, T.Z. - ZHANG, Z.Y. - ZHENG, H.R. Synthesis of Ag-SiO2 composite nanospheres and their catalytic activity. In SCIENCE CHINA-CHEMISTRY. ISSN 1674-7291, JUN 2014, vol. 57, no. 6, p. 881-887., WOS

2. [1.1] MAJDALAWIEH, A. - KANAN, M.C. - EL-KADRI, O. - KANAN, S.M. Recent advances in gold and silver nanoparticles: Synthesis and applications. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, JUL 2014, vol. 14, no. 7, p. 4757-4780., WOS

ADCA110 CAPEK, Ignác. On photoinduced miniemulsion polymerization of butyl acrylate with clay. In Designed Monomers and Polymers, 2012, vol. 15, no. 4, p. 345-355. (1.444 - IF2011). (2012 - Current Contents). ISSN 1385-772X.

Citácie:

1. [1.1] HARIKRISHNA, R. - SHAIKH, A. W. - PONRATHNAM, S. - RAJAN, C. R. - BHONGALE, S. Photopolymerization of high internal phase emulsions based on 2-ethylhexyl (meth)acrylates and ethylene glycol dimethacrylate. In DESIGNED MONOMERS AND POLYMERS. ISSN 1385-772X, JAN 2 2014, vol. 17, no. 1, p. 1-6., WOS

2. [1.1] JASINSKI, F. - LOBRY, E. - LEFEVRE, L. - CHEMTOB, A. - CROUTXE-BARGHORN, C. - ALLONAS, X. - CRIQUI, A. Acrylate nanolatex via self-initiated photopolymerization. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, JUL 1 2014, vol. 52, no. 13, p. 1843-1853., WOS

3. [1.1] QI, D. - CAO, Z. - ZIENER, U. Recent advances in the preparation of hybrid nanoparticles in miniemulsions. In ADVANCES IN COLLOID AND INTERFACE SCIENCE. ISSN 0001-8686, SEP 2014, vol. 211, p. 47-62., WOS

ADCA111 CAPEK, Ignác. Preparation of metal nanoparticles in water-in-oil (w/o) microemulsions. In Advances in colloid and interface science, 2004, vol. 110, no.1 - 2, p. 49 - 74. (4.057 - IF2003). ISSN 0001-8686.

Citácie:

1. [1.1] ALKHALDI, S. - HUSEIN, M.M. Hydrocracking of heavy oil by means of in situ prepared ultradispersed nickel nanocatalyst. In ENERGY & FUELS. ISSN 0887-0624, JAN 2014, vol. 28, no. 1, p. 643-649., WOS

2. [1.1] ANGELESCU, D.G. - ANASTASESCU, M. - ANGHEL, D.F. Synthesis and modeling of calcium alginate nanoparticles in quaternary water-in-oil microemulsions. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, OCT 20 2014, vol. 460, p. 95-103., WOS

3. [1.1] ASZTEMBORSKA, M. - JAKUBIAK, M. - KSIAZYK, M. - STEBOROWSKI, R. - POLKOWSKA-MOTRENKO, H. - BYSTRZEJEWSKA-PIOTROWSKA, G. Silver nanoparticle accumulation by aquatic organisms - neutron activation as a tool for the environmental fate of nanoparticles tracing. In NUKLEONIKA. ISSN 0029-5922, DEC 2014, vol. 59, no. 4, p. 169-173., WOS

4. [1.1] BARAD, J. - CHAKRABORTY, M. Reduction of 4-nitrophenol and 4-nitrobenzo 15 crown with colloidal platinum nanoparticles synthesized by microemulsion technique. In PARTICULATE SCIENCE AND TECHNOLOGY. ISSN 0272-6351, MAR 4 2014, vol. 32, no. 2, p. 164-170., WOS

5. [1.1] BUCETA, D. - PINEIRO, Y. - VAZQUEZ-VAZQUEZ, C. - RIVAS, J. - LOPEZ-QUINTELA, M.A. Metallic clusters: Theoretical background, properties and synthesis in microemulsions. In CATALYSTS. ISSN 2073-4344, DEC 2014, vol. 4, no. 4, p. 356-374., WOS

6. [1.1] BULAVCHENKO, A.I. - POPOVETSKIY, P.S. Structure of adsorption layer of silver nanoparticles in sodium bis(2-ethylhexyl) sulfosuccinate solutions in n-decane as observed by photon-correlation spectroscopy and nonaqueous

electrophoresis. In LANGMUIR. ISSN 0743-7463, NOV 4 2014, vol. 30, no. 43, p. 12729-12735., WOS
7. [1.1] DHOKALE, R.K. - YADAV, H.M. - ACHARY, S.N. - DELEKAR, S.D. Anatase supported nickel nanoparticles for catalytic hydrogenation of 4-nitrophenol. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JUN 1 2014, vol. 303, p. 168-174., WOS
8. [1.1] EINAGA, H. - KAWARADA, J. - KIMURA, K. - TERAOKA, Y. Preparation of platinum nanoparticles on TiO2 from DNA-protected particles. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, AUG 5 2014, vol. 455, p. 179-184., WOS
9. [1.1] HASHEMI, R. - NASSAR, N.N. - ALMAO, P.P. Nanoparticle technology for heavy oil in-situ upgrading and recovery enhancement: Opportunities and challenges. In APPLIED ENERGY. ISSN 0306-2619, NOV 15 2014, vol. 133, p. 374-387., WOS
10. [1.1] HAZRA, S. - GHOSH, N.N. Preparation of nanoferrites and their applications. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, FEB 2014, vol. 14, no. 2, p. 1983-2000., WOS
11. [1.1] HOLADE, Y. - MORAIS, C. - NAPPORN, T.W. - SERVAT, K. - KOKOH, K.B. Electrochemical behavior of organics oxidation on palladium-based nanocatalysts synthesized from bromide anion exchange. In PHYSICAL AND ANALYTICAL ELECTROCHEMISTRY (GENERAL) - 224TH ECS MEETING. ISSN 1938-5862, 2014, vol. 58, no. 46, p. 25-35., WOS
12. [1.1] HU, L.W. - HU, Z.Q. - LIU, C. - YU, Z.J. - CAO, X.Y. - HAN, Y. - JIAO, S.Q. Electrochemical assembly of ZnO architectures via deformation and coalescence of soft colloidal templates in reverse microemulsion. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 46, p. 24103-24109., WOS
13. [1.1] KAKAEI, K. - GHARIBI, H. Palladium nanoparticle catalysts synthesis on graphene in sodium dodecyl sulfate for oxygen reduction reaction. In ENERGY. ISSN 0360-5442, FEB 1 2014, vol. 65, p. 166-171., WOS
14. [1.1] KALIA, S. - KANGO, S. - KUMAR, A. - HALDORAI, Y. - KUMARI, B. - KUMAR, R. Magnetic polymer nanocomposites for environmental and biomedical applications. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, SEP 2014, vol. 292, no. 9, p. 2025-2052., WOS
15. [1.1] KYLIAN, O. - KRATOCHVIL, J. - HANUS, J. - POLONSKYI, O. - SOLAR, P. - BIEDERMAN, H. Fabrication of Cu nanoclusters and their use for production of Cu/plasma polymer nanocomposite thin films. In THIN SOLID FILMS. ISSN 0040-6090, JAN 1 2014, vol. 550, p. 46-52., WOS
16. [1.1] LI, Y.Z. - CAO, Y.L. - JIA, D.Z. A general strategy for synthesis of metal nanoparticles by a solid-state redox route under ambient conditions. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 11, p. 3761-3765., WOS
17. [1.1] MILLS, A.J. - WILKIE, J. - BRITTON, M.M. NMR and molecular dynamics study of the size, shape, and composition of reverse micelles in a cetyltrimethylammonium bromide (CTAB)/n-hexane/pentanol/water microemulsion. In JOURNAL OF PHYSICAL CHEMISTRY B. ISSN 1520-6106, SEP 11 2014, vol. 118, no. 36, p. 10767-10775., WOS
18. [1.1] MONTES, V. - CHECA, M. - MARINAS, A. - BOUTONNET, M. - MARINAS, J.M. - URBANO, F.J. - JARAS, S. - PINEL, C. Synthesis of different ZnO-supported metal systems through microemulsion technique and application to catalytic transformation of glycerol to acetol and 1,2-propanediol. In CATALYSIS TODAY. ISSN 0920-5861, MAR 15 2014, vol. 223, p. 129-137., WOS
19. [1.1] MURASHOVA, N.M. - LEVCHISHIN, S.Y. - YURTOV, E.V. Effect of bis-

(2-ethylhexyl)phosphoric acid on sodium bis-(2-ethylhexyl)phosphate microemulsion for selective extraction of non-ferrous metals. In JOURNAL OF SURFACTANTS AND DETERGENTS. ISSN 1097-3958, NOV 2014, vol. 17, no. 6, p. 1249-1258., WOS

20. [1.1] PAPE, J. - VIKSE, K.L. - JANUSSON, E. - TAYLOR, N. - MCINDOE, J.S. Solvent effects on surface activity of aggregate ions in electrospray ionization. In INTERNATIONAL JOURNAL OF MASS SPECTROMETRY. ISSN 1387-3806, NOV 15 2014, vol. 373, p. 66-71., WOS

21. [1.1] PAREDES, D. - ORTIZ, C. - TORRES, R. Synthesis, characterization, and evaluation of antibacterial effect of Ag nanoparticles against Escherichia coli O157: H7 and methicillinresistant Staphylococcus aureus (MRSA). In INTERNATIONAL JOURNAL OF NANOMEDICINE. ISSN 1178-2013, 2014, vol. 9, p. 1717-1729., WOS

22. [1.1] POUR, A.N. - HOUSAINDOKHT, M.R. - MONHEMI, H. Effect of solvent surface tension on the radius of hematite nanoparticles. In COLLOID JOURNAL. ISSN 1061-933X, NOV 2014, vol. 76, no. 6, p. 782-787., WOS

23. [1.1] RANGARAJAN, V. - MAJUMDER, S. - SEN, R. Biosurfactant-mediated nanoparticle synthesis a green and sustainable approach. In BIOSURFACTANTS: RESEARCH TRENDS AND APPLICATIONS. 2014, p. 217-229., WOS

24. [1.1] RATHER, S.U. Synthesis, characterization, and hydrogen uptake studies of magnesium nanoparticles by solution reduction method. In MATERIALS RESEARCH BULLETIN. ISSN 0025-5408, DEC 2014, vol. 60, p. 556-561., WOS

25. [1.1] ROSKEN, L.M. - KORSTEN, S. - FISCHER, C.B. - SCHONLEBER, A. - VAN SMAALEN, S. - GEIMER, S. - WEHNER, S. Time-dependent growth of crystalline Au-0-nanoparticles in cyanobacteria as self-reproducing bioreactors: 1. Anabaena sp.. In JOURNAL OF NANOPARTICLE RESEARCH. ISSN 1388-0764, APR 1 2014, vol. 16, no. 4., WOS

26. [1.1] SAHU, R.K. - HIREMATH, S.S. - MANIVANNAN, P.V. - SINGAPERUMAL, M. Generation and characterization of copper nanoparticles using micro-electrical discharge machining. In MATERIALS AND MANUFACTURING PROCESSES. ISSN 1042-6914, APR 3 2014, vol. 29, no. 4, p. 477-486., WOS

27. [1.1] SERRA, A. - GOMEZ, E. - LOPEZ-BARBERA, J.F. - NOGUES, J. - VALLES, E. Green electrochemical template synthesis of CoPt nanoparticles with tunable size, composition, and magnetism from microemulsions using an ionic liquid (bmimPF(6)). In ACS NANO. ISSN 1936-0851, MAY 2014, vol. 8, no. 5, p. 4630-4639., WOS

28. [1.1] SHARMA, S. - GANGULI, A.K. Spherical-to-cylindrical transformation of reverse micelles and their templating effect on the growth of nanostructures. In JOURNAL OF PHYSICAL CHEMISTRY B. ISSN 1520-6106, APR 17 2014, vol. 118, no. 15, p. 4122-4131., WOS

29. [1.1] SILVEIRA, J.L.R. - DIB, S.R. - FARIA, A.M. New support for high-performance liquid chromatography based on silica coated with alumina particles. In ANALYTICAL SCIENCES. ISSN 0910-6340, FEB 2014, vol. 30, no. 2, p. 285-291., WOS

30. [1.1] SINGHA, D. - BARMAN, N. - PHUKON, A. - SAHU, K. Selective probing of reverse micelle interfacial layer upon silver nanoparticle formation using dynamic stokes shift measurements. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, 2014, vol. 118, no. 19, p. 10366-10374., WOS

31. [1.1] SINGHA, D. - BARMAN, N. - SAHU, K. A facile synthesis of high optical quality silver nanoparticles by ascorbic acid reduction in reverse micelles

at room temperature. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, JAN 1 2014, vol. 413, p. 37-42., WOS
32. [1.1] TOJO, C. - GONZALEZ, E. - VILA-ROMEU, N. The impact of the confinement of reactants on the metal distribution in bimetallic nanoparticles synthesized in reverse micelles. In BEILSTEIN JOURNAL OF NANOTECHNOLOGY. ISSN 2190-4286, NOV 2014, vol. 5, p. 1966-1979., WOS
33. [1.1] WANG, A.L. - CHEN, L. - XU, F. - YAN, Z.C. In situ synthesis of copper nanoparticles within ionic liquid-in-vegetable oil microemulsions and their direct use as high efficient nanolubricants. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 85, p. 45251-45257., WOS
34. [1.1] XIONG, J. - WU, X.D. - XUE, Q.J. One-step synthesis of highly monodisperse silver nanoparticles using poly-amino compounds. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, JAN 20 2014, vol. 441, p. 109-115., WOS
35. [1.1] YILMAZ, O. - KARESOJA, M. - ADIGUZEL, A.C. - ZENGIN, G. - TENHU, H. Nanocomposites based on crosslinked polyacrylic latex/silver nanoparticles for waterborne high-performance antibacterial coatings. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, MAY 15 2014, vol. 52, no. 10, p. 1435-1447., WOS
36. [1.1] ZAMAND, N. - POUR, A.N. - HOUSAINDOKHT, M.R. - IZADYAR, M. Size-controlled synthesis of SnO2 nanoparticles using reverse microemulsion method. In SOLID STATE SCIENCES. ISSN 1293-2558, JUL 2014, vol. 33, p. 6-11., WOS
37. [1.2] FRITZSCHE, W.- DE LA CHAPELLE, M.L. Molecular Plasmonics. (2014) Molecular Plasmonics, p. 1-173. DOI: 10.1002/9783527649686, Scopus
38. [1.2] GONZÁLEZ, A.G.- MOMBO, S.- LEFLAIVE, J.- LAMY, A.- POKROVSKY, O.S.- ROLS, J.L. Silver nanoparticles impact phototrophic biofilm communities to a considerably higher degree than ionic silver. (2014) Environmental Science and Pollution Research, 22 (11), p. 8412-8424. DOI: 10.1007/s11356-014-3978-1, Scopus
39. [1.2] LI, W.C. -PAN, Y.Z.- WANG, J.- YE, L.S.- JIN, L.H. Preparation of Cu nanoparticles with thiourea dioxide by aqueous reduction method. (2014) Guocheng Gongcheng Xuebao/The Chinese Journal of Process Engineering, 14 (6), p. 1029-1034., Scopus
40. [1.2] MATHIAS, F.T.- ROMANO, M.A.- ROMANO, R.M. Assessment of toxic and environmental effects of silver salt nanoparticles [Avaliação dos efeitos toxicológicos e ambientais de nanopartículas de sais de prata]. (2014) Revista de Ciencias Farmaceuticas Basica e Aplicada, 35 (2), p. 187-193., Scopus
41. [1.2] PARAMESHWARAN, R.- KALAISELVAM, S. Thermal energy storage technologies. (2014) Nearly Zero Energy Building Refurbishment: A Multidisciplinary Approach, p. 483-536. DOI: 10.1007/978-1-4471-5523-2_18, Scopus
42. [1.2] SCHULZE, N.- APPELHANS, D.- TIERSCH, B.- KOETZ, J. Morphological transformation of vesicles into tubular structures by adding polyampholytes or dendritic glycopolymers. (2014) Colloids and Surfaces A: Physicochemical and Engineering Aspects, 457 (1), p. 326-332. DOI: 10.1016/j.colsurfa.2014.06.007, Scopus
43. [1.2] TAXIPALATI, M.- QUE, F.- ZHANG, H. A review of the research progress on edible nanoemulsions. (2014) Journal of Chinese Institute of Food Science and Technology, 14 (1), p. 213-223., Scopus

ADCA112 CAPEK, Ignác. Fate of excited probes in micellar systems. In Advances in colloid and interface science, 2002, vol. 97, no.1 - 3, p. 91 - 149. ISSN 0001-8686.

Citácie:

1. [1.1] CHAN, C.Y.K. - LAM, J.W.Y. - ZHAO, Z.J. - CHEN, S.M. - LU, P. - SUNG, H.H.Y. - KWOK, H.S. - MA, Y.G. - WILLIAMS, I.D. - TANG, B.Z. Aggregation-induced emission, mechanochromism and blue electroluminescence of carbazole and triphenylamine-substituted ethenes. In JOURNAL OF MATERIALS CHEMISTRY C. ISSN 2050-7526, 2014, vol. 2, no. 21, p. 4320-4327., WOS

2. [1.1] MACHATA, P. - RAPTA, P. - LUKES, V. - IDZIK, K.R. - LICHA, T. - BECKERT, R. - DUNSCH, L. Regioregular electrochromic polymers based on thienyl derivatives of fluorescent pyrene monomers: Optical properties, spectroelectrochemistry and quantum chemical study. In ELECTROCHIMICA ACTA. ISSN 0013-4686, MAR 10 2014, vol. 122, SI, p. 57-65., WOS

3. [1.2] NAGARAJ, K.-SAKTHINATHAN, S.- ARUNACHALAM, S. Thermodynamics and kinetic investigation of electron transfer reactions of surfactant cobalt(III) complexes containing diimine ligands with iron(II) in the presence of liposome vesicles and amphiphilic salt media. (2014) RSC Advances, 4 (99), p. 56068-56073. DOI: 10.1039/c4ra07404a, Scopus

ADCA113 CAPEK, Ignác. Dispersion, novel nanomaterial sensors and nanoconjugates based on carbon nanotubes. In Advances in colloid and interface science, 2009, vol. 150, p. 63 - 89. (5.333 - IF2008). (2009 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] AI, Q.H. - YANG, D. - LI, Y.B. - SHI, J.F. - WANG, X.L. - JIANG, Z.Y. Highly efficient covalent immobilization of catalase on titanate nanotubes. In BIOCHEMICAL ENGINEERING JOURNAL. ISSN 1369-703X, FEB 15 2014, vol. 83, p. 8-15., WOS

2. [1.1] DANESHVAR-FATAH, F. - NASIRPOURI, F. A study on electrodeposition of Ni-noncovalnetly treated carbon nanotubes nanocomposite coatings with desirable mechanical and anti-corrosion properties. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, JUN 15 2014, vol. 248, p. 63-73., WOS

3. [1.1] GASNIER, A. - GONZALEZ-DOMINGUEZ, J.M. - ANSON-CASAOS, A. - HERNANDEZ-FERRER, J. - PEDANO, M.L. - RUBIANES, M.D. - MARTINEZ, M.T. - RIVAS, G. Single-wall carbon nanotubes covalently functionalized with polylysine: Synthesis, characterization and analytical applications for the development of electrochemical (bio)sensors. In ELECTROANALYSIS. ISSN 1040-0397, AUG 2014, vol. 26, no. 8, p. 1676-1683., WOS

4. [1.1] KIANI, K. Vibration and instability of a single-walled carbon nanotube in a three-dimensional magnetic field. In JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS. ISSN 0022-3697, 2014, vol. 75, no. 1, p. 15-22., WOS

5. [1.1] KUMAR, M.K. - JAYANISHA, V. - MANJARI, R. - PRABU, S.B. - PADMANABHAN, K.A. Self-assembly of carbon nanotubes using magnetic positioning and alignment by drop drying. In MATERIALS LETTERS. ISSN 0167-577X, JAN 1 2014, vol. 114, p. 68-71., WOS

6. [1.1] KUMAR, R. - KHAN, M.A. - HAQ, N. Application of carbon nanotubes in heavy metals remediation. In CRITICAL REVIEWS IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY. ISSN 1064-3389, MAY 3 2014, vol. 44, no. 9, p. 1000-1035., WOS

7. [1.1] LI, P. - LIU, H.L. - YANG, J. - SUN, D.M. - CHEN, Y. - ZHOU, Y.M. - CAI, C.X. - LU, T.H. A ruthenium(III) phosphonate complex on polyallylamine functionalized carbon nanotube multilayer films: self-assembly, direct electrochemistry, and electrocatalysis. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, 2014, vol. 2, no. 1, p. 102-109., WOS

8. [1.1] MCKEON-FISCHER, K.D. - ROSSMEISL, J.H. - WHITTINGTON, A.R. - FREEMAN, J.W. In vivo skeletal muscle biocompatibility of composite, coaxial electrospun, and microfibrous scaffolds. In TISSUE ENGINEERING PART A. ISSN 1937-3341, JUL 2014, vol. 20, no. 13-14, p. 1961-1970., WOS
9. [1.1] NAZ, A. - RIZWAN, S.A. - ALI, N.Z. - BIER, T.A. - ULLAH, H. Using carbon nanotubes in self-compacting paste systems. In CONSTRUCTION MATERIALS AND STRUCTURES. 2014, p. 697-702., WOS
10. [1.1] XU, F. - GUO, S. - LUO, Y.L. Novel THTBN/MWNTs-OH polyurethane conducting composite thin films for applications in detection of volatile organic compounds. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, MAY 15 2014, vol. 145, no. 1-2, p. 222-231., WOS
11. [1.1] ZHANG, X. - YIN, J. - YOON, J. Recent advances in development of chiral fluorescent and colorimetric sensors. In CHEMICAL REVIEWS. ISSN 0009-2665, MAY 14 2014, vol. 114, no. 9, p. 4918-4959., WOS
12. [1.2] ALIOFKHAZRAEI, M.- ALI, N. Recent developments in miniaturization of sensor technologies and their applications. (2014) Comprehensive Materials Processing, 13, p. 245-306. DOI: 10.1016/B978-0-08-096532-1.01309-1, Scopus
13. [1.2] LI, Q.- LOZANO, K.- LÜ, Y.- MAO, Y. Heterogeneous manganese oxide-encased carbon nanocomposite fibers for high performance pseudocapacitors. (2014) Ceramic Engineering and Science Proceedings, 34 (9), p. 41-55., Scopus

ADCA114 CAPEK, Ignác. Degradation of kinetically-stable o/w emulsions. In Advances in colloid and interface science, 2004, vol. 107, no. 2 - 3, p. 125 - 155. (4.057 - IF2003). ISSN 0001-8686.

Citácie:

1. [1.1] BERENDSEN, R. - GUELL, C. - HENRY, O. - FERRANDO, M. Premix membrane emulsification to produce oil-in-water emulsions stabilized with various interfacial structures of whey protein and carboxymethyl cellulose. In FOOD HYDROCOLLOIDS. ISSN 0268-005X, JUL 2014, vol. 38, p. 1-10., WOS
2. [1.1] BERTON-CARABIN, C.C. - ROPERS, M.H. - GENOT, C. Lipid oxidation in oil-in-water emulsions: Involvement of the interfacial layer. In COMPREHENSIVE REVIEWS IN FOOD SCIENCE AND FOOD SAFETY. ISSN 1541-4337, SEP 2014, vol. 13, no. 5, p. 945-977., WOS
3. [1.1] BOTHIRAJA, C. - YOJANA, B.D. - PAWAR, A.P. - SHAIKH, K.S. - THORAT, U.H. Fisetin-loaded nanocochleates: formulation, characterisation, in vitro anticancer testing, bioavailability and biodistribution study. In EXPERT OPINION ON DRUG DELIVERY. ISSN 1742-5247, JAN 2014, vol. 11, no. 1, p. 17-29., WOS
4. [1.1] DIANE, J.M.M. - BURGESS, J. Vitamin E nanoemulsions characterization and analysis. In INTERNATIONAL JOURNAL OF PHARMACEUTICS. ISSN 0378-5173, APR 25 2014, vol. 465, no. 1-2, p. 455-463., WOS
5. [1.1] EL-DIN, M.R.N. - EL-HAMOULY, S.H. - MOHAMED, H.M. - MISHRIF, M.R. - RAGAB, A.M. Investigating factors affecting water-in-diesel fuel nanoemulsions. In JOURNAL OF SURFACTANTS AND DETERGENTS. ISSN 1097-3958, JUL 2014, vol. 17, no. 4, p. 819-831., WOS
6. [1.1] FAN, Z.Y. - TAY, A. - PERA-TITUS, M. - ZHOU, W.J. - BENHABBARI, S. - FENG, X.S. - MALCOURONNE, G. - BONNEVIOT, L. - DE CAMPO, F. - WANG, L.M. - CLACENS, J.M. Pickering interfacial catalysts for solvent-free biomass transformation: Physicochemical behavior of non-aqueous emulsions. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, AUG 1 2014, vol. 427, p. 80-90., WOS
7. [1.1] GANTA, S. - TALEKAR, M. - SINGH, A. - COLEMAN, T.P. - AMIJI,

M.M. Nanoemulsions in translational research-opportunities and challenges in targeted cancer therapy. In AAPS PHARMSCITECH. ISSN 1530-9932, JUN 2014, vol. 15, no. 3, p. 694-708., WOS
8. [1.1] ISHIGAMI, H. - TSUDA, Y. - UCHIMURA, T. Laser ionization/time-of-flight mass spectrometry for the direct analysis of emulsions. In ANALYTICAL METHODS. ISSN 1759-9660, AUG 7 2014, vol. 6, no. 15, p. 5615-5619., WOS
9. [1.1] LOEFFLER, M. - BEISER, S. - SURIYARAK, S. - GIBIS, M. - WEISS, J. Antimicrobial efficacy of emulsified essential oil components against weak acid-adapted spoilage yeasts in clear and cloudy apple juice. In JOURNAL OF FOOD PROTECTION. ISSN 0362-028X, AUG 2014, vol. 77, no. 8, p. 1325-1335., WOS
10. [1.1] LU, W.C. - CHIANG, B.H. - HUANG, D.W. - LI, P.H. Skin permeation of D-limonene-based nanoemulsions as a transdermal carrier prepared by ultrasonic emulsification. In ULTRASONICS SONOCHEMISTRY. ISSN 1350-4177, MAR 2014, vol. 21, no. 2, p. 826-832., WOS
11. [1.1] RODRIGUEZ-ABREU, C. - VILA, A. Nano-droplet systems by surfactant self-assembly and applications in the pharmaceutical industry. In CURRENT TOPICS IN MEDICINAL CHEMISTRY. ISSN 1568-0266, MAR 2014, vol. 14, no. 6, p. 747-765., WOS
12. [1.1] SAINSBURY, F. - ZENG, B.J. - MIDDELBERG, A.P.J. Towards designer nanoemulsions for precision delivery of therapeutics. In CURRENT OPINION IN CHEMICAL ENGINEERING. ISSN 2211-3398, MAY 2014, vol. 4, p. 11-17., WOS
13. [1.1] VIANA, C. - BOHRER, D. - DE CARVALHO, L.M. - DO NASCIMENTO, P.C. - DA ROSA, M.B. Emulsified systems for metal determination by spectrometric methods. In TRAC-TRENDS IN ANALYTICAL CHEMISTRY. ISSN 0165-9936, JAN 2014, vol. 53, p. 49-59., WOS
14. [1.1] ZADYMOVA, N.M. - ARSHAKYAN, G.A. Inhibition of Ostwald ripening in heptane/water miniemulsions. In COLLOID JOURNAL. ISSN 1061-933X, JAN 2014, vol. 76, no. 1, p. 25-37., WOS
15. [1.1] ZAHI, M.R. - WAN, P.Y. - LIANG, H. - YUAN, Q.P. Formation and stability of D-limonene organogel-based nanoemulsion prepared by a high-pressure homogenizer. In JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. ISSN 0021-8561, DEC 31 2014, vol. 62, no. 52, p. 12563-12569., WOS
16. [1.1] ZHU, X.M. - MASON, T.G. Nanoparticle size distributions measured by optical adaptive-deconvolution passivated-gel electrophoresis. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, DEC 1 2014, vol. 435, p. 67-74., WOS
17. [1.2] YANG, Y.- LI, F.- DAI, D.- YUAN, Y. Preparation of the waterproofing agent for the mineral wool board from modified C5 and C9 petroleum resin. (2014) Shiyou Huagong Gaodeng Xuexiao Xuebao/Journal of Petrochemical Universities, 27 (2), p. 37-41. DOI: 10.3969/j.issn.1006-396X.2014.02.008, Scopus

ADCA115 CAPEK, Ignác. Radical polymerization of polar unsaturated monomers in direct microemulsion systems. In Advances in Colloid and Interface Science, 1999, vol. 80, no. 2, p. 85-149. (2.113 - IF1998). (1999 - Current Contents). ISSN 0001-8686.

Citácie:

1. [1.1] JUNEJA, R. - ROY, I. Surface modified PMMA nanoparticles with tunable drug release and cellular uptake. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 84, p. 44472-44479., WOS
2. [1.1] MEUNIER, D.M. - LYONS, J.W. - KIEFER, J.J. - NIU, Q.J. - DELONG, L.M. - LI, Y.F. - RUSSO, P.S. - CUETO, R. - EDWIN, N.J. - BOUCK, K.J. -

SILVIS, H.C. - TUCKER, C.J. - KALANTAR, T.H. Determination of particle size distributions, molecular weight distributions, swelling, conformation, and morphology of dilute suspensions of cross-linked polymeric nanoparticles via size-exclusion chromatography/differential viscometry. In MACROMOLECULES. ISSN 0024-9297, OCT 14 2014, vol. 47, no. 19, p. 6715-6729., WOS

3. [1.2] HERRERA, J.R.- OVANDO-MEDINA, V.M.- LÓPEZ, R.G.- MENDIZÁBAL, E.- CORTEZ-MAZATÁN, G.Y.- PERALTA, R.D. Kinetics and monomer partitioning during polymerization of vinyl acetate in microemulsions stabilized with AOT and n-butanol. (2014) Colloid and Polymer Science, 293 (2), p. 655-664. DOI: 10.1007/s00396-014-3479-2, Scopus

ADCA116 CAPEK, Ignác. Kinetics of free-radical emulsion polymerization of vinyl chloride. In Advances in Polymer Science, 1995, vol. 120, p. 136-205.

Citácie:

1. [1.2] XIANG, H.- FANG, H.- PAN, C.- BAO, Y. Conversion of vinyl chloride-vinyl acetate-maleic anhydride emulsion copolymerization and characteristics of copolymer latexs. (2014) Huaxue Fanying Gongcheng Yu Gongyi/Chemical Reaction Engineering and Technology, 30 (6), p. 522-527., Scopus

ADCA117 CAPEK, Ignác - RIZA, M. - AKASHI, M. Dispersion copolymerization of poly(oxyethylene) macromonomers and styrene. In Journal of Polymer Science. Part A.Polymer Chemistry, 1997, vol. 35, no. 15, p. 3131-3139. (1.229 - IF1996). (1997 - Current Contents). ISSN 0887-624X.

Citácie:

1. [1.2] AHN, B.H. Preparation of polystyrene-polyetherimide core-shell particles by dispersion polymerization. (2014) Applied Chemistry for Engineering, 25 (5), p. 526-530. DOI: 10.14478/ace.2014.1081, Scopus

ADCA118 CAPEK, Ignác - *POTISK, Potisk.* Microemulsion and emulsion polymerization of butyl acrylate-I. Effect of the initiator type and temperature. In European Polymer Journal, 1995, vol. 31, no. 12, p. 1269-1277.

Citácie:

1. [1.1] WANG, H. - YANG, L.J. - REMPEL, G.L. - PAN, Q.M. Hydrogenation of a Tri-layer high performance elastomer: Substrate synthesis, catalytic latex hydrogenation, and catalyst recovery. In TOPICS IN CATALYSIS. ISSN 1022-5528, NOV 2014, vol. 57, no. 17-20, p. 1512-1518., WOS

2. [1.2] SHUKLA, S.-RAI, J.S.P. Environmentally-Friendly acrylates-based polymer latices. (2014) Advanced Materials for Agriculture, Food and Environmental Safety, p. 145-176. DOI: 10.1002/9781118773857.ch6, Scopus

ADCA119 CARLSSON, D. J., Jr. - CHMELA, Štefan - LACOSTE, J. On the structure and yields of the first peroxyl radicals in gamma-irradiated polyolefins. In Macromolecules, 1990, vol. 23, p. 4934-4938.

Citácie:

1. [1.1] BURNEA, L.C. - ZAHARESCU, T. - DUMITRU, A. - PLESA, I. - CIUPRINA, F. Radiation stability of polypropylene/lead zirconate composites. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, JAN 2014, vol. 94, p. 156-160., WOS

2. [1.1] GUBLER, L. Polymer design strategies for radiation-grafted fuel cell membranes. In ADVANCED ENERGY MATERIALS. ISSN 1614-6832, FEB 2014, vol. 4, no. 3., WOS

3. [1.1] ZAHARESCU, T. - PLESA, I. - JIPA, S. Improvement in the degradation resistance of LDPE for radiochemical processing. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, JAN 2014, vol. 94, p. 151-155., WOS

ADCA120 CATALDO, F. - OMASTOVÁ, Mária. On the ozone degradation of pyrrole. In

Polymer Degradation and Stability, 2003, vol. 82, no. 3, p. 487 - 495. (0.890 - IF2002). (2003 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] CAO, X.W. - LUO, J. - CAO, Y. - YIN, X.C. - HE, G.J. - PENG, X.F. - XU, B.P. Structure and properties of deeply oxidized waster rubber crumb through long time ozonization. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, NOV 2014, vol. 109, SI, p. 1-6., WOS

2. [1.1] DE PAULA, F.R. - SCHIAVO, D. - PEREIRA, E.C. - DE OLIVEIRA, A.J.A. Polaronic ferromagnetic behavior in ClO4- doped poly(3-hexylthiophene) at room temperature. In JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS. ISSN 0304-8853, DEC 2014, vol. 370, p. 110-115., WOS

3. [1.1] QI, K. - QIU, Y.B. - CHEN, Z.Y. - GUO, X.P. Corrosion of conductive polypyrrole: Effects of possibly formed galvanic cells. In CORROSION SCIENCE. ISSN 0010-938X, MAR 2014, vol. 80, p. 318-330., WOS

4. [1.1] WANG, J.P. - XU, Y.L. - WANG, J. - ZHU, J.H. - BAI, Y. - XIONG, L.L. Study on capacitance evolving mechanism of polypyrrole during prolonged cycling. In JOURNAL OF PHYSICAL CHEMISTRY B. ISSN 1520-6106, FEB 6 2014, vol. 118, no. 5, p. 1353-1362., WOS

ADCA121 CATALINA, F. - PEINADO, C. - BLANCO, M. - ALLEN, N. S. - CORRALES, T. - LUKÁČ, Ivan. Synthesis, photochemical and photoinitiation activity of water soluble copolymers with pendent benzil chromophores. In Polymer : the International Journal for the Science and Technology of Polymers, 1998, vol. 39, no. 18, p. 4399 - 4408. (1.358 - IF1997). (1998 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.2] ŚCIGALSKI, F.- JANKOWSKI, K. Mercaptoalkoxy-thioxanthones as a novel photoinitiator for free radical polymerization. (2014) Polymer Bulletin, 72 (2), p. 255-263.DOI: 10.1007/s00289-014-1270-7, Scopus

ADCA122 CECEN, V. - BOUDENNE, A. - IBOS, L. - NOVÁK, Igor - NÓGELLOVÁ, Zuzana - PROKEŠ, J. - *KRUPA, Igor*. Electrical, mechanical and adhesive properties of ethylene-vinylacetate copolymer (EVA) filled with wollastonite fibers coated by silver. In European Polymer Journal, 2008, vol. 44, p. 3827 - 3834. (2.248 - IF2007). (2008 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] JOUNI, M. - BUZLUKOV, A. - BARDET, M. - DA CRUZ-BOISSON, F. - EDDARIR, A. - MASSARDIER, V. - BOITEUX, G. Skin effect of conductive polymer composites observed by high-resolution solid-state NMR. In COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, NOV 19 2014, vol. 104, p. 104-110., WOS

2. [1.1] LAN, M.M. - ZHANG, D.Y. - CAI, J. - HU, Y.Y. - YUAN, L.M. Fabrication and electromagnetic interference shielding effectiveness of polymeric composites filled with silver-coated microorganism cells. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JUL 15 2014, vol. 307, p. 287-292., WOS

3. [1.1] STARKOVA, O. - BUSCHHORN, S.T. - PRADO, L.A.S.D. - POTSCHKE, P. - EDELMANN, M. - SCHULTE, K. Ethylene-vinyl acetate thermoplastic copolymers filled with multiwall carbon nanotubes: Effect of hydrothermal ageing on mechanical, thermal, and electrical properties. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, JAN 2014, vol. 299, no. 1, p. 41-50., WOS

ADCA123 CERRUTI, P. - RYCHLÝ, Jozef - MATISOVÁ - RYCHLÁ, Lýdia - CARFAGNA, C. Chemiluminescence from oxidation of polyamide 6,6 -. In Polymer Degradation and Stability, 2004, vol. 84, no. 2, p. 199 - 206. (1.405 - IF2003). (2004 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] HOLDSWORTH, A.F. - HORROCKS, A.R. - KANDOLA, B.K. - PRICE, D. The potential of metal oxalates as novel flame retardants and synergists for engineering polymers. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 290-297., WOS

ADCA124 CERRUTI, P. - CARFAGNA, C. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia. Chemiluminescence from oxidation of polyamide 6,6. In Polymer Degradation and Stability, 2003, vol. 82, no. 3, p. 477 - 485. (0.890 - IF2002). (2003 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] THAM, W.L. - POH, B.T. - ISHAK, Z.A.M. - CHOW, W.S. Thermal behaviors and mechanical properties of halloysite nanotube-reinforced poly(lactic acid) nanocomposites. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, DEC 2014, vol. 118, no. 3, p. 1639-1647., WOS
2. [1.1] ZHAO, X.W. - LI, X.H. - YE, L. - LI, G.X. Stress-accelerated photothermal oxidative aging behavior of polyamide 6. In JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS. ISSN 0892-7057, NOV 2014, vol. 27, no. 11, p. 1573-1586., WOS

ADCA125 CERRUTI, P. - MALINCONICO, M. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia - CARFAGNA, C. Effect of natural antioxidants on the stability of polypropylene films. In Polymer Degradation and Stability, 2009, vol. 94, p. 2095 - 2100. (2.320 - IF2008). ISSN 0141-3910.

Citácie:
1. [1.1] BATTEGAZZORE, D. - BOCCHINI, S. - ALONGI, J. - FRACHE, A. Plasticizers, antioxidants and reinforcement fillers from hazelnut skin and cocoa by-products: Extraction and use in PLA and PP. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, OCT 2014, vol. 108, SI, p. 297-306., WOS
2. [1.1] OLEJAR, K.J. - RAY, S. - RICCI, A. - KILMARTIN, P.A. Superior antioxidant polymer films created through the incorporation of grape tannins in ethyl cellulose. In CELLULOSE. ISSN 0969-0239, DEC 2014, vol. 21, no. 6, p. 4545-4556., WOS
3. [1.1] TATRAALJAI, D. - FOLDES, E. - PUKANSZKY, B. Efficient melt stabilization of polyethylene with quercetin, a flavonoid type natural antioxidant. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, APR 2014, vol. 102, p. 41-48., WOS
4. [1.2] COLÍN-CHÁVEZ, C.- SOTO-VALDEZ, H.- PERALTA, E. Diffusion of carotenoids from mono and bilayer polyethylene active packaging into soybean oil. (2014) Food Packaging and Shelf Life, 1 (2), p. 170-178. DOI: 10.1016/j.fpsl.2014.01.008, Scopus

ADCA126 CERRUTI, P. - AMBROGI, V. - POSTIGLIONE, A. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia - CARFAGNA, C. Morphological and thermal properties of cellulose-montmorillonite nanocomposite. In Biomacromolecules, 2008, vol. 9, p. 3004 - 3013. (4.169 - IF2007). (2008 - Current Contents). ISSN 1525-7797.

Citácie:
1. [1.1] KISKU, S.K. - DASH, S. - SWAIN, S.K. Dispersion of SiC nanoparticles in cellulose for study of tensile, thermal and oxygen barrier properties. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, JAN 2 2014, vol. 99, p. 306-310., WOS
2. [1.1] LI, J.H. - WANG, Y.H. - WEI, X.Y. - WANG, F. - HAN, D.H. - WANG, Q.H. - KONG, L.X. Homogeneous isolation of nanocelluloses by controlling the shearing force and pressure in microenvironment. In CARBOHYDRATE

POLYMERS. ISSN 0144-8617, NOV 26 2014, vol. 113, p. 388-393., WOS
3. [1.1] YANG, Q.L. - WU, C.N. - SAITO, T. - ISOGAI, A. Cellulose-clay layered nanocomposite films fabricated from aqueous cellulose/LiOH/urea solution. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, JAN 16 2014, vol. 100, SI, p. 179-184., WOS
4. [1.1] YUAN, Z.W. - FAN, Q.R. - DAI, X.N. - ZHAO, C. - LV, A.J. - ZHANG, J.J. - XU, G.Y. - QIN, M.H. Cross-linkage effect of cellulose/laponite hybrids in aqueous dispersions and solid films. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, FEB 15 2014, vol. 102, p. 431-437., WOS
5. [1.2] FAN, X.- YU, C.- YANG, J.- LING, Z.- HU, C.- ZHANG, M.- QIU, J. A layered-nanospace-confinement strategy for the synthesis of two-dimensional porous carbon nanosheets for high-rate performance supercapacitors. (2014) Advanced Energy Materials, 5 (7), art. no. 1401761, DOI: 10.1002/aenm.201401761, Scopus
6. [1.2] PUGLIA, D.- FORTUNATI, E.- SANTULLI, C.- KENNY, J.M. Multifunctional ternary polymeric nanocomposites based on cellulosic nanoreinforcements. (2014) Nanocellulose Polymer Nanocomposites: Fundamentals and Applications, p. 163-198. DOI: 10.1002/9781118872246.ch6, Scopus

ADCA127 CIFRA, Peter - BLEHA, Tomáš. Partition coefficients and the free energy of confinement from simulations of nonideal polymer systems. In Macromolecules, 2001, vol. 34, p. 605-613. (3.697 - IF2000). (2001 - Current Contents). ISSN 0024-9297.

Citácie:
1. [1.1] DE SANTO, I. - CAUSA, F. - NETTI, P.A. Temperature driven macromolecule separation by nanoconfinement. In MACROMOLECULES. ISSN 0024-9297, DEC 23 2014, vol. 47, no. 24, p. 8754-8760., WOS
2. [1.1] KURGANOV, A.A. - KANATEVA, A.Y. - OREKHOV, V.A. Conformational transitions of macromolecules in an eluent flow and their manifestation in the chromatography of polymers. In RUSSIAN CHEMICAL REVIEWS. ISSN 0036-021X, 2014, vol. 83, no. 7, p. 638-656., WOS

ADCA128 CIFRA, Peter - BLEHA, Tomáš. Modeling of stress-strain relations of non-Gaussian chains in swollen networks. In Macromolecules, 1998, vol. 31, no. 4, p. 1358 - 1365. (3.500 - IF1997). (1998 - Current Contents). ISSN 0024-9297.

Citácie:
1. [1.1] KAMERLIN, N. - EKHOLM, T. - CARLSSON, T. - ELVINGSON, C. Construction of a closed polymer network for computer simulations. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, OCT 2014, vol. 141, no. 15., WOS

ADCA129 CIFRA, Peter - BLEHA, Tomáš. Detection of chain backfolding in simulation of DNA in nanofluidic channels. In SOFT MATTER, 2012, vol. 8, p. 9022 - 9028. (4.390 - IF2011). (2012 - Current Contents). ISSN 1744-683X.

Citácie:
1. [1.1] MANNESCHI, C. - FANZIO, P. - ALA-NISSILA, T. - ANGELI, E. - REPETTO, L. - FIRPO, G. - VALBUSA, U. Stretching of DNA confined in nanochannels with charged walls. In BIOMICROFLUIDICS. ISSN 1932-1058, NOV 2014, vol. 8, no. 6., WOS
2. [1.1] MURALIDHAR, A. - TREE, D.R. - DORFMAN, K.D. Backfolding of s. In MACROMOLECULES. ISSN 0024-9297, DEC 9 2014, vol. 47, no. 23, p. 8446-8458., WOS
3. [1.1] MURALIDHAR, A. - TREE, D.R. - WANG, Y.W. - DORFMAN, K.D. Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-

9606, FEB 28 2014, vol. 140, no. 8., WOS
4. [1.1] ROUSHAN, M. - KAUR, P. - KARPUSENKO, A. - COUNTRYMAN, P.J. - ORTIZ, C.P. - LIM, S.F. - WANG, H. - RIEHN, R. Probing transient protein-mediated DNA linkages using nanoconfinement. In BIOMICROFLUIDICS. ISSN 1932-1058, MAY 2014, vol. 8, no. 3., WOS

ADCA130 CIFRA, Peter - TERAOKA, I. Confined polymer chains in a theta solvent. A model with polymer-solvent interactions. In Macromolecules, 2003, vol. 36, no. 25, p. 9638 - 9646. (3.751 - IF2002). (2003 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] IVANOV, V.A. - RODIONOVA, A.S. - MARTEMYANOVA, J.A. - STUKAN, M.R. - MULLER, M. - PAUL, W. - BINDER, K. Conformational properties of semiflexible chains at nematic ordering transitions in thin Films: A Monte Carlo simulation. In MACROMOLECULES. ISSN 0024-9297, FEB 11 2014, vol. 47, no. 3, p. 1206-1220., WOS

ADCA131 CIFRA, Peter. Asymmetric bridging of interconnected pores by encased semiflexible macromolecules. In Journal of Chemical Physics, 2006, vol. 124, p. 024706 1-7. (3.138 - IF2005). ISSN 0021-9606.

Citácie:

1. [1.1] HUANG, A.Q. - ADHIKARI, R. - BHATTACHARYA, A. - BINDER, K. Universal monomer dynamics of a two-dimensional semi-flexible chain. In EPL. ISSN 0295-5075, JAN 2014, vol. 105, no. 1., WOS
2. [1.1] HUANG, A.Q. - BHATTACHARYA, A. - BINDER, K. Conformations, transverse fluctuations, and crossover dynamics of a semi-flexible chain in two dimensions. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, JUN 7 2014, vol. 140, no. 21., WOS
3. [1.1] LIN, B. - MARTIN, T.B. - JAYARAMAN, A. Decreasing polymer flexibility improves wetting and dispersion of polymer-grafted particles in a chemically identical polymer matrix. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 628-632., WOS
4. [1.1] TOMCZYNSKA-MLEKO, M. - KAMYSZ, E. - SIKORSKA, E. - PUCHALSKI, C. - MLEKO, S. - OZIMEK, L. - KOWALUK, G. - GUSTAW, W. - WESOLOWSKA-TROJANOWSKA, M. Changes of secondary structure and surface tension of whey protein isolate dispersions upon pH and temperature. In CZECH JOURNAL OF FOOD SCIENCES. ISSN 1212-1800, 2014, vol. 32, no. 1, p. 82-89., WOS

ADCA132 CIFRA, Peter - BLEHA, Tomáš. Steric exclusion/adsorption compensation in partitioning of polymers into micropores in good solvents. In Polymer : the international journal for the science and technology of polymers, 2000, vol. 41, p. 1003-1009. (1.340 - IF1999). (2000 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] DE SANTO, I. - CAUSA, F. - NETTI, P.A. Temperature driven macromolecule separation by nanoconfinement. In MACROMOLECULES. ISSN 0024-9297, DEC 23 2014, vol. 47, no. 24, p. 8754-8760., WOS
2. [1.1] KURGANOV, A.A. - KANATEVA, A.Y. - OREKHOV, V.A. Conformational transitions of macromolecules in an eluent flow and their manifestation in the chromatography of polymers. In RUSSIAN CHEMICAL REVIEWS. ISSN 0036-021X, 2014, vol. 83, no. 7, p. 638-656., WOS

ADCA133 CIFRA, Peter - BLEHA, Tomáš. Free energy of polymers confined in open and closed cavities. In Macromolecular Theory and Simulations, 2012, vol. 21, p. 15 - 23. (1.709 - IF2011). (2012 - Current Contents). ISSN 1022-1344.

Citácie:

1. [1.1] GAO, J. - TANG, P. - YANG, Y.L. - CHEN, J.Z.Y. Free energy of a long semiflexible polymer confined in a spherical cavity. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 26, p. 4674-4685., WOS
2. [1.1] UZCATEGUI, A.V. - SHANBHAG, S. Self-entanglement of a single polymer chain confined in a cubic box. In JOURNAL OF POLYMER SCIENCE PART B-POLYMER PHYSICS. ISSN 0887-6266, OCT 1 2014, vol. 52, no. 19, p. 1283-1290., WOS

ADCA134 CIFRA, Peter - BRUDER, F. - BRENN, R. Surface segregation in a polymer blend - comparison between Monte-Carlo simulation and Mean-Field theory. In Journal of Chemical Physics, 1993, vol. 99, no. 5, p. 4121 - 4127. (3.433 - IF1992). (1993 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] RODRIGUEZ-HERNANDEZ, J. Nano/micro and hierarchical structured surfaces in polymer blends. In NANOSTRUCTURED POLYMER BLENDS. 2014, p. 357-421., WOS

ADCA135 CIFRA, Peter - BENKOVÁ, Zuzana - BLEHA, Tomáš. Chain extension of DNA confined channels. In Journal of physical chemistry. B.Materials, surfaces, interfaces, and biophysical, 2009, vol. 113, p. 1843 - 1851. (4.189 - IF2008). (2009 - Current Contents). ISSN 1520-6106.

Citácie:

1. [1.1] DAI, L. - VAN DER MAAREL, J.R.C. - DOYLE, P.S. Extended de gennes regime of DNA confined in a nanochannel. In MACROMOLECULES. ISSN 0024-9297, APR 8 2014, vol. 47, no. 7, p. 2445-2450., WOS
2. [1.1] GUPTA, D. - SHEATS, J. - MURALIDHAR, A. - MILLER, J.J. - HUANG, D.E. - MAHSHID, S. - DORFMAN, K.D. - REISNER, W. Mixed confinement regimes during equilibrium confinement spectroscopy of DNA. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, JUN 7 2014, vol. 140, no. 21., WOS
3. [1.1] HUANG, A.Q. - BHATTACHARYA, A. DNA confined in a two-dimensional strip geometry. In EPL. ISSN 0295-5075, APR 2014, vol. 106, no. 1., WOS
4. [1.1] MANNESCHI, C. - FANZIO, P. - ALA-NISSILA, T. - ANGELI, E. - REPETTO, L. - FIRPO, G. - VALBUSA, U. Stretching of DNA confined in nanochannels with charged walls. In BIOMICROFLUIDICS. ISSN 1932-1058, NOV 2014, vol. 8, no. 6., WOS
5. [1.1] MICHELETTI, C. - ORLANDINI, E. Knotting and unknotting dynamics of DNA strands in nanochannels. In ACS MACRO LETTERS. ISSN 2161-1653, SEP 2014, vol. 3, no. 9, p. 876-880., WOS
6. [1.1] MISHRA, P.K. A semiflexible polymer chain under geometrical restrictions: Only bulk behaviour and no surface adsorption. In CONDENSED MATTER PHYSICS. ISSN 1607-324X, 2014, vol. 17, no. 2., WOS
7. [1.1] MURALIDHAR, A. - TREE, D.R. - DORFMAN, K.D. Backfolding of wormlike chains confined in nanochannels. In MACROMOLECULES. ISSN 0024-9297, DEC 9 2014, vol. 47, no. 23, p. 8446-8458., WOS
8. [1.1] MURALIDHAR, A. - TREE, D.R. - WANG, Y.W. - DORFMAN, K.D. Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, FEB 28 2014, vol. 140, no. 8., WOS

ADCA136 CIFRA, Peter - BENKOVÁ, Zuzana - BLEHA, Tomáš. Persistence lengths and structure factors of wormlike polymers under confinement. In Journal of physical chemistry. B.Materials, surfaces, interfaces, and biophysical, 2008, vol.112, p.1367-1375. (4.086 - IF2007). (2008 - Current Contents). ISSN 1520-6106.

Citácie:

1. [1.1] MARION, S. - SIBER, A. Ejecting phage DNA against cellular turgor pressure. in BIOPHYSICAL JOURNAL. ISSN 0006-3495, OCT 21 2014, vol. 107, no. 8, p. 1924-1929., WOS
2. [1.1] MURALIDHAR, A. - TREE, D.R. - DORFMAN, K.D. Backfolding of wormlike chains confined in nanochannels. In MACROMOLECULES. ISSN 0024-9297, DEC 9 2014, vol. 47, no. 23, p. 8446-8458., WOS
3. [1.1] VAN DER MAAREL, J.R.C. - ZHANG, C. - VAN KAN, J.A. A Nanochannel platform for single DNA sudies: From crowding, protein DNA interaction, to sequencing of genomic information. In ISRAEL JOURNAL OF CHEMISTRY. ISSN 0021-2148, NOV 2014, vol. 54, no. 11-12, SI, p. 1573-1588., WOS

ADCA137 CIFRA, Peter. Weak-to-strong confinement transition of semi-flexible macromolecules in slit and in channel. In Journal of Chemical Physics, 2012, vol. 136, art.no.024902. (3.333 - IF2011). (2012 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] CHEN, Y.L. - LIN, Y.H. - CHANG, J.F. - LIN, P.K. Dynamics and conformation of semiflexible polymers in strong quasi-1D and-2D confinement. In MACROMOLECULES. ISSN 0024-9297, FEB 11 2014, vol. 47, no. 3, p. 1199-1205., WOS
2. [1.1] HUANG, A.Q. - BHATTACHARYA, A. DNA confined in a two-dimensional strip geometry. In EPL. ISSN 0295-5075, APR 2014, vol. 106, no. 1., WOS
3. [1.1] LEE, J. - KIM, S. - JEONG, H. - JUNG, G.Y. - CHANG, R. - CHEN, Y.L. - JO, K. Nanoslit confined DNA at low ionic strengths. In ACS MACRO LETTERS. ISSN 2161-1653, SEP 2014, vol. 3, no. 9, p. 926-930., WOS
4. [1.1] MURALIDHAR, A. - TREE, D.R. - DORFMAN, K.D. Backfolding of wormlike chains confined in nanochannels. In MACROMOLECULES. ISSN 0024-9297, DEC 9 2014, vol. 47, no. 23, p. 8446-8458., WOS
5. [1.1] ROUSHAN, M. - KAUR, P. - KARPUSENKO, A. - COUNTRYMAN, P.J. - ORTIZ, C.P. - LIM, S.F. - WANG, H. - RIEHN, R. Probing transient protein-mediated DNA linkages using nanoconfinement. In BIOMICROFLUIDICS. ISSN 1932-1058, MAY 2014, vol. 8, no. 3., WOS
6. [1.1] TREE, D.R. - REINHART, W.F. - DORFMAN, K.D. The Odijk Regime in slits. In MACROMOLECULES. ISSN 0024-9297, JUN 10 2014, vol. 47, no. 11, p. 3672-3684., WOS
7. [1.1] VAN DER MAAREL, J.R.C. - ZHANG, C. - VAN KAN, J.A. A Nanochannel platform for single DNA studies: From crowding, protein DNA interaction, to sequencing of genomic information. In ISRAEL JOURNAL OF CHEMISTRY. ISSN 0021-2148, NOV 2014, vol. 54, no. 11-12, SI, p. 1573-1588., WOS

ADCA138 CIFRA, Peter. Channel confinement of flexible and semiflexible macromolecules. In Journal of Chemical Physics, 2009, vol. 131, p. 224903 1 - 7. (3.149 - IF2008). (2009 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] DAI, L. - VAN DER MAAREL, J.R.C. - DOYLE, P.S. Extended de Gennes Regime of DNA Confined in a nanochannel. In MACROMOLECULES. ISSN 0024-9297, APR 8 2014, vol. 47, no. 7, p. 2445-2450., WOS
2. [1.1] GUPTA, D. - SHEATS, J. - MURALIDHAR, A. - MILLER, J.J. - HUANG, D.E. - MAHSHID, S. - DORFMAN, K.D. - REISNER, W. Mixed confinement regimes during equilibrium confinement spectroscopy of DNA. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, JUN 7 2014, vol. 140, no. 21., WOS
3. [1.1] HUANG, A.Q. - BHATTACHARYA, A. DNA confined in a two-

dimensional strip geometry. In EPL. ISSN 0295-5075, APR 2014, vol. 106, no. 1., WOS
4. [1.1] MISHRA, P.K. A semiflexible polymer chain under geometrical restrictions: Only bulk behaviour and no surface adsorption. In CONDENSED MATTER PHYSICS. ISSN 1607-324X, 2014, vol. 17, no. 2., WOS
5. [1.1] MURALIDHAR, A. - TREE, D.R. - WANG, Y.W. - DORFMAN, K.D. Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, FEB 28 2014, vol. 140, no. 8., WOS
6. [1.1] PATRA, T.K. - SINGH, J.K. Localization and stretching of polymer chains at the junction of two surfaces. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, MAY 28 2014, vol. 140, no. 20., WOS
7. [1.1] ZHANG, D. - HE, L.L. - ZHANG, L.X. Ordered structures of small numbers of nanorods induced by semiflexible star polymers. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 14 2014, vol. 141, no. 10., WOS
8. [1.1] ZHANG, D. - ZHANG, L.X. Binding to semiflexible polymers: a novel method to control the structures of small numbers of building blocks. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 38, p. 7661-7668., WOS

ADCA139 CIFRA, Peter - BENKOVÁ, Zuzana - BLEHA, Tomáš. Effect of confinement on properties of stiff biological macromolecules. In Faraday Discussions, 2008, vol. 139, p. 377 - 392. (5.000 - IF2007). (2008 - Current Contents). ISSN 1364-5498.

Citácie:

1. [1.1] SUN, T.T. - YANG, Z.Y. Coil-helix transition of biopolymer confined in finite cylinder. In CHEMICAL PHYSICS LETTERS. ISSN 0009-2614, JUL 21 2014, vol. 608, p. 74-79., WOS

ADCA140 CIFRA, Peter - BENKOVÁ, Zuzana - BLEHA, Tomáš. Persistence lenght of DNA molecules confined in nanochannels. In Physical Chemistry Chemical Physics, 2010, vol.12, p. 8934 - 8942. (4.116 - IF2009). (2010 - Current Contents). ISSN 1463-9076.

Citácie:

1. [1.1] MURALIDHAR, A. - TREE, D.R. - DORFMAN, K.D. Backfolding of wormlike chains confined in nanochannels. In MACROMOLECULES. ISSN 0024-9297, DEC 9 2014, vol. 47, no. 23, p. 8446-8458., WOS
2. [1.1] MURALIDHAR, A. - TREE, D.R. - WANG, Y.W. - DORFMAN, K.D. Interplay between chain stiffness and excluded volume of semiflexible polymers confined in nanochannels. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, FEB 28 2014, vol. 140, no. 8., WOS
3. [1.1] ZHAN, J. - MATSUNO, H. - MASUNAGA, H. - OGAWA, H. - TANAKA, K. Green solid films with tunable mechanical properties made from deoxyribonucleic acid. In NPG ASIA MATERIALS. ISSN 1884-4049, MAR 2014, vol. 6., WOS

ADCA141 CIFRA, Peter - BLEHA, Tomáš. Concentration dependence of the global and anisotropic dimensions of confined macromolecules. In Macromolecular Theory and Simulations, 2000, vol. 9, p. 555-563. (1.130 - IF1999). (2000 - Current Contents). ISSN 1022-1344.

Citácie:

1. [1.1] KURGANOV, A.A. - KANATEVA, A.Y. - OREKHOV, V.A. Conformational transitions of macromolecules in an eluent flow and their manifestation in the chromatography of polymers. In RUSSIAN CHEMICAL REVIEWS. ISSN 0036-021X, 2014, vol. 83, no. 7, p. 638-656., WOS

ADCA142 CIFRA, Peter - BLEHA, Tomáš. Anisotropy in dimensional and elastic parameters

of confined macromolecules. In Macromolecular Theory and Simulations, 1999, vol. 8, no. 6, p. 603 - 610. (1.916 - IF1998). (1999 - Current Contents). ISSN 1022-1344.

Citácie:

1. [1.1] KURGANOV, A.A. - KANATEVA, A.Y. - OREKHOV, V.A. Conformational transitions of macromolecules in an eluent flow and their manifestation in the chromatography of polymers. In RUSSIAN CHEMICAL REVIEWS. ISSN 0036-021X, 2014, vol. 83, no. 7, p. 638-656., WOS

ADCA143 CIFRA, Peter - BLEHA, Tomáš. Force-length relations in deformed coils above and below the theta state. Possible bimodality in the chain distribution function. In Macromolecular Theory and Simulations, 1995, vol. 4, p. 233-243.

Citácie:

1. [1.1] LUETTMER-STRATHMANN, J. - BINDER, K. Transitions of tethered chain molecules under tension. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 21 2014, vol. 141, no. 11., WOS

ADCA144 CIFRA, Peter - BLEHA, Tomáš. Shape transition of semi-flexible macromolecules confined in channel and cavity. In European Physical Journal E : Soft Matter and Biological Physics, 2010, vol. 032, p. 273 - 279. (2.019 - IF2009). (2010 - Current Contents). ISSN 1292-8941.

Citácie:

1. [1.1] MICHELETTI, C. - ORLANDINI, E. Knotting and unknotting dynamics of DNA strands in nanochannels. In ACS MACRO LETTERS. ISSN 2161-1653, SEP 2014, vol. 3, no. 9, p. 876-880., WOS

2. [1.1] MISHRA, P.K. A semiflexible polymer chain under geometrical restrictions: Only bulk behaviour and no surface adsorption. In CONDENSED MATTER PHYSICS. ISSN 1607-324X, 2014, vol. 17, no. 2., WOS

ADCA145 CIFRA, Peter - KARASZ, F. E. - MACKNIGHT, W. J. Surface segregation in polymer blends - a Monte-Carlo simulation. In Macromolecules, 1992, vol. 25, no. 19, p. 4895 - 4901. (1992 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] LEE, J.S. - LEE, N.H. - PERI, S. - FOSTER, M.D. - MAJKRZAK, C.F. - HU, R.F. - WU, D.T. Surface segregation driven by molecular architecture asymmetry in polymer blends. In PHYSICAL REVIEW LETTERS. ISSN 0031-9007, NOV 26 2014, vol. 113, no. 22., WOS

ADCA146 CIFRA, Peter. Differences and limits in estimates persistence lenght for semi-flexible macromolecules. In Polymer : the International Journal for the Science and Technology of Polymers, 2004, vol. 45, no.17, p. 5995 - 6002. (2.340 - IF2003). (2004 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.2] HUANG, A.- ADHIKARI, R.- BHATTACHARYA, A.- BINDER, K. Universal monomer dynamics of a two-dimensional semi-flexible chain. (2014) EPL, 105 (1), art. no. 18002, DOI: 10.1209/0295-5075/105/18002, Scopus

2. [1.2] HUANG, A.- BHATTACHARYA, A.- BINDER, K. Conformations, transverse fluctuations, and crossover dynamics of a semi-flexible chain in two dimensions. (2014) Journal of Chemical Physics, 140 (21), art. no. 214902, DOI: 10.1063/1.4879537, Scopus

3. [1.2] LIN, B.- MARTIN, T.B.- JAYARAMAN, A. Decreasing polymer flexibility improves wetting and dispersion of polymer-grafted particles in a chemically identical polymer matrix. (2014) ACS Macro Letters, 3 (7), p. 628-632. DOI: 10.1021/mz500274w, Scopus

ADCA147 CIFRA, Peter - BLEHA, Tomáš. Stretching of self-interacting wormlike macromolecules. In Polymer : the International Journal for the Science and

Technology of Polymers, 2007, vol. 48, p. 2444-2452. (2.773 - IF2006). (2007 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.2] HONG, D.- SUI, S.- WU, W. Uniform ball Monte-Carlo model in propylene polymerization catalyzed by multi-active-site catalyst. (2014) Hecheng Shuzhi Ji Suliao/China Synthetic Resin and Plastics, 31 (4), p. 48-51 and 54., Scopus

ADCA148 CIGÁŇ, M. - DANKO, Martin - DONOVALOVÁ, J. - GAŠPAR, J. - STANKOVIČOVÁ, H. - GÁPLOVSKÝ, A. - HRDLOVIČ, Pavol. 3-(7-dimethylamino)coumarin N-phenylsemicarbazones in solution and polymer matrices: Tuning their fluorescence via para-phenyl substitution. In Spectrochimica Acta Part A - Molecular and Biomolecular Spectroscopy, 2014, vol. 126, p. 36 - 45. (2.129 - IF2013). (2014 - Current Contents). ISSN 1386-1425.

Citácie:

1. [1.1] VERMA, P. - PAL, H. Aggregation studies of dipolar coumarin-153 dye in polar solvents: A photophysical study. In JOURNAL OF PHYSICAL CHEMISTRY A. ISSN 1089-5639, AUG 28 2014, vol. 118, no. 34, p. 6950-6964., WOS

ADCA149 COWIE, J. M. G. - GARAY, M. T. - *LATH, Dieter* - MCEWEN, I. J. Formation of polymer-polymer complexes and blends in the system poly(acrylic acid) - poly(vinyl methyl-ether). In British Polymer Journal, 1989, vol. 21, no. 1, p. 81 - 85.

Citácie:

1. [1.1] RUIZ-RUBIO, L. - LAZA, J.M. - PEREZ, L. - RIOJA, N. - BILBAO, E. Polymer-polymer complexes of poly(N-isopropylacrylamide) and poly(N,N-diethylacrylamide) with poly(carboxylic acids): a comparative study. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, FEB 2014, vol. 292, no. 2, p. 423-430., WOS

ADCA150 CSOMOROVÁ, Katarína - RYCHLÝ, Jozef - *BAKOŠ, Dušan* - JANIGOVÁ, Ivica. The effect of inorganic additives on the decomposition of poly (beta-hydroxybutyrate) into volatile products. In Polymer Degradation and Stability, 1994, vol. 43, p. 441-446.

Citácie:

1. [1.1] ARZA, C.R. - JANNASCH, P. - MAURER, F.H.J. Network formation of graphene oxide in poly (3-hydroxybutyrate) nanocomposites. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, OCT 2014, vol. 59, p. 262-269., WOS

ADCA151 CZANIKOVÁ, Klaudia - TORRAS, N. - ESTEVE, J. - *KRUPA, Igor* - *KASÁK, Peter* - PAVLOVA, E. - RAČKO, Dušan - CHODÁK, Ivan - OMASTOVÁ, Mária. Nanocomposite photoactuators based on an ethylene vinyl acetate copolymer filled with carbon nanotubes. In Sensors and Actuators B-Chemical, 2013, vol. 186, p. 701 - 710. (3.535 - IF2012). (2013 - Current Contents). ISSN 0925-4005.

Citácie:

1. [1.1] PONNAMMA, D. - SADASIVUNI, K.K. - GROHENS, Y. - GUO, Q.P. - THOMAS, S. Carbon nanotube based elastomer composites - an approach towards multifunctional materials. In JOURNAL OF MATERIALS CHEMISTRY C. ISSN 2050-7526, 2014, vol. 2, no. 40, p. 8446-8485., WOS

ADCA152 *ČAPLA, Milan* - BORSIG, Eberhard. Simultaneous degradation and cross-linking effect of dicumyl peroxide on ethylene-propylene copolymers. In European Polymer Journal, 1980, vol. 16, no. 7, p. 611 - 613. ISSN 0014-3057.

Citácie:

1. [1.1] DE ALMEIDA, A. - CHAZEAU, L. - VIGIER, G. - MARQUE, G. - GOUTILLE, Y. Influence of PE/PP ratio and ENS content on the degradation

kinetics of gamma-irradiated EPDM. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 175-183., WOS

ADCA153 DANKO, Martin - MIČUŠÍK, Matej - OMASTOVÁ, Mária - BUJDÁK, J. - CHORVÁT, D. Jr. Spectral characterisation of new organic fluorescent dyes with an alkoxysilane moiety and their utilisation for the labelling of layered silicates. In Chemical papers, 2013, vol. 67, no. 1, p. 18-28. (0.879 - IF2012). (2013 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] BILGIC, C. - YAZICI, D.T. - KARAKEHYA, N. - CETINKAYA, H. - SINGH, A. - CHEHIMI, M.M. Surface and interface physicochemical aspects of intercalated organo-bentonite. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, APR 2014, vol. 50, p. 204-210., WOS

2. [1.1] VUORI, L. - HANNULA, M. - LAHTONEN, K. - JUSSILA, P. - ALI-LOYTTY, H. - HIRSIMAKI, M. - PARNA, R. - NOMMISTE, E. - VALDEN, M. Controlling the synergetic effects in (3-aminopropyl) trimethoxysilane and (3-mercaptopropyl) trimethoxysilane coadsorption on stainless steel surfaces. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, OCT 30 2014, vol. 317, p. 856-866., WOS

ADCA154 DANKO, Martin - SZABO, E. - HRDLOVIČ, Pavol. Synthesis and spectral characteristics of fluorescent dyes based on coumarin fluorophore and hindered amine stabilizer in solution and polymer matrices. In Dyes and Pigments, 2011, vol. 90, p. 129 - 138. (2.635 - IF2010). (2011 - Current Contents). ISSN 0143-7208.

Citácie:

1. [1.1] DEGROTE, J. - TYNDALL, S. - WONG, K.F. - VANALSTINE-PARRIS, M. Synthesis of 7-alkoxy-4-trifluoromethylcoumarins via the von Pechmann reaction catalyzed by molecular iodine. In TETRAHEDRON LETTERS. ISSN 0040-4039, DEC 3 2014, vol. 55, no. 49, p. 6715-6717., WOS

2. [1.1] EL-BINDARY, A.A. - EL-SONBATI, A.Z. - AL-SARAWY, A.A. - MOHAMED, K.S. - FARID, M.A. Adsorption and thermodynamic studies of hazardous azocoumarin dye from an aqueous solution onto low cost rice straw based carbons. In JOURNAL OF MOLECULAR LIQUIDS. ISSN 0167-7322, NOV 2014, vol. 199, p. 71-78., WOS

ADCA155 DANKO, Martin - HRDLOVIČ, Pavol - BORSIG, Eberhard. Characterization of interpenetrating polymer-like network based on polyethylene/poly(styrene-co-butylmethacrylate) (PE/P(S-co-BMA)) by non-radiative energy transfer. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2003, vol. 154, no. 2-3, p. 279 - 288. ISSN 1010-6030.

Citácie:

1. [1.1] BODE, S. - ENKE, M. - GORLS, H. - HOEPPENER, S. - WEBERSKIRCH, R. - HAGER, M.D. - SCHUBERT, U.S. Blocked isocyanates: an efficient tool for post-polymerization modification of polymers. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 7, p. 2574-2582., WOS

ADCA156 DANKO, Martin - ANDICS, Anita - *KÓSA, Csaba* - HRDLOVIČ, Pavol - VEGH, D. Spectral properties of chalcone containing triphenylamino structural unit in solution and in polymer matrices. In Dyes and Pigments, 2012, vol. 92, p. 1257 - 1265. (3.126 - IF2011). (2012 - Current Contents). ISSN 0143-7208.

Citácie:

1. [1.1] JIN, H.Y. - LI, X.G. - TAN, T.F. - WANG, S.R. - XIAO, Y. - TIAN, J.H. Electrochromic properties of novel chalcones containing triphenylamine moiety. In DYES AND PIGMENTS. ISSN 0143-7208, JUL 2014, vol. 106, p. 154-160., WOS

2. [1.1] WANG, Z.Q. - XIAO, Y. - JIN, H.Y. - TAN, T.F. - WANG, S.R. - LI, X.G.

Synthesis and properties of photochromic dithienylethene compounds with triphenylamine units. In ACTA CHIMICA SINICA. ISSN 0567-7351, JUN 15 2014, vol. 72, no. 6, p. 731-738., WOS
3. [1.1] ZHOU, Q.X. - GU, P.Y. - ZHANG, Y.H. - LI, N.J. - XU, Q.F. - ZHANG, Y. - LU, J.M. Preparation of fluorescent polystyrene via ATRP with dimethylamino chalcones as initiator. In CHINESE JOURNAL OF CHEMISTRY. ISSN 1001-604X, JUL 2014, vol. 32, no. 7, p. 573-578., WOS

ADCA157 DONESCU, D. - FUSULAN, I. - PETCU, C. - VASILESCU, M. - SMARANDACHE, C. - CAPEK, Ignác. Ternary microemulsion of vinylic and acrylic monomers. In European Polymer Journal, 2002, vol. 38, no. 8, p. 1691 - 1701. (0.779 - IF2001). (2002 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.2] HERRERA, J.R.- OVANDO-MEDINA, V.M.- LÓPEZ, R.G.- MENDIZÁBAL, E.- CORTEZ-MAZATÁN, G.Y.- PERALTA, R.D. Kinetics and monomer partitioning during polymerization of vinyl acetate in microemulsions stabilized with AOT and n-butanol. (2014) Colloid and Polymer Science, 293 (2), p. 655-664. DOI: 10.1007/s00396-014-3479-2, Scopus

ADCA158 DONOVALOVÁ, J. - CIGÁŇ, M. - STANKOVIČOVÁ, H. - GAŠPAR, J. - DANKO, Martin - GÁPLOVSKÝ, A. - HRDLOVIČ, Pavol. Spectral properties of substituted coumarins in solution and polymer matrices. In Molecules, 2012, vol. 17, p. 3259 - 3276. (2.386 - IF2011). (2012 - Current Contents). ISSN 1420-3049.

Citácie:

1. [1.1] ELENKOVA, D. - MORGENSTERN, B. - MANOLOV, I. - MILANOVA, M. Synthesis, crystal structure and physico-chemical properties of 3,3 '(4-hydroxyphenyl)methyl] bis-(4-hydroxy-2H-chromen-2-one). In ACTA CHIMICA SLOVENICA. ISSN 1318-0207, 2014, vol. 61, no. 4, p. 718-728., WOS
2. [1.1] GHOUILI, A. - DUSEK, M. - PETRICEK, V. - BEN AYED, T. - BEN HASSEN, R. Synthesis, crystal structure and spectral characteristics of highly fluorescent chalcone-based coumarin in solution and in polymer matrix. In JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS. ISSN 0022-3697, FEB 2014, vol. 75, no. 2, p. 188-193., WOS
3. [1.1] GHOUILI, A. - ROHLICEK, J. - BEN AYED, T. - BEN HASSEN, R. Crystal structure determination from powder diffraction data of the coumarin vanillin chalcone. In POWDER DIFFRACTION. ISSN 0885-7156, DEC 2014, vol. 29, no. 4, p. 361-365., WOS
4. [1.1] KIM, J.H. - SUMRANJIT, J. - KANG, H.J. - CHUNG, S.J. Discovery of coumarin derivatives as fluorescence acceptors for intrinsic fluorescence resonance energy transfer of proteins. In MOLECULAR BIOSYSTEMS. ISSN 1742-206X, 2014, vol. 10, no. 1, p. 30-33., WOS
5. [1.1] LURIDIANA, A. - PRETTA, G. - SECCI, F. - FRONGIA, A. - CHIRIU, D. - CARBONARO, C.M. - CORPINO, R. - RICCI, P.C. Synthesis and characterization of tunable coumarin-linked glasses as new class of organic/inorganic phosphors. In FUNDAMENTALS AND APPLICATIONS IN SILICA AND ADVANCED DIELECTRICS (SIO2014). ISSN 0094-243X, 2014, vol. 1624, p. 81-86., WOS
6. [1.1] RAHMAN, M.M. - NOMOTO, A. - YOUNUS, M. - OGAWA, A. Palladium-Catalyzed Dithiolation of Platinum(II) Alkynylarylacetylides with Diphenyl Disulfide Leading to Construction of -Conjugated Systems with Platinum and Thio Groups. In EUROPEAN JOURNAL OF INORGANIC CHEMISTRY. ISSN 1434-1948, JUN 2014, no. 16, p. 2613-2617., WOS
7. [1.1] VERMA, P. - PAL, H. Aggregation studies of dipolar coumarin-153 dye in polar solvents: A photophysical study. In JOURNAL OF PHYSICAL

CHEMISTRY A. ISSN 1089-5639, 2014, vol. 118, no. 34, p. 6950-6964., WOS

ADCA159 DUDA, A. - LIBISZOWSKI, J. - MOSNÁČEK, Jaroslav - PENCZEK, S. Copolymerization of cyclic esters at the living polymer-monomer equilibrium. In Macromolecular Symposia, 2005, vol. 226, p. 109 - 119. (0.691 - IF2004). (2005 - Current Contents). ISSN 1022-1360.

Citácie:

1. [1.1] HODGE, P. Entropically driven ring-opening polymerization of strainless organic macrocycles. In CHEMICAL REVIEWS. ISSN 0009-2665, FEB 26 2014, vol. 114, no. 4, p. 2278-2312., WOS

2. [1.1] MARTIN, R.T. - CAMARGO, L.P. - MILLER, S.A. Marine-degradable polylactic acid. In GREEN CHEMISTRY. ISSN 1463-9262, 2014, vol. 16, no. 4, p. 1768-1773., WOS

ADCA160 ELTEKOVA, N.A. - BEREK, Dušan - NOVÁK, Ivan - BELLIARDO, F. Adsorption of organic compounds on porous carbon sorbents. In Carbon, 2000, vol. 38, p. 373-377. (1.722 - IF1999). (2000 - Current Contents). ISSN 0008-6223.

Citácie:

1. [1.1] MAKHLOUF, M.T. - ABU-ZIED, B.M. - MANSOURE, T.H. Effect of fuel/oxidizer ratio and the calcination temperature on the preparation of microporous-nanostructured tricobalt tetraoxide. In ADVANCED POWDER TECHNOLOGY. ISSN 0921-8831, MAR 2014, vol. 25, no. 2, p. 560-566., WOS

2. [1.1] TITIRICI, M.M. Hydrothermal nanocarbons. In ADVANCED HIERARCHICAL NANOSTRUCTURED MATERIALS. 2014, p. 351-405., WOS

ADCA161 EREN, E. - CELIK, G. - UYGUN, A. - TABAČIAROVÁ, Jana - OMASTOVÁ, Mária. Synthesis of poly(3,4-ethylenedioxythiophene)/titanium dioxide nanocomposites in the presence of surfactants and their properties. In Synthetic Metals, 2012, vol. 162, p. 1451 - 1458. (1.829 - IF2011). (2012 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] ABDIRYIM, T. - ALI, A. - JAMAL, R. - OSMAN, Y. - ZHANG, Y. A facile solid-state heating method for preparation of poly(3,4-ethelenedioxythiophene)/ZnO nanocomposite and photocatalytic activity. In NANOSCALE RESEARCH LETTERS. ISSN 1556-276X, FEB 2014, vol. 9., WOS

2. [1.1] NIE, T. - LENG, J. - BAI, L. - LU, L.M. - XU, J.K. - ZHANG, K.X. Synthesis and characterization of benzenesulfonate derivatives doped poly(3,4-ethylenedioxythiophene) films and their application in electrocatalysis. In SYNTHETIC METALS. ISSN 0379-6779, MAR 2014, vol. 189, p. 161-172., WOS

3. [1.1] WU, L.P. - GAO, Y.S. - XU, J.K. - LU, L.M. - NIE, T. Novel nickel redox polymer as an efficient electrode material for electrochemical sensing. In ELECTROANALYSIS. ISSN 1040-0397, OCT 2014, vol. 26, no. 10, p. 2207-2215., WOS

ADCA162 *FIALOVÁ, Lenka* - CAPEK, Ignác - IANCHIŞ, R. - COROBEA, M. C. - DONESCU, D. - BEREK, Dušan. Kinetics of styrene and butyl acrylate polymerization in anionic microemulsions in presence of layered silicates. In Polymer Journal, 2008, vol. 4, no. 2, p. 2223 - 2228. (1.421 - IF2007). (2008 - Current Contents). ISSN 0032-3896.

Citácie:

1. [1.1] ZHANG, F.A. - LUO, M. - CHEN, Z.J. - WEI, Z.B. - PINNAVAIA, T.J. Effects of mesoporous silica particles on the emulsion polymerization of methyl methacrylate. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, DEC 2014, vol. 54, no. 12, p. 2746-2752., WOS

ADCA163 FLORCZAK, M. - LIBISZOWSKI, J. - MOSNÁČEK, Jaroslav - DUDA, A. -

PENCZEK, S. L,L-lactide and epsilon-caprolactone block copolymers by a ´poly(L,L-lactide) block first´route. In Macromolecular Rapid Communications, 2007, vol. 28, no. 13, p. 1385 - 1391. (3.164 - IF2006). (2007 - Current Contents). ISSN 1022-1336.

Citácie:

1. [1.1] LIU, Y. - DONG, W.S. - LIU, J.Y. - LI, Y.S. Living ring-opening homo- and copolymerisation of epsilon-caprolactone and L-lactide by cyclic beta-ketiminato aluminium complexes. In DALTON TRANSACTIONS. ISSN 1477-9226, 2014, vol. 43, no. 5, p. 2244-2251., WOS

2. [1.1] PLICHTA, A. - FLORJANCZYK, Z. - KUNDYS, A. - FRYDRYCH, A. - DEBOWSKI, M. - LANGWALD, N. On the copolymerization of monomers from renewable resources: L-lactide and ethylene carbonate in the presence of metal alkoxides. In PURE AND APPLIED CHEMISTRY. ISSN 0033-4545, MAY 2014, vol. 86, no. 5, p. 733-745., WOS

ADCA164 GAÁL, A. - BUGÁR, I. - CAPEK, Ignác - *FIALOVÁ, Lenka - PÁLSZEGI, Tibor* - SZOCS, V. - ŠATKA, A. - UHEREK, F. Femtosecond multicolor transient absorption spectroscopy of colloidal silver nanoparticles. In Laser Physics, 2009, vol.19, no. 5, p. 961 - 968. (0.777 - IF2008). ISSN 1054-660X.

Citácie:

1. [1.1] TAMULEVICIUS, T. - PECKUS, D. - TAMULEVICIENE, A. - VASILIAUSKAS, A. - CIEGIS, A. - MESKINIS, S. - TAMULEVICIUS, S. Dynamic optical properties of amorphous diamond like carbon nanocomposite films doped with Cu and Ag nanoparticles. In PLASMONICS: METALLIC NANOSTRUCTURES AND THEIR OPTICAL PROPERTIES XII. ISSN 0277-786X, 2014, vol. 9163., WOS

ADCA165 GALÁŘ, P. - DZURŇÁK, B. - MALÝ, P. - ČERMÁK, J. - KROMKA, A. - OMASTOVÁ, Mária - REZEK, B. Chemical changes and photoluminescence properties of UV modified polypyrrole. In International Journal of Electrochemical Science, 2013, vol. 8, p. 57 - 70. (2013 - Current Contents). ISSN 1452-3981.

Citácie:

1. [1.1] HARRAZ, F.A. Electrochemical formation of a novel porous silicon/polypyrrole hybrid structure with enhanced electrical and optical characteristics. In JOURNAL OF ELECTROANALYTICAL CHEMISTRY. ISSN 1572-6657, SEP 1 2014, vol. 729, p. 68-74., WOS

2. [1.2] MOHAMMED, M.Z.- ABDULAMOHSIN, S.- LI, Z.- CHEN, T.P. ZnO nanowires/N719 dye/polypyrrole-SWNTs nanocomposite solid state dye sensitized solar cells. (2014) 2014 IEEE 40th Photovoltaic Specialist Conference, PVSC 2014, art. no. 6925201, p. 1510-1514., Scopus

3. [1.2] THAI, D.V. - THI, T.M.- BEN, P.V.- LAP, D.V.- UYEN, N.T.- THU, H.H. The effect of ultraviolet irradiation on the optical properties of ZnS: Mn synthesized by hydrothermal method and using thioglycolic acid.(2014) 2014 Conference on Optoelectronic and Microelectronic Materials and Devices, COMMAD 2014, art. no. 7038666, p. 117-120., Scopus

ADCA166 GAM-DEROUICH, S. - MAHOUCHE-CHERGUI, S. - TURMINE, M. - PIQUEMAL, J.-Y. - BEN HASSEN-CHEHIMI, D. - OMASTOVÁ, Mária - CHEHIMI, M. M. A versatile route for surface modification of carbon, metals and semi-conductors by diazonium salt-initiated photopolymerization. In Surface Science, 2011, vol. 605, p. 1889 - 1899. (2.010 - IF2010). (2011 - Current Contents). ISSN 0039-6028.

Citácie:

1. [1.1] FARIAS, E.D. - PAEZ, J.I. - STRUMIA, M.C. - BARUZZI, A.M. - PASSEGGI, M.C.G. - BRUNETTI, V. Self-assembly of the second-generation of

nitroaryl-ended dendrons onto carbon. In ELECTROCHIMICA ACTA. ISSN 0013-4686, JUL 10 2014, vol. 134, p. 76-83., WOS

2. [1.1] SHIMIZU, K. - MALMOS, K. - SPIEGELHAUER, S.A. - HINKE, J. - HOLM, A.H. - PEDERSEN, S.U. - DAASBJ, K. - HINGE, M. Durability of PEEK adhesive to stainless steel modified with aryldiazonium salts. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, JUN 2014, vol. 51, p. 1-12., WOS

ADCA167 GMUCOVÁ, K. - WEIS, M. - NÁDAŽDY, V.- CAPEK, Ignác - ŠATKA, A. - CHITU, L. - CIRÁK, J. - MAJKOVÁ, Eva. Effect of charged deep states in hydrogenated amorphous silicon on the behavior of iron oxides nanoparticles deposited on its surface. In Applied Surface Science, 2008, vol. 254, p. 7008 - 7013. (1.410 - IF2007). (2008 - Current Contents). ISSN 0169-4332.

Citácie:

1. [1.1] HORVATH, B. - SUSTEK, M. - VAVRA, I. - MICUSIK, M. - GAL, M. - HRONEC, M. Gas-phase epoxidation of propylene over iron-containing catalysts: the effect of iron incorporation in the support matrix. In CATALYSIS SCIENCE & TECHNOLOGY. ISSN 2044-4753, 2014, vol. 4, no. 8, p. 2664-2673., WOS

ADCA168 GÖK, A. - OMASTOVÁ, Mária - YAVUZ, A. G. Synthesis and characterization of polythiophenes prepared in the presence of surfactants. In Synthetic Metals, 2007, vol.157, p.23-29. (1.685 - IF2006). (2007 - Current Contents, SCOPUS). ISSN 0379-6779.

Citácie:

1. [1.1] BORA, C. - PEGU, R. - SAIKIA, B.J. - DOLUI, S.K. Synthesis of polythiophene/graphene oxide composites by interfacial polymerization and evaluation of their electrical and electrochemical properties. In POLYMER INTERNATIONAL. ISSN 0959-8103, DEC 2014, vol. 63, no. 12, p. 2061-2067., WOS

2. [1.1] COGAL, S. - OCAKOGLU, K. - OKSUZ, A.U. The synthesis, photophysical and electrochemical studies of symmetrical phthalocyanines linked thiophene substituents. In INORGANICA CHIMICA ACTA. ISSN 0020-1693, NOV 1 2014, vol. 423, A, p. 139-144., WOS

3. [1.1] DEVAKI, S.J. - SADANANDHAN, N.K. - SASI, R. - ADLER, H.J.P. - PICH, A. Water dispersible electrically conductive poly(3,4-ethylenedioxythiophene) nanospindles by liquid crystalline template assisted polymerization. In JOURNAL OF MATERIALS CHEMISTRY C. ISSN 2050-7526, 2014, vol. 2, no. 34, p. 6991-7000., WOS

4. [1.1] EREN, E. - ASLAN, E. - OKSUZ, A.U. The effect of anionic surfactant on the properties of polythiophene/chitosan composites. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, NOV 2014, vol. 54, no. 11, p. 2632-2640., WOS

5. [1.1] ESSIZ, S. - SARI, B. - ELDEMIR, N. Effect of synthetic route on structural and morphological properties of poly(thiophene-co-indole). In POLYMER SCIENCE SERIES B. ISSN 1560-0904, SEP 2014, vol. 56, no. 5, p. 593-602., WOS

6. [1.1] FOROUTANI, K. - POURABBAS, B. - SHARIF, M. - FALLAHIAN, M. - KHADEMI, S. - MOHAMMADIZADEH, M. In situ deposition of polythiophene nanoparticles on flexible transparent films: Effect of the process conditions. In MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING. ISSN 1369-8001, MAR 2014, vol. 19, p. 57-65., WOS

7. [1.1] GUO, Q.H. - ZOU, S.S. - LI, J. - LI, D.F. - JIAO, H.X. - SHI, J.H. Facile synthesis of morphology- and size-controllable polythiophene/gold composites in aqueous medium. In JOURNAL OF NANOPARTICLE RESEARCH. ISSN 1388-

0764, NOV 2014, vol. 16, no. 11., WOS
8. [1.1] KHALILI, R. - SHABANPOUR, F. - EISAZADEH, H. Synthesis of polythiophene/Sb2O3 nanocomposite using sodium dodecylbenzenesulfonate for the removal of Pb (II). In ADVANCES IN POLYMER TECHNOLOGY. ISSN 0730-6679, JUN 2014, vol. 33, no. 2., WOS
9. [1.1] LU, L.L. - CHEN, Z.M. - XU, G.H. - ZHANG, J.A. - XU, Q. Pine needle-like nanocomposite: Supercritical CO2 assisted polythiophene synthesis on carbon nanotubes. In CHEMICAL RESEARCH IN CHINESE UNIVERSITIES. ISSN 1005-9040, JUN 2014, vol. 30, no. 3, p. 521-526., WOS
10. [1.1] MAO, Y. - KONG, Q.Y. - SHEN, L. - WANG, Z.X. - CHEN, L.Q. Polythiophene coordination complexes as high performance lithium storage materials. In JOURNAL OF POWER SOURCES. ISSN 0378-7753, FEB 15 2014, vol. 248, p. 343-347., WOS
11. [1.1] MASSOUMI, B. - OMIDI, H. - VESSALLY, E. - ENTEZAMI, A.A. Nanostructured poly (2,2 '-bithiophene)-co-(3-dodecylthiophene): preparation, investigation of the electroactivity, conductivity, and morphology. In INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS. ISSN 0091-4037, APR 2014, vol. 63, no. 6, p. 323-329., WOS
12. [1.1] MOHAMMADIZADEH, M. - POURABBAS, B. - MAHMOODIAN, M. - FOROUTANI, K. - FALLAHIAN, M. Facile and rapid production of conductive flexible films by deposition of polythiophene nanoparticles on transparent poly(ethyleneterephthalate): Electrical and morphological properties. In MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING. ISSN 1369-8001, APR 2014, vol. 20, p. 74-83., WOS
13. [1.1] PEKMEZ, N.O. - CINKILLI, K. - ZEYBEK, B. The electrochemical copolymerization of pyrrole and bithiophene on stainless steel in the presence of SDS in aqueous medium and its anticorrosive performance. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, AUG 2014, vol. 77, no. 8, p. 1277-1287., WOS
14. [1.1] PERMPOOL, T. - SIRIVAT, A. - AUSSAWASATHIEN, D. Synthesis of polydiphenylamine with tunable size and shape via emulsion polymerization. In POLYMER INTERNATIONAL. ISSN 0959-8103, DEC 2014, vol. 63, no. 12, p. 2076-2083., WOS
15. [1.1] RAWAT, N.K. - GHOSAL, A. - AHMAD, S. Influence of microwave irradiation on various properties of nanopolythiophene and their anticorrosive nanocomposite coatings. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 92, p. 50594-50605., WOS
16. [1.1] ZHANG, H.Q. - HU, L.W. - TU, J.G. - JIAO, S.Q. Electrochemically assembling of polythiophene film in ionic liquids (ILs) microemulsions and its application in an electrochemical capacitor. In ELECTROCHIMICA ACTA. ISSN 0013-4686, FEB 20 2014, vol. 120, p. 122-127., WOS
17. [1.2] BALAKRISHNAN, K.- KUMAR, M.- SUBRAMANIA, A. Synthesis of polythiophene and its carbonaceous nanofibers as electrode materials for asymmetric supercapacitors. (2014) Advanced Materials Research, 938, p. 151-157. DOI: 10.4028/www.scientific.net/AMR.938.151, Scopus
18. [1.2] MASSOUMI, B.- ALIPOUR, N.- FATHALIPOUR, S.- JAYMAND, M. Nanostructured poly(2,2-bithiophene-co-3,4-ethylenedioxythiophene): Synthesis, characterization, and properties. (2014) High Performance Polymers, 27 (2), p. 161-170. DOI: 10.1177/0954008314541821, Scopus
19. [1.2] NOHUT, N.- EREN, E.-RAHHAL-IRABI, L.-OKSUZ, A.U. In situ investigation of surfactants' effect onto electrochemical synthesis and properties of polyfurans. (2014) Journal of Materials Science, 49 (7), p. 2754-2760. DOI:

10.1007/s10853-013-7978-1, Scopus
20. [1.2] PATIL, B.H.- GUND, G.S.- LOKHANDE, C.D. Influence of surfactant on the morphology and supercapacitive behavior of SILAR-deposited polyaniline thin films. (2014) Ionics, 21 (1), p. 191-200. DOI: 10.1007/s11581-014-1146-8, Scopus

ADCA169 GÖK, A. - OMASTOVÁ, Mária - PROKEŠ, J. Synthesis and characterization of red mud/polyaniline composites: Electrical properties and thermal stability. In European Polymer Journal, 2007, vol. 43, p. 2471 - 2480. (2.113 - IF2006). (2007 - Current Contents). ISSN 0014-3057.

Citácie:
1. [1.1] ABACI, S. - NESSARK, B. - RIAHI, F. Preparation and characterization of polyaniline+TiO2 composite films. In IONICS. ISSN 0947-7047, DEC 2014, vol. 20, no. 12, p. 1693-1702., WOS
2. [1.1] CAO, J.L. - YAN, Z.L. - DENG, Q.F. - WANG, Y. - YUAN, Z.Y. - SUN, G. - JIA, T.K. - WANG, X.D. - BALA, H. - ZHANG, Z.Y. Mesoporous modified-red-mud supported Ni catalysts for ammonia decomposition to hydrogen. In INTERNATIONAL JOURNAL OF HYDROGEN ENERGY. ISSN 0360-3199, APR 4 2014, vol. 39, no. 11, p. 5747-5755., WOS
3. [1.1] CAO, J.L. - YAN, Z.L. - DENG, Q.F. - YUAN, Z.Y. - WANG, Y. - SUN, G. - WANG, X.D. - HARI, B. - ZHANG, Z.Y. Homogeneous precipitation method preparation of modified red mud supported Ni mesoporous catalysts for ammonia decomposition. In CATALYSIS SCIENCE & TECHNOLOGY. ISSN 2044-4753, 2014, vol. 4, no. 2, p. 361-368., WOS
4. [1.1] KOHL, M. - KALENDOVA, A. - STEJSKAL, J. The effect of polyaniline phosphate on mechanical and corrosive properties of protective organic coatings containing high amounts of zinc metal particles. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, FEB 2014, vol. 77, no. 2, p. 512-517., WOS
5. [1.1] LU, Q.H. - LIU, K. - CHEN, B.Z. - HU, Y.H. Comparison of chemical reactivity of bauxite-tailings pre- and post-calcinations and whitening bauxite-tailing. In JOURNAL OF WUHAN UNIVERSITY OF TECHNOLOGY-MATERIALS SCIENCE EDITION. ISSN 1000-2413, FEB 2014, vol. 29, no. 1, p. 29-34., WOS
6. [1.1] NADAROGLU, H. - KALKAN, E. - CELEBI, N. Equilibrium, kinetic and thermodynamic studies on adsorption of reactive black 5 dye by laccase modified-red mud from aqueous solutions. In FRESENIUS ENVIRONMENTAL BULLETIN. ISSN 1018-4619, 2014, vol. 23, no. 1, p. 70-83., WOS
7. [1.1] PEREIRA, C.E. - ALVES, J.J.N. - MENEZES, R.R. - SANTOS, J.O.P.N. - SOUSA, B.V. Experimental planning of mixtures to obtain geopolymer. In BRAZILIAN CERAMIC CONFERENCE 57. ISSN 0255-5476, 2014, vol. 798-799, p. 79-84., WOS
8. [1.2] KOHL, M.- KALENDOVÁ, A. Assessment of the impact of polyaniline salts on corrosion properties of organic coatings [Hodnocení vlivu připravených polyanilinových solí na korozní vlastnosti organických povlaků]. (2014) Koroze a Ochrana Materialu, 58 (4), p. 113-119. DOI: 10.1515/kom-2015-0004, Scopus
9. [1.2] KUMAR, S. The properties and performance of red mud-based geopolymeric masonry blocks. (2014) Eco-efficient Masonry Bricks and Blocks: Design, Properties and Durability, p. 311-328. DOI: 10.1016/B978-1-78242-305-8.00014-0, Scopus

ADCA170 GÓMEZ-ELVIRA, J. M. - TIEMBLO, P. - ELVIRA, M. - RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Relaxations and thermal stability of low molecular weight predominantly isotactic metallocene and Ziegler-Natta polypropylene. In Polymer Degradation and Stability, 2004, vol. 85, p. 873 - 882. (1.405 - IF2003). (2004 -

Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] CEROVIC, D.D. - PETRONIJEVIC, I. - DOJCILOVIC, J.R. Influence of temperature and fiber structure on the dielectric properties of polypropylene fibrous structures. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, MAR 2014, vol. 25, no. 3, p. 338-342., WOS

2. [1.1] SHAMIRI, A. - CHAKRABARTI, M.H. - JAHAN, S. - HUSSAIN, M.A. - KAMINSKY, W. - ARAVIND, P.V. - YEHYE, W.A. the influence of Ziegler-Natta and metallocene catalysts on polyolefin structure, properties, and processing ability. In MATERIALS. ISSN 1996-1944, JUL 2014, vol. 7, no. 7, p. 5069-5108., WOS

ADCA171 GORELIK, B. A. - KOLGANOVA, I. V. - RYCHLÁ, Lýdia - LISTVOJB, G. I. - DRABKINA, A. M. - GOLNIK, A. G. Effect of oxygen on the degradation of polypropylene initiated by ionizing irradiation. In Polymer Degradation and Stability, 1993, vol. 42, no.3, p. 263 - 266. (0.660 - IF1992). (1993 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.2] KLEPAC, D.- ŠČETAR, M.- BARANOVIĆ, G.- GALIĆ, K.- VALIĆ, S. Influence of high doses γ-irradiation on oxygen permeability of linear low-density polyethylene and cast polypropylene films. (2014) Radiation Physics and Chemistry, 97, p. 304-312. DOI: 10.1016/j.radphyschem.2013.12.005, Scopus

ADCA172 HAFKO, R. - OREČNÁ, M. - BAČOVÁ, Z. - HLOUŠKOVÁ, Gabriela - LACÍK, Igor - ŠTRBÁK, V. Mechanism of ethanol-induced insulin secretion from INS-1 and INS-1E tumor cell lines. In Cellular Physiology and Biochemistry, 2009, vol. 24, iss. 5-6, p. 441-450. (3.246 - IF2008). (2009 - Current Contents). ISSN 1015-8987.

Citácie:

1. [1.1] WANG, Shuanglian - LUO, Yan - FENG, Allen - LI, Tao - YANG, Xupeng - NOFECH-MOZES, Roy - YU, Meng - WANG, Changhui - LI, Ziwei - YI, Fan - LIU, Chuanyong - LU, Wei-Yang. Ethanol induced impairment of glucose metabolism involves alterations of GABAergic signaling in pancreatic beta-cells. In TOXICOLOGY. ISSN 0300-483X, 2014, vol. 326, pp. 44-52., WOS

ADCA173 HLANGOTHI, S. P. - *KRUPA, Igor* - LUYT, A. S. - DJOKOVIČ, V. Thermal and mechanical properties of cross-linked and uncross-linked linear low-density polyethylene-wax blends. In Polymer Degradation and Stability, 2003, vol. 79, p. 53 - 59. (0.890 - IF2002). (2003 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] KATANCIC, Z. - KREHULA, L.K. - SIROCIC, A.P. - GROZDANIC, V. - HRNJAK-MURGIC, Z. Effect of modified nanofillers on fire retarded high-density polyethylene/wood composites. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, DEC 2014, vol. 48, no. 30, p. 3771-3783., WOS

2. [1.1] SIROCIC, A.P. - RESCEK, A. - HRNJAK-MURGIC, Z. Polyethylene nanocomposites filled with modified nanoparticles. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 8, p. 811-817., WOS

ADCA174 HOESLI, C. A. - RAGHURAM, K. - KIANG, R. L.J. - TREĽOVÁ, Dušana - HU, X. - JOHNSON, J. D. - LACÍK, Igor - KIEFFER, T. J. - PIRET, J. M. Pancreatic cell immobilization in alginate beads produced by emulsion and internal gelation. In Biotechnology and Bioengineering, 2011, vol. 108, no. 2, p. 424 - 434. (3.700 - IF2010). (2011 - Current Contents). ISSN 0006-3592.

Citácie:

1. [1.1] AKBARI, S. - PIRBODAGHI, T. Microfluidic encapsulation of cells in alginate particles via an improved internal gelation approach. In

MICROFLUIDICS AND NANOFLUIDICS. ISSN 1613-4982, APR 2014, vol. 16, no. 4, p. 773-777., WOS
2. [1.1] CAI, S. - ZHAO, M. - FANG, Y.P. - NISHINARI, K. - PHILLIPS, G.O. - JIANG, F.T. Microencapsulation of Lactobacillus acidophilus CGMCC1.2686 via emulsification/internal gelation of alginate using Ca-EDTA and CaCO3 as calcium sources. In FOOD HYDROCOLLOIDS. ISSN 0268-005X, AUG 2014, vol. 39, p. 295-300., WOS
3. [1.1] HOLDCRAFT, R.W. - GAZDA, L.S. - CIRCLE, L. - ADKINS, H. - HARBECK, S.G. - MEYER, E.D. - BAUTISTA, M.A. - MARTIS, P.C. - LARAMORE, M.A. - VINEREAN, H.V. - HALL, R.D. - SMITH, B.H. Enhancement of in vitro and in vivo function of agarose-encapsulated porcine islets by changes in the islet microenvironment. In CELL TRANSPLANTATION. ISSN 0963-6897, 2014, vol. 23, no. 8, p. 929-944., WOS
4. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS
5. [1.1] STEELE, J.A.M. - HALLE, J.P. - PONCELET, D. - NEUFELD, R.J. Therapeutic cell encapsulation techniques and applications in diabetes. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 74-83., WOS
6. [1.2] SCHOLTZ, J.-VAN DER COLFF, J.- STEENEKAMP, J.- STIEGER, N.- HAMMAN, J. More good news about polymeric plant- and algae-derived biomaterials in drug delivery systems. (2014) Current Drug Targets, 15 (5), p. 486-501. DOI: 10.2174/1389450111314999017 5, Scopus

ADCA175 HOESLI, C. A. - KIANG, R. L. J. - TREĽOVÁ, Dušana - SPECK, M.e - JOCHEC MOŠKOVÁ, Daniela - DONALD-HAGUE, Ch. - LACÍK, Igor - KIEFFER, T. J. - PIRET, J. M. Reversal of diabetes by betaTC3 cells encapsulated in alginate beads generated by emulsion and internal gelation. In Journal of Biomedical Materials Research Part B: Applied Biomaterials, 2012, vol. 100B, p. 1017 - 1028. (2.147 - IF2011). (2012 - Current Contents). ISSN 1552-4973.

Citácie:

1. [1.1] BARBA, A.A. - LAMBERTI, G. - RABBIA, L. - GRASSI, M. - LAROBINA, D. - GRASSI, G. Modeling of the reticulation kinetics of alginate/pluronic blends for biomedical applications. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, APR 1 2014, vol. 37, p. 327-331., WOS
2. [1.1] BHONDE, R.R. - SHESHADRI, P. - SHARMA, S. - KUMAR, A. Making surrogate beta-cells from mesenchymal stromal cells: Perspectives and future endeavors. In INTERNATIONAL JOURNAL OF BIOCHEMISTRY & CELL BIOLOGY. ISSN 1357-2725, JAN 2014, vol. 46, p. 90-102., WOS
3. [1.1] RICHARDSON, T. - KUMTA, P.N. - BANERJEE, I. Alginate encapsulation of human embryonic stem cells to enhance directed differentiation to pancreatic islet-like cells. In TISSUE ENGINEERING PART A. ISSN 1937-3341, DEC 1 2014, vol. 20, no. 23-24, p. 3198-3211., WOS
4. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS
5. [1.1] SCHOLTZ, J. - VAN DER COLFF, J. - STEENEKAMP, J. - STIEGER, N. - HAMMAN, J. More good news about polymeric plant-and algae-derived biomaterials in drug delivery systems. In CURRENT DRUG TARGETS. ISSN

1389-4501, MAY 2014, vol. 15, no. 5, p. 486-501., WOS
6. [1.1] STEELE, J.A.M. - HALLE, J.P. - PONCELET, D. - NEUFELD, R.J. Therapeutic cell encapsulation techniques and applications in diabetes. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 74-83., WOS

ADCA176 HRABÁROVÁ, E. - VALACHOVÁ, K. - RYCHLÝ, Jozef - RAPTA, P. - SASINKOVÁ, V. - MALÍKOVÁ, Marta - ŠOLTÉS, L. High-molar-mass hyaluronan degradation by Weissberger's system: Pro- and anti-oxidative effects of some thiol compounds. In Polymer Degradation and Stability, 2009, vol. 94, no. 10, p. 1867-1875. (2.320 - IF2008). ISSN 0141-3910.

Citácie:

1. [1.1] SAHA, P. - GHOSH, I. - DATTA, K. Increased hyaluronan levels in HABP1/p32/gC1qR overexpressing HepG2 cells inhibit autophagic vacuolation regulating tumor potency. In PLOS ONE. ISSN 1932-6203, 2014, vol. 9, no. 7, article number: e103208, WOS
2. [3] OMER, A.M. - TAMER, M. T. - MOHYELDIN, M.S. High-molecular weight of biopolymer. In SCIENCE JOURNAL OF VOLGOGRAD STATE UNIVERSITY : TECHNOLOGY AND INNOVATIONS. ISSN 2305-7815, 2014, vol. 12, no. 3, p. 56-70
3. [3] TAMER, T.M. Hyaluronan degradation under free-radical oxidation stress: Action and healing (Book Chapter 6). In ENGINEERING OF POLYMERS AND CHEMICALS COMPLEXITY. VOL. II: NEW APPROACHES, LIMITATIONS AND CONTROL. Edit. Focke W.W, Radusch H.J. Toronto, Apple Academic Press 2014, p. 107-144, ISBN 978-1-926895-87-1

ADCA177 HRACHOVÁ, J. - KOMADEL, P. - JOCHEC MOŠKOVÁ, Daniela - *KRAJČI, Juraj* - JANIGOVÁ, Ivica - ŠLOUF, M. - CHODÁK, Ivan. Properties of organo-clay/natural rubber nanocomposites: Effects of organophilic modifiers. In Journal of Applied Polymer Science, 2013, vol. 127, p. 3447 - 3455. (1.395 - IF2012). (2013 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] JOHN, M.J. Rubber compounding and processing. In HANDBOOK OF GREEN MATERIALS, VOL 4: BIOBASED COMPOSITE MATERIALS, THEIR PROCESSING PROPERTIES AND INDUSTRIAL APPLICATIONS. ISSN 2335-6596, 2014, vol. 5, p. 233-244., WOS

ADCA178 HRDLOVIČ, Pavol - CHMELA, Štefan - DANKO, Martin - SARAKHA, M. - GUYOT, G. Spectral properties of probes containing benzothioxanthene chromophore linked with hindered amine in solution and in polymer matrices. In Journal of Fluorescence, 2008, vol. 18, p. 393 - 402. (2.101 - IF2007). (2008 - Current Contents). ISSN 1053-0509.

Citácie:

1. [1.1] SUN, F.Y. - JIN, R.F. Optical and charge transport properties of N-butyl-1,8-naphthalimide derivatives as organic light-emitting materials: A theoretical study. In JOURNAL OF LUMINESCENCE. ISSN 0022-2313, MAY 2014, vol. 149, p. 125-132., WOS

ADCA179 HRDLOVIČ, Pavol - CHMELA, Štefan. Spectral characteristics of probes based on ionic derivatives of pyrene in polar polymer matrices. In Journal of Photochemistry and Photobiology A : polymer chemistry, 1998, vol.118, no. 2, p. 137 - 142. (1.056 - IF1997). (1998 - Current Contents). ISSN 1010-6030.

Citácie:

1. [1.1] BARAN, A. - STINGA, G. - ANGHEL, D.F. - IOVESCU, A. - TUDOSE, M. Comparing the spectral properties of pyrene as free molecule, label and

derivative in some colloidal systems. In SENSORS AND ACTUATORS B-CHEMICAL. ISSN 0925-4005, JUL 2014, vol. 197, p. 193-199., WOS

ADCA180 HRDLOVIČ, Pavol - CHMELA, Štefan - DANKO, Martin. Spectral characteristics and photochemical stability of fluorescence probes based on 1,8-naphtaleneimide in solution and in polymer matrix. In Journal of Photochemistry and Photobiology A : polymer chemistry, 1998, vol. 112, no. 2-3, p. 197 - 203. (1.056 - IF1997). (1998 - Current Contents). ISSN 1010-6030.

Citácie:

1. [1.1] REDDY, T.S. - REDDY, A.R. 2-Hexylaminoethylamidonaphthalimide as Cu2+ sensor. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, JUL 15 2014, vol. 128, p. 880-886., WOS

ADCA181 HRDLOVIČ, Pavol - *HORINOVÁ, Ľubica* - CHMELA, Štefan. Spectral properties of ionic derivatives of pyrene and their aggregates with anionic surfactant and polyelectrolyte. In Canadian Journal of Chemistry, 1995, vol. 73, p. 1948-1954.

Citácie:

1. [1.1] BARAN, A. - STINGA, G. - ANGHEL, D.F. - IOVESCU, A. - TUDOSE, M. Comparing the spectral properties of pyrene as free molecule, label and derivative in some colloidal systems. In SENSORS AND ACTUATORS B-CHEMICAL. ISSN 0925-4005, JUL 2014, vol. 197, p. 193-199., WOS

ADCA182 HRDLOVIČ, Pavol - DONOVALOVÁ, J. - STANKOVIČOVÁ, H. - GÁPLOVSKÝ, A. Influence of polarity of solvents on the spectral properties of bichromophoric coumarins. In Molecules, 2010, vol. 15, p. 8915 - 8932. (1.738 - IF2009). (2010 - Current Contents). ISSN 1420-3049.

Citácie:

1. [1.1] CHAKRABORTY, P. - ADHIKARY, J. - SAMANTA, S. - ESCUDERO, D. - CASTRO, A.C. - SWART, M. - GHOSH, S. - BAUZA, A. - FRONTERA, A. - ZANGRANDO, E. - DAS, D. Combined experimental and theoretical investigation of ligand and anion controlled complex formation with unprecedented structural features and photoluminescence properties of zinc(II) complexes. In CRYSTAL GROWTH & DESIGN. ISSN 1528-7483, 2014, vol. 14, no. 8, p. 4111-4123., WOS
2. [1.1] PRIOR, A.M. - GUNARATNA, M.J. - KIKUCHI, D. - DESPER, J. - KIM, Y. - CHANG, K.O. - MAEZAWA, I. - JIN, L.W. - HUA, D.H. Syntheses of3-[(Alkylamino)methylene]-6-methylpyridine-2,4(1H,3H)-diones, 3-Substituted 7-Methyl-2H-pyrano[3,2-c]pyridine-2,5(6H)-dione Fluorescence Probes, and Tetrahydro-1H,9H-2,10-dioxa-9-azaanthracen-1-ones. In SYNTHESIS-STUTTGART. ISSN 0039-7881, AUG 2014, vol. 46, no. 16, p. 2179-2190., WOS

ADCA183 HRDLOVIČ, Pavol - LUKÁČ, Ivan. Derivatives of 1,2-diketones; Emission spectra in polymer matrices and efficiency as initiators of degradation. In Polymer Degradation and Stability, 1994, vol. 43, p. 195-201.

Citácie:

1. [1.2] WYPYCH, G. Other properties of solvents, solutions, and products obtained from solutions. (2014) Handbook of Solvents: Second Edition, 1, p. 725-751. DOI: 10.1016/B978-1-895198-64-5.50019-2, Scopus

ADCA184 HROBÁRIK, P. - SIGMUNDOVÁ, I. - ZAHRADNÍK, P. - *KASÁK, Peter* - ARION, V. - FRANZ, E. - CLAYS, K. Molecular engineering of benzothiazolium salts with large quadratic hyperpolarizabilities: Can auxiliary electron-withdrawing groups enhance nonlinear optical responses? In Journal of Physical Chemistry C, 2010, vol. 114, no. 50, p. 22289-22302. (4.224 - IF2009). (2010 - Current Contents). ISSN 1932-7447.

Citácie:

1. [1.1] ARJUNAN, V. - GOVINDARAJA, S.T. - JOSE, S.P. - MOHAN, S. DFT simulation, quantum chemical electronic structure, spectroscopic and structure-activity investigations of 2-benzothiazole acetonitrile. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, JUL 15 2014, vol. 128, p. 22-36., WOS
2. [1.1] BAPTISTA, R.M.F. - ISAKOV, D. - RAPOSO, M.M.M. - BELSLEY, M. - BDIKIN, I. - KHOLKIN, A.L. - COSTA, S.P.G. - GOMES, E.D. Ferroelectric nanofibers with an embedded optically nonlinear benzothiazole derivative. In JOURNAL OF NANOPARTICLE RESEARCH. ISSN 1388-0764, JUN 24 2014, vol. 16, no. 7., WOS
3. [1.1] CHANDRASEKHAR, B. 2-Alkyl/aryl/heteroarylbenzothiazole ring systems from o-aminothiophenol and its derivatives as versatile synthons. In JOURNAL OF SULFUR CHEMISTRY. ISSN 1741-5993, OCT 2014, vol. 35, no. 5, p. 538-586., WOS
4. [1.1] GAUTAM, P. - MARAGANI, R. - MISRA, R. Tuning the HOMO-LUMO gap of donor-substituted benzothiazoles. In TETRAHEDRON LETTERS. ISSN 0040-4039, DEC 10 2014, vol. 55, no. 50, p. 6827-6830., WOS
5. [1.1] LI, Y. - XU, H.L. - WU, H.Q. - ZHONG, R.L. - SUN, S.L. - SU, Z.M. Isomeric thiophene-fused benzocarborane molecules-different lithium doping effect on the nonlinear optical property. In DALTON TRANSACTIONS. ISSN 1477-9226, 2014, vol. 43, no. 6, p. 2656-2660., WOS
6. [1.1] MENG, X.G. - AN, L.Z. - LI, B.Y. Synthesis and photoluminescence of iridium complexes with benzothiazol-2-yl carbazole derivative ligand. In RESEARCH ON CHEMICAL INTERMEDIATES. ISSN 0922-6168, OCT 2014, vol. 40, no. 8, p. 2945-2952., WOS
7. [1.1] SENTHIL, K. - KALAINATHAN, S. - KUMAR, A.R. Synthesis, growth, crystal structure, spectral, thermal, mechanical and optical studies of stilbazolium derivative single crystal: 2-[2-(4-Diethylamino-phenyl)-vinyl]-1-methyl-pyridinium naphthalene-2-sulfonate (DESNS). In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, APR 24 2014, vol. 124, p. 603-610., WOS
8. [1.1] SINHA, L. - PRASAD, O. - KARABACAK, M. - MISHRA, H.N. - NARAYAN, V. - ASIRI, A.M. Quantum-chemical (DFT, MP2) and spectroscopic studies (FT-IR and UV) of monomeric and dimeric structures of 2(3H)-benzothiazolone. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, FEB 24 2014, vol. 120, p. 126-136., WOS
9. [1.1] SUN, Z.H. - LI, S.H. - ZHANG, S.Q. - DENG, F. - HONG, M.C. - LUO, J.H. Second-order nonlinear optical switch of a new hydrogen-bonded supramolecular crystal with a high laser-induced damage threshold. In ADVANCED OPTICAL MATERIALS. ISSN 2195-1071, DEC 2014, vol. 2, no. 12, p. 1199-1205., WOS
10. [1.1] TROFIMOV, B.A. - SCHMIDT, E.Y. Reactions of acetylenes in superbasic media. Recent advances. In RUSSIAN CHEMICAL REVIEWS. ISSN 0036-021X, 2014, vol. 83, no. 7, p. 600-619., WOS
11. [1.1] ZHANG, M.L. - LU, W.T. - RUAN, W.Q. - ZHANG, H.J. - WEN, T.B. Copper-catalyzed solvent-free redox condensation of benzothiazoles with aldehydes or benzylic alcohols. In TETRAHEDRON LETTERS. ISSN 0040-4039, MAR 5 2014, vol. 55, no. 10, p. 1806-1809., WOS
12. [1.1] ZHANG, M.L. - XU, H.J. - PENG, C.C. - HUANG, H.Y. - BO, S.H. - LIU, J.L. - LIU, X.H. - ZHEN, Z. - QIU, L. Novel NLO-phores containing dihexyl amino benzo [b]thiophene exhibiting good transparency and enhanced electro-

optical activity dagger. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 31, p. 15870-15876., WOS

ADCA185 HRONEC, M. - FULAJTÁROVÁ, K. - MIČUŠÍK, Matej. Influence of furanic polymers on selectivity of furfural rearrangement to cyclopentanone. In Applied Catalysis A: General, 2013, vol. 468, p. 426 - 431. (3.410 - IF2012). (2013 - Current Contents). ISSN 0926-860X.

Citácie:

1. [1.2] GUO, J.- XU, G.- HAN, Z.- ZHANG, Y.- FU, Y.- GUO, Q. Selective conversion of furfural to cyclopentanone with Cuznal catalysts. (2014) ACS Sustainable Chemistry and Engineering, 2 (10), p. 2259-2266. DOI: 10.1021/sc5003566, Scopus

2. [1.2] YAN, K.- WU, G.- LAFLEUR, T.- JARVIS, C. Production, properties and catalytic hydrogenation of furfural to fuel additives and value-added chemicals. (2014) Renewable and Sustainable Energy Reviews, 38, p. 663-676. DOI: 10.1016/j.rser.2014.07.003, Scopus

ADCA186 HUBER, T. - BÖHME, F. - KOMBER, H. - KRONEK, Juraj - *LUSTOŇ, Jozef* - VOIGT, D. - VOIT, B. New hyperbranched poly(ether amide)s via nucleophilic ring opening of 2-oxazoline-containing monomers. In Macromolecular Chemistry and Physics, 1999, vol. 200, p. 126-133. (1.662 - IF1998). (1999 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.2] BORAH, J.- KARAK, N. Dendrimers and hyperbranched polymers. (2014) Advanced Sensor and Detection Materials, p. 369-411. DOI: 10.1002/9781118774038.ch11, Scopus

ADCA187 HUDEC, B. - HUŠEKOVÁ, K. - ROSOVÁ, A. - ŠOLTÝS, J. - RAMMULA, R. - KASIKOV, A. - UUSTARE, T. - MIČUŠÍK, Matej - OMASTOVÁ, Mária - AARIK, J. - FRÖHLICH, K. Impact of plasma treatment on electrical properties of TiO2/RuO2 based DRAM capacitor. In Journal of Physics D: Applied Physics, 2013, vol. 46, 385304. (2.528 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0022-3727.

Citácie:

1. [1.1] JEON, W. - LEE, W. - YOO, Y. W. - AN, C. H. - HAN, J. H. - KIM, S. K. - HWANG, C. S. In JOURNAL OF MATERIALS CHEMISTRY C. 2014, vol. 2, no. 46, p. 9993-10001., WOS

2. [1.1] JEON, W. - YOO, S. - KIM, H. K. - LEE, W. - AN, C. H. - CHUNG, M. J. - CHO, C. J. - KIM, S. K. - HWANG, C. S. In ACS APPLIED MATERIALS & INTERFACES. DEC 20 2014, vol. 6, no. 23, p. 21632-21637., WOS

3. [1.1] POINTET, J. - GONON, P. - LATU-ROMAIN, L. - BSIESY, A. - VALLEE, C. In JOURNAL OF VACUUM SCIENCE & TECHNOLOGY A. JAN 2014, vol. 32, no. 1., WOS

4. [1.1] WANG, W. - GUO, S. - LEE, I. - AHMED, K. - ZHONG, J. - FAVORS, Z. - ZAERA, F. - OZKAN, M. - OZKAN, C. S. In SCIENTIFIC REPORTS. MAR 25 2014, vol. 4., WOS

ADCA188 HUNTOSOVA, V. - BUZOVA, D. - PETROVAJOVA, D. - *KASÁK, Peter* - NADOVA, Z. - JANCURA, D. - SUREAU, F. - MISKOVSKY, P. Development of a new LDL-based transport system for hydrophobic/amphiphilic drug delivery to cancer cells. In International Journal of Pharmaceutics, 2012, vol. 436, p. 463 - 471. (3.350 - IF2011). (2012 - Current Contents). ISSN 0378-5173.

Citácie:

1. [1.1] FEINWEBER, D. - VERWANGER, T. - BRUGGEMANN, O. -

TEASDALE, I. - KRAMMER, B. Applicability of new degradable hypericin-polymer-conjugates as photosensitizers: principal mode of action demonstrated by in vitro models. In PHOTOCHEMICAL & PHOTOBIOLOGICAL SCIENCES. ISSN 1474-905X, 2014, vol. 13, no. 11, p. 1607-1620., WOS

2. [1.1] HARISA, G.I. - ALANAZI, F.K. Low density lipoprotein bionanoparticles: From cholesterol transport to delivery of anti-cancer drugs. In SAUDI PHARMACEUTICAL JOURNAL. ISSN 1319-0164, DEC 2014, vol. 22, no. 6, p. 504-515., WOS

3. [1.1] WANG, X.Q. - LI, S.X. - SHI, Y.J. - CHUAN, X.X. - LI, J. - ZHONG, T. - ZHANG, H. - DAI, W.B. - HE, B. - ZHANG, Q. The development of site-specific drug delivery nanocarriers based on receptor mediation. In JOURNAL OF CONTROLLED RELEASE. ISSN 0168-3659, NOV 2014, vol. 193, p. 139-153., WOS

4. [1.1] XING, H.B. - PAN, H.M. - FANG, Y. - ZHOU, X.Y. - PAN, Q. - LI, D. Construction of a tumor cell-targeting non-viral gene delivery vector with polyethylenimine modified with RGD sequence-containing peptide. In ONCOLOGY LETTERS. ISSN 1792-1074, FEB 2014, vol. 7, no. 2, p. 487-492., WOS

5. [1.1] ZHU, Q.L. - ZHOU, Y. - GUAN, M. - ZHOU, X.F. - YANG, S.D. - LIU, Y. - CHEN, W.L. - ZHANG, C.G. - YUAN, Z.Q. - LIU, C. - ZHU, A.J. - ZHANG, X.N. Low-density lipoprotein-coupled N-succinyl chitosan nanoparticles co-delivering siRNA and doxorubicin for hepatocyte-targeted therapy. In BIOMATERIALS. ISSN 0142-9612, JUL 2014, vol. 35, no. 22, p. 5965-5976., WOS

6. [1.2] WANG, R.- LIU, C.- ZHOU, J.- CHEN, J.- WANG, W. Advances in the research of lipoprotein-based nano scale drug delivery systems. (2014) Journal of China Pharmaceutical University, 45 (1), p. 10-16. DOI: 10.11665/j.issn.1000-5048.20140102, Scopus

7. [1.2] WANG, R.N.- DING, Y.- ZHOU, J.P. Advances in research of photosensitizer anti-tumor target delivery systems based on photodynamic therapy. (2014) Chinese Journal of New Drugs, 23 (16), p. 1897-1903., Scopus

8. [1.2] WANG, Y.- ZHOU, J.- DING, Y.- WANG, W. Advances in research of biomimetic drug delivery systems. (2014) Journal of China Pharmaceutical University, 45 (3), p. 267-273. DOI: 10.11665/j.issn.1000-5048.20140303, Scopus

9. [1.2] XU, Y.- JIN, X.F.- PING, Q.N.- LIU, H.F.- CHEN, M.- XU, X.M. Recent development of natural and reconstituted lipoprotein based nano drug delivery vehicles. (2014) Yaoxue Xuebao, 49 (1), p. 23-29., Scopus

ADCA189 HURAN, J. - VALOVIČ, A. - BOHÁČEK, P. - SHVETSOV, V. N. - KOBZEV, A. P. - BORZAKOV, S. B. - KLEINOVÁ, Angela - SEKÁČOVÁ, M. - ARBET, J. - SASINKOVÁ, V. The effect of neutron irradiation on the properties of SiC and SiC(N) layer prepared by plasma enhanced chemical vapor deposition. In Applied Surface Science, 2013, vol. 269, p. 88-91. (2.112 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0169-4332.

Citácie:

1. [1.1] EL KHALFI, A.I. - ECH-CHAMIKH, E. - IJDIYAOU, Y. - AZIZAN, M. - ESSAFTI, A. - NKHAILI, L. - OUTZOURHIT, A. Infrared and raman study of amorphous silicon carbide thin films deposited by radiofrequency cosputtering. In SPECTROSCOPY LETTERS. MAY 28 2014, vol. 47, no. 5, SI, p. 392-396., WOS

ADCA190 *HUSÁR, Branislav* - COMMEREUC, S. - LUKÁČ, Ivan - CHMELA, Štefan - NEDELEC, J. M. - BABA, M. Carbon tetrachloride as a thermoporometry liquid probe to study the cross-linking of styrene copolymer networks. In Journal of physical chemistry B.Materials, surfaces, interfaces, and biophysical, 2006, vol. 110, no. 11, p. 5315 - 5320. (4.033 - IF2005). (2006 - Current Contents, WOS, SCOPUS).

ISSN 1520-6106.

Citácie:

1. [1.1] LI, Z. - YIN, J.J. - WEN, G. - LI, T.P. - SHEN, X.L. Copper-mediated aerobic oxidative cleavage of alpha,beta-unsaturated ketones to 1,2-diketones. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 61, p. 32298-32302., WOS

2. [1.1] ZHANG, C. - WANG, X.Y. - JIAO, N. Copper-catalyzed aerobic oxidative C-C bond cleavage of 1,3-diaryldiketones to synthesize 1,2-diketones. In SYNLETT. ISSN 0936-5214, JUN 2014, vol. 25, no. 10, p. 1458-1460., WOS

ADCA191 HUSÁR, Branislav - MOSZNER, N. - LUKÁČ, Ivan. Synthesis and photooxidation of styrene copolymer bearing comphorquinone pendant groups. In Beilstein Journal of Organic Chemistry, 2012, vol. 8, p. 337 - 343. (2.517 - IF2011). (2012 - Current Contents). ISSN 1860-5397.

Citácie:

1. [1.1] WARNEKE, J. - WANG, Z.Y. - ZELLER, M. - LEIBFRITZ, D. - PLAUMANN, M. - AZOV, V.A. Methacryloyl chloride dimers: from structure elucidation to a manifold of chemical transformations. In TETRAHEDRON. ISSN 0040-4020, SEP 16 2014, vol. 70, no. 37, p. 6515-6521., WOS

ADCA192 CHIRTOC, M. - HORNY, N. - TAVMAN, I.- TURGUT, A. - KOKEY, I. - OMASTOVÁ, Mária. Preparation and photothermal characterization of nanocomposites based on high density polyethylene filled with expanded and unexpanded graphite: Particle size and shape effect. In International Journal of Thermal Sciences, 2012, vol. 62, p. 50 - 55. (2.142 - IF2011). (2012 - Current Contents). ISSN 1290-0729.

Citácie:

1. [1.1] PROLONGO, S.G. - JIMENEZ-SUAREZ, A. - MORICHE, R. - URENA, A. Graphene nanoplatelets thickness and lateral size influence on the morphology and behavior of epoxy composites. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, APR 2014, vol. 53, p. 292-301., WOS

2. [1.2] MAHESH KUMAR, K.V.- KRISHNAMURTHY, K.- SATHISH KUMAR, P.- RAJASEKAR, R.- SIVA KUMAR, A. Effect of mechanical behaviours of graphene oxide reinforced compatibilized high density polyethylene.(2014) International Journal of ChemTech Research, 6 (3), p. 1894-1897., Scopus

ADCA193 CHITU, L. - JERGEL, M. - MAJKOVÁ, E. - LUBY, Š. - CAPEK, Ignác - SATKA, A. - IVAN, J. - KOVÁČ, J. - TIMKO, M. Structure and magnetic properties of CoFe2O4 and Fe3O4 nanoparticles. In Materials Science and Engineering C - Biomimetic and Supramolecular Systems, 2007, vol. 27, no. 5-8, p. 1415-1417. (1.325 - IF2006). (2007 - Current Contents, WOS, SCOPUS). ISSN 0928-4931.

Citácie:

1. [1.1] CAPONE, S. - MANERA, M. G. - TAURINO, A. - SICILIANO, P. - RELLA, R. - LUBY, S. - BENKOVICOVA, M. - SIFFALOVIC, P. - MAJKOVA, E. Fe3O4/gamma-Fe2O3 nanoparticle multilayers deposited by the langmuir-blodgett technique for gas sensors application. In LANGMUIR. ISSN 0743-7463, 2014, vol. 30, no. 4, pp. 1190., WOS

ADCA194 CHMELA, Štefan - LAJOIE, P. - HRDLOVIČ, Pavol - LACOSTE, J. Combined oligomeric light and heat stabilizers. In Polymer Degradation and Stability, 2001, vol. 71, no. 1, p. 171 - 177. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] YOUSIF, E. - SALIMON, J. - SALIH, N. Mechanism of photostabilization of poly(methy methacrylate) films by 2-thioacetic acid benzothiazol complexes. In ARABIAN JOURNAL OF CHEMISTRY. ISSN 1878-5352, JUL 2014, vol. 7, no. 3, p. 306-311., WOS

ADCA195 CHMELA, Štefan - HABICHER, W. D. - HAHNER, U. - HRDLOVIČ, Pavol. Hals phosphite combinations as light and heat stabilizers for polypropylene. In Polymer Degradation and Stability, 1993, vol. 39, no. 3, p. 367-371. (0.660 - IF1992). (1993 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] SAIYAD, M. - DEVASHRAYEE, N.M. - MEWADA, R.K. The influence of stabilisers on resistance to gamma radiation for epoxy based polymeric composite material. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, FEB 2014, vol. 57, p. 71-79., WOS

ADCA196 CHMELA, Štefan - KLEINOVÁ, Angela - FIEDLEROVÁ, Agnesa - BORSIG, Eberhard - KAEMPFER, D. - THOMANN, R. - MULHAUPT, R. Photo oxidation of sPP/Organoclay nanocomposites. In Journal of Macromolecular Science : Part A: Pure & Applied Chemistry, 2005, vol. 42, p. 821 - 829. (0.700 - IF2004). (2005 - Current Contents). ISSN 1060-1325.

Citácie:

1. [1.1] ANNAMALAI, P.K. - MARTIN, D.J. Can clay nanoparticles accelerate environmental biodegradation of polyolefins?. In MATERIALS SCIENCE AND TECHNOLOGY. ISSN 0267-0836, MAY 2014, vol. 30, no. 5, p. 593-602., WOS

2. [1.1] ASLANZADEH, S. - RAHBAR, R.S. - NAZI, M. Accelerating role of clay in photo-oxidation of polypropylene/clay multifilament yarns. In CHINESE JOURNAL OF POLYMER SCIENCE. ISSN 0256-7679, MAY 2014, vol. 32, no. 5, p. 609-619., WOS

3. [1.2] PFAENDNER, R. (Photo)oxidative stabilization of flame-retarded polymers. (2014) Polymer Green Flame Retardants, p. 419-439. DOI: 10.1016/B978-0-444-53808-6.00013-5, Scopus

ADCA197 CHMELA, Štefan - FIEDLEROVÁ, Agnesa - BORSIG, Eberhard - ERLER, J. - MULHAUPT, R. Photo-oxidation of sPP and iPP/Boehmite dispersal nanocomposites. In Journal of Macromolecular Science : Part A: Pure & Applied Chemistry, 2007, vol. 44, no. 7 - 9, p. 1027 - 1034. (0.800 - IF2006). (2007 - Current Contents). ISSN 1060-1325.

Citácie:

1. [1.2] PFAENDNER, R. (Photo)oxidative stabilization of flame-retarded polymers. (2014) Polymer Green Flame Retardants, p. 419-439. DOI: 10.1016/B978-0-444-53808-6.00013-5, Scopus

ADCA198 CHODÁK, Ivan - OMASTOVÁ, Mária - PIONTECK, Jurgen. Relation between electrical and mechaical properties of conducting polymer composites. In Journal of Applied Polymer Science, 2001, vol. 82, p. 1903-1906. (0.881 - IF2000). (2001 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] GULREZ, S.K.H. - MOHSIN, M.E.A. - SHAIKH, H. - ANIS, A. - PULOSE, A.M. - YADAV, M.K. - QUA, E.H.P. - AL-ZAHRANI, S.M. A review on electrically conductive polypropylene and polyethylene. In POLYMER COMPOSITES. ISSN 0272-8397, MAY 2014, vol. 35, no. 5, p. 900-914., WOS

ADCA199 CHODÁK, Ivan. High modulus polyethylene fibres: Preparation, properties and modification by crosslinking. In Progress in Polymer Science : an International Review Journal, 1998, vol. 23, no. 8, p. 1409 - 1442. (3.300 - IF1997). (1998 - Current Contents). ISSN 0079-6700.

Citácie:

1. [1.1] ALMAADEED, M.A. - NOGELLOVA, Z. - JANIGOVA, I. - KRUPA, I. Improved mechanical properties of recycled linear low-density polyethylene composites filled with date palm wood powder. In MATERIALS & DESIGN. ISSN 0261-3069, JUN 2014, vol. 58, p. 209-216., WOS

2. [1.1] BARTUSCH, M. - HUND, R.D. - FUND, H. - CHERIF, C. Surface functionalisation of UHMW polyethylene textile with atmospheric pressure plasma. In FIBERS AND POLYMERS. ISSN 1229-9197, APR 2014, vol. 15, no. 4, p. 736-743., WOS
3. [1.1] KRUPA, I. - NOGELLOVA, Z. - SPITALSKY, Z. - JANIGOVA, I. - BOH, B. - SUMIGA, B. - KLEINOVA, A. - KARKRI, M. - ALMAADEED, M.A. Phase change materials based on high-density polyethylene filled with microencapsulated paraffin wax. In ENERGY CONVERSION AND MANAGEMENT. ISSN 0196-8904, NOV 2014, vol. 87, p. 400-409., WOS
4. [1.1] LIU, S.Q. - GONG, W.G. - ZHENG, B.C. The effect of peroxide cross-linking on the properties of low-density polyethylene. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, JAN 1 2014, vol. 53, no. 1, p. 67-77., WOS
5. [1.1] YAO, Y.F. - JIANG, S.Z. - RASTOGI, S. C-13 solid state NMR characterization of structure and orientation development in the narrow and broad molar mass disentangled UHMWPE. In MACROMOLECULES. ISSN 0024-9297, FEB 25 2014, vol. 47, no. 4, p. 1371-1382., WOS
6. [1.1] YUN, D.W. - JANG, J. Wear Minimization of ultra high molecular weight polyethylene by benzophenone-assisted photocrosslinking. In FIBERS AND POLYMERS. ISSN 1229-9197, MAR 2014, vol. 15, no. 3, p. 480-486., WOS

ADCA200 CHODÁK, Ivan - *KRUPA, Igor*. Percolation effect and mechanical behavior of carbon black filled polyethylene. In Journal of Materials Science Letters, 1999, vol. 18, p. 1457-1459. (0.349 - IF1998). (1999 - Current Contents). ISSN 0261-8028.

Citácie:

1. [1.1] GARDEBJER, S. - BERGSTRAND, A. - LARSSON, A. A mechanistic approach to explain the relation between increased dispersion of surface modified cellulose nanocrystals and final porosity in biodegradable films. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, AUG 2014, vol. 57, p. 160-168., WOS
2. [1.1] SULLIVAN, E.M. - OH, Y.J. - GERHARDT, R.A. - WANG, B. - KALAITZIDOU, K. Understanding the effect of polymer crystallinity on the electrical conductivity of exfoliated graphite nanoplatelet/polylactic acid composite films. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, SEP 2 2014, vol. 21, no. 10., WOS
3. [1.2] JORDAN, J.L.- HERBOLD, E.B. Particulate composites under high strain rate and shock loading. (2014) Advanced Structured Materials, 35, 15 p. DOI: 10.1007/978-3-642-54258-9_1, Scopus

ADCA201 CHODÁK, Ivan. Properties of crosslinked polyolefin-based materials. In Progres in Polymer Science., 1995, vol. 20, p. 1165-1199.

Citácie:

1. [1.1] GARRETT, G.E. - MUELLER, E. - PRATT, D.A. - PARENT, J.S. Reactivity of polyolefins toward cumyloxy radical: Yields and regioselectivity of hydrogen atom transfer. In MACROMOLECULES. ISSN 0024-9297, JAN 28 2014, vol. 47, no. 2, p. 544-551., WOS
2. [1.1] GU, Z. - ZHANG, X. - BAO, C. - FANG, F. - DING, X. - LI, S.Y. - CHEN, L. - XUE, M. - WANG, H. - TIAN, X.Y. Simultaneous enhancement and percolation behaviors of damping and mechanical properties of ethylene-propylene-diene rubber by introducing phase-change organic acid. In JOURNAL OF NON-CRYSTALLINE SOLIDS. ISSN 0022-3093, MAR 15 2014, vol. 388, p. 17-22., WOS
3. [1.1] LIU, S.Q. - GONG, W.G. - ZHENG, B.C. The effect of peroxide cross-linking on the properties of low-density polyethylene. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, JAN 1

2014, vol. 53, no. 1, p. 67-77., WOS
4. [1.1] MILICEVIC, D. - MICIC, M. - SULJOVRUJIC, E. Radiation-induced modification of dielectric relaxation spectra of polyolefins: polyethylenes vs. polypropylene. In POLYMER BULLETIN. ISSN 0170-0839, SEP 2014, vol. 71, no. 9, p. 2317-2334., WOS
5. [1.1] MOLLOY, B.M. - HYSLOP, D.K. - PARENT, J.S. Comparative analysis of delayed-onset peroxide crosslinking formulations. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, NOV 2014, vol. 54, no. 11, p. 2645-2653., WOS
6. [1.1] TUCKART, W. - MOLINARI, E. - ROSSIT, D. - FAILLA, M. Friction and wear behavior of irradiated polyethylene sliding against a rough steel surface. In TRIBOLOGY LETTERS. ISSN 1023-8883, JUL 2014, vol. 55, no. 1, p. 165-176., WOS
7. [1.2] STAMBOLIEV, G.- MILICEVIC, D.- MICIC, M.- SULJOVRUJIC, E. Polyethylene crosslinked in different media: structural changes versus dielectric behaviour. (2014) Polymer Bulletin, 72 (2), p. 371-385., Scopus

ADCA202 ILLEKOVÁ, E. - MIKLOŠOVIČOVÁ, M. - ŠAUŠA, O. - BEREK, Dušan. Solidification and melting of cetane confined in the nanopores of silica gel. In Journal of Thermal Analysis and Calorimetry, 2012, vol. 108, p. 497 - 503. (1.604 - IF2011). ISSN 1388-6150.

Citácie:

1. [1.1] WU, M. - JOHANNESSON, B. - GEIKER, M. Determination of ice content in hardened concrete by low-temperature calorimetry Influence of baseline calculation and heat of fusion of confined water. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, FEB 2014, vol. 115, no. 2, p. 1335-1351., WOS

ADCA203 ILLEKOVÁ, E. - CSOMOROVÁ, Katarína - KUHNAST, F. A. - FIORANI, J. M. Transformation kinetics of the Fe73.5Cu1Nb3Si13.5B9 ribbons to the nanocrystalline state. In Materials Science and Engineering, 1996, vol. A205, p. 166-179.

Citácie:

1. [1.2] LOUZGUINE-LUZGIN, D.V. Early stage crystallization kinetics in metallic glass-forming alloys. (2014) Journal of Alloys and Compounds, 586, p. 216-219. DOI: 10.1016/j.jallcom.2013.10.022, Scopus

ADCA204 ILLEKOVÁ, E. - CSOMOROVÁ, Katarína. Kinetics of oxidation in various forms of carbon. In Journal of Thermal Analysis and Calorimetry, 2005, vol. 80, no. 1, p. 103-108. ISSN 1388-6150.

Citácie:

1. [1.1] LI, Yawei - WANG, Qinghu - FAN, Haibing - SANG, Shaobai - LI, Yuanbing - ZHAO, Lei. Synthesis of silicon carbide whiskers using reactive graphite as template. In CERAMICS INTERNATIONAL. ISSN 0272-8842, 2014, vol. 40, no. 1, pp. 1481-1488., WOS
2. [1.1] OSSWALD, Sebastian - ETZOLD, Bastian J. M. - GOGOTSI, Y - PRESSER. Oxidation and purification of carbon nanostructures. In CARBON NANOMATERIALS, 2ND EDITION, 2014, pp. 355-394., WOS
3. [1.1] RATKOVIC, Sanja - PEICA, Niculina - THOMSEN, Christian - BUKUR, Dragomir B. - BOSKOVIC, Goran. Thermal stability evolution of carbon nanotubes caused by liquid oxidation. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, 2014, vol. 115, no. 2, pp. 1477-1486., WOS
4. [1.2] PRASAD, R.- KUMAR, A.- MISHRA, A. Isothermal kinetics of diesel soot oxidation over La0.7K0.3ZnOy catalysts. (2014) Bulletin of Chemical Reaction Engineering and Catalysis, 9 (3), p. 192-200. DOI: 10.9767/bcrec.9.3.6773.192-

200, Scopus

ADCA205 JAKAB, E. - OMASTOVÁ, Mária. Thermal decomposition of polyolefin/carbon black composites. In Journal of Analytical and Applied Pyrolysis, 2005, vol. 74, no. 1, p. 204 - 214. ISSN 0165-2370.

Citácie:

1. [1.1] DONATE-ROBLES, J. - LIAUW, C.M. - MARTIN-MARTINEZ, J.M. Flow micro-calorimetry and diffuse reflectance Fourier transform infrared spectroscopy studies in filled polyurethane adhesives by using dimethyl adipate as a model compound. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, JAN 2014, vol. 48, p. 43-50., WOS

2. [1.1] GOTZ, C. - LIM, G.T. - PUSKAS, J.E. - ALTSTADT, V. The effect of carbon black reinforcement on the dynamic fatigue and creep of polyisobutylene-based biomaterials. In JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS. ISSN 1751-6161, NOV 2014, vol. 39, p. 355-365., WOS

3. [1.1] POVACZ, M. - WALLNER, G.M. - LANG, R.W. Black-pigmented polypropylene materials for solar thermal absorbers - Effect of carbon black concentration on morphology and performance properties. In SOLAR ENERGY. ISSN 0038-092X, DEC 2014, vol. 110, p. 420-426., WOS

4. [1.1] STRZEMIECKA, B. - VOELKEL, A. - DONATE-ROBLES, J. - MARTIN-MARTINEZ, J.M. Assessment of the surface chemistry of carbon blacks by TGA-MS, XPS and inverse gas chromatography using statistical chemometric analysis. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, OCT 15 2014, vol. 316, p. 315-323., WOS

ADCA206 JAKAB, E. - MÉSZÁROS, E. - OMASTOVÁ, Mária. Thermal decomposition of polypyrroles. In Journal of Thermal Analysis and Calorimetry, 2007, vol. 8, p. 515 - 521. (1.438 - IF2006). (2007 - Current Contents). ISSN 1388-6150.

Citácie:

1. [1.1] CAMPOS, R.A.M. - FAEZ, R. - REZENDE, M.C. Synthesis of polypyrrole with anionic surfactants targeting applications such as microwave absorbers. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, MAY-JUN 2014, vol. 24, no. 3, p. 351-359., WOS

2. [1.2] ZAIDI, M.G.H.- THAKUR, A.- AGARWAL, T.- ALAM, S. Synthesis of polypyrrole/polythiophene copolymers in supercritical carbon dioxide. (2014) Iranian Polymer Journal (English Edition), 23 (5), p. 365-374. DOI: 10.1007/s13726-014-0234-y, Scopus

ADCA207 *JANČO, Miroslav* - HIRANO, T. - KITAYAMA, T. - HATADA, K. - BEREK, Dušan. Discrimination of poly(ethyl methacrylate)s according to their polar mass and tacticity by coupling size exclusion chromatography and liquid chromatography at the critical adsorption point. In Macromolecules, 2000, vol. 33, p. 1710-1715. (3.530 - IF1999). (2000 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA208 JANIGOVÁ, Ivica - CHODÁK, Ivan - CHORVÁTH, I. The influence of cross-linking on isothermal crystallization of LDPE filled with silica. In European Polymer Journal, 1992, vol. 218, no. 12, p. 1547 - 1552. (1992 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] CHANG, H.L. - CHEN, C.M. - CHEN, C.H. Influences of nano-silica addition on diluent/epoxy mechanical properties. In MATERIALS SCIENCE, MACHINERY AND ENERGY ENGINEERING. ISSN 1022-6680, 2014, vol. 853, p. 34-39., WOS

2. [1.1] VALENTOVA, H. - ILCIKOVA, M. - CZANIKOVA, K. - SPITALSKY, Z. - SLOUF, M. - NEDBAL, J. - OMASTOVA, M. Dynamic mechanical and dielectric properties of ethylene vinyl acetate/carbon nanotube composites. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, MAR 4 2014, vol. 53, no. 3, p. 496-512., WOS

ADCA209 JANIGOVÁ, Ivica - CHODÁK, Ivan. Temperature effect on kinetics of isothermal crystallization of crosslinked filled LDPE-2. Particulate silica with high surface area as a filler. In European Polymer Journal, 1995, vol. 31, no. 3, p. 271-274.

Citácie:

1. [1.1] CHANDRAKALA, H.N. - RAMARAJ, B. - SHIVAKUMARAIAH - SIDDARAMAIAH. Influence of lithium potassium zirconate nanoparticles on the electrical properties and structural characteristics of poly(vinyl alcohol) films. In JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS. ISSN 0022-3697, FEB 2014, vol. 75, no. 2, p. 252-258., WOS

ADCA210 JANIGOVÁ, Ivica - LACÍK, Igor - CHODÁK, Ivan. Thermal degradation of plasticized poly(3-hydroxybutyrate) investigated by DSC. In Polymer Degradation and Stability, 2002, vol. 77, no. 1, p. 35 - 41. (0.906 - IF2001). (2002 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] EL-HADI, A.M. Investigation of the effect of nano-clay type on the non-isothermal crystallization kinetics and morphology of poly(3(R)-hydroxybutyrate) PHB/clay nanocomposites. In POLYMER BULLETIN. ISSN 0170-0839, JUN 2014, vol. 71, no. 6, p. 1449-1470., WOS

2. [1.1] FOLLAIN, N. - CHAPPEY, C. - DARGENT, E. - CHIVRAC, F. - CRETOIS, R. - MARAIS, S. Structure and barrier properties of biodegradable polyhydroxyalkanoate films. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, MAR 27 2014, vol. 118, no. 12, p. 6165-6177., WOS

3. [1.1] MA, P.M. - CAI, X.X. - LOU, X.W. - DONG, W.F. - CHEN, M.Q. - LEMSTRA, P.J. Styrene-assisted melt free-radical grafting of maleic anhydride onto poly(beta-hydroxybutyrate). In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, FEB 2014, vol. 100, p. 93-100., WOS

4. [1.1] MIKUSOVA, M. - MIHALIK, M. - ALEXY, P. - TOMANOVA, K. - PLAVEC, R. - BOCKAJ, J. - VANOVCANOVA, Z. Method for testing of processing stability of biodegradable polyesters based on oscillation rheometry. In KGK-KAUTSCHUK GUMMI KUNSTSTOFFE. ISSN 0948-3276, MAR 2014, vol. 67, no. 3, p. 51-54., WOS

5. [1.2] HAO, Y.- LIANG, H.- BIAN, J.- ZHANG, H.- DONG, L. Effects of chain-extended modification on properties of poly(3-hydroxybutyra te-co-4-hydroxybutyrate). (2014) Gaofenzi Cailiao Kexue Yu Gongcheng/Polymeric Materials Science and Engineering, 30 (3), p. 39-42+48., Scopus

6. [1.2] HE, H.- LONG, Z.- DAI, L.- LÜ, Y.- HU, G. Mechanical and rheological properties of NanoSiO2/PCL/PBSA blends. (2014) Zhongnan Daxue Xuebao (Ziran Kexue Ban)/Journal of Central South University (Science and Technology), 45 (2), p. 383-388., Scopus

7. [1.2] KURUSU, R.S.- DEMARQUETTE, N.R.- GAUTHIER, C.- CHENAL, J.-M. Effect of ageing and annealing on the mechanical behaviour and biodegradability of a poly(3-hydroxybutyrate) and poly(ethylene-co-methyl-acrylate-co-glycidyl-methacrylate)blend. (2014) Polymer International, 63 (6), p.

1085-1093. DOI: 10.1002/pi.4616, Scopus
8. [1.2] LI, W.- LU, X.- JIA, B.- LI, L. Preparation and properties of GF/P(3HB-co-4HB)- PLA bio-based composites. (2014) Fuhe Cailiao Xuebao/Acta Materiae Compositae Sinica, 31 (1), p. 112-117., Scopus

ADCA211 JANKOVIČ, Ľ. - MADEJOVÁ, J. - KOMADEL, P. - JOCHEC MOŠKOVÁ, Daniela - CHODÁK, Ivan. Characterization of systematically selected organo-montmorillonites for polymer nanocomposites. In Applied Clay Science, 2011, vol. 51, p. 438 - 444. (2.303 - IF2010). (2011 - Current Contents). ISSN 0169-1317.

Citácie:

1. [1.1] ALBENIZ, S. - VICENTE, M.A. - TRUJILLANO, R. - KORILI, S.A. - GIL, A. Synthesis and characterization of organosaponites. Thermal behavior of their poly(vinyl chloride) nanocomposites. In APPLIED CLAY SCIENCE. ISSN 0169-1317, SEP 2014, vol. 99, p. 72-82., WOS
2. [1.1] BELTRAN, M.I. - BENAVENTE, V. - MARCHANTE, V. - DEMA, H. - MARCILLA, A. Characterisation of montmorillonites simultaneously modified with an organic dye and an ammonium salt at different dye/salt ratios. Properties of these modified montmorillonites EVA nanocomposites. In APPLIED CLAY SCIENCE. ISSN 0169-1317, AUG 2014, vol. 97-98, p. 43-52., WOS
3. [1.1] BOONCHOO, P. - REMPEL, G.L. - PRASASSARAKICH, P. Synthesis of polyisoprene-montmorillonite nanocomposites via differential microemulsion polymerization and application of PIP-Mt in natural rubber. In APPLIED CLAY SCIENCE. ISSN 0169-1317, FEB 2014, vol. 88-89, p. 186-193., WOS

ADCA212 JUHARI, A. - MOSNÁČEK, Jaroslav - YOON, J. A. - NESE, A. - KOYNOV, K. - KOWALEWSKI, T. - MATYJASZEWSKI, K. Star-like poly(n-butyl acrylate)-b-poly(alfa-methylene-gamma-butyrolactone) block copolymers for high temperature thermoplastic elastomers applications. In Polymer : the International Journal for the Science and Technology of Polymers, 2010, vol. 51, p. 4806 - 4813. (3.573 - IF2009). (2010 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] HIGAKI, Y. - OKAZAKI, R. - ISHIKAWA, T. - KIKUCHI, M. - OHTA, N. - TAKAHARA, A. Chain stiffness and chain conformation of poly(alpha-methylene-gamma-butyrolactone) in dilute solutions. In POLYMER. ISSN 0032-3861, DEC 1 2014, vol. 55, no. 25, p. 6539-6545., WOS
2. [1.1] HILLMYER, M.A. - TOLMAN, W.B. Aliphatic polyester block polymers: renewable, degradable, and sustainable. In ACCOUNTS OF CHEMICAL RESEARCH. ISSN 0001-4842, AUG 2014, vol. 47, no. 8, p. 2390-2396., WOS
3. [1.1] HOLMBERG, A.L. - RENO, K.H. - WOOL, R.P. - EPPS, T.H. Biobased building blocks for the rational design of renewable block polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 38, p. 7405-7424., WOS
4. [1.1] HONG, M. - CHEN, E.Y.X. Coordination Ring-Opening Copolymerization of Naturally renewable alpha-methylene-gamma-butyrolactone into unsaturated polyesters. In MACROMOLECULES. ISSN 0024-9297, JUN 10 2014, vol. 47, no. 11, p. 3614-3624., WOS
5. [1.1] LIU, X. - ZHAO, R.Y. - ZHAO, T.P. - LIU, C.Y. - YANG, S. - CHEN, E.Q. An ABA triblock containing a central soft block of poly[2,5-di(n-hexogycarbonyl) styrene] and outer hard block of poly(4-vinylpyridine): synthesis, phase behavior and mechanical enhancement. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 35, p. 18431-18441., WOS
6. [1.1] LIU, Y.P. - YAO, K.J. - CHEN, X.M. - WANG, J.F. - WANG, Z.K. - PLOEHN, H.J. - WANG, C.P. - CHU, F.X. - TANG, C.B. Sustainable thermoplastic elastomers derived from renewable cellulose, rosin and fatty acids. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3170-3181.,

WOS
7. [1.1] WANG, W.W. - WANG, W.Y. - LU, X.Y. - BOBADE, S. - CHEN, J.H. - KANG, N.G. - ZHANG, Q.Y. - MAYS, J. Synthesis and characterization of comb and centipede multigraft copolymers PnBA-g-PS with high molecular weight using miniemulsion polymerization. In MACROMOLECULES. ISSN 0024-9297, NOV 11 2014, vol. 47, no. 21, p. 7284-7295., WOS

ADCA213 *KAHOLEK, Marián* - HRDLOVIČ, Pavol. Spectral properties of coumarin derivatives substituted at position 3. Effect of polymer matrix. In Journal of Photochemistry and Photobiology A:Chemistry, 1997, vol. 108, p. 283-288.

Citácie:
1. [1.1] TALEBNIA, F. - NOURMOHAMMADIAN, F. - BASTANI, S. Development of novel fluorescent offset ink based on coumarin dyes: Synthesis and properties. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, SEP 2014, vol. 77, no. 9, p. 1351-1359., WOS

ADCA214 *KAHOLEK, Marián* - HRDLOVIČ, Pavol - BARTOŠ, Josef. Singlet probes based on coumarin derivatives substituted in position 3, spectral properties in solution and in polymer matrices. In Polymer : the international journal for the science and technology of polymers, 2000, vol. 41, p. 991-1001. (1.340 - IF1999). (2000 - Current Contents). ISSN 0032-3861.

Citácie:
1. [1.1] BUCHS, J. - GABLER, M. - JANIETZ, D. - SAWADE, H. Coumarin-based emissive liquid crystals. In LIQUID CRYSTALS. ISSN 0267-8292, NOV 2 2014, vol. 41, no. 11, p. 1605-1618., WOS
2. [1.1] IASILLI, G. - BATTISTI, A. - TANTUSSI, F. - FUSO, F. - ALLEGRINI, M. - RUGGERI, G. - PUCCI, A. Aggregation-induced emission of tetraphenylethylene in styrene-based polymers. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, MAR 2014, vol. 215, no. 6, p. 499-506., WOS
3. [1.1] TALEBNIA, F. - NOURMOHAMMADIAN, F. - BASTANI, S. Development of novel fluorescent offset ink based on coumarin dyes: Synthesis and properties. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, SEP 2014, vol. 77, no. 9, p. 1351-1359., WOS

ADCA215 KANAYA, T. - TSUKUSHI, T. - KAJI, K. - BARTOŠ, Josef - KRIŠTIAK, J. Microscopic basis of free-volume concept as studied by quasielastic neutron scattering and positron annihilation lifetime spectroscopy. In Physical Review E, 1999, vol. 60, no. 2, p. 1906-1912. (2.066 - IF1998). (1999 - Current Contents). ISSN 1539-3755.

Citácie:
1. [1.1] NGAI, K.L. - HABASAKI, J. An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T-c or T-B. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 21 2014, vol. 141, no. 11., WOS
2. [1.1] SANDITOV, D.S. - SANGADIEV, S.S. - SHAGDAROV, V.B. Criterion of vitrification and cooling rate of vitreous melts. In GLASS PHYSICS AND CHEMISTRY. ISSN 1087-6596, JUL 2014, vol. 40, no. 4, p. 402-407., WOS
3. [1.2] SANDITOV, D.- SYDYKOV, B. Free volume of amorphous solids in the model of delocalized atoms. (2014) Physics and Chemistry of Glasses: European Journal of Glass Science and Technology Part B, 55 (2), p. 97-102., Scopus

ADCA216 *KASÁK, Peter* - KRONEKOVÁ, Zuzana - *KRUPA, Igor* - LACÍK, Igor. Zwitterionic hydrogels crosslinked with novel zwitterionic crosslinkers: Synthesis and characterization. In Polymer : the International Journal for the Science and Technology of Polymers, 2011, vol. 52, p. 3011 - 3020. (3.829 - IF2010). (2011 -

Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] LASCHEWSKY, A. Structures and synthesis of zwitterionic polymers. In POLYMERS. ISSN 2073-4360, MAY 2014, vol. 6, no. 5, p. 1544-1601., WOS

2. [1.1] LIU, Y. - PENG, D.D. - HE, G.W. - WANG, S.F. - LI, Y.F. - WU, H. - JIANG, Z.Y. Enhanced CO2 Permeability of membranes by incorporating polyzwitterion@cnt composite particles into polyimide matrix. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, AUG 13 2014, vol. 6, no. 15, p. 13051-13060., WOS

3. [1.1] YE, T. - SONG, Y.H. - ZHENG, Q. Solubility and solution rheology of acrylamide-sulfobetaine copolymers. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, SEP 2014, vol. 292, no. 9, p. 2185-2195., WOS

4. [1.1] YI, Z.A. - ZHU, L.P. - ZHANG, H. - ZHU, B.K. - XUA, Y.Y. Ionic liquids as co-solvents for zwitterionic copolymers and the preparation of poly(vinylidene fluoride) blend membranes with dominated beta-phase crystals. In POLYMER. ISSN 0032-3861, MAY 27 2014, vol. 55, no. 11, p. 2688-2696., WOS

5. [1.1] ZHANG, Q. - TANG, X.D. - WANG, T.S. - YU, F.Q. - GUO, W.J. - PEI, M.S. Thermo-sensitive zwitterionic block copolymers via ATRP. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 46, p. 24240-24247., WOS

ADCA217 KASHEM, M. M. A. - PERLICH, J. - DIETHERT, A. - WANG, W. - MEMESA, M. - GUTMANN, J. S. - MAJKOVÁ, E. - ROTH, S. V. - PETRY, W. - MULLER-BUSCHBAUM, P. - CAPEK, Ignác. Array of magnetic nanoparticles via particle Co-operated self-assembly in block copolymer thin film. In Macromolecules, 2009, vol. 42, no. 16, p. 6202-6208. ISSN 0024-9297.

Citácie:

1. [1.1] HORECHYY, Andriy - NANDAN, Bhanu - ZAFEIROPOULOS, Nikolaos E. - JEHNICHEN, Dieter - GOEBEL, Michael - STAMM, Manfred - POSPIECH, Doris. Nanoparticle directed domain orientation in thin films of asymmetric block copolymers. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, 2014, vol. 292, no. 9, pp. 2249., WOS

2. [1.1] RAMAN, V. - HATTON, T.A. - OLSEN, B.D. Kinetics of magnetic field-induced orientational ordering in block copolymer/superparamagnetic nanoparticle composites. In MACROMOLECULAR RAPID COMMUNICATIONS. ISSN 1022-1336, DEC 2014, vol. 35, no. 23, p. 2005-2011., WOS

3. [1.1] YAO, Y. - METWALLI, E. - MOULIN, J.F. - SU, B. - OPEL, M. - MULLER-BUSCHBAUM, P. Self-assembly of diblock copolymer-maghemite nanoparticle hybrid thin films. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, OCT 2014, vol. 6, no. 20, p. 18152-18162., WOS

4. [1.2] LV, F.- XU, L.- XU, Z.- FU, L.- ZHANG, Y. Fabrication and characterization of the orientated mmt/pi composite films via relatively low magnetic field. (2014) Journal of Applied Polymer Science, 132 (1), art. no. 41224, DOI: 10.1002/app.41224, Scopus

ADCA218 KHUNOVÁ, V. - HURST, J. - JANIGOVÁ, Ivica - ŠMATKO, V. Plasma treatment of particulate polymer composites for analyses by scanning electron microscopy.2. A study of highly filled polypropylene/calcium carbonate composites. In Polymer Testing, 1999, vol. 18, p. 501-509. (0.419 - IF1998). (1999 - Current Contents). ISSN 0142-9418.

Citácie:

1. [1.1] CHENG, H.T. - GAO, J. - WANG, G. - SHI, S.Q. - ZHANG, S.B. - CAI, L.P. Effect of temperature on calcium carbonate deposition in situ on bamboo

fiber and polymer interfaces. In WOOD AND FIBER SCIENCE. APR 2014, vol. 46, no. 2, p. 247-258., WOS

ADCA219 KITAYAMA, T. - JANČO, Miroslav - UTE, K. - NIIMI, R. - HATADA, K. - BEREK, Dušan. Analysis of poly(ethyl methacrylate)s by on-line hyphenation of liquid chromatography at the critical adsorption point and nuclear magnetic resonance spectroscopy. In Analytical Chemistry, 2000, vol. 72, no. 7, p. 1518-1522. (4.555 - IF1999). (2000 - Current Contents). ISSN 0003-2700.

Citácie:

1. [1.1] HILLER, W. - SINHA, P. - HEHN, M. - PASCH, H. Online LC-NMR - from an expensive toy to a powerful tool in polymer analysis. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, MAY 2014, vol. 39, no. 5, p. 979-1016., WOS

2. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

3. [1.1] SINHA, P. - HILLER, W. - PASCH, H. HPLC-H-1-NMR Characterization of polystyrene-block-polyisoprene copolymers: LCCC-H-1-NMR using a single mobile phase. In MACROMOLECULAR SYMPOSIA. ISSN 1022-1360, MAR 2014, vol. 337, no. 1, p. 44-50., WOS

ADCA220 KLEINOVÁ, Angela - *BARTOŇ, Jaroslav*. Emulsion polymerization of butyl methacrylate initiated by 2,2´-azoisobutyronitrile.1. Kinetics and mechanism. In Die makromolekulare Chemie, 1987, vol. 188, no.4, p. 693 -702.

Citácie:

1. [1.1] ZHANG, Y.W. - HE, Y.Q. - ZHAO, J.X. Poly(methyl methacrylate) nanolatexes with high solid contents prepared by semi-continuous emulsion polymerization in the presence of oil-soluble initiators. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, DEC 2014, vol. 61, p. 316-325., WOS

ADCA221 KOČAR, D. - STRLIČ, M. - KOLAR, J. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia - PIHLAR, B. Chemiluminescence from paper. III. The effect of superoxide anion and water. In Polymer Degradation and Stability, 2005, vol. 88, no.3, p. 407 - 414. (1.685 - IF2004). (2005 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] CONTE, A.M. - PULCI, O. - MISITI, M.C. - LOJEWSKA, J. - TEODONIO, L. - VIOLANTE, C. - MISSORI, M. Visual degradation in Leonardo da Vinci's iconic self-portrait: A nanoscale study. In APPLIED PHYSICS LETTERS. ISSN 0003-6951, JUN 2 2014, vol. 104, no. 22., WOS

2. [1.1] JEONG, M.J. - DUPONT, A.L. - DE LA RIE, E.R. Degradation of cellulose at the wet-dry interface. II. Study of oxidation reactions and effect of antioxidants. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, JAN 30 2014, vol. 101, p. 671-683., WOS

ADCA222 KOLLÁR, Jozef - HRDLOVIČ, Pavol - CHMELA, Štefan - SARAKHA, M. - GUYOT, G. Synthesis and transient absorption spectra of derivatives of 1,8 - naphthalic and naphthalimides containing 2,2,6,6-tetramethylpiperidine, triplet route of deactivation. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2005, vol. 170, no.2, p. 151 - 159. (2.235 - IF2004). ISSN 1010-6030.

Citácie:

1. [1.1] WANG, L.M. - SHI, Y. - ZHAO, Y.Y. - LIU, H.Y. - LI, X.Y. - BAI, M. "Push-pull" 1,8-naphthalic anhydride with multiple triphenylamine groups as electron donor. In JOURNAL OF MOLECULAR STRUCTURE. ISSN 0022-2860, JAN 6 2014, vol. 1056, p. 339-346., WOS

ADCA223 KOLLÁR, Jozef - HRDLOVIČ, Pavol - CHMELA, Štefan. Spectral properties of

bichromophoric pyrene derivatives: Monomer vs. excimer fluorescence. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2010, vol. 214, p. 33 - 39. (2.553 - IF2009). (2010 - Current Contents). ISSN 1010-6030.

Citácie:

1. [1.1] FOSTER, J.A. - EDKINS, R.M. - CAMERON, G.J. - COLGIN, N. - FUCKE, K. - RIDGEWAY, S. - CRAWFORD, A.G. - MARDER, T.B. - BEEBY, A. - COBB, S.L. - STEED, J.W. Blending gelators to tune gel structure and probe anion-induced disassembly. In CHEMISTRY-A EUROPEAN JOURNAL. ISSN 0947-6539, JAN 3 2014, vol. 20, no. 1, p. 279-291., WOS

ADCA224 KOLLÁR, Jozef - CHMELA, Štefan - HRDLOVIČ, Pavol. Spectral properties of bichromophoric probes based on pyrene and benzothioxanthene in solution and in polymer matrices. In Journal of Photochemistry and Photobiology A : polymer chemistry, 2013, vol. 270, p. 28 - 36. (2.416 - IF2012). (2013 - Current Contents). ISSN 1010-6030.

Citácie:

1. [1.1] MARY, Y.S. - PANICKER, C.Y. - YAMUNA, T.S. - SIDDEGOWDA, M.S. - YATHIRAJAN, H.S. - AL-SAADI, A.A. - VAN ALSENOY, C. Theoretical investigations on the molecular structure, vibrational spectral, HOMO-LUMO and NBO analysis of 9-[3-(Dimethylamino)propyl]-2-trifluoro-methyl-9H-thioxanthen-9-ol. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, NOV 11 2014, vol. 132, p. 491-501., WOS

ADCA225 *KÓSA, Csaba* - CHMELA, Štefan - THEUMER, G. - HABICHER, W. D. New combined phenol-hindered amine stabilizers for polymers based on diphenylmethane-4,4-diisocyanate and dicyclohexyl methane -4,4´-diisocyanate. In Polymer Degradation and Stability, 2004, vol. 86, no. 3, p. 391 - 400. (1.405 - IF2003). (2004 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] SHI, K.H. - YE, L. - LI, G.X. Photo-oxidative stabilization effect of a reactive hindered amine on monomer casting nylon-6. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, 2014, vol. 53, no. 8, p. 1453-1464., WOS

2. [1.1] XIA, L. - SHENTU, B.Q. - WENG, Z.X. Preparation of a novel stabilizer and its thermal-oxidative stabilization effect on polyamide 6. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, SEP 2014, vol. 54, no. 9, p. 2197-2206., WOS

ADCA226 *KÓSA, Csaba* - CHMELA, Štefan - PAWELKE, B. - THEUMER, G. - HABICHER, W. D. New combined hindered phenol/hindered amine stabilizers forpolymers based on diphenylmethane-4,4´-diisocyanate. In Polymer Degradation and Stability, 2003, vol. 81, no. 3, p. 453 - 461. (0.890 - IF2002). (2003 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] XIA, L. - SHENTU, B.Q. - WENG, Z.X. Preparation of a novel stabilizer and its thermal-oxidative stabilization effect on polyamide 6. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, SEP 2014, vol. 54, no. 9, p. 2197-2206., WOS

2. [1.1] XIAO, F. - ZHOU, Y.L. - YANG, W.B. Synthesis of piperazine-1,4-dipropanoic acid di(1,2,2,6,6-pentamethyl-4-piperidine)yl ester as a photostabilizer. In RUSSIAN JOURNAL OF GENERAL CHEMISTRY. ISSN 1070-3632, NOV 2014, vol. 84, no. 11, p. 2218-2221., WOS

ADCA227 *KÓSA, Csaba* - DANKO, Martin - HRDLOVIČ, Pavol. Preparation and spectral

characterization of fluorescence probes based on 4-N,N-dimethylamino benzoic acid and sterically hindered amines. In Journal of Fluorescence, 2012, vol. 22, no.5, p. 1371 - 1381. (2.107 - IF2011). (2012 - Current Contents). ISSN 1053-0509.

Citácie:

1. [1.1] FIELDING, A.J. - CONCILIO, M.G. - HEAVEN, G. - HOLLAS, M.A. New developments in spin labels for pulsed dipolar EPR. In MOLECULES. ISSN 1420-3049, OCT 2014, vol. 19, no. 10, p. 16998-17025., WOS

ADCA228 KOSIDLO, U. - OMASTOVÁ, Mária - MIČUŠÍK, Matej - ĆIRIĆ-MARJANOVIĆ, G. - RANDRIAMAHAZAKA, H. - WALLMERSPERGER, T. - AABLOO, A. - KOLARIC, I. - BAUERNHANSL, T. Nanocarbon based ionic actuators - a review. In Smart Materials & Structures, 2013, vol. 22, art.no. 104022 [30 p.]. (2.024 - IF2012). (2013 - Current Contents). ISSN 0964-1726.

Citácie:

1. [1.1] BUBAK, G. - CESERACCIU, L. - ANSALDO, A. - FUTABA, D.N. - HATA, K. - RICCI, D. Carbon nanotubes plastic actuator: Towards lightweight, low-voltage haptic devices. In 2014 IEEE HAPTICS SYMPOSIUM (HAPTICS). 2014, p. 499-503., WOS

2. [1.1] KRUUSAMAE, K. - MUKAI, K. - SUGINO, T. - ASAKA, K. Impact of viscoelastic properties on bucky-gel actuator performance. In JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES. ISSN 1045-389X, DEC 2014, vol. 25, no. 18, SI, p. 2235-2245., WOS

3. [1.1] KRUUSAMAE, K. - MUKAI, K. - SUGINO, T. - ASAKA, K. Mechanical behaviour of bending bucky-gel actuators and its representation. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, FEB 2014, vol. 23, no. 2., WOS

4. [1.1] MUST, I. - KAASIK, F. - POLDSALU, I. - MIHKELS, L. - JOHANSON, U. - PUNNING, A. - AABLOO, A. Pulse-width-modulated charging of ionic and capacitive actuators. In 2014 IEEE/ASME INTERNATIONAL CONFERENCE ON ADVANCED INTELLIGENT MECHATRONICS (AIM). ISSN 2159-6255, 2014, p. 1446-1451., WOS

5. [1.1] PUNNING, A. - KIM, K.J. - PALMRE, V. - VIDAL, F. - PLESSE, C. - FESTIN, N. - MAZIZ, A. - ASAKA, K. - SUGINO, T. - ALICI, G. - SPINKS, G. - WALLACE, G. - MUST, I. - POLDSALU, I. - VUNDER, V. - TEMMER, R. - KRUUSAMAE, K. - TOROP, J. - KAASIK, F. - RINNE, P. - JOHANSON, U. - PEIKOLAINEN, A.L. - TAMM, T. - AABLOO, A. Ionic electroactive polymer artificial muscles in space applications. In SCIENTIFIC REPORTS. ISSN 2045-2322, NOV 5 2014, vol. 4., WOS

6. [1.1] PUNNING, A. - MUST, I. - POLDSALU, I. - VUNDER, V. - TEMMER, R. - KRUUSAMAE, K. - KAASIK, F. - TOROP, J. - RINNE, P. - LULLA, T. - JOHANSON, U. - TAMM, T. - AABLOO, A. Lifetime measurements of ionic electroactive polymer actuators. In JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES. ISSN 1045-389X, DEC 2014, vol. 25, no. 18, SI, p. 2267-2275., WOS

7. [1.2] KRUUSAMÄE, K.- MUKAI, K.- SUGINO, T.- ASAKA, K..The viscoelastic effect in bending bucky-gel actuators. (2014) Proceedings of SPIE - The International Society for Optical Engineering, 9056, art. no. 90560G. DOI: 10.1117/12.2044745, Scopus

ADCA229 KOUTNÝ, M. - VÁCLAVKOVÁ, T. - RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Characterization of oxidation progress by chemiluminescence. A study of polyethylene with pro-oxidant additives. In Polymer Degradation and Stability, 2008, vol. 93, p. 1515 - 1519. (2.073 - IF2007). (2008 - Current Contents). ISSN

0141-3910.

Citácie:

1. [1.1] AMBROGI, V. - PANZELLA, L. - PERSICO, P. - CERRUTI, P. - LONZ, C.A. - CARFAGNA, C. - VEROTTA, L. - CANEVA, E. - NAPOLITANO, A. - D'ISCHIA, M. An Antioxidant bioinspired phenolic polymer for efficient stabilization of polyethylene. In BIOMACROMOLECULES. ISSN 1525-7797, JAN 2014, vol. 15, no. 1, p. 302-310., WOS

2. [1.1] LUNGULESCU, M.E. - ZAHARESCU, T. - PLESA, I. - PODINA, C. Thermal and radiation stability of polyolefins modified with silica nanoparticles. In JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS. ISSN 1454-4164, MAY-JUN 2014, vol. 16, no. 5-6, p. 719-725., WOS

3. [1.1] NOGUCHI, T. - YAMADA, E. - AKAI, N. - ISHII, H. - SATOH, C. - HIRONIWA, T. - MILLINGTON, K.R. - NAKATA, M. Thermal chemiluminescence from gamma-irradiated polytetrafluoroethylene and its emission mechanism: Investigation by multichannel Fourier-transform luminescence spectroscopy. In CHEMICAL PHYSICS LETTERS. ISSN 0009-2614, OCT 20 2014, vol. 614, p. 181-185., WOS

4. [1.1] ZAPATA, P.A. - RABAGLIATI, F.M. - LIEBERWIRTH, I. - CATALINA, F. - CORRALES, T. Study of the photodegradation of nanocomposites containing TiO2 nanoparticles dispersed in polyethylene and in poly(ethylene-co-octadecene). In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, NOV 2014, vol. 109, SI, p. 106-114., WOS

5. [1.2] XU, J.- GAO, Y.- XIE, B.- YANG, W.- YANG, M. Effect of oxidation degradation of polyethylene on morphology and mechanical property of high density polyethylene/polyamide 6 blends. (2014) Gaofenzi Cailiao Kexue Yu Gongcheng/Polymeric Materials Science and Engineering, 30 (5), p. 77-80+86., Scopus

ADCA230 KOWALCZUK, A. - KRONEK, Juraj - BOSOWSKA, K. - TRZEBICKA, B. - DWORAK, A. Star poly(2-ethyl-2-oxazoline)s- synthesis and thermosensitivity. In Polymer International, 2011, vol. 60, p. 1001 - 1009. (2.056 - IF2010). (2011 - Current Contents). ISSN 0959-8103.

Citácie:

1. [1.1] DE LA ROSA, V.R. Poly(2-oxazoline)s as materials for biomedical applications. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE. ISSN 0957-4530, MAY 2014, vol. 25, no. 5, p. 1211-1225., WOS

2. [1.1] KOSTOVA, B. - IVANOVA, S. - BALASHEV, K. - RACHEV, D. - CHRISTOVA, D. Evaluation of poly(2-ethyl-2-oxazoline) containing copolymer networks of varied composition as sustained metoprolol tartrate delivery Systems. In AAPS PHARMSCITECH. ISSN 1530-9932, AUG 2014, vol. 15, no. 4, p. 939-946., WOS

3. [1.2] AMIROVA, A.I.- DUDKINA, M.M.- TENKOVTSEV, A.V.- FILIPPOV, A.P. Self-assembly of star-shaped poly(2-isopropyl-2-oxazoline) in aqueous solutions. (2014) Colloid and Polymer Science, 293 (1), p. 239-248. DOI: 10.1007/s00396-014-3402-x, Scopus

ADCA231 KRAMÁROVÁ, Z. - ALEXY, P. - CHODÁK, Ivan - ŠPIRK, E. - HUDEC, I. - KOŠÍKOVÁ, B. - GREGOROVÁ, A. - ŠÚRI, P. - FERANC, J. - BUGAJ, P. - ĎURAČKA, M. Biopolymers as fillers for rubber blends. In Polymers for Advanced Technologies, 2007, vol. 18, p. 132-140. (1.406 - IF2006). (2007 - Current Contents). ISSN 1042-7147.

Citácie:

1. [1.1] FRIGERIO, P. - ZOIA, L. - ORLANDI, M. - HANEL, T. - CASTELLANI, L. Application of sulphur-free lignins as a filler for elastomers: effect of

hexamethylenetetramine treatment. In BIORESOURCES. ISSN 1930-2126, 2014, vol. 9, no. 1, p. 1387-1400., WOS
2. [1.1] KARAAGAC, B. Use of Ground pistachio shell as alternative filler in natural rubber/styrene-butadiene rubber-based rubber compounds. In POLYMER COMPOSITES. ISSN 0272-8397, FEB 2014, vol. 35, no. 2, p. 245-252., WOS
3. [1.1] XIAO, S. - TAN, Y.T. - XU, J.S. - XIONG, C. - WANG, X. - SU, S.P. Lignosulfonate as dispersant for layered double hydroxide in nitrile-butadiene rubber composites. In APPLIED CLAY SCIENCE. ISSN 0169-1317, AUG 2014, vol. 97-98, p. 91-95., WOS

ADCA232 KRATOCHVÍLA, Ján - BOUDENNE, A. - KRUPA, Igor. Effect of filler size on thermophysical and electrical behavior of nanocomposites based on expanded graphite nanoparticles filled in low-density polyethylene matrix. In Polymer Composites, 2013, vol. 34, iss. 2, p. 149 - 155. (1.482 - IF2012). (2013 - Current Contents). ISSN 0272-8397.

Citácie:

1. [1.1] CHEN, H.Z. - YANG, D.M. - GUO, Z.K. Dispersivity of mModified ZnO and characterization of polyurethane/ZnO composites. In POLYMER COMPOSITES. ISSN 0272-8397, FEB 2014, vol. 35, no. 2, p. 237-244., WOS
2. [1.2] CHOI, J.- SHIN, H.- YANG, S.- CHO, M. The influence of nanoparticle size on the mechanical properties of polymer nanocomposites and the associated interphase region: A multiscale approach. (2014) Composite Structures, 119, p. 365-376., Scopus

ADCA233 KRONEK, Juraj - *LUSTOŇ, Jozef* - KRONEKOVÁ, Zuzana - PAULOVIČOVÁ, E. - FARKAŠ, P. - PETRENČÍKOVÁ, Nadežda - PAULOVIČOVÁ, L. - JANIGOVÁ, Ivica. Synthesis and bioimmunological efficiency of poly(2-oxazolines) containing a free amino group. In Journal of Materials Science: Materials in Medicine, 2010, vol. 21, p. 879 - 886. (1.955 - IF2009). (2010 - Current Contents). ISSN 0957-4530.

Citácie:

1. [1.1] TAUHARDT, L. - PRETZEL, D. - KEMPE, K. - GOTTSCHALDT, M. - POHLERS, D. - SCHUBERT, U.S. Zwitterionic poly(2-oxazoline)s as promising candidates for blood contacting applications. In POLYMER CHEMISTRY. ISSN 1759-9954, OCT 7 2014, vol. 5, no. 19, p. 5751-5764., WOS

ADCA234 KRONEK, Juraj - *LUSTOŇ, Jozef* - BOHME, F. Synthesis of 2-oxazolines as efficient reagents in organic synthesis and monomers for macromolecular chemistry. In Chemické listy, 1998, roč. 92, č. 3, s. 175 - 185. (0.159 - IF1997). (1998 - Current Contents). ISSN 0009-2770.

Citácie:

1. [1.1] SAMIMI, H.A. - SHAMS, Z. Regio-controlled and stereo- controlled ring expansion of n-substituted-2 benzoylaziridines using Fe(NO3)(3). In JOURNAL OF HETEROCYCLIC CHEMISTRY. ISSN 0022-152X, NOV 2014, vol. 51, no. 6, p. 1659-1663., WOS
2. [1.1] XU, S.M. - ZHANG, Q.Y. - ZHOU, H.W. Thionium ion promoted Michael acceptor: a sequence of Pummerer/Michael reactions for the stereoselective synthesis of 5-(1-(arylthio)vinyl)-oxazolines. In TETRAHEDRON LETTERS. ISSN 0040-4039, FEB 5 2014, vol. 55, no. 6, p. 1196-1198., WOS

ADCA235 KRONEK, Juraj - *NEDELČEV, Tomáš - MIKULEC, Marcel* - KLEINOVÁ, Angela - *LUSTOŇ, Jozef*. Synthesis of cinnamic acid-derived 4,5-dihydrooxazoles. In Chemical Papers, 2013, vol. 67, no. 11, p. 1424 - 1432. (0.879 - IF2012). (2013 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] AVALOS-ALANIS, F.G. - HERNANDEZ-FERNANDEZ, E. -

HERNANDEZ-ROMERO, R. - LOPEZ-CORTINA, S. - ORDONEZ, M. - GARCIA-BARRADAS, O. - LAGUNAS-RIVERA, S. Practical and efficient synthesis of chiral 2,4-disubstituted oxazolines from beta-phosphonoamides. In TETRAHEDRON-ASYMMETRY. ISSN 0957-4166, JAN 31 2014, vol. 25, no. 2, p. 156-162., WOS

ADCA236 KRONEK, Juraj - PAULOVIČOVÁ, E. - PAULOVIČOVÁ, L. - KRONEKOVÁ, Zuzana - *LUSTOŇ, Jozef*. Immunomodulatory efficiency of poly(2-oxazolines). In Journal of Materials Science: Materials in Medicine, 2012, vol. 23, no. 6, p. 1457-1464. (2.316 - IF2011). (2012 - Current Contents). ISSN 0957-4530.

Citácie:

1. [1.1] IVANOVA, E.P. - BAZAKA, K. - CRAWFORD, R.J. Advanced synthetic polymer biomaterials derived from organic sources. In NEW FUNCTIONAL BIOMATERIALS FOR MEDICINE AND HEALTHCARE. ISSN 2049-9485, 2014, no. 67, p. 71-99., WOS

2. [1.1] TAUHARDT, L. - PRETZEL, D. - KEMPE, K. - GOTTSCHALDT, M. - POHLERS, D. - SCHUBERT, U.S. Zwitterionic poly(2-oxazoline)s as promising candidates for blood contacting applications. In POLYMER CHEMISTRY. ISSN 1759-9954, OCT 7 2014, vol. 5, no. 19, p. 5751-5764., WOS

ADCA237 KRONEK, Juraj - KRONEKOVÁ, Zuzana - *LUSTOŇ, Jozef* - PAULOVIČOVÁ, E. - PAULOVIČOVÁ, L. - MENDREK, B. In vitro bio-immunological and cytoxicity studies of poly(2-oxazolines). In Journal of Materials Science: Materials in Medicine, 2011, vol. 22, p. 1725 - 1734. (2.325 - IF2010). (2011 - Current Contents). ISSN 0957-4530.

Citácie:

1. [1.1] ALIUOS, P. - SEN, A. - REICH, U. - DEMPWOLF, W. - WARNECKE, A. - HADLER, C. - LENARZ, T. - MENZEL, H. - REUTER, G. Inhibition of fibroblast adhesion by covalently immobilized protein repellent polymer coatings studied by single cell force spectroscopy. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JAN 2014, vol. 102, no. 1, p. 117-127., WOS

2. [1.1] DE LA ROSA, V.R. Poly(2-oxazoline)s as materials for biomedical applications. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE. ISSN 0957-4530, MAY 2014, vol. 25, no. 5, p. 1211-1225., WOS

3. [1.1] DWORAK, A. - UTRATA-WESOLEK, A. - OLESZKO, N. - WALACH, W. - TRZEBICKA, B. - ANIOL, J. - SIERON, A.L. - KLAMA-BARYLA, A. - KAWECKI, M. Poly(2-substituted-2-oxazoline) surfaces for dermal fibroblasts adhesion and detachment. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE. ISSN 0957-4530, APR 2014, vol. 25, no. 4, p. 1149-1163., WOS

4. [1.1] SUMMERS, G.J. - MASEKO, R.B. - SUMMERS, C.A. The preparation of alpha-bis and alpha,omega-tetrakis aromatic oxazolyl- and carboxyl-functionalized polymers using 1,1-bis[4-(2-(4,4-dimethyl-1,3-oxazolyl))phenyl]ethylene in atom transfer radical polymerization reactions. In POLYMER INTERNATIONAL. ISSN 0959-8103, OCT 2014, vol. 63, no. 10, p. 1785-1796., WOS

5. [1.1] TAUHARDT, L. - PRETZEL, D. - KEMPE, K. - GOTTSCHALDT, M. - POHLERS, D. - SCHUBERT, U.S. Zwitterionic poly(2-oxazoline)s as promising candidates for blood contacting applications. In POLYMER CHEMISTRY. ISSN 1759-9954, OCT 7 2014, vol. 5, no. 19, p. 5751-5764., WOS

ADCA238 *KRUPA, Igor* - NOVÁK, Igor - CHODÁK, Ivan. Electrically and thermally conductive polyethylene/graphite composites and their mechanical properties. In Synthetic Metals, 2004, vol. 145, no. 2-3, p. 245 - 252. (1.303 - IF2003). (2004 - Current Contents). ISSN 0379-6779.

Citácie:
1. [1.1] CHAN, E. - LEUNG, S.N. - KHAN, M.O. - NAGUIB, H. - DAWSON, F. - ADINKRAH, V. - LAKATOS-HAYWARD, L. Fabrication and characterization of ceramic-filled thermoplastics composites with enhanced multifunctional properties. In JOURNAL OF THERMOPLASTIC COMPOSITE MATERIALS. ISSN 0892-7057, APR 2014, vol. 27, no. 4, p. 541-557., WOS
2. [1.1] LI, J.H. - WANG, Q.L. - LI, M. - FENG, J. - JIA, Z.X. - SU, Y.M. An Facile High-Density Polyethylene - Exfoliated Graphite - Aluminium hydroxide composite: manufacture, morphology, structure, antistatic and fireproof properties. In MATERIALS SCIENCE-MEDZIAGOTYRA. ISSN 1392-1320, 2014, vol. 20, no. 3, p. 289-294., WOS
3. [1.1] LIU, M.D. - JIA, K. - LIU, X.B. Preparation of hybrid colloidal graphite-copper phthalocyanine and their utilization in polymer composites with enhanced thermal conductivity and mechanical properties. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, OCT 18 2014, vol. 21, no. 11., WOS
4. [1.1] SONG, J.B. - YANG, W.B. - FU, F. - ZHANG, Y.H. The Effect of graphite on the water uptake, mechanical properties, morphology, and EMI shielding effectiveness of HOPE/Bamboo flour composites. In BIORESOURCES. ISSN 1930-2126, 2014, vol. 9, no. 3, p. 3955-3967., WOS
5. [1.1] THEODOROU, D.N. - VOGIATZIS, G.G. - KRITIKOS, G. Self-consistent-field study of adsorption and desorption kinetics of polyethylene melts on graphite and comparison with atomistic simulations. In MACROMOLECULES. ISSN 0024-9297, OCT 14 2014, vol. 47, no. 19, p. 6964-6981., WOS

ADCA239 *KRUPA, Igor* - CECEN, V. - TLILI, R. - BOUDENNE, A. - IBOS, L. Thermophysical properties of ethylene-vinylacetate copolymer (EVA) filled with wollastonite fibers coated by silver. In European Polymer Journal, 2008, vol. 44, p. 3817 - 3826. (2.248 - IF2007). (2008 - Current Contents). ISSN 0014-3057.

Citácie:
1. [1.1] BORREGUERO, A.M. - GARRIDO, I. - VALVERDE, J.L. - RODRIGUEZ, J.F. - CARMONA, M. Development of smart gypsum composites by incorporating thermoregulating microcapsules. In ENERGY AND BUILDINGS. ISSN 0378-7788, JUN 2014, vol. 76, p. 631-639., WOS

ADCA240 *KRUPA, Igor* - *MIKOVÁ, Gizela* - LUYT, A. S. Phase change materials based on low-density polyethylene-paraffin wax blends. In European Polymer Journal, 2007, vol. 43., p. 4695-4705. (2.113 - IF2006). (2007 - Current Contents). ISSN 0014-3057.

Citácie:
1. [1.1] AADMI, M. - KARKRI, M. - EL HAMMOUTI, M. Heat transfer characteristics of thermal energy storage of a composite phase change materials: Numerical and experimental investigations. In ENERGY. ISSN 0360-5442, AUG 1 2014, vol. 72, p. 381-392., WOS
2. [1.1] BURHEIM, O.S. - ONSRUD, M.A. - PHAROAH, J.G. - VULLUM-BRUER, F. - VIE, P.J.S. Thermal conductivity, heat sources and temperature profiles of Li-ion batteries. In LITHIUM-ION BATTERIES. ISSN 1938-5862, 2014, vol. 58, no. 48, p. 145-171., WOS
3. [1.1] CHEN, F. - WOLCOTT, M.P. Miscibility studies of paraffin/polyethylene blends as form-stable phase change materials. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, MAR 2014, vol. 52, p. 44-52., WOS
4. [1.1] PIELICHOWSKA, K. - PIELICHOWSKI, K. Phase change materials for thermal energy storage. In PROGRESS IN MATERIALS SCIENCE. ISSN 0079-6425, AUG 2014, vol. 65, p. 67-123., WOS

5. [1.1] SHI, H.F. - ZHANG, L.J. - LI, W.W. - HAN, X. - ZHANG, X.X. Structure and properties of mixtures based on long chain polyacrylate and 1-alcohol composites. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, FEB 14 2014, vol. 143, no. 3, p. 1069-1074., WOS

6. [1.1] SINGH, S.P. - BHAT, V. Applications of organic phase change materials for thermal comfort in buildings. In REVIEWS IN CHEMICAL ENGINEERING. ISSN 0167-8299, OCT 2014, vol. 30, no. 5, p. 521-538., WOS

7. [1.1] WANG, Y. - WANG, S.Y. - WANG, J.P. - YANG, R. Preparation, stability and mechanical property of shape-stabilized phase change materials. In ENERGY AND BUILDINGS. ISSN 0378-7788, JUL 2014, vol. 77, p. 11-16., WOS

ADCA241 *KRUPA, Igor* - CECEN, V. - BOUDENNE, A. - PROKEŠ, J. - NOVÁK, Igor. The mechanical and adhesive properties of electrically and thermally conductive polymeric composites based on high density polyethylene filled with nickel powder. In Materials and Design, vol. 51, /2013), p. 620 - 628. ISSN 0261-3069.

Citácie:

1. [1.1] KHORAMISHAD, H. - RAZAVI, S.M.J. Metallic fiber-reinforced adhesively bonded joints. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, DEC 2014, vol. 55, p. 114-122., WOS

2. [1.1] KUSUKTHAM, B. - TEERANACHAIDEEKUL, P. Mechanical properties of high density polyethylene/modified calcium silicate composites. In SILICON. ISSN 1876-990X, JUL 2014, vol. 6, no. 3, p. 179-189., WOS

3. [1.1] SABBATINI, L. Wettability: Significance and measurement. In POLYMER SURFACE CHARACTERIZATION. 2014, p. 207-245., WOS

4. [1.1] XIANG, D. - HARKIN-JONES, E. - LINTON, D. Processability, structural evolution and properties of melt processed biaxially stretched HDPE/MWCNT nanocomposites. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 83, p. 44130-44140., WOS

ADCA242 *KRUPA, Igor* - BOUDENNE, A. - IBOS, L. Thermophysical properties of polyethylene filled with metal coated polyamide particles. In European Polymer Journal, 2007, vol. 43, p. 2443 - 2452. (2.113 - IF2006). (2007 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] ZHU, B.L. - ZHENG, H. - WANG, J. - MA, J. - WU, J. - WU, R. Tailoring of thermal and dielectric properties of LDPE-matrix composites by the volume fraction, density, and surface modification of hollow glass microsphere filler. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, MAR 2014, vol. 58, p. 91-102., WOS

ADCA243 *KRUPA, Igor* - *MIKOVÁ, Gizela* - NOVÁK, Igor - JANIGOVÁ, Ivica - NÓGELLOVÁ, Zuzana - LEDNICKÝ, F. - PROKEŠ, J. Electrically conductive composites of polyethylene filled with polyamide particles coated with silver. In European Polymer Journal, 2007, vol. 43, p. 2401 - 2413. (2.113 - IF2006). (2007 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] DENG, Y.L. - XIONG, D.S. - WANG, K. The mechanical properties of the ultra high molecular weight polyethylene grafted with 3-dimethy (3-(N-methacryamido) propyl) ammonium propane sulfonate. In JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS. ISSN 1751-6161, JUL 2014, vol. 35, p. 18-26., WOS

2. [1.1] GULREZ, S.K.H. - MOHSIN, M.E.A. - SHAIKH, H. - ANIS, A. - PULOSE, A.M. - YADAV, M.K. - QUA, E.H.P. - AL-ZAHRANI, S.M. A review on electrically conductive polypropylene and polyethylene. In POLYMER COMPOSITES. ISSN 0272-8397, MAY 2014, vol. 35, no. 5, p. 900-914., WOS

3. [1.1] LI, J.H. - WANG, Q.L. - LI, M. - FENG, J. - JIA, Z.X. - SU, Y.M. An facile high-density polyethylene - exfoliated graphite - aluminium hydroxide composite: Manufacture, morphology, structure, antistatic and fireproof properties. In MATERIALS SCIENCE-MEDZIAGOTYRA. ISSN 1392-1320, 2014, vol. 20, no. 3, p. 289-294., WOS

4. [1.1] ZHANG, S. - WANG, C.G. - YUAN, H. - ZHU, B. - YU, M.J. - ZHANG, B.M. - HAN, R.H. - LI, Y.W. Surface resistivity of carbonaceous fiber/PTFE antistatic coatings. In JOURNAL OF CENTRAL SOUTH UNIVERSITY. ISSN 2095-2899, MAY 2014, vol. 21, no. 5, p. 1689-1695., WOS

ADCA244 *KRUPA, Igor* - LUYT, A. S. Thermal properties of polypropylene/wax blends. In Thermochimica Acta, 2001, vol. 372, p. 137-141.

Citácie:

1. [1.1] MISHRA, N. - PATRA, N. - PANDEY, S. - SALERNO, M. - SHARON, M. - SHARON, M. Taguchi method optimization of wax production from pyrolysis of waste polypropylene. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, AUG 2014, vol. 117, no. 2, p. 885-892., WOS

2. [1.1] SALEEM, A. - FRORMANN, L. - KOLTERMANN, J. - REICHELT, C. Fabrication and processing of polypropylene -paraffin compounds with enhanced thermal and processing properties: Impact penetration and thermal characterization. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAY 5 2014, vol. 131, no. 9., WOS

ADCA245 *KRUPA, Igor* - CHODÁK, Ivan. Physical properties of thermoplastic/graphite composites. In European Polymer Journal, 2001, vol. 37, p. 2159-2168. (0.745 - IF2000). (2001 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] AADMI, M. - KARKRI, M. - IBOS, L. - HAMMOUTI, M.E. Effective thermal conductivity of random two-phase composites. In JOURNAL OF REINFORCED PLASTICS AND COMPOSITES. ISSN 0731-6844, JAN 2014, vol. 33, no. 1, p. 69-80., WOS

2. [1.1] DUARTE, T.M. - REIS, J.M.L. Experimental investigation of heat conduction in red mud/epoxy and red mud/polyester composites. In INTERNATIONAL JOURNAL OF THERMOPHYSICS. ISSN 0195-928X, AUG 2014, vol. 35, no. 8, p. 1590-1600., WOS

3. [1.1] PERETS, Y.S. - MATZUI, L.Y. - VOVCHENKO, L.L. - PRYLUTSKYY, Y.I. - SCHARFF, P. - RITTER, U. The effect of boron nitride on electrical conductivity of nanocarbon-polymer composites. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, MAR 2014, vol. 49, no. 5, p. 2098-2105., WOS

4. [1.1] RAM, R. - RAHAMAN, M. - KHASTGIR, D. Mechanical, electrical, and dielectric properties of polyvinylidene fluoride/short carbon fiber composites with low-electrical percolation threshold. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 5 2014, vol. 131, no. 3., WOS

5. [1.1] RATZSCH, K.F. - CECEN, V. - TOLLE, F. - WARTIG, K.A. - THOMANN, R. - MULHAUPT, R. - FRIEDRICH, C. Rheology, electrical properties, and percolation of TRGO-filled EVA-copolymers. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, SEP 2014, vol. 299, no. 9, p. 1134-1144., WOS

6. [1.1] YU, X.W. - SHI, G.Q. Preparation and applications of graphene/polymer composite thin films. In ACTA POLYMERICA SINICA. ISSN 1000-3304, JUL 20 2014, no. 7, p. 885-895., WOS

ADCA246 *KRUPA, Igor* - LUYT, A. S. Mechanical properties of uncrosslinked and crosslinked linear low-density polyethylene/wax blends. In Journal of Applied Polymer Science, 2001, vol. 81, p. 973-980. (0.881 - IF2000). (2001 - Current Contents). ISSN 0021-

8995.

Citácie:

1. [1.1] BAKHSHI, H. - YEGANEH, H. - YARI, A. - NEZHAD, S.K. Castor oil-based polyurethane coatings containing benzyl triethanol ammonium chloride: synthesis, characterization, and biological properties. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, AUG 2014, vol. 49, no. 15, p. 5365-5377., WOS

2. [1.1] BARDET, J.P. - JESMANI, M. - JABBARI, N. - LOURENCO, S.D.N. Permeability and compressibility of wax-coated sands. In GEOTECHNIQUE. ISSN 0016-8505, 2014, vol. 64, no. 9, p. 752-755., WOS

3. [1.1] LIU, S.Q. - GONG, W.G. - ZHENG, B.C. The effect of peroxide cross-linking on the properties of low-density polyethylene. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, JAN 1 2014, vol. 53, no. 1, p. 67-77., WOS

4. [1.1] YANG, J.X. - CUI, J. - LONG, Y.Y. - LI, Y.G. - LI, Y.S. Synthesis of novel cyclic olefin polymers with excellent transparency and high glass-transition temperature via gradient copolymerization of bulky cyclic olefin and cis-cyclooctene. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, NOV 15 2014, vol. 52, no. 22, p. 3240-3249., WOS

5. [1.1] ZHANG, X.X. - ZHANG, W. - SU, J.S. - WANG, M.Y. - LU, C.H. Preparation, characterization, and properties of polyethylene composites highly filled with calcium carbonate through co-rotating conical twin-screw extrusion. In JOURNAL OF VINYL & ADDITIVE TECHNOLOGY. ISSN 1083-5601, JUN 2014, vol. 20, no. 2, p. 108-115., WOS

ADCA247 *KRUPA, Igor* - LUYT, A. S. Thermal and mechanical properties of LLDPE cross-linked with gamma radiation. In Polymer Degradation and Stability, 2001, vol. 71, p. 361-366. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] KIM, K.J. - PARK, M.S. - YIM, T. - YU, J.S. - KIM, Y.J. Electron-beam-irradiated polyethylene membrane with improved electrochemical and thermal properties for lithium-ion batteries. In JOURNAL OF APPLIED ELECTROCHEMISTRY. ISSN 0021-891X, MAR 2014, vol. 44, no. 3, p. 345-352., WOS

ADCA248 *KRUPA, Igor* - LUYT, A. S. Thermal properties of uncross-linked and cross-linked LLDPE/wax blends. In Polymer Degradation and Stability, 2000, vol. 70, no. 1, p. 111 - 117. (0.641 - IF1999). (2000 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] BARDET, J.P. - JESMANI, M. - JABBARI, N. - LOURENCO, S.D.N. Permeability and compressibility of wax-coated sands. In GEOTECHNIQUE. ISSN 0016-8505, 2014, vol. 64, no. 9, p. 752-755., WOS

2. [1.1] DUTIL, Y. - ROUSSE, D. - LASSUE, S. - ZALEWSKI, L. - JOULIN, A. - VIRGONE, J. - KUZNIK, F. - JOHANNES, K. - DUMAS, J.P. - BEDECARRATS, J.P. - CASTELL, A. - CABEZA, L.F. Modeling phase change materials behavior in building applications: Comments on material characterization and model validation. In RENEWABLE ENERGY. ISSN 0960-1481, JAN 2014, vol. 61, p. 132-135., WOS

3. [1.1] GU, J.Q. - XU, H.Y. - WU, C.F. The effect of benzoyl peroxide and divinyl benzene on the properties of cross-linked recycled polyolefin blends. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, 2014, vol. 53, no. 12, p. 1777-1785., WOS

4. [1.1] MISHRA, N. - PATRA, N. - PANDEY, S. - SALERNO, M. - SHARON, M. -

SHARON, M. Taguchi method optimization of wax production from pyrolysis of waste polypropylene. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, AUG 2014, vol. 117, no. 2, p. 885-892., WOS
5. [1.1] ZHANG, X.H. - YANG, H.M. - SONG, Y.H. - ZHENG, Q. Influence of crosslinking on crystallization, rheological, and mechanical behaviors of high density polyethylene/ethylene-vinyl acetate copolymer blends. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, DEC 2014, vol. 54, no. 12, p. 2848-2858., WOS

ADCA249 *KRUPA, Igor* - LUYT, A. S. Thermal properties of isotactic polypropylene degraded with gamma irradiation. In Polymer Degradation and Stability, 2001, vol. 72, p. 505-508. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] KEENE, B. - BOURHAM, M. - VISWANATH, V. - AVCI, H. - KOTEK, R. Characterization of degradation of polypropylene nonwovens irradiated by gamma-ray. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS

ADCA250 *KRUPA, Igor* - *NEDELČEV, Tomáš* - RAČKO, Dušan - LACÍK, Igor. Mechanical properties of silica hydrogels prepared and aged at physiological conditions: testing in the compression mode. In Journal of Sol-Gel Science and Technology, 2010, vol. 53, no.1, p. 107 - 114. (1.393 - IF2009). (2010 - Current Contents). ISSN 0928-0707.

Citácie:

1. [1.1] LU, C.H. - ZAHEDI, P. - FORMAN, A. - ALLEN, C. multi-arm peg/silica hydrogel for sustained ocular drug delivery. In JOURNAL OF PHARMACEUTICAL SCIENCES. ISSN 0022-3549, JAN 2014, vol. 103, no. 1, p. 216-226., WOS
2. [1.1] YOM-TOV, O. - FRISMAN, I. - SELIKTAR, D. - BIANCO-PELED, H. A novel method for hydrogel nanostructuring. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, MAR 2014, vol. 52, p. 137-145., WOS
3. [1.1] YOM-TOV, O. - NEUFELD, L. - SELIKTAR, D. - BIANCO-PELED, H. A novel design of injectable porous hydrogels with in situ pore formation. In ACTA BIOMATERIALIA. ISSN 1742-7061, 2014, vol. 10, no. 10, p. 4236-4246., WOS
4. [1.1] YOM-TOV, O. - SELIKTAR, D. - BIANCO-PELED, H. Cell morphology in injectable nanostructured biosynthetic hydrogels. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, DEC 2014, vol. 102, no. 12, p. 4371-4379., WOS

ADCA251 *KRUPA, Igor* - *MIKOVÁ, Gizela* - LUYT, A. S. Polypropylene as a potential matrix for the creation of shape stabilized phase change materials. In European Polymer Journal, 2007, vol. 43, p. 895-907. (2.113 - IF2006). (2007 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] AADMI, M. - KARKRI, M. - EL HAMMOUTI, M. Heat transfer characteristics of thermal energy storage of a composite phase change materials: Numerical and experimental investigations. In ENERGY. ISSN 0360-5442, AUG 1 2014, vol. 72, p. 381-392., WOS
2. [1.1] BAHRAMIAN, A.R. - AHMADI, L.S. - KOKABI, M. Performance evaluation of polymer/clay nanocomposite thermal protection systems based on polyethylene glycol phase change material. In IRANIAN POLYMER JOURNAL. ISSN 1026-1265, MAR 2014, vol. 23, no. 3, p. 163-169., WOS
3. [1.1] JIN, X.M. - LI, J.L. - XUE, P. - JIA, M.Y. Preparation and characterization of PVC-based form-stable phase change materials. In SOLAR ENERGY MATERIALS AND SOLAR CELLS. ISSN 0927-0248, NOV 2014, vol. 130, SI, p. 435-441., WOS

4. [1.1] SINGH, S.P. - BHAT, V. Applications of organic phase change materials for thermal comfort in buildings. In REVIEWS IN CHEMICAL ENGINEERING. ISSN 0167-8299, OCT 2014, vol. 30, no. 5, p. 521-538., WOS
5. [1.1] WANG, Y. - WANG, S.Y. - WANG, J.P. - YANG, R. Preparation, stability and mechanical property of shape-stabilized phase change materials. In ENERGY AND BUILDINGS. ISSN 0378-7788, JUL 2014, vol. 77, p. 11-16., WOS
6. [1.2] AL SHANNAQ, R.- FARID, M.M. Microencapsulation of phase change materials (PCMs) for thermal energy storage systems. (2014) Advances in Thermal Energy Storage Systems: Methods and Applications, p. 247-284. DOI: 10.1533/9781782420965.2.247, Scopus
7. [1.2] SALEEM, A.- FRORMANN, L.- KOLTERMANN, J.- REICHELT, C. Fabrication and processing of polypropylene - Paraffin compounds with enhanced thermal and processing properties: Impact penetration and thermal characterization. (2014) Journal of Applied Polymer Science, 131 (9), art. no. 40164, DOI: 10.1002/app.40164, Scopus

ADCA252 *KRUPA, Igor* - CECEN, V. - BOUDENNE, A. - KRIŽANOVÁ, Z. - VÁVRA, I. - SRNÁNEK, R. - RADNÓCZI, G. Mechanical properties and morphology of composites based on the EVA copolymer filled with expanded graphite. In Polymer - Plastics Technology and Engineering, 2012, vol. 51, p. 1388-1393. (1.279 - IF2011). (2012 - Current Contents). ISSN 0360-2559.

Citácie:

1. [1.1] NAZ, A. - KAUSAR, A. - SIDDIQ, M. Fabrication and properties of novel polyaniline/poly(styrene-co-maleic anhydride) cumene terminated/4,4 '-oxydianiline/graphite-based nanocomposites via layered polymerization. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 15, p. 1542-1552., WOS
2. [1.1] PICUNO, P. Innovative Material and improved technical design for a sustainable exploitation of agricultural plastic film. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 10, p. 1000-1011., WOS

ADCA253 KUBIČÁR, Ľ. - ANIBARRO, C. C. - VRETENÁR, V. - DIEŠKA, P. - NOVÁK, Igor - CHODÁK, Ivan. Monitoring of epoxy curing by a thermal-conductivity sensor based on the hot-ball transient method. In International Journal of Thermophysics, 2012, vol. 33, p.1164 - 1176. (0.953 - IF2011). (2012 - Current Contents). ISSN 0195-928X.

Citácie:

1. [1.1] KOCI, V. - MADERA, J. - JERMAN, M. - TRNIK, A. - CERNY, R. Determination of the equivalent thermal conductivity of complex material systems with large-scale heterogeneities. In INTERNATIONAL JOURNAL OF THERMAL SCIENCES. ISSN 1290-0729, DEC 2014, vol. 86, p. 365-373., WOS

ADCA254 LACÍK, Igor - BEUERMANN, S. - BUBACK, M. PLP-SEC study into free-radical propagation rate of nonionized acrylic acid in aqueous solution. In Macromolecules, 2003, vol. 36, no. 25, p. 9355 - 9363. (3.751 - IF2002). (2003 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] CHEVREL, M.C. - BRUN, N. - HOPPE, S. - MEIMAROGLOU, D. - FALK, L. - CHAPRON, D. - BOURSON, P. - DURAND, A. In situ monitoring of acrylic acid polymerization in aqueous solution using rheo-Raman technique. Experimental investigation and theoretical modelling. In CHEMICAL ENGINEERING SCIENCE. ISSN 0009-2509, MAR 17 2014, vol. 106, p. 242-252., WOS
2. [1.1] OZALTIN, T.F. - DERELI, B. - KARAHAN, O. - SALMAN, S. -

AVIYENTE, V. Solvent effects on free-radical copolymerization of styrene and 2-hydroxyethyl methacrylate: a DFT study. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, JAN 2014, vol. 38, no. 1, p. 170-178., WOS
3. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA255 LACÍK, Igor - BEUERMANN, S. - BUBACK, M. Aqueous phase size-exclusion-chromatography used for PLP-SEC studies into free-radical propagation rate of acrylic acid in aqueous solution. In Macromolecules, 2001, vol. 34, p. 6224-6228. (3.697 - IF2000). (2001 - Current Contents). ISSN 0024-9297.

Citácie:
1. [1.1] CHEVREL, M.C. - BRUN, N. - HOPPE, S. - MEIMAROGLOU, D. - FALK, L. - CHAPRON, D. - BOURSON, P. - DURAND, A. In situ monitoring of acrylic acid polymerization in aqueous solution using rheo-Raman technique. Experimental investigation and theoretical modelling. In CHEMICAL ENGINEERING SCIENCE. ISSN 0009-2509, 2014, vol. 106, p. 242-252., WOS
2. [1.1] OLIVER, J.D. - ROSSER, A.A. - FELLOWS, C.M. - GUILLANEUF, Y. - CLEMENT, J.L. - GABORIEAU, M. - CASTIGNOLLES, P. Understanding and improving direct UV detection of monosaccharides and disaccharides in free solution capillary electrophoresis. In ANALYTICA CHIMICA ACTA. ISSN 0003-2670, JAN 27 2014, vol. 809, p. 183-193., WOS
3. [1.1] OZALTIN, T.F. - DERELI, B. - KARAHAN, O. - SALMAN, S. - AVIYENTE, V. Solvent effects on free-radical copolymerization of styrene and 2-hydroxyethyl methacrylate: a DFT study. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, JAN 2014, vol. 38, no. 1, p. 170-178., WOS
4. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA256 LACÍK, Igor - ANILKUMAR, A. V. - WANG, T. G. A two-step process for controlling the surface smoothness of polyelectrolyte-based microcapsules. In Journal of Microencapsulation. - Bristol : Taylor & Francis, 2001, vol. 18, no. 4, p. 479-490. (2001 - Current Contents). ISSN 0265-2048.

Citácie:
1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS

ADCA257 LACÍK, Igor. Polymer chemistry in diabetes treatment by encapsulated islets of Langerhans.Review to 2006. In Australian Journal of Chemistry, 2006, vol. 59, no. 8, p. 508 - 524. (1.456 - IF2005). ISSN 0004-9425.

Citácie:
1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS
2. [1.1] SPASOJEVIC, M. - BHUJBAL, S. - PAREDES, G. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Considerations in binding diblock copolymers on hydrophilic alginate beads for providing an immunoprotective membrane. In

JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JUN 2014, vol. 102, no. 6, p. 1887-1896., WOS
3. [1.1] TUCH, B.E. - GAO, S.Y. - LEES, J.G. Scaffolds for islets and stem cells differentiated into insulin-secreting cells. In FRONTIERS IN BIOSCIENCE-LANDMARK. ISSN 1093-9946, JAN 1 2014, vol. 19, p. 126-138., WOS

ADCA258 LACÍK, Igor - BEUERMANN, S. - BUBACK, M. PLP-SEC study into the free-radical propagation rate coefficients of partially and fully ionized acrylic acid in aqueous solution. In Macromolecular Chemistry and Physics, 2004, vol. 205, no. 8, p. 1080 - 1087. (1.390 - IF2003). (2004 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] CHEVREL, M.C. - BRUN, N. - HOPPE, S. - MEIMAROGLOU, D. - FALK, L. - CHAPRON, D. - BOURSON, P. - DURAND, A. In situ monitoring of acrylic acid polymerization in aqueous solution using rheo-Raman technique. Experimental investigation and theoretical modelling. In CHEMICAL ENGINEERING SCIENCE. ISSN 0009-2509, 2014, vol. 106, p. 242-252., WOS

ADCA259 LACÍK, Igor - *KRUPA, Igor* - *STACH, Marek* - KUČMA, A. - JURČIOVÁ, J. - CHODÁK, Ivan. Thermal lag and its practical consequence in the dynamic mechanical analysis of polymers. In Polymer Testing, 2000, vol. 19, p. 755-771. (2000 - Current Contents). ISSN 0142-9418.

Citácie:

1. [1.1] SUN, W. - VASSILOPOULOS, A.P. - KELLER, T. Effect of thermal lag on glass transition temperature of polymers measured by DMA. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, JUL 2014, vol. 52, p. 31-39., WOS
2. [1.1] ZHANG, D.H. - HE, M. - GUO, J.B. - ZHANG, K.Z. Mechanical properties, morphology and dynamic mechanical properties of LGF/TPU/SAN composites. In FIBERS AND POLYMERS. ISSN 1229-9197, APR 2014, vol. 15, no. 4, p. 794-799., WOS

ADCA260 LACÍK, Igor - SELB, J. - CANDAU, F. Compositional heterogeneity effects in hydrophobically associating water-soluble polymers prepared by micellar copolymerization. In Polymer, 1995, vol. 36, no. 16, p. 3197-3211.

Citácie:

1. [1.1] FENG, R.S. - JI, W. - GUO, Y.J. - SUN, J.H. - TANG, H. - SONG, R.T. The Determination of WEIGHT-AVERAGE MOLECULAR WEIGHT OF HYDROPHOBICALLY ASSOCIATED WATER-SOLUBLE POLYMERS. In ACTA POLYMERICA SINICA. ISSN 1000-3304, JAN 20 2014, no. 1, p. 150-155., WOS
2. [1.1] LIAO, Y. - ZHENG, H.L. - DAI, L. - LI, F.T. - ZHU, G.C. - GUAN, Q.Q. - SUN, Y.J. - TANG, X.M. Hydrophobically modified polyacrylamide synthesis and application in water treatment. In ASIAN JOURNAL OF CHEMISTRY. ISSN 0970-7077, SEP 2014, vol. 26, no. 18, B, p. 5923-5927., WOS
3. [1.1] LIMA, B.V. - VIDAL, R.R.L. - VILLETTI, M.A. - BALABAN, R.C. Solution properties of poly(acrylamide-co-3,5,5-trimethylhexane methacrylate) and its polyelectrolyte derivative. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, SEP 2014, vol. 292, no. 9, p. 2123-2135., WOS

ADCA261 LACÍK, Igor - CASEY, B. S. - SANGSTER, D. F. - GILBERT, R. G. - NAPPER, D. H. Desorbed free-radicals in emulsion polymerizations - effect of aqueous-phase spin trap. In Macromolecules, 1992, vol. 25, no. 16, p. 4065 - 4072. (1992 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] SHANG, Y. - SHAN, G.R. - PAN, P.J. Modeling for primary radical desorption in miniemulsion polymerization initiated by oil-soluble initiator. In AICHE JOURNAL. ISSN 0001-1541, 2014, vol. 60, no. 9, p. 3276-3285., WOS

ADCA262 LACÍK, Igor - BRISSOVÁ, M. - ANILKUMAR, A. V. - POWERS, A. C. - WANG, T. New capsule with tailored properties for the encapsulation of living cells. In Journal of Biomedical Materials Research : Part A, 1998, vol. 39, no. 1, p. 52 - 60. ISSN 1549-3296.

Citácie:

1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS

2. [1.1] SPASOJEVIC, M. - BHUJBAL, S. - PAREDES, G. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Considerations in binding diblock copolymers on hydrophilic alginate beads for providing an immunoprotective membrane. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JUN 2014, vol. 102, no. 6, p. 1887-1896., WOS

3. [1.1] TUCH, B.E. - GAO, S.Y. - LEES, J.G. Scaffolds for islets and stem cells differentiated into insulin-secreting cells. In FRONTIERS IN BIOSCIENCE-LANDMARK. ISSN 1093-9946, JAN 1 2014, vol. 19, p. 126-138., WOS

4. [1.2] SCHARP, D.W.- MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. (2014) Advanced Drug Delivery Reviews, 67-68, p. 35-73. DOI: 10.1016/j.addr.2013.07.018, Scopus

5. [1.2] WRIGHT, B.- CONNON, C.J. Alginate hydrogels for the 3D culture and therapeutic delivery of cells. (2014) RSC Soft Matter, p. 135-170., Scopus

ADCA263 LACOSTE, J. - VAILLANT, D. - CHMELA, Štefan. Gamma-,photo- and thermally-initiated oxidation of polyolefines used in packaging. In Journal of Polymer Engineering, 1995/96, vol. 15, no. 1-2, p. 139-152.

Citácie:

1. [1.1] DRIFFIELD, M. - BRADLEY, E.L. - LEON, I. - LISTER, L. - SPECK, D.R. - CASTLE, L. - POTTER, E.L.J. Analytical screening studies on irradiated food packaging. In FOOD ADDITIVES AND CONTAMINANTS PART A-CHEMISTRY ANALYSIS CONTROL EXPOSURE & RISK ASSESSMENT. ISSN 1944-0049, MAR 4 2014, vol. 31, no. 3, SI, p. 556-565., WOS

2. [1.1] MILICEVIC, D. - MICIC, M. - SULJOVRUJIC, E. Radiation-induced modification of dielectric relaxation spectra of polyolefins: polyethylenes vs. polypropylene. In POLYMER BULLETIN. ISSN 0170-0839, SEP 2014, vol. 71, no. 9, p. 2317-2334., WOS

ADCA264 LÁNSKÁ, B. - MATISOVÁ-RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Chemiluminescence of polyamides.III. Luminescence accompanying thermooxidation of lactam-based polyamides stabilized by antioxidants. In Polymer Degradation and Stability, 2001, vol. 72, p. 249-258. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] FINK, J.K. Partially aromatic poly(amide)s. In HIGH PERFORMANCE POLYMERS, 2ND EDITION. 2014, p. 281-299., WOS

2. [1.1] XIA, L. - SHENTU, B.Q. - WENG, Z.X. Preparation of a novel stabilizer and its thermal-oxidative stabilization effect on polyamide 6. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, SEP 2014, vol. 54, no. 9, p. 2197-2206., WOS

ADCA265 LÁNSKÁ, B. - DOSKOČILOVÁ, D. - PUFFR, R. - RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Thermooxidation of lactam-based polyamides with amino end-groups. Thermooxidation of hexano-6-lactam and decomposition of 6-hydroperoxyhexano-

6-lactam in the presence of primary amines. In Polymer Degradation and Stability, 1999, vol. 63, p. 469-479. (0.854 - IF1998). (1999 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] CHIVAS-JOLY, C. - MOTZKUS, C. - GUILLAUME, E. - DUCOURTIEUX, S. - SARAGOZA, L. - LESENECHAL, D. - LOPEZ-CUESTA, J.M. - LONGUET, C. - SONNIER, R. - MINISINI, B. Influence of carbon nanotubes on fire behaviour and aerosol emitted during combustion of thermoplastics. In FIRE AND MATERIALS. ISSN 0308-0501, JAN 2014, vol. 38, no. 1, p. 46-62., WOS

2. [1.1] XIA, L. - SHENTU, B.Q. - WENG, Z.X. Preparation of a novel stabilizer and its thermal-oxidative stabilization effect on polyamide 6. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, SEP 2014, vol. 54, no. 9, p. 2197-2206., WOS

3. [1.1] XIA, L. - XIONG, J.S. - SHENTU, B.Q. - WENG, Z.X. Thermal-oxidative degradation and accelerated aging behavior of polyamide 6/epoxy resin-modified montmorillonite nanocomposites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, OCT 5 2014, vol. 131, no. 19., WOS

ADCA266 *LATHOVÁ, Elena* - *LATH, Dieter* - PAVLINEC, Jiří. The behaviour of poly(2-ethylhexyl acrylate) in dilute solution: viscosity measurement. In Polymer Bulletin, 1993, vol. 30, no.6, p. 713 - 718. (1.128 - IF1992). (1993 - Current Contents). ISSN 0170-0839.

Citácie:

1. [1.1] PALANGETIC, L. - REDDY, N.K. - SRINIVASAN, S. - COHEN, R.E. - MCKINLEY, G.H. - CLASEN, C. Dispersity and spinnability: Why highly polydisperse polymer solutions are desirable for electrospinning. In POLYMER. ISSN 0032-3861, SEP 15 2014, vol. 55, no. 19, p. 4920-4931., WOS

ADCA267 *LAZÁR, Milan* - KLEINOVÁ, Angela - FIEDLEROVÁ, Agnesa - JANIGOVÁ, Ivica - BORSIG, Eberhard. Role of minority structures and mechanism of peroxide crosslinking of polyethylene. In Journal of Polymer Science. Part A.Polymer Chemistry, 2004, vol. 42, no. 3, p. 675 - 688. (2.226 - IF2003). (2004 - Current Contents). ISSN 0887-624X.

Citácie:

1. [1.1] WU, J.C. - WU, Z.L. - YANG, H.M. - ZHENG, Q. Crosslinking of low density polyethylene with octavinyl polyhedral oligomeric silsesquioxane as the crosslinker. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 83, p. 44030-44038., WOS

ADCA268 *LAZÁR, Milan* - *RADO, Rudolf* - RYCHLÝ, Jozef. Crosslinking of polyolefins. In Advances in Polymer Science, 1990, vol. 95, p. 149 - 197.

Citácie:

1. [1.1] ALMAADEED, M.A. - NOGELLOVA, Z. - JANIGOVA, I. - KRUPA, I. Improved mechanical properties of recycled linear low-density polyethylene composites filled with date palm wood powder. In MATERIALS & DESIGN. ISSN 0261-3069, JUN 2014, vol. 58, p. 209-216., WOS

2. [1.1] LIU, S.Q. - GONG, W.G. - ZHENG, B.C. The effect of peroxide cross-linking on the properties of low-density polyethylene. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, JAN 1 2014, vol. 53, no. 1, p. 67-77., WOS

3. [1.1] PORUBSKA, M. - JANIGOVA, I. - JOMOVA, K. - CHODAK, I. The effect of electron beam irradiation on properties of virgin and glass fiber-reinforced polyamide 6. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, SEP 2014, vol. 102, p. 159-166., WOS

ADCA269 LINSE, P. - *PALENČÁR, Peter* - BLEHA, Tomáš. A new two-state polymer folding model and its application to alfa-helical polyalanine. In Journal of physical chemistry B.Materials, surfaces, interfaces, and biophysical, 2011, vol. 115, p. 11448 - 11454. (3.603 - IF2010). (2011 - Current Contents, WOS, SCOPUS). ISSN 1520-6106.

Citácie:

1. [1.1] TSVETKOV, V.B. - SOLOV'EVA, A.B. - MELIK-NUBAROV, N.S. Computer modeling of the complexes of Chlorin e6 with amphiphilic polymers. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2014, vol. 16, no. 22, p. 10903-10913., WOS

ADCA270 *LÍŠKA, Juraj* - BORSIG, Eberhard. Polymer-analogous reactions on poly(2,6-dimethyl-1,4-phenylene oxide. In Journal of Macromolecular Science - Review in Macromolecular Chemistry and Physics, 1995, vol. C35, no. 3, p. 517-529.

Citácie:

1. [1.1] LIN, C.H. - TSAI, Y.J. - SHIH, Y.S. - CHANG, H.C. Catalyst-free synthesis of phosphinated poly(2,6-dimethyl-1,4-phenylene oxide) with high-T-g and low-dielectric characteristic. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JAN 2014, vol. 99, p. 105-110., WOS

ADCA271 *LÍŠKA, Juraj* - BORSIG, Eberhard. Chemical modification and degradation of poly(2,6-dimethyl-1,4-phenylene oxide). In Chemické listy, 1992, roč. 86, č. 12, s. 900 - 909. (1992 - Current Contents). ISSN 0009-2770.

Citácie:

1. [1.1] LIN, C.H. - TSAI, Y.J. - SHIH, Y.S. - CHANG, H.C. Catalyst-free synthesis of phosphinated poly(2,6-dimethyl-1,4-phenylene oxide) with high-T-g and low-dielectric characteristic. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JAN 2014, vol. 99, p. 105-110., WOS

ADCA272 *LÍŠKA, Juraj* - BORSIG, Eberhard - TKÁČ, I. A route to preparation of bromomethylated poly(2,6-dimethyl-1,4-phenylene oxide). In Die Angewandte Makromolekulare Chemie, 1993, vol. 211, p. 121 - 129. (0.400 - IF1992). (1993 - Current Contents). ISSN 0003-3146.

Citácie:

1. [1.1] LIN, C.H. - TSAI, Y.J. - SHIH, Y.S. - CHANG, H.C. Catalyst-free synthesis of phosphinated poly(2,6-dimethyl-1,4-phenylene oxide) with high-T-g and low-dielectric characteristic. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JAN 2014, vol. 99, p. 105-110., WOS

ADCA273 LOBOTKA, P. - KUNZO, P. - KOVÁČOVÁ, E. - VÁVRA, I. - KRIŽANOVÁ, Z. - ŠMATKO, V. - STEJSKAL, J. - KONYUSHENKO, E. N. - OMASTOVÁ, Mária - ŠPITALSKÝ, Zdenko - MIČUŠÍK, Matej - *KRUPA, Igor*. Thin polyaniline and polyaniline/carbon nanocomposite films for gas sensing. In Thin Solid Films : international journal on the science and technology of Thin and Thick Films, 2011, vol. 519, p.4123 - 4127. (1.909 - IF2010). (2011 - Current Contents). ISSN 0040-6090.

Citácie:

1. [1.1] LI, H.S. - DING, W.C. - SHI, Q.R. - LI, Y.J. - ZHANG, P.N. - FENG, C. - XIA, H.B. Synthesis of polyaniline-coated carbon nanotubes and study on their pH-sensitive conductivity. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, APR 2014, vol. 14, no. 4, p. 3087-3094., WOS

2. [1.1] MEKKI, A. - SAMANTA, S. - SINGH, A. - SALMI, Z. - MAHMOUD, R. - CHEHIMI, M.M. - ASWAL, D.K. Core/shell, protuberance-free multiwalled

carbon nanotube/polyaniline nanocomposites via interfacial chemistry of aryl diazonium salts. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, MAR 15 2014, vol. 418, p. 185-192., WOS

3. [1.1] MERIAN, T. - REDON, N. - ZUJOVIC, Z. - STANISAVLJEV, D. - WOJKIEWICZ, J.L. - GIZDAVIC-NIKOLAIDIS, M. Ultra sensitive ammonia sensors based on microwave synthesized nanofibrillar polyanilines. In SENSORS AND ACTUATORS B-CHEMICAL. ISSN 0925-4005, NOV 2014, vol. 203, p. 626-634., WOS

ADCA274 LOGAKIS, E. - PANDIS, Ch. - KYRITSIS, A. - PISSIS, P. - MIČUŠÍK, Matej - OMASTOVÁ, Mária - PIONTECK, J. Indirect methods for the determination of optimal processing conditions in conductive polypropylene/carbon nanotubes composites. In Chemical Physics Letters, 2010, vol. 498, p. 125 - 128. (2.291 - IF2009). (2010 - Current Contents). ISSN 0009-2614.

Citácie:

1. [1.1] GUPTA, P. - YADAV, S.K. - AGRAWAL, B. - GOYAL, R.N. A novel graphene and conductive polymer modified pyrolytic graphite sensor for determination of propranolol in biological fluids. In SENSORS AND ACTUATORS B-CHEMICAL. ISSN 0925-4005, DEC 1 2014, vol. 204, p. 791-798., WOS

2. [1.1] YADAV, S.K. - CHOUBEY, P.K. - AGRAWAL, B. - GOYAL, R.N. Carbon nanotube embedded poly 1,5-diaminonapthalene modified pyrolytic graphite sensor for the determination of sulfacetamide in pharmaceutical formulations. In TALANTA. ISSN 0039-9140, JAN 15 2014, vol. 118, p. 96-103., WOS

ADCA275 LOGAKIS, E. - PANDIS, Ch. - PEOGLOS, V. - PISSIS, P. - PIONTECK, J. - PÖTSCHKE, P. - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Electrical/dielectric properties and conduction mechanism in melt processed polyamide/multi-walled carbon nanotubes composites. In Polymer : the International Journal for the Science and Technology of Polymers, 2009, vol. 50, p. 5103 - 5111. (3.331 - IF2008). (2009 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] ARANBURU, N. - EGUIAZABAL, J.I. Electrically conductive multi-walled carbon nanotube-reinforced amorphous polyamide nanocomposites. In POLYMER COMPOSITES. ISSN 0272-8397, MAR 2014, vol. 35, no. 3, p. 587-595., WOS

2. [1.1] BOWEN, C.R. - BUSCHHORN, S. - ADAMAKI, V. Manufacture and characterization of conductor-insulator composites based on carbon nanotubes and thermally reduced graphene oxide. In PURE AND APPLIED CHEMISTRY. ISSN 0033-4545, MAY 2014, vol. 86, no. 5, p. 765-774., WOS

3. [1.1] JOUNI, M. - FAURE-VINCENT, J. - FEDORKO, P. - DJURADO, D. - BOITEUX, G. - MASSARDIER, V. Charge carrier transport and low electrical percolation threshold in multiwalled carbon nanotube polymer nanocomposites. In CARBON. ISSN 0008-6223, SEP 2014, vol. 76, p. 10-18., WOS

4. [1.1] KIM, C.I. - OH, S.M. - OH, K.M. - GANSUKH, E. - LEE, H.I. - JEONG, H.M. Graphenes for low percolation threshold in electroconductive nylon 6 composites. In POLYMER INTERNATIONAL. ISSN 0959-8103, JUN 2014, vol. 63, no. 6, p. 1003-1010., WOS

5. [1.1] MURAL, P.K.S. - MADRAS, G. - BOSE, S. Positive temperature coefficient and structural relaxations in selectively localized MWNTs in PE/PEO blends. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 10, p. 4943-4954., WOS

6. [1.1] PAWAR, S.P. - PATTABHI, K. - BOSE, S. Assessing the critical concentration of NH2 terminal groups on the surface of MWNTs towards chain

scission of PC in PC/SAN blends: effect on dispersion, electrical conductivity and EMI shielding. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 36, p. 18842-18852., WOS
7. [1.1] SAETIA, K. - SCHNORR, J.M. - MANNARINO, M.M. - KIM, S.Y. - RUTLEDGE, G.C. - SWAGER, T.M. - HAMMOND, P.T. Spray-layer-by-layer carbon nanotube/electrospun fiber electrodes for flexible chemiresistive sensor applications. In ADVANCED FUNCTIONAL MATERIALS. ISSN 1616-301X, JAN 2014, vol. 24, no. 4, p. 492-502., WOS
8. [1.1] VERSAVAUD, S. - REGNIER, G. - GOUADEC, G. - VINCENT, M. Influence of injection molding on the electrical properties of polyamide 12 filled with multi-walled carbon nanotubes. In POLYMER. ISSN 0032-3861, DEC 15 2014, vol. 55, no. 26, p. 6811-6818., WOS
9. [1.1] WANG, L.Z. - WANG, H. - DATTA, T. - YIN, M. - TIAN, X.Y. Distinct electrical effects of multi-walled carbon nanotubes in two composites. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, NOV 7 2014, vol. 116, no. 17., WOS
10. [1.2] LU, M.M.- CAO, W.Q.- SHI, H.L.- FANG, X.Y.- YANG, J.- HOU, Z.L.- JIN, H.B.- WANG, W.Z.- YUAN, J.- CAO, M.S. Multi-wall carbon nanotubes decorated with ZnO nanocrystals: Mild solution-process synthesis and highly efficient microwave absorption properties at elevated temperature. (2014) Journal of Materials Chemistry A, 2 (27), p. 10540-10547., Scopus

ADCA276 LOGAKIS, E. - PANDIS, Ch. - PEOGLOS, V. - PISSIS, P. - STERGIOU, Ch. - PIONTECK, J. - PÖTSCHKE, P. - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Structure-property relationships in polyamide 6/multi-walled carbon nanotubes nanocomposites. In Journal of Polymer Science. Part B.Polymer Physics, 2009, vol. 47, p. 764 - 774. (1.586 - IF2008). (2009 - Current Contents). ISSN 0887-6266.

Citácie:

1. [1.1] ARANBURU, N. - EGUIAZABAL, J.I. Electrically conductive multi-walled carbon nanotube-reinforced amorphous polyamide nanocomposites. In POLYMER COMPOSITES. ISSN 0272-8397, MAR 2014, vol. 35, no. 3, p. 587-595., WOS
2. [1.1] COSTA, P. - SILVA, J. - ANSON-CASAOS, A. - MARTINEZ, M.T. - ABAD, M.J. - VIANA, J. - LANCEROS-MENDEZ, S. Effect of carbon nanotube type and functionalization on the electrical, thermal, mechanical and electromechanical properties of carbon nanotube/styrene-butadiene-styrene composites for large strain sensor applications. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, MAY 2014, vol. 61, p. 136-146., WOS
3. [1.1] HAN, F. - AZDOUD, Y. - LUBINEAU, G. Computational modeling of elastic properties of carbon nanotube/polymer composites with interphase regions. Part I: Micro-structural characterization and geometric modeling. In COMPUTATIONAL MATERIALS SCIENCE. ISSN 0927-0256, JAN 2014, vol. 81, p. 641-651., WOS
4. [1.1] JAFARIESFAD, N. - RAMAZANI, S.A.A. - AZINFAR, B. Property investigation of polypropylene/multiwall carbon nanotube nanocomposites prepared via in situ polymerization. In POLYMER INTERNATIONAL. ISSN 0959-8103, APR 2014, vol. 63, no. 4, p. 689-694., WOS
5. [1.1] KAYNAK, C. - SANKAL, S. Effects of oxidative functionalized and aminosilanized carbon nanotubes on the crystallization behaviour of polyamide-6 nanocomposites. In POLYMER BULLETIN. ISSN 0170-0839, APR 2014, vol. 71, no. 4, p. 855-873., WOS
6. [1.1] KRITIKOS, G. Transition of the bounded polymer layer to a rigid amorphous phase: A computational and DSC study. In POLYMER. ISSN 0032-

3861, SEP 2 2014, vol. 55, no. 18, p. 4658-4670., WOS
7. [1.1] MAHMOOD, N. - ISLAM, M. - HAMEED, A. - SAEED, S. - KHAN, A.N. Polyamide-6-based composites reinforced with pristine or functionalized multi-walled carbon nanotubes produced using melt extrusion technique. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, MAY 2014, vol. 48, no. 10, p. 1197-1207., WOS
8. [1.1] PUROHIT, P.J. - WANG, D.Y. - WURM, A. - SCHICK, C. - SCHONHALS, A. Comparison of thermal and dielectric spectroscopy for nanocomposites based on polypropylene and Layered Double Hydroxide - Proof of interfaces. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, JUN 2014, vol. 55, p. 48-56., WOS
9. [1.1] SHOJAEI, A. - NOURBAKHSH, P. - FAGHIHI, M. An investigation on the structural characteristics and reinforcement of melt processed polyamide 66/multiwalled carbon nanotube composites. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, APR 2014, vol. 25, no. 4, p. 406-417., WOS
10. [1.1] XU, J.Z. - ZHONG, G.J. - HSIAO, B.S. - FU, Q. - LI, Z.M. Low-dimensional carbonaceous nanofiller induced polymer crystallization. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, MAR 2014, vol. 39, no. 3, p. 555-593., WOS

ADCA277 LUKÁČ, Ivan - *KÓSA, Csaba* - WEISS, R. G. Photo-crosslinking of polyethylene by mono-and diacetophenone derivatives and their precursors. In Photochemical and Photobiological Sciences, 2009, vol. 8, p. 1389 - 1400. (2.144 - IF2008). ISSN 1474-905X.

Citácie:

1. [1.1] LOPEZ-VILANOVA, L. - MARTINEZ, I. - CORRALES, T. - CATALINA, F. Photochemical crosslinking of poly-(ethylene-butyl-acrylate) copolymers functionalized with anthracene moieties by reactive extrusion. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, JUL 2014, vol. 56, p. 69-76., WOS

ADCA278 LUKÁČ, Ivan - LANGHALS, H. Synthesis and fluorescence of 2,3,4,4a,10a,11,12,13-octahydro-1.4a,10a,14-tetra azaviolanthrone derivatives. In Chemische Berichte-Recueil, 1983, vol. 116, p. 3524.

Citácie:

1. [1.1] BLAS-FERRANDO, V.M. - ORTIZ, J. - OHKUBO, K. - FUKUZUMI, S. - FERNANDEZ-LAZARO, F. - SASTRE-SANTOS, A. Submillisecond-lived photoinduced charge separation in a fully conjugated phthalocyanine-perylenebenzimidazole dyad. In CHEMICAL SCIENCE. ISSN 2041-6520, 2014, vol. 5, no. 12, p. 4785-4793., WOS

ADCA279 LUKEŠ, V. - BREZA, M. - VÉGH, D. - HRDLOVIČ, Pavol - KRAJČOVIČ, J. - LAURINC, V. Non-linear optical properties of new bridged bis-thienyls. i. Pyrazine-based bridges: theory, synthesis and spectra. In Synthetic Metals, 2001, vol. 124, no. 2-3, p. 279 - 286. (0.802 - IF2000). (2001 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] CHEN, W.Q. - SALIM, T. - FAN, H.J. - JAMES, L. - LAM, Y.M. - ZHANG, Q.C. Quinoxaline-functionalized C-60 derivatives as electron acceptors in organic solar cells. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 48, p. 25291-25301., WOS

ADCA280 LUKEŠ, V. - VÉGH, D. - HRDLOVIČ, Pavol - ŠTEFKO, M. - MATUSZNÁ, K. - LAURINC, V. Synthesis, theoretical characterisation and spectra of thiophene-fluorene pi-conjugated derivatives. In Synthetic Metals, 2005, vol. 148, no.2, p. 179 - 186. (1.278 - IF2004). (2005 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] DEMIRHAN, H. - ARSLAN, M. - KAYA, M.O. - KAYA, Y. - GENCER, N. - ARSLAN, O. In vitro inhibition of purified human carbonic anhydrase I and II by novel fluorene derivatives. In MACEDONIAN JOURNAL OF CHEMISTRY AND CHEMICAL ENGINEERING. ISSN 1857-5552, 2014, vol. 33, no. 2., WOS

ADCA281 LUKEŠ, V. - ILČIN, M. - KOLLÁR, Jozef - HRDLOVIČ, Pavol - CHMELA, Štefan. On the geometrical structure and spectral properties of pyrene monomer and sterically constrained intramolecular pyrene dimers. In Chemical Physics, 2010, vol. 377, iss.1 - 3, p. 123 - 131.

Citácie:

1. [1.2] XU, H.- LIU, X.- TANG, C.- FAN, Q.L.- HUANG, W. Research progress of pyrene-based organic semiconductor materials. (2014) Nanjing Youdian Daxue Xuebao (Ziran Kexue Ban)/Journal of Nanjing University of Posts and Telecommunications (Natural Science), 34 (3), p. 111-124., Scopus

ADCA282 *LUSTOŇ, Jozef* - KRONEK, Juraj - MARKUS, O. - JANIGOVÁ, Ivica - BÖHME, F. Synthesis and polymerization reactions of cyclic imino ethers. In Polymers for Advanced Technologies, 2007, vol. 18, p. 165-172. (1.406 - IF2006). (2007 - Current Contents). ISSN 1042-7147.

Citácie:

1. [1.1] SUN, H.Y. - YIN, T. - LI, Y. - ZHAO, J.B. - ZHANG, Z.Y. - ZHANG, J.Y. Synthesis and characterization of biodegradable alternating polyesteramides from mixed diamidediols and sebacic acid. In CHEMICAL RESEARCH IN CHINESE UNIVERSITIES. ISSN 1005-9040, FEB 2014, vol. 30, no. 1, p. 168-175., WOS

2. [1.1] YIN, T. - SUN, H.Y. - ZHAO, J.B. - ZHANG, Z.Y. - YANG, W.T. Synthesis and characterization of aliphatic polyesteramides mainly composed of alternating diester diamide units from N,N '-bis(2-Hydroxyethyl)-oxamide and diacids. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, APR 2014, vol. 54, no. 4, p. 756-765., WOS

ADCA283 *LUSTOŇ, Jozef - VAŠŠ, František*. Anionic copolymerization of cyclic ethers with cyclic anhydrides. In Advances in polymer science, 1984, vol. 56, p. 91. ISSN 0065-3195.

Citácie:

1. [1.1] KUDO, H. - OGAWA, H. - NARITOMI, K. - MURATA, Y. - KANO, H. - OCHI, M. Novel epoxy thermosetting resin system using epsilon-caprolactam. In CHEMISTRY LETTERS. ISSN 0366-7022, SEP 5 2014, vol. 43, no. 9, p. 1450-1452., WOS

2. [1.1] LIU, D.F. - WU, L.Y. - FENG, W.X. - ZHANG, X.M. - WU, J. - ZHU, L.Q. - FAN, D.D. - LU, X.Q. - SHI, Q. Ring-opening copolymerization of CHO and MA catalyzed by mononuclear [Zn(L-2)(H2O)] or trinuclear [Zn-3(L-2)(2)(OAc)(2)] complex based on the asymmetrical bis-Schiff-base ligand precursor. In JOURNAL OF MOLECULAR CATALYSIS A-CHEMICAL. ISSN 1381-1169, FEB 2014, vol. 382, p. 136-145., WOS

3. [1.1] LIU, Y.L. - XIAO, M. - WANG, S.J. - XIA, L. - HANG, D.M. - CUI, G.F. - MENG, Y.Z. Mechanism studies of terpolymerization of phthalic anhydride, propylene epoxide, and carbon dioxide catalyzed by ZnGA. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 19, p. 9503-9508., WOS

4. [1.1] VAN ZEE, N.J. - COATES, G.W. Alternating copolymerization of dihydrocoumarin and epoxides catalyzed by chromium salen complexes: a new route to functional polyesters. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2014, vol. 50, no. 48, p. 6322-6325., WOS

5. [1.1] WU, J. - LIU, D.F. - WU, L.Y. - ZHANG, X.M. - ZHU, L.Q. - FAN, D.D. - LU, X.Q. - SHI, Q. Electronic and steric effects of substituents in series of Zn2+ asymmetrical bis-Schiff-base ligands complexes on catalytic ring-opening

copolymerization of CHO and MA. In JOURNAL OF ORGANOMETALLIC CHEMISTRY. ISSN 0022-328X, JAN 1 2014, vol. 749, p. 302-311., WOS
6. [1.1] WU, L.Y. - FAN, D.D. - LU, X.Q. - LU, R. Ring-opening copolymerization of cyclohexene oxide and maleic anhydride catalyzed by mononuclear [Zn(L)(H2O)] or binuclear [Zn-2(L)(OAc)(2)(H2O)] complex based on the Salen-type Schiff-base ligand. In CHINESE JOURNAL OF POLYMER SCIENCE. ISSN 0256-7679, JUN 2014, vol. 32, no. 6, p. 768-777., WOS
7. [1.1] ZHANG, X.M. - LIU, Y.J. - CHEN, Y. - ZHANG, Z. - FAN, D.D. - LU, X.Q. Ring-opening copolymerization of CHO (cyclohexene oxide) and MA (maleic anhydride) catalyzed by the Co(III)-Salalen complex. In INORGANIC CHEMISTRY COMMUNICATIONS. ISSN 1387-7003, OCT 2014, vol. 48, p. 69-72., WOS

ADCA284 *LUSTOŇ, Jozef* - KRONEK, Juraj - BOHME, F. Synthesis and polymerization reactions of cyclic imino ethers. I. Ring-opening homopolyaddition of AB-type hydroxyphenyl-substituted 2-oxazolines. In Journal of Polymer Science. Part A.Polymer Chemistry, 2006, vol. 44, no.1, p. 343 - 355. (4.033 - IF2005). (2006 - Current Contents). ISSN 0887-624X.

Citácie:

1. [1.1] HU, F.Y. - XIE, S.L. - JIANG, L.M. - SHEN, Z.Q. Living cationic ring-opening polymerization of 2-oxazolines initiated by rare-earth metal triflates. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 104, p. 59917-59926., WOS
2. [1.1] ROTSTEIN, B.H. - WEY, H.Y. - SHOUP, T.M. - WILSON, A.A. - LIANG, S.H. - HOOKER, J.M. - VASDEV, N. PET Imaging of fatty acid amide hydrolase with [F-18]DOPP in nonhuman primates. In MOLECULAR PHARMACEUTICS. ISSN 1543-8384, NOV 2014, vol. 11, no. 11, p. 3832-3838., WOS

ADCA285 *LUSTOŇ, Jozef* - KRONEK, Juraj. Synthesis and polymerization reactions of cyclic imino ethers. II. Preparation of novel hyperbranched polymers from AB2 monomers of 2-oxazoline type with nonequivalent B units. In Polymer Engineering and Science, 2007, vol. 47, p.1272-1279. (1.414 - IF2006). (2007 - Current Contents). ISSN 0032-3888.

Citácie:

1. [1.1] SUN, H.Y. - YIN, T. - LI, Y. - ZHAO, J.B. - ZHANG, Z.Y. - ZHANG, J.Y. Synthesis and characterization of biodegradable alternating polyesteramides from mixed diamidediols and sebacic acid. In CHEMICAL RESEARCH IN CHINESE UNIVERSITIES. ISSN 1005-9040, FEB 2014, vol. 30, no. 1, p. 168-175., WOS
2. [1.1] YIN, T. - SUN, H.Y. - ZHAO, J.B. - ZHANG, Z.Y. - YANG, W.T. Synthesis and characterization of aliphatic polyesteramides mainly composed of alternating diester diamide units from N,N '-bis(2-Hydroxyethyl)-oxamide and diacids. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, APR 2014, vol. 54, no. 4, p. 756-765., WOS
3. [1.2] HUANG, X.- ZHENG, S.- KIM, I. Hyperbranched polymers and dendrimers as templates for organic/inorganic hybrid nanomaterials. (2014) Journal of Nanoscience and Nanotechnology, 14 (2), p. 1631-1646. DOI: 10.1166/jnn.2014.8750, Scopus

ADCA286 LUYT, A. S. - *KRUPA, Igor*. Thermal behaviour of low and high molecular weight paraffin waxes used for designing phase change materials. In Thermochimica Acta, 2008, vol.467, p. 117-120. (1.562 - IF2007). (2008 - Current Contents). ISSN 0040-6031.

Citácie:

1. [1.1] WEBER, A. - RESCH, K. Thermotropic glazings for overheating protection. I. Material preselection, formulation, and light-shielding efficiency. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014,

vol. 131, no. 4., WOS

ADCA287 LUYT, A. S. - ***KRUPA, Igor*** - ASSUMPTION, H. J. - AHMAD, E. E. M. - MOFOKENG, J. P. Blends of polyamide 12 and maleic anhydride grafted paraffin wax as potential phase change materials. In Polymer Testing, 2010, vol. 29, p. 100 - 106. (1.667 - IF2009). (2010 - Current Contents). ISSN 0142-9418.

Citácie:

1. [1.1] DE CAMPOS, B.M. - CALEFI, P.S. - CIUFFI, K.J. - DE FARIA, E.H. - ROCHA, L.A. - NASSAR, E.J. - SILVA, J.V.L. - OLIVEIRA, M.F. - MAIA, I.A. Coating of polyamide 12 by sol-gel methodology. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, FEB 2014, vol. 115, no. 2, p. 1029-1035., WOS

2. [1.1] MURRAY, K.A. - KENNEDY, J.E. - MCEVOY, B. - VRAIN, O. - RYAN, D. - COWMAN, R. - HIGGINBOTHAM, C.L. Effects of temperature, packaging and electron beam irradiation processing conditions on the property behaviour of Poly (ether-block-amide) blends. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, JUN 1 2014, vol. 39, p. 380-394., WOS

3. [1.1] PIELICHOWSKA, K. - PIELICHOWSKI, K. Phase change materials for thermal energy storage. In PROGRESS IN MATERIALS SCIENCE. ISSN 0079-6425, AUG 2014, vol. 65, p. 67-123., WOS

4. [1.1] TODROS, S. - NATALI, A.N. - PACE, G. - DI NOTO, V. Effect of steam on the structural and morphological stability of renewable poly(ether-block-amide)s. In JOURNAL OF POLYMER SCIENCE PART B-POLYMER PHYSICS. ISSN 0887-6266, MAR 1 2014, vol. 52, no. 5, p. 409-418., WOS

5. [1.1] WEBER, A. - SCHMID, A. - RESCH, K. Thermotropic glazings for overheating protection. II. Morphology and structure-property relationships. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS

6. [1.2] LI, Z.- XU, L.X.- LU, C.L.- LIU, G.Z.- LI, X.Y. Internal structure changes of nylon 12 in balloon forming process. (2014) Applied Mechanics and Materials, 528, p. 153-161., Scopus

ADCA288 LUYT, A. S. - ***KRUPA, Igor***. Phase change materials formed by uv curable epoxy matrix and Fischer-Tropsch paraffin wax. In Energy Conversion and Management, 2009, vol. 50, p. 57- 61. (1.813 - IF2008). (2009 - Current Contents). ISSN 0196-8904.

Citácie:

1. [1.1] PIELICHOWSKA, K. - PIELICHOWSKI, K. Phase change materials for thermal energy storage. In PROGRESS IN MATERIALS SCIENCE. ISSN 0079-6425, AUG 2014, vol. 65, p. 67-123., WOS

2. [1.2] BRUNO, F.- BELUSKO, M.- LIU, M.- TAY, N.H.S. Using solid-liquid phase change materials (PCMs) in thermal energy storage systems. (2014) Advances in Thermal Energy Storage Systems: Methods and Applications, p. 201-246. DOI: 10.1533/9781782420965.2.201, Scopus

ADCA289 MACKO, T. - HUNKELER, D. - BEREK, Dušan. Liquid chromatography of synthetic polymers under critical conditions. The case of single eluents and role of theta conditions. In Macromolecules, 2002, vol.35, no. 5, p. 1797 - 1804. (3.733 - IF2001). (2002 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] FU, C. - ZHU, Y.T. - SHI, D. Separation and characterization of block copolymers by liquid chromatography at the critical condition. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, JAN 2014, vol. 26, no. 1, p. 140-151., WOS

2. [1.1] MALIK, M.I. - MAHBOOB, T. - AHMED, S. Characterization of poly(2-

vinylpyridine)-block-poly(methyl methacrylate) copolymers and blends of their homopolymers by liquid chromatography at critical conditions. In ANALYTICAL AND BIOANALYTICAL CHEMISTRY. ISSN 1618-2642, OCT 2014, vol. 406, no. 25, p. 6311-6317., WOS

3. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

4. [1.1] SINHA, P. - HILLER, W. - PASCH, H. HPLC-H-1-NMR Characterization of polystyrene-block-polyisoprene copolymers: LCCC-H-1-NMR using a single mobile phase. In MACROMOLECULAR SYMPOSIA. ISSN 1022-1360, MAR 2014, vol. 337, no. 1, p. 44-50., WOS

ADCA290 MALÍKOVÁ, Marta - RYCHLÝ, Jozef - RYCHLÁ, Lýdia - CSOMOROVÁ, Katarína - JANIGOVÁ, Ivica - WILDE, H.-W. Accesing the progress of degradation in polyurethanes by chemiluminescence.1. Unstabilised polyurethane films. In Polymer Degradation and Stability, 2010, vol. 95, no. 12, p.2367 - 2375. (2.154 - IF2009). (2010 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] WANG, M.Y. - ZHANG, X.X. - ZHANG, W. - LU, C.H. - YUAN, G.P. From thermosetting to thermoplastic: A novel one-pot approach to recycle polyurethane wastes via reactive compounding With Diethanolamine. In PROGRESS IN RUBBER PLASTICS AND RECYCLING TECHNOLOGY. ISSN 1477-7606, 2014, vol. 30, no. 4, p. 221-236., WOS

2. [1.1] XIANG, K.W. - WANG, X.A. - HUANG, G.S. - ZHENG, J. - HUANG, J.Y. - LI, G.X. Thermogravimetric studies of styrene-butadiene rubber (SBR) after accelerated thermal aging. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, JAN 2014, vol. 115, no. 1, p. 247-254., WOS

3. [1.2] SOARES, R.R.- CARONE, C.- EINLOFT, S.- LIGABUE, R.- MONTEIRO, W.F. Synthesis and characterization of waterborne polyurethane/ZnO composites. (2014) Polymer Bulletin, 71 (4), p. 829-838. DOI: 10.1007/s00289-014-1095-4, Scopus

ADCA291 MARCINČIN, A. - HRICOVÁ, M. - UJHELYOVÁ, A.- BREJKA, O. - MICHLÍK, P. - DULÍKOVÁ, M. - STRECKÁ, Z. - CHMELA, Štefan. Effect of inorganic nano-fillers on the UV barrier properties, photo and thermal degradation of polypropylene fibres. In Fibres & Textiles in Eastern Europe, 2009, vol. 17, no. 6, p. 29 - 35. (0.439 - IF2008). ISSN 1230-3666.

Citácie:

1. [1.1] ASLANZADEH, S. - RAHBAR, R.S. - NAZI, M. Accelerating role of clay in photo-oxidation of polypropylene/clay multifilament yarns. In CHINESE JOURNAL OF POLYMER SCIENCE. ISSN 0256-7679, MAY 2014, vol. 32, no. 5, p. 609-619., WOS

ADCA292 MARCHESSAULT, R. H. - BLEHA, Tomáš - DESLANDES, Y. - REVOL, J. F. Conformation and crystalline structure of (2-1)-beta-D-fructofuranan (nulin). In Canadian journal of chemistry, 1980, vol. 58, p. 2415. ISSN 0008-4042.

Citácie:

1. [1.1] SAAVEDRA-LEOS, M.Z. - LEYVA-PORRAS, C. - MARTINEZ-GUERRA, E. - PEREZ-GARCIA, S.A. - AGUILAR-MARTINEZ, J.A. - ALVAREZ-SALAS, C. Physical properties of inulin and inulin-orange juice: Physical characterization and technological application. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, MAY 25 2014, vol. 105, p. 10-19., WOS

ADCA293 MARKO, V. - ŠOLTÉS, L. - *NOVÁK, Ivan*. Selective solid-phase extraction of basic drugs by C.SUB.18-silica. Discussion of possible interactions. In Journal of

Pharmaceutical and Biomedical Analysis, 1991, vol. 8, no. 3, p. 297-301. ISSN 0731-7085.

Citácie:

1. [1.1] RAJAGOPALAN, P. - TRACEY, H. - CHEN, Z. - BANDYOPADHYAYA, A. - VEERARAGHAVAN, S. - RAJAGOPALAN, D. R. - SALVEMINI, D. - MCPHEE, I. - VISWANADHA, S. - RAJAGOPALAN, R. DDD-028: A potent potential non-opioid, non-cannabinoid analgesic for neuropathic and inflammatory pain. In BIOORGANIC & MEDICINAL CHEMISTRY LETTERS. ISSN 0960-894X, 2014, vol. 24, no. 14, p. 3088-3091., WOS

ADCA294 MATSUMOTO, A. - KODAMA, K. - AOTA, H. - CAPEK, Ignác. Kinetics of emulsion crosslinking polymerization and copolymerization of allyl methacrylate. In European Polymer Journal, 1999, vol. 35, p. 1509-1517. (0.600 - IF1998). (1999 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] RATCHA, A. - YOOSUK, B. - KONGPARAKUL, S. Grafted methyl methacrylate and butyl methacrylate onto natural rubber foam for oil sorbent. In ADVANCES IN RUBBER. ISSN 1022-6680, 2014, vol. 844, p. 385-390., WOS

2. [1.2] YUSOF, H.- NAURAH, M.I.- LIYANA, M.A.N. Polyethylene glycol diacrylate microgels from irradiated micelles. (2014) Advanced Materials Research, 1024, p. 316-319. DOI: 10.4028/www.scientific.net/AMR.1024.316, Scopus

ADCA295 MAYO-PEDROSA, M. - ALVAREZ-LORENZO, C. - LACÍK, Igor - MARTINEZ-PACHECO, R. - CONCHEIRO, A. Sustained release pellets based on poly(N-isopropyl acrylamide): Matrix and In Situ photopolymerization-coated systems. In Journal of Pharmaceutical Sciences, 2007, vol. 96, p. 93-105. ISSN 0022-3549.

Citácie:

1. [1.1] KADUNC, N.O. - SIBANC, R. - DREU, R. - LIKAR, B. - TOMAZEVIC, D. In-line monitoring of pellet coating thickness growth by means of visual imaging. In INTERNATIONAL JOURNAL OF PHARMACEUTICS. ISSN 0378-5173, AUG 15 2014, vol. 470, no. 1-2, p. 8-14., WOS

ADCA296 MIČUŠÍK, Matej - *NEDELČEV, Tomáš* - OMASTOVÁ, Mária - *KRUPA, Igor* - OLEJNÍKOVÁ, K. - FEDORKO, P. - CHEHIMI, Mohamed M. Conductive polymer-coated textiles: The role of fabric treatment by pyrrole-functionalized triethoxysilane. In Synthetic Metals, 2007, vol. 157, p. 914-923. (1.685 - IF2006). (2007 - Current Contents, SCOPUS). ISSN 0379-6779.

Citácie:

1. [1.1] CHENG, Y.L. - WANG, Y.K. - CHEN, P. - DENG, S.B. - RUAN, R. Non-thermal plasma assisted polymer surface modification and synthesis: A review. In INTERNATIONAL JOURNAL OF AGRICULTURAL AND BIOLOGICAL ENGINEERING. ISSN 1934-6344, APR 2014, vol. 7, no. 2, p. 1-9., WOS

2. [1.1] SHEN, Y. - ZHANG, H.F. - WANG, L.M. - XU, L.H. - DING, Y. Fabrication of electromagnetic shielding polyester fabrics with carboxymethyl chitosan-palladium complexes activation. In FIBERS AND POLYMERS. ISSN 1229-9197, JUL 2014, vol. 15, no. 7, p. 1414-1421., WOS

ADCA297 MIČUŠÍK, Matej - OMASTOVÁ, Mária - PIONTECK, J. - PANDIS, Ch. - LOGAKIS, E. - PISSIS, P. Influence of surface treatment of multiwall carbon nanotubes on the properties of polypropylene/carbon nanotubes nanocomposites. In Polymers for Advanced Technologies, 2011, vol. 22, p. 38 - 47. (1.776 - IF2010). (2011 - Current Contents). ISSN 1042-7147.

Citácie:

1. [1.1] JAFARIESFAD, N. - RAMAZANI, S.A.A. - AZINFAR, B. Property

investigation of polypropylene/multiwall carbon nanotube nanocomposites prepared via in situ polymerization. In POLYMER INTERNATIONAL. ISSN 0959-8103, APR 2014, vol. 63, no. 4, p. 689-694., WOS
2. [1.1] JOUNI, M. - BOUDENNE, A. - BOITEUX, G. - MASSARDIER, V. - GARNIER, B. Significant enhancement of electrical and thermal conductivities of polyethylene carbon nanotube composites by the addition of a low amount of silver nanoparticles. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, SEP 2014, vol. 25, no. 9, p. 1054-1059., WOS
3. [1.1] XU, J.Z. - ZHONG, G.J. - HSIAO, B.S. - FU, Q. - LI, Z.M. Low-dimensional carbonaceous nanofiller induced polymer crystallization. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, MAR 2014, vol. 39, no. 3, p. 555-593., WOS

ADCA298 MIČUŠÍK, Matej - OMASTOVÁ, Mária - BOUKERMA, K. - ALBOUY, A. - CHEHIMI, M. M. - TRCHOVÁ, M. - FEDORKO, P. Preparation, surface chemistry, and electrical conductivity of novel silicon carbide-polypyrrole composites containing an anionic surfactants. In Polymer Engineering and Science, 2007, vol. 47, p. 1198 - 1206. (1.414 - IF2006). (2007 - Current Contents). ISSN 0032-3888.

Citácie:

1. [1.1] MERLINI, C. - BARRA, G.M.D. - ARAUJO, T.M. - PEGORETTI, A. The effect of compressive stress on the electrically resistivity of poly(vinylidene fluoride)/polypyrrole blends. In SYNTHETIC METALS. ISSN 0379-6779, OCT 2014, vol. 196, p. 186-192., WOS
2. [1.1] MERLINI, C. - BARRA, G.M.O. - ARAUJO, T.M. - PEGORETTI, A. Electrically pressure sensitive poly(vinylidene fluoride)/polypyrrole electrospun mats. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 30, p. 15749-15758., WOS

ADCA299 MIČUŠÍK, Matej - BONNEFOND, A. - PAULIS, M. - LEIZA, J. R. Synthesis of waterborne acrylic/clay nanocomposites by controlled surface initiation from macroinitiator modified montmorillonite. In European Polymer Journal, 2012, vol. 48, p. 896 - 905. (2.739 - IF2011). (2012 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] DANILOSKA, V. - KEDDIE, J.L. - ASUA, J.M. - TOMOVSKA, R. MoS2 Nanoplatelet fillers for enhancement of the properties of waterborne pressure-sensitive adhesives. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, DEC 24 2014, vol. 6, no. 24, p. 22640-22648., WOS

ADCA300 MIČUŠÍK, Matej - OMASTOVÁ, Mária - *KRUPA, Igor* - PROKEŠ, J. - PISSIS, P. - LOGAKIS, E. - PANDIS, Ch. - PÖTSCHKE, P. - PIONTECK, J. A comparative study on the electrical and mechanical behaviour of multi-walled carbon nanotube composites prepared by diluting a masterbatch with various types of polypropylenes. In Journal of Applied Polymer Science, 2009, vol. 113, p. 2536 - 2551. (1.400 - IF2008). (2009 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] ABBASI, S. - DERDOURI, A. - CARREAU, P.J. Carbon nanotube conductive networks through the double percolation concept in polymer systems. In INTERNATIONAL POLYMER PROCESSING. ISSN 0930-777X, MAR 2014, vol. 29, no. 1, p. 13-27., WOS
2. [1.1] ARAVAND, M. - LOMOV, S.V. - VERPOEST, I. - GORBATIKH, L. Evolution of carbon nanotube dispersion in preparation of epoxy-based composites: From a masterbatch to a nanocomposite. In EXPRESS POLYMER LETTERS. ISSN 1788-618X, AUG 2014, vol. 8, no. 8, p. 596-608., WOS
3. [1.1] BESCO, S. - LORENZETTI, A. - HRELJA, D. - BOARETTI, C. - ROSO,

M. - FERRI, D. - MODESTI, M. Influence of melt viscosity on the structure and properties of electrically conductive nanocomposites produced by masterbatch process. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, JUL 2014, vol. 299, no. 7, p. 814-824., WOS

4. [1.1] GENTILE, G. - AMBROGI, V. - CERRUTI, P. - DI MAIO, R. - NASTI, G. - CARFAGNA, C. Pros and cons of melt annealing on the properties of MWCNT/polypropylene composites. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 56-64., WOS

5. [1.1] LANDA, M. - CANALES, J. - FERNANDEZ, M. - MUNOZ, M.E. - SANTAMARIA, A. Effect of MWCNTs and graphene on the crystallization of polyurethane based nanocomposites, analyzed via calorimetry, rheology and AFM microscopy. In POLYMER TESTING. ISSN 0142-9418, MAY 2014, vol. 35, p. 101-108., WOS

6. [1.1] LIU, S.Y. - WANG, Z. - LU, G.M. - WANG, Y. - ZHANG, Y. - HE, X.D. - ZHAO, L.X. - LI, Z.W. - XUAN, L.C. - ZHAO, D.Y. Interfacial modification of single-walled carbon nanotubes for high-loading-reinforced polypropylene composites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 5 2014, vol. 131, no. 3., WOS

7. [1.1] LIVELY, B. - SMOOT, W.R. - SANGARI, S.S. - ZHONG, W.H. A quantitative analysis tool for quality assessment of nanocomposite masterbatches. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, AUG 2014, vol. 48, no. 20, p. 2527-2536., WOS

8. [1.1] MAYORAL, B. - LOPES, J. - MCNALLY, T. Influence of processing parameters during small-scale batch melt mixing on the dispersion of MWCNTs in a poly(propylene) Matrix. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, MAY 2014, vol. 299, no. 5, p. 609-621., WOS

9. [1.1] PEDDINI, S.K. - BOSNYAK, C.P. - HENDERSON, N.M. - ELLISON, C.J. - PAUL, D.R. Nanocomposites from styrene-butadiene rubber (SBR) and multiwall carbon nanotubes (MWCNT) part 1: Morphology and rheology. In POLYMER. ISSN 0032-3861, JAN 14 2014, vol. 55, no. 1, SI, p. 258-270., WOS

10. [1.1] VEGA, J.F. - DA SILVA, Y. - VICENTE-ALIQUE, E. - NUNEZ-RAMIREZ, R. - TRUJILLO, M. - ARNAL, M.L. - MULLER, A.J. - DUBOIS, P. - MARTINEZ-SALAZAR, J. Influence of chain branching and molecular weight on melt rheology and crystallization of polyethylene/carbon nanotube nanocomposites. In MACROMOLECULES. ISSN 0024-9297, AUG 26 2014, vol. 47, no. 16, p. 5668-5681., WOS

11. [1.1] ZHONG, J. - ISAYEV, A.I. - HUANG, K.Y. Influence of ultrasonic treatment in PP/CNT composites using masterbatch dilution method. In POLYMER. ISSN 0032-3861, APR 1 2014, vol. 55, no. 7, p. 1745-1755., WOS

12. [1.2] BESCO, S.- HRELJA, D.- LORENZETTI, A.- ROSO, M.- BOARETTI, C.- RABACHIN, R.- MODESTI, M. Influence of melt viscosity on the properties of polypropylene/carbon nanotube nanocomposites obtained by melt mixing process. (2014) Society of Plastics Engineers - Technical Conference and Exhibition of the Society of Plastics Engineers, ANTEC DUBAI 2014, p. 99-102., Scopus

13. [1.2] LIN, L.Y.- SCHLARB, A.K. Vibration welding of carbon nanotube reinforced polyoxymethylene: Mophology and mechanical property. (2014) 16th European Conference on Composite Materials, ECCM 2014, Scopus

14. [1.2] PALZA, H.- DELGADO, K.- PINOCHET, I. Improving the metal ion release from nanoparticles embedded in a polypropylene matrix for antimicrobial applications. (2014) Journal of Applied Polymer Science, 132 (1), art. no. 41232, Scopus

15. [1.2] ZHONG, J.- ISAYEV, A.I.- HUANG, K. Influence of ultrasonic treatment

in PP/CNT composites using masterbatch dilution method. (2014) Annual Technical Conference - ANTEC, Conference Proceedings, 1 (January), p. 908-916., Scopus

ADCA301 MIČUŠÍK, Matej - OMASTOVÁ, Mária - PROKEŠ, J. - *KRUPA, Igor*. Mechanical and electrical properties of composites based on thermoplastic matrices and condustive cellulose fibers. In Journal of Applied Polymer Science, 2006, vol. 101, no. 1, p. 133 - 142. (1.072 - IF2005). (2006 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] SILVA, M.J. - SANCHES, A.O. - MEDEIROS, E.S. - MATTOSO, L.H.C. - MCMAHAN, C.M. - MALMONGE, J.A. Nanocomposites of natural rubber and polyaniline-modified cellulose nanofibrils. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, JUL 2014, vol. 117, no. 1, p. 387-392., WOS

2. [1.2] ARAUJO, J.R.- ADAMO, C.B.- ROBERTIS, E.- KUZNETSOV, A.- ARCHANJO, B.- ACHETE, C.A.- DE PAOLI, M.A. Polyaniline coated curauá fibres in polyamide-6 composites: The effect of fibre surface modification on the crystallographic properties. (2014) WIT Transactions on the Built Environment, 137, p. 589-598. DOI: 10.2495/HPSM140541, Scopus

ADCA302 MLYNARČÍKOVÁ, Z. - KAEMPFER, D. - THOMANN, R. - MULHAUPT, R. - BORSIG, Eberhard - MARCINČIN, A Syndiotactic poly(propylene/organoclay nanocomposite fibers: Influence of the nano-filler and the compatibilizer on the fiber properties. In Polymers for Advanced Technologies, 2005, vol. 16, no. 5, p. 362 - 369. (1.083 - IF2004). (2005 - Current Contents). ISSN 1042-7147.

Citácie:

1. [1.1] ASLANZADEH, S. - RAHBAR, R.S. - NAZI, M. Accelerating role of clay in photo-oxidation of polypropylene/clay multifilament yarns. In CHINESE JOURNAL OF POLYMER SCIENCE. ISSN 0256-7679, MAY 2014, vol. 32, no. 5, p. 609-619., WOS

2. [1.2] POLSHCHIKOV, S.V.- NEDOREZOVA, P.M.-KOMKOVA, O.M.- KLYAMKINA, A.N.- SHCHEGOLIKHIN, A.N.- KRASHENINNIKOV, V.G.- ALADYSHEV, A.M.- SHEVCHENKO, V.G.- MURADYAN, V.E. Synthesis by polymerization in situ and properties of composite materials based on syndiotactic polypropylene and carbon nanofillers. (2014) Nanotechnologies in Russia, 9 (3-4), p. 175-183. DOI: 10.1134/S1995078014020128, Scopus

ADCA303 MLYNARČÍKOVÁ, Z. - BORSIG, Eberhard - LEGÉŇ, J. - MARCINČIN, A. - ALEXY, P. Influence of the composition of polypropylene/organoclay nanocomposite fibers on their tensile strength. In Journal of Macromolecular Science : Part A: Pure & Applied Chemistry, 2005, vol. A42, no. 5, p. 543 - 554. (0.700 - IF2004). (2005 - Current Contents). ISSN 1060-1325.

Citácie:

1. [1.1] ASLANZADEH, S. - RAHBAR, R.S. - NAZI, M. Accelerating role of clay in photo-oxidation of polypropylene/clay multifilament yarns. In CHINESE JOURNAL OF POLYMER SCIENCE. ISSN 0256-7679, MAY 2014, vol. 32, no. 5, p. 609-619., WOS

ADCA304 MNGOMEZULU, M. E. - LUYT, A. S. - *KRUPA, Igor*. Structure and properties of phase change materials based on HDPE, soft Fischer-Tropsch paraffin wax, and wood flour. In Journal of Applied Polymer Science, 2010, vol. 118, p. 1541 - 1551. (1.203 - IF2009). (2010 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] CHEN, F. - WOLCOTT, M.P. Miscibility studies of paraffin/polyethylene blends as form-stable phase change materials. In EUROPEAN POLYMER

JOURNAL. ISSN 0014-3057, MAR 2014, vol. 52, p. 44-52., WOS
2. [1.1] MU, M.L. - BASHEER, P.A.M. - BAI, Y. - MCNALLY, T. Shape stabilised phase change materials (SSPCMs): High density polyethylene and hydrocarbon Waxes. In PROCEEDINGS OF PPS-29: THE 29TH INTERNATIONAL CONFERENCE OF THE POLYMER - CONFERENCE PAPERS. ISSN 0094-243X, 2014, vol. 1593, p. 687-690., WOS

ADCA305 MNGOMEZULU, M. E. - LUYT, A. S. - ***KRUPA, Igor***. Structure and properties of phase-change materials based on high-density polyethylene, hard Fischer-Tropsch paraffin wax, and wood flour. In Polymer Composites, 2011, vol. 32, iss. 8, p. 1159 - 1163. (0.998 - IF2010). (2011 - Current Contents). ISSN 0272-8397.

Citácie:

1. [1.1] CHEN, F. - WOLCOTT, M.P. Miscibility studies of paraffin/polyethylene blends as form-stable phase change materials. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, MAR 2014, vol. 52, p. 44-52., WOS

ADCA306 MOLEFI, J. A. - LUYT, A. S. - ***KRUPA, Igor***. Comparison of LDPE, LLDPE and HDPE as matrices for phase change materials based on a soft Fischer-Tropsch paraffin wax. In Thermochimica Acta, 2010, vol. 500, p. 88 - 92. (1.742 - IF2009). (2010 - Current Contents). ISSN 0040-6031.

Citácie:

1. [1.1] BAHRAMIAN, A.R. - AHMADI, L.S. - KOKABI, M. Performance evaluation of polymer/clay nanocomposite thermal protection systems based on polyethylene glycol phase change material. In IRANIAN POLYMER JOURNAL. ISSN 1026-1265, MAR 2014, vol. 23, no. 3, p. 163-169., WOS
2. [1.1] CHEN, F. - WOLCOTT, M.P. Miscibility studies of paraffin/polyethylene blends as form-stable phase change materials. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, MAR 2014, vol. 52, p. 44-52., WOS
3. [1.1] MU, M.L. - BASHEER, P.A.M. - BAI, Y. - MCNALLY, T. Shape stabilised phase change materials (SSPCMs): High density polyethylene and hydrocarbon waxes. In PROCEEDINGS OF PPS-29: THE 29TH INTERNATIONAL CONFERENCE OF THE POLYMER - CONFERENCE PAPERS. ISSN 0094-243X, 2014, vol. 1593, p. 687-690., WOS

ADCA307 MOLEFI, J. A. - LUYT, A. S. - ***KRUPA, Igor***. Investigation of thermally conducting phase-change materials based on polyethylene/wax blends filled with copper particles. In Journal of Applied Polymer Science, 2010, vol. 116, p. 1766 - 1774. (1.203 - IF2009). (2010 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] SREETHAWONG, T. - SHAH, K.W. - ZHANG, S.Y. - YE, E.Y. - LIM, S.H. - MAHESWARAN, U. - MAO, W.Y. - HAN, M.Y. Optimized production of copper nanostructures with high yields for efficient use as thermal conductivity-enhancing PCM dopant. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 10, p. 3417-3423., WOS

ADCA308 MORAITIS, G. - ŠPITALSKÝ, Zdenko - RAVANI, F. - SIOKOU, A. - GALIOTIS, C. Electrochemical oxidation of multi-wall carbon nanotubes. In Carbon, 2011, vol. 49, p. 2702 - 2708. (4.893 - IF2010). (2011 - Current Contents). ISSN 0008-6223.

Citácie:

1. [1.1] DASSIOS, K.G. Carbon nanotube-reinforced ceramic matrix composites: Processing and properties. In HIGH TEMPERATURE CERAMIC MATRIX COMPOSITES 8: CERAMIC TRANSACTIONS, VOL 248. ISSN 1042-1122, 2014, vol. 248, p. 133-157., WOS
2. [1.1] LIKODIMOS, V. - STERIOTIS, T.A. - PAPAGEORGIOU, S.K. - ROMANOS, G.E. - MARQUES, R.R.N. - ROCHA, R.P. - FARIA, J.L. - PEREIRA,

M.F.R. - FIGUEIREDO, J.L. - SILVA, A.M.T. - FALARAS, P. Controlled surface functionalization of multiwall carbon nanotubes by HNO3 hydrothermal oxidation. In CARBON. ISSN 0008-6223, APR 2014, vol. 69, p. 311-326., WOS

ADCA309 MORCH, Y. A. - QI, M. - GUNDERSEN, P. O. M. - FORMO, K.- LACÍK, Igor - SKJAK-BRAEK, G. - OBERHOLZER, J. - STRAND, B. L. Binding and leakage of barium in alginate microbeads. In Journal of Biomedical Materials Research : Part A, 2012, vol. 100A, p. 2939 - 2947. (2.625 - IF2011). (2012 - Current Contents). ISSN 1549-3296.

Citácie:

1. [1.1] HARVESTINE, J.N. - MIKULSKI, B.A. - MAHUTA, K.M. - CROUSE, J.Z. - GUO, X.R. - LEE, J.C. - MIDELFORT, K.S. - CHEN, J.H. - ZHANG, W.J. A Novel red-blood-cell-shaped pectin-oligochitosan hydrogel system. In PARTICLE & PARTICLE SYSTEMS CHARACTERIZATION. ISSN 0934-0866, SEP 2014, vol. 31, no. 9, p. 955-959., WOS

2. [1.1] KRAVCHENKO, J. - DARRAH, T.H. - MILLER, R.K. - LYERLY, H.K. - VENGOSH, A. A review of the health impacts of barium from natural and anthropogenic exposure. In ENVIRONMENTAL GEOCHEMISTRY AND HEALTH. ISSN 0269-4042, AUG 2014, vol. 36, no. 4, p. 797-814., WOS

3. [1.1] YAJIMA, Y. - YAMADA, M. - YAMADA, E. - IWASE, M. - SEKI, M. Facile fabrication processes for hydrogel-based microfluidic devices made of natural biopolymers. In BIOMICROFLUIDICS. ISSN 1932-1058, MAR 2014, vol. 8, no. 2., WOS

ADCA310 MORRISON, B. R. - CASEY, B. S. - LACÍK, Igor - LESLIE, G. L. - SANGSTER, D. F. - GILBERT, R. G. - NAPPER, D. H. Free radical exit in emulsion polymerization. 2. Model discrimination via experiment. In Journal of Polymer Science A, 1994, vol. 32, p. 631-649.

Citácie:

1. [1.1] EL-HADAD, O. - RUSSELL, G.T. Effect of cyclodextrin on the gamma-radiolysis initiated emulsion polymerization of styrene. In POLYMER. ISSN 0032-3861, AUG 18 2014, vol. 55, no. 17, p. 4447-4458., WOS

2. [1.1] SHANG, Y. - SHAN, G.R. - PAN, P.J. Modeling for primary radical desorption in miniemulsion polymerization initiated by oil-soluble initiator. In AICHE JOURNAL. ISSN 0001-1541, SEP 2014, vol. 60, no. 9, p. 3276-3285., WOS

ADCA311 MOSNÁČEK, Jaroslav - YOON, J. A. - JUHARI, A. - KOYNOV, K. - MATYJASZEWSKI, K. Synthesis, morphology and mechanical properties of linear triblock copolymers based on poly alfa-methylene - gama- butyrolactone. In Polymer : the International Journal for the Science and Technology of Polymers, 2009, vol. 50, p. 2087 - 2094. (3.331 - IF2008). (2009 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] GOWDA, R.R. - CAPORASO, L. - CAVALLO, L. - CHEN, E.Y.X. Unusual C-C bond cleavage in the formation of amine-bis(phenoxy) group 4 benzyl complexes: Mechanism of formation and application to stereospecific polymerization. In ORGANOMETALLICS. ISSN 0276-7333, AUG 11 2014, vol. 33, no. 15, p. 4118-4130., WOS

2. [1.1] HIGAKI, Y. - OKAZAKI, R. - ISHIKAWA, T. - KIKUCHI, M. - OHTA, N. - TAKAHARA, A. Chain stiffness and chain conformation of poly(alpha-methylene-gamma-butyrolactone) in dilute solutions. In POLYMER. ISSN 0032-3861, DEC 1 2014, vol. 55, no. 25, p. 6539-6545., WOS

3. [1.1] HILLMYER, M.A. - TOLMAN, W.B. Aliphatic polyester block polymers: Renewable, degradable, and sustainable. In ACCOUNTS OF CHEMICAL RESEARCH. ISSN 0001-4842, AUG 2014, vol. 47, no. 8, p. 2390-2396., WOS

4. [1.1] HOLMBERG, A.L. - RENO, K.H. - WOOL, R.P. - EPPS, T.H. Biobased building blocks for the rational design of renewable block polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 38, p. 7405-7424., WOS
5. [1.1] HOLMBERG, A.L. - STANZIONE, J.F. - WOOL, R.P. - EPPS, T.H. A Facile method for generating designer block copolymers from functionalized lignin model compounds. In ACS SUSTAINABLE CHEMISTRY & ENGINEERING. ISSN 2168-0485, APR 2014, vol. 2, no. 4, p. 569-573., WOS
6. [1.1] HONG, M. - CHEN, E.Y.X. Coordination ring-opening copolymerization of naturally renewable alpha-methylene-gamma-butyrolactone into unsaturated polyesters. In MACROMOLECULES. ISSN 0024-9297, JUN 10 2014, vol. 47, no. 11, p. 3614-3624., WOS
7. [1.1] LIU, X. - ZHAO, R.Y. - ZHAO, T.P. - LIU, C.Y. - YANG, S. - CHEN, E.Q. An ABA triblock containing a central soft block of poly[2,5-di(n-hexogycarbonyl) styrene] and outer hard block of poly(4-vinylpyridine): synthesis, phase behavior and mechanical enhancement. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 35, p. 18431-18441., WOS
8. [1.1] LIU, Y.P. - YAO, K.J. - CHEN, X.M. - WANG, J.F. - WANG, Z.K. - PLOEHN, H.J. - WANG, C.P. - CHU, F.X. - TANG, C.B. Sustainable thermoplastic elastomers derived from renewable cellulose, rosin and fatty acids. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3170-3181., WOS
9. [1.1] MANDAL, P. - CHOUDHURY, S. - SINGHA, N.K. Acrylic ABA triblock copolymer bearing pendant reactive bicycloalkenyl functionality via ATRP and tuning its properties using thiol-ene chemistry. In POLYMER. ISSN 0032-3861, OCT 23 2014, vol. 55, no. 22, SI, p. 5576-5583., WOS
10. [1.1] SCHMITT, M. - FALIVENE, L. - CAPORASO, L. - CAVALLO, L. - CHEN, E.Y.X. High-speed organocatalytic polymerization of a renewable methylene butyrolactone by a phosphazene superbase. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3261-3270., WOS
11. [1.1] ZHANG, S. - ZHANG, L.Q. - ZHAO, S.H. - WU, Y.P. Comparison of structure, morphology, and properties of miktoarms star styrene-butadiene rubber and star-shaped styrene-butadiene rubbe/polybutadiene rubber blends. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, 2014, vol. 53, no. 7, p. 1270-1285., WOS
12. [1.1] ZHANG, S. - ZHAO, S.H. - ZHANG, X.Y. - ZHANG, L.Q. - WU, Y.P. Preparation, structure, and properties of end- functionalized miktoarms star-shaped polybutadiene- Sn- poly(styrene- butadiene) Rubber. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAR 15 2014, vol. 131, no. 6., WOS
13. [1.1] ZHANG, Y.T. - CHEN, E.Y.X. Polymerization of nonfood biomass-derived monomers to sustainable polymers. In SELECTIVE CATALYSIS FOR RENEWABLE FEEDSTOCKS AND CHEMICALS. ISSN 0340-1022, 2014, vol. 353, p. 185-227., WOS
14. [1.2] SHIN, J.- KIM, Y.W.- KIM, G.J. Sustainable block copolymer-based thermoplastic elastomers. (2014) Applied Chemistry for Engineering, 25 (2), p. 121-133. DOI: 10.14478/ace.2014-1025, Scopus

ADCA312 MOSNÁČEK, Jaroslav - ILČÍKOVÁ, Markéta. Photochemically mediated atom transfer radical polymerization of methyl methacrylate using ppm amounts of catalyst. In Macromolecules, 2012, vol. 45, p. 5859 - 5865. (5.167 - IF2011). (2012 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] ANASTASAKI, A. - NIKOLAOU, V. - PAPPAS, G.S. - ZHANG, Q. - WAN,

C. - WILSON, P. - DAVIS, T.P. - WHITTAKER, M.R. - HADDLETON, D.M. Photoinduced sequence-control via one pot living radical polymerization of acrylates. In CHEMICAL SCIENCE. ISSN 2041-6520, SEP 2014, vol. 5, no. 9, p. 3536-3542., WOS

2. [1.1] ANASTASAKI, A. - NIKOLAOU, V. - ZHANG, Q. - BURNS, J. - SAMANTA, S.R. - WALDRON, C. - HADDLETON, A.J. - MCHALE, R. - FOX, D. - PERCEC, V. - WILSON, P. - HADDLETON, D.M. Copper(II)/tertiary amine synergy in photoinduced living radical polymerization: Accelerated synthesis of omega-functional and alpha,omega-heterofunctional poly(acrylates). In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, JAN 22 2014, vol. 136, no. 3, p. 1141-1149., WOS

3. [1.1] CHUANG, Y.M. - ETHIRAJAN, A. - JUNKERS, T. Photoinduced sequence-controlled copper-mediated polymerization: Synthesis of decablock copolymers. In ACS MACRO LETTERS. ISSN 2161-1653, AUG 2014, vol. 3, no. 8, p. 732-737., WOS

4. [1.1] CIFTCI, M. - TASDELEN, M.A. - YAGCI, Y. Sunlight induced atom transfer radical polymerization by using dimanganese decacarbonyl. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 2, p. 600-606., WOS

5. [1.1] DADASHI-SILAB, S. - TASDELEN, M.A. - ASIRI, A.M. - KHAN, S.B. - YAGCI, Y. Photoinduced atom transfer radical polymerization using semiconductor nanoparticles. In MACROMOLECULAR RAPID COMMUNICATIONS. ISSN 1022-1336, FEB 2014, vol. 35, no. 4, SI, p. 454-459., WOS

6. [1.1] DADASHI-SILAB, S. - TASDELEN, M.A. - KISKAN, B. - WANG, X.C. - ANTONIETTI, M. - YAGCI, Y. Photochemically mediated atom transfer radical polymerization using polymeric semiconductor mesoporous graphitic carbon nitride. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, APR 2014, vol. 215, no. 7, p. 675-681., WOS

7. [1.1] DADASHI-SILAB, S. - TASDELEN, M.A. - YAGCI, Y. Photoinitiated atom transfer radical polymerization: Current status and future perspectives. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, OCT 15 2014, vol. 52, no. 20, p. 2878-2888., WOS

8. [1.1] DEOGHARE, C. - BABY, C. - NADKARNI, V.S. - BEHERA, R.N. - CHAUHAN, R. Synthesis, characterization, and computational study of potential itaconimide-based initiators for atom transfer radical polymerization. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 89, p. 48163-48176., WOS

9. [1.1] DORAN, S. - MURTEZI, E. - BARLAS, F.B. - TIMUR, S. - YAGCI, Y. One-pot photo-induced sequential cuaac and thiol-ene click strategy for bioactive macromolecular synthesis. In MACROMOLECULES. ISSN 0024-9297, JUN 10 2014, vol. 47, no. 11, p. 3608-3613., WOS

10. [1.1] HSIAO, C.Y. - HAN, H.A. - LEE, G.H. - PENG, C.H. AGET and SARA ATRP of styrene and methyl methacrylate mediated by pyridyl-imine based copper complexes. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, FEB 2014, vol. 51, p. 12-20., WOS

11. [1.1] HUA, H. - XIONG, Y. - FU, C. - LI, N. pH-sensitive membranes prepared with poly(methyl methacrylate) grafted poly(vinylidene fluoride) via ultraviolet irradiation-induced atom transfer radical polymerization. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 74, p. 39273-39279., WOS

12. [1.1] JIANG, X.W. - WU, J. - ZHANG, L.F. - CHENG, Z.P. - ZHU, X.L. Highly active PPM level organic copper catalyzed photo-induced ICAR ATRP of methyl methacrylate. In MACROMOLECULAR RAPID COMMUNICATIONS. ISSN 1022-1336, NOV 2014, vol. 35, no. 21, p. 1879-1885., WOS

13. [1.1] KONKOLEWICZ, D. - WANG, Y. - KRYS, P. - ZHONG, M.J. - ISSE, A.A. - GENNARO, A. - MATYJASZEWSKI, K. SARA ATRP or SET-LRP. End of controversy?. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 15, p. 4396-4417., WOS

14. [1.1] LIU, Q. - LIU, L.Y. - MA, Y.H. - ZHAO, C.W. - YANG, W.T. Visible light-induced controlled radical polymerization of methacrylates with perfluoroalkyl iodide as the initiator in conjugation with a photoredox Catalyst fac-[Ir(ppy)](3). In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, NOV 2014, vol. 52, no. 22, p. 3283-3291., WOS

15. [1.1] MATYJASZEWSKI, K. - TSAREVSKY, N.V. Macromolecular engineering by atom transfer radical polymerization. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, MAY 7 2014, vol. 136, no. 18, p. 6513-6533., WOS

16. [1.1] MIYAKE, G.M. - THERIOT, J.C. Perylene as an organic photocatalyst for the radical polymerization of functionalized vinyl monomers through oxidative quenching with alkyl bromides and visible light. In MACROMOLECULES. ISSN 0024-9297, DEC 9 2014, vol. 47, no. 23, p. 8255-8261., WOS

17. [1.1] MURTEZI, E. - YAGCI, Y. Simultaneous Photoinduced ATRP and CuAAC Reactions for the Synthesis of Block Copolymers. In MACROMOLECULAR RAPID COMMUNICATIONS. ISSN 1022-1336, OCT 2014, vol. 35, no. 20, p. 1782-1787., WOS

18. [1.1] NAUMANN, S. - BUCHMEISER, M.R. Latent and delayed action polymerization systems. In MACROMOLECULAR RAPID COMMUNICATIONS. ISSN 1022-1336, APR 2014, vol. 35, no. 7, p. 682-701., WOS

19. [1.1] RIBELLI, T.G. - KONKOLEWICZ, D. - BERNHARD, S. - MATYJASZEWSKI, K. How are radicals (re)generated in photochemical ATRP?. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, SEP 24 2014, vol. 136, no. 38, p. 13303-13312., WOS

20. [1.1] RIBELLI, T.G. - KONKOLEWICZ, D. - PAN, X.C. - MATYJASZEWSKI, K. Contribution of photochemistry to activator regeneration in ATRP. In MACROMOLECULES. ISSN 0024-9297, SEP 23 2014, vol. 47, no. 18, p. 6316-6321., WOS

21. [1.1] TASKIN, O.S. - YILMAZ, G. - TASDELEN, M.A. - YAGCI, Y. Photoinduced reverse atom transfer radical polymerization of methyl methacrylate using camphorquinone/benzhydrol system. In POLYMER INTERNATIONAL. ISSN 0959-8103, MAY 2014, vol. 63, no. 5, SI, p. 902-907., WOS

22. [1.1] YANG, D.F. - HE, D. - LIAO, Y.G. - XUE, Z.G. - ZHOU, X.P. - XIE, X.L. Iron-mediated AGET ATRP of methyl methacrylate in the presence of polar solvents as ligands. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, APR 1 2014, vol. 52, no. 7, p. 1020-1027., WOS

23. [1.1] ZHANG, T. - CHEN, T. - AMIN, I. - JORDAN, R. ATRP with a light switch: photoinduced ATRP using a household fluorescent lamp. In POLYMER CHEMISTRY. ISSN 1759-9954, AUG 21 2014, vol. 5, no. 16, p. 4790-4796., WOS

24. [1.1] ZHANG, Y.T. - CHEN, E.Y.X. Polymerization of nonfood biomass-derived monomers to sustainable polymers. In SELECTIVE CATALYSIS FOR RENEWABLE FEEDSTOCKS AND CHEMICALS. ISSN 0340-1022, 2014, vol. 353, p. 185-227., WOS

25. [1.1] ZHAO, M.N. - ZHOU, G.W. - ZHANG, L. - LI, X.Y. - LI, T.D. - LIU, F.F. Fabrication and photoactivity of a tunable-void SiO2-TiO2 core-shell structure on modified SiO2 nanospheres by grafting an amphiphilic diblock copolymer using ARGET ATRP. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 8, p.

1110-1120., WOS
26. [1.1] ZHAO, Y.G. - YU, M.M. - ZHANG, S.L. - LIU, Y.C. - FU, X.F. Visible light induced living/controlled radical polymerization of acrylates catalyzed by cobalt porphyrins. In MACROMOLECULES. ISSN 0024-9297, SEP 23 2014, vol. 47, no. 18, p. 6238-6245., WOS

ADCA313 MOSNÁČEK, Jaroslav - MATYJASZEWSKI, K. Atom transfer radical polymerization of Tulipalin A: A naturally renewable monomer. In Macromolecules, 2008, vol. 41, no. 15, p. 5509 - 5511. (4.411 - IF2007). (2008 - Current Contents). ISSN 0024-9297.

Citácie:
1. [1.1] FINK, J. Acid and lactone polymers. In CHEMISTRY OF BIO-BASED POLYMERS. 2014, p. 63-86., WOS
2. [1.1] GOWDA, R.R. - CAPORASO, L. - CAVALLO, L. - CHEN, E.Y.X. Unusual C-C bond cleavage in the formation of amine-bis(phenoxy) group 4 benzyl complexes: Mechanism of formation and application to stereospecific polymerization. In ORGANOMETALLICS. ISSN 0276-7333, AUG 11 2014, vol. 33, no. 15, p. 4118-4130., WOS
3. [1.1] HIGAKI, Y. - OKAZAKI, R. - ISHIKAWA, T. - KIKUCHI, M. - OHTA, N. - TAKAHARA, A. Chain stiffness and chain conformation of poly(alpha-methylene-gamma-butyrolactone) in dilute solutions. In POLYMER. ISSN 0032-3861, DEC 1 2014, vol. 55, no. 25, p. 6539-6545., WOS
4. [1.1] HILLMYER, M.A. - TOLMAN, W.B. Aliphatic polyester block polymers: Renewable, degradable, and sustainable. In ACCOUNTS OF CHEMICAL RESEARCH. ISSN 0001-4842, AUG 2014, vol. 47, no. 8, p. 2390-2396., WOS
5. [1.1] HOLMBERG, A.L. - RENO, K.H. - WOOL, R.P. - EPPS, T.H. Biobased building blocks for the rational design of renewable block polymers. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 38, p. 7405-7424., WOS
6. [1.1] HONG, M. - CHEN, E.Y.X. Coordination ring-opening copolymerization of naturally renewable alpha-methylene-gamma-butyrolactone into unsaturated polyesters. In MACROMOLECULES. ISSN 0024-9297, JUN 10 2014, vol. 47, no. 11, p. 3614-3624., WOS
7. [1.1] HUANG, S.Y. - SUN, H. - SUN, J.R. - LI, G. - CHEN, X.S. Biodegradable tough blends of poly(L-lactide) and poly(castor oil)-poly(L-lactide) copolymer. In MATERIALS LETTERS. ISSN 0167-577X, OCT 15 2014, vol. 133, p. 87-90., WOS
8. [1.1] LIU, X. - ZHAO, R.Y. - ZHAO, T.P. - LIU, C.Y. - YANG, S. - CHEN, E.Q. An ABA triblock containing a central soft block of poly[2,5-di(n-hexogycarbonyl) styrene] and outer hard block of poly(4-vinylpyridine): synthesis, phase behavior and mechanical enhancement. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 35, p. 18431-18441., WOS
9. [1.1] LIU, Y.P. - YAO, K.J. - CHEN, X.M. - WANG, J.F. - WANG, Z.K. - PLOEHN, H.J. - WANG, C.P. - CHU, F.X. - TANG, C.B. Sustainable thermoplastic elastomers derived from renewable cellulose, rosin and fatty acids. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3170-3181., WOS
10. [1.1] SATOH, K. - LEE, D.H. - NAGAI, K. - KAMIGAITO, M. Precision synthesis of bio- based acrylic thermoplastic elastomer by RAFT polymerization of itaconic acid derivatives. In MACROMOLECULAR RAPID COMMUNICATIONS. ISSN 1022-1336, JAN 2014, vol. 35, no. 2, SI, p. 161-167., WOS
11. [1.1] SCHMITT, M. - FALIVENE, L. - CAPORASO, L. - CAVALLO, L. - CHEN, E.Y.X. High-speed organocatalytic polymerization of a renewable methylene butyrolactone by a phosphazene superbase. In POLYMER

CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3261-3270., WOS
12. [1.1] ZHANG, Y.T. - CHEN, E.Y.X. Polymerization of nonfood biomass-derived monomers to sustainable polymers. In SELECTIVE CATALYSIS FOR RENEWABLE FEEDSTOCKS AND CHEMICALS. ISSN 0340-1022, 2014, vol. 353, p. 185-227., WOS
13. [1.2] SHIN, J.- KIM, Y.W.- KIM, G.J. Sustainable block copolymer-based thermoplastic elastomers. (2014) Applied Chemistry for Engineering, 25 (2), p. 121-133. DOI: 10.14478/ace.2014-1025, Scopus

ADCA314 MOSNÁČEK, Jaroslav - DUDA, A. - LIBISZOWSKI, J. - PENCZEK, S. Copolymerization of LL-Lactide at its Living Polymer-Monomer Equilibrium with e-Caprolactone as Comonomer. In Macromolecules. - Washington : American Chemical Society, 2005, vol. 38, no. 1, p. 2027-2029. (3.898 - IF2004). (2005 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] PLICHTA, A. - FLORJANCZYK, Z. - KUNDYS, A. - FRYDRYCH, A. - DEBOWSKI, M. - LANGWALD, N. On the copolymerization of monomers from renewable resources: L-lactide and ethylene carbonate in the presence of metal alkoxides. In PURE AND APPLIED CHEMISTRY. ISSN 0033-4545, MAY 2014, vol. 86, no. 5, p. 733-745., WOS

ADCA315 MOSNÁČEK, Jaroslav - CHMELA, Štefan - THEUMER, G. - HABICHER, W. D. - HRDLOVIČ, Pavol. New combined phenol/hindered amine photo- and thermal-stabilizers based on toluene-2,4-diisocyanate. In Polymer Degradation and Stability, 2003, vol. 80, no. 1, p. 113 - 126. (0.890 - IF2002). (2003 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] HUANG, Z.Y. - ZENG, M.Q. - LIU, L. - REN, X.C. Synthesis and characterization of HALS/UV-absorbers bifunctionalized core-shell elastomer and Its application in polyoxymethylene. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, OCT 30 2014, vol. 21, no. 11., WOS
2. [1.1] LIU, L. - YOU, B. - ZENG, M.Q. - REN, X.C. Modification of poly (butylene terephthalate) with core-shell nanoparticles containing UV-absorber. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, MAR 22 2014, vol. 21, no. 4., WOS
3. [1.1] PLICHTA, A. - FLORJANCZYK, Z. - KUNDYS, A. - FRYDRYCH, A. - DEBOWSKI, M. - LANGWALD, N. On the copolymerization of monomers from renewable resources: L-lactide and ethylene carbonate in the presence of metal alkoxides. In PURE AND APPLIED CHEMISTRY. ISSN 0033-4545, MAY 2014, vol. 86, no. 5, p. 733-745., WOS
4. [1.1] SHEN, Y. - ZHEN, L.L. - HUANG, D. - XUE, J. Improving anti-UV performances of cotton fabrics via graft modification using a reactive UV-absorber. In CELLULOSE. ISSN 0969-0239, OCT 2014, vol. 21, no. 5, p. 3745-3754., WOS
5. [1.1] XIA, L. - SHENTU, B.Q. - WENG, Z.X. Preparation of a novel stabilizer and its thermal-oxidative stabilization effect on polyamide 6. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, SEP 2014, vol. 54, no. 9, p. 2197-2206., WOS

ADCA316 MOSNÁČEK, Jaroslav - BERTOLDO, M. - *KÓSA, Csaba* - RUGGERI, G. - LUKÁČ, Ivan - CIARDELLI, F. Modification and photostabilization of low density polyethylene film by photodecomposition of various diazo-compounds and methyl azidocarboxylate. In Polymer Degradation and Stability, 2007, vol. 92, p. 849-858. (2.174 - IF2006). (2007 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] XIAO, F. - ZHOU, Y.L. - YANG, W.B. Synthesis of piperazine-1,4-dipropanoic acid di(1,2,2,6,6-pentamethyl-4-piperidine)yl ester as a photostabilizer. In RUSSIAN JOURNAL OF GENERAL CHEMISTRY. ISSN 1070-3632, NOV 2014, vol. 84, no. 11, p. 2218-2221., WOS

ADCA317 MOSZNER, N. - PAVLINEC, Jiří - LAMPARTH, I. - ZEUNER, F. - ANGERMANN, J. Synthesis and radical polymerisation of 1,3-bis(methacrylamido)propane-2-yl dihydrogen phosphate. In Macromolecular Rapid Communications, 2006, vol. 27, no. 14, p. 1115 - 1120. (3.164 - IF2005). (2006 - Current Contents). ISSN 1022-1336.

Citácie:

1. [1.1] BOUILHAC, C. - TRAVELET, C. - GRAILLOT, A. - MONGE, S. - BORSALI, R. - ROBIN, J.J. Synthesis of fatty phosphonic acid based polymethacrylamide by RAFT polymerization and self-assembly in solution. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 8, p. 2756-2767., WOS

ADCA318 MOUČKA, R. - MRLIK, M. - ILČÍKOVÁ, Markéta - ŠPITALSKÝ, Zdenko - KAZANTSEVA, N. - BOBER, P. - STEJSKAL, J. Electrical transport properties of poly(aniline-co-p-phenylenediamine) and its composites with incorporated silver particles. In Chemical Papers, 2013, vol. 67, no. 8, p. 1012 - 1019. (0.879 - IF2012). (2013 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] BROOK, I. - BERNER, A. - TCHOUDAKOV, R. - SUCKEVERIENE, R.Y. - NARKIS, M. Conductive elastomeric nanocomposites based on oxidation of aniline with silver nitrate via inverse emulsion polymerization. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, DEC 2014, vol. 25, no. 12, p. 1446-1453., WOS

ADCA319 *MRAVČÁKOVÁ, Miroslava* - OMASTOVÁ, Mária - OLEJNÍKOVÁ, K. - PUKÁNSZKY, B. - CHEHIMI, M. M. The preparation and properties of sodium and organomodified-montmorillonite/polypyrrole composites: a comparative study. In Synthetic Metals, 2007, vol. 157, p. 347 - 357. (1.685 - IF2006). (2007 - Current Contents, SCOPUS). ISSN 0379-6779.

Citácie:

1. [1.1] DA SILVA RAMOA, S.D.A. - MERLINI, C. - DE OLIVEIRA BARRA, G.M. - SOARES, B.G. The Preparation of montmorillonite/polypyrrole nanocomposites: The effect of surfactant incorporation on the structure and properties. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, JUL 2014, vol. 24, SI, p. 57-62., WOS

2. [1.1] UKIC, S. - MANDIC, V. - BUIC, Z. - BOLANCA, T. - ZELIC, B. - KURAJICA, S. - NOVAK, M. Sorption kinetics and structural investigations of acid and alkali-pretreated bentonite used for ammonium and phosphate removal from petrochemical wastewater. In FRESENIUS ENVIRONMENTAL BULLETIN. ISSN 1018-4619, 2014, vol. 23, no. 5, p. 1260-1270., WOS

ADCA320 *MRAVČÁKOVÁ, Miroslava* - BOUKERMA, K. - OMASTOVÁ, Mária - CHEHIMI, M. M. Montmorillonite/polypyrrole nanocomposites. The effect of organic modification of clay on the chemical and electrical properties. In Materials Science and Engineering C : biomimetic and supramolecular systems, 2006, vol. 26, no. 2-3, p. 306 - 313. (2006 - Current Contents, SCOPUS). ISSN 0928-4931.

Citácie:

1. [1.1] CHANG, Y. - LIU, Z.H. - FU, Z.B. - WANG, C.Y. - DAI, Y.T. - PENG, R.F. - HU, X.P. Preparation and characterization of one-dimensional core-shell sepiolite/polypyrrole nanocomposites and effect of organic Modification on the

Electrochemical Properties. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, JAN 8 2014, vol. 53, no. 1, p. 38-47., WOS
2. [1.1] DA SILVA RAMOA, S.D.A. - MERLINI, C. - DE OLIVEIRA BARRA, G.M. - SOARES, B.G. The Preparation of Montmorillonite/polypyrrole Nanocomposites: The Effect of Surfactant Incorporation on the Structure and Properties. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, JUL 2014, vol. 24, SI, p. 57-62., WOS
3. [1.1] JLASSI, K. - MEKKI, A. - BENNA-ZAYANI, M. - SINGH, A. - ASWAL, D.K. - CHEHIMI, M.M. Exfoliated clay/polyaniline nanocomposites through tandem diazonium cation exchange reactions and in situ oxidative polymerization of aniline. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 110, p. 65213-65222., WOS
4. [1.1] KARAKEHYA, N. - BILGIC, C. Surface characterisation of montmorillonite/PVC nanocomposites by inverse gas chromatography. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, JUN 2014, vol. 51, p. 140-147., WOS
5. [1.1] PRAMANIK, S. - BHARALI, P. - KONWAR, B.K. - KARAK, N. Antimicrobial hyperbranched poly(ester amide)/polyaniline nanofiber modified montmorillonite nanocomposites. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, FEB 1 2014, vol. 35, p. 61-69., WOS

ADCA321 *MRAVČÁKOVÁ, Miroslava* - OMASTOVÁ, Mária - POTSCHKE, P. - POZSGAY, A. - PUKÁNSZKY, B. - PIONTECK, J. Poly(propylene)/montmorillonite/polypyrrole composites: structure and conductivity. In Polymers for Advanced Technologies, 2006, vol. 17, no. 9 - 11, p. 715 - 726. (0.962 - IF2005). (2006 - Current Contents). ISSN 1042-7147.

Citácie:
1. [1.1] CUI, H.W. - FAN, Q. - LI, D.S. Surface functionalization of micro silver flakes and their application in electrically conductive adhesives for electronic package. In INTERNATIONAL JOURNAL OF ADHESION AND ADHESIVES. ISSN 0143-7496, JAN 2014, vol. 48, p. 177-182., WOS

ADCA322 MRLIK, M. - ILČÍKOVÁ, Markéta - SEDLACIK, M. - MOSNÁČEK, Jaroslav - PEER, P. - FILIP, P. Cholesteryl-coated carbonyl iron particles with improved anti-corrosion stability and their viscoelastic behaviour under magnetic field. In Colloid and Polymer Science, 2014, vol. 292, p. 2137-2143. (2.410 - IF2013). (2014 - Current Contents). ISSN 0303-402X.

Citácie:
1. [1.2] JANG, D.S.- LIU, Y.D.- KIM, J.H.- CHOI, H.J. Enhanced magnetorheology of soft magnetic carbonyl iron suspension with hard magnetic γ-Fe<infn</inf>O<info</inf> nanoparticle additive. (2014) Colloid and Polymer Science, 293 (2), p. 641-647. DOI: 10.1007/s00396-014-3475-6, Scopus

ADCA323 MRLÍK, M. - ILČÍKOVÁ, Markéta - PAVLÍNEK, V. - MOSNÁČEK, Jaroslav - PEER, P. - FILIP, P. Improved thermooxidation and sedimentation stability of covalently-coated carbonyl iron particles with cholesteryl groups and their influence on magnetorheology. In Journal of Colloid and Interface Science, 2013, vol. 396, p. 146 - 151. (3.172 - IF2012). (2013 - Current Contents). ISSN 0021-9797.

Citácie:
1. [1.1] HONG, C.H. - CHOI, H.J. Effect of halloysite clay on magnetic carbonyl iron-based magnetorheological fluid. In IEEE TRANSACTIONS ON MAGNETICS. ISSN 0018-9464, NOV 2014, vol. 50, no. 11., WOS
2. [1.1] KIM, S.Y. - KWON, S.H. - LIU, Y.D. - LEE, J.S. - YOU, C.Y. - CHOI, H.J.

Core-shell-structured cross-linked poly(glycidyl methacrylate)-coated carbonyl iron microspheres and their magnetorheology. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, FEB 2014, vol. 49, no. 3, p. 1345-1352., WOS
3. [1.1] LIU, Y.D. - CHOI, H.J. Fabrication of anisotropic snowman-like magnetic particles and their magnetorheological response. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, MAY 7 2014, vol. 115, no. 17., WOS
4. [1.1] PIAO, S.H. - ZHANG, W.L. - CHOI, H.J. Magnetic carbonyl iron suspension with sepiolite additive and its magnetorheological property. In IEEE TRANSACTIONS ON MAGNETICS. ISSN 0018-9464, JAN 2014, vol. 50, no. 1, 1., WOS
5. [1.1] QUAN, X. - CHUAH, W. - SEO, Y. - CHOI, H.J. Core-shell structured polystyrene coated carbonyl iron microspheres and their magnetorheology. In IEEE TRANSACTIONS ON MAGNETICS. ISSN 0018-9464, JAN 2014, vol. 50, no. 1, 1., WOS
6. [1.1] ZHANG, W.L. - CHOI, H.J. Graphene oxide based smart fluids. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 35, p. 6601-6608., WOS
7. [1.1] ZHANG, W.L. - CHOI, H.J. Self-assembly of graphene oxide coated soft magnetic carbonyl iron particles and their magnetorheology. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, MAY 7 2014, vol. 115, no. 17., WOS
8. [1.1] ZHANG, W.L. - KIM, S.D. - CHOI, H.J. Effect of graphene oxide on carbonyl-iron-based magnetorheological fluid. In IEEE TRANSACTIONS ON MAGNETICS. ISSN 0018-9464, JAN 2014, vol. 50, no. 1, 1., WOS
9. [1.2] CHAE, H.S.- PIAO, S.H.- MAITY, A.- CHOI, H.J. Additive role of attapulgite nanoclay on carbonyl iron-based magnetorheological suspension. (2014) Colloid and Polymer Science, 293 (1), p. 89-95. DOI: 10.1007/s00396-014-3389-3, Scopus
10. [1.2] JANG, D.S.- LIU, Y.D.- KIM, J.H.- CHOI, H.J. Enhanced magnetorheology of soft magnetic carbonyl iron suspension with hard magnetic γ-Fe<infn</inf>O<info</inf> nanoparticle additive. (2014) Colloid and Polymer Science, 293 (2), p. 641-647. DOI: 10.1007/s00396-014-3475-6, Scopus

ADCA324 MTSHALI, T. N. - *KRUPA, Igor* - LUYT, A. S. The effect of cross-linking on the thermal properties of LDPE/wax blends. In Thermochimica Acta, 2001, vol. 380, p. 47-54.

Citácie:
1. [1.1] WANG, F. - KIM, S.S. - KEE, C.D. - SHEN, Y.D. - OH, I.K. Novel electroactive PVA-TOCN actuator that is extremely sensitive to low electrical inputs. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, JUL 2014, vol. 23, no. 7., WOS
2. [1.1] ZHANG, X.X. - ZHANG, W. - SU, J.S. - WANG, M.Y. - LU, C.H. Preparation, characterization, and properties of polyethylene composites highly filled with calcium carbonate through co-rotating conical Twin-Screw extrusion. In JOURNAL OF VINYL & ADDITIVE TECHNOLOGY. ISSN 1083-5601, JUN 2014, vol. 20, no. 2, p. 108-115., WOS

ADCA325 *NEDELČEV, Tomáš* - RAČKO, Dušan - *KRUPA, Igor*. Preparation and characterization of a new derivative of rhodamine B with an alkoxysilane moiety. In Dyes and Pigments, 2008, vol. 76, p. 550-556. (2.796 - IF2007). (2008 - Current Contents). ISSN 0143-7208.

Citácie:
1. [1.1] PICCINETTI, C.C. - MONTIS, C. - BONINI, M. - LAURA, R. - GUERRERA, M.C. - RADAELLI, G. - VIANELLO, F. - SANTINELLI, V. - MARADONNA, F. - NOZZI, V. - MICCOLI, A. - OLIVOTTO, I. Transfer of silica-coated magnetic (Fe3O4) nanoparticles through food: A molecular and

morphological study in zebrafish. In ZEBRAFISH. ISSN 1545-8547, DEC 1 2014, vol. 11, no. 6, p. 567-579., WOS

ADCA326 NESE, A. - MOSNÁČEK, Jaroslav - JUHARI, A. - YOON, J. A. - KOYNOV, K. - KOWALEWSKI, T. - MATYJASZEWSKI, K. Synthesis, characterization, and properties of starlike poly(n-butyl acrylate)-b-poly(methyl methacrylate) block copolymers. In Macromolecules, 2010, vol. 43, p. 1227 - 1235. (4.539 - IF2009). (2010 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] JONG, S. - MOON, H.C. - KWAK, J. - BAE, D. - LEE, Y. - KIM, J.K. - LEE, W.B. Phase behavior of star-shaped polystyrene-block-poly(methyl methacrylate) copolymers. In MACROMOLECULES. ISSN 0024-9297, AUG 12 2014, vol. 47, no. 15, p. 5295-5302., WOS

2. [1.1] LAI, H.W. - CHEN, X.Y. - LU, Q. - BIAN, Z. - TAO, Y.H. - WANG, X.H. A new strategy to synthesize bottlebrushes with a helical polyglutamate backbone via N-carboxyanhydride polymerization and RAFT. In CHEMICAL COMMUNICATIONS. ISSN 1359-7345, 2014, vol. 50, no. 91, p. 14183-14186., WOS

3. [1.1] LIU, X. - ZHAO, R.Y. - ZHAO, T.P. - LIU, C.Y. - YANG, S. - CHEN, E.Q. An ABA triblock containing a central soft block of poly[2,5-di(n-hexogycarbonyl) styrene] and outer hard block of poly(4-vinylpyridine): synthesis, phase behavior and mechanical enhancement. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 35, p. 18431-18441., WOS

4. [1.1] LIU, Y.P. - YAO, K.J. - CHEN, X.M. - WANG, J.F. - WANG, Z.K. - PLOEHN, H.J. - WANG, C.P. - CHU, F.X. - TANG, C.B. Sustainable thermoplastic elastomers derived from renewable cellulose, rosin and fatty acids. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3170-3181., WOS

5. [1.1] WANG, W.W. - WANG, W.Y. - LU, X.Y. - BOBADE, S. - CHEN, J.H. - KANG, N.G. - ZHANG, Q.Y. - MAYS, J. Synthesis and characterization of comb and centipede multigraft copolymers PnBA-g-PS with High molecular weight using miniemulsion polymerization. In MACROMOLECULES. ISSN 0024-9297, NOV 11 2014, vol. 47, no. 21, p. 7284-7295., WOS

ADCA327 NÓGELLOVÁ, Zuzana - KOKTA, B. V. - CHODÁK, Ivan. A composite LDPE/Wood flour crosslinked by peroxide. In Journal of Macromolecular Science : Pure and Applied Chemistry, 1998, vol. A35, no. 7&8, p. 1069-1077. (0.571 - IF1997). (1998 - Current Contents). ISSN 1060-1325.

Citácie:

1. [1.2] HOSSAIN, M.F.- SHUVO, S.N.- ISLAM, M.A. Effect of types of wood on the thermal conductivities of wood saw dust particle reinforced composites. (2014) Procedia Engineering, 90, p. 46-51. DOI: 10.1016/j.proeng.2014.11.812, Scopus

ADCA328 NOVÁK, Igor - JANIGOVÁ, Ivica - *KRUPA, Igor*. Hybrid electro-conductive composites with improved toughness, filled by carbon black. In Carbon, 2005, vol. 43, no. 4, p. 841 - 848. (3.331 - IF2004). (2005 - Current Contents). ISSN 0008-6223.

Citácie:

1. [1.1] HU, J. - ZHANG, H.B. - HONG, S. - JIANG, Z.G. - GUI, C.X. - LI, X.F. - YU, Z.Z. Simultaneous improvement in both electrical conductivity and toughness of polyamide 6 nanocomposites filled with elastomer and carbon black particles. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, FEB 12 2014, vol. 53, no. 6, p. 2270-2276., WOS

2. [1.1] LI, C.B. - CHE, R.S. - XIANG, J. - LEI, J.X. - ZHOU, C.L. Preparation and characterization of thermoplastic antistatic polyurethane synthesized by in situ polymerization. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS

3. [1.1] ZHANG, S. - WANG, C.G. - YUAN, H. - ZHU, B. - YU, M.J. - ZHANG, B.M. - HAN, R.H. - LI, Y.W. Surface resistivity of carbonaceous fiber/PTFE antistatic coatings. In JOURNAL OF CENTRAL SOUTH UNIVERSITY. ISSN 2095-2899, MAY 2014, vol. 21, no. 5, p. 1689-1695., WOS

ADCA329 NOVÁK, Igor - *KRUPA, Igor*. Electro-conductive resins filled with graphite for casting applications. In European Polymer Journal, 2004, vol. 40, no. 7, p. 1417 - 1422. (1.086 - IF2003). (2004 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] DOU, S. - QI, J.Y. - GUO, X.F. - YU, C.S. Preparation and adhesive performance of electrical conductive epoxy-acrylate resin containing silver-plated graphene. In JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY. ISSN 0169-4243, AUG 18 2014, vol. 28, no. 16, p. 1556-1567., WOS

2. [1.1] FU, Y.X. - HE, Z.X. - MO, D.C. - LU, S.S. Thermal conductivity enhancement with different fillers for epoxy resin adhesives. In APPLIED THERMAL ENGINEERING. ISSN 1359-4311, MAY 2014, vol. 66, no. 1-2, p. 493-498., WOS

3. [1.1] KAVAK, N. - ALTAN, E. A new hybrid bonding technique: Adhesive-soft soldered joints. In PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS. ISSN 1464-4207, APR 2014, vol. 228, no. 2, SI, p. 137-143., WOS

4. [1.1] ZAMAN, I. - MANSHOOR, B. - KHALID, A. - ARABY, S. From clay to graphene for polymer nanocomposites-a survey. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, APR 15 2014, vol. 21, no. 5., WOS

ADCA330 NOVÁK, Igor - *KRUPA, Igor* - LUYT, A. S. Improvement of the polarity of polyethylene with oxidized Fischer-Tropsch parrafin wax and its influence on the final mechanical properties. In Journal of Applied Polymer Science, 2005, vol. 95, no. 5, p. 1164 - 1168. (1.021 - IF2004). (2005 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] WEBER, A. - SCHMID, A. - RESCH, K. Thermotropic glazings for overheating protection. II. Morphology and structure-property relationships. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS

ADCA331 NOVÁK, Igor - *KRUPA, Igor* - LUYT, A. S. Modification of a Fischer-Tropsch wax by grafting with maleic anhydride. In Journal of Applied Polymer Science, 2004, vol. 93, no. 2, p. 662 - 668. (1.017 - IF2003). (2004 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] HONG, H.Q. - LIAO, H.Y. - ZHANG, H.Y. - HE, H. - LIU, T. - JIA, D.M. Significant improvement in performance of recycled polyethylene/wood flour composites by synergistic compatibilization at multi-scale interfaces. In COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING. ISSN 1359-835X, SEP 2014, vol. 64, p. 90-98., WOS

ADCA332 NOVÁK, Igor - *KRUPA, Igor* - CHODÁK, Ivan. Electroconductive adhesives based on epoxy and polyurethane resins filled with silver-coated inorganic fillers. In Synthetic Metals, 2004, vol. 144, no. 1, p. 13 - 19. (1.303 - IF2003). (2004 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] LI, C.B. - CHE, R.S. - XIANG, J. - LEI, J.X. - ZHOU, C.L. Preparation and characterization of thermoplastic antistatic polyurethane synthesized by in situ polymerization. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS

2. [1.1] VAISAKH, S.S. - HASSANZADEH, M. - METZ, R. - RAMAKRISHNAN, S. - CHAPPELLE, D. - SUDHA, J.D. - ANANTHAKUMAR, S. Effect of nano/micro-mixed ceramic fillers on the dielectric and thermal properties of epoxy polymer composites. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, FEB 2014, vol. 25, no. 2, p. 240-248., WOS

ADCA333 NOVÁK, Igor - *KRUPA, Igor* - CHODÁK, Ivan. Investigation of the correlation between electrical conductivity and elongation break of polyurethane-based adhesives. In Synthetic Metals, 2002, vol. 131, no. 1-3, p. 93 - 98. (1.158 - IF2001). (2002 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] HO, L.N. - NISHIKAWA, H. Copper-filled electrically conductive adhesives with enhanced shear strength. In JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE. ISSN 1059-9495, SEP 2014, vol. 23, no. 9, p. 3371-3378., WOS

ADCA334 NOVÁK, Igor - *POPELKA, Anton* - *KRUPA, Igor* - CHODÁK, Ivan - JANIGOVÁ, Ivica - *NEDELČEV, Tomáš* - ŠPÍRKOVÁ, M. - KLEINOVÁ, Angela. High-density polyethylene functionalized by cold plasma and silanes. In Vacuum, 2012, vol. 86, p. 2089 - 2094. (1.317 - IF2011). (2012 - Current Contents). ISSN 0042-207X.

Citácie:

1. [1.1] ABENOJAR, J. - BARBOSA, A.Q. - BALLESTEROS, Y. - DEL REAL, J.C. - DA SILVA, L.F.M. - MARTINEZ, M.A. Effect of surface treatments on natural cork: surface energy, adhesion, and acoustic insulation. In WOOD SCIENCE AND TECHNOLOGY. ISSN 0043-7719, 2014, vol. 48, no. 1, p. 207-224., WOS

2. [1.1] ABENOJAR, J. - MARTINEZ, M.A. - VELASCO, F. - RODRIGUEZ-PEREZ, M.A. Atmospheric plasma torch treatment of polyethylene/boron composites: Effect on thermal stability. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, JAN 25 2014, vol. 239, p. 70-77., WOS

3. [1.1] PATTERSON, R. - KANDELBAUER, A. - MULLER, U. - LAMMER, H. Crosslinked thermoplastics. In HANDBOOK OF THERMOSET PLASTICS, 3RD EDITION. 2014, p. 697-737., WOS

ADCA335 NOVÁK, Igor - *ŠTEVIAR, Marián* - *POPELKA, Anton* - CHODÁK, Ivan - MOSNÁČEK, Jaroslav - ŠPÍRKOVÁ, M. - JANIGOVÁ, Ivica - KLEINOVÁ, Angela - SEDLIAČIK, J. - ŠLOUF, M. Surface modification of polyethylene by diffuse barrier discharge plasma. In Polymer Engineering and Science, 2013, vol. 53, p. 516 - 523. (1.243 - IF2012). (2013 - Current Contents). ISSN 0032-3888.

Citácie:

1. [1.1] VAN DEYNSE, A. - DE GEYTER, N. - LEYS, C. - MORENT, R. Influence of water vapor addition on the surface modification of polyethylene in an argon dielectric barrier discharge. In PLASMA PROCESSES AND POLYMERS. ISSN 1612-8850, FEB 2014, vol. 11, no. 2, p. 117-125., WOS

ADCA336 NOVÁK, Igor - SYSEL, P. - ZEMEK, J. - ŠPÍRKOVÁ, M. - VELIČ, D. - ARANYOSIOVÁ, M. - *FLORIÁN, Štepán* - *POLLÁK, Vladimír* - KLEINOVÁ, Angela - LEDNICKÝ, F. - JANIGOVÁ, Ivica. Surface and adhesion properties of poly(imide-siloxane) block copolymers. In European Polymer Journal, 2009, vol. 45, p. 57-69. (2.143 - IF2008). (2009 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] HUANG, K. - LIU, Y.L. - WU, D.F. Synthesis and characterization of

polyacrylate modified by polysiloxane latexes and films. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, NOV 2014, vol. 77, no. 11, p. 1774-1779., WOS
2. [1.1] WANG, X.Y. - MA, J.X. - LI, C.G. - WANG, H.X. Thermosetting polyimide resin matrix composites with interpenetrating polymer networks for precision foil resistor chips based on special mechanical performance requirements. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, 2014, vol. 299, p. 73-80., WOS
3. [1.1] ZHANG, L.L. - TIAN, G.F. - WANG, X.D. - QI, S.L. - WU, Z.P. - WU, D.Z. Polyimide/ladder-like polysilsesquioxane hybrid films: Mechanical performance, microstructure and phase separation behaviors. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, JAN 2014, vol. 56, p. 808-814., WOS

ADCA337 NOVÁK, Igor - *KRUPA, Igor* - CHODÁK, Ivan. Analysis of correlation between percolation concentration and elongation at break in filled electroconductive epoxy-based adhesives. In European Polymer Journal, 2003, vol. 39, no. 3, p. 585 - 592. (0.952 - IF2002). (2003 - Current Contents). ISSN 0014-3057.

Citácie:
1. [1.1] ALAM, M.K. - ISLAM, M.T. - MINA, M.F. - GAFUR, M.A. Structural, mechanical, thermal, and electrical properties of carbon black reinforced polyester resin composites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, JUL 5 2014, vol. 131, no. 13., WOS
2. [1.1] MENCHAVEZ, R.L. - FUJI, M. - SHIRAI, T. - KUMAZAWA, T. Electrically conductive porous alumina/graphite composite synthesized by starch consolidation with reductive sintering. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, 2014, vol. 34, no. 3, p. 717-729., WOS
3. [1.1] RATZSCH, K.F. - CECEN, V. - TOLLE, F. - WARTIG, K.A. - THOMANN, R. - MULHAUPT, R. - FRIEDRICH, C. Rheology, electrical properties, and percolation of TRGO-filled EVA-copolymers. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, SEP 2014, vol. 299, no. 9, p. 1134-1144., WOS
4. [1.1] SOYDAL, U. - AHMETLI, G. - KOCAMAN, S. The Influence of semiconductive binary Sb2S3-Yb3S4 system on electrical conductivity property of epoxy composites. In TIMES OF POLYMERS (TOP) AND COMPOSITES 2014. ISSN 0094-243X, 2014, vol. 1599, p. 50-53., WOS

ADCA338 NOVÁK, Igor - *ŠTEVIAR, Marián* - CHODÁK, Ivan. Surface energy and adhesive properties of polyamide 12 modified by barrier and radio-frequency discharge plasma. In Monatshefte für Chemie, 2006, vol. 137, no. 7, p. 943 - 952. ISSN 0026-9247.

Citácie:
1. [1.1] BEN SALEM, D. - PULPYTEL, J. - PILLIER, F. - PAILLERET, A. - AREFI-KHONSARI, F. Amorphization and polymorphism modification of polyamide-6 films via open-air non-equilibrium atmospheric pressure plasma jet treatment. In PLASMA PROCESSES AND POLYMERS. ISSN 1612-8850, OCT 2014, vol. 11, no. 10, p. 961-973., WOS
2. [1.1] HNILICA, J. - POTOCNAKOVA, L. - STUPAVSKA, M. - KUDRLE, V. Rapid surface treatment of polyamide 12 by microwave plasma jet. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JAN 1 2014, vol. 288, p. 251-257., WOS

ADCA339 NOVÁK, Igor - *FLORIÁN, Štepán*. Effect of aging on adhesion behavior of discharge plasma-treated biaxially oriented polypropylene. In Journal of Materials Science Letters, 1999, vol. 18, p. 1055-1057. (0.349 - IF1998). (1999 - Current Contents). ISSN 0261-8028.

Citácie:
1. [1.1] PANDIYARAJ, K.N. - DESHMUKH, R.R. - RUZYBAYEV, I. - SHAH, S.I.

- SU, P.G. - HALLELUYAH, M. - HALIM, A.S. Influence of non-thermal plasma forming gases on improvement of surface properties of low density polyethylene (LDPE). In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JUL 15 2014, vol. 307, p. 109-119., WOS

ADCA340 NOVÁK, Igor - *FLORIÁN, Štepán*. Influence of ageing on adhesive properties of polypropylene modified by discharge plasma. In Polymer International, 2001, vol. 50, p. 49-50. (2001 - Current Contents). ISSN 0959-8103.

Citácie:

1. [1.1] JACHOWICZ, T. - GAJDOS, I. Effect of natural ageing on some properties of oxybiodegrading agent-containing polypropylene products. In PRZEMYSL CHEMICZNY. ISSN 0033-2496, NOV 2014, vol. 93, no. 11, p. 1983-1985., WOS

ADCA341 NOVÁK, Igor - *FLORIÁN, Štepán*. Pressure-sensitive adhesives for electronic applications. In Journal of Materials Science Letters, 2003, vol. 22, no. 18, p. 1237 - 1239. ISSN 0261-8028.

Citácie:

1. [1.1] PARK, G.H. - KIM, K.T. - AHN, Y.T. - LEE, H.I. - JEONG, H.M. The effects of graphene on the properties of acrylic pressure-sensitive adhesive. In JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY. ISSN 1226-086X, NOV 25 2014, vol. 20, no. 6, p. 4108-4111., WOS

ADCA342 NOVÁK, Igor - *FLORIÁN, Štepán*. Investigation of long-term hydrophobic recovery of plasma modified polypropylene. In Journal of Materials Science, 2004, vol. 39, no. 6, p. 2033 - 2036. (0.826 - IF2003). (2004 - Current Contents, WOS, SCOPUS). ISSN 0022-2461.

Citácie:

1. [1.1] BAI, J. - SHI, Z.X. - YIN, J. - TIAN, M. A simple approach to preparation of polyhedral oligomeric silsesquioxane crosslinked poly(styrene-b-butadiene-b-styrene) elastomers with a unique micro-morphology via UV-induced thiol-ene reaction. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 23, p. 6761-6769., WOS

2. [1.1] BAI, J. - SHI, Z.X. - YIN, J. - TIAN, M. Tailoring the morphologies and mechanical properties of styrene-butadiene-styrene triblock copolymers by the incorporation of thiol functionalized benzoxazine. In MACROMOLECULES. ISSN 0024-9297, MAY 13 2014, vol. 47, no. 9, p. 2964-2973., WOS

3. [1.1] OZKAYA, B. - GROSSE-KREUL, S. - CORBELLA, C. - VON KEUDELL, A. - GRUNDMEIER, G. Combined in situ XPS and UHV- Chemical Force Microscopy (CFM) studies of the plasma induced surface oxidation of polypropylene. In PLASMA PROCESSES AND POLYMERS. ISSN 1612-8850, MAR 2014, vol. 11, no. 3, p. 256-262., WOS

ADCA343 NOVÁK, Igor - BORSIG, Eberhard - HRČKOVÁ, Ľudmila - FIEDLEROVÁ, Agnesa - KLEINOVÁ, Angela - *POLLÁK, Vladimír*. Study of surface and adhesive properties of polypropylene grafted by maleic anhydride. In Polymer Engineering and Science, 2007, vol. 47, p. 1207-1212. (1.414 - IF2006). (2007 - Current Contents). ISSN 0032-3888.

Citácie:

1. [1.1] KATOGI, H. - TAKEMURA, K. Effect of crystallinity on mechanical properties of carbon fiber reinforced polypropylene. In ADVANCES IN FRACTURE AND DAMAGE MECHANICS XII. ISSN 1013-9826, 2014, vol. 577-578, p. 77-80., WOS

2. [1.1] OSAKADA, K. Polymerization of Polar Monomers. In ORGANOMETALLIC REACTIONS AND POLYMERIZATION. ISSN 0342-4901,

2014, vol. 85, p. 217-236., WOS
3. [1.1] SAFFAR, A. - CARREAU, P.J. - AJJI, A. - KAMAL, M.R. Development of polypropylene microporous hydrophilic membranes by blending with PP-g-MA and PP-g-AA. In JOURNAL OF MEMBRANE SCIENCE. ISSN 0376-7388, JUL 15 2014, vol. 462, p. 50-61., WOS

ADCA344 NOVÁK, Igor - *POLLÁK, Vladimír* - CHODÁK, Ivan. Study of surface properties of polylefins modified by corona discharge plasma. In Plasma Processes and Polymers, 2006, vol. 3, no. 4 - 5, p. 355 - 364. (2.846 - IF2005). (2006 - Current Contents). ISSN 1612-8850.

Citácie:
1. [1.1] CHI, X.Q. - OHASHI, H. - YAMAGUCHI, T. Plasma-induced graft polymerization inside pores of porous substrates assisted by an infiltration agent in acidic conditions. In PLASMA PROCESSES AND POLYMERS. ISSN 1612-8850, APR 2014, vol. 11, no. 4, p. 306-314., WOS
2. [1.1] FOMBUENA, V. - GARCIA-SANOGUERA, D. - SANCHEZ-NACHER, L. - BALART, R. - BORONAT, T. Optimization of atmospheric plasma treatment of LDPE films: influence on adhesive properties and ageing behavior. In JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY. ISSN 0169-4243, JAN 2 2014, vol. 28, no. 1, p. 97-113., WOS
3. [1.1] MULTANEN, V. - CHANIEL, G. - GRYNYOV, R. - LOEW, R.Y. - SIANY, N.K. - BORMASHENKO, E. Hydrophilization of liquid surfaces by plasma treatment. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, NOV 5 2014, vol. 461, p. 225-230., WOS
4. [1.1] SADEGHNEJAD, A. - AROUJALIAN, A. - RAISI, A. - FAZEL, S. Antibacterial nano silver coating on the surface of polyethylene films using corona discharge. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, APR 25 2014, vol. 245, p. 1-8., WOS
5. [1.2] DOUNAEV, A.- SHARIFULLIN, S. Friction surfaces modification using tribo-compounds. (2014) World Applied Sciences Journal, 31 (2), p. 272-276. DOI: 10.5829/idosi.wasj.2014.31.02.14293, Scopus

ADCA345 NOVÁK, Igor - *KRUPA, Igor* - CHODÁK, Ivan. Relation between electrical and mechanical properties in polyurethane/carbon black adhesives. In Materials Science Letters, 2002, vol. 21, no. 13, p. 1039 - 1041.

Citácie:
1. [1.1] HO, L.N. - NISHIKAWA, H. Copper-filled electrically conductive adhesives with enhanced shear strength. In JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE. ISSN 1059-9495, SEP 2014, vol. 23, no. 9, p. 3371-3378., WOS
2. [1.1] MANDHAKINI, M. - CHANDRAMOHAN, A. - JAYANTHI, K. - ALAGAR, M. Carbon black reinforced C8 ether linked bismaleimide toughened electrically conducting epoxy nanocomposites. In MATERIALS & DESIGN. ISSN 0261-3069, DEC 2014, vol. 64, p. 706-713., WOS
3. [1.2] JORDAN, J.L.- HERBOLD, E.B. Particulate composites under high strain rate and shock loading. (2014) Advanced Structured Materials, 35, 15 p. DOI: 10.1007/978-3-642-54258-9_1, Scopus

ADCA346 NOVÁK, Igor - *FLORIÁN, Štepán*. Study of the change in polarity of polypropylene modified in bulk by polar copolymers. In Journal of Materials Science, 2001, vol. 36, no. 20, p. 4863 - 4867. (0.701 - IF2000). (2001 - Current Contents). ISSN 0022-2461.

Citácie:
1. [1.2] GHOSH, D.- PANCHOLI, L.- SATHAYE, A. Comparative studies of

adhesive joints in automotive. (2014) SAE Technical Papers, 1, DOI: 10.4271/2014-01-0788, Scopus

ADCA347 NOVÁK, Igor - *ŠTEVIAR, Marián* - CHODÁK, Ivan - KRUPA, Igor - *NEDELČEV, Tomáš* - ŠPÍRKOVÁ, M. - CHEHIMI, M. M. - MOSNÁČEK, Jaroslav - KLEINOVÁ, Angela. Study of adhesion and surface properties of low-density poly(ethylene) pre- treated by cold discharge plasma. In Polymers for Advanced Technologies, 2007, vol. 18, p. 97-105. (1.406 - IF2006). (2007 - Current Contents). ISSN 1042-7147.

Citácie:

1. [1.1] PANKAJ, S.K. - BUENO-FERRER, C. - MISRA, N.N. - MILOSAVLJEVIC, V. - O'DONNELL, C.P. - BOURKE, P. - KEENER, K.M. - CULLEN, P.J. Applications of cold plasma technology in food packaging. In TRENDS IN FOOD SCIENCE & TECHNOLOGY. ISSN 0924-2244, JAN 2014, vol. 35, no. 1, p. 5-17., WOS

ADCA348 OLČÁK, D. - HRONSKÝ, V. - FRIČOVÁ, O. - KOVAĽAKOVÁ, M. - DURANKA, P. - CHODÁK, Ivan. Solid and melt-state 1H NMR studies of relaxation processes in isotactic polypropylenes. In Journal of Polymer Research, 2013, vol. 20, iss.4, art.no.117 [9p.]. (2.019 - IF2012). (2013 - Current Contents). ISSN 1022-9760.

Citácie:

1. [1.2] ALIEV, A.E.- LAW, R.V. Solid state NMR spectroscopy. (2014) Nuclear Magnetic Resonance, 43, p. 286-344. DOI: 10.1039/9781849738125-00286, Scopus

2. [1.2] KOWALEWSKI, J. Nuclear spin relaxation in liquids and gases. (2014) Nuclear Magnetic Resonance, 43, p. 230-285. DOI: 10.1039/9781849738125-00230, Scopus

ADCA349 OMASTOVÁ, Mária - BOUKERMA, K. - CHEHIMI, M. M. - TRCHOVÁ, M. Novel silicon carbide/polypyrrole composites: preparation and physicochemical properties. In Materials Research Bulletin, 2005, vol. 40, no. 5, p. 749 - 765. (1.310 - IF2004). (2005 - Current Contents, WOS). ISSN 0025-5408.

Citácie:

1. [1.1] MA, Q.B. - ZIEGLER, J. - KAISER, B. - FERTIG, D. - CALVET, W. - MURUGASEN, E. - JAEGERMANN, W. Solar water splitting with p-SiC film on p-Si: Photoelectrochemical behavior and XPS characterization. In INTERNATIONAL JOURNAL OF HYDROGEN ENERGY. ISSN 0360-3199, JAN 22 2014, vol. 39, no. 4, p. 1623-1629., WOS

ADCA350 OMASTOVÁ, Mária - TRCHOVÁ, M. - PIONTECK, J. - PROKEŠ, J. - STEJSKAL, J. Effect of polymerization conditions on the properties of polypyrrole prepared in the presence of sodium bis(2ethylhexyl) sulfosuccinate. In Synthetic Metals, 2004, vol. 143, no. 2, p. 153 - 161. (1.303 - IF2003). (2004 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] BOBER, P. - LIU, J. - MIKKONEN, K.S. - IHALAINEN, P. - PESONEN, M. - PLUMED-FERRER, C. - VON WRIGHT, A. - LINDFORS, T. - XU, C.L. - LATONEN, R.M. Biocomposites of nanofibrillated cellulose, polypyrrole, and silver nanoparticles with electroconductive and antimicrobial properties. In BIOMACROMOLECULES. ISSN 1525-7797, OCT 2014, vol. 15, no. 10, p. 3655-3663., WOS

2. [1.1] CAMPOS, R.A.M. - FAEZ, R. - REZENDE, M.C. Synthesis of polypyrrole with anionic surfactants targeting applications such as microwave absorbers. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, MAY-JUN 2014, vol. 24, no. 3, p. 351-359., WOS

3. [1.1] GURSOY, O. - CELIK, G. - GURSOY, S.S. Electrochemical Biosensor based on surfactant doped polypyrrole (PPy) matrix for lactose determination. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAY 5 2014, vol. 131, no. 9., WOS
4. [1.1] KHAMLICH, S. - BARZEGAR, F. - NURU, Z.Y. - DANGBEGNON, J.K. - BELLO, A. - NGOM, B.D. - MANYALA, N. - MAAZA, M. Polypyrrole/graphene nanocomposite: High conductivity and low percolation threshold. In SYNTHETIC METALS. ISSN 0379-6779, DEC 2014, vol. 198, p. 101-106., WOS
5. [1.1] YANG, C. - MO, H.D. - ZANG, L.M. - QIU, J.H. - SAKAI, E. - WU, X.L. A facile method to synthesize polypyrrole nanoparticles in the presence of natural organic phosphate. In PHYSICA B-CONDENSED MATTER. ISSN 0921-4526, SEP 15 2014, vol. 449, p. 181-185., WOS

ADCA351 OMASTOVÁ, Mária - SIMON, F. Surface characterizations of conductive poly(methyl methacrylate)/polypyrrole composites. In Journal of Materials Science, 2000, vol. 35, p. 1743-1749. (0.786 - IF1999). (2000 - Current Contents, WOS, SCOPUS).

Citácie:

1. [1.1] ZHANG, Y.H. - YI, Q.F. - LIU, X.P. - XIANG, B.L. Carbonizing products of the Fe/Co doped polypyrrole as efficient electrocatalysts for oxygen reduction reaction. In JOURNAL OF INORGANIC MATERIALS. ISSN 1000-324X, MAR 2014, vol. 29, no. 3, p. 269-274., WOS

ADCA352 OMASTOVÁ, Mária - PODHRADSKÁ, Silvia - PROKEŠ, J. - JANIGOVÁ, Ivica - STEJSKAL, J. Thermal ageing of conducting polymeric composites. In Polymer Degradation and Stability, 2003, vol. 82, no. 2, p. 251 - 256. (0.890 - IF2002). (2003 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] ABENOJAR, J. - MARTINEZ, M.A. - VELASCO, F. - RODRIGUEZ-PEREZ, M.A. Atmospheric plasma torch treatment of polyethylene/boron composites: Effect on thermal stability. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, JAN 25 2014, vol. 239, p. 70-77., WOS

ADCA353 OMASTOVÁ, Mária - KOŠINA, S. - SKÁKALOVÁ, V. - JANČULA, D. Electrochemical preparation of thick porous polypyrrole layers. In Synthetic Metals, 1993, vol. 53, no. 2, p. 227 - 235. (1.725 - IF1992). (1993 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] PECH-RODRIGUEZ, W.J. - GONZALEZ-QUIJANO, D. - VARGAS-GUTIERREZ, G. - RODRIGUEZ-VARELA, F.J. Electrophoretic deposition of polypyrrole/Vulcan XC-72 corrosion protection coatings on SS-304 bipolar plates by asymmetric alternating current for PEM fuel cells. In INTERNATIONAL JOURNAL OF HYDROGEN ENERGY. ISSN 0360-3199, OCT 2 2014, vol. 39, no. 29, p. 16740-16749., WOS

ADCA354 OMASTOVÁ, Mária - PIONTECK, J. - TRCHOVÁ, M. Properties and morphology of polypyrrole containing a surfactants. In Synthetic Metals, 2003, vol. 135, no.1 - 3, p. 437 - 438. (1.187 - IF2002). (2003 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] CAMPOS, R.A.M. - FAEZ, R. - REZENDE, M.C. Synthesis of polypyrrole with anionic surfactants targeting applications such as microwave absorbers. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, MAY-JUN 2014, vol. 24, no. 3, p. 351-359., WOS
2. [1.1] SEN GURSOY, S. - COGAL, S. - OKSUZ, A.U. Influence of surfactants on properties of electrochemically synthesized pyrrole/1-dimethylaminopyrrole

copolymer. In IRANIAN POLYMER JOURNAL. ISSN 1026-1265, OCT 2014, vol. 23, no. 10, p. 783-792., WOS

ADCA355 OMASTOVÁ, Mária - PIONTECK, J. - KOŠINA, S. Preparation and characterization of electrically conductive polypropylene/polypyrrole composites. In European Polymer Journal, 1996, vol. 32, no. 6, p . 681-689.

Citácie:

1. [1.1] CHIKOUCHE, I. - SAHARI, A. - ZOUAOUI, A. Influence of electropolymerization method on morphologies and capacitive properties of polypyrrole films growing on silicon. In SURFACE REVIEW AND LETTERS. ISSN 0218-625X, DEC 2014, vol. 21, no. 6., WOS

2. [1.1] GULREZ, S.K.H. - MOHSIN, M.E.A. - SHAIKH, H. - ANIS, A. - PULOSE, A.M. - YADAV, M.K. - QUA, E.H.P. - AL-ZAHRANI, S.M. A review on electrically conductive polypropylene and polyethylene. In POLYMER COMPOSITES. ISSN 0272-8397, MAY 2014, vol. 35, no. 5, p. 900-914., WOS

ADCA356 OMASTOVÁ, Mária - CHODÁK, Ivan - PIONTECK, J. - POTSCHKE, P. Preparation and properties of conducting polyolefins composites. In Journal of Macromolecular Science : Part A: Pure & Applied Chemistry, 1998, vol. A35, no. 7-8, p. 1117 - 1126. (0.571 - IF1997). (1998 - Current Contents). ISSN 1060-1325.

Citácie:

1. [1.1] ZARE, M. - SHARIF, M. - KASHKOOLI, A. Study on the effect of polypyrrole and polypyrrole/graphene oxide nanoparticles on the microstructure, electrical and tensile properties of polypropylene nanocomposites. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 13, p. 1392-1401., WOS

ADCA357 OMASTOVÁ, Mária - BOBER, P. - MORÁVKOVÁ, Z. - PEŘINKA, N. - KAPLANOVÁ, M. - SYROVÝ, T. - HROMÁDKOVÁ, J. - TRCHOVÁ, M. - STEJSKAL, J. Towards conducting inks: Polypyrrole-silver colloids. In Electrochimica Acta, 2014, vol. 122, p. 296-302. (4.086 - IF2013). (2014 - Current Contents). ISSN 0013-4686.

Citácie:

1. [1.1] ZHONG, Z. - LU, H. - REN, T.B. Shape control synthesis of silver nanoparticles and silver polymeric nanocomposites. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, DEC 2014, vol. 26, no. 12, p. 1930-1941., WOS

ADCA358 OMASTOVÁ, Mária - MIČUŠÍK, Matej. Polypyrrole coating of inorganic and organic materials by chemical oxidative polymerisation. In Chemical papers, 2012, vol. 66, no. 5, p. 392 - 414. (1.096 - IF2011). (2012 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] BLINOVA, N.V. - SVEC, F. Functionalized high performance polymer membranes for separation of carbon dioxide and methane. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 3, p. 600-604., WOS

2. [1.1] HUANG, Y.S. - LI, J.X. - CHEN, X.P. - WANG, X.K. Applications of conjugated polymer based composites in wastewater purification. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 107, p. 62160-62178., WOS

3. [1.1] JLASSI, K. - MEKKI, A. - BENNA-ZAYANI, M. - SINGH, A. - ASWAL, D.K. - CHEHIMI, M.M. Exfoliated clay/polyaniline nanocomposites through tandem diazonium cation exchange reactions and in situ oxidative polymerization of aniline. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 110, p. 65213-65222., WOS

4. [1.1] KASHIF, M. - AHMAD, N. - AHMAD, S. Electrochemical corrosion

resistance performance of sustainable resource-based nanoconducting polymer composites in alkaline medium. In JOURNAL OF SOLID STATE ELECTROCHEMISTRY. ISSN 1432-8488, JUL 2014, vol. 18, no. 7, p. 1855-1867., WOS

5. [1.1] MEKKI, A. - JOSHI, N. - SINGH, A. - SALMI, Z. - JHA, P. - DECORSE, P. - STEPHANIE, L.T. - MAHMOUD, R. - CHEHIMI, M.M. - ASWAL, D.K. - GUPTA, S.K. H2S sensing using in situ photo-polymerized polyaniline-silver nanocomposite films on flexible substrates. In ORGANIC ELECTRONICS. ISSN 1566-1199, JAN 2014, vol. 15, no. 1, p. 71-81., WOS

6. [1.1] REZNICKOVA, A. - KOLSKA, Z. - ZARUBA, K. - SVORCIK, V. Grafting of gold nanoparticles on polyethyleneterephthalate using dithiol interlayer. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, JUN 16 2014, vol. 145, no. 3, p. 484-490., WOS

7. [1.1] REZNICKOVA, A. - NOVOTNA, Z. - KOLSKA, Z. - SVORCIK, V. Immobilization of silver nanoparticles on polyethylene terephthalate. In NANOSCALE RESEARCH LETTERS. ISSN 1556-276X, JUN 16 2014, vol. 9., WOS

8. [1.1] SALOMAKI, M. - MYLLYMAKI, O. - HATONEN, M. - SAVOLAINEN, J. - LUKKARI, J. Layer-by-layer assembled oxidative films as general platform for electrodeless formation of conducting polymers. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, FEB 26 2014, vol. 6, no. 4, p. 2325-2334., WOS

9. [1.1] ZAIDI, M.G.H. - THAKUR, A. - AGARWAL, T. - ALAM, S. Synthesis of polypyrrole/polythiophene copolymers in supercritical carbon dioxide. In IRANIAN POLYMER JOURNAL. ISSN 1026-1265, MAY 2014, vol. 23, no. 5, p. 365-374., WOS

ADCA359 OMASTOVÁ, Mária - KOŠINA, S.- PIONTECK, J. - JANKE, A. - PAVLINEC, Jiří. Electrical properties and stability of polypyrrole containing conducting polymer composites. In Synthetic Metals, 1996, vol. 81, p. 49-57.

Citácie:

1. [1.1] ASHRAF, R. - KAUSAR, A. - SIDDIQ, M. Preparation and properties of layered carbon nanotube/polyazopyridine/nanodiamond composites. In JOURNAL OF PLASTIC FILM & SHEETING. ISSN 8756-0879, OCT 2014, vol. 30, no. 4, p. 412-434., WOS

2. [1.1] HESS, E.H. - WARYO, T. - SADIK, O.A. - IWUOHA, E.I. - BAKER, P.G.L. Constitution of novel polyamic acid/polypyrrole composite films by in-situ electropolymerization. In ELECTROCHIMICA ACTA. ISSN 0013-4686, MAY 10 2014, vol. 128, SI, p. 439-447., WOS

3. [1.2] ZHOU, S.B.- HUANG, X.B.- XIAO, A.G.- CHEN, Z.G.- CHEN, Y.D.- XING, Z.F. The conductive of composites made from polypyrrole and PBA-g-PMMA-GMA. (2014) Advanced Materials Research, 898, p. 144-148. DOI: 10.4028/www.scientific.net/AMR.898.144, Scopus

4. [1.2] ZHOU, S.B.- XIAO, A.G.- HUANG, X.B.- CHEN, Z.G.- CHEN, Y.D.- XING, Z.F. Study on conductive polypyrrole /P(BA-co-AA)-g-PMMA-GMA composites. (2014) Advanced Materials Research, 904, p. 111-116. DOI: 10.4028/www.scientific.net/AMR.904.111, Scopus

ADCA360 OMASTOVÁ, Mária - PAVLINEC, Jiří - PIONTECK, J. - SIMON, F. - KOŠINA, S. Chemical preparation and characterization of conductive poly(methyl methacrylate) polypyrrole composites. In Polymer : the International Journal for the Science and Technology of Polymers, 1998, vol. 39, no. 25, p. 6559 - 6566. (1.358 - IF1997). (1998 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] HESS, E.H. - WARYO, T. - SADIK, O.A. - IWUOHA, E.I. - BAKER, P.G.L. Constitution of novel polyamic acid/polypyrrole composite films by in-situ electropolymerization. In ELECTROCHIMICA ACTA. ISSN 0013-4686, MAY 10 2014, vol. 128, SI, p. 439-447., WOS
2. [1.1] NATEGHI, M.R. - NEGAHBANFARD, H. - KAVOOSI, S. Study of life time and energy conversion efficiency in bi-layer and tri-layer polymer actuators. In RUSSIAN JOURNAL OF ELECTROCHEMISTRY. ISSN 1023-1935, MAR 2014, vol. 50, no. 3, p. 274-280., WOS
3. [1.1] NATEGHI, M.R. - ZARANDI, M.B. - FATHI, A. Structural and morphological aspects considerations of bilayers actuators based on polypyrrole/polyethylene glycole composites. In POLYMER SCIENCE SERIES A. ISSN 0965-545X, SEP 2014, vol. 56, no. 5, p. 623-629., WOS
4. [1.2] NOËL, A.- FAUCHEU, J.- RIEU, M.- VIRICELLE, J.P.- BOURGEAT-LAMI, E. Tunable architecture for flexible and highly conductive graphene-polymer composites. (2014) Composites Science and Technology, 95, p. 82-88. DOI: 10.1016/j.compscitech.2014.02.013, Scopus

ADCA361 OMASTOVÁ, Mária - TRCHOVÁ, M. - KOVÁŘOVÁ, J. - STEJSKAL, J. Synthesis and structural study of polypyrroles prepared in the presence of surfactants. In Synthetic Metals, 2003, vol. 138, no. 3, p. 447 - 455. (1.187 - IF2002). (2003 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] ASHASSI-SORKHABI, H. - BAGHERI, R. - REZAEI-MOGHADAM, B. Protective properties of PPy-Au nanocomposite coatings prepared by sonoelectrochemisty and optimized by the Taguchi method. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, NOV 15 2014, vol. 131, no. 22., WOS
2. [1.1] CAMPOS, R.A.M. - FAEZ, R. - REZENDE, M.C. Synthesis of polypyrrole with anionic surfactants targeting applications such as microwave absorbers. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, MAY-JUN 2014, vol. 24, no. 3, p. 351-359., WOS
3. [1.1] CASTRO-BELTRAN, A. - DOMINGUEZ, C. - BAHENA-URIBE, D. - SEPULVEDA-GUZMAN, S. - CRUZ-SILVA, R. Effect of non-electroactive additives on the early stage pyrrole electropolymerization on indium tin oxide electrodes. In THIN SOLID FILMS. ISSN 0040-6090, SEP 1 2014, vol. 566, p. 23-31., WOS
4. [1.1] CETINER, S. Dielectric and morphological studies of nanostructured polypyrrole-coated cotton fabrics. In TEXTILE RESEARCH JOURNAL. ISSN 0040-5175, SEP 2014, vol. 84, no. 14, p. 1463-1475., WOS
5. [1.1] CHANG, Y. - LIU, Z.H. - FU, Z.B. - WANG, C.Y. - DAI, Y.T. - PENG, R.F. - HU, X.P. Preparation and characterization of one-dimensional core-shell sepiolite/polypyrrole nanocomposites and effect of organic modification on the electrochemical properties. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, JAN 8 2014, vol. 53, no. 1, p. 38-47., WOS
6. [1.1] DAS, D. - BASU, R.N. Electrophoretic deposition of zirconia thin film on nonconducting substrate for solid oxide fuel cell application. In JOURNAL OF THE AMERICAN CERAMIC SOCIETY. ISSN 0002-7820, NOV 2014, vol. 97, no. 11, p. 3452-3457., WOS
7. [1.1] ESSIZ, S. - SARI, B. Temperature-sensitive composite films: Synthesis and characterization of poly(vinyl acetate)/polystyrene/polypyrrole ternary composites. In ADVANCES IN POLYMER TECHNOLOGY. ISSN 0730-6679, DEC 2014, vol. 33., WOS
8. [1.1] FOROUTANI, K. - POURABBAS, B. - SHARIF, M. - FALLAHIAN, M. -

KHADEMI, S. - MOHAMMADIZADEH, M. In situ deposition of polythiophene nanoparticles on flexible transparent films: Effect of the process conditions. In MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING. ISSN 1369-8001, MAR 2014, vol. 19, p. 57-65., WOS

9. [1.1] GLOWALA, P. - BUDNIAK, A. - KRUG, P. - WYSOCKA, B. - BERBEC, S. - DEC, R. - DOLEGA, I. - KACPRZAK, K. - WOJCIECHOWSKI, J. - KAWALKO, J. - KEPKA, P. - KEPINSKA, D. - KIJEWSKA, K. - MAZUR, M. Incorporation of pyrene in polypyrrole/polystyrene magnetic beads. In SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY. ISSN 1386-1425, OCT 15 2014, vol. 131, p. 667-673., WOS

10. [1.1] GURSOY, O. - CELIK, G. - GURSOY, S.S. Electrochemical biosensor based on surfactant doped polypyrrole (PPy) matrix for lactose determination. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAY 5 2014, vol. 131, no. 9., WOS

11. [1.1] HSU, F.H. - WU, T.M. Enhanced capacitance of one-dimensional polypyrrole/graphene oxide nanoribbon nanocomposite as electrode material for high performance supercapacitors. In SYNTHETIC METALS. ISSN 0379-6779, DEC 2014, vol. 198, p. 188-195., WOS

12. [1.1] HUR, J. - IM, K. - KIM, S.W. - KIM, J. - CHUNG, D.Y. - KIM, T.H. - JO, K.H. - HAHN, J.H. - BAO, Z.A. - HWANG, S. - PARK, N. Polypyrrole/agarose-based electronically conductive and reversibly restorable hydrogel. In ACS NANO. ISSN 1936-0851, OCT 2014, vol. 8, no. 10, p. 10066-10076., WOS

13. [1.1] KARDARIAN, K. - BUSANI, T. - OSORIO, I. - DOMINGOS, H. - IGREJA, R. - FRANCO, R. - CORTEZ, J. Sintering of nanoscale silver coated textiles, a new approach to attain conductive fabrics for electromagnetic shielding. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, OCT 15 2014, vol. 147, no. 3, p. 815-822., WOS

14. [1.1] LAWAL, A.T. - WALLACE, G.G. Vapour phase polymerisation of conducting and non-conducting polymers: A review. In TALANTA. ISSN 0039-9140, FEB 15 2014, vol. 119, p. 133-143., WOS

15. [1.1] LEE, D. - ZHANG, C.Y. - GAO, H.F. Facile production of polypyrrole nanofi bers using a freeze-drying method. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, APR 2014, vol. 215, no. 7, p. 669-674., WOS

16. [1.1] LOVETT, J.R. - FIELDING, L.A. - ARMES, S.P. - BUXTON, R. One- pot preparation of conducting polymer- coated silica particles: Model highly absorbing aerosols. In ADVANCED FUNCTIONAL MATERIALS. ISSN 1616-301X, MAR 2014, vol. 24, no. 9, p. 1290-1299., WOS

17. [1.1] MERLINI, C. - ALMEIDA, R.D. - D'AVILA, M.A. - SCHREINER, W.H. - BARRA, G.M.D. Development of a novel pressure sensing material based on polypyrrole-coated electrospun poly(vinylidene fluoride) fibers. In MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS. ISSN 0921-5107, JAN 2014, vol. 179, p. 52-59., WOS

18. [1.1] MERLINI, C. - BARRA, G.M.D. - ARAUJO, T.M. - PEGORETTI, A. The effect of compressive stress on the electrically resistivity of poly(vinylidene fluoride)/polypyrrole blends. In SYNTHETIC METALS. ISSN 0379-6779, OCT 2014, vol. 196, p. 186-192., WOS

19. [1.1] MERLINI, C. - BARRA, G.M.O. - ARAUJO, T.M. - PEGORETTI, A. Electrically pressure sensitive poly(vinylidene fluoride)/polypyrrole electrospun mats. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 30, p. 15749-15758., WOS

20. [1.1] NOHUT, N. - EREN, E. - RAHHAL-IRABI, L. - OKSUZ, A.U. In situ

investigation of surfactants' effect onto electrochemical synthesis and properties of polyfurans. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, APR 2014, vol. 49, no. 7, p. 2754-2760., WOS

21. [1.1] PATIL, B.H. - BULAKHE, R.N. - LOKHANDE, C.D. Supercapacitive performance of chemically synthesized polypyrrole thin films: effect of monomer to oxidant ratio. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, MAY 2014, vol. 25, no. 5, p. 2188-2198., WOS

22. [1.1] RAUDSEPP, T. - MARANDI, M. - TAMM, T. - SAMMELSELG, V. - TAMM, J. Influence of ion-exchange on the electrochemical properties of polypyrrole films. In ELECTROCHIMICA ACTA. ISSN 0013-4686, MAR 10 2014, vol. 122, SI, p. 79-86., WOS

23. [1.1] RAWAL, I. - KAUR, A. Effect of anionic surfactant concentration on the variable range hopping conduction in polypyrrole nanoparticles. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, JAN 28 2014, vol. 115, no. 4., WOS

24. [1.1] RAWAL, I. - SEHRAWAT, K. - KAUR, A. Vibrational spectroscopic investigations of ammonia gas sensing mechanism in polypyrrole nanostructures. In VIBRATIONAL SPECTROSCOPY. ISSN 0924-2031, SEP 2014, vol. 74, p. 64-74., WOS

25. [1.1] SEN GURSOY, S. - COGAL, S. - OKSUZ, A.U. Influence of surfactants on properties of electrochemically synthesized pyrrole/1-dimethylaminopyrrole copolymer. In IRANIAN POLYMER JOURNAL. ISSN 1026-1265, OCT 2014, vol. 23, no. 10, p. 783-792., WOS

26. [1.1] SHINDE, S.S. - GUND, G.S. - DUBAL, D.P. - JAMBURE, S.B. - LOKHANDE, C.D. Morphological modulation of polypyrrole thin films through oxidizing agents and their concurrent effect on supercapacitor performance. In ELECTROCHIMICA ACTA. ISSN 0013-4686, FEB 2014, vol. 119, p. 1-10., WOS

27. [1.1] SINGH, B. - KAUR, A. Photoelectrical, optical, and transport properties of poly (3-hexylthiophene)-zinc sulfide hybrid nanocomposites. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, AUG 14 2014, vol. 116, no. 6., WOS

28. [1.1] SUI, J. - KILMARTIN, P. - TRAVAS-SEJDIC, J. A Novel micro ring structured PPy/pTS free standing film with improved actuation stability. In INTERNATIONAL JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS. ISSN 0091-4037, MAY 2014, vol. 63, no. 8, p. 424-429., WOS

29. [1.1] TOHUMCU, C. - TAS, R. - CAN, M. Increasing the crystallite and conductivity of polypyrrole with dopant used. In IONICS. ISSN 0947-7047, DEC 2014, vol. 20, no. 12, p. 1687-1692., WOS

30. [1.1] ULLAH, H. - SHAH, A.U.A. - BILAL, S. - AYUB, K. Doping and dedoping processes of polypyrrole: DFT study with hybrid functionals. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, AUG 7 2014, vol. 118, no. 31, p. 17819-17830., WOS

31. [1.1] VELHAL, N. - PATIL, N. - JAMDADE, S. - PURI, V. Studies on galvanostatically electropolymerised polypyrrole/polyaniline composite thin films on stainless steel. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JUL 15 2014, vol. 307, p. 129-135., WOS

32. [1.1] XU, J. - LI, M.X. - WU, L. - SUN, Y.Y. - ZHU, L.G. - GU, S.J. - LIU, L. - BAI, Z.K. - FANG, D. - XU, W.L. A flexible polypyrrole-coated fabric counter electrode for dye-sensitized solar cells. In JOURNAL OF POWER SOURCES. ISSN 0378-7753, JUL 1 2014, vol. 257, p. 230-236., WOS

33. [1.1] YAGHOUBIDOUST, F. - WICAKSONO, D.H.B. - CHANDREN, S. - NUR, H. Effect of graphene oxide on the structural and electrochemical behavior of polypyrrole deposited on cotton fabric. In JOURNAL OF MOLECULAR STRUCTURE. ISSN 0022-2860, OCT 5 2014, vol. 1075, p. 486-493., WOS

34. [1.1] YANG, Y. - HE, K.C. - YAN, P. - WANG, D. - WU, X.Y. - ZHAO, X. - HUANG, Z.L. - ZHANG, C.M. - HE, D.N. Enhanced capacity of polypyrrole/anthraquinone sulfonate/graphene composite as cathode in lithium batteries. In ELECTROCHIMICA ACTA. ISSN 0013-4686, AUG 20 2014, vol. 138, p. 481-485., WOS

35. [1.1] YANG, Y. - WANG, C.Y. - ZHANG, C.M. - WANG, D. - HE, D.N. - WALLACE, G.G. A novel codoping approach for enhancing the performance of polypyrrole cathode in a bioelectric battery. In CARBON. ISSN 0008-6223, DEC 2014, vol. 80, p. 691-697., WOS

36. [1.1] ZHU, L.G. - WU, L. - SUN, Y.Y. - LI, M.X. - XU, J. - BAI, Z.K. - LIANG, G.J. - LIU, L. - FANG, D. - XU, W.L. Cotton fabrics coated with lignosulfonate-doped polypyrrole for flexible supercapacitor electrodes. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 12, p. 6261-6266., WOS

37. [1.1] ZHU, L.G. - ZHANG, L.X. - WU, L. - SUN, Y.Y. - BAI, Z.K. - XU, J. - LIANG, G.J. - XU, W.L. Conductive cotton fabrics for heat generation prepared by mist polymerization. In FIBERS AND POLYMERS. ISSN 1229-9197, SEP 2014, vol. 15, no. 9, p. 1804-1809., WOS

38. [1.2] GERGELY, A.- PÁSZTI, Z.- BERTÓTI, I.- MIHÁLY, J.- DROTÁR, E.- TÖRÖK, T. Hybrid zinc-rich paint coatings: The impact of incorporation of nano-size inhibitor and electrical conducting particles. (2014) Intelligent Coatings for Corrosion Control, p. 195-249. DOI: 10.1016/B978-0-12-411467-8.00006-4, Scopus

39. [1.2] JADHAV, N.- GELLING, V. Titanium dioxide/conducting polymers composite pigments for corrosion protection of cold rolled steel. (2014) Journal of Coatings Technology Research, 12 (1), p. 137-152. DOI: 10.1007/s11998-014-9613-8, Scopus

40. [1.2] JADHAV, N.- GELLING, V. Titanium dioxide/conducting polymers composite pigments for corrosion protection of cold rolled steel. (2014) Journal of Coatings Technology Research, 12 (1), p. 137-152. DOI: 10.1007/s11998-014-9613-8, Scopus

ADCA362 OMASTOVÁ, Mária - MOSNÁČKOVÁ, Katarína - TRCHOVÁ, M. - KONYUSHENKO, E. N. - STEJSKAL, J. - FEDORKO, P. - PROKEŠ, J. Polypyrrole and polyaniline prepared with cerium (IV) sulfate oxidant. In Synthetic Metals, 2010, vol.160, p. 701 - 702. (1.901 - IF2009). (2010 - Current Contents, WOS, SCOPUS). ISSN 0379-6779.

Citácie:

1. [1.2] BOBER, P.- LIU, J.- MIKKONEN, K.S.- IHALAINEN, P.- PESONEN, M.- PLUMED-FERRER, C.- VON WRIGHT, A.- LINDFORS, T.- XU, C.- LATONEN, R.M. Biocomposites of nanofibrillated cellulose, polypyrrole, and silver nanoparticles with electroconductive and antimicrobial properties.(2014) Biomacromolecules, 15 (10), p. 3655-3663., Scopus

ADCA363 OMASTOVÁ, Mária - MOSNÁČKOVÁ, Katarína - FEDORKO, P. - TRCHOVÁ, M. - STEJSKAL, J. Polypyrrole/silver composites prepared by single-step synthesis. In Synthetic Metals, 2013, vol.166, p. 57 - 62. (2.109 - IF2012). (2013 - Current Contents). ISSN 0379-6779.

Citácie:

1. [1.1] BOBER, P. - LIU, J. - MIKKONEN, K.S. - IHALAINEN, P. - PESONEN, M. - PLUMED-FERRER, C. - VON WRIGHT, A. - LINDFORS, T. - XU, C.L. - LATONEN, R.M. Biocomposites of nanofibrillated cellulose, polypyrrole, and silver nanoparticles with electroconductive and antimicrobial properties. In BIOMACROMOLECULES. ISSN 1525-7797, OCT 2014, vol. 15, no. 10, p. 3655-3663., WOS

2. [1.1] GNIADEK, M. - MALINOWSKA, S. - RAPECKI, T. - STOJEK, Z. - DONTEN, M. Synthesis of polymer-metal nanocomposites at liquid-liquid interface supported by ultrasonic irradiation. In SYNTHETIC METALS. ISSN 0379-6779, JAN 2014, vol. 187, p. 193-200., WOS

3. [1.1] YANG, S.W. - YE, C.C. - SONG, X. - HE, L. - LIAO, F. Theoretical calculation based synthesis of a poly(p-phenylenediamine)-Fe3O4 composite: a magnetically recyclable photocatalyst with high selectivity for acid dyes. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 97, p. 54810-54818., WOS

ADCA364 ORIVE, G. - HERNANDEZ, R. M. - GASCON, A. R. - CALAFIORE, R. - CHANG, T. S. M. - DE VOS, P. - HORTELAO, G. - HUNKELER, D. - LACÍK, Igor - SHAPIRO, A. M. I. - PEDRAZ, J. L. Cell encapsulation: promise and progress. In Nature medicine, 2003, vol. 9, no. 1, p. 104 - 107. ISSN 1078-8956.

Citácie:

1. [1.1] AL-RAMMAH, T.Y. Alginate microencapsulation of stem cells as alternative source to the limited supply of donor tissue. In BIOMEDICAL RESEARCH-INDIA. ISSN 0970-938X, APR-JUN 2014, vol. 25, no. 2, p. 276-280., WOS

2. [1.1] CHOI, Y.C. - CHOI, J.S. - WOO, C.H. - CHO, Y.W. Stem cell delivery systems inspired by tissue-specific niches. In JOURNAL OF CONTROLLED RELEASE. ISSN 0168-3659, NOV 10 2014, vol. 193, p. 42-50., WOS

3. [1.1] COSTA, R.R. - MANO, J.F. Polyelectrolyte multilayered assemblies in biomedical technologies. In CHEMICAL SOCIETY REVIEWS. ISSN 0306-0012, 2014, vol. 43, no. 10, p. 3453-3479., WOS

4. [1.1] DAS, R.K. - ZOUANI, O.F. A review of the effects of the cell environment physicochemical nanoarchitecture on stem cell commitment. In BIOMATERIALS. ISSN 0142-9612, JUL 2014, vol. 35, no. 20, p. 5278-5293., WOS

5. [1.1] DATTA, S.S. - ABBASPOURRAD, A. - AMSTAD, E. - FAN, J. - KIM, S.H. - ROMANOWSKY, M. - SHUM, H.C. - SUN, B.J. - UTADA, A.S. - WINDBERGS, M. - ZHOU, S.B. - WEITZ, D.A. 25th Anniversary Article: double emulsion templated solid microcapsules: Mechanics and controlled release. In ADVANCED MATERIALS. ISSN 0935-9648, APR 2014, vol. 26, no. 14, p. 2205-2218., WOS

6. [1.1] DELBARI, A. - FADAEI, F. - SALEHI, M. - FARAHANI, R.M. - PIRYAEI, A. - HEIDARI, M.H. - NOUROZIAN, M. - MANSOURI, V. A simple method for generating small calcium-alginate beads by syringe. In JOURNAL OF HISTOTECHNOLOGY. ISSN 0147-8885, DEC 2014, vol. 37, no. 4, p. 132-137., WOS

7. [1.1] GRYSHKOV, O. - POGOZHYKH, D. - HOFMANN, N. - POGOZHYKH, O. - MUELLER, T. - GLASMACHER, B. Encapsulating non-human primate multipotent stromal cells in alginate via high voltage for cell-based therapies and cryopreservation. In PLOS ONE. ISSN 1932-6203, SEP 26 2014, vol. 9, no. 9., WOS

8. [1.1] HUANG, H.S. - HE, X.M. Interfacial tension based on-chip extraction of microparticles confined in microfluidic Stokes flows. In APPLIED PHYSICS LETTERS. ISSN 0003-6951, OCT 6 2014, vol. 105, no. 14., WOS

9. [1.1] HUMES, H.D. - BUFFINGTON, D. - WESTOVER, A.J. - ROY, S. - FISSELL, W.H. The bioartificial kidney: current status and future promise. In PEDIATRIC NEPHROLOGY. ISSN 0931-041X, MAR 2014, vol. 29, no. 3, p. 343-351., WOS

10. [1.1] KATO, K. - INUKAI, K. - FUJIKURA, K. - KASUGA, T. Effective encapsulation of laccase in an aluminium silicate nanotube hydrogel. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, AUG 2014, vol. 38, no. 8, p. 3591-

3599., WOS
11. [1.1] KE, Y. - LIU, G.S. - WANG, J.H. - XUE, W. - DU, C. - WU, G. Preparation of carboxymethyl cellulose based microgels for cell encapsulation. In EXPRESS POLYMER LETTERS. ISSN 1788-618X, NOV 2014, vol. 8, no. 11, p. 841-849., WOS
12. [1.1] KEPSUTLU, B. - NAZLI, C. - BAL, T. - KIZILEL, S. Design of bioartificial pancreas with functional micro/nano-based encapsulation of islets. In CURRENT PHARMACEUTICAL BIOTECHNOLOGY. ISSN 1389-2010, 2014, vol. 15, no. 7, p. 590-608., WOS
13. [1.1] KIM, C. - PARK, J. - KANG, J.Y. A microfluidic manifold with a single pump system to generate highly mono-disperse alginate beads for cell encapsulation. In BIOMICROFLUIDICS. ISSN 1932-1058, NOV 2014, vol. 8, no. 6., WOS
14. [1.1] LAM, P.L. - GAMBARI, R. Advanced progress of microencapsulation technologies: In vivo and in vitro models for studying oral and transdermal drug deliveries. In JOURNAL OF CONTROLLED RELEASE. ISSN 0168-3659, MAR 28 2014, vol. 178, p. 25-45., WOS
15. [1.1] LAMB, M. - LAUGENOUR, K. - LIANG, O.W. - ALEXANDER, M. - FOSTER, C.E. - LAKEY, J.R.T. In vitro maturation of viable islets from partially digested young pig pancreas. In CELL TRANSPLANTATION. ISSN 0963-6897, 2014, vol. 23, no. 3, p. 263-272., WOS
16. [1.1] MADRY, H. - REY-RICO, A. - VENKATESAN, J.K. - JOHNSTONE, B. - CUCCHIARINI, M. Transforming growth factor beta- releasing scaffolds for cartilage tissue engineering. In TISSUE ENGINEERING PART B-REVIEWS. ISSN 1937-3368, APR 1 2014, vol. 20, no. 2, p. 106-125., WOS
17. [1.1] MONTORO, S.R. - MEDEIROS, S.D. - ALVES, G.M. Nanostructured hydrogels. In NANOSTRUCTURED POLYMER BLENDS. 2014, p. 325-355., WOS
18. [1.1] NO, D.Y. - JEONG, G.S. - LEE, S.H. Immune-protected xenogeneic bioartificial livers with liver-specific microarchitecture and hydrogel-encapsulated cells. In BIOMATERIALS. ISSN 0142-9612, OCT 2014, vol. 35, no. 32, p. 8983-8991., WOS
19. [1.1] O'CEARBHAILL, E.D. - NG, K.S. - KARP, J.M. Emerging medical devices for minimally invasive cell therapy. In MAYO CLINIC PROCEEDINGS. ISSN 0025-6196, FEB 2014, vol. 89, no. 2, p. 259-273., WOS
20. [1.1] PALCHESKO, R.N. - SZYMANSKI, J.M. - SAHU, A. - FEINBERG, A.W. Shrink wrapping cells in a defined extracellular matrix to modulate the chemo-mechanical microenvironment. In CELLULAR AND MOLECULAR BIOENGINEERING. ISSN 1865-5025, SEP 2014, vol. 7, no. 3, p. 355-368., WOS
21. [1.1] PARK, J.H. - YANG, S.H. - LEE, J. - KO, E.H. - HONG, D. - CHOI, I.S. Nanocoating of Single Cells: From maintenance of cell viability to manipulation of cellular activities. In ADVANCED MATERIALS. ISSN 0935-9648, APR 2014, vol. 26, no. 13, p. 2001-2010., WOS
22. [1.1] RANG, A. - PARK, J. - JU, J. - JEONG, G.S. - LEE, S.H. Cell encapsulation via microtechnologies. In BIOMATERIALS. ISSN 0142-9612, MAR 2014, vol. 35, no. 9, p. 2651-2663., WOS
23. [1.1] RAO, W. - ZHAO, S.T. - YU, J.H. - LU, X.B. - ZYNGER, D.L. - HE, X.M. Enhanced enrichment of prostate cancer stem-like cells with miniaturized 3D culture in liquid core-hydrogel shell microcapsules. In BIOMATERIALS. ISSN 0142-9612, SEP 2014, vol. 35, no. 27, p. 7762-7773., WOS
24. [1.1] SAYYAR, B. - DODD, M. - MARQUEZ-CURTIS, L. - JANOWSKA-WIECZOREK, A. - HORTELANO, G. Cell-matrix Interactions of Factor IX (FIX)-

engineered human mesenchymal stromal cells encapsulated in RGD-alginate vs. Fibrinogen-alginate microcapsules. In ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY. ISSN 2169-1401, APR 2014, vol. 42, no. 2, p. 102-109., WOS

25. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS

26. [1.1] SINITSYNA, O.V. - DAVYDOVA, N.K. - SERGEEV, V.N. - LAUKHINA, E.E. Nanostructured films by the self-assembly of bioactive copolymer. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 98, p. 55565-55570., WOS

27. [1.1] SONG, W. - AN, D. - KAO, D.I. - LU, Y.C. - DA, G.H. - CHEN, S.B. - MA, M.L. Nanofibrous microposts and microwells of controlled shapes and their hybridization with hydrogels for cell encapsulation. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, MAY 28 2014, vol. 6, no. 10, p. 7038-7044., WOS

28. [1.1] VOLKERT, B. - LEHMANN, A. - HETTRICH, K. Novel cellulose and starch-based materials. In CELLULOSE CHEMISTRY AND TECHNOLOGY. ISSN 0576-9787, MAY-JUN 2014, vol. 48, no. 5-6, p. 425-443., WOS

29. [1.1] XU, C.X. - HUANG, Y. - FU, J.Z. - MARKWALD, R.R. Electric field-assisted droplet formation using piezoactuation-based drop-on-demand inkjet printing. In JOURNAL OF MICROMECHANICS AND MICROENGINEERING. ISSN 0960-1317, NOV 2014, vol. 24, no. 11., WOS

30. [1.1] YANG, D.B. - WANG, N. - YAN, X.J. - SHI, J. - ZHANG, M. - WANG, Z.Y. - YUAN, H.Z. Microencapsulation of seed-coating tebuconazole and its effects on physiology and biochemistry of maize seedlings. In COLLOIDS AND SURFACES B-BIOINTERFACES. ISSN 0927-7765, FEB 1 2014, vol. 114, p. 241-246., WOS

31. [1.1] YAO, M.L. - LIU, J.Z. - JIN, S. - JIAO, J. - GAI, Q.Y. - WEI, Z.F. - FU, Y.J. - ZHAO, J.T. A novel biotransformation of astragalosides to astragaloside IV with the deacetylation of fungal endophyte Penicillium canescens. In PROCESS BIOCHEMISTRY. ISSN 1359-5113, MAY 2014, vol. 49, no. 5, p. 807-812., WOS

32. [1.1] ZHAO, S.T. - AGARWAL, P. - RAO, W. - HUANG, H.S. - ZHANG, R.L. - LIU, Z.G. - YU, J.H. - WEISLEDER, N. - ZHANG, W.J. - HE, X.M. Coaxial electrospray of liquid core-hydrogel shell microcapsules for encapsulation and miniaturized 3D culture of pluripotent stem cells. In INTEGRATIVE BIOLOGY. ISSN 1757-9694, SEP 2014, vol. 6, no. 9, p. 874-884., WOS

33. [1.1] ZHENG, G.S. - LIU, X.D. - WANG, X.L. - CHEN, L. - XIE, H.G. - WANG, F. - ZHENG, H.Z. - YU, W.T. - MA, X.J. Improving stability and biocompatibility of alginate/chitosan microcapsule by fabricating bi-functional membrane. In MACROMOLECULAR BIOSCIENCE. ISSN 1616-5187, MAY 2014, vol. 14, no. 5, p. 655-666., WOS

34. [1.2] DU, J.-YAREMA, K.J. Cell microencapsulation for tissue engineering and regenerative medicine. (2014) Micro-and Nanoengineering of the Cell Surface, p. 215-239. DOI: 10.1016/B978-1-4557-3146-6.00010-6, Scopus

35. [1.2] KIM, Y.- OZER, S.- UYGUN, B.E. Liver regeneration. The bioengineering approach. (2014) Regenerative Medicine Applications in Organ Transplantation, p. 333-352. DOI: 10.1016/B978-0-12-398523-1.00024-0, Scopus

ADCA365 ORIVE, G. - HERNANDEZ, R. M. - GASCON, A. R. - CALAFIORE, R. - CHANG, T. M. S. - DE VOS, P. - HORTELANO, G. - HUNKELER, D. - LACÍK, Igor - PEDRAZ, J. L. History, challenges and perspectives of cell microencapsulation. In Trends in Biotechnology, 2004, vol. 22, no.2, p. 87 - 92.

ISSN 0167-7799.

Citácie:

1. [1.1] AL-RAMMAH, T.Y. Alginate microencapsulation of stem cells as alternative source to the limited supply of donor tissue. In BIOMEDICAL RESEARCH-INDIA. ISSN 0970-938X, APR-JUN 2014, vol. 25, no. 2, p. 276-280., WOS

2. [1.1] COLTON, C.K. Oxygen supply to encapsulated therapeutic cells. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 93-110., WOS

3. [1.1] DORNAS, R.M. - SILVA, G.A.X. - MARTINS, C.H.V. - MOREIRA, J.L.S. - JENSEN, C.E.M. - SOUZA, M.R. - NICOLI, J.R. - NUNES, A.C. - NEUMANN, E. Probiotic technological and functional characteristics of Lactobacillus strains isolated from chicken gut. In ARQUIVO BRASILEIRO DE MEDICINA VETERINARIA E ZOOTECNIA. ISSN 0102-0935, FEB 2014, vol. 66, no. 1, p. 93-100., WOS

4. [1.1] HUANG, P.Y. - ZHANG, L.D. - GAO, Y.M. - HE, Z.Y. - YAO, D. - WU, Z.T. - CEN, J. - CHEN, X.T. - LIU, C.C. - HU, Y.P. - LAI, D.M. - HU, Z.L. - CHEN, L. - ZHANG, Y. - CHENG, X. - MA, X.J. - PAN, G.Y. - WANG, X. - HUI, L.J. Direct reprogramming of human fibroblasts to functional and expandable hepatocytes. In CELL STEM CELL. ISSN 1934-5909, MAR 6 2014, vol. 14, no. 3, p. 370-384., WOS

5. [1.1] JIANG, L.Y. - LIU, J.Y. - WANG, K. - GU, X. - LUO, Y. Investigating design principles of micropatterned encapsulation systems containing high-density microtissue arrays. In SCIENCE CHINA-LIFE SCIENCES. ISSN 1674-7305, FEB 2014, vol. 57, no. 2, SI, p. 221-231., WOS

6. [1.1] KIM, D.I. - ZHANG, Y. - KIM, H.H. - JEON, H.J. - KIM, G.C. - GO, J.S. Microfluidic synthesis of pH-sensitive multiamine hydrogel microparticles and release characterization of anticancer drug of doxorubicin (Dox). In JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY. ISSN 1773-2247, 2014, vol. 24, no. 5, p. 464-468., WOS

7. [1.1] LAM, P.L. - GAMBARI, R. Advanced progress of microencapsulation technologies: In vivo and in vitro models for studying oral and transdermal drug deliveries. In JOURNAL OF CONTROLLED RELEASE. ISSN 0168-3659, MAR 28 2014, vol. 178, p. 25-45., WOS

8. [1.1] LOPEZ, M.L. - KIELING, C.O. - CRUZ, C.U. - OSVALDT, A. - DE MUNOZ, G.O. - MEURER, L. - SILLA, L. - MATTE, U. Platelet increases survival in a model of 90% hepatectomy in rats. In LIVER INTERNATIONAL. ISSN 1478-3223, AUG 2014, vol. 34, no. 7, p. 1049-1056., WOS

9. [1.1] MONTORO, S.R. - MEDEIROS, S.D. - ALVES, G.M. Nanostructured Hydrogels. In NANOSTRUCTURED POLYMER BLENDS. 2014, p. 325-355., WOS

10. [1.1] RANG, A. - PARK, J. - JU, J. - JEONG, G.S. - LEE, S.H. Cell encapsulation via microtechnologies. In BIOMATERIALS. ISSN 0142-9612, MAR 2014, vol. 35, no. 9, p. 2651-2663., WOS

11. [1.1] SAYYAR, B. - DODD, M. - MARQUEZ-CURTIS, L. - JANOWSKA-WIECZOREK, A. - HORTELANO, G. Cell-matrix Interactions of Factor IX (FIX)-engineered human mesenchymal stromal cells encapsulated in RGD-alginate vs. Fibrinogen-alginate microcapsules. In ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY. ISSN 2169-1401, APR 2014, vol. 42, no. 2, p. 102-109., WOS

12. [1.1] SCHWEICHER, J. - NYITRAY, C. - DESAI, T.A. Membranes to achieve immunoprotection of transplanted islets. In FRONTIERS IN BIOSCIENCE-

LANDMARK. ISSN 1093-9946, JAN 1 2014, vol. 19, p. 49-76., WOS
13. [1.1] STEELE, J. A. M. - HALLE, J. -P. - PONCELET, D. - NEUFELD, R. J. Therapeutic cell encapsulation techniques and applications in diabetes. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 74-83., WOS
14. [1.1] THANAWALA, K. - MUTNEJA, N. - KHANNA, A.S. - RAMAN, R.K.S. Development of self-healing coatings based on linseed oil as autonomous repairing agent for corrosion resistance. In MATERIALS. ISSN 1996-1944, NOV 2014, vol. 7, no. 11, p. 7324-7338., WOS
15. [1.1] THOMAS, D. - FONTANA, G. - CHEN, X.Z. - SANZ-NOGUES, C. - ZEUGOLIS, D.I. - DOCKERY, P. - O'BRIEN, T. - PANDIT, A. A shape-controlled tuneable microgel platform to modulate angiogenic paracrine responses in stem cells. In BIOMATERIALS. ISSN 0142-9612, OCT 2014, vol. 35, no. 31, p. 8757-8766., WOS
16. [1.2] MEIER, R.P.H.- MULLER, Y.D.- GUTZWILLER, E.M.- SPAHR, L.- NEGRO, F.- KRAUSE, K.H.- SCHALLER, K.- WANDREY, C.- SGROI, A.- MOREL, P.- BÜHLER, L.H. Cell transplantation: Current treatments and future prospects [Transplantation cellulaire: Traitements actuels et perspectives d'avenir]. (2014) Revue Medicale Suisse, 10 (435), p. 1350-1355., Scopus

ADCA366 ORVISKÝ, E. - ŠOLTÉS, L. - CHABREČEK, P. - *NOVÁK, Ivan* - STANČÍKOVÁ, M. Size exclusion chromatographic characterization of sodium hyaluronate fractions prepared by high energetic sonification. In Chromatographia, 1993, vol. 37, no. 1-2, p. 20-22. (1993 - Current Contents). ISSN 0009-5893.

Citácie:

1. [1.1] KUPSKA, I. - LAPCIK, L. - LAPCIKOVA, B. - ZAKOVA, K. - JURIKOVA, J. The viscometric behaviour of sodium hyaluronate in aqueous and KCl solutions. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, 2014, vol. 454, p. 32-37., WOS

ADCA367 ORVISKÝ, E. - ŠOLTÉS, L. - CHABREČEK, P. - *NOVÁK, Ivan* - KÉRY, V. - STANČÍKOVÁ, M. - VINŠ, I. The determination of hyaluronan molecular weight distribution by means of high-performance size exclusion chromatography. In Journal of Liquid Chromatography & Related Technologies, 1992, vol.15, no.18, p. 3203-3218. ISSN 1082-6076.

Citácie:

1. [1.2] GIJI, S. - ARUMUGAM, M. Isolation and characterization of hyaluronic acid from marine organisms. In ADVANCES IN FOOD AND NUTRITION RESEARCH. ISSN 1043-4526, 2014, vol. 72, p. 61-77, SCOPUS
2. [3] RAJAGOPALAN, P. - TRACEY, H. - CHEN, Z.M. - BANDYOPADHYAYA, A. - VEERARAGHAVAN, S. - RAJAGOPALAN, D.R. - SALVEMINI, D. - MCPHEE, I. - VISWANADHA, S. - RAJAGOPALAN, R. DDD-028: A potent potential non-opioid, non-cannabinoid analgesic for neuropathic and inflammatory pain. In BIOORGANIC & MEDICINAL CHEMISTRY LETTERS. ISSN 0960-894X, 2014, vol. 24, no. 14, p. 3088-3091.

ADCA368 *PALENČÁR, Peter* - BLEHA, Tomáš. Molecular dynamics simulations of the folding of poly (alanine) peptides. In Journal of molecular modeling, 2011, vol. 17, p. 2367 - 2374. (1.871 - IF2010). (2011 - Current Contents). ISSN 1610-2940.

Citácie:

1. [1.1] PELASSA, I. - CORA, D. - CESANO, F. - MONJE, F.J. - MONTAROLO, P.G. - FIUMARA, F. Association of polyalanine and polyglutamine coiled coils mediates expansion disease-related protein aggregation and dysfunction. In HUMAN MOLECULAR GENETICS. ISSN 0964-6906, JUL 2014, vol. 23, no. 13, p. 3402-3420., WOS

ADCA369 PANDIS, C. - LOGAKIS, E. - PEOGLOS, V. - PISSIS, P. - OMASTOVÁ, Mária - *MRAVČÁKOVÁ, Miroslava* - JANKE, A. - PIONTECK, J. - PENEVA, Y. - MINKOVA, L. Morphology, microhardness, and electrical properties of composites based on polypropylene, montmorillonite, and polypyrrole. In Journal of Polymer Science. Part B.Polymer Physics, 2009, vol. 47, p. 407 - 423. (1.586 - IF2008). (2009 - Current Contents). ISSN 0887-6266.

Citácie:

1. [1.1] CHOUDHARY, S. - SENGWA, R.J. Intercalated clay structures and amorphous behavior of solution cast and melt pressed poly(ethylene oxide)-clay nanocomposites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS

ADCA370 *PAPAJOVÁ, Eva* - BUJDOŠ, M. - CHORVÁT, D. Jr. - STACH, Marek - LACÍK, Igor. Method for preparation of planar alginate hydrogels by external gelling using an aerosol of gelling solution. In Carbohydrate Polymers : scientific and technological aspects of industrially important polysaccharides, 2012, vol. 90, p. 472 - 482. (3.628 - IF2011). (2012 - Current Contents). ISSN 0144-8617.

Citácie:

1. [1.1] MAHDAVINIA, G.R. - BAZMIZEYNABAD, F. Synthesis of anti-salt hydroxypropyl methylcellulose-g-polyacrylamide/laponite RD nanocomposite hydrogel and its application to remove cationic dye. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, MAR 7 2014, vol. 53, no. 4, p. 411-422., WOS

2. [1.2] JIANG, H.L.-CUI, Y.L.-QI, X.J.- QI, Y.- DING, S. Alginate-chitosan microcapsule in tissue engineering research. (2014) Chinese Journal of Tissue Engineering Research, 18 (3), p. 412-419. DOI: 10.3969/j.issn.2095-4344, Scopus

3. [1.2] LI, Y.- LIU, Y.- LI, S.- LIANG, G.- ZHANG, Y.- HU, Q. Gel fraction and swelling degree of hollow alginate fiber fabricated by direct writing and crosslinking.(2014) Huagong Xuebao/CIESC Journal, 65 (12), p. 5090-5096. DOI: 10.3969/j.issn.0438-1157.2014.12.060, Scopus

ADCA371 PASZKIEWICZ, S. - SZYMCZYK, A. - ŠPITALSKÝ, Zdenko - SOCCIO, M. - MOSNÁČEK, Jaroslav - EZQUERRA, T. A. - ROSLANIEC, Z. Electrical conductivity of poly(ethylene terephthalate)/expanded graphite nanocomposites prepared by In situ polymerization. In Journal of Polymer Science. Part B.Polymer Physics, 2012, vol. 50, p. 1645 - 1652. (1.531 - IF2011). (2012 - Current Contents). ISSN 0887-6266.

Citácie:

1. [1.1] BELLUCCI, S. - BISTARELLI, S. - CATALDO, A. - MICCIULLA, F. - MACUTKEVIC, J. - KRANAUSKAITE, I. - BANYS, J. - KUZHIR, P. - VOLYNETS, N. - PADDUBSKAYA, A. - BYCHANOK, D. - MAKSIMENKO, S. - FIERRO, V. - CELZARD, A. Microwave response properties of epoxy resin composites filled with graphitic fillers. In 2014 INTERNATIONAL CONFERENCE ON NUMERICAL ELECTROMAGNETIC MODELING AND OPTIMIZATION FOR RF, MICROWAVE, AND TERAHERTZ APPLICATIONS (NEMO). 2014., WOS

2. [1.1] GORRASI, G. - D'AMBROSIO, S. - PATIMO, G. - PANTANI, R. Hybrid clay- carbon nanotube/ PET composites: Preparation, processing, and analysis of physical properties. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, JUL 5 2014, vol. 131, no. 13., WOS

3. [1.1] KRANAUSKAITE, I. - MACUTKEVIC, J. - KUZHIR, P. - VOLYNETS, N. - PADDUBSKAYA, A. - BYCHANOK, D. - MAKSIMENKO, S. - BANYS, J. - JUSKENAS, R. - BISTARELLI, S. - CATALDO, A. - MICCIULLA, F. -

BELLUCCI, S. - FIERRO, V. - CELZARD, A. Dielectric properties of graphite-based epoxy composites. In PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE. ISSN 1862-6300, JUL 2014, vol. 211, no. 7, p. 1623-1633., WOS

ADCA372 PAVLIKOVÁ, S. - THOMANN, R. - REICHERT, P. - MULHAUPT, R. - MARCINČIN, A. - BORSIG, Eberhard. Fiber spinning from poly(propylene)-organoclay nanocomposite. In Journal of Applied Polymer Science, 2003, vol. 89, no. 3, p. 604 - 611. (0.927 - IF2002). (2003 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] ASLANZADEH, S. - RAHBAR, R.S. - NAZI, M. Accelerating role of clay in photo-oxidation of polypropylene/clay multifilament yarns. In CHINESE JOURNAL OF POLYMER SCIENCE. ISSN 0256-7679, MAY 2014, vol. 32, no. 5, p. 609-619., WOS

ADCA373 PAVLINEC, Jiří - ZEUNER, F. - ANGERMANN, J. - MOSZNER, N. Monomers for adhesive polymers. 5 Synthesis and radical polymerization behavior 2,4,6 - trimethylphenyl 2-[4- (dihydroxyphosphoryl) - 2- oxa-butyl]acrylate. In Macromolecular Chemistry and Physics, 2005, vol. 206, no. 18, p. 1878 - 1886. (1.880 - IF2004). (2005 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] ALTIN, A. - AKGUN, B. - BILGICI, Z.S. - TURKER, S.B. - AVCI, D. Synthesis, photopolymerization, and adhesive properties of hydrolytically stable phosphonic acid-containing (meth)acrylamides. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, FEB 15 2014, vol. 52, no. 4, p. 511-522., WOS

2. [1.1] SONG, L.Y. - YE, Q. - GE, X.P. - MISRA, A. - LAURENCE, J.S. - BERRIE, C.L. - SPENCER, P. Synthesis and evaluation of novel dental monomer with branched carboxyl acid group. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS. ISSN 1552-4973, OCT 2014, vol. 102, no. 7, p. 1473-1484., WOS

ADCA374 PAVLINEC, Jiří - MOSZNER, N. Monomers for adhesive polymers. 8a Crosslinking polymeriztion of selected N-substituted bis(acrylamide)s for dental filling materials. In Journal of Applied Polymer Science, 2009, vol. 113, p. 3137 - 3145. (1.400 - IF2008). (2009 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] BURUIANA, T. - MELINTE, V. - POPA, I.D. - BURUIANA, E.C. New urethane oligodimethacrylates with quaternary alkylammonium for formulating dental composites. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE. ISSN 0957-4530, APR 2014, vol. 25, no. 4, p. 1183-1194., WOS

2. [1.1] SONG, L.Y. - YE, Q. - GE, X.P. - MISRA, A. - LAURENCE, J.S. - BERRIE, C.L. - SPENCER, P. Synthesis and evaluation of novel dental monomer with branched carboxyl acid group. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS. ISSN 1552-4973, OCT 2014, vol. 102, no. 7, p. 1473-1484., WOS

ADCA375 PAVLINEC, Jiří - *LAZÁR, Milan* - CSOMOROVÁ, Katarína. The oxidative decomposition of poly(methyl methacrylate)-crosslinked poly(butyl acrylate) core-shell polymers. In Polymer Degradation and Stability, 1997, vol. 57, no. 3, p. 307-312. (0.653 - IF1996). (1997 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] ZHANG, Z. - WANG, S.C. - ZHANG, J. Large stabilizing effect of titanium dioxide on photodegradation of PVC/alpha-methylstyrene-acrylonitrile copolymer/impact modifier-matrix composites. In POLYMER COMPOSITES.

ISSN 0272-8397, DEC 2014, vol. 35, no. 12, p. 2365-2375., WOS

ADCA376 PAWLUS, S. - BARTOŠ, Josef - ŠAUŠA, O. - KRIŠTIAK, J. - PALUCH, M. Positronium annihilation lifetimes and dielectric spectroscopy studies on diethyl phthalate: Phenomenological correlations and microscopic analyses in therms of the extended free volume model by Cohen-Grest. In Journal of Chemical Physics, 2006, vol. 124, no. 10, 104505. (3.138 - IF2005). ISSN 0021-9606.

Citácie:

1. [1.1] CECCIA, S.- COCQUET, C.- TROUILLET-FONTI, L. In RHEOLOGICA ACTA, 2014, vol. 53, no. 2, pp. 181-190., WOS

ADCA377 PENEVA, Y. - VALCHEVA, M. - MINKOVA, L. - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Nonisothermal crystallization kinetics and microhardness of PP/CNT composites. In Journal of Macromolecular Science : Part B: Physics, 2008, vol. 47, p. 1197 - 1210. (0.809 - IF2007). (2008 - Current Contents). ISSN 0022-2348.

Citácie:

1. [1.2] AVALOS-BELMONTES, F.- FLORES-GODINA, M.- NARRO-CESPEDES, R.- CASTAÑEDA-FACIO, A.- CASTAÑEDA-FLORES, M.- TELLEZ-ROSAS, M.- RAMOS-DEVALLE, L.- ZITZUMBO-GUZMAN, R.Enhanced structural behavior of systems polypropylene-carbon nanotubes in acidic medium. (2014) Materials Research Society Symposium Proceedings, 1613, p. 115-120. DOI: 10.1557/opl.2014.167, Scopus

ADCA378 *PETRO, Miroslav* - BEREK, Dušan. Polymers immobilized on silica-gels as stationary phases for liquid-chromatography. In Chromatographia, 1993, vol. 37, no. 9 - 10, p. 549 - 561. ISSN 0009-5893.

Citácie:

1. [1.1] LANE, J.A. - HICKEY, R.M. Analysis of bioactive food-sourced oligosaccharides by high-performance liquid chromatography. In FOOD OLIGOSACCHARIDES: PRODUCTION, ANALYSIS AND BIOACTIVITY. 2014, p. 399-420., WOS

ADCA379 PILICHOWSKI, J.-F. - MOREL, M. - TAMBOURA, F. - CHMELA, Štefan - BABA, M. - LACOSTE, J. Crosslinking and ageing of 13C labelled polyisoprene part 1: Synthesis and polymerisation of 4-13C-isoprene. In Polymer Degradation and Stability, 2010, vol. 95, p. 1575 - 1580. (2.154 - IF2009). (2010 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] HLANGOTHI, S.P. - WOOLARD, C.D. - HLANGOTHI, B.G. alpha,omega-Alkanedithiol cross-linking of high vinyl 3,4-polyisoprene. In PLASTICS RUBBER AND COMPOSITES. ISSN 1465-8011, SEP 2014, vol. 43, no. 7, p. 217-224., WOS

2. [1.2] GUERRERO-VÁSQUEZ, G.A.- CHINCHILLA, N.- MOLINILLO, J.M.G.- MACÍAS, F.A. Synthesis of bioactive speciosins G and P from hexagonia speciosa. (2014) Journal of Natural Products, 77 (9), p. 2029-2036. DOI: 10.1021/np500341q, Scopus

ADCA380 PIONTECK, J. - OMASTOVÁ, Mária - PÖTSCHKE, P. - SIMON, F. - CHODÁK, Ivan. Morphology, conductivity, and mechanical properties of polypyrrole-containing composites. In Journal of Macromolecular Science : Physics, 1999, vol. B38, no. 5&6, p. 737-748. (0.647 - IF1998). (1999 - Current Contents). ISSN 0022-2348.

Citácie:

1. [1.1] ZARE, M. - SHARIF, M. - KASHKOOLI, A. Study on the effect of polypyrrole and polypyrrole/graphene oxide nanoparticles on the microstructure,

electrical and tensile properties of polypropylene nanocomposites. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 13, p. 1392-1401., WOS

ADCA381 *POPELKA, Anton* - KRONEK, Juraj - NOVÁK, Igor - KLEINOVÁ, Angela - MIČUŠÍK, Matej - ŠPÍRKOVÁ, M. - OMASTOVÁ, Mária. Surface modification of low-density polyethylene with poly(2-ethyl-2-oxazoline) using a low-pressure plasma treatment. In Vacuum, 2014, vol. 100, p. 53 - 56. (1.426 - IF2013). (2014 - Current Contents). ISSN 0042-207X.

Citácie:

1. [1.1] POSPISILOVA, A. - FILIPPOV, S.K. - BOGOMOLOVA, A. - TURNER, S. - SEDLACEK, O. - MATUSHKIN, N. - CERNOCHOVA, Z. - STEPANEK, P. - HRUBY, M. Glycogen-graft-poly(2-alkyl-2-oxazolines) - the new versatile biopolymer-based thermoresponsive macromolecular toolbox. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 106, p. 61580-61588., WOS

ADCA382 *POPELKA, Anton* - NOVÁK, Igor - LEHOCKÝ, M. - CHODÁK, Ivan - SEDLIAČIK, J. - GAJTANSKA, M. - SEDLIAČIKOVÁ, M. - VESEL, A. - JUNKAR, I. - KLEINOVÁ, Angela - ŠPÍRKOVÁ, M. - BÍLEK, F. Anti-bacterial treatment of polyethylene by cold plasma for medical purposes. In Molecules, 2012, vol. 17, p. 762 - 785. (2.386 - IF2011). (2012 - Current Contents). ISSN 1420-3049.

Citácie:

1. [1.1] FADIDA, T. - KROUPITSKI, Y. - PEIPER, U.M. - BENDIKOV, T. - SELA, S. - POVERENOV, E. Air-ozonolysis to generate contact active antimicrobial surfaces: Activation of polyethylene and polystyrene followed by covalent graft of quaternary ammonium salts. In COLLOIDS AND SURFACES B-BIOINTERFACES. ISSN 0927-7765, OCT 1 2014, vol. 122, p. 294-300., WOS

2. [1.1] GRATZL, G. - PAULIK, C. - HILD, S. - GUGGENBICHLER, J.P. - LACKNER, M. Antimicrobial activity of poly(acrylic acid) block copolymers. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, MAY 1 2014, vol. 38, p. 94-100., WOS

3. [1.1] KREGIEL, D. - NIEDZIELSKA, K. Effect of plasma processing and organosilane modifications of polyethylene on aeromonas hydrophila biofilm formation. In BIOMED RESEARCH INTERNATIONAL. ISSN 2314-6133, 2014., WOS

4. [1.1] PANKAJ, S.K. - BUENO-FERRER, C. - MISRA, N.N. - MILOSAVLJEVIC, V. - O'DONNELL, C.P. - BOURKE, P. - KEENER, K.M. - CULLEN, P.J. Applications of cold plasma technology in food packaging. In TRENDS IN FOOD SCIENCE & TECHNOLOGY. ISSN 0924-2244, JAN 2014, vol. 35, no. 1, p. 5-17., WOS

5. [1.1] PERSIN, Z. - KLEINSCHEK, K.S. - MOZETIC, M. The effects of storage gases on the durability of ammonia plasma effects with respect to wound fluid absorption and the biostatic activity of viscose non-wovens. In TEXTILE RESEARCH JOURNAL. ISSN 0040-5175, MAY 2014, vol. 84, no. 7, p. 751-763., WOS

6. [1.1] TRENTIN, D.S. - BONATTO, F. - ZIMMER, K.R. - RIBEIRO, V.B. - ANTUNES, A.L.S. - BARTH, A.L. - SOARES, G.V. - KRUG, C. - BAUMVOL, I.J.R. - MACEDO, A.J. N-2/H-2 plasma surface modifications of polystyrene inhibit the adhesion of multidrug resistant bacteria. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, APR 25 2014, vol. 245, p. 84-91., WOS

ADCA383 *POPELKA, Anton* - NOVÁK, Igor - LEHOCKÝ, M. - JUNKAR, I. - MOZETIČ, M. - KLEINOVÁ, Angela - JANIGOVÁ, Ivica - ŠLOUF, M. - BÍLEK, F. - CHODÁK, Ivan. A new route for chitosan immobilization onto polyethylene surface. In Carbohydrate Polymers : scientific and technological aspects of industrially

important polysaccharides, 2012, vol. 90, p. 1501 - 1508. (3.628 - IF2011). (2012 - Current Contents). ISSN 0144-8617.

Citácie:

1. [1.1] BALAN, V. - VERESTIUC, L. Strategies to improve chitosan hemocompatibility: A review. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, APR 2014, vol. 53, p. 171-188., WOS

2. [1.1] FUENTES, C.A. - BECKERS, K. - PFEIFFER, H. - TRAN, L.Q.N. - DUPONT-GILLAIN, C. - VERPOEST, I. - VAN VUURE, A.W. Equilibrium contact angle measurements of natural fibers by an acoustic vibration technique. In COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS. ISSN 0927-7757, AUG 5 2014, vol. 455, p. 164-173., WOS

3. [1.1] GRATZL, G. - PAULIK, C. - HILD, S. - GUGGENBICHLER, J.P. - LACKNER, M. Antimicrobial activity of poly(acrylic acid) block copolymers. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, MAY 1 2014, vol. 38, p. 94-100., WOS

4. [1.1] KALINOV, K. - IGNATOVA, M. - MANOLOVA, N. - RASHKOV, I. - MARKOVA, N. - MOMEKOVA, D. N,N,N-trimethylchitosan iodide complexes with a weak or a strong polyacid and nanoparticles thereof. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, NOV 2014, vol. 292, no. 11, p. 2899-2912., WOS

5. [1.1] KARA, F. - AKSOY, E.A. - YUKSEKDAG, Z. - HASIRCI, N. - AKSOY, S. Synthesis and surface modification of polyurethanes with chitosan for antibacterial properties. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, NOV 4 2014, vol. 112, p. 39-47., WOS

6. [1.2] CAMPOS, D.M.- TOURY, B.- D'ALMEIDA, M.- ATTIK, G.N.- FERRAND, A.- RENOUD, P.- GROSGOGEAT, B. Acidic pH resistance of grafted chitosan on dental implant. (2014) Odontology, 103 (2), p. 210-217. DOI: 10.1007/s10266-014-0162-5, Scopus

ADCA384 PORUBSKÁ, M. - SZOLOS, O. - KÓŇOVÁ, A. - JANIGOVÁ, Ivica - JAŠKOVÁ, M. - JOMOVÁ, K. - CHODÁK, Ivan. FTIR spectroscopy study of polyamide-6 irradiated by electron and proton beams. In Polymer Degradation and Stability, 2012, vol. 97, p. 523 - 531. (2.769 - IF2011). (2012 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] APAYDIN, K. - LAACHACHI, A. - FOUQUET, T. - JIMENEZ, M. - BOURBIGOT, S. - RUCH, D. Mechanistic investigation of a flame retardant coating made by layer-by-layer assembly. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 82, p. 43326-43334., WOS

2. [1.1] PAVLINAK, D. - HNILICA, J. - QUADE, A. - SCHAFER, J. - ALBERTI, M. - KUDRLE, V. Functionalisation and pore size control of electrospun PA6 nanofibres using a microwave jet plasma. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, OCT 2014, vol. 108, SI, p. 48-55., WOS

3. [1.1] SHIN, B.Y. - HAN, D.H. Morphological and mechanical properties of polyamide 6/linear low density polyethylene blend compatibilized by electron-beam initiated mediation process. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, APR 2014, vol. 97, p. 198-207., WOS

4. [1.1] TU, K.L. - CHIVAS, A.R. - NGHIEM, L.D. Effects of chemical preservation on flux and solute rejection by reverse osmosis membranes. In JOURNAL OF MEMBRANE SCIENCE. ISSN 0376-7388, DEC 15 2014, vol. 472, p. 202-209., WOS

5. [1.1] WANG, W. - MENG, L.H. - HUANG, Y.D. Hydrolytic degradation of monomer casting nylon in subcritical water. In POLYMER DEGRADATION AND

STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 312-317., WOS

ADCA385 *POTISK, Pavol* - CAPEK, Ignác. Emulsion polymerization of butyl acrylate, 3. In Die Angewandte Makromolekulare Chemie, 1994, vol. 218, no 3795, p. 53-67.

Citácie:

1. [1.1] SHUKLA, S. - RAI, J.S.P. Synthesis and characterizations of waterborne poly(acrylate) latexes. In HIGH PERFORMANCE POLYMERS. ISSN 0954-0083, SEP 2014, vol. 26, no. 6, SI, p. 653-659., WOS

ADCA386 QI, M. - LOKENSGARD STRAND, B. - MORCH, Y. - LACÍK, Igor - WANG, Y. - SALEHI, P. - BARBARO, B. - GANGEMI, A. - KUECHLE, J. - ROMAGNOLI, T. - HANSEN, M. A. - RODRIGUES, L. A. - BENEDETTI, E. - HUNKELER, D. - SKJAK-BRAEK, G. - OBERHOLZER, J. Encapsulation of human islets in novel inhomogeneous alginate-Ca2+/Ba2+ microbeads: In Vitro and In Vivo function. In Artificial Cells, Bloods Substitutes and Biotechnology, 2008, vol. 36, p. 403 - 420. (0.857 - IF2007). (2008 - Current Contents). ISSN 1073-1199.

Citácie:

1. [1.1] KRISHNAN, R. - ARORA, R.P. - ALEXANDER, M. - WHITE, S.M. - LAMB, M.W. - FOSTER, C.E. - CHOI, B. - LAKEY, J.R.T. Noninvasive evaluation of the vascular response to transplantation of alginate encapsulated islets using the dorsal skin-fold model. In BIOMATERIALS. ISSN 0142-9612, JAN 2014, vol. 35, no. 3, p. 891-898., WOS

2. [1.1] MOTTE, E. - SZEPESSY, E. - SUENENS, K. - STANGE, G. - BOMANS, M. - JACOBS-TULLENEERS-THEVISSEN, D. - LING, Z.D. - KROON, E. - PIPELEERS, D. Composition and function of macroencapsulated human embryonic stem cell-derived implants: comparison with clinical human islet cell grafts. In AMERICAN JOURNAL OF PHYSIOLOGY-ENDOCRINOLOGY AND METABOLISM. ISSN 0193-1849, NOV 1 2014, vol. 307, no. 9, p. E838-E846., WOS

3. [1.1] ROBLES, L. - STORRS, R. - LAMB, M. - ALEXANDER, M. - LAKEY, J.R.T. Current status of islet encapsulation. In CELL TRANSPLANTATION. ISSN 0963-6897, 2014, vol. 23, no. 11, p. 1321-1348., WOS

ADCA387 QI, M. - LACÍK, Igor - HLOUŠKOVÁ, Gabriela - STRAND, B. L. - FORMO, K. - WANG, Y. - MARCHESE, E. - MENDOZA-ELIAS, J. E. - KINZER, K. P. - GATTI, F. - PAUSHTER, D. - PATEL, S. - OBERHOLZER, J. A recommended laparoscopic procedure for implantation of microcapsules in the peritoneal cavity of non-human primates. In Journal of Surgical Research, 2011, vol. 168, p. e117 - e123. (2.239 - IF2010). (2011 - Current Contents). ISSN 0022-4804.

Citácie:

1. [1.1] KRISHNAN, R. - ARORA, R.P. - ALEXANDER, M. - WHITE, S.M. - LAMB, M.W. - FOSTER, C.E. - CHOI, B. - LAKEY, J.R.T. Noninvasive evaluation of the vascular response to transplantation of alginate encapsulated islets using the dorsal skin-fold model. In BIOMATERIALS. ISSN 0142-9612, JAN 2014, vol. 35, no. 3, p. 891-898., WOS

ADCA388 QI, M. - MORCH, Y. - LACÍK, Igor - FORMO, K. - MARCHESE, E. - WANG, Y. - DANIELSON, K. J. - KINZER, K. - WANG, S. - BARBARO, B. - HLOUŠKOVÁ, Gabriela - CHORVÁT, Dušan Jr. - HUNKELER, D. - SKJAK-BRAEK, G. - OBERHOLZER, J. - STRAND, B. L. Survival of human islets in microbeads containing high guluronic acid alginate crosslinked with Ca2+ and Ba2+. In Xenotransplantation, 2012, vol. 19, p. 355 - 364. (2.326 - IF2011). (2012 - Current Contents). ISSN 0908-665X.

Citácie:

1. [1.1] GRANICKA, L.H. Nanoencapsulation of cells within multilayer shells for

biomedical applications. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, JAN 2014, vol. 14, no. 1, p. 705-716., WOS

ADCA389 RAČKO, Dušan - CIFRA, Peter. Segregation of semiflexible macromolecules in nanochannel. In Journal of Chemical Physics, 2013, vol. 138, art.no. 184904. (3.164 - IF2012). (2013 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] POLSON, J.M. - MONTGOMERY, L.G. Polymer segregation under confinement: Free energy calculations and segregation dynamics simulations. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, OCT 28 2014, vol. 141, no. 16., WOS

2. [1.1] ROUSHAN, M. - KAUR, P. - KARPUSENKO, A. - COUNTRYMAN, P.J. - ORTIZ, C.P. - LIM, S.F. - WANG, H. - RIEHN, R. Probing transient protein-mediated DNA linkages using nanoconfinement. In BIOMICROFLUIDICS. ISSN 1932-1058, MAY 2014, vol. 8, no. 3., WOS

3. [1.1] SHIN, J. - CHERSTVY, A.G. - METZLER, R. Mixing and segregation of ring polymers: spatial confinement and molecular crowding effects. In NEW JOURNAL OF PHYSICS. ISSN 1367-2630, MAY 23 2014, vol. 16., WOS

ADCA390 RAČKO, Dušan - CAPPONI, S. - ALVAREZ, F. - COLMENERO, J. The free volume of poly(vinyl methylether) as computed in a wide temperature range and at length scales up to the nanoregion. In Journal of Chemical Physics, 2011, vol. 134, iss. 4, art.no. 044512 p.1-14. (2.921 - IF2010). (2011 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] CHEN, Y. - JIA, M.L. - XU, H. - CAO, Y. - FAN, H.J. Counterintuitive gas transport through polymeric nanocomposite membrane: Insights from molecular dynamics simulations. In JOURNAL OF PHYSICAL CHEMISTRY C. ISSN 1932-7447, DEC 4 2014, vol. 118, no. 48, p. 28179-28188., WOS

2. [1.1] KOBAYASHI, Y. - KAZAMA, S. - INOUE, K. - TOYAMA, T. - NAGAI, Y. - HARAYA, K. - MOHAMED, H.F.M. - O'ROUKE, B.E. - OSHIMA, N. - KINOMURA, A. - SUZUKI, R. Positron annihilation in cardo-based polymer membranes. In JOURNAL OF PHYSICAL CHEMISTRY B. ISSN 1520-6106, JUN 5 2014, vol. 118, no. 22, p. 6007-6014., WOS

ADCA391 RAČKO, Dušan - CAPPONI, S. - ALVAREZ, F. - COLMENERO, J. - BARTOŠ, Josef. The free-volume structure of a polymer melt, poly(vinyl methylether) from molecular dynamics simulations and cavity analysis. In Journal of Chemical Physics, 2009, vol.131, iss.6, p. 064903-1 - 064903-10. (3.149 - IF2008). (2009 - Current Contents). ISSN 0021-9606.

Citácie:

1. [1.1] XIA, Z.Y. - TREXLER, M. - WU, F. - JEAN, Y.C. - VAN HORN, J.D. Free-volume hole relaxation in molecularly oriented glassy polymers. In PHYSICAL REVIEW E. ISSN 1539-3755, FEB 24 2014, vol. 89, no. 2., WOS

ADCA392 RAHEĽ, J. - ČERNÁK, M. - HUDEC, I. - BRABLEC, A. - TRUNEC, D. - CHODÁK, Ivan. Atmospheric-pressure plasma treatment of ultra-high-molecular-weight polypropylene fabric. In Czechoslovak journal of physics, 2000, vol. 50, suppl.3, p. 445 - 448. (0.328 - IF1999). (2000 - Current Contents, Scopus). ISSN 0011-4626.

Citácie:

1. [1.1] GHORANNEVISS, M. - SHAHIDI, S. Flame retardant properties of plasma pretreated/metallic salt loaded cotton fabric before and after direct dyeing. In JOURNAL OF FUSION ENERGY. ISSN 0164-0313, APR 2014, vol.

33, no. 2, p. 119-124., WOS
2. [1.1] TINO, R. - SMATKO, L. Modifying wood surfaces with atmospheric diffuse coplanar surface barrier discharge plasma. In WOOD AND FIBER SCIENCE. ISSN 0735-6161, OCT 2014, vol. 46, no. 4, p. 459-464., WOS

ADCA393 RÄTZSCH, M. - BUCKA, H. - HESSE, A. - REICHELT, N. - BORSIG, Eberhard. Challenges in polypropylene by chemical modification. In Macromolecular Symposia, 1998, vol. 129, p. 53-77. (0.677 - IF1997). (1998 - Current Contents). ISSN 1022-1360.

Citácie:

1. [1.1] KUBOKI, T. Foaming behavior of cellulose fiber-reinforced polypropylene composites in extrusion. In JOURNAL OF CELLULAR PLASTICS. ISSN 0021-955X, MAR 2014, vol. 50, no. 2, p. 113-128., WOS

ADCA394 RÄTZSCH, M. - ARNOLD, M. - BORSIG, Eberhard - BUCKA, H. - REICHELT, N. Radical reactions on polypropylene in the solid state. In Progress in Polymer Science : an International Review Journal, 2002, vol. 27, no. 7, p. 1195 - 1282. ISSN 0079-6700.

Citácie:

1. [1.1] AMINTOWLIEH, Y. - TZOGANAKIS, C. - HATZIKIRIAKOS, S.G. - PENLIDIS, A. Effects of processing variables on polypropylene degradation and long chain branching with UV irradiation. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JUN 2014, vol. 104, p. 1-10., WOS
2. [1.1] ARDAKANI, F. - JAHANI, Y. - MORSHEDIAN, J. Effect of electron beam irradiation dose on the rheology, morphology, and thermal properties of branched polypropylene/polybutene-1 blend. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, AUG 2014, vol. 54, no. 8, p. 1747-1756., WOS
3. [1.1] CHEN, Q.H. - DENG, Y. - MAO, X.G. - YIN, F.Q. - LIN, J.H. Preparation and reaction kinetics of polypropylene-graft-cardanol by reactive extrusion and its compatibilization on polypropylene/polystyrene. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 15 2014, vol. 131, no. 4., WOS
4. [1.1] GUAPACHA, J. - FAILLA, M.D. - VALLES, E.M. - QUINZANI, L.M. Molecular, rheological, and thermal study of long-chain branched polypropylene obtained by esterification of anhydride grafted polypropylene. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, JUN 15 2014, vol. 131, no. 12., WOS
5. [1.1] GUO, P. - LIU, Y.P. - XU, Y.H. - LU, M.F. - ZHANG, S.J. - LIU, T. Effects of saturation temperature/pressure on melting behavior and cell structure of expanded polypropylene bead. In JOURNAL OF CELLULAR PLASTICS. ISSN 0021-955X, JUL 2014, vol. 50, no. 4, p. 321-335., WOS
6. [1.1] KFOURY, G. - HASSOUNA, F. - RAQUEZ, J.M. - TONIAZZO, V. - RUCH, D. - DUBOIS, P. Tunable and durable toughening of polylactide materials via reactive extrusion. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, MAY 2014, vol. 299, no. 5, p. 583-595., WOS
7. [1.1] NUNTAPICHEDKUL, B. - TANTAYANON, S. - LAOHHASURAYOTIN, K. Practical approach in surface modification of biaxially oriented polypropylene films for gravure printability. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, SEP 30 2014, vol. 314, p. 331-340., WOS
8. [1.1] SUGIMOTO, R. - KANEKO, H. - SAITO, J. - KAWAHARA, N. - MATSUO, S. - MATSUGI, T. Controlled radical polymerization with polyolefin macroinitiator: a convenient and versatile approach to polyolefin-based block and graft copolymers. In POLYMER BULLETIN. ISSN 0170-0839, JUN 2014, vol. 71, no. 6, p. 1421-1431., WOS
9. [1.1] ZHANG, Y.J. - GAN, T. - HU, H.Y. - HUANG, Z.Q. - HUANG, A.M. -

ZHU, Y.Q. - FENG, Z.F. - YANG, M. A green technology for the preparation of high fatty acid starch esters: Solid-phase synthesis of starch laurate assisted by mechanical activation with stirring ball mill as reactor. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, FEB 12 2014, vol. 53, no. 6, p. 2114-2120., WOS

10. [1.2] AMINTOWLIEH, Y.- TZOGANAKIS, C.- HATZIKIRIAKOS, S.- PENLIDIS, A. Modification of melt strength of polypropylene via UV radiation. (2014) Annual Technical Conference - ANTEC, Conference Proceedings, 3 (January), p. 2370-2374., Scopus

11. [1.2] CHEN, Q.H.- LIN, J.H. Preparation and properties of polypropylene-graft-cardanol by reactive extrusion. (2014) Advanced Materials Research, 936, p. 39-42. DOI: 10.4028/www.scientific.net/AMR.936.39, Scopus

ADCA395 REITH, D. - CIFRA, Peter - STASIAK, A. - VIRNAU, P. Effective stiffening of DNA due to nematic ordering causes DNA molecules packed in phage capsids to preferentially form torus knots. In Nucleic acids research, 2012, vol. 22, p. 1 - 9. (8.026 - IF2011). (2012 - Current Contents). ISSN 0305-1048.

Citácie:

1. [1.1] TUBIANA, L. Computational study on the progressive factorization of composite polymer knots into separated prime components. In PHYSICAL REVIEW E. ISSN 1539-3755, MAY 27 2014, vol. 89, no. 5., WOS

ADCA396 RICHAUD, E. - FAYOLLE, B. - VERDU, J. - RYCHLÝ, Jozef. Co-oxidation kinetic model for the thermal oxidation of polyethylene-unsaturated substrate systems. In Polymer Degradation and Stability, 2013, vol. 98, p. 1081 - 1088. (2.770 - IF2012). (2013 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] BOHNING, M. - NIEBERGALL, U. - ADAM, A. - STARK, W. Impact of biodiesel sorption on mechanical properties of polyethylene. In POLYMER TESTING. ISSN 0142-9418, APR 2014, vol. 34, p. 17-24., WOS

2. [1.1] BOHNING, M. - NIEBERGALL, U. - ADAM, A. - STARK, W. Influence of biodiesel sorption on temperature-dependent impact properties of polyethylene. In POLYMER TESTING. ISSN 0142-9418, DEC 2014, vol. 40, p. 133-142., WOS

ADCA397 ROKSTAD, A. M. - BREKKE, O.- L. - STEINKJER, B. - RYAN, L. - HLOUŠKOVÁ, Gabriela - STRAND, B. L. - SKJAK-BRAEK, G. - LAMBRIS, J.D. - LACÍK, Igor - MOLLNES, T. E. - ESPEVIK, T. The induction of cytokines by polycation containing microspheres by a complement dependent mechanism. In Biomaterials, 2013, vol. 34, p. 621 - 630. (7.604 - IF2012). (2013 - Current Contents). ISSN 0142-9612.

Citácie:

1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS

2. [1.1] HOLMES, B. - ZHANG, L.G. Enhanced human bone marrow mesenchymal stem cell functions in 3D bioprinted biologically inspired osteochondral construct. In PROCEEDINGS OF THE ASME INTERNATIONAL MECHANICAL ENGINEERING CONGRESS AND EXPOSITION, 2013, VOL 3A. 2014., WOS

3. [1.1] MAHOU, R. - MEIER, R.P.H. - BUHLER, L.H. - WANDREY, C. Alginate-poly(ethylene glycol) hybrid microspheres for primary cell microencapsulation. In MATERIALS. ISSN 1996-1944, JAN 2014, vol. 7, no. 1, p. 275-286., WOS

4. [1.1] SPASOJEVIC, M. - PAREDES-JUAREZ, G.A. - VORENKAMP, J. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Reduction of the inflammatory

responses against alginate-poly-L-Lysine microcapsules by anti-biofouling surfaces of PEG-b-PLL diblock copolymers. In PLOS ONE. ISSN 1932-6203, OCT 27 2014, vol. 9, no. 10., WOS

5. [1.1] ZHENG, G.S. - LIU, X.D. - WANG, X.L. - CHEN, L. - XIE, H.G. - WANG, F. - ZHENG, H.Z. - YU, W.T. - MA, X.J. Improving stability and biocompatibility of alginate/chitosan microcapsule by fabricating bi-functional membrane. In MACROMOLECULAR BIOSCIENCE. ISSN 1616-5187, MAY 2014, vol. 14, no. 5, p. 655-666., WOS

ADCA398 ROKSTAD, A. M A. - LACÍK, Igor - DE VOS, P. - STRAND, B. L. Advanced in biocompatibility and physico-chemical characterization of microspheres for cell encapsulation. In Advanced Drug Delivery Reviews, 2014, vol. 67-68, p. 111-130. (12.707 - IF2013). (2014 - Current Contents). ISSN 0169-409X.

Citácie:

1. [1.2] JUNG, J.- OH, J. Cell-induced flow-focusing instability in gelatin methacrylate microdroplet generation. (2014) Biomicrofluidics, 8 (3), art. no. 036503, DOI: 10.1063/1.4880375, Scopus

2. [1.2] LI, X.L.-WANG, M.B.- CHEN, C.S.- SHE, Z.D.Preparation and characterization of ciliary neurotrophic factor sustained-release microcapsules. (2014) Chinese Journal of Tissue Engineering Research, 18 (34), p. 5455-5460. DOI: 10.3969/j.issn.2095-4344.2014.34.008, Scopus

ADCA399 ROLLET, M. - PELLETIER, B. - ALTOUNIAN, A. - BEREK, Dušan - MARIA, S. - BEAUDOIN, E. - GIGMES, D. Separation of parent homopolymers from polystyrene-b-poly(ethylene oxide)-b-polystyrene triblock copolymers by means of liquid chromatography.1. Comparison of different methods. In Analytical Chemistry, 2014, vol. 86, p. 2694-2702. (5.825 - IF2013). (2014 - Current Contents). ISSN 0003-2700.

Citácie:

1. [1.1] BOUVIER, E.S.P. - KOZA, S.M. Advances in size-exclusion separations of proteins and polymers by UHPLC. In TRAC-TRENDS IN ANALYTICAL CHEMISTRY. ISSN 0165-9936, DEC 2014, vol. 63, SI, p. 85-94., WOS

ADCA400 MATISOVÁ-RYCHLÁ, Lýdia - RYCHLÝ, Jozef. New approach to understanding chemiluminescence from the decomposition of peroxidic structures in polypropylene. In Polymer Degradation and Stability, 2000, vol. 67, p. 515-525. (0.641 - IF1999). (2000 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] YANO, A. - ISHII, H. - SATOH, C. - AKAI, N. - HIRONIWA, T. - MILLINGTON, K.R. - NAKATA, M. The effect of gamma-ray irradiation on thermal oxidation of additive-free polypropylene pellets investigated by multichannel Fourier-transform chemiluminescence spectroscopy. In CHEMICAL PHYSICS LETTERS. ISSN 0009-2614, JAN 20 2014, vol. 591, p. 259-264., WOS

ADCA401 MATISOVÁ-RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Thermal oxidation of nonstabilized and stabilized polymers and chemiluminescence. In Journal of Polymer Science. Part A.Polymer Chemistry, 2004, vol. 42, no. 3, p. 648 - 660. (2.226 - IF2003). (2004 - Current Contents). ISSN 0887-624X.

Citácie:

1. [1.1] PRIESS, C. - KATZENMAIER, V. - KREISELMAIER, R. - TRABER, B. - BECK, K. Analysis of the oxidative aging behavior of elastomers: Comparison of NMR, stress relaxation and chemiluminescence. In KGK-KAUTSCHUK GUMMI KUNSTSTOFFE. ISSN 0948-3276, SEP 2014, vol. 67, no. 9, p. 16-21., WOS

ADCA402 MATISOVÁ-RYCHLÁ, Lýdia - RYCHLÝ, Jozef - MESKE, M. - SCHULZ, M.

Antioxidative efficiency of substituted n-phenyl n-pyrazolyl-3, n-phenyl n-benzimidazolyl-2 and n-benzthiazolyl-2 n-benzimidazolyl-2 amines in the thermooxidation of polypropylene. In Polymer Degradation and Stability, 1988, vol. 21, no. 4, p. 323 - 333. ISSN 0141-3910.

Citácie:

1. [1.1] BHATIA, S. - BHARATAM, P.V. Possibility of the existence of donor-acceptor interactions in bis(azole)amines: An electronic structure analysis. In JOURNAL OF ORGANIC CHEMISTRY. ISSN 0022-3263, JUN 6 2014, vol. 79, no. 11, p. 4852-4862., WOS

ADCA403 RYCHLÁ, Lýdia - LÁNSKÁ, B. - RYCHLÝ, Jozef. Application of chemiluminescence to polymer degradation studies. Thermal Oxidation of Polyamide 6. In Die Angewandte Makromolekulare Chemie, 1994, vol. 216, p. 169-186.

Citácie:

1. [1.1] ZUO, X.L. - ZHANG, K.Z. - LEI, Y. - QIN, S.H. - HAO, Z. - GUO, J.B. Influence of thermooxidative aging on the static and dynamic mechanical properties of long-glass-fiber-reinforced polyamide 6 composites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, 2014, vol. 131, no. 3., WOS

ADCA404 RYCHLÝ, Jozef - LATTUATI-DERIEUX, A. - LAVÉDRINE, B. - MATISOVÁ-RYCHLÁ, Lýdia - MALÍKOVÁ, Marta - CSOMOROVÁ, Katarína - JANIGOVÁ, Ivica. Assesing the progress of degradation in polyurethanes by chemiluminescence and thermal analysis. II. Flexible polyether- and polyester-type polyurethane foams. In Polymer Degradation and Stability, 2011, vol. 96, p. 462 - 469. (2.594 - IF2010). (2011 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] LE GAC, P. - CHOQUEUSE, D. - MELOT, D. - MELVE, B. - MENICONI, L. Life time prediction of polymer used as thermal insulation in offshore oil production conditions: Ageing on real structure and reliability of prediction. In POLYMER TESTING. ISSN 0142-9418, APR 2014, vol. 34, p. 168-174., WOS

2. [1.1] TI, Y. - CHEN, D.J. Thermal properties of Fe-octacarboxyl acid phthalocyanine/polyurethane blends. In JOURNAL OF MACROMOLECULAR SCIENCE PART B-PHYSICS. ISSN 0022-2348, 2014, vol. 53, no. 10, p. 1654-1664., WOS

ADCA405 RYCHLÝ, Jozef - MATISOVÁ-RYCHLÁ, Lýdia - CSOMOROVÁ, Katarína - JANIGOVÁ, Ivica - SCHILLING, M. - LEARNER, T. Non-isothermal thermogravimetry, differential scanning calorimetry and chemiluminescence in degradation of polyethylene, polypropylene, polystyrene and poly(methyl methacrylate). In Polymer Degradation and Stability, 2011, vol. 96, p. 1573 - 1581. (2.594 - IF2010). (2011 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] GENTILE, G. - AMBROGI, V. - CERRUTI, P. - DI MAIO, R. - NASTI, G. - CARFAGNA, C. Pros and cons of melt annealing on the properties of MWCNT/polypropylene composites. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 56-64., WOS

ADCA406 RYCHLÝ, Jozef - LATTUATI-DERIEUX, A. - MATISOVÁ - RYCHLÁ, Lýdia - CSOMOROVÁ, Katarína - JANIGOVÁ, Ivica - LAVÉDRINE, B. Degradation of aged nitrocellulose investigated by thermal analysis and chemiluminescence. In Journal of Thermal Analysis and Calorimetry, 2012, vol. 107, p. 1267 - 1276. (1.604 - IF2011). ISSN 1388-6150.

Citácie:
1. [1.1] BERTHUMEYRIE, S. - COLLIN, S. - BUSSIERE, P.O. - THERIAS, S. Photooxidation of cellulose nitrate: New insights into degradation mechanisms. In JOURNAL OF HAZARDOUS MATERIALS. ISSN 0304-3894, MAY 15 2014, vol. 272, p. 137-147., WOS
2. [1.1] BUSSIERE, P.O. - GARDETTE, J.L. - THERIAS, S. Photodegradation of celluloid used in museum artifacts. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, SEP 2014, vol. 107, SI, p. 246-254., WOS

ADCA407 RYCHLÝ, Jozef - HUDÁKOVÁ, M. - RYCHLÁ, Lýdia. Burning of thermally thin polyethylene mixtures. Cone calorimeter study. In Journal of Thermal Analysis and Calorimetry, 2014, vol.115, p. 527 - 535. (2.206 - IF2013). (2014 - Current Contents). ISSN 1388-6150.

Citácie:
1. [1.1] SATTARI, M. - GHARAGHEIZI, F. - ILANI-KASHKOULI, P. - MOHAMMADI, A.H. - RAMJUGERNATH, D. Development of a group contribution method for the estimation of heat capacities of ionic liquids. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, FEB 2014, vol. 115, no. 2, p. 1863-1882., WOS

ADCA408 RYCHLÝ, Jozef - RYCHLÁ, Lýdia - FIEDLEROVÁ, Agnesa - CHMELA, Štefan - HRONEC, M. Thermally and UV initiated degradation of polypropylene in the presence of 2,5 bis(2-furylmethylene) cyclopentanone and heterogeneous distribution of hydroxides assessed by non-isothermal chemiluminescence in nitrogen. In Polymer Degradation and Stability, 2014, vol. 108, p. 41-47. (2.633 - IF2013). (2014 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] GENTILE, G. - AMBROGI, V. - CERRUTI, P. - DI MAIO, R. - NASTI, G. - CARFAGNA, C. Pros and cons of melt annealing on the properties of MWCNT/polypropylene composites. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 56-64., WOS

ADCA409 RYCHLÝ, Jozef - RYCHLÁ, Lýdia - *JURČÁK, Dalimír*. Chemiluminescence from oxidized polypropylene during temperature cycling. In Polymer Degradation and Stability, 2000, vol. 68, p. 239-246. (0.641 - IF1999). (2000 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] ZAHARESCU, T. - SETNESCU, R. - BORBATH, I. Thermal oxidation of irradiated magnetic fluids and their component surfactants and dispersing oils. In CENTRAL EUROPEAN JOURNAL OF CHEMISTRY. ISSN 1895-1066, JUL 2014, vol. 12, no. 7, SI, p. 782-787., WOS

ADCA410 RYCHLÝ, Jozef - RYCHLÁ, Lýdia - CSOMOROVÁ, Katarína - ACHIMSKY, L. - AUDOUIN, L. - TCHARKHTCHI, A. - VERDU, J. Kinetics of mass changes in oxidation of polypropylene. In Polymer Degradation and Stability, 1997, vol. 58, no. 3, p. 269 - 274. (0.653 - IF1996). (1997 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] MOSADEGH-SEDGHI, S. - RODRIGUE, D. - BRISSON, J. - ILIUTA, M.C. Wetting phenomenon in membrane contactors - Causes and prevention. In JOURNAL OF MEMBRANE SCIENCE. ISSN 0376-7388, FEB 15 2014, vol. 452, p. 332-353., WOS

ADCA411 RYCHLÝ, Jozef - STRLIČ, M. - RYCHLÁ, Lýdia - KOLAR, J. Chemiluminescence from paper. Kinetic analysis of thermal oxidation of cellulose. In Polymer Degradation and Stability, 2002, vol. 78, no. 2, p. 357 - 367. (0.906 -

IF2001). (2002 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] FRANK, E. - STEUDLE, L.M. - INGILDEEV, D. - SPORL, J.M. - BUCHMEISER, M.R. Carbon fibers: Precursor systems, processing, structure, and properties. In ANGEWANDTE CHEMIE-INTERNATIONAL EDITION. ISSN 1433-7851, MAY 19 2014, vol. 53, no. 21, p. 5262-5298., WOS

2. [1.1] SETNESCU, R. - BADICU, L.V. - DUMITRAN, L.M. - NOTINGHER, P.V. - SETNESCU, T. Thermal lifetime of cellulose insulation material evaluated by an activation energy based method. In CELLULOSE. ISSN 0969-0239, FEB 2014, vol. 21, no. 1, p. 823-833., WOS

ADCA412 RYCHLÝ, Jozef - VESELÝ, K. - GÁL, Egon - KUMMER, M. - JANČÁŘ, J. - RYCHLÁ, Lýdia. Use of thermal methods in the characterization of the high-temperarure decomposition and ignition of polyolefins and EVA copolymers filled with Mg(OH).sub.2,Al(OH).sub.3 and CaCO.sub.3. In Polymer Degradation and Stability, 1990, vol. 30, p. 57-72.

Citácie:

1. [1.2] ROTHON, R.-HORNSBY, P. Fire retardant fillers for polymers. (2014) Polymer Green Flame Retardants, p. 289-321. DOI: 10.1016/B978-0-444-53808-6.00009-3, Scopus

ADCA413 RYCHLÝ, Jozef - MATISOVÁ-RYCHLÁ, Lýdia - *VAVREKOVÁ, Miriam* Difference method of evaluation of dynamic integral thermogravimetric curves in decomposition of polypropylene. In Journal of Thermal Analysis and Calorimetry, 1982, vol. 25, no. 2, p. 423 - 431. ISSN 1388-6150.

Citácie:

1. [1.2] CHENG, H.K.F.- CHONG, M.F.- LIU, E.- ZHOU, K.LI, L. Thermal decomposition kinetics of multiwalled carbon nanotube/polypropylene nanocomposites. (2014) Journal of Thermal Analysis and Calorimetry, 117 (1), p. 63-71. DOI: 10.1007/s10973-014-3668-8, Scopus

ADCA414 RYCHLÝ, Jozef - ŠOLTÉS, L. - STANKOVSKÁ, M. - JANIGOVÁ, Ivica - CSOMOROVÁ, Katarína - SASINKOVÁ, V. - KOGAN, G. - GEMEINER, P. Unexplored capabilities of chemiluminescence and thermoanalytical methods in characterization of intact and degraded hyaluronans. In Polymer Degradation and Stability. - Oxford : Elsevier Science, 2006, vol. 91, p. 3174 - 3184. (1.749 - IF2005). (2006 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] BELLOMARIA, A. - NEPRAVISHTA, R. - MAZZANTI, U. - MARCHETTI, M. - PICCIOLI, P. - PACI, M. Determination of the presence of hyaluronic acid in preparations containing amino acids: The molecular weight characterization. In EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES. ISSN 0928-0987, 2014, vol. 63, p. 199-203., WOS

2. [1.2] LIU, X. M. - HARMON, P.S. - MAZIARZ, E. P. - SHEETS, J.W. In vitro characterization and ophthalmic applications of hyaluronan (Book Chapter 5). In Pomin V.H. edit. HYALURONAN: BIOLOGICAL AND MEDICAL IMPLICATIONS, (BIOCHEMISTRY RESEARCH TRENDS). Nova Science Publishers, Inc. 2014, p. 85-112. ISBN 978-1-63117-812-2; 978-1-63117-808-5, SCOPUS

3. [3] TAMER, T.M. Hyaluronan degradation under free-radical oxidation stress: Action and healing (Book Chapter 6). In ENGINEERING OF POLYMERS AND CHEMICALS COMPLEXITY. VOL. II: NEW APPROACHES, LIMITATIONS AND CONTROL. Edit. Focke W.W, Radusch H.J. Toronto, Apple Academic Press 2014, p. 107-144, ISBN 978-1-926895-87-1

ADCA415 SANTANAKRISHNAN, S. - TANG, L. - HUTCHINSON, R. A. - *STACH, Marek* - LACÍK, Igor - SCHROOTEN, J. - HESSE, P. - BUBACK, M. Kinetics and modeling of batch and semibatch aqueous-phase NVP free-radical polymerization. In Macromolecular Reaction Engineering, 2010, vol. 4, p. 499 - 509. (1.488 - IF2009). (2010 - Current Contents). ISSN 1862-832X.

Citácie:

1. [1.1] LEE, C.Y. - TEYMOUR, F. - CAMASTRAL, H. - TIRELLI, N. - HUBBELL, J.A. - ELBERT, D.L. - PAPAVASILIOU, G. Characterization of the network structure of PEG diacrylate hydrogels formed in the presence of N-vinyl pyrrolidone. In MACROMOLECULAR REACTION ENGINEERING. ISSN 1862-832X, APR 2014, vol. 8, no. 4, SI, p. 314-328., WOS

ADCA416 SAROV, Y. - CAPEK, Ignác - IVANOV, T. B. - IVANOVA, K. Zh. - SAROVA, V. A. - RANGELOW, I. W. On total internal reflection investigation of nanoparticles by integrated micro-fluidic system. In Nano Letters, 2008, vol. 8, no. 2, p. 376 - 381. (9.627 - IF2007). (2008 - Current Contents). ISSN 1530-6984.

Citácie:

1. [1.1] PAROLA, A. - PIAZZA, R. - DEGIORGIO, V. Optical extinction, refractive index, and multiple scattering for suspensions of interacting colloidal particles. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, SEP 28 2014, vol. 141, no. 12., WOS

ADCA417 SEVER, K. - TAVMAN, I. H. - SEKI, Y. - TURGUT, A. - OMASTOVÁ, Mária - OZDEMIR, I. Electrical and mechanical properties of expanded graphite/high density polyethylene nanocomposites. In Composites Part B: Engineering, 2013, vol. 53, p. 226 - 233. (2.143 - IF2012). (2013 - Current Contents). ISSN 1359-8368.

Citácie:

1. [1.1] JAGIELLO, J. - JUDEK, J. - ZDROJEK, M. - AKSIENIONEK, M. - LIPINSKA, L. Production of graphene composite by direct graphite exfoliation with chitosan. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, DEC 15 2014, vol. 148, no. 3, p. 507-511., WOS

2. [1.2] MAHESH KUMAR, K.V.- KRISHNAMURTHY, K.- SATHISH KUMAR, P.- RAJASEKAR, R.- SIVA KUMAR, A. Effect of mechanical behaviours of graphene oxide reinforced compatibilized high density polyethylene. (2014) International Journal of ChemTech Research, 6 (3), p. 1894-1897., Scopus

ADCA418 SHUKRI, T. M. - MOSNÁČEK, Jaroslav - BASFAR, A. A. - BAHATTAB, M. A. - NOIREAUX, P. - COURDREUSE, A. Flammability of blends of low-density polyethylene and ethylene vinyl acetate crosslinked by both dicumyl peroxide and ionizing radiation for wire and cable applications. In Journal of Applied Polymer Science, 2008, vol. 109, p. 167- 173. (1.008 - IF2007). (2008 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] LI, L. - QIAN, Y. - JIAO, C.M. Synergistic flame retardant effects of ammonium polyphosphate in ethylene-vinyl acetate/layered double hydroxides composites. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, APR 2014, vol. 54, no. 4, p. 766-776., WOS

2. [1.1] SIBEKO, M.A. - LUYT, A.S. Preparation and characterisation of vinylsilane crosslinked low-density polyethylene composites filled with nano clays. In POLYMER BULLETIN. ISSN 0170-0839, MAR 2014, vol. 71, no. 3, p. 637-657., WOS

3. [1.2] NOUR, M.A.- ELMORSY, S.S.- SALTOUT, R.B. Fire retardant properties of HDPE composite based on modification of Na-MMT treated with phenol formaldehyde resin modified by some silane reagents. (2014) 16th European

Conference on Composite Materials, ECCM 2014,, Scopus

ADCA419 SHUNDO, A. - FUKUI, M. - TAKAFUJI, M. - AKASAKA, K. - OHRUI, H. - BEREK, Dušan - IHARA, H. Selectivity enhancement for trans-2-(2,3,-anthracenedicarboximido)cyclohexane-derived diastereomers in HPLC by using an ordered stationary phase. In Analytical Sciences, 2007, vol. 23, p. 1-5. (1.589 - IF2006). ISSN 0910-6340.

Citácie:

1. [1.1] MALLIK, A.K. - GURAGAIN, S. - HACHISAKO, H. - RAHMAN, M.M. - TAKAFUJI, M. - LHARA, H. Molecular orientation of gel forming compounds and their effect on molecular-shape selectivity in liquid chromatography. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, JAN 10 2014, vol. 1324, p. 149-154., WOS

ADCA420 SCHNÖLL-BITAI, I. - ULLMER, R. - HREBICEK, T. - RIZZI, A. - LACÍK, Igor. Characterization of the molecular mass distribution of pullulans by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry using 2,5-dihydroxy-benzoic acid butyamine (DHBB) as liquid matrix. In Rapid Communications in Mass Spectrometry, 2008, vol. 22, p. 2961 - 2970. (2.971 - IF2007). (2008 - Current Contents). ISSN 0951-4198.

Citácie:

1. [1.1] FONSECA-CORONA, C. - VERA-AVILA, L.E. - GALLEGOS-PEREZ, J.L. Use of mass spectrometry for identification and quantitation of tensoactive agents in synthetic latex samples. In JOURNAL OF THE MEXICAN CHEMICAL SOCIETY. ISSN 1870-249X, OCT-DEC 2014, vol. 58, no. 4, p. 444-451., WOS

2. [1.1] FUKUYAMA, Y. - FUNAKOSHI, N. - TAKEYAMA, K. - HIOKI, Y. - NISHIKAZE, T. - KANESHIRO, K. - KAWABATA, S. - IWAMOTO, S. - TANAKA, K. 3-aminoquinoline/p-coumaric acid as a MALDI matrix for glycopeptides, carbohydrates, and phosphopeptides. In ANALYTICAL CHEMISTRY. ISSN 0003-2700, FEB 18 2014, vol. 86, no. 4, p. 1937-1942., WOS

3. [1.2] ABDELHAMID, H.N.-KHAN, M.S.- WU, H.F. Design, characterization and applications of new ionic liquid matrices for multifunctional analysis of biomolecules: A novel strategy for pathogenic bacteria biosensing. (2014) Analytica Chimica Acta, 823, p. 51-60. DOI: 10.1016/j.aca.2014.03.026, Scopus

ADCA421 SKVORTSOV, A. M. - GORBUNOV, A. A. - BEREK, Dušan - TRATHNIGG, B. Liquid chromatography of macromolecules at the critical adsorption point : behaviour of a polymer chain inside pores. In Polymer : the International Journal for the Science and Technology of Polymers, 1998, vol. 39, no. 2, p. 423 - 429. (1.358 - IF1997). (1998 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] FU, C. - ZHU, Y.T. - SHI, D. Separation and characterization of block copolymers by liquid chromatography at the critical condition. In PROGRESS IN CHEMISTRY. ISSN 1005-281X, JAN 2014, vol. 26, no. 1, p. 140-151., WOS

2. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

3. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCA422 *SOBOLČIAK, Patrik* - ŠPÍREK, M. - KATRLÍK, J. - GEMEINER, P. - LACÍK, Igor - *KASÁK, Peter*. Light-switchable polymer from cationic to zwitterionic form: Synthesis, characterization, and interactions with DNA and bacterial cells. In Macromolecular Rapid Communications, 2013, vol. 34, p. 635 - 639. (4.929 -

IF2012). (2013 - Current Contents). ISSN 1022-1336.

Citácie:

1. [1.1] CAO, B. - TANG, Q. - CHENG, G. Recent advances of zwitterionic carboxybetaine materials and their derivatives. In JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION. ISSN 0920-5063, 2014, vol. 25, no. 14-15, SI, p. 1502-1513., WOS

2. [1.1] GUMBLEY, P. - KOYLU, D. - PAWLE, R.H. - UMEZURUIKE, B. - SPEDDEN, E. - STAII, C. - THOMAS, S.W. Wavelength-selective disruption and triggered release with photo labile polyelectrolyte multilayers. In CHEMISTRY OF MATERIALS. ISSN 0897-4756, FEB 11 2014, vol. 26, no. 3, p. 1450-1456., WOS

3. [1.1] JIN, Q. - CAI, T.J. - WANG, Y. - WANG, H.B. - JI, J. Light-responsive polyion complex micelles with switchable surface charge for efficient protein delivery. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 679-683., WOS

4. [1.1] JIN, Q. - CHEN, Y.J. - WANG, Y. - JI, J. Zwitterionic drug nanocarriers: A biomimetic strategy for drug delivery. In COLLOIDS AND SURFACES B-BIOINTERFACES. ISSN 0927-7765, DEC 1 2014, vol. 124, SI, p. 80-86., WOS

5. [1.1] LASCHEWSKY, A. Structures and synthesis of Zwitterionic polymers. In POLYMERS. ISSN 2073-4360, MAY 2014, vol. 6, no. 5, p. 1544-1601., WOS

6. [1.1] LEE, H. - KIM, Y. - SCHWEICKERT, P.G. - KONIECZNY, S.F. - WON, Y.Y. A photo-degradable gene delivery system for enhanced nuclear gene transcription. In BIOMATERIALS. ISSN 0142-9612, JAN 2014, vol. 35, no. 3, p. 1040-1049., WOS

ADCA423 SOWE, M. - NOVÁK, Igor - VESEL, A. - JUNKAR, I. - LEHOCKÝ, M. - SÁHA, P. - CHODÁK, Ivan. Analysis and characterization of printed plasma-treated polyvinyl chloride. In International journal of polymer analysis and characterisation, 2009, vol. 14, p. 641 651. (0.824 - IF2008). (2009 - Current Contents). ISSN 1023-666X.

Citácie:

1. [1.1] HENKE, P. - KOZAK, H. - ARTEMENKO, A. - KUBAT, P. - FORSTOVA, J. - MOSINGER, J. Superhydrophilic polystyrene nanofiber materials Generating O-2((1)Delta(g)): Postprocessing surface modifications toward efficient antibacterial effect. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, AUG 13 2014, vol. 6, no. 15, p. 13007-13014., WOS

ADCA424 *STACH, Marek* - KRONEKOVÁ, Zuzana - *KASÁK, Peter* - KOLLÁR, Jozef - PENTRÁK, M. - MIČUŠÍK, Matej - CHORVÁT, D. Jr. - NUNNEY, T. S. - LACÍK, Igor. Polysulfobetaine films prepared by electrografting technique for reduction of biofouling on electroconductive surfaces. In Applied Surface Science, 2011, vol. 257, no. 24, p. 10795-10801. (1.793 - IF2010). (2011 - Current Contents). ISSN 0169-4332.

Citácie:

1. [1.1] LI, J. - WANG, G.Q. - MENG, Q.H. - DING, C.H. - JIANG, H. - FANG, Y.Z. A biomimetic nano hybrid coating based on the lotus effect and its anti-biofouling behaviors. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, OCT 1 2014, vol. 315, p. 407-414., WOS

2. [1.1] PEREIRA, A.D. - RODRIGUEZ-EMMENEGGER, C. - SURMAN, F. - RIEDEL, T. - ALLES, A.B. - BRYNDA, E. Use of pooled blood plasmas in the assessment of fouling resistance. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 5, p. 2318-2321., WOS

3. [1.1] XU, L.Q. - PRANANTYO, D. - LIU, J.B. - NEOH, K.G. - KANG, E.T. - NG, Y.X. - TEO, S.L.M. - FU, G.D. Layer-by-layer deposition of antifouling

coatings on stainless steel via catechol-amine reaction. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 61, p. 32335-32344., WOS

ADCA425 *STACH, Marek* - LACÍK, Igor - *KASÁK, Peter* - CHORVÁT, D. - SAUNDERS, A. J. - SANTANAKRISHNAN, S. - HUTCHINSON, R. A. Free-radical propagation kinetics of N-vinyl formamide in aqueous solution studied by PLP-SEC. In Macromolecular Chemistry and Physics, 2010, vol. 211, p. 580 - 593. (2.570 - IF2009). (2010 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] BARTOSZEK, N. - SAWICKI, P. - KADLUBOWSKI, S. - ULANSKI, P. - ROSIAK, J.M. Determination of propagation rate coefficient for the polymerization of N-vinylpyrrolidone in aqueous solution by pulsed electron polymerization and size exclusion chromatography. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 639-642., WOS

ADCA426 *STACH, Marek* - LACÍK, Igor - CHORVÁT, D. Jr. - BUBACK, M. - HESSE, P.- HUTCHINSON, R. A. - TANG, L. Propagation rate coefficient for radical polymerization of N-Vinyl pyrrolidone in aqueous solution obtained by PLP-SEC. In Macromolecules, 2008, vol. 41, p. 5174 - 5185. (4.411 - IF2007). (2008 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] BARTOSZEK, N. - SAWICKI, P. - KADLUBOWSKI, S. - ULANSKI, P. - ROSIAK, J.M. Determination of propagation rate coefficient for the polymerization of N-vinylpyrrolidone in aqueous solution by pulsed electron polymerization and size exclusion chromatography. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 639-642., WOS

2. [1.1] GUINAUDEAU, A. - COUTELIER, O. - SANDEAU, A. - MAZIERES, S. - THI, H.D.N. - LE DROGO, V. - WILSON, D.J. - DESTARAC, M. Facile access to poly(n-vinylpyrrolidone)-based double hydrophilic block copolymers by aqueous ambient RAFT/MADIX polymerization. In MACROMOLECULES. ISSN 0024-9297, JAN 14 2014, vol. 47, no. 1, p. 41-50., WOS

3. [1.1] LEE, C.Y. - TEYMOUR, F. - CAMASTRAL, H. - TIRELLI, N. - HUBBELL, J.A. - ELBERT, D.L. - PAPAVASILIOU, G. Characterization of the network structure of PEG diacrylate hydrogels formed in the presence of N-vinyl pyrrolidone. In MACROMOLECULAR REACTION ENGINEERING. ISSN 1862-832X, APR 2014, vol. 8, no. 4, SI, p. 314-328., WOS

4. [1.1] REED, W.F. Applications of ACOMP (II). In MONITORING POLYMERIZATION REACTIONS: FROM FUNDAMENTALS TO APPLICATIONS. 2014, p. 271-294., WOS

5. [1.1] SALIAN, V.D. - WHITE, C.J. - BYRNE, M.E. Molecularly imprinted polymers via living radical polymerization: Relating increased structural homogeneity to improved template binding parameters. In REACTIVE & FUNCTIONAL POLYMERS. ISSN 1381-5148, MAY 2014, vol. 78, p. 38-46., WOS

6. [1.2] KOLATE, A.- BARADIA, D.- PATIL, S.- VHORA, I.- KORE, G.- MISRA, A. PEG - A versatile conjugating ligand for drugs and drug delivery systems. (2014) Journal of Controlled Release, 192, p. 67-81. DOI: 10.1016/j.jconrel.2014.06.046, Scopus

ADCA427 STANKOVSKÁ, M. - ŠOLTÉS, L. - VIKARTOVSKÁ, A., Welwardová - MENDICHI, R. - *LATH, Dieter* - MOLNÁROVÁ, M. - GEMEINER, P. Study of hyaluronan degradation by means of rotational viscometry: contribution of the material of viscometer. In Chemical papers. - Warsaw : Springer-Verlag Versita), 2006-, 2004, vol. 58, no. 5, p. 348-352. ISSN 0366-6352.

Citácie:

1. [1.1] RINAUDO, M. - LARDY, B. - GRANGE, L. - CONROZIER, T. Effect of

mannitol on hyaluronic acid stability in two in vitro models of oxidative Stress. In POLYMERS. ISSN 2073-4360, 2014, vol. 6, no. 7, p. 1948-1957., WOS
2. [3] OMER, A.M. - TAMER, M. T. - MOHYELDIN, M.S. High-molecular weight of biopolymer. In SCIENCE JOURNAL OF VOLGOGRAD STATE UNIVERSITY : TECHNOLOGY AND INNOVATIONS. ISSN 2305-7815, 2014, vol. 12, no. 3, p. 56-70

ADCA428 STEJSKAL, J. - OMASTOVÁ, Mária - FEDOROVÁ, S. - PROKEŠ, J. - TRCHOVÁ, M. Polyaniline and polypyrrole prepared in the presence of surfactants: a comparative conductivity study. In Polymer : the International Journal for the Science and Technology of Polymers, 2003, vol. 44, no. 5, p. 1353 - 1358. (1.383 - IF2002). (2003 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] BOEVA, Z.A. - SERGEYEV, V.G. Polyaniline: Synthesis, properties, and application. In POLYMER SCIENCE SERIES C. ISSN 1811-2382, SEP 2014, vol. 56, no. 1, p. 144-153., WOS
2. [1.1] DENG, J.X. - WANG, X. - GUO, J.S. - LIU, P. Effect of the oxidant/monomer ratio and the washing post-treatment on electrochemical properties of conductive polymers. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, SEP 3 2014, vol. 53, no. 35, p. 13680-13689., WOS
3. [1.1] GAO, Y. - DING, K. - XU, X. - WANG, Y.Z. - YU, D.M. PPy film/TiO2 nanotubes composite with enhanced supercapacitive properties. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 52, p. 27130-27134., WOS
4. [1.1] NOHUT, N. - EREN, E. - RAHHAL-IRABI, L. - OKSUZ, A.U. In situ investigation of surfactants' effect onto electrochemical synthesis and properties of polyfurans. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, APR 2014, vol. 49, no. 7, p. 2754-2760., WOS
5. [1.1] OSORIO-FUENTE, J.E. - GOMEZ-YANEZ, C. - HERNANDEZ-PEREZ, M.D. - PEREZ-MORENO, F. Camphor sulfonic acid-hydrochloric acid codoped polyaniline/polyvinyl alcohol composite: Synthesis and characterization. In JOURNAL OF THE MEXICAN CHEMICAL SOCIETY. ISSN 1870-249X, JAN-MAR 2014, vol. 58, no. 1, p. 52-58., WOS
6. [1.1] RAWAL, I. - KAUR, A. Effect of anionic surfactant concentration on the variable range hopping conduction in polypyrrole nanoparticles. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, JAN 28 2014, vol. 115, no. 4., WOS
7. [1.1] RAWAL, I. - SEHRAWAT, K. - KAUR, A. Vibrational spectroscopic investigations of ammonia gas sensing mechanism in polypyrrole nanostructures. In VIBRATIONAL SPECTROSCOPY. ISSN 0924-2031, SEP 2014, vol. 74, p. 64-74., WOS
8. [1.1] SINGH, B. - KAUR, A. Photoelectrical, optical, and transport properties of poly (3-hexylthiophene)-zinc sulfide hybrid nanocomposites. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, AUG 14 2014, vol. 116, no. 6., WOS
9. [1.1] TALWAR, V. - SINGH, O. - SINGH, R.C. ZnO assisted polyaniline nanofibers and its application as ammonia gas sensor. In SENSORS AND ACTUATORS B-CHEMICAL. ISSN 0925-4005, FEB 2014, vol. 191, p. 276-282., WOS
10. [1.1] TALWAR, V. - SINGH, R.C. Different chemical approaches for the synthesis of polyaniline nanofibers and its application in ammonia gas sensing. In MATERIALS AND APPLICATIONS FOR SENSORS AND TRANSDUCERS III. ISSN 1013-9826, 2014, vol. 605, p. 573-576., WOS
11. [1.1] WLODARCZYK, K. - SINGER, F. - JASINSKI, P. - VIRTANEN, S. Solid state conductivity of optimized polypyrrole coatings on iron obtained from

aqueous sodium salicylate solution determined by impedance spectroscopy. In INTERNATIONAL JOURNAL OF ELECTROCHEMICAL SCIENCE. ISSN 1452-3981, DEC 2014, vol. 9, no. 12, p. 7997-8010., WOS
12. [1.1] YANG, Y. - HE, K.C. - YAN, P. - WANG, D. - WU, X.Y. - ZHAO, X. - HUANG, Z.L. - ZHANG, C.M. - HE, D.N. Enhanced capacity of polypyrrole/anthraquinone sulfonate/graphene composite as cathode in lithium batteries. In ELECTROCHIMICA ACTA. ISSN 0013-4686, AUG 20 2014, vol. 138, p. 481-485., WOS
13. [1.2] LEHR, I.L.- SAIDMAN, S.B. Bilayers polypyrrole coatings for corrosion protection of SAE 4140 steel. (2014) Portugaliae Electrochimica Acta, 32 (4), p. 281-293. DOI: 10.4152/pea.201404281, Scopus

ADCA429 STEJSKAL, J. - TRCHOVÁ, M. - KOVÁŘOVÁ, J. - PROKEŠ, J. - OMASTOVÁ, Mária. Polyaniline-coated cellulose fibers decorated with silver nanoparticles. In Chemical papers, 2008, vol. 62, no. 2, p.181-186. (0.367 - IF2007). (2008 - Current Contents). ISSN 0366-6352.

Citácie:
1. [1.1] BOBER, P. - LIU, J. - MIKKONEN, K.S. - IHALAINEN, P. - PESONEN, M. - PLUMED-FERRER, C. - VON WRIGHT, A. - LINDFORS, T. - XU, C.L. - LATONEN, R.M. Biocomposites of nanofibrillated cellulose, polypyrrole, and silver nanoparticles with electroconductive and antimicrobial properties. In BIOMACROMOLECULES. ISSN 1525-7797, OCT 2014, vol. 15, no. 10, p. 3655-3663., WOS
2. [1.1] JIA, B.Q. - DONG, Y. - ZHOU, J.P. - ZHANG, L.N. Constructing flexible cellulose-Cu nanocomposite film through in situ coating with highly single-side conductive performance. In JOURNAL OF MATERIALS CHEMISTRY C. ISSN 2050-7526, 2014, vol. 2, no. 3, p. 524-529., WOS
3. [1.1] MARINS, J.A. - SOARES, B.G. - FRAGA, M. - MULLER, D. - BARRA, G.M.O. Self-supported bacterial cellulose polyaniline conducting membrane as electromagnetic interference shielding material: effect of the oxidizing agent. In CELLULOSE. ISSN 0969-0239, JUN 2014, vol. 21, no. 3, p. 1409-1418., WOS
4. [1.1] SU, Z. - ZHANG, L.Y. - CHAI, L.Y. - WANG, H.Y. - YU, W.T. - WANG, T. - YANG, J.X. High-yield synthesis of poly(m-phenylenediamine) hollow nanostructures by a diethanolamine-assisted method and their enhanced ability for Ag+ adsorption. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, AUG 2014, vol. 38, no. 8, p. 3984-3991., WOS

ADCA430 STLOUKAL, P. - VERNEY, V. - COMMEREUC, S. - RYCHLÝ, Jozef - MATISOVÁ-RYCHLÁ, Lýdia - PIS, V. - KOUTNY, M. Assessment of the interrelation between photooxidation and biodegradation of selected polyesters after artificial weathering. In Chemosphere, 2012, vol. 88, p. 1214 - 1219. (3.206 - IF2011). (2012 - Current Contents). ISSN 0045-6535.

Citácie:
1. [1.1] LI, C.H. - MOORE-KUCERA, J. - MILES, C. - LEONAS, K. - LEE, J. - CORBIN, A. - INGLIS, D. Degradation of potentially biodegradable plastic mulch films at three diverse U.S. locations. In AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS. ISSN 2168-3565, 2014, vol. 38, no. 8, p. 861-889., WOS
2. [1.2] DE ARAÚJO JR., J.- MAGALHÃES, D.- DE OLIVEIRA, N.A.- WIEBECK, H.- MATOS, J.R. Thermal degradation and kinetic parameters of polyester and poly(lactic acid) blends used in shopping bags in Brazil. (2014) Journal of Polymers and the Environment, 22 (1), p. 52-57. DOI: 10.1007/s10924-013-0632-9, Scopus

ADCA431 STRLIČ, M. - KOLAR, J. - PIHLAR, B. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia. Initial degradation processes of cellulose at elevated temperatures revisited -

chemiluminescence evidence. In Polymer Degradation and Stability, 2001, vol. 72, p. 157-162. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] VANSKA, E. - LUUKKA, M. - SOLALA, I. - VUORINEN, T. Effect of water vapor in air on thermal degradation of paper at high temperature. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JAN 2014, vol. 99, p. 283-289., WOS

ADCA432 STRLIČ, M. - KOLAR, J. - PIHLAR, B. - RYCHLÝ, Jozef - RYCHLÁ, Lýdia. Chemiluminescence during thermal and thermo-oxidative degradation of cellulose. In European Polymer Journal, 2000, vol. 36, p. 2351-2358. (0.720 - IF1999). (2000 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] SETNESCU, R. - BADICU, L.V. - DUMITRAN, L.M. - NOTINGHER, P.V. - SETNESCU, T. Thermal lifetime of cellulose insulation material evaluated by an activation energy based method. In CELLULOSE. ISSN 0969-0239, FEB 2014, vol. 21, no. 1, p. 823-833., WOS

ADCA433 STROHHOFER, Ch. - FORSTER, T. - *CHORVÁT, Dušan Jr.* - *KASÁK, Peter* - LACÍK, Igor - KOUKAKI, M. - KARAMANOU, S. - ECONOMOU, A. Quantitative analysisof energy transfer between fluorescent proteins in CFP-GBP-YFP and its response to Ca2+. In Physical Chemistry Chemical Physics, 2011, vol. 13, p. 17852 - 17863. (3.453 - IF2010). (2011 - Current Contents). ISSN 1463-9076.

Citácie:

1. [1.1] BONOMI, M. - PELLARIN, R. - KIM, S.J. - RUSSEL, D. - SUNDIN, B.A. - RIFFLE, M. - JASCHOB, D. - RAMSDEN, R. - DAVIS, T.N. - MULLER, E.G.D. - SALI, A. Determining protein complex structures based on a bayesian model of in vivo forster resonance energy transfer (FRET) data. In MOLECULAR & CELLULAR PROTEOMICS. ISSN 1535-9476, NOV 2014, vol. 13, no. 11, SI, p. 2812-2823., WOS

2. [1.1] MOUSSA, R. - BAIERL, A. - STEFFEN, V. - KUBITZKI, T. - WIECHERT, W. - POHL, M. An evaluation of genetically encoded FRET-based biosensors for quantitative metabolite analyses in vivo. In JOURNAL OF BIOTECHNOLOGY. ISSN 0168-1656, DEC 10 2014, vol. 191, SI, p. 250-259., WOS

ADCA434 ŠAGÁTOVÁ-PERĎOCHOVÁ, A. - DUBECKÝ, F. - ZAŤKO, B. - CHODÁK, Ivan - LADZIANSKY, M. - NEČAS, V. Detectors of fast netrons based on semi-insulating GaAs with neutron converter layers. In Nuclear Instruments and Methods in Physics Research A.Accelerators, Spectrometers, Detectors, and Associated Equipment, 2007, vol. 576, p. 56-69. (1.190 - IF2006). (2007 - Current Contents). ISSN 0168-9002.

Citácie:

1. [1.1] DIZAJI, H.Z. - KAKAVAND, T. - DAVANI, F.A. In CHINESE PHYSICS LETTERS. JAN 2014, vol. 31, no. 1., WOS

ADCA435 ŠIFFALOVIČ, P. - CHITU, L. - VÉGSO, K. - MAJKOVÁ, E. - JERGEL, M. - WEIS, M. Jr. - LUBY, Š. - CAPEK, Ignác - KECKES, J. - MAIER, G.A. - SATKA, A. - PERLICH, J. - ROTH, S.V. Towards strain gauges based on a self-assembled nanoparticle monolayer- SAXS study. In Nanotechnology, 2010, vol. 21, no. 38, 385702. (3.137 - IF2009). (2010 - Current Contents, WOS, SCOPUS). ISSN 0957-4484.

Citácie:

1. [1.1] DECORDE, Nicolas - SANGEETHA, Neralagatta M. - VIALLET, Benoit - VIAU, Guillaume - GRISOLIA, Jeremie - COATI, Alessandro - VLAD, Alina - GARREAU, Yves - RESSIER, Laurence. Small angle X-ray scattering coupled with in situ electromechanical probing of nanoparticle-based resistive strain

gauges. In NANOSCALE. ISSN 2040-3364, 2014, vol. 6, no. 24, pp. 15107., WOS
2. [1.1] TANG, Jun - GUO, Hao - AN, Ping - CHEN, Meng - TSOUKALAS, D. - SHI, Yunbo - LIU, Jun - XUE, Chenyang - ZHANG, Wendong. ZnO nanoparticles embedded in polyethylene-glycol (PEG) matrix as sensitive strain gauge elements. In JOURNAL OF NANOPARTICLE RESEARCH. ISSN 1388-0764, 2014, vol. 16, no. 11, UNSP 2714., WOS
3. [1.1] ZHENG, Mengyang - LI, Wenyang - XU, Mengjiao - XU, Ning - CHEN, Peng - HAN, Min - XIE, Bo. Strain sensors based on chromium nanoparticle arrays. In NANOSCALE. ISSN 2040-3364, 2014, vol. 6, no. 8, pp. 3930., WOS

ADCA436 ŠIFFALOVIČ, P. - MAJKOVÁ, E. - CHITU, L. - JERGEL, M. - LUBY, Š. - CAPEK, Ignác - ŠATKA, A. - TIMMANN, A. - ROTH, S.V. Real-time tracking of superparamagnetic nanoparticle self-assembly. In small, 2008, vol. 4, no. 12, p. 2222 - 2228. (6.408 - IF2007). (2008 - Current Contents). ISSN 1613-6810.

Citácie:

1. [1.1] AGTHE, M. - WETTERSKOG, E. - MOUZON, J. - SALAZAR-ALVAREZ, G. - BERGSTROM, L. Dynamic growth modes of ordered arrays and mesocrystals during drop-casting of iron oxide nanocubes. In CRYSTENGCOMM. ISSN 1466-8033, 2014, vol. 16, no. 8, p. 1443-1450., WOS

ADCA437 ŠIMKOVIC, I. - CSOMOROVÁ, Katarína. Thermogravimetric study of starch derivatives with amine/ammonium ion-exchanging group in oxidative environment. In Carbohydrate Polymers, 2002, vol. 49, no. 4, p. 509-513. (1.203 - IF2001). (2002 - Current Contents). ISSN 0144-8617.

Citácie:

1. [1.1] PRADO, H.J. - MATULEWICZ, M.C. Cationization of polysaccharides: A path to greener derivatives with many industrial applications. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, MAR 2014, vol. 52, p. 53-75., WOS

ADCA438 ŠIMKOVIC, I. - CSOMOROVÁ, Katarína. Thermogravimetric analysis of agricultural residues: Oxygen effect and environmental impact. In Journal of Applied Polymer Science, 2006, vol.100, no. 2, p. 1318 - 1322. (1.072 - IF2005). (2006 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] EL-SAYED, S.A. - MOSTAFA, M.E. Pyrolysis characteristics and kinetic parameters determination of biomass fuel powders by differential thermal gravimetric analysis (TGA/DTG). In ENERGY CONVERSION AND MANAGEMENT. ISSN 0196-8904, SEP 2014, vol. 85, p. 165-172., WOS
2. [1.1] JEGUIRIM, M. - LIMOUSY, L. - DUTOURNIE, P. Pyrolysis kinetics and physicochemical properties of agropellets produced from spent ground coffee blended with conventional biomass. In CHEMICAL ENGINEERING RESEARCH & DESIGN. ISSN 0263-8762, OCT 2014, vol. 92, no. 10, SI, p. 1876-1882., WOS

ADCA439 ŠIMKOVIC, I. - BALOG, K. - CSOMOROVÁ, Katarína. Thermal-degradation and thermooxidation of 0-acetyl-(4-0-methyl-D-glucurono)-D-xylan and related derivatives. In Holzforschung : International Journal of the Biology, Chemistry, Physics, and Technology of Wood, 1995, vol. 49, no. 6, p. 512-516. ISSN 0018-3830.

Citácie:

1. [1.1] VANSKA, E. - LUUKKA, M. - SOLALA, I. - VUORINEN, T. Effect of water vapor in air on thermal degradation of paper at high temperature. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JAN 2014, vol. 99, p. 283-289., WOS

ADCA440 ŠIMKOVIC, I. - ANTAL, M. - CSOMOROVÁ, Katarína - MICKO, M. M. New aspects in cationization of lignocellulose materials. X. Thermooxidation of TMAHP-

sawdust. In Journal of Applied Polymer Science, 1989, vol. 52, no. 1, p. 1913-1917. ISSN 0021-8995.

Citácie:

1. [1.2] PRADO, H.J.- MATULEWICZ, M.C. Cationization of polysaccharides: A path to greener derivatives with many industrial applications. (2014) European Polymer Journal, 52 (1), p. 53-75. DOI: 10.1016/j.eurpolymj.2013.12.011, Scopus

ADCA441 ŠIŠKOVÁ, Alena - MACOVÁ, Eva - BEREK, Dušan. Liquid chromatography under limiting conditions of desorption 4 separation of blends containing low-solubility polymers. In European Polymer Journal, 2012, vol. 48, p. 155 - 168. (2.739 - IF2011). (2012 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA442 ŠIŠKOVÁ, Alena - MACOVÁ, Eva - CORRADINI, D. - BEREK, Dušan. Liquid chromatography of synthetic polymers under critical conditions of enthalpic interactions.4: Sample recovery. In Journal of Separation Science, 2013, vol. 36, p. 2979 - 2985. (2.591 - IF2012). (2013 - Current Contents). ISSN 1615-9306.

Citácie:

1. [1.1] GUTIERREZ, C.G. - MINARI, R.J. - GUGLIOTTA, L.M. - MEIRA, G.R. - VEGA, J.R. Analysis by size exclusion chromatography of the graft terpolymer present in MBS. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, DEC 10 2014, vol. 22, no. 1., WOS

2. [1.1] SUTTON, A.T. - READ, E. - MANIEGO, A.R. - THEVARAJAH, J. - MARTY, J.D. - DESTARAC, M. - GABORIEAU, M. - CASTIGNOLLES, P. Purity of double hydrophilic block copolymers revealed by capillary electrophoresis in the critical conditions. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, DEC 12 2014, vol. 1372, p. 187-195., WOS

ADCA443 ŠKRABÁKOVÁ, S. - MATISOVÁ, E. - BENICKÁ, E. - NOVÁK, I. - BEREK, Dušan. Use of a novel carbon sorbent for the adsorption of organic compounds from water. In Journal of Chromatography A, 1994, vol. 665, p. 27-32.

Citácie:

1. [1.1] FALCO, I.P.R. - MOYA, M.N. Determination of Volatile organic compounds in water. In HANDBOOK OF WATER ANALYSIS, 3RD EDITION. 2014, p. 549-610., WOS

ADCA444 *ŠKRINÁROVÁ, Zuzana* - CIFRA, Peter. Partitioning of semiflexible macromolecules into a slit of theta solvent. In Macromolecular Theory and Simulations, 2002, vol. 11, iss. 4, p. 401-409. ISSN 1022-1344.

Citácie:

1. [1.1] IVANOV, V.A. - RODIONOVA, A.S. - MARTEMYANOVA, J.A. - STUKAN, M.R. - MULLER, M. - PAUL, W. - BINDER, K. Conformational properties of semiflexible chains at nematic ordering transitions in thin films: A Monte Carlo simulation. In MACROMOLECULES. ISSN 0024-9297, FEB 11 2014, vol. 47, no. 3, p. 1206-1220., WOS

ADCA445 *ŠKRINÁROVÁ, Zuzana* - CIFRA, Peter. Partitioning of semiflexible macromolecules into a slit in good solvents. In Macromolecular Theory and Simulations, 2001, vol. 10, no. 5, p. 523-531. (2001 - Current Contents). ISSN 1022-1344.

Citácie:

1. [1.1] IVANOV, V.A. - RODIONOVA, A.S. - MARTEMYANOVA, J.A. - STUKAN, M.R. - MULLER, M. - PAUL, W. - BINDER, K. Conformational properties of semiflexible chains at nematic ordering transitions in thin films: A

Monte Carlo simulation. In MACROMOLECULES. ISSN 0024-9297, FEB 11 2014, vol. 47, no. 3, p. 1206-1220., WOS

ADCA446 ŠNAUKO, Marián - BEREK, Dušan - HUNKELER, D. Liquid chromatography of polymers under limiting conditions of adsorption.IV. Sample recovery. In Journal of Chromatography A : international Journal on Chromatography, Electrophoresis and Related Methods, 2005, vol. 1084, no. 1-2, p. 173 - 179. (3.359 - IF2004). (2005 - Current Contents). ISSN 0021-9673.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA447 ŠNAUKO, Marián - BEREK, Dušan. Liquid chromatography of polymers under limiting conditions of desorption. II. Tandem injection and quantitative molar mass determination. In Journal of Chromatography A : international Journal on Chromatography, Electrophoresis and Related Methods, 2005, vol. 1094, no. 1-2, p. 42 - 48. (3.359 - IF2004). (2005 - Current Contents). ISSN 0021-9673.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA448 ŠNAUKO, Marián - BEREK, Dušan. Liquid chromatography of polymers under limiting conditions of desorption. 3. Role of experimental variables. In Macromolecular Chemistry and Physics, 2005, vol. 206, iss. 9, p 938 - 944. (1.880 - IF2004). (2005 - Current Contents). ISSN 1022-1352.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA449 ŠNAUKO, Marián - BEREK, Dušan. Liquid chromatography under limiting conditions of adsorption and limiting conditions of desorption for separation of complex polymers. The role of flower-like interactions of macromolecules. In Chromatographia, 2003, vol. 57, p. S55 - S59. (1.230 - IF2002). (2003 - Current Contents). ISSN 0009-5893.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA450 ŠNAUKO, Marián - BEREK, Dušan. Liquid chromatography of polymers under limiting conditions of adsorption. III. Role of experimental variables. In Journal of Separation Science, 2005, vol. 28, no. 16, p. 2094 - 2103. ISSN 1615-9306.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADCA451 ŠOLTÉS, L. - LATH, Dieter - MENDICHI, R. - BYSTRICKÝ, P. Radical degradation of high molecular weight hyaluronan: Inhibition of the reaction by Ibuprofen enantiomers. In Methods and Findings in Experimental and Clinical Pharmacology, 2001, vol. 23, no. 3, p. 65-71. (0.543 - IF2000). (2001 - Current Contents). ISSN 0379-0355.

Citácie:

1. [1.1] FUCHS, B. - SCHILLER, J. Glycosaminoglycan degradation by selected

reactive oxygen species. In ANTIOXIDANTS & REDOX SIGNALING. ISSN 1523-0864, 2014, vol. 21, no. 7, p. 1044-1062, WOS
2. [1.1] PETREY, A.C. - de la MOTTE, C.A. Hyaluronan, a crucial regulator of inflammation. In FRONTIERS IN IMMUNOLOGY. ISNN 1664-3224, 2014, vol. 5, no. MAR, article number 101, WOS
3. [3] OMER, A.M. - TAMER, M. T. - MOHYELDIN, M.S. High-molecular weight of biopolymer. In SCIENCE JOURNAL OF VOLGOGRAD STATE UNIVERSITY : TECHNOLOGY AND INNOVATIONS. ISSN 2305-7815, 2014, vol. 12, no. 3, p. 56-70

ADCA452 ŠOLTÉS, L. - KOGAN, G. - STANKOVSKÁ, M. - MENDICHI, R. - RYCHLÝ, Jozef - SCHILLER, J. - GEMEINER, P. Degradation of high-molar-mass hyaluronan and characterization of fragments. In Biomacromolecules, 2007, vol. 8, p. 2697-2705. (3.664 - IF2006). (2007 - Current Contents). ISSN 1525-7797.

Citácie:

1. [1.1] BELLOMARIA, A. - NEPRAVISHTA, R. - MAZZANTI, U. - MARCHETTI, M. - PICCIOLI, P. - PACI, M. Determination of the presence of hyaluronic acid in preparations containing amino acids: The molecular weight characterization. In EUROPEAN JOURNAL OF PHARMACEUTICAL SCIENCES. ISSN 0928-0987, 2014, vol. 63, p. 199-203., WOS
2. [1.1] HOLUBOVA, L. - KORECKA, L. - PODZIMEK, S. - MORAVCOVA, V. - ROTKOVA, J. - EHLOVA, T. - VELEBNY, V. - BILKOVA, Z. Enhanced multiparametric hyaluronan degradation for production of molar-mass-defined fragments. In CARBOHYDRATE POLYMERS. ISSN 0144-8617, 2014, vol. 112, p. 271-276., WOS

ADCA453 ŠOLTÉS, L. - MENDICHI, R. - *LATH, Dieter* - MACH, M. - *BAKOŠ, Dušan* Molecular characteristics of some commercial high-molecular-weight hyluronans. In Biomedical Chromatography, 2002, vol. 16, no. 7, p. 459-462. (1.432 - IF2001). (2002 - Current Contents). ISSN 0269-3879.

Citácie:

1. [1.1] CASPERSEN, M. B. - ROUBROEKS, J. P. - QUN, L. - SHAN, H. - FOGH, J. - RUIDONG, Z. - TOMMERAAS, K. Thermal degradation and stability of sodium hyaluronate in solid state. In CARBOHYDRATE POLYMERS. ISSN 0144-8617; 1879-1344, 2014, vol. 107, p. 25-30., WOS
2. [1.1] HAWARD, S. J. Characterization of hyaluronic acid and synovial fluid in stagnation point elongational flow. In BIOPOLYMERS. ISSN 0006-3525; 1097-0282, 2014, vol. 101, no. 3, p. 287-305., WOS
3. [1.2] LIU, X. M. - HARMON, P.S. - MAZIARZ, E. P. - SHEETS, J.W. In vitro characterization and ophthalmic applications of hyaluronan (Book Chapter 5). In Pomin V.H. edit. HYALURONAN: BIOLOGICAL AND MEDICAL IMPLICATIONS, (BIOCHEMISTRY RESEARCH TRENDS). Nova Science Publishers, Inc. 2014, p. 85-112. ISBN 978-1-63117-812-2; 978-1-63117-808-5, SCOPUS

ADCA454 ŠPITALSKÝ, Zdenko - BLEHA, Tomáš. Elastic moduli of highly stretched tie molecules in solid polyethylene. In Polymer : the International Journal for the Science and Technology of Polymers, 2003, vol. 44, no. 5, p. 1603 - 1611. (1.383 - IF2002). (2003 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] SHINZAWA, H. - KANEMATSU, W. - NODA, I. Rheo-optical near-infrared (NIR) spectroscopy study of low-density polyethylene (LDPE) in conjunction with projection two-dimensional (2D) correlation analysis. In VIBRATIONAL SPECTROSCOPY. ISSN 0924-2031, JAN 2014, vol. 70, p. 53-57., WOS

2. [1.1] YU, L. - WU, T. - CHEN, T. - YANG, F. - XIANG, M. Polypropylene random copolymer in pipe application: Performance improvement with controlled molecular weight distribution. In THERMOCHIMICA ACTA. ISSN 0040-6031, FEB 20 2014, vol. 578, p. 43-52., WOS

ADCA455 ŠPITALSKÝ, Zdenko - TSOUKLERI, G. - TASIS, D. - KRONTIRAS, C. - GEORGA, S.N. - GALIOTIS, C. High volume fraction carbon nanotube-epoxy composites. In Nanotechnology, 2009, vol.20, iss. 40, p. 405702 (7p. ISSN 0957-4484.

Citácie:

1. [1.1] DEMETZOS, C. - PIPPA, N. Advanced drug delivery nanosystems (aDDnSs): a mini-review. In DRUG DELIVERY. ISSN 1071-7544, JUN 2014, vol. 21, no. 4, p. 250-257., WOS

2. [1.1] LAIRD, E.D. - HOOD, M.A. - LI, C.Y. Cooperative interaction, crystallization, and properties of polymer-carbon nanotube nanocomposites. In CARBON NANOMATERIALS, 2ND EDITION. 2014, p. 135-186., WOS

3. [1.1] NAM, T.H. - GOTO, K. - NAKAYAMA, H. - OSHIMA, K. - PREMALAL, V. - SHIMAMURA, Y. - INOUE, Y. - NAITO, K. - KOBAYASHI, S. Effects of stretching on mechanical properties of aligned multi-walled carbon nanotube/epoxy composites. In COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING. ISSN 1359-835X, SEP 2014, vol. 64, p. 194-202., WOS

4. [1.1] TALU, S. - MARKOVIC, Z. - STACH, S. - MARKOVIC, B.T. - TALU, M. Multifractal characterization of single wall carbon nanotube thin films surface upon exposure to optical parametric oscillator laser irradiation. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JAN 15 2014, vol. 289, p. 97-106., WOS

ADCA456 ŠPITALSKÝ, Zdenko - LACÍK, Igor - *LATHOVÁ, Elena* - JANIGOVÁ, Ivica - CHODÁK, Ivan. Controlled degradation of polyhydroxybutyrate via alkoholysis with ethylene glycol or glycerol. In Polymer Degradation and Stability, 2006, vol. 91, no. 4, p. 856 - 861. (1.749 - IF2005). (2006 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] ARRIETA, M.P. - FORTUNATI, E. - DOMINICI, F. - RAYON, E. - LOPEZ, J. - KENNY, J.M. PLA-PHB/cellulose based films: Mechanical, barrier and disintegration properties. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, SEP 2014, vol. 107, SI, p. 139-149., WOS

2. [1.1] DE PAULA, E.L. - CAMPOS, T.F. - MANO, V. Glycolysis of poly(3-hydroxybutyrate) via enzyme catalysis. In QUIMICA NOVA. ISSN 0100-4042, 2014, vol. 37, no. 3, p. 487-+., WOS

3. [1.1] HONG, S.G. - HSU, H.W. - YE, M.T. Characterization and use of ultraviolet-reactive low-molecular-weight polyhydroxybutyrate to prepare biodegradable acrylates. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, FEB 5 2014, vol. 131, no. 3., WOS

4. [1.1] KRIKSTANAVICIENE, K. - STANYS, S. - JONAITIENE, V. Comparative investigation of mechanical-physical characteristics of biodegradable and non-degradable yarns. In AUTEX RESEARCH JOURNAL. ISSN 1470-9589, JUN 2014, vol. 14, no. 2, p. 61-72., WOS

ADCA457 ŠPITALSKÝ, Zdenko - TASIS, D. - PAPAGELIS, K. - GALIOTIS, C. Carbon nanotube-polymer composites: Chemistry, processing, mechanical and electrical properties. In Progress in Polymer Science : an International Review Journal, 2010, vol. 35, p. 357 - 401. (23.753 - IF2009). (2010 - Current Contents). ISSN 0079-6700.

Citácie:

1. [1.1] ABBASZADEH, F. - MORADI, O. - NOROUZI, M. - SABZEVARI, O.

Improvement single-wall carbon nanotubes (SWCNTs) based on functionalizing with monomers 2-hydroxyethylmethacryate (HEMA) and N-vinylpyrrolidone (NVP) for pharmaceutical applications as cancer therapy. In JOURNAL OF INDUSTRIAL AND ENGINEERING CHEMISTRY. ISSN 1226-086X, SEP 25 2014, vol. 20, no. 5, p. 2895-2900., WOS

2. [1.1] ALAM, J. - ALAM, M. - DASS, L.A. - SHANMUGHARAJ, A.M. - RAJA, M. Development of plasticized PLA/NH2-CNTs nanocomposite: Potential of NH2-CNTs to improve electroactive shape memory properties. In POLYMER COMPOSITES. ISSN 0272-8397, NOV 2014, vol. 35, no. 11, p. 2129-2136., WOS

3. [1.1] ALSHAMMARI, A.S. - SHKUNOV, M. - SILVA, S.R.P. Correlation between wetting properties and electrical performance of solution processed PEDOT:PSS/CNT nano-composite thin films. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, MAR 2014, vol. 292, no. 3, p. 661-668., WOS

4. [1.1] ANDREOLI, E. - LIAO, K.S. - CRICINI, A. - ZHANG, X. - SOFFIATTI, R. - BYRNE, H.J. - CURRAN, S.A. Carbon black instead of multiwall carbon nanotubes for achieving comparable high electrical conductivities in polyurethane-based coatings. In THIN SOLID FILMS. ISSN 0040-6090, JAN 1 2014, vol. 550, p. 558-563., WOS

5. [1.1] ANDRZEJEWSKI, J. - SZOSTAK, M. - BARCZEWSKI, M. - KRASUCKI, J. - STERZYNSKI, T. Fabrication of the self-reinforced composites using co-extrusion technique. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, DEC 5 2014, vol. 131, no. 23., WOS

6. [1.1] ARRIGO, R. - DINTCHEVA, N.T. - MORICI, E. - LA MANTIA, F.P. Performances and morphology of polyamide/carbonaceous structures based fibers. In TIMES OF POLYMERS (TOP) AND COMPOSITES 2014. ISSN 0094-243X, 2014, vol. 1599, p. 330-333., WOS

7. [1.1] AZIZ, A.A. - HASSIM, D.H.A.I. - SURIANI, A.B. - MAHMOOD, M.R. Effect of multi-wall carbon nanotubes on the properties of natural rubber nanocomposites. In NANOSCIENCE, NANOTECHNOLOGY AND NANOENGINEERING. ISSN 1022-6680, 2014, vol. 832, p. 338-343., WOS

8. [1.1] AZOUBEL, S. - MAGDASSI, S. Controlling adhesion properties of SWCNT-PET films prepared by wet deposition. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, JUN 25 2014, vol. 6, no. 12, p. 9265-9271., WOS

9. [1.1] BAI, Q.L. - MEI, H. - JI, T.M. - SUN, Y.Y. - LI, H.Q. - CHENG, L.F. Mechanical properties of carbon nanotube reinforced composites: A review. In HIGH TEMPERATURE CERAMIC MATRIX COMPOSITES 8: CERAMIC TRANSACTIONS, VOL 248. ISSN 1042-1122, 2014, vol. 248, p. 167-178., WOS

10. [1.1] BERTHOLDI, J. - OPELT, C.V. - MILAN, J.C.G. - COELHO, L.A.F. - LEPIENSKI, C.M. Mechanical, tribological and thermal properties of PLLA/MWCNT nanocomposites. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, JUL-AUG 2014, vol. 24, no. 4, p. 514-520., WOS

11. [1.1] BOHNENBERGER, T. - SCHMID, U. Layer-by-layer approach for deposition of pure carbon nanotubes and composite films for use as electrodes in electrochemical devices. In THIN SOLID FILMS. ISSN 0040-6090, AUG 28 2014, vol. 565, p. 116-121., WOS

12. [1.1] BRZEZINSKI, M. - BIELA, T. Polylactide nanocomposites with functionalized carbon nanotubes and their stereocomplexes: A focused review. In MATERIALS LETTERS. ISSN 0167-577X, APR 15 2014, vol. 121, p. 244-250., WOS

13. [1.1] BU, X.H. - ZHOU, Y.M. - ZHANG, T. - WANG, Y.J. - ZHANG, Z.W. - HE, M. Optically active substituted polyacetylene@carbon nanotube hybrids: Preparation, characterization and infrared emissivity property study. In

JOURNAL OF SOLID STATE CHEMISTRY. ISSN 0022-4596, AUG 2014, vol. 216, p. 23-29., WOS

14. [1.1] BURTON, A.R. - MINEGISHI, K. - KURATA, M. - LYNCH, J.P. Free-standing carbon nanotube composite sensing skin for distributed strain sensing in structures. In SENSORS AND SMART STRUCTURES TECHNOLOGIES FOR CIVIL, MECHANICAL, AND AEROSPACE SYSTEMS 2014. ISSN 0277-786X, 2014, vol. 9061., WOS

15. [1.1] CAO, L. - SU, D.F. - SU, Z.Q. - CHEN, X.N. Fabrication of multiwalled carbon nanotube/polypropylene conductive fibrous membranes by melt electrospinning. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, FEB 12 2014, vol. 53, no. 6, p. 2308-2317., WOS

16. [1.1] CAO, Z.S. - QIU, L. - YANG, Y.Z. - CHEN, Y.K. - LIU, X.G. The effects of surface modifications of multiwalled carbon nanotubes on their dispersibility in different solvents and poly(ether ether ketone). In JOURNAL OF MATERIALS RESEARCH. ISSN 0884-2914, NOV 28 2014, vol. 29, no. 22, p. 2625-2633., WOS

17. [1.1] CHEN, W. - LI, H. - HE, Y.Z. Theoretical study of core-shell composite structure made of carbon nanoring and aluminum nanowire. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2014, vol. 16, no. 17, p. 7907-7912., WOS

18. [1.1] CHEN, Y. - TAO, J. - LI, S. - KHASHAB, N.M. Compositing polyetherimide with polyfluorene wrapped carbon nanotubes for enhanced interfacial interaction and conductivity. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, JUN 25 2014, vol. 6, no. 12, p. 9013-9022., WOS

19. [1.1] CHEN, Z.Q. - DAI, X.J.J. - MAGNIEZ, K. - LAMB, P.R. - FOX, B.L. - WANG, X.G. Improving the mechanical properties of multiwalled carbon nanotube/epoxy nanocomposites using polymerization in a stirring plasma system. In COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING. ISSN 1359-835X, JAN 2014, vol. 56, p. 172-180., WOS

20. [1.1] CHENG, H.Z. - CHENG, X.H. Influence of rare-earth-functionalized carbon nanotubes on thermal and mechanical properties of polytetrafluoroethylene nanocomposites. In JOURNAL OF REINFORCED PLASTICS AND COMPOSITES. ISSN 0731-6844, JAN 2014, vol. 33, no. 1, p. 47-57., WOS

21. [1.1] CHIU, C.W. - HUANG, T.K. - WANG, Y.C. - ALAMANI, B.G. - LIN, J.J. Intercalation strategies in clay/polymer hybrids. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, MAR 2014, vol. 39, no. 3, p. 443-485., WOS

22. [1.1] COMBESSIS, A. - CHARVIN, N. - ALLAIS, A. - FOURNIER, J. - FLANDIN, L. Understanding dynamic percolation mechanisms in carbonaceous polymer nanocomposites through impedance spectroscopy: Experiments and modeling. In JOURNAL OF APPLIED PHYSICS. ISSN 0021-8979, JUL 21 2014, vol. 116, no. 3., WOS

23. [1.1] COSTA, P. - SILVIA, C. - VIANA, J.C. - MENDEZ, S.L. Extruded thermoplastic elastomers styrene-butadiene-styrene/carbon nanotubes composites for strain sensor applications. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, FEB 2014, vol. 57, p. 242-249., WOS

24. [1.1] CRUZ-DELGADO, V.J. - AVILA-ORTA, C.A. - ESPINOZA-MARTINEZ, A.B. - MATA-PADILLA, J.M. - SOLIS-ROSALES, S.G. - JALBOUT, A.F. - MEDELLIN-RODRIGUEZ, F.J. - HSIAO, B.S. Carbon nanotube surface-induced crystallization of polyethylene terephthalate (PET). In POLYMER. ISSN 0032-3861, JAN 30 2014, vol. 55, no. 2, p. 642-650., WOS

25. [1.1] DA SILVA, W.M. - RIBEIRO, H. - NEVES, J.C. - CALADO, H.D.R. - GARCIA, F.G. - SILVA, G.G. Multi-walled carbon nanotubes functionalized with

triethylenetetramine as fillers to enhance epoxy dimensional thermal stability. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, FEB 2014, vol. 115, no. 2, p. 1021-1027., WOS

26. [1.1] DAS, D. - SATAPATHY, B.K. Microstructure-rheological percolation-mechanical properties correlation of melt-processed polypropylene-multiwall carbon nanotube nanocomposites: Influence of matrix tacticity combination. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, SEP 15 2014, vol. 147, no. 1-2, p. 127-140., WOS

27. [1.1] DAS, R. - ALI, M.E. - ABD HAMID, S.B. - ANNUAR, M.S.M. - RAMAKRISHNA, S. Common wet chemical agents for purifying multiwalled carbon nanotubes. In JOURNAL OF NANOMATERIALS. ISSN 1687-4110, 2014., WOS

28. [1.1] DENG, H. - LIN, L. - JI, M.Z. - ZHANG, S.M. - YANG, M.B. - FU, Q. Progress on the morphological control of conductive network in conductive polymer composites and the use as electroactive multifunctional materials. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, APR 2014, vol. 39, no. 4, p. 627-655., WOS

29. [1.1] DI, J.T. - WANG, X. - XING, Y.J. - ZHANG, Y.Y. - ZHANG, X.H. - LU, W.B. - LI, Q.W. - ZHU, Y.T.T. Dry-processable carbon nanotubes for functional devices and composites. In SMALL. ISSN 1613-6810, NOV 26 2014, vol. 10, no. 22, SI, p. 4606-4625., WOS

30. [1.1] DIEZ-PASCUAL, A.M. - SHUTTLEWORTH, P.S. - GONZALEZ-CASTILLO, E.I. - MARCO, C. - GOMEZ-FATOU, M.A. - ELLIS, G. Polymer blend nanocomposites: Effect of selective nanotube location on the properties of a semicrystalline thermoplastic-toughened epoxy thermoset. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, DEC 2014, vol. 299, no. 12, p. 1430-1444., WOS

31. [1.1] DINTCHEVA, N.T. - ARRIGO, R. - GAMBAROTTI, C. - CARROCCIO, S. - FILIPPONE, G. - CICOGNA, F. - GUENZI, M. alpha-Tocopherol-induced radical scavenging activity in carbon nanotubes for thermo-oxidation resistant ultra-high molecular weight polyethylene-based nanocomposites. In CARBON. ISSN 0008-6223, AUG 2014, vol. 74, p. 14-21., WOS

32. [1.1] DOLATI, F. - YU, Y. - ZHANG, Y.H. - DE JESUS, A.M. - SANDER, E.A. - OZBOLAT, I.T. In vitro evaluation of carbon-nanotube-reinforced bioprintable vascular conduits. In NANOTECHNOLOGY. ISSN 0957-4484, APR 11 2014, vol. 25, no. 14., WOS

33. [1.1] ESPEJO, C. - CARRION-VILCHES, F.J. - BERMUDEZ, M.D. Viscoelastic properties and long-term stability of polystyrene-carbon nanotube nanocomposites. Effect of the nature of the carbon nanotubes and modification by ionic liquid. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, MAY 2014, vol. 103, p. 42-48., WOS

34. [1.1] EYASSU, T. - HSIAO, T.J. - HENDERSON, K. - KIM, T. - LIN, C.T. Molecular Cooling Fan: Factors for optimization of heat dissipation devices and applications. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, DEC 17 2014, vol. 53, no. 50, p. 19550-19558., WOS

35. [1.1] FADIRAN, O.O. - MEREDITH, J.C. Surface treated pollen performance as a renewable reinforcing filler for poly(vinyl acetate). In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, OCT 28 2014, vol. 2, no. 40, p. 17031-17040., WOS

36. [1.1] FARAGUNA, F. - PETER, R. - VOLOVSEK, V. - JUKIC, A. Synthesis and characterization of alkyl ester functionalized multiwall carbon nanotubes. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880,

AUG 2014, vol. 14, no. 8, p. 6347-6354., WOS
37. [1.1] FARBOD, M. - MOBINI, N. Physical properties, thermal stability, and glass transition temperature of multi-walled carbon nanotube/polypyrrole nanocomposites. In COMPOSITE INTERFACES. ISSN 0927-6440, 2014, vol. 21, no. 8, p. 737-747., WOS
38. [1.1] GAJBHIYE, S.O. - SINGH, S.P. Experimental investigation of static and dynamic characteristics of multiwall carbon nanotubes reinforced polypropylene. In DYNAMICS OF MACHINES AND MECHANISMS, INDUSTRIAL RESEARCH. ISSN 1660-9336, 2014, vol. 592-594, p. 927-931., WOS
39. [1.1] GAO, L.L. - MAO, X.H. - ZHU, H. - XIAO, W. - GAN, F.X. - WANG, D.H. Electropolymerization of PEDOT on CNTs conductive network assembled at water/oil interface. In ELECTROCHIMICA ACTA. ISSN 0013-4686, AUG 1 2014, vol. 136, p. 97-104., WOS
40. [1.1] GENTILE, G. - AMBROGI, V. - CERRUTI, P. - DI MAIO, R. - NASTI, G. - CARFAGNA, C. Pros and cons of melt annealing on the properties of MWCNT/polypropylene composites. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, DEC 2014, vol. 110, p. 56-64., WOS
41. [1.1] GHAEMI, F. - AMIRI, A. - YUNUS, R. Methods for coating solid-phase microextraction fibers with carbon nanotubes. In TRAC-TRENDS IN ANALYTICAL CHEMISTRY. ISSN 0165-9936, JUL-AUG 2014, vol. 59, p. 133-143., WOS
42. [1.1] GHAMSARI, A.K. - WICKER, S. - WOLDESENBET, E. Bucky syntactic foam; multi-functional composite utilizing carbon nanotubes-ionic liquid hybrid. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, DEC 2014, vol. 67, p. 1-8., WOS
43. [1.1] GHOBADI, H. - NEMATI, A. - EBADZADEH, T. - SADEGHIAN, Z. - BARZEGAR-BAFROOEI, H. Improving CNT distribution and mechanical properties of MWCNT reinforced alumina matrix. In MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING. ISSN 0921-5093, NOV 3 2014, vol. 617, p. 110-114., WOS
44. [1.1] GIANNOPOULOS, G.I. - KALLIVOKAS, I.G. Mechanical properties of graphene based nanocomposites incorporating a hybrid interphase. In FINITE ELEMENTS IN ANALYSIS AND DESIGN. ISSN 0168-874X, NOV 1 2014, vol. 90, p. 31-40., WOS
45. [1.1] GING, J. - TEJERINA-ANTON, R. - RAMAKRISHNAN, G. - NIELSEN, M. - MURPHY, K. - GORHAM, J.M. - NGUYEN, T. - ORLOV, A. Development of a conceptual framework for evaluation of nanomaterials release from nanocomposites: Environmental and toxicological implications. In SCIENCE OF THE TOTAL ENVIRONMENT. ISSN 0048-9697, MAR 1 2014, vol. 473, p. 9-19., WOS
46. [1.1] GODA, T. - KURITA, T. - MITSUMATA, T. - SANO, M. Very small amounts of carbon nanotubes to weaken thixotropy of polysaccharide gels. In CHEMISTRY LETTERS. ISSN 0366-7022, JUL 5 2014, vol. 43, no. 7, p. 988-990., WOS
47. [1.1] GOH, P.S. - ISMAIL, A.F. - NG, B.C. Directional alignment of carbon nanotubes in polymer matrices: Contemporary approaches and future advances. In COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING. ISSN 1359-835X, JAN 2014, vol. 56, p. 103-126., WOS
48. [1.1] GROSSIORD, N. - NOORDOVER, B.A.J. - MILTNER, H.E. - HOEKS, T. - ALEXANDRE, V. - LOOS, J. - VAN MELE, B. - MEULDIJK, J. - KONING, C.E. A Latex-based route to disperse carbon nanotubes in poly(2,6-dimethyl-1,4-

phenylene ether)/polystyrene blends. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, FEB 2014, vol. 299, no. 2, p. 228-236., WOS

49. [1.1] HABISREUTINGER, S.N. - LEIJTENS, T. - EPERON, G.E. - STRANKS, S.D. - NICHOLAS, R.J. - SNAITH, H.J. Enhanced hole extraction in perovskite solar cells through carbon nanotubes. In JOURNAL OF PHYSICAL CHEMISTRY LETTERS. ISSN 1948-7185, DEC 4 2014, vol. 5, no. 23, p. 4207-4212., WOS

50. [1.1] HAGHGOO, M. - YOUSEFI, A.A. - MEHR, M.J.Z. - CELZARD, A. - FIERRO, V. - LEONARD, A. - JOB, N. Characterization of multi-walled carbon nanotube dispersion in resorcinol-formaldehyde aerogels. In MICROPOROUS AND MESOPOROUS MATERIALS. ISSN 1387-1811, JAN 15 2014, vol. 184, p. 97-104., WOS

51. [1.1] HAN, F. - AZDOUD, Y. - LUBINEAU, G. Computational modeling of elastic properties of carbon nanotube/polymer composites with interphase regions. Part I: Micro-structural characterization and geometric modeling. In COMPUTATIONAL MATERIALS SCIENCE. ISSN 0927-0256, JAN 2014, vol. 81, p. 641-651., WOS

52. [1.1] HAN, K. - SHIN, J. A systematic way of identifying and forecasting technological reverse salients using QFD, bibliometrics, and trend impact analysis: A carbon nanotube biosensor case. In TECHNOVATION. ISSN 0166-4972, SEP 2014, vol. 34, no. 9, SI, p. 559-570., WOS

53. [1.1] HAN, Y. - ZHOU, H. - GE, K.K. - GUO, Y. - LIU, F. - ZHAO, T. Toughness reinforcement of bismaleimide resin using functionalized carbon nanotubes. In HIGH PERFORMANCE POLYMERS. ISSN 0954-0083, DEC 2014, vol. 26, no. 8, p. 874-883., WOS

54. [1.1] HAO, X.Y. - CHIEN, A.T. - HUA, X.Y. - LU, J. - LIU, Y.D. Dispersion of pristine CNT in UHMWPE solution to prepare CNT/UHMWPE composite fiber. In POLYMERS & POLYMER COMPOSITES. ISSN 0967-3911, 2014, vol. 22, no. 5, p. 467-469., WOS

55. [1.1] HE, G.W. - ZHAO, J. - HU, S. - LI, L.Q. - LI, Z.Y. - LI, Y.F. - LI, Z. - WU, H. - YANG, X.L. - JIANG, Z.Y. Functionalized carbon nanotube via distillation precipitation polymerization and its application in nafion-based composite membranes. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, SEP 10 2014, vol. 6, no. 17, p. 15291-15301., WOS

56. [1.1] HE, H. - XIE, G.Z. - ZHOU, Y. - TAI, H.L. Resistive gas sensors based on MWCNTs-PVP composite films. In MATERIAL SCIENCE, CIVIL ENGINEERING AND ARCHITECTURE SCIENCE, MECHANICAL ENGINEERING AND MANUFACTURING TECHNOLOGY II. ISSN 1660-9336, 2014, vol. 651-653, p. 84-87., WOS

57. [1.1] HIJAZI, I. - BOURGETEAU, T. - CORNUT, R. - MOROZAN, A. - FILORAMO, A. - LEROY, J. - DERYCKE, V. - JOUSSELME, B. - CAMPIDELLI, S. Carbon nanotube-templated synthesis of covalent porphyrin network for oxygen reduction reaction. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, APR 30 2014, vol. 136, no. 17, p. 6348-6354., WOS

58. [1.1] HONG, S.Y. - KIM, Y.H. Preparation and characterization of poly(phenylene sulfide)-functionalized MWNTs. In POLYMER-KOREA. ISSN 0379-153X, NOV 2014, vol. 38, no. 6, p. 791-800., WOS

59. [1.1] HU, D.D. - CHEN, J. - SUN, S.J. - LIU, T. - ZHAO, L. Solubility and diffusivity of CO2 in isotactic polypropylene/nanomontmorillonite composites in melt and solid states. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, FEB 19 2014, vol. 53, no. 7, p. 2673-2683., WOS

60. [1.1] HU, H. - ZHAO, Z.B. - ZHANG, R. - BIN, Y.Z. - QIU, J.S. Polymer

casting of ultralight graphene aerogels for the production of conductive nanocomposites with low filling content. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 11, p. 3756-3760., WOS
61. [1.1] HU, K.S. - KULKARNI, D.D. - CHOI, I. - TSUKRUK, V.V. Graphene-polymer nanocomposites for structural and functional applications. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, NOV 2014, vol. 39, no. 11, p. 1934-1972., WOS
62. [1.1] HUANG, C.M. - BAI, H.W. - XIU, H. - ZHANG, Q. - FU, Q. Matrix crystallization induced simultaneous enhancement of electrical conductivity and mechanical performance in poly(L-lactide)/multiwalled carbon nanotubes (PLLA/MWCNTs) nanocomposites. In COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, OCT 6 2014, vol. 102, p. 20-27., WOS
63. [1.1] HUANG, J. - RODRIGUE, D. The effect of carbon nanotube orientation and content on the mechanical properties of polypropylene based composites. In MATERIALS & DESIGN. ISSN 0261-3069, MAR 2014, vol. 55, p. 653-663., WOS
64. [1.1] HUANG, L. - YANG, X.P. - JIA, X.L. - CAO, D.P. Fracture mechanism of amorphous polymers at strain fields. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2014, vol. 16, no. 45, p. 24892-24898., WOS
65. [1.1] HUANG, X. - TAN, C.L. - YIN, Z.Y. - ZHANG, H. 25th Anniversary Article: Hybrid nanostructures based on two-dimensional nanomaterials. In ADVANCED MATERIALS. ISSN 0935-9648, APR 2014, vol. 26, no. 14, p. 2185-2204., WOS
66. [1.1] HUH, M. - JUNG, M.H. - PARK, Y.S. - KIM, B.J. - KANG, M.S. - HOLDEN, P.J. - YUN, S.I. Effect of carbon nanotube functionalization on the structure and properties of poly(3-hydroxybutyrate)/MWCNTs biocomposites. In MACROMOLECULAR RESEARCH. ISSN 1598-5032, JUL 2014, vol. 22, no. 7, SI, p. 765-772., WOS
67. [1.1] ILCIKOVA, M. - MRLIK, M. - SEDLACEK, T. - CHORVAT, D. - KRUPA, I. - SLOUF, M. - KOYNOV, K. - MOSNACEK, J. Viscoelastic and photo-actuation studies of composites based on polystyrene-grafted carbon nanotubes and styrene-b-isoprene-b-styrene block copolymer. In POLYMER. ISSN 0032-3861, JAN 14 2014, vol. 55, no. 1, SI, p. 211-218., WOS
68. [1.1] IMAI, Y. - SHIMAMOTO, D. - HOTTA, Y. Effect of wet jet milling of carbon nanotube on electrical properties of polymer nanocomposites. In MATERIALS CHEMISTRY AND PHYSICS. ISSN 0254-0584, DEC 15 2014, vol. 148, no. 3, p. 1178-1183., WOS
69. [1.1] JAINAL, M.S. - KAMARLUDIN, S.N.C. - AKHBAR, S. - RAHMAN, M.F.A. Preliminary study of development of HDPE/EVA/MMT/EFB nanohybrid biocomposite by using single screw extruder. In ADVANCES IN APPLIED MECHANICS AND MATERIALS. ISSN 1660-9336, 2014, vol. 493, p. 715-720., WOS
70. [1.1] JAJAM, K.C. - RAHMAN, M.M. - HOSUR, M.V. - TIPPUR, H.V. Fracture behavior of epoxy nanocomposites modified with polyol diluent and amino-functionalized multi-walled carbon nanotubes: A loading rate study. In COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING. ISSN 1359-835X, APR 2014, vol. 59, p. 57-69., WOS
71. [1.1] JEN, Y.M. - HUANG, C.Y. Effect of temperature on fatigue strength of carbon nanotube/epoxy composites. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, DEC 2014, vol. 48, no. 28, p. 3469-3483., WOS
72. [1.1] JEONG, D.H. - KIL, S.C. - NAM, S.W. Polymer-matrix structural lightweight CNT composites: A review for development trends and applications. In KOREAN JOURNAL OF METALS AND MATERIALS. ISSN 1738-8228, NOV

2014, vol. 52, no. 11, p. 873-880., WOS
73. [1.1] JEONG, H.T. - KIM, B.C. - GORKIN, R. - HIGGINS, M.J. - WALLACE, G.G. Capacitive behavior of latex/single-wall carbon nanotube stretchable electrodes. In ELECTROCHIMICA ACTA. ISSN 0013-4686, AUG 10 2014, vol. 137, p. 372-380., WOS
74. [1.1] JERONIMO, K. - CRUZ, V.L. - RAMOS, J. - VEGA, J.F. - TRUJILLO, M. - MULLER, A.J. - MARTINEZ-SALAZAR, J. Computer simulations of the early stages of crystal nucleation of linear and short chain branched polyethylene on carbon nanotubes. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, JUL 2014, vol. 56, p. 194-204., WOS
75. [1.1] JIA, K. - MARKS, R.S. - IONESCU, R.E. Influence of carbon-based nanomaterials on lux-bioreporter Escherichia coli. In TALANTA. ISSN 0039-9140, AUG 1 2014, vol. 126, p. 208-213., WOS
76. [1.1] JIANG, F. - ZHANG, Y. - WANG, Z.K. - FANG, H.G. - DING, Y.S. - XU, H.X. - WANG, Z.G. Synthesis and characterization of nanostructured copolymer-grafted multiwalled carbon nanotube composite thermoplastic elastomers toward unique morphology and strongly enhanced mechanical properties. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, DEC 31 2014, vol. 53, no. 52, p. 20154-20167., WOS
77. [1.1] JIANG, F. - ZHANG, Y.Q. - FANG, C. - WANG, Z.K. - WANG, Z.G. From soft to strong elastomers: the role of additional crosslinkings in copolymer-grafted multiwalled carbon nanotube composite thermoplastic elastomers. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 104, p. 60079-60085., WOS
78. [1.1] JIANG, W.G. - YAO, J.L. - PENG, S.M. - ZHAO, H.P. Finite element and molecular dynamics models for predicting effective mechanical behaviors of carbon nanotube bundles. In ACTA MECHANICA. ISSN 0001-5970, DEC 2014, vol. 225, no. 12, p. 3549-3558., WOS
79. [1.1] JOUNI, M. - BOUDENNE, A. - BOITEUX, G. - MASSARDIER, V. - GARNIER, B. Significant enhancement of electrical and thermal conductivities of polyethylene carbon nanotube composites by the addition of a low amount of silver nanoparticles. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, SEP 2014, vol. 25, no. 9, p. 1054-1059., WOS
80. [1.1] KALITA, H. - KARAK, N. Bio-based hyperbranched thermosetting polyurethane/triethanolamine functionalized multi-walled carbon nanotube nanocomposites as shape memory materials. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, JUL 2014, vol. 14, no. 7, p. 5435-5442., WOS
81. [1.1] KAMARLUDIN, S.N.C. - JAINAL, M.S. - AKHBAR, S. - RAHMAN, M.F.A. Effect of empty fruit bunch (EFB) fiber on mechanical properties of HDPE/EVA/MMT/EFB nanohybrid biocomposite. In ADVANCED MATERIALS ENGINEERING AND TECHNOLOGY II. ISSN 1013-9826, 2014, vol. 594-595, p. 618-623., WOS
82. [1.1] KAUSAR, A. A study on high-performance poly(azo-pyridine-benzophenone-imide) nanocomposites via self-reinforcement of electrospun nanofibers. In IRANIAN POLYMER JOURNAL. ISSN 1026-1265, FEB 2014, vol. 23, no. 2, p. 127-136., WOS
83. [1.1] KAZAKOVA, M.A. - KUZNETSOV, V.L. - SEMIKOLENOVA, N.V. - MOSEENKOV, S.I. - KRASNIKOV, D.V. - MATSKO, M.A. - ISHCHENKO, A.V. - ZAKHAROV, V.A. - ROMANENKO, A.I. - ANIKEEVA, O.B. - TKACHEV, E.N. - SUSLYAEV, V.I. - ZHURAVLEV, V.A. - DOROZKIN, K.V. Comparative study of multiwalled carbon nanotube/polyethylene composites produced via different techniques. In PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS.

ISSN 0370-1972, DEC 2014, vol. 251, no. 12, p. 2437-2443., WOS
84. [1.1] KERU, G. - NDUNGU, P.G. - NYAMORI, V.O. A review on carbon nanotube/polymer composites for organic solar cells. In INTERNATIONAL JOURNAL OF ENERGY RESEARCH. ISSN 0363-907X, OCT 25 2014, vol. 38, no. 13, p. 1635-1653., WOS
85. [1.1] KHALED, E. - KAMEL, M.S. - HASSAN, H.N.A. - ABDEL-GAWAD, H. - ABOUL-ENEIN, H.Y. Performance of a portable biosensor for the analysis of ethion residues. In TALANTA. ISSN 0039-9140, FEB 15 2014, vol. 119, p. 467-472., WOS
86. [1.1] KHARE, K.S. - KHABAZ, F. - KHARE, R. Effect of carbon nanotube functionalization on mechanical and thermal properties of cross-linked epoxy-carbon nanotube nanocomposites: Role of strengthening the interfacial interactions. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, MAY 14 2014, vol. 6, no. 9, p. 6098-6110., WOS
87. [1.1] KIM, H. Enhanced crack detection sensitivity of carbon fiber composites by carbon nanotubes directly grown on carbon fibers. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, APR 2014, vol. 60, p. 284-291., WOS
88. [1.1] KIM, J.W. - SAUTI, G. - SIOCHI, E.J. - SMITH, J.G. - WINCHESKI, R.A. - CANO, R.J. - CONNELL, J.W. - WISE, K.E. Toward high performance thermoset/carbon nanotube sheet nanocomposites via resistive heating assisted infiltration and cure. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, NOV 12 2014, vol. 6, no. 21, p. 18832-18843., WOS
89. [1.1] KIM, N.H. - KUILA, T. - LEE, J.H. Enhanced mechanical properties of a multiwall carbon nanotube attached pre-stitched graphene oxide filled linear low density polyethylene composite. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 8, p. 2681-2689., WOS
90. [1.1] KIM, Y. - BAECK, S.H. - SHIM, S.E. Sonochemical grafting of poly(vinyl alcohol) onto multiwall carbon nanotubes in water. In POLYMER-KOREA. ISSN 0379-153X, MAY 2014, vol. 38, no. 3, p. 378-385., WOS
91. [1.1] KINGSTON, C. - ZEPP, R. - ANDRADY, A. - BOVERHOF, D. - FEHIR, R. - HAWKINS, D. - ROBERTS, J. - SAYRE, P. - SHELTON, B. - SULTAN, Y. - VEJINS, V. - WOHLLEBEN, W. Release characteristics of selected carbon nanotube polymer composites. In CARBON. ISSN 0008-6223, MAR 2014, vol. 68, p. 33-57., WOS
92. [1.1] LEE, S.H. - JUNG, J.H. - OH, I.K. 3D Networked graphene-ferromagnetic hybrids for fast shape memory polymers with enhanced mechanical stiffness and thermal conductivity. In SMALL. ISSN 1613-6810, OCT 15 2014, vol. 10, no. 19, p. 3880-3886., WOS
93. [1.1] LEKAWA-RAUS, A. - KURZEPA, L. - PENG, X.Y. - KOZIOL, K. Towards the development of carbon nanotube based wires. In CARBON. ISSN 0008-6223, MAR 2014, vol. 68, p. 597-609., WOS
94. [1.1] LI, J. - TIAN, L. - PAN, N. - PAN, Z.J. Mechanical and electrical properties of the PA6/SWNTs nanofiber yarn by electrospinning. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, JUL 2014, vol. 54, no. 7, p. 1618-1624., WOS
95. [1.1] LI, Q.Q. - ZAISER, M. - BLACKFORD, J.R. - JEFFREE, C. - HE, Y.H. - KOUTSOS, V. Mechanical properties and microstructure of single-wall carbon nanotube/elastomeric epoxy composites with block copolymers. In MATERIALS LETTERS. ISSN 0167-577X, JUN 15 2014, vol. 125, p. 116-119., WOS
96. [1.1] LI, Y. - MAI, C.K. - PHAN, H. - LIU, X.F. - NGUYEN, T.Q. - BAZAN, G.C. - CHAN-PARK, M.B. Electronic properties of conjugated polyelectrolyte/ single-walled carbon nanotube composites. In ADVANCED MATERIALS. ISSN

0935-9648, JUL 16 2014, vol. 26, no. 27, p. 4697-+., WOS
97. [1.1] LIAN, M. - FAN, J.C. - SHI, Z.X. - LI, H. - YIN, J. Kevlar (R)-functionalized graphene nanoribbon for polymer reinforcement. In POLYMER. ISSN 0032-3861, MAY 13 2014, vol. 55, no. 10, p. 2578-2587., WOS
98. [1.1] LIM, M.Y. - KIM, H.J. - BAEK, S.J. - KIM, K.Y. - LEE, S.S. - LEE, J.C. Improved strength and toughness of polyketone composites using extremely small amount of polyamide 6 grafted graphene oxides. In CARBON. ISSN 0008-6223, OCT 2014, vol. 77, p. 366-378., WOS
99. [1.1] LIN, C. - LIU, Y.T. - XIE, X.M. Improved mechanical properties of graphene oxide/poly(ethylene oxide) nanocomposites by dynamic interfacial interaction of coordination. In AUSTRALIAN JOURNAL OF CHEMISTRY. ISSN 0004-9425, 2014, vol. 67, no. 1, p. 121-126., WOS
100. [1.1] LIU, F. - ZOU, J.W. - HU, G.X. - JIANG, Y.J. Quantitative structure-property relationship studies on the adsorption of aromatic contaminants by carbon nanotubes. In ACTA PHYSICO-CHIMICA SINICA. ISSN 1000-6818, SEP 2014, vol. 30, no. 9, p. 1616-1624., WOS
101. [1.1] LIU, K.J. - JIN, M. - LA, R.X. - ZHANG, J. - WANG, T. - ZHANG, X.W. Transcrystallization of isotactic polypropylene containing a self-assembled nucleating agent nanonetwork. In MATERIALS LETTERS. ISSN 0167-577X, JUN 15 2014, vol. 125, p. 209-212., WOS
102. [1.1] LIU, P. - WANG, X. - LI, H.D. Facile preparation of string-like composite of hollow PPy nanospheres decorated on the carbon nanotubes. In SYNTHETIC METALS. ISSN 0379-6779, MAR 2014, vol. 189, p. 173-176., WOS
103. [1.1] LIU, Y.D. - KUMAR, S. Polymer/carbon nanotube nano composite fibers-A review. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, MAY 14 2014, vol. 6, no. 9, p. 6069-6087., WOS
104. [1.1] LOPES, M.C. - DE CASTRO, V.G. - SEARA, L.M. - DINIZ, V.P.A. - LAVALL, R.L. - SILVA, G.G. Thermosetting polyurethane-multiwalled carbon nanotube composites: Thermomechanical properties and nanoindentation. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, DEC 5 2014, vol. 131, no. 23., WOS
105. [1.1] LUO, H.S. - LI, Z.W. - YI, G.B. - ZU, X.H. - WANG, H. - HUANG, H.L. - WANG, Y.J. - LIANG, Z.F. - ZHANG, S. Multi-stimuli responsive carbon nanotube-shape memory polymeric composites. In MATERIALS LETTERS. ISSN 0167-577X, DEC 15 2014, vol. 137, p. 385-388., WOS
106. [1.1] MADHUKAR, K. - SAINATH, A.V.S. - BIKSHAMAIAH, N. - SRINIVAS, Y. - BABU, N.M. - ASHOK, B. - KUMAR, D.S. - RAO, B.S. Thermal properties of single walled carbon nanotubes composites of polyamide 6/poly(methyl methacrylate) blend system. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, JAN 2014, vol. 115, no. 1, p. 345-354., WOS
107. [1.1] MAHMOOD, N. - ISLAM, M. - HAMEED, A. - SAEED, S. - KHAN, A.N. Polyamide-6-based composites reinforced with pristine or functionalized multi-walled carbon nanotubes produced using melt extrusion technique. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, MAY 2014, vol. 48, no. 10, p. 1197-1207., WOS
108. [1.1] MAHMOODIAN, H. - MORADI, O. - SHARIATZADEH, B. Grafting chitosan and polyHEMA on carbon nanotubes surfaces: "Grafting to" and "Grafting from" methods. In INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES. ISSN 0141-8130, FEB 2014, vol. 63, p. 92-97., WOS
109. [1.1] MAHMOODIAN, H. - MORADI, O. Preparation and characterization of 2-hydroxyethyl methacrylate-chitosan functionalized multiwall carbon nanotubes nanocomposites. In POLYMER COMPOSITES. ISSN 0272-8397, MAR

2014, vol. 35, no. 3, p. 495-500., WOS
110. [1.1] MALLAKPOUR, S. - SOLTANIAN, S. Chemical modification of MWCNTs with 5-aminoisophthalic acid and its effects on the thermal and morphological properties of chiral poly (ester-imide)/MWCNT nanocomposites having N-trimellitylimido-L-isoleucine moieties. In JOURNAL OF POLYMER RESEARCH. ISSN 1022-9760, AUG 6 2014, vol. 21, no. 9., WOS
111. [1.1] MALLAKPOUR, S. - ZADEHNAZARI, A. A convenient strategy to functionalize carbon nanotubes with ascorbic acid and its effect on the physical and thermomechanical properties of poly(amide-imide) composites. In JOURNAL OF SOLID STATE CHEMISTRY. ISSN 0022-4596, MAR 2014, vol. 211, p. 136-145., WOS
112. [1.1] MALLAKPOUR, S. - ZADEHNAZARI, A. Rapid and green functionalization of multi-walled carbon nanotubes by glucose: structural investigation and the preparation of dopamine-based poly(amide-imide) composites. In POLYMER BULLETIN. ISSN 0170-0839, OCT 2014, vol. 71, no. 10, p. 2523-2542., WOS
113. [1.1] MALLAKPOUR, S. - ZADEHNAZARI, A. Studies on behavior of acid-functionalized multi-walled carbon nanotubes partitioning in a phenol-containing poly(amide-imide)-based blend nanocomposites. In FULLERENES NANOTUBES AND CARBON NANOSTRUCTURES. ISSN 1536-383X, 2014, vol. 23, no. 4, p. 346-354., WOS
114. [1.1] MAMMERI, F. - TEYSSANDIER, J. - DARCHE-DUGARET, C. - DEBACKER, S. - LE BOURHIS, E. - CHEHIMI, M.M. Carbon nanotube-poly(methyl methacrylate) hybrid films: Preparation using diazonium salt chemistry and mechanical properties. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, NOV 1 2014, vol. 433, p. 115-122., WOS
115. [1.1] MARCINCIN, A. - HRICOVA, M. - UJHELYIOVA, A. Spinning, structure and properties of PP/CNTs and PP/carbon black composite fibers. In 2ND INTERNATIONAL CONFERENCE ON STRUCTURAL NANO COMPOSITES (NANOSTRUC 2014). ISSN 1757-8981, 2014, vol. 64., WOS
116. [1.1] MITTAL, V. Functional Polymer Nanocomposites with Graphene: A Review. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, AUG 2014, vol. 299, no. 8, p. 906-931., WOS
117. [1.1] MOLINA, D. - GRIFFINI, G. - LEVI, M. - TURRI, S. Novel conductive nanocomposites from perfluoropolyether waterborne polyurethanes and carbon nanotubes. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, SEP 2014, vol. 25, no. 9, p. 1082-1088., WOS
118. [1.1] MOSCOSO, R. - CARBAJO, J. - SQUELLA, J.A. 1,3-Dioxolane: A green solvent for the preparation of carbon nanotube-modified electrodes. In ELECTROCHEMISTRY COMMUNICATIONS. ISSN 1388-2481, NOV 2014, vol. 48, p. 69-72., WOS
119. [1.1] MUN, S.C. - KIM, M. - PRAKASHAN, K. - JUNG, H.J. - SON, Y. - PARK, O.O. A new approach to determine rheological percolation of carbon nanotubes in microstructured polymer matrices. In CARBON. ISSN 0008-6223, FEB 2014, vol. 67, p. 64-71., WOS
120. [1.1] MURALI, A. - GURUSAMY-THANGAVELU, S.A. - JAISANKAR, S.N. - MANDAL, A.B. Augmentation of properties on sparingly loaded nanocomposites via functionalized single-walled carbon nanotubes using a covalent approach. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 108, p. 62947-62950., WOS
121. [1.1] NABAE, Y. - LIANG, J. - HUANG, X.H. - HAYAKAWA, T. - KAKIMOTO, M. Sulfonic acid functionalized hyperbranched poly(ether sulfone)

as a solid acid catalyst. In GREEN CHEMISTRY. ISSN 1463-9262, 2014, vol. 16, no. 7, p. 3596-3602., WOS
122. [1.1] NASRABADI, H.S. - KALAEE, M.R. - MAZINANI, S. - ABDOUSS, M. - SEDAGHAT, N. Use of carbon nanotube to enhance thermal resistance of poly(ethylenetetrasulfide) via in situ polymerization Method. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 8, p. 767-774., WOS
123. [1.1] NAYAK, S. - BEHURA, S.K. - BHATTACHARJEE, S. - SINGH, B.P. - JANI, O. - MUKHOPADHYAY, I. Transparent conductive multiwall carbon nanotubes-polymer composite for electrode applications. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, APR 2014, vol. 14, no. 4, p. 2816-2822., WOS
124. [1.1] NEVERSA, D.R. - PETERSON, S.W. - ROBERTSON, L. - CHUBBUCK, C. - FLYGARE, J. - COLE, K. - WHEELER, D.R. The effect of carbon additives on the microstructure and conductivity of alkaline battery cathodes. In JOURNAL OF THE ELECTROCHEMICAL SOCIETY. ISSN 0013-4651, 2014, vol. 161, no. 10, p. A1691-A1697., WOS
125. [1.1] NIKJE, M.M.A. - YAGHOUBI, A. Preparation and properties of polyurethane / functionalized multi-walled carbon nanotubes rigid foam nanocomposites. In POLIMERY. ISSN 0032-2725, NOV-DEC 2014, vol. 59, no. 11-12, p. 776-782., WOS
126. [1.1] NIU, X.L. - HUO, L.X. - CAI, C.T. - GUO, J.S. - ZHOU, H. Rod-like attapulgite modified by bifunctional acrylic resin as reinforcement for epoxy composites. In INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH. ISSN 0888-5885, OCT 22 2014, vol. 53, no. 42, p. 16359-16365., WOS
127. [1.1] NOH, Y.J. - KIM, H.S. - KIM, S.Y. Carbon nanotube mat reinforced thermoplastic composites with a polymerizable, low-viscosity cyclic butylene terephthalate matrix. In MACROMOLECULAR RESEARCH. ISSN 1598-5032, NOV 2014, vol. 22, no. 11, p. 1183-1189., WOS
128. [1.1] O'NEILL, A. - BAKIRTZIS, D. - DIXON, D. Polyamide 6/graphene composites: The effect of in situ polymerisation on the structure and properties of graphene oxide and reduced graphene oxide. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, OCT 2014, vol. 59, p. 353-362., WOS
129. [1.1] OSAZUWA, O. - KONTOPOULOU, M. - XIANG, P. - YE, Z.B. - DOCOSLIS, A. Electrically conducting polyolefin composites containing electric field-aligned multiwall carbon nanotube structures: The effects of process parameters and filler loading. In CARBON. ISSN 0008-6223, JUN 2014, vol. 72, p. 89-99., WOS
130. [1.1] OUEINY, C. - BERLIOZ, S. - PERRIN, F.X. Carbon nanotube-polyaniline composites. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, APR 2014, vol. 39, no. 4, p. 707-748., WOS
131. [1.1] PAN, L. - LIU, Y.T. - XIE, X.M. Progress in high-performance graphene/polymer nanocomposites - design of filler/matrix interfacial interactions and their influences. In ACTA POLYMERICA SINICA. ISSN 1000-3304, JUN 20 2014, no. 6, p. 724-736., WOS
132. [1.1] PANDEY, G. - BISWAS, A. Estimating electrical conductivity of multi-scale composites with conductive nanoparticles using bidirectional time marching percolation network mapping. In COMPUTATIONAL MATERIALS SCIENCE. ISSN 0927-0256, JUN 15 2014, vol. 89, p. 80-88., WOS
133. [1.1] PEPONI, L. - PUGLIA, D. - TORRE, L. - VALENTINI, L. - KENNY, J.M. Processing of nanostructured polymers and advanced polymeric based nanocomposites. In MATERIALS SCIENCE & ENGINEERING R-REPORTS.

ISSN 0927-796X, NOV 2014, vol. 85, p. 1-46., WOS
134. [1.1] POOSALA, A. - HRIMCHUM, K. - AUSSAWASATHIEN, D. - PENTRAKOON, D. Oxygen-plasma treated graphene nanoplatelet/multi-walled carbon nanotube/polycarbonate hybrid nanocomposites for anti-electrostatic discharge applications: Preparation and properties. In MATERIALS ENGINEERING FOR ADVANCED TECHNOLOGIES (ICMEAT 2013). ISSN 1660-9336, 2014, vol. 510, p. 63-72., WOS
135. [1.1] POOSALA, A. - KURDSUK, W. - AUSSAWASATHIEN, D. - PENTRAKOON, D. Graphene nanoplatelet/multi-walled carbon nanotube/polycarbonate hybrid nanocomposites for electrostatic dissipative applications: Preparation and properties. In CHIANG MAI JOURNAL OF SCIENCE. ISSN 0125-2526, OCT 2014, vol. 41, no. 5.2, p. 1274-1286., WOS
136. [1.1] POURJAVADI, A. - DOULABI, M. Multiwalled carbon nanotube-polyelectrolyte gels: Preparation and swelling behavior for organic solvents. In SOLID STATE IONICS. ISSN 0167-2738, APR 1 2014, vol. 257, p. 32-37., WOS
137. [1.1] POURJAVADI, A. - DOULABI, M. Preparation and evaluation of a polymeric gel containing ionic liquid-functionalized MWCNTs as a novel class of organic solvent absorbent. In JOURNAL OF POLYMER SCIENCE PART A-POLYMER CHEMISTRY. ISSN 0887-624X, NOV 15 2014, vol. 52, no. 22, p. 3166-3172., WOS
138. [1.1] PROLONGO, S.G. - MELITON, B.E. - JIMENEZ-SUAREZ, A. - URENA, A. Study of efficiency of different commercial carbon nanotubes on manufacturing of epoxy matrix composites. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, OCT 2014, vol. 48, no. 25, p. 3169-3177., WOS
139. [1.1] PUCH, F. - HOPMANN, C. Morphology and tensile properties of unreinforced and short carbon fibre reinforced Nylon 6/multiwalled carbon nanotube-composites. In POLYMER. ISSN 0032-3861, JUN 13 2014, vol. 55, no. 13, p. 3015-3025., WOS
140. [1.1] PUCH, F. - HOPMANN, C. Nylon 6/Multiwalled carbon nanotube composites: Effect of the melt-compounding conditions and nanotube content on the morphology, mechanical properties, and rheology. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, OCT 15 2014, vol. 131, no. 20., WOS
141. [1.1] QING, Y.C. - MU, Y. - ZHOU, Y.Y. - LUO, F. - ZHU, D.M. - ZHOU, W.C. Multiwalled carbon nanotubes BaTiO3/silica composites with high complex permittivity and improved electromagnetic interference shielding at elevated temperature. In JOURNAL OF THE EUROPEAN CERAMIC SOCIETY. ISSN 0955-2219, SEP 2014, vol. 34, no. 10, p. 2229-2237., WOS
142. [1.1] RAFIEE, R. - SHOKRIEH, M.M. Prediction of mechanical properties of CNT based composites using multi-scale modeling and stochastic analysis. In MODELING OF CARBON NANOTUBES, GRAPHENE AND THEIR COMPOSITES. ISSN 0933-033X, 2014, vol. 188, p. 201-238., WOS
143. [1.1] RAHMANIAN, S. - SURAYA, A.R. - SHAZED, M.A. - ZAHARI, R. - ZAINUDIN, E.S. Mechanical characterization of epoxy composite with multiscale reinforcements: Carbon nanotubes and short carbon fibers. In MATERIALS & DESIGN. ISSN 0261-3069, AUG 2014, vol. 60, p. 34-40., WOS
144. [1.1] RAY, S.S. Recent trends and future outlooks in the field of clay-containing polymer nanocomposites. In MACROMOLECULAR CHEMISTRY AND PHYSICS. ISSN 1022-1352, JUN 2014, vol. 215, no. 12, p. 1162-1179., WOS
145. [1.1] ROFOUEI, M.K. - SALAHINEJAD, M. - GHASEMI, J.B. An Alignment independent 3D-QSAR modeling of dispersibility of single-walled carbon

nanotubes in different organic solvents. In FULLERENES NANOTUBES AND CARBON NANOSTRUCTURES. ISSN 1536-383X, MAY 1 2014, vol. 22, no. 7, p. 605-617., WOS

146. [1.1] ROGHANI-MAMAQANI, H. - HADDADI-ASL, V. - KHEZRI, K. - SALAMI-KALAJAHI, M. Edge-functionalized graphene nanoplatelets with polystyrene by atom transfer radical polymerization: grafting through carboxyl groups. In POLYMER INTERNATIONAL. ISSN 0959-8103, NOV 2014, vol. 63, no. 11, p. 1912-1923., WOS

147. [1.1] ROGHANI-MAMAQANI, H. - HADDADI-ASL, V. - KHEZRI, K. - SALAMI-KALAJAHI, M. Polystyrene-grafted graphene nanoplatelets with various graft densities by atom transfer radical polymerization from the edge carboxyl groups. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 47, p. 24439-24452., WOS

148. [1.1] ROGHANI-MAMAQANI, H. - HADDADI-ASL, V. In-plane functionalizing graphene nanolayers with polystyrene by atom transfer radical polymerization: Grafting from hydroxyl groups. In POLYMER COMPOSITES. ISSN 0272-8397, FEB 2014, vol. 35, no. 2, p. 386-395., WOS

149. [1.1] ROUMELI, E. - PAVLIDOU, E. - BIKIARIS, D. - CHRISSAFIS, K. Microscopic observation and micromechanical modeling to predict the enhanced mechanical properties of multi-walled carbon nanotubes reinforced crosslinked high density polyethylene. In CARBON. ISSN 0008-6223, FEB 2014, vol. 67, p. 475-487., WOS

150. [1.1] RUSEN, E. - MOCANU, A. - NISTOR, L.C. - DINESCU, A. - CALINESCU, L. - MUSTATEA, G. - VOICU, S.I. - ANDRONESCU, C. - DIACON, A. Design of antimicrobial membrane based on polymer colloids/multiwall carbon nanotubes hybrid material with silver nanoparticles. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, OCT 22 2014, vol. 6, no. 20, p. 17384-17393., WOS

151. [1.1] SACHDEV, V.K. - BHATTACHARYA, S. - PATEL, K. - SHARMA, S.K. - MEHRA, N.C. - TANDON, R.P. Electrical and EMI shielding characterization of multiwalled carbon nanotube/polystyrene composites. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, DEC 15 2014, vol. 131, no. 24, SI., WOS

152. [1.1] SAHMETLIOGLU, E. - YILMAZ, E. - AKTAS, E. - SOYLAK, M. Polypyrrole/multi-walled carbon nanotube composite for the solid phase extraction of lead(II) in water samples. In TALANTA. ISSN 0039-9140, FEB 15 2014, vol. 119, p. 447-451., WOS

153. [1.1] SALAVAGIONE, H.J. - DIEZ-PASCUAL, A.M. - LAZARO, E. - VERA, S. - GOMEZ-FATOU, M.A. Chemical sensors based on polymer composites with carbon nanotubes and graphene: the role of the polymer. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 35, p. 14289-14328., WOS

154. [1.1] SARAFRAZ-YAZDI, A. - ROUNAGHI, G. - RAZAVIPANAH, I. - VATANI, H. - AMIRI, A. New polypyrrole-carbon nanotubes-silicon dioxide solid-phase microextraction fiber for the preconcentration and determination of benzene, toluene, ethylbenzene, and o-xylene using gas liquid chromatography. In JOURNAL OF SEPARATION SCIENCE. ISSN 1615-9306, SEP 2014, vol. 37, no. 18, p. 2605-2612., WOS

155. [1.1] SEO, S.J. - KIM, J.J. - KIM, J.H. - LEE, J.Y. - SHIN, U.S. - LEE, E.J. - KIM, H.W. Enhanced mechanical properties and bone bioactivity of chitosan/silica membrane by functionalized-carbon nanotube incorporation. In COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, MAY 23 2014,

vol. 96, p. 31-37., WOS
156. [1.1] SERRANO, M.C. - GUTIERREZ, M.C. - DEL MONTE, F. Role of polymers in the design of 3D carbon nanotube-based scaffolds for biomedical applications. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JUL 2014, vol. 39, no. 7, p. 1448-1471., WOS
157. [1.1] SHABANIAN, M. - FAGHIHI, K. - RAEISI, A. - VARVANIFARAHANI, M. - KHONAKDAR, H.A. - WAGENKNECHT, U. New poly(ether-imide)/MWCNT nanocomposite. In JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY. ISSN 1388-6150, JUL 2014, vol. 117, no. 1, p. 293-299., WOS
158. [1.1] SHEARER, C.J. - CHEREVAN, A. - EDER, D. Application of functional hybrids incorporating carbon nanotubes or graphene. In CARBON NANOTUBES AND GRAPHENE, 2ND EDITION. 2014, p. 387-433., WOS
159. [1.1] SHEN, K. - ZHANG, Q. - HUANG, Z.H. - YANG, J.H. - YANG, G.Z. - SHEN, W.C. - KANG, F.Y. Interface enhancement of carbon nanotube/mesocarbon microbead isotropic composites. In COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING. ISSN 1359-835X, JAN 2014, vol. 56, p. 44-50., WOS
160. [1.1] SHOJAEI, A. - NOURBAKHSH, P. - FAGHIHI, M. An investigation on the structural characteristics and reinforcement of melt processed polyamide 66/multiwalled carbon nanotube composites. In POLYMERS FOR ADVANCED TECHNOLOGIES. ISSN 1042-7147, APR 2014, vol. 25, no. 4, p. 406-417., WOS
161. [1.1] SHRIVASTAVA, N.K. - MAITI, S. - SUIN, S. - KHATUA, B.B. Influence of selective dispersion of MWCNT on electrical percolation of in-situ polymerized high-impact polystyrene/MWCNT nanocomposites. In EXPRESS POLYMER LETTERS. ISSN 1788-618X, JAN 2014, vol. 8, no. 1, p. 15-29., WOS
162. [1.1] SOLIMAN, E. - KANDIL, U. - TAHA, M.R. Improved strength and toughness of carbon woven fabric composites with functionalized MWCNTs. In MATERIALS. ISSN 1996-1944, JUN 2014, vol. 7, no. 6, p. 4640-4657., WOS
163. [1.1] SOULIE-ZIAKOVIC, C. - NICOLAY, R. - PREVOTEAU, A. - LEIBLER, L. Dispersible carbon nanotubes. In CHEMISTRY-A EUROPEAN JOURNAL. ISSN 0947-6539, JAN 27 2014, vol. 20, no. 5, p. 1210-1217., WOS
164. [1.1] SU, J.B. - ZHOU, W.C. - LIU, Y. - LUO, F. - ZHU, D.M. Atmosphere plasma-sprayed carbon nanotubes/cordierite nanocomposite coatings for microwave absorption applications. In JOURNAL OF THERMAL SPRAY TECHNOLOGY. ISSN 1059-9630, OCT 2014, vol. 23, no. 7, p. 1065-1072., WOS
165. [1.1] TANG, L.C. - WANG, X. - GONG, L.X. - PENG, K. - ZHAO, L. - CHEN, Q. - WU, L.B. - JIANG, J.X. - LAI, G.Q. Creep and recovery of polystyrene composites filled with graphene additives. In COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, JAN 31 2014, vol. 91, p. 63-70., WOS
166. [1.1] TANG, M.Y. - XU, X.Y. - WU, T. - ZHANG, S. - LI, X.X. - LI, Y. Polyacrylamide grafting of modified graphene oxides by in situ free radical polymerization. In MATERIALS RESEARCH BULLETIN. ISSN 0025-5408, DEC 2014, vol. 60, p. 576-583., WOS
167. [1.1] TEKIN, N. - KARA, A. - BEYAZ, S.K. - SIMSEK, E. - CAKMAK, G. - GUNEY, H.Y. - LAMARI, F.D. Preparation, solubility, and electrical properties of multiwalled carbon nanotubes/poly(1-vinyl-1,2,4-triazole) composites via in situ functionalization. In POLYMER-PLASTICS TECHNOLOGY AND ENGINEERING. ISSN 0360-2559, 2014, vol. 53, no. 8, p. 840-850., WOS
168. [1.1] TU, X. - CHEN, X.H. - HOU, Q.L. - WU, X.L. An easy route to lower-destructive and highly functionalized multi-walled carbon nanotubes with thermotropic liquid crystalline polymer on a large scale. In SOFT MATERIALS.

ISSN 1539-445X, APR 3 2014, vol. 12, no. 2, p. 205-213., WOS
169. [1.1] UCAR, N. - EREN, O. - ONEN, A. - KIZILDAG, N. - DEMIRSOY, N. - KARACAN, I. The effect of polyaniline and amine functionalized carbon nanotubes on the properties of composite nanofiber WEB. In TEKSTIL VE KONFEKSIYON. ISSN 1300-3356, JUL-SEP 2014, vol. 24, no. 3, p. 266-271., WOS
170. [1.1] VASILEIOU, A.A. - KONTOPOULOU, M. - DOCOSLIS, A. A Noncovalent compatibilization approach to improve the filler dispersion and properties of polyethylene/graphene composites. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, FEB 12 2014, vol. 6, no. 3, p. 1916-1925., WOS
171. [1.1] VEGA, J.F. - DA SILVA, Y. - VICENTE-ALIQUE, E. - NUNEZ-RAMIREZ, R. - TRUJILLO, M. - ARNAL, M.L. - MULLER, A.J. - DUBOIS, P. - MARTINEZ-SALAZAR, J. Influence of chain branching and molecular weight on melt rheology and crystallization of polyethylene/carbon nanotube nanocomposites. In MACROMOLECULES. ISSN 0024-9297, AUG 26 2014, vol. 47, no. 16, p. 5668-5681., WOS
172. [1.1] WANG, B.L. - WANG, Z.K. - JIANG, F. - FANG, H.G. - WANG, Z.G. Synthesis and characterization of MWCNT-graft-polyisoprene via ARGET ATRP. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 50, p. 26468-26475., WOS
173. [1.1] WANG, J.L. - REN, K.F. - CHANG, H. - ZHANG, S.M. - JIN, L.J. - JI, J. Facile fabrication of robust superhydrophobic multilayered film based on bioinspired poly(dopamine)-modified carbon nanotubes. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2014, vol. 16, no. 7, p. 2936-2943., WOS
174. [1.1] WANG, J.T.W. - FABBRO, C. - VENTURELLI, E. - MENARD-MOYON, C. - CHALOIN, O. - DA ROS, T. - METHVEN, L. - NUNES, A. - SOSABOWSKI, J.K. - MATHER, S.J. - ROBINSON, M.K. - AMADOU, J. - PRATO, M. - BIANCO, A. - KOSTARELOS, K. - AL-JAMAL, K.T. The relationship between the diameter of chemically-functionalized multi-walled carbon nanotubes and their organ biodistribution, profiles in vivo. In BIOMATERIALS. ISSN 0142-9612, NOV 2014, vol. 35, no. 35, p. 9517-9528., WOS
175. [1.1] WANG, S. - ZHAI, Y.Y. - GAO, Q. - LUO, W.J. - XIA, H. - ZHOU, C.G. Highly efficient removal of acid red 18 from aqueous solution by magnetically retrievable chitosan/carbon nanotube: Batch study, isotherms, kinetics, and thermodynamics. In JOURNAL OF CHEMICAL AND ENGINEERING DATA. ISSN 0021-9568, JAN 2014, vol. 59, no. 1, p. 39-51., WOS
176. [1.1] WANG, Y. - HUANG, Y. - DING, J. Synthesis and electromagnetic absorption properties of polypyrrole/BaFe12O19-Ni0.8Zn0.2Fe2O4/multi-walled carbon nanotube composites. In MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING. ISSN 1369-8001, OCT 2014, vol. 26, p. 632-641., WOS
177. [1.1] WANG, Y. - HUANG, Y. - DING, J. Synthesis and enhanced electromagnetic absorption properties of polypyrrole-BaFe12O19/Ni0.8Zn0.2Fe2O4 on graphene nanosheet. In SYNTHETIC METALS. ISSN 0379-6779, OCT 2014, vol. 196, p. 125-130., WOS
178. [1.1] WANG, Y.Z. - LI, F.M. Nonlinear free vibration of nanotube with small scale effects embedded in viscous matrix. In MECHANICS RESEARCH COMMUNICATIONS. ISSN 0093-6413, SEP 2014, vol. 60, p. 45-51., WOS
179. [1.1] WANG, Z. - ZHAO, G.L. Electromagnetic wave absorption of multi-walled carbon nanotube-epoxy composites in the R band. In JOURNAL OF MATERIALS CHEMISTRY C. ISSN 2050-7526, NOV 28 2014, vol. 2, no. 44, p.

9406-9411., WOS
180. [1.1] WEI, L. - JIANG, W.C. - GOH, K. - CHEN, Y. Mechanical reinforcement of polyethylene using n-alkyl group-functionalized multiwalled carbon nanotubes: Effect of alkyl group carbon chain length and density. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, FEB 2014, vol. 54, no. 2, p. 336-344., WOS
181. [1.1] WILLEY, A.D. - HOLT, J.M. - LARSEN, B.A. - BLACKBURN, J.L. - LIDDIARD, S. - ABBOTT, J. - COFFIN, M. - VANFLEET, R.R. - DAVIS, R.C. Thin films of carbon nanotubes via ultrasonic spraying of suspensions in N-methyl-2-pyrrolidone and N-cyclohexyl-2-pyrrolidone. In JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B. ISSN 1071-1023, JAN 2014, vol. 32, no. 1., WOS
182. [1.1] WINTER, A.D. - LARIOS, E. - ALAMGIR, F.M. - JAYE, C. - FISCHER, D.A. - CAMPO, E.M. Polymer-carbon nanotube composites: electrospinning, alignment and interactions. In NANOENGINEERING: FABRICATION, PROPERTIES, OPTICS, AND DEVICES XI. ISSN 0277-786X, 2014, vol. 9170., WOS
183. [1.1] WINTER, A.D. - LARIOS, E. - JAYE, C. - FISCHER, D.A. - OMASTOVA, M. - CAMPO, E.M. Thermo-active polymer nanocomposites: a spectroscopic study. In NANOENGINEERING: FABRICATION, PROPERTIES, OPTICS, AND DEVICES XI. ISSN 0277-786X, 2014, vol. 9170., WOS
184. [1.1] WU, X.L. - QIU, J.H. - LIU, P. - SAKAI, E. Synergistic effect of MWCNTs and graphite powder on the properties of polymer nanocomposites. In CHEMICAL ENGINEERING JOURNAL. ISSN 1385-8947, JUN 15 2014, vol. 246, p. 211-216., WOS
185. [1.1] WU, Y.F. - GUO, Z.R. - FENG, Y.J. Dispersion of single-walled carbon nanotubes in aqueous solution with a thermo-responsive pentablock terpolymer. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, FEB 2014, vol. 292, no. 2, p. 281-289., WOS
186. [1.1] WU, Z.F. - WANG, H. - TIAN, X.Y. - DING, X. - ZHOU, H.F. - YE, X.Z. Fabrication and properties of carbon nanotube/ styrene- ethylenebutylene-styrene composites via a sequential process of (electrostatic adsorption aided dispersion)-plus-(melt mixing). In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAY 5 2014, vol. 131, no. 9., WOS
187. [1.1] XIE, G.Z. - HE, H. - ZHOU, Y. - XIE, T. - JIANG, Y.D. - TAI, H.L. Gas sensors based on MWCNTs-PVP composite films for 1,2-dichloroethane vapor detection. In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, NOV 2014, vol. 25, no. 11, p. 5095-5100., WOS
188. [1.1] XING, H.P. - WAN, D. - QIU, J. - WANG, Y.H. - MA, L. - JIANG, Z.W. - TANG, T. Combined effects between activating group Z and leaving group R in dithiocarbamates for controlling degradation and branching reactions of polypropylene. In POLYMER. ISSN 0032-3861, OCT 9 2014, vol. 55, no. 21, p. 5435-5444., WOS
189. [1.1] XIONG, S.Q. - WANG, Y. - YU, J.R. - CHEN, L. - ZHU, J. - HU, Z.M. Polydopamine particles for next-generation multifunctional biocomposites. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 20, p. 7578-7587., WOS
190. [1.1] YADAV, S.K. - CHOUBEY, P.K. - AGRAWAL, B. - GOYAL, R.N. Carbon nanotube embedded poly 1,5-diaminonapthalene modified pyrolytic graphite sensor for the determination of sulfacetamide in pharmaceutical formulations. In TALANTA. ISSN 0039-9140, JAN 15 2014, vol. 118, p. 96-103.,

WOS

191. [1.1] YADAV, S.K. - JUNG, Y.C. - YANG, C.M. - KO, Y.I. - YANG, K.S. - KIM, Y.A. - CHO, J.W. An environmentally friendly approach to functionalizing carbon nanotubes for fabricating a strong biocomposite Film. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 11, p. 5382-5388., WOS

192. [1.1] YAN, H.X. - JIA, Y. - MA, L. - WANG, Y.L. Functionalized multiwalled carbon nanotubes by grafting hyperbranched polysiloxane. In NANO. ISSN 1793-2920, APR 2014, vol. 9, no. 3., WOS

193. [1.1] YANG, H.S. - LIU, P. - ZHANG, T.P. - DUAN, Y.X. - ZHANG, J.M. Fabrication of natural rubber nanocomposites with high graphene contents via vacuum-assisted self-assembly. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 53, p. 27687-27690., WOS

194. [1.1] YANG, W.D. - WANG, X. - FANG, C.Q. - LU, G. Electromechanical coupling characteristics of carbon nanotube reinforced cantilever nano-actuator. In SENSORS AND ACTUATORS A-PHYSICAL. ISSN 0924-4247, DEC 1 2014, vol. 220, p. 178-187., WOS

195. [1.1] YANG, Y. - PEI, Z.Q. - ZHANG, X.Q. - TAO, L. - WEI, Y. - JI, Y. Carbon nanotube-vitrimer composite for facile and efficient photo-welding of epoxy. In CHEMICAL SCIENCE. ISSN 2041-6520, SEP 2014, vol. 5, no. 9, p. 3486-3492., WOS

196. [1.1] YI, D.H. - YOO, H.J. - MAHAPATRA, S.S. - KIM, Y.A. - CHO, J.W. The synergistic effect of the combined thin multi-walled carbon nanotubes and reduced graphene oxides on photothermally actuated shape memory polyurethane composites. In JOURNAL OF COLLOID AND INTERFACE SCIENCE. ISSN 0021-9797, OCT 15 2014, vol. 432, p. 128-134., WOS

197. [1.1] YIM, B.S. - LEE, B.H. - KIM, J. - KIM, J.M. Effect of dispersion condition of multi-walled carbon nanotube (MWNT) on bonding properties of solderable isotropic conductive adhesives (ICAs). In JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS. ISSN 0957-4522, DEC 2014, vol. 25, no. 12, p. 5208-5217., WOS

198. [1.1] YIN, C.Q. - DONG, J. - LI, Z.T. - ZHANG, Z.X. - ZHANG, Q.H. Large-scale fabrication of polyimide fibers containing functionalized multiwalled carbon nanotubes via wet spinning. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, MAR 2014, vol. 58, p. 430-437., WOS

199. [1.1] YOON, I.K. - HWANG, J.Y. - SEO, J.W. - JONG, W.C. - KIM, H.W. - SHIN, U.S. Carbon nanotube-gelatin-hydroxyapatite nanohybrids with multilayer core-shell structure for mimicking natural bone. In CARBON. ISSN 0008-6223, OCT 2014, vol. 77, p. 379-389., WOS

200. [1.1] YOONESSI, M. - LEBRON-COLON, M. - SCHEIMAN, D. - MEADOR, M.A. Carbon nanotube epoxy nanocomposites: The effects of interfacial modifications on the dynamic mechanical properties of the nanocomposites. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, OCT 8 2014, vol. 6, no. 19, p. 16621-16630., WOS

201. [1.1] YU, K. - LEE, J.M. - KIM, J. - KIM, G. - KANG, H. - PARK, B. - KAHNG, Y.H. - KWON, S. - LEE, S. - LEE, B.H. - KIM, J. - PARK, H.I. - KIM, S.O. - LEE, K. Semiconducting polymers with nanocrystallites interconnected via boron-doped carbon nanotubes. In NANO LETTERS. ISSN 1530-6984, DEC 2014, vol. 14, no. 12, p. 7100-7106., WOS

202. [1.1] YU, K. - LIU, Y.J. - LENG, J.S. Shape memory polymer/CNT composites and their microwave induced shape memory behaviors. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 6, p. 2961-2968., WOS

203. [1.1] YU, L. - KANG, H. - LIM, Y.S. - LEE, C.S. - SHIN, K. - PARK, J.S. -

HAN, J.H. Electrically conductive epoxy nanocomposites with expanded graphite/carbon nanotube hybrid fillers prepared by direct hybridization. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, DEC 2014, vol. 14, no. 12, p. 9139-9142., WOS

204. [1.1] ZANJANIJAM, A.R. - HAJIAN, M. - KOOHMAREH, G.A. Fabrication of single wall carbon nanotubes-based poly(vinyl butyral) nanocomposites with enhanced mechanical and thermal properties. In JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY. ISSN 1060-1325, APR 3 2014, vol. 51, no. 4, p. 369-377., WOS

205. [1.1] ZANOAGA, M. - MAMUNYA, Y. - TANASA, F. Conductive properties of some ternary thermoplastic nanocomposites filled with dispersed powders. a comparative study. In REVUE ROUMAINE DE CHIMIE. ISSN 0035-3930, JUN-JUL 2014, vol. 59, no. 6-7, p. 547-554., WOS

206. [1.1] ZEVRI, L. - IORDACHE, I. Current trends in research and development of tensoresistive sensors. In JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS. ISSN 1454-4164, JAN-FEB 2014, vol. 16, no. 1-2, p. 52-59., WOS

207. [1.1] ZHANG, Y.L. - WANG, Y. - YU, J.R. - CHEN, L. - ZHU, J. - HU, Z.M. Polybenzimidazole assisted fabrication of multiwalled carbon nanotube buckypapers and their silver nanoparticle hybrids. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 68, p. 35904-35913., WOS

208. [1.2] LIU, S.- WANG, Z.- LU, G.- WANG, Y.- ZHANG, Y.- HE, X.- ZHAO, L.- LI, Z.- XUAN, L.-ZHAO, D. Interfacial modification of single-walled carbon nanotubes for high-loading-reinforced polypropylene composites. (2014) Journal of Applied Polymer Science, 131 (3), art. no. 39817. DOI: 10.1002/app.39817, Scopus

209. [1.2] SAPOZHNIKOV, D.A.- ZABEGAEVA, O.N.- KRESTININ, A.V.- BUZIN, M.I.- POPOVA, N.A.- KOTEL'NIKOV, V.A.- PASHUNIN, Y.M.- ANOKHINA, E.A.- VYGODSKII, Y.S. Carbon nanotubes bearing imide groups for anionic polymerization of ε-caprolactam. (2014) Russian Chemical Bulletin, 63 (10), p. 2369-2374. DOI: 10.1007/s11172-014-0749-6, Scopus

210. [1.2] AKKACHAI, P.- KITTIPONG, H.- DARUNEE, A.- DUANGHATHAI, P. Oxygen-plasma treated graphene nanoplatelet/multi-walled carbon nanotube/polycarbonate hybrid nanocomposites for anti-electrostatic discharge applications: Preparation and properties. (2014) Applied Mechanics and Materials, 510, p. 63-72., Scopus

211. [1.2] ALI, A.A.- ELTABEY, M.M.- ABDELBARY, B.M.- ZOALFAKAR, S.H. MWCNTs/carbon nano fibril composite papers for fuel cell and super capacitor applications. (2014) Journal of Electrostatics, 73, p. 12-18. DOI: 10.1016/j.elstat.2014.10.012, Scopus

212. [1.2] ALVARADO, C.J.C.- GALINDO, A.S.- BERUMEN, C.P.- LÓPEZ, L.L.- ORTA, C.Á.- GARZA, J.V.- DONÍAS, L.D.M.. Modification surface of MWCNTS assisted by ultrasonic with acetic acid and citric acid [Modificadó superficial de Multiwall Carbon Nanotubes (MWCNT) assistida per ultrasons amb àcid acètic i àcid cítric]. (2014) Afinidad, 71 (566), p. 139-145., Scopus

213. [1.2] ARANBURU, N.- EGUIAZÁBAL, J.I. Electrically conductive multi-walled carbon nanotube-reinforced amorphous polyamide nanocomposites. (2014) Polymer Composites, 35 (3), p. 587-595. DOI: 10.1002/pc.22699, Scopus

214. [1.2] CAMPO, E.M.- LARIOS, E.- HUYNH, C. ANANTH, M. Helium ion microscopy of electrospun CNT-polymer composites. (2014) Journal of Materials Research, 30 (1), p. 130-140. DOI: 10.1557/jmr.2014.362, Scopus

215. [1.2] DAI, L.- JIA, R.P.- HE, X.Y.- HUANG, M.S. Preparation and thermal

performance of fluorinated carbon nanotubes/thermoplastic polyurethane nanocomposites. (2014) Applied Mechanics and Materials, 687-691, p. 4273-4276. DOI: 10.4028/www.scientific.net/AMM.687-691.4273, Scopus

216. [1.2] DOBRZAŃSKI, L.A.- MACEK, M.- TOMICZEK, B. Effect of carbon nanotubes content on morphology and properties of almg1sicu matrix composite powders. (2014) Archives of Materials Science and Engineering, 69 (1), p. 12-18., Scopus

217. [1.2] DOBRZAŃSKI, L.A.- MUCHA, A.- MACEK, M. The influence of carbon nanotubes on the mechanical properties of nanocomposites. (2014) Archives of Materials Science and Engineering, 68 (2), p. 75-80., Scopus

218. [1.2] EL RHAZI, M.- MAJID, S. Electrochemical sensors based on polydiaminonaphthalene and polyphenylenediamine for monitoring metal pollutants. (2014) Trends in Environmental Analytical Chemistry, 2, p. 33-42. DOI: 10.1016/j.teac.2014.02.001, Scopus

219. [1.2] FAWAZ, J.- MITTAL, V. Polymer nanotube nanocomposites: a review of synthesis methods, properties and applications. (2014) Polymer Nanotubes Nanocomposites: Synthesis, Properties and Applications: Second Edition, p. 1-44. DOI: 10.1002/9781118945964.ch1, Scopus

220. [1.2] FINA, A.- CAMINO, G.- BOCCHINI, S. Comprehensive approach to flame-retardancy evaluation of layered silicate nanocomposites. (2014) Polymer Green Flame Retardants, p. 441-459. DOI: 10.1016/B978-0-444-53808-6.00014-7, Scopus

221. [1.2] GAVREL, G.- JOUSSELME, B.- FILORAMO, A.-CAMPIDELLI, S.Supramolecular chemistry of carbon nanotubes. (2014) Topics in Current Chemistry, 348, p. 95-126. DOI: 10.1007/128-2013-450, Scopus

222. [1.2] GONG, S.- ZHU, Z.- LI, J. Characterization of electrical conductivity of carbon nanotube composites. (2014) ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE), 9, DOI: 10.1115/IMECE2014-38596, Scopus

223. [1.2] HAI, Z.- GAO, L.- LI, J.- ZHANG, Q.- LIU, J.- XUE, C. Preparation and conductivity research of flexible composite piezoelectric film. (2014) Chinese Journal of Sensors and Actuators, 27 (7), p. 861-865. DOI: 10.3969/j.issn.1004-1699.2014.07.002, Scopus

224. [1.2] HAN, K.- SHIN, J. A systematic way of identifying and forecasting technological reverse salients using QFD, bibliometrics, and trend impact analysis: A carbon nanotube biosensor case. (2014) Technovation, 34 (9), p. 559-570. DOI: 10.1016/j.technovation.2014.05.009, Scopus

225. [1.2] HATTENHAUER, I.- TAMBOSI, P.P.- DUARTE, C.A.- COELHO, L.A.F.- RAMOS, A.- PEZZIN, S.H. Impact of electric field application during curing on epoxy-carbon nanotube nanocomposite electrical conductivity. (2014) Journal of Inorganic and Organometallic Polymers and Materials, 25 (4), p. 627-634. DOI: 10.1007/s10904-014-0125-x, Scopus

226. [1.2] HONG, R.Y.-CHEN, Q. Dispersion of inorganic nanoparticles in polymer matrices: Challenges and solutions, Scopus

227. [1.2] HOPMANN, C.- PUCH, F. Experimental investigation of the mechanical properties and the morphology of PA6-MWCNT-composites depending on the melt compounding conditions. (2014) Annual Technical Conference - ANTEC, Conference Proceedings, 2 (January), p. 1096-1101., Scopus

228. [1.2] HUANG, G.W.- XIAO, H.M.- FU, S.Y. Novel vertical spinning preparation of free-standing carbon nanotube-polyaniline composite films with high electrical conductivity. (2014) Journal of Materials Chemistry C, 2 (15), p.

2758-2764. DOI: 10.1039/c3tc32296c, Scopus
229. [1.2] IQBAL, N.- SAGAR, S.- KHAN, M.B.- RAFIQUE, H.M. Elastomeric ablative nanocomposites used in hyperthermal environments. (2014) Polymer Engineering and Science, 54 (2), p. 255-263. DOI: 10.1002/pen.23573, Scopus
230. [1.2] JAGANNATHAN, N.- BOJJA, R.- REVATHI, A.- SRIHARI, S.- MANJUNATHA, C.M. Mechanical properties of a hybrid nanocomposite under room temperature and hot-wet environments. (2014) Transactions of the Indian Institute of Metals, 68 (3), p. 363-369. DOI: 10.1007/s12666-014-0463-y, Scopus
231. [1.2] KAUSAR, A.- SIDDIQ, M. Influence of interface interaction on thermal, mechanical and conducting properties of segmented poly (azo-urethane)/carbon nanotube composites. (2014) International Journal of Plastics Technology, 18 (2), p. 203-222. DOI: 10.1007/s12588-014-9079-7, Scopus
232. [1.2] KAUSAR, A.-HUSSAIN, S.T. Effect of modified filler surfaces and filler-tethered polymer chains on morphology and physical properties of poly(azo-pyridyl-urethane)/multi-walled carbon nanotube nanocomposites. (2014) Journal of Plastic Film and Sheeting, 30 (2), p. 181-204. DOI: 10.1177/8756087913493633, Scopus
233. [1.2] LEE, Y.S.- MALEK, F.- CHENG, E.M.- LIU, W.W.- WEE, F.H.- IQBAL, M.N.-ZAHID, L.- MEZAN, M.S.- ABDULLAH, F.S.- OTHMAN, M. Dielectric properties of rice husk/carbon nanotubes composites in Ku-band. (2014) Progress in Electromagnetics Research Symposium, p. 75-78., Scopus
234. [1.2] LEPINAY, S.- STAFF, A.- IANOUL, A.-ALBERT, J. Improved detection limits of protein optical fiber biosensors coated with gold nanoparticles. (2014) Biosensors and Bioelectronics, 52, p. 337-344. DOI: 10.1016/j.bios.2013.08.058, Scopus
235. [1.2] LI, R.- SUN, L.Z. Dynamic viscoelastic behavior of multiwalled carbon nanotube-reinforced magnetorheological (MR) nanocomposites. (2014) Journal of Nanomechanics and Micromechanics, 4 (4), art. no. A4013014, DOI: 10.1061/(ASCE)NM.2153-5477.0000065, Scopus
236. [1.2] OUEINY, C.- BERLIOZ, S.- PERRIN, F.X. Carbon nanotube-polyaniline composites. (2014) Progress in Polymer Science, 39 (4), p. 707-748. DOI: 10.1016/j.progpolymsci.2013.08.009, Scopus
237. [1.2] RISSANOU, A.N.- HARMANDARIS, V. A molecular dynamics study of polymer/graphene nanocomposites. (2014) 16th European Conference on Composite Materials, ECCM 2014, Scopus
238. [1.2] SABET, M.- SOLEIMANI, H. Mechanical and electrical properties of low density polyethylene filled with carbon nanotubes. (2014) IOP Conference Series: Materials Science and Engineering, 64 (1), art. no. 012001, DOI: 10.1088/1757-899X/64/1/012001, Scopus
239. [1.2] SANTONICOLA, M.G.- COSCIA, M.G.- BOTTI, S.- LAURENZI, S. Graphene/DNA nanostructured films for bioinspired sensing of UV radiation effects. (2014) Proceedings of the International Astronautical Congress, IAC, 9, p. 6313-6317., Scopus
240. [1.2] SOUIER, T. Conductive probe microscopy investigation of electrical and charge transport in advanced carbon nanotubes and nanofibers-polymer nanocomposites. (2014) Handbook of Research on Nanoscience, Nanotechnology, and Advanced Materials, p. 343-375. DOI: 10.4018/978-1-4666-5824-0.ch014, Scopus
241. [1.2] TALIB, E.- MOHAMAD, N.- ABD RASHID, M.W.- AZAM, M.A. Fabrication and characterization of single-walled carbon nanotube filled epoxidized natural rubber nanocomposite. (2014) Research Journal of Applied Sciences, 9 (6), p. 344-349. DOI: 10.3923/rjasci.2014.344.349, Scopus

242. [1.2] TALWAR, B.S.-GUO, S.- CHIZARI, K.- THERRIAULT, D. Investigation of carbon nanotubes mixing methods and functionalizations for electrically conductive polymer composites. (2014) ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE), 2B, art. no. 39970, DOI: 10.1115/IMECE2014-39970, Scopus

243. [1.2] WAN DALINA, W.A.D.- MARIATTI, M.- MOHD ISHAK, Z.A.- MOHAMED, A.R. Comparison of properties of MWCNT/carbon fibre/ epoxy laminated composites prepared by solvent spraying method. (2014) International Journal of Automotive and Mechanical Engineering, 10 (1), p. 1901-1909. DOI: 10.15282/ijame.10.2014.3.0158, Scopus

244. [1.2] WEI, B.W.- QU, D.- HU, C.F.- LI, F.Z.- ZHOU, T.L.- XIE, R.J.- ZHOU, Z.M. Synthesis and physical properties of graphene nanosheets reinforced copper composites. (2014) Advanced Materials Research, 833, p. 310-314. DOI: 10.4028/www.scientific.net/AMR.833.310, Scopus

245. [1.2] YANG, D.- CHEN, Z.- RONG, X.- ZHANG, H.- QIU, F. Formulation and characterization of epoxidized hydroxyl-terminated hyperbranched polyester and its application in waterborne epoxy resin. (2014) Journal of Polymer Research, 21 (1), art. no. 331, DOI: 10.1007/s10965-013-0331-1, Scopus

246. [1.2] YIN, C.- DONG, J.- LI, Z.- ZHANG, Z.- ZHANG, Q. Large-scale fabrication of polyimide fibers containing functionalized multiwalled carbon nanotubes via wet spinning. (2014) Composites Part B: Engineering, 58, p. 430-437. DOI: 10.1016/j.compositesb.2013.10.074, Scopus

247. [1.2] YOON, I.K.- HWANG, J.Y.- SEO, J.W.- JANG, W.C.- KIM, H.W.- SHIN, U.S. Carbon nanotube-gelatin-hydroxyapatite nanohybrids with multilayer core-shell structure for mimicking natural bone. (2014) Carbon, 77, p. 379-389. DOI: 10.1016/j.carbon.2014.05.041, Scopus

248. [1.2] YU, P.- HUANG, J.Y.- LIU, W.T.- GU, C.X.- FU, X.- DARIO, P. Fabrication and piezoresistive property of TPU/MWNTs oriented nanofibers. (2014) Gongneng Cailiao/Journal of Functional Materials, 45 (16), p. 16052-16055. DOI: 10.3969/j.issn.1001-9731.2014.16.012, Scopus

ADCA458 ŠPITALSKÝ, Zdenko - KRONTIRAS, Ch.s A. - GEORGA, S. N. - GALIOTIS, C. Effect of oxidation treatment of multiwalled carbon nanotubes on the mechanical and electrical properties of their epoxy composites. In Composites. Part A.Applied science and manufacturing, 2009, vol. 40, p. 778 - 783. (1.951 - IF2008). ISSN 1539-835X.

Citácie:

1. [1.1] DANESHVAR-FATAH, F. - NASIRPOURI, F. A study on electrodeposition of Ni-noncovalnetly treated carbon nanotubes nanocomposite coatings with desirable mechanical and anti-corrosion properties. In SURFACE & COATINGS TECHNOLOGY. ISSN 0257-8972, JUN 15 2014, vol. 248, p. 63-73., WOS

2. [1.2] DING, N.- ZHAO, B. Analysis of damage influence factors on ablation damage of composite laminates subjected lightning strike. (2014) Cailiao Rechuli Xuebao/Transactions of Materials and Heat Treatment, 35 (2), p. 186-192., Scopus

3. [1.2] WANG, Z.- WU, Z.- BRAMNIK, N.- MITRA, S. Fabrication of high-performance flexible alkaline batteries by implementing multiwalled carbon nanotubes and copolymer separator. (2014) Advanced Materials, 26 (6), p. 970-976. DOI: 10.1002/adma.201304020, Scopus

4. [1.2] ZHANG, M.- SUI, S.- CHEN, J.- WU, S.- SUN, R.- GUO, N. Study of properties of functional multi-walled carbon nanotubes/epoxy nanocomposites. (2014) Diangong Jishu Xuebao/Transactions of China Electrotechnical Society,

29 (4), p. 97-102., Scopus

ADCA459 ŠPITALSKÝ, Zdenko - MATĚJKA, . ŠLOUF, M. - KONYUSHENKO, E. N. - KOVÁŘOVÁ, J. - ZEMEK, J. - KOTEK, J. Modification of carbon nanotubes and its effect on properties of carbon nanotube/epoxy nanocomposites. In Polymer Composites, 2009, vol. 30, iss.10, p. 1378 - 1387. (1.054 - IF2008). ISSN 0272-8397.

Citácie:

1. [1.1] KAUSAR, A. - IQBAL, A. - HUSSAIN, S.T. Preparation and properties of polyamide/epoxy/multi-walled carbon nanotube nanocomposite. In JOURNAL OF PLASTIC FILM & SHEETING. ISSN 8756-0879, APR 2014, vol. 30, no. 2, p. 205-224., WOS

2. [1.1] KHARE, K.S. - KHABAZ, F. - KHARE, R. Effect of carbon nanotube functionalization on mechanical and thermal properties of cross-linked epoxy-carbon nanotube nanocomposites: Role of strengthening the interfacial interactions. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, MAY 14 2014, vol. 6, no. 9, p. 6098-6110., WOS

3. [1.1] RAHAMAN, A. - MOHANTY, A. Effect of carbon nanotubes on the curing and thermomechanical behavior of epoxy/carbon nanotubes composites. In POLYMER COMPOSITES. ISSN 0272-8397, MAR 2014, vol. 35, no. 3, p. 441-449., WOS

4. [1.2] ZHANG, C.- WAN, L.- XU, J.- GUO, B.- HUANG, F. Preparation and characterization of polytriazole/carbon nanotube composites. (2014) Cailiao Yanjiu Xuebao/Chinese Journal of Materials Research, 28 (7), p. 555-560., Scopus

ADCA460 ŠPITALSKÝ, Zdenko - AGGELOPOULOS, Ch. - TSOUKLERI, G. - TSAKIROGLOU, Ch. - PARTHENIOS, J. - GEORGA, S. - KRONTIRAS, Ch. - TASIS, D. - PAPAGELIS, K. - GALIOTIS, C. The effect of oxidation treatment on the properties of multi-walled carbon nanotube thin films. In Materials Science and Engineering B - Solid-State Materials for Advanced Technology, 2009, vol. 165, p. 135 - 138. (1.577 - IF2008). (2009 - SCOPUS). ISSN 0921-5107.

Citácie:

1. [1.1] GEIER, S.M. - WIERACH, P. - MAHRHOLZ, T. - SINAPIUS, M. Carbon nanotube strain measurements via tensile teSTING. In PROCEEDINGS OF THE ASME CONFERENCE ON SMART MATERIALS, ADAPTIVE STRUCTURES AND INTELLIGENT SYSTEMS, 2014, VOL 1. 2014., WOS

2. [1.1] HAN, J.H. - ZHANG, H. - CHEN, M.J. - WANG, G.R. - ZHANG, Z. CNT buckypaper/thermoplastic polyurethane composites with enhanced stiffness, strength and toughness. In COMPOSITES SCIENCE AND TECHNOLOGY. ISSN 0266-3538, OCT 28 2014, vol. 103, p. 63-71., WOS

3. [1.1] KOSE, H. - AYDIN, A.O. - AKBULUT, H. Free-standing SnO2/MWCNT nanocomposite anodes produced by different rate spin coatings for Li-ion batteries. In INTERNATIONAL JOURNAL OF HYDROGEN ENERGY. ISSN 0360-3199, DEC 12 2014, vol. 39, no. 36, p. 21435-21446., WOS

4. [1.1] OSSWALD, S. - ETZOLD, B.J.M. Oxidation and purification of carbon nanostructures. In CARBON NANOMATERIALS, 2ND EDITION. 2014, p. 355-394., WOS

5. [1.1] ZHANG, Y.L. - WANG, Y. - YU, J.R. - CHEN, L. - ZHU, J. - HU, Z.M. Polybenzimidazole assisted fabrication of multiwalled carbon nanotube buckypapers and their silver nanoparticle hybrids. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 68, p. 35904-35913., WOS

6. [1.2] LI, M.- WANG, S.- GU, Y.- ZHANG, Z. Research progress on macroscopic carbon nanotube assemblies and their composites. (2014) Hangkong

Xuebao/Acta Aeronautica et Astronautica Sinica, 35 (10), p. 2699-2721. DOI: 10.7527/S1000-6893.2014.0146, Scopus
7. [1.2] OSSWALD, S. Nanodiamond purification. (2014) RSC Nanoscience and Nanotechnology, 2014-January (31), p. 89-111., Scopus

ADCA461 ŠPITALSKÝ, Zdenko - DANKO, Martin - MOSNÁČEK, Jaroslav. Preparation of functionalized graphene sheets. In Current Organic Chemistry, 2011, vol. 15, p. 1133 - 1150. (2.920 - IF2010). (2011 - Current Contents). ISSN 1385-2728.

Citácie:
1. [1.1] RUBIO, C. - ZORNOZA, B. - GORGOJO, P. - TELLEZ, C. - CORONAS, J. Separation of H-2 and CO2 containing mixtures with mixed matrix membranes based on layered materials. In CURRENT ORGANIC CHEMISTRY. ISSN 1385-2728, 2014, vol. 18, no. 18, p. 2351-2363., WOS

ADCA462 TAVMAN, I. - *KRUPA, Igor* - OMASTOVÁ, Mária - SARIKANAT, M. - NOVÁK, Igor - SEVER, K. - OZDEMIR, I. - SEKI, Y. - PODHRADSKÁ, Silvia - JOCHEC MOŠKOVÁ, Daniela - ERBAY, E. - GUNER, F. Effects of conductive graphite filler loading on physical properties of high-density polyethylene composite. In Polymer Composites, 2012, vol. 33, iss. 7, p. 1071 - 1076. (1.231 - IF2011). (2012 - Current Contents). ISSN 0272-8397.

Citácie:
1. [1.1] KASGOZ, A. - AKIN, D. - AYTEN, A.I. - DURMUS, A. Effect of different types of carbon fillers on mechanical and rheological properties of cyclic olefin copolymer (COC) composites. In COMPOSITES PART B-ENGINEERING. ISSN 1359-8368, NOV 2014, vol. 66, p. 126-135., WOS
2. [1.1] PARK, M. - JUNG, Y.J. - RYU, J. - CHO, J. Material selection and optimization for highly stable composite bipolar plates in vanadium redox flow batteries. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 38, p. 15808-15815., WOS
3. [1.1] WANG, Z.Y. - HAN, E.H. - LIU, F.C. - QIAN, Z.H. - ZHU, L.W. Waterborne epoxy nanocoatings modified by nanoemulsions and nanoparticles. In JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY. ISSN 1005-0302, OCT 2014, vol. 30, no. 10, p. 1036-1042., WOS

ADCA463 TEISSEDRE, G. - PILICHOWSKI, J.F. - CHMELA, Štefan - LACOSTE, J. Ageing of EPDM-I: Photo and thermal stability of EPDM hydroperoxides. In Polymer Degradation and Stability, 1996, vol. 53, p. 207-215.

Citácie:
1. [1.1] SU, J. - ZHANG, J. Effect of hot-air ageing on properties of ethylenepropylene-diene monomer (EPDM) rubber/samarium borate/polyolefin and EPDM/antimony- doped tin oxide/polyolefin composites. In JOURNAL OF ELASTOMERS AND PLASTICS. ISSN 0095-2443, JUN 2014, vol. 46, no. 4, p. 368-387., WOS

ADCA464 TERAOKA, I. - CIFRA, Peter - WANG, Y. M. Polymer chains in good solvent facing impenetrable walls: what is the distance to the wall in lattice Monte Carlo simulations. In Colloids and Surfaces A : Physicochem. Eng. Aspects, 2002, vol. 206, no. 1-2 Sp. iss. SI, p. 299 - 303. ISSN 0927-7757.

Citácie:
1. [1.1] HAMMER, Y. - KANTOR, Y. Entropic pressure in lattice models for polymers. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, NOV 28 2014, vol. 141, no. 20., WOS

ADCA465 TERAOKA, I. - CIFRA, Peter - WANG, Y.What is the distance tothe wall in lattice simulations? In Macromolecules, 2001, vol. 34, p. 7121-7126. (3.697 - IF2000). (2001 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] UZCATEGUI, A.V. - SHANBHAG, S. Self-entanglement of a single polymer chain confined in a cubic box. In JOURNAL OF POLYMER SCIENCE PART B-POLYMER PHYSICS. ISSN 0887-6266, OCT 1 2014, vol. 52, no. 19, p. 1283-1290., WOS

ADCA466 THOMASSIN, J.-M. - KOLLÁR, Jozef - CALDARELLA, G.- GERMAIN, A. - JERÔME, R. - DETREMBLEUR, Ch. Beneficial effect of carbon nanotubes on the performances of Nafion membranes in fuel cell applications. In Journal of Membrane Science, 2007, vol. 303, p. 252-257.

Citácie:

1. [1.1] CHOI, J. - LEE, C. - HAWKINS, S.C. - HUYNH, C.P. - PARK, J. - JEON, Y. - TRUONG, Y.B. - KYRATZIS, I.L. - SHUL, Y.G. - CARUSO, R.A. Direct spun aligned carbon nanotube web-reinforced proton exchange membranes for fuel cells. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 62, p. 32787-32790., WOS

2. [1.1] CHOI, J.H. - KIM, Y.H. - CHOI, S.D. - KIM, G.M. Preparation of 3D electrode microarrays of multi-walled carbon nanotubes/nafion nanocomposites for microfluidic biofuel cells. In JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY. ISSN 1533-4880, DEC 2014, vol. 14, no. 12, p. 9323-9328., WOS

3. [1.1] DE BONIS, C. - COZZI, D. - MECHERI, B. - D'EPIFANIO, A. - RAINER, A. - DE PORCELLINIS, D. - LICOCCIA, S. Effect of filler surface functionalization on the performance of Nafion/Titanium oxide composite membranes. In ELECTROCHIMICA ACTA. ISSN 0013-4686, NOV 20 2014, vol. 147, p. 418-425., WOS

4. [1.1] DI, Y.B. - YANG, W.J. - LI, X.J. - ZHAO, Z. - WANG, M.R. - DAI, J.M. Preparation and characterization of continuous carbon nanofiber-supported SPEEK composite membranes for fuel cell application. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 94, p. 52001-52007., WOS

5. [1.1] HE, G.W. - ZHAO, J. - HU, S. - LI, L.Q. - LI, Z.Y. - LI, Y.F. - LI, Z. - WU, H. - YANG, X.L. - JIANG, Z.Y. Functionalized carbon nanotube via distillation precipitation polymerization and its application in nafion-based composite membranes. In ACS APPLIED MATERIALS & INTERFACES. ISSN 1944-8244, SEP 10 2014, vol. 6, no. 17, p. 15291-15301., WOS

6. [1.1] HOSSEINI, S.M. - GHOLAMI, A. - KORANIAN, P. - NEMATI, M. - MADAENI, S.S. - MOGHADASSI, A.R. Electrochemical characterization of mixed matrix heterogeneous cation exchange membrane modified by aluminum oxide nanoparticles: Mono/bivalent ionic transportation. In JOURNAL OF THE TAIWAN INSTITUTE OF CHEMICAL ENGINEERS. ISSN 1876-1070, JUL 2014, vol. 45, no. 4, p. 1241-1248., WOS

7. [1.1] HOSSEINI, S.M. - JEDDI, F. - NEMATI, M. - MADAENI, S.S. - MOGHADASSI, A.R. Electrodialysis heterogeneous anion exchange membrane modified by PANI/MWCNT composite nanoparticles: Preparation, characterization and ionic transport property in desalination. In DESALINATION. ISSN 0011-9164, MAY 15 2014, vol. 341, p. 107-114., WOS

8. [1.1] KUMAR, S.M.S. - PILLAI, V.K. Low-cost nanomaterials for high-performance polymer electrolyte fuel cells (PEMFCs). In LOW-COST NANOMATERIALS: TOWARD GREENER AND MORE EFFICIENT ENERGY APPLICATIONS. ISSN 1865-3529, 2014, p. 359-394., WOS

9. [1.1] NEELAKANDAN, S. - RANA, D. - MATSUURA, T. - MUTHUMEENAL, A. - KANAGARAJ, P. - NAGENDRAN, A. Fabrication and electrochemical properties of surface modified sulfonated poly(vinylidenefluoride-co-

hexafluoropropylene) membranes for DMFC application. In SOLID STATE IONICS. ISSN 0167-2738, DEC 15 2014, vol. 268, A, p. 35-41., WOS
10. [1.1] ZARRINKHAMEH, M. - ZENDEHNAM, A. - HOSSEINI, S.M. Preparation and characterization of nanocomposite heterogeneous cation exchange membranes modified by silver nanoparticles. In KOREAN JOURNAL OF CHEMICAL ENGINEERING. ISSN 0256-1115, JUL 2014, vol. 31, no. 7, p. 1187-1193., WOS
11. [1.1] ZENDEHNAM, A. - MOKHTARI, S. - HOSSEINI, S.M. - RABIEYAN, M. Fabrication of novel heterogeneous cation exchange membrane by use of synthesized carbon nanotubes-co-copper nanolayer composite nanoparticles: Characterization, performance in desalination. In DESALINATION. ISSN 0011-9164, AUG 15 2014, vol. 347, p. 86-93., WOS
12. [1.1] ZENDEHNAM, A. - ROBATMILI, N. - HOSSEINI, S.M. - ARABZADEGAN, M. - MADAENI, S.S. Fabrication and modification of acrylonitrile- butadiene- styrene- based heterogeneous ion- exchange membranes by plasma treatment: Investigation of the nanolayer deposition rate and temperature effects. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, MAR 15 2014, vol. 131, no. 6., WOS

ADCA467 TIEMBLO, P. - GOMEZ-ELVIRA, J. - NAVARRO, O. - RYCHLÁ, Lýdia - RYCHLÝ, Jozef. The autoacceleration of polypropylene thermooxidation in reduced coordinates: effect of the oxidation temperature and of polyolefin structure. In Polymer Degradation and Stability, 2001, vol. 72, no. 1, p. 23 - 30. (0.905 - IF2000). (2001 - Current Contents). ISSN 0141-3910.

Citácie:
1. [1.1] YANO, A. - ISHII, H. - SATOH, C. - AKAI, N. - HIRONIWA, T. - MILLINGTON, K.R. - NAKATA, M. The effect of gamma-ray irradiation on thermal oxidation of additive-free polypropylene pellets investigated by multichannel Fourier-transform chemiluminescence spectroscopy. In CHEMICAL PHYSICS LETTERS. ISSN 0009-2614, JAN 20 2014, vol. 591, p. 259-264., WOS

ADCA468 TLILI, R. - CECEN, V. - *KRUPA, Igor* - BOUDENNE, A. - IBOS, L. - CANDAU, Y. - NOVÁK, Igor. Mechanical and thermophysical properties of EVA copolymer filled with nickel particles. In Polymer Composites, 2011, vol. 32, iss. 5, p. 727 - 736. (0.998 - IF2010). (2011 - Current Contents). ISSN 0272-8397.

Citácie:
1. [1.1] NASE, M. - GROSSMANN, L. - RENNERT, M. - LANGER, B. - GRELLMANN, W. Adhesive properties of heat-sealed EVAc/PE films in dependence on recipe, processing, and sealing parameters. In JOURNAL OF ADHESION SCIENCE AND TECHNOLOGY. ISSN 0169-4243, JUN 18 2014, vol. 28, no. 12, p. 1149-1166., WOS

ADCA469 TLILI, R. - BOUDENNE, A. - CECEN, V. - IBOS, L. - *KRUPA, Igor* - CANDAU, Y. Thermophysical and electrical properties of nanocomposites based onethylene-vinylacetate copolymer (EVA) filled with expandedand unexpanded graphite. In International Journal of Thermophysics, 2010, vol. 31, p. 936 - 948. (0.702 - IF2009). (2010 - Current Contents, WOS, SCOPUS). ISSN 0195-928X.

Citácie:
1. [1.2] LI, X.- YUE, C.- HUANG, M. Functionalization and application of poly(ethylene-co-vinyl acetate). (2014) Shiyou Huagong/Petrochemical Technology, 43 (6), p. 609-617., Scopus

ADCA470 TORRAS, N. - ZINOVIEV, K. E. - CAMARGO, C. J. - CAMPO, Eva M. - CAMPANELLA, H. - ESTEVE, J. - MARSHALL, J. E. - TERENTJEV, E. M. - OMASTOVÁ, Mária - *KRUPA, Igor* - TEPLICKÝ, P. - MAMOJKA, M. - BRUNS,

P. - ROEDER, B. - VALLRIBERA, M. - MALET, R. - ZUFFANELLI, S. - SOLER, V. - ROIG, J. - WALKER, N. - WENN, D. - VOSSEN, F. - CROMPVOETS, F. M. H. Tactile device based on opto-mechanical actuation of liquid crystal elastomers. In Sensors and Actuators A-Physical, 2014, vol. 208, p. 104-112. (1.943 - IF2013). (2014 - Current Contents). ISSN 0924-4247.

Citácie:

1. [1.1] LI, M.E. - LV, S. - ZHOU, J.X. Photo-thermo-mechanically actuated bending and snapping kinetics of liquid crystal elastomer cantilever. In SMART MATERIALS AND STRUCTURES. ISSN 0964-1726, DEC 2014, vol. 23, no. 12., WOS

2. [1.1] SKACEJ, G. - ZANNONI, C. Molecular simulations shed light on supersoft elasticity in polydomain liquid crystal elastomers. In MACROMOLECULES. ISSN 0024-9297, DEC 23 2014, vol. 47, no. 24, p. 8824-8832., WOS

ADCA471 TVAROSKA, I. - BLEHA, Tomáš. Anomeric and exo-anomeric effects in carbohydrate chemistry. In Advances in Carbohydrate Chemistry and Biochemistry, 1989, vol. 47, p. 45 - 123.

Citácie:

1. [1.1] CANALES, A. - MALLAGARAY, A. - BERBIS, M.A. - NAVARRO-VAZQUEZ, A. - DOMINGUEZ, G. - CANADA, F.J. - ANDRE, S. - GABIUS, H.J. - PEREZ-CASTELLS, J. - JIMENEZ-BARBERO, J. Lanthanide-chelating carbohydrate conjugates are useful tools to characterize carbohydrate conformation in solution and sensitive sensors to detect carbohydrate-protein interactions. In JOURNAL OF THE AMERICAN CHEMICAL SOCIETY. ISSN 0002-7863, JUN 4 2014, vol. 136, no. 22, p. 8011-8017., WOS

2. [1.1] DESMOND, R.T. - MAGPUSAO, A.N. - LORENC, C. - ALVERSON, J.B. - PRIESTLEY, N. - PECZUH, M.W. De novo macrolide-glycolipid macrolactone hybrids: Synthesis, structure and antibiotic activity of carbohydrate-fused macrocycles. In BEILSTEIN JOURNAL OF ORGANIC CHEMISTRY. ISSN 1860-5397, SEP 17 2014, vol. 10, p. 2215-2221., WOS

3. [1.1] LAVADO, J.R. - SESTITO, S.E. - CIGHETTI, R. - MONCAYO, E.M.A. - OBLAK, A. - LAINSCEK, D. - BLANCO, J.L.J. - FERNANDEZ, J.M.G. - MELLET, C.O. - JERALA, R. - CALABRESE, V. - PERI, F. Trehalose- and glucose-derived glycoamphiphiles: Small-molecule and nanoparticle toll-like receptor 4 (TLR4) modulators. In JOURNAL OF MEDICINAL CHEMISTRY. ISSN 0022-2623, NOV 13 2014, vol. 57, no. 21, p. 9105-9123., WOS

4. [1.1] WANG, C.W. - YING, F.M. - WU, W. - MO, Y.R. How Solvent influences the anomeric effect: Roles of hyperconjugative versus steric interactions on the conformational preference. In JOURNAL OF ORGANIC CHEMISTRY. ISSN 0022-3263, FEB 21 2014, vol. 79, no. 4, p. 1571-1581., WOS

5. [1.1] XU, B.X. - UNIONE, L. - SARDINHA, J. - WU, S.P. - ETHEVE-QUELQUEJEU, M. - RAUTER, A.P. - BLERIOT, Y. - ZHANG, Y.M. - MARTIN-SANTAMARIA, S. - DIAZ, D. - JIMENEZ-BARBERO, J. - SOLLOGOUB, M. gem-Difluorocarbadisaccharides: Restoring the exo-Anomeric Effect. In ANGEWANDTE CHEMIE-INTERNATIONAL EDITION. ISSN 1433-7851, SEP 1 2014, vol. 53, no. 36, p. 9597-9602., WOS

6. [1.2] AJISH, J.K.- AJISH KUMAR, K.S.- SUBRAMANIAN, M.- KUMAR, M. D-Glucose based bisacrylamide crosslinker: Synthesis and study of homogeneous biocompatible glycopolymeric hydrogels. (2014) RSC Advances, 4 (103), p. 59370-59378. DOI: 10.1039/c4ra09481f, Scopus

7. [1.2] KUCHANA, R.- MAMIDYALA, S.K.- MEREYALA, H.B. Synthesis of novel xylofuranosyloxymethyl nucleosides. (2014) Oriental Journal of Chemistry, 30

(2), p. 409-418. DOI: 10.13005/ojc/300202, Scopus

ADCA472 TVAROŠKA, I. - BLEHA, Tomáš. Anomeric and exoanomeric effects in cerbohydrate chemistry. In Advances in Carbohydrate Chemistry and Biochemistry, 1989, vol. 47, p. 45-123.

Citácie:

1. [1.2] Ajish, J. K., Ajish Kumar, K. S., Subramanian, M., & Kumar, M. , In: RSC Advances, 4(103), 59370-59378, SCOPUS

2. [1.2] Canales, A., Mallagaray, A., Berbís, M. A., Navarro-Vázquez, A., Domínguez, G., Cañada, F. J., André, S., Gabius, H.-J., Pérez-Castells, J., Jiménez-Barbero, J., In: Journal of the American Chemical Society, 136(22), 8011-8017, SCOPUS

3. [1.2] Desmond, R. T., Magpusao, A. N., Lorenc, C., Alverson, J. B., Priestley, N., & Peczuh, M. W. , In: Beilstein Journal of Organic Chemistry, 10, 2215-2221, SCOPUS

4. [1.2] Kuchana, R., Mamidyala, S. K., & Mereyala, H. B., In: Oriental Journal of Chemistry, 30(2), 409-418, SCOPUS

5. [1.2] Miljkovic, M. , In: Electrostatic and stereoelectronic effects in carbohydrate chemistry Springer, pp. 1-304)., SCOPUS

6. [1.2] Rodriguez Lavado, J., Sestito, S. E., Cighetti, R., Aguilar Moncayo, E. M., Oblak, A., Lainšček, D., Jiménez Blanco, J. L., García Fernández, J. M., Ortiz Mellet, C., Jerala, R., Calabrese, V., & Peri, F., In: Journal of Medicinal Chemistry, 57(21), 9105-9123, SCOPUS

7. [1.2] Wang, C., Ying, F., Wu, W., & Mo, Y. , In: Journal of Organic Chemistry, 79(4), 1571-1581, SCOPUS

8. [1.2] Xu, B., Unione, L., Sardinha, J., Wu, S., Ethève-Quelquejeu, M., Pilar Rauter, A., Blériot, Y., Zhang, Y., Martín-Santamaría, S., Díaz, D., Jiménez-Barbero, J., & Sollogoub, M. , In: Angewandte Chemie - International Edition, 53(36), 9597-9602, SCOPUS

ADCA473 UYGUN, A. - YAVUZ, A. G. - SEN, S. - OMASTOVÁ, Mária. Polythiophene/SiO2 nanocomposites prepared in the presence of surfactants and their application to glucose biosensing. In Synthetic Metals, 2009, vol. 159, p. 2022 - 2028. (1.962 - IF2008). (2009 - Current Contents, SCOPUS). ISSN 0379-6779.

Citácie:

1. [1.1] ABOLGHASEMI, M.M. - YOUSEFI, V. - HAZIZADEH, B. An inorganic-organic hybrid material based on ZnO nanoparticles anchored to a composite made from polythiophene and hexagonally ordered silica for use in solid-phase fiber microextraction of PAHs. In MICROCHIMICA ACTA. ISSN 0026-3672, APR 2014, vol. 181, no. 5-6, p. 639-645., WOS

2. [1.1] ABOLGHASEMI, M.M. - YOUSEFI, V. Polythiophene/hexagonally ordered silica nanocomposite coating as a solid-phase microextraction fiber for the determination of polycyclic aromatic hydrocarbons in water. In JOURNAL OF SEPARATION SCIENCE. ISSN 1615-9306, JAN 2014, vol. 37, no. 1-2, p. 120-126., WOS

3. [1.1] BORA, C. - PEGU, R. - SAIKIA, B.J. - DOLUI, S.K. Synthesis of polythiophene/graphene oxide composites by interfacial polymerization and evaluation of their electrical and electrochemical properties. In POLYMER INTERNATIONAL. ISSN 0959-8103, DEC 2014, vol. 63, no. 12, p. 2061-2067., WOS

4. [1.1] ERDONMEZ, S. - OZKAZANC, E. Power-law conductivity in polythiophene/copper(II) acetylacetonate composites. In POLYMER INTERNATIONAL. ISSN 0959-8103, JAN 2014, vol. 63, no. 1, p. 31-36., WOS

5. [1.1] EREN, E. - ASLAN, E. - OKSUZ, A.U. The effect of anionic surfactant on

the properties of polythiophene/chitosan composites. In POLYMER ENGINEERING AND SCIENCE. ISSN 0032-3888, NOV 2014, vol. 54, no. 11, p. 2632-2640., WOS
6. [1.1] MAO, Y. - KONG, Q.Y. - SHEN, L. - WANG, Z.X. - CHEN, L.Q. Polythiophene coordination complexes as high performance lithium storage materials. In JOURNAL OF POWER SOURCES. ISSN 0378-7753, FEB 15 2014, vol. 248, p. 343-347., WOS
7. [1.1] NOHUT, N. - EREN, E. - RAHHAL-IRABI, L. - OKSUZ, A.U. In situ investigation of surfactants' effect onto electrochemical synthesis and properties of polyfurans. In JOURNAL OF MATERIALS SCIENCE. ISSN 0022-2461, APR 2014, vol. 49, no. 7, p. 2754-2760., WOS
8. [1.1] SEEMA, H. - KEMP, K.C. - LE, N.H. - PARK, S.W. - CHANDRA, V. - LEE, J.W. - KIM, K.S. Highly selective CO2 capture by S-doped microporous carbon materials. In CARBON. ISSN 0008-6223, JAN 2014, vol. 66, p. 320-326., WOS
9. [1.1] UNAL, H.I. - SAHAN, B. - EROL, O. Effect of surfactant on electrokinetic properties of polyindole/TiO2-conducting nanocomposites in aqueous and nonaqueous media. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, FEB 2014, vol. 292, no. 2, p. 499-509., WOS
10. [1.1] ZHANG, H.Q. - HU, L.W. - TU, J.G. - JIAO, S.Q. Electrochemically assembling of polythiophene film in ionic liquids (ILs) microemulsions and its application in an electrochemical capacitor. In ELECTROCHIMICA ACTA. ISSN 0013-4686, FEB 20 2014, vol. 120, p. 122-127., WOS

ADCA474 VAITHILINGAM, V. - HLOUŠKOVÁ, Gabriela - QI, M. - LACÍK, Igor - OBERHOLZER, J. - GUILLEMIN, G. J. - TUCH, B. E. Effect of prolonged gelling time on the intrinsic properties of barium alginate microcapsules and its biocompatibility. In Journal of Microencapsulation, 2011, vol. 28, no.6, p. 499 - 507. (1.515 - IF2010). (2011 - Current Contents). ISSN 0265-2048.

Citácie:

1. [1.1] BHUJBAL, S.V. - PAREDES-JUAREZ, G.A. - NICLOU, S.P. - DE VOS, P. Factors influencing the mechanical stability of alginate beads applicable for immunoisolation of mammalian cells. In JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS. ISSN 1751-6161, SEP 2014, vol. 37, p. 196-208., WOS
2. [1.1] JITRARUCH, S. - DHAWAN, A. - HUGHES, R.D. - FILIPPI, C. - SOONG, D. - PHILIPPEOS, C. - LEHEC, S.C. - HEATON, N.D. - LONGHI, M.S. - MITRY, R.R. Alginate microencapsulated hepatocytes optimised for transplantation in acute liver failure. In PLOS ONE. ISSN 1932-6203, DEC 1 2014, vol. 9, no. 12., WOS
3. [1.1] KRISHNAN, R. - ARORA, R.P. - ALEXANDER, M. - WHITE, S.M. - LAMB, M.W. - FOSTER, C.E. - CHOI, B. - LAKEY, J.R.T. Noninvasive evaluation of the vascular response to transplantation of alginate encapsulated islets using the dorsal skin-fold model. In BIOMATERIALS. ISSN 0142-9612, JAN 2014, vol. 35, no. 3, p. 891-898., WOS
4. [1.1] PAREDES-JUAREZ, G.A. - DE HAAN, B.J. - FAAS, M.M. - DE VOS, P. A technology platform to test the efficacy of purification of alginate. In MATERIALS. ISSN 1996-1944, MAR 2014, vol. 7, no. 3, p. 2087-2103., WOS
5. [1.1] SPASOJEVIC, M. - BHUJBAL, S. - PAREDES, G. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Considerations in binding diblock copolymers on hydrophilic alginate beads for providing an immunoprotective membrane. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JUN 2014, vol. 102, no. 6, p. 1887-1896., WOS

ADCA475 VAITHILINGHAM, V. - HLOUŠKOVÁ, Gabriela - QI, M.- LARSSON, R. - LACÍK, Igor - FORMO, K. - MARCHESE, E. - OBERHOLZER, J. - GUILLEMIN, G. J. - TUCH, Bernard E. Beneficial effects of coating alginate microcapsules with macromolecular heparin conjugates - In vitro and In vivo study. In Tissue engineering : Part A, 2014, vol. 20, no. 1-2, p. 324-334. (4.254 - IF2013). ISSN 1076-3279.

Citácie:

1. [1.2] GIMI, B.- NEMANI, K.V. Advances in alginate gel microencapsulation of therapeutic cells. (2014) Critical Reviews in Biomedical Engineering, 41 (6), p. 469-481., Scopus

ADCA476 VALKO, L. - KLEIN, E. - KOVAŘÍK, P. - BLEHA, Tomáš - ŠIMON, P. Kinetic study of thermal dehydrochlorination of poly(vinyl chloride) in presence of oxygen. 3. Statistical thermodynamic interpretation of the oxygen catalytic activity. In European Polymer Journal, 2001, vol. 37, p. 1123-1132. (0.745 - IF2000). (2001 - Current Contents). ISSN 0014-3057.

Citácie:

1. [1.1] FLEMING, R. - PARDINI, L.C. - ALVES, N. - GARCIA, E. - BRITO, C. Synthesis and thermal behavior of polyacrylonitrile/vinylidene chloride copolymer. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, MAY-JUN 2014, vol. 24, no. 3, p. 259-268., WOS

2. [1.2] WANG, F.- YAO, W.- GUAN, D.- WANG, S.- AN, H.- JIA, Y. Thermal degradation characteristics and kinetics of PVC slush powder. (2014) Cailiao Kexue yu Gongyi/Material Science and Technology, 22 (2), p. 55-60., Scopus

ADCA477 VÉGSO, K. - ŠIFFALOVIČ, P. - WEIS, M. Jr. - JERGEL, M. - BENKOVIČOVÁ, M. - MAJKOVÁ, E. - CHITU, L. - HALAHOVETS, Y. - LUBY, Š. - CAPEK, Ignác - SATKA, A. In situ GISAXS monitoring of Langmuir nanoparticle multilayer degradation processes induced by UV photolysis. In Physica Status Solidi A, 2011, vol. 208, no. 11, p. 2629-2634. (1.458 - IF2010). (2011 - Current Contents). ISSN 1862-6300.

Citácie:

1. [1.1] KOERSTGENS, Volker - PHILIPP, Martine - MAGERL, David - NIEDERMEIER, Martin A. - SANTORO, Gonzalo - ROTH, Stephan V. - MUELLER-BUSCHBAUM, Peter. Following initial changes in nanoparticle films under laminar flow conditions with in situ GISAXS microfluidics. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 3, pp. 1476., WOS

ADCA478 VÉGSO, K. - ŠIFFALOVIČ, P. - JERGEL, M. - WEIS, M. Jr. - BENKOVIČOVÁ, M. - MAJKOVÁ, E. - LUBY, Š. - *KOCSIS, Teodora* - CAPEK, Ignác. Silver nanoparticle monolayer-to-Bilayer transition at the air/water interface as studied by the GISAXS technique: Application of a new paracrystal model. In Langmuir, 2012, vol. 28, no. 25, p. 9395-9404. (4.186 - IF2011). (2012 - Current Contents). ISSN 0743-7463.

Citácie:

1. [1.1] FUJIMORI, A. et al. In COLLOIDS AND SURFACES A, 2014, vol. 446, pp. 109-117., WOS

ADCA479 VÉGSO, K. - ŠIFFALOVIČ, P. - BENKOVIČOVÁ, M. - JERGEL, M. - LUBY, Š. - MAJKOVÁ, E. - CAPEK, Ignác - *KOCSISOVÁ, Teodora* - PERLICH, J. - ROTH, S. V. GISAXS analysis of 3D nanoparticle assemblies- effect of vertical nanoparticle ordering. In Nanotechnology, 2012, vol. 23, no. 4, 045704. (3.979 - IF2011). (2012 - Current Contents, WOS, SCOPUS). ISSN 0957-4484.

Citácie:

1. [1.1] DYADKINA, E. A. - VOROBIEV, A. A. - UKLEEV, V. A. - LOTT, D. -

SITNIKOV, A. V. - KALININ, Yu. E. - GERASHCHENKO, O. V. - GRIGORIEV, S. V. Morphology and the magnetic and conducting properties of heterogeneous layered magnetic structures [(Co45Fe45Zr10)(35)(Al2O3)(65)/a-Si:H](36). In JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS. ISSN 1063-7761, 2014, vol. 118, no. 3, pp. 410., WOS

ADCA480 VELIČKOVIČ, S. J. - DŽUNUZOVIČ, E. S. - GRIFFITHS, P. C. - LACÍK, Igor - FILIPOVIČ, J. - POPOVIČ, I. G. Polymerization of itaconic acid initiated by a potassium persulfate/N,N-dimethylethanolamine system. In Journal of Applied Polymer Science, 2008, vol. 110, p. 3275 - 3282. (1.008 - IF2007). (2008 - Current Contents). ISSN 0021-8995.

Citácie:

1. [1.1] BEDNARZ, S. - FLUDER, M. - GALICA, M. - BOGDAL, D. - MACIEJASZEK, I. Synthesis of hydrogels by polymerization of itaconic acid-choline chloride deep eutectic solvent. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, AUG 15 2014, vol. 131, no. 16., WOS

2. [1.1] DE SMET, S. - LINGIER, S. - DU PREZ, F.E. MacroRAFT agents from renewable resources and their use as polymeric scaffolds in a grafting from approach. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 9, p. 3163-3169., WOS

3. [1.2] BEDNARZ, S.- BŁASZCZYK, A.- BŁAZEJEWSKA, D.- BOGDAŁ, D. Free-radical polymerization of itaconic acid in the presence of choline salts: Mechanism of persulfate decomposition. (2014) Catalysis Today, 257 (P2), p. 297-304. DOI: 10.1016/j.cattod.2014.07.021, Scopus

ADCA481 VIALA, S. - TAUER, K. - ANTONIETTI, M. - LACÍK, Igor - BREMSER, W. Structural control in radical polymerization with1,1-diphenylethylene. Part 3. Aqueous heterophase polymerization. In Polymer : the International Journal for the Science and Technology of Polymers, 2005, vol. 46, no. 19, p. 7843 - 7854. (2.433 - IF2004). (2005 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] ZHAO, M.J. - SHI, Y. - FU, Z.F. - YANG, W.T. Preparation of PMMA-b-PSt block copolymer via seeded emulsion polymerization in the presence of 1,1-diphenylethylene. In MACROMOLECULAR REACTION ENGINEERING. ISSN 1862-832X, AUG 2014, vol. 8, no. 8, p. 555-563., WOS

ADCA482 VIKARTOVSKÁ, A., Welwardová - BUČKO, M. - MISLOVIČOVÁ, D. - PÄTOPRSTÝ, V. - LACÍK, Igor - GEMEINER, P. Improvement of the stability of glucose oxidase via encapsulation in sodium alginate-cellulose sulfate-poly(methylene-co-guanidine) capsules. In Enzyme and Microbial Technology, 2007, vol. 41, p. 748-755. (1.897 - IF2006). (2007 - Current Contents). ISSN 0141-0229.

Citácie:

1. [1.1] GASMI, S.N. - RIHOUEY, C. - PICTON, L. - LE CERF, D. Hydrolysis of pullulan by entrapped pullulanase in Ca/Alginate beads. In BIOPOLYMERS. ISSN 0006-3525, SEP 2014, vol. 101, no. 9, SI, p. 938-944., WOS

2. [1.1] GUNASEKARAN, S. - KO, S. Rationales of Nano- and Microencapsulation for Food Ingredients. In NANO- AND MICROENCAPSULATION FOR FOODS. 2014, p. 43-64., WOS

3. [1.1] HUANG, R.L. - WU, S.K. - LI, A.T. - LI, Z. Integrating interfacial self-assembly and electrostatic complexation at an aqueous interface for capsule synthesis and enzyme immobilization. In JOURNAL OF MATERIALS CHEMISTRY A. ISSN 2050-7488, 2014, vol. 2, no. 6, p. 1672-1676., WOS

ADCA483 VILČÁKOVÁ, J. - MOUČKA, R. - SVOBODA, P. - ILČÍKOVÁ, Markéta -

KAZANTSEVA, N. - HŘIBOVÁ, M. - MIČUŠÍK, Matej - OMASTOVÁ, Mária. Effect of surfactants and manufacturing methods on the electrical and thermal conductivity of carbon nanotube/silicone composites. In Molecules, 2012, vol.17, p. 13157 - 13174. (2.386 - IF2011). (2012 - Current Contents). ISSN 1420-3049.

Citácie:

1. [1.1] SUDEEP, P.M. - TAHA-TIJERINA, J. - AJAYAN, P.M. - NARAYANAN, T.N. - ANANTHARAMAN, M.R. Nanofluids based on fluorinated graphene oxide for efficient thermal management. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 47, p. 24887-24892., WOS

2. [1.2] YUJUN, G.- ZHONGLIANG, L.- GUANGMENG, Z.- YANXIA, L. Effects of multi-walled carbon nanotubes addition on thermal properties of thermal grease. (2014) International Journal of Heat and Mass Transfer, 74, p. 358-367., Scopus

ADCA484 VOS, P. de - BUČKO, M. – GEMEINER, P. - NAVRÁTIL, M. - ŠVITEL, J. - FAAS, M. - STRAND, B. L. - SKJAK-BRAEK, G. - MORCH, Y. A. - VIKARTOVSKÁ, A., Welwardová - LACÍK, Igor - HLOUŠKOVÁ, Gabriela - ORIVE, G. - PONCELET, D. - PEDRAZ, J. L. - ANSORGE-SCHUMACHER, M. B. Multiscale requirements for bioencapsulation in medicine and biotechnology. In Biomaterials, 2009, vol. 30, p. 2559 - 2570. (6.646 - IF2008). (2009 - Current Contents). ISSN 0142-9612.

Citácie:

1. [1.1] CANILLAS, M. - MORENO-BURRIEL, B. - CHINARRO, E. Materials directed to implants for repairing Central Nervous System. In BOLETIN DE LA SOCIEDAD ESPANOLA DE CERAMICA Y VIDRIO. ISSN 0366-3175, NOV-DEC 2014, vol. 53, no. 6, p. 249-259., WOS

2. [1.1] CAO, H. - YE, H. - LI, C. - ZHENG, L.L. - LI, Y. - OUYANG, Q.F. Effect of microencapsulated cell preparation technology and conditions on the catalytic performance of Penicillium purpurogenum Li-3 strain cells. In PROCESS BIOCHEMISTRY. ISSN 1359-5113, MAY 2014, vol. 49, no. 5, p. 791-796., WOS

3. [1.1] DALMAIS, A. - SERRA, C.A. - CHANG, Z.Q. - BOUQUEY, M. - MULLER, R. Microfluidic-assisted synthesis of waterborne and solvent-free urea-crosslinked polydimethylsiloxane microparticles. In MACROMOLECULAR MATERIALS AND ENGINEERING. ISSN 1438-7492, JUN 2014, vol. 299, no. 6, p. 698-706., WOS

4. [1.1] DENG, Y. - ZHOU, H.F. - YAN, C.X. - WANG, Y.F. - XIAO, C.W. - GU, P. - FAN, X.Q. In vitro osteogenic induction of bone marrow stromal cells with encapsulated gene-modified bone marrow stromal cells and in vivo implantation for orbital bone repair. In TISSUE ENGINEERING PART A. ISSN 1937-3341, JUL 2014, vol. 20, no. 13-14, p. 2019-2029., WOS

5. [1.1] GATTAS-ASFURA, K.M. - VALDES, M. - CELIK, E. - STABLER, C.L. Covalent layer-by-layer assembly of hyperbranched polymers on alginate microcapsules to impart stability and permselectivity. In JOURNAL OF MATERIALS CHEMISTRY B. ISSN 2050-750X, 2014, vol. 2, no. 46, p. 8208-8219., WOS

6. [1.1] GEREMIA, I. - BORGOGNA, M. - TRAVAN, A. - MARSICH, E. - PAOLETTI, S. - DONATI, I. Determination of the composition for binary mixtures of polyanions: The case of mixed solutions of alginate and hyaluronan. In BIOMACROMOLECULES. ISSN 1525-7797, MAR 2014, vol. 15, no. 3, p. 1069-1073., WOS

7. [1.1] GRYSHKOV, O. - POGOZHYKH, D. - HOFMANN, N. - POGOZHYKH, O. - MUELLER, T. - GLASMACHER, B. Encapsulating Non-human primate multipotent stromal cells in alginate via high voltage for cell-based therapies and

cryopreservation. In PLOS ONE. ISSN 1932-6203, SEP 26 2014, vol. 9, no. 9., WOS

8. [1.1] JUANOLA-FELIU, E. - MIRIBEL-CATALA, P.L. - AVILES, C.P. - COLOMER-FARRARONS, J. - GONZALEZ-PINERO, M. - SAMITIER, J. Design of a customized multipurpose nano-enabled implantable system for in-vivo theranostics. In SENSORS. ISSN 1424-8220, OCT 2014, vol. 14, no. 10, p. 19275-19306., WOS

9. [1.1] NAFEA, E.H. - POOLE-WARREN, L.A. - MARTENS, P.J. Structural and permeability characterization of biosynthetic PVA hydrogels designed for cell-based therapy. In JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION. ISSN 0920-5063, NOV 2 2014, vol. 25, no. 16, p. 1771-1790., WOS

10. [1.1] PARK, J.H. - KIM, M.H. - JEONG, L. - CHO, D. - KWON, O.H. - PARK, W.H. Effect of surfactants on sol-gel transition of silk fibroin. In JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY. ISSN 0928-0707, AUG 2014, vol. 71, no. 2, p. 364-371., WOS

11. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS

12. [1.1] SCHWEICHER, J. - NYITRAY, C. - DESAI, T.A. Membranes to achieve immunoprotection of transplanted islets. In FRONTIERS IN BIOSCIENCE-LANDMARK. ISSN 1093-9946, JAN 1 2014, vol. 19, p. 49-76., WOS

13. [1.1] WEIDLING, J. - SAMENI, S. - LAKEY, J.R.T. - BOTVINICK, E. Method measuring oxygen tension and transport within subcutaneous devices. In JOURNAL OF BIOMEDICAL OPTICS. ISSN 1083-3668, AUG 2014, vol. 19, no. 8., WOS

14. [1.1] ZALESSKIY, S.S. - DANIELI, E. - BLUEMICH, B. - ANANIKOV, V.P. Miniaturization of NMR systems: desktop spectrometers, microcoil spectroscopy, and "NMR on a Chip" for chemistry, biochemistry, and industry. In CHEMICAL REVIEWS. ISSN 0009-2665, JUN 11 2014, vol. 114, no. 11, p. 5641-5694., WOS

ADCA485 WANG, T. - LACÍK, Igor - BRISSOVÁ, M. - ANILKUMAR, A. V. - PROKOP, A. - HUNKELER, David - GREEN, R. - SHAHROKHI, K. - POWERS, A. C. An encapsulation system for the immunoisolation of pancreatic islets. In Nature Biotechnology, 1997, vol. 15, p. 358-362.

Citácie:

1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS

2. [1.1] HEADEN, D.M. - AUBRY, G. - LU, H. - GARCIA, A.J. Microfluidic-based generation of size-controlled, biofunctionalized synthetic polymer microgels for cell encapsulation. In ADVANCED MATERIALS. ISSN 0935-9648, MAY 2014, vol. 26, no. 19, p. 3003-3008., WOS

3. [1.1] JIANG, L.Y. - LIU, J.Y. - WANG, K. - GU, X. - LUO, Y. Investigating design principles of micropatterned encapsulation systems containing high-density microtissue arrays. In SCIENCE CHINA-LIFE SCIENCES. ISSN 1674-7305, FEB 2014, vol. 57, no. 2, SI, p. 221-231., WOS

4. [1.1] KADAM, S. - GRACIAS, D.H. Natural and synthetic nanoporous membranes for cell encapsulation therapy. In BIOENGINEERED NANOMATERIALS. 2014, p. 199-223., WOS

5. [1.1] KIM, B. - LEE, T.Y. - ABBASPOURRAD, A. - KIM, S.H. Perforated microcapsules with selective permeability created by confined phase separation of

polymer blends. In CHEMISTRY OF MATERIALS. ISSN 0897-4756, DEC 23 2014, vol. 26, no. 24, p. 7166-7171., WOS

6. [1.1] KRISHNAN, L. - TOUROO, J. - REED, R. - BOLAND, E. - HOYING, J.B. - WILLIAMS, S.K. Vascularization and cellular isolation potential of a novel electrospun cell delivery vehicle. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JUL 2014, vol. 102, no. 7, p. 2208-2219., WOS

7. [1.1] KUEHN, C. - FULOP, T. - LAKEY, J.R.T. - VERMETTE, P. Young porcine endocrine pancreatic islets cultured in fibrin and alginate gels show improved resistance towards human monocytes. In PATHOLOGIE BIOLOGIE. ISSN 0369-8114, DEC 2014, vol. 62, no. 6, p. 354-364., WOS

8. [1.1] KUMOSA, L.S. - ROUTH, T.L. - LIN, J.T. - LUCISANO, J.Y. - GOUGH, D.A. Permeability of subcutaneous tissues surrounding long-term implants to oxygen. In BIOMATERIALS. ISSN 0142-9612, SEP 2014, vol. 35, no. 29, p. 8287-8296., WOS

9. [1.1] MULLER, M. Sizing, shaping and pharmaceutical applications of polyelectrolyte complex nanoparticles. In POLYELECTROLYTE COMPLEXES IN THE DISPERSED AND SOLID STATE II: APPLICATION ASPECTS. ISSN 0065-3195, 2014, vol. 256, p. 197-260., WOS

10. [1.1] ROLLAND, L. - SANTANACH-CARRERAS, E. - DELMAS, T. - BIBETTE, J. - BREMOND, N. Physicochemical properties of aqueous core hydrogel capsules. In SOFT MATTER. ISSN 1744-683X, 2014, vol. 10, no. 48, p. 9668-9674., WOS

11. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS

12. [1.1] SCHWEICHER, J. - NYITRAY, C. - DESAI, T.A. Membranes to achieve immunoprotection of transplanted islets. In FRONTIERS IN BIOSCIENCE-LANDMARK. ISSN 1093-9946, JAN 1 2014, vol. 19, p. 49-76., WOS

13. [1.1] SPASOJEVIC, M. - BHUJBAL, S. - PAREDES, G. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Considerations in binding diblock copolymers on hydrophilic alginate beads for providing an immunoprotective membrane. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JUN 2014, vol. 102, no. 6, p. 1887-1896., WOS

14. [1.1] YOON, D.H. - NUMAKUNAI, S. - NAKAHARA, A. - SEKIGUCHI, T. - SHOJI, S. Hydrodynamic on-rail droplet pass filter for fully passive sorting of droplet-phase samples. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 71, p. 37721-37725., WOS

15. [1.2] GIMI, B.- NEMANI, K.V. Advances in alginate gel microencapsulation of therapeutic cells. (2014) Critical Reviews in Biomedical Engineering, 41 (6), p. 469-481., Scopus

ADCA486 WANG, Y. M. - LIN, Q. - CIFRA, Peter - TERAOKA, I. Partitioning of bimodal polymer mixtures into a slit: effect of slit width, composition and pore-to-bulk volume ratio. In Colloids and Surfaces A : Physicochem. Eng. Aspects, 2002, vol. 206, no. 1- 3, p. 305 - 312. ISSN 0927-7757.

Citácie:

1. [1.1] MANIADIS, P. - TSIMPANOGIANNIS, I.N. - KOBER, E.M. - LOOKMAN, T. Morphology of diblock copolymers in porous media. In MOLECULAR PHYSICS. ISSN 0026-8976, 2014, vol. 112, no. 17, p. 2297-2309., WOS

ADCA487 WANG, Y. - TERAOKA, I. - CIFRA, Peter. Lattice Monte Carlo simulation for the

partitioning of a bimodal polymer mixture into a slit. In Macromolecules, 2001, vol. 34, no. 1, p. 127-133. (3.697 - IF2000). (2001 - Current Contents). ISSN 0024-9297.

Citácie:

1. [1.1] DE SANTO, I. - CAUSA, F. - NETTI, P.A. Temperature driven macromolecule separation by nanoconfinement. In MACROMOLECULES. ISSN 0024-9297, DEC 23 2014, vol. 47, no. 24, p. 8754-8760., WOS

ADCA488 YAGCI, Y. - LUKÁČ, Ivan - SCHNABEL, W. Photosensitized cationic polymerization using n-ethoxy-2-methylpyridinium hexafluorophosphate. In Polymer : the International Journal for the Science and Technology of Polymers, 1993, vol. 34, no. 6, p. 1130 - 1133. (1.336 - IF1992). (1993 - Current Contents). ISSN 0032-3861.

Citácie:

1. [1.1] SHAO, J.Z. - HUANG, Y. - FAN, Q.U. Visible light initiating systems for photopolymerization: status, development and challenges. In POLYMER CHEMISTRY. ISSN 1759-9954, 2014, vol. 5, no. 14, p. 4195-4210., WOS

2. [1.1] XIAO, P. - DUMUR, F. - FRIGOLI, M. - GRAFF, B. - MORLET-SAVARY, F. - WANTZ, G. - BOCK, H. - FOUASSIER, J.P. - GIGMES, D. - LALEVEE, J. Perylene derivatives as photoinitiators in blue light sensitive cationic or radical curable films and panchromatic thiol-ene polymerizable films. In EUROPEAN POLYMER JOURNAL. ISSN 0014-3057, APR 2014, vol. 53, p. 215-222., WOS

ADCA489 ZAMOTAEV, P. - SHIBIRIN, E. - NÓGELLOVÁ, Zuzana. Photocrosslinking of polypropylene: The effect of different photo-initiators and coagents. In Polymer Degradation and Stability, 1995, vol. 47, no. 1, p. 93 - 107. (0.815 - IF1994). (1995 - Current Contents). ISSN 0141-3910.

Citácie:

1. [1.1] AMINTOWLIEH, Y. - TZOGANAKIS, C. - HATZIKIRIAKOS, S.G. - PENLIDIS, A. Effects of processing variables on polypropylene degradation and long chain branching with UV irradiation. In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, JUN 2014, vol. 104, p. 1-10., WOS

2. [1.1] AMINTOWLIEH, Y. - TZOGANAKIS, C. - PENLIDIS, A. The effect of depth and duration of uv radiation on polypropylene modification via photoinitiation. In JOURNAL OF APPLIED POLYMER SCIENCE. ISSN 0021-8995, NOV 5 2014, vol. 131, no. 21., WOS

3. [1.1] YUN, D.W. - JANG, J. Wear minimization of ultra high molecular weight polyethylene by benzophenone-assisted Photocrosslinking. In FIBERS AND POLYMERS. ISSN 1229-9197, MAR 2014, vol. 15, no. 3, p. 480-486., WOS

ADCA490 ZOIS, H. - APEKIS, L. - OMASTOVÁ, Mária. Electrical properties of carbon black-filled polymer composites. In Macromolecular Symposia, 2001, vol. 170, p. 249-256. (0.406 - IF2000). (2001 - Current Contents). ISSN 1022-1360.

Citácie:

1. [1.1] MANSOUR, S.A. - HUSSEIN, M. - MOHARRAM, A.H. Thermoelectric power properties of graphite-loaded nitrile rubber/poly(vinyl chloride) blends above the percolation threshold. In ADVANCES IN POLYMER TECHNOLOGY. ISSN 0730-6679, DEC 2014, vol. 33., WOS

2. [1.1] OSKOUYI, A.B. - SUNDARARAJ, U. - MERTINY, P. Tunneling conductivity and piezoresistivity of composites containing randomly dispersed conductive nano-platelets. In MATERIALS. ISSN 1996-1944, APR 2014, vol. 7, no. 4, p. 2501-2521., WOS

3. [1.1] PETKOSKA, A.T. The role of conductive dopants in polymer cholesteric liquid crystals. In MACEDONIAN JOURNAL OF CHEMISTRY AND CHEMICAL ENGINEERING. ISSN 1857-5552, 2014, vol. 33, no. 2, p. 287-297., WOS

4. [1.1] SAMET, M. - BOITEUX, G. - SEYTRE, G. - KALLEL, A. - SERGHEI, A. Interfacial polarization in composite materials with spherical fillers: characteristic frequencies and scaling laws. In COLLOID AND POLYMER SCIENCE. ISSN 0303-402X, AUG 2014, vol. 292, no. 8, SI, p. 1977-1988., WOS
5. [1.1] SHRIVASTAVA, N.K. - MAITI, S. - SUIN, S. - KHATUA, B.B. Influence of selective dispersion of MWCNT on electrical percolation of in-situ polymerized high-impact polystyrene/MWCNT nanocomposites. In EXPRESS POLYMER LETTERS. ISSN 1788-618X, JAN 2014, vol. 8, no. 1, p. 15-29., WOS
6. [1.1] SHRIVASTAVA, N.K. - SUIN, S. - MAITI, S. - KHATUA, B.B. An approach to reduce the percolation threshold of MWCNT in ABS/MWCNT nanocomposites through selective distribution of CNT in ABS matrix. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 47, p. 24584-24593., WOS

ADCB Vedecké práce v zahraničných karentovaných časopisoch neimpaktovaných

ADCB01 BEREK, Dušan. Liquid chromatography of synthetic polymers under limiting conditions of insolubility III. In Macromolecular Symposia, 2007, vol. 258, p. 198-215. ISSN 1022-1360.

Citácie:

1. [1.1] RADKE, W. Polymer separations by liquid interaction chromatography: Principles - prospects - limitations. In JOURNAL OF CHROMATOGRAPHY A. ISSN 0021-9673, MAR 28 2014, vol. 1335, SI, p. 62-79., WOS

ADCB02 BEUERMANN, S. - BUBACK, M. - HESSE, P. - KUKUČKOVÁ, S. - LACÍK, Igor. Propagation kinetics of free-radical methacrylic acid polymerization in aqueous solution. The effect of concentration and degree of ionization. In Macromolecular Symposia, 2007, vol. 248, p. 23-32. ISSN 1022-1360.

Citácie:

1. [1.1] OZALTIN, T.F. - DERELI, B. - KARAHAN, O. - SALMAN, S. - AVIYENTE, V. Solvent effects on free-radical copolymerization of styrene and 2-hydroxyethyl methacrylate: a DFT study. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, JAN 2014, vol. 38, no. 1, p. 170-178., WOS

ADCB03 BEUERMANN, S. - BUBACK, M. - HESSE, P. - KUKUČKOVÁ, S. - LACÍK, Igor. Propagation rate coefficient of non-ionized methacrylic acid radical polymerization in aqueous solution. The effect of monomer conversion. In Macromolecular Symposia, 2007, vol. 248, p. 41-49. ISSN 1022-1360.

Citácie:

1. [1.1] OZALTIN, T.F. - DERELI, B. - KARAHAN, O. - SALMAN, S. - AVIYENTE, V. Solvent effects on free-radical copolymerization of styrene and 2-hydroxyethyl methacrylate: a DFT study. In NEW JOURNAL OF CHEMISTRY. ISSN 1144-0546, JAN 2014, vol. 38, no. 1, p. 170-178., WOS

ADCB04 CIFRA, Peter - BLEHA, Tomáš. Elastic properties of semi-flexible chains and networks. In Macromolecular Symposia, 2007, vol. 256, p. 105-111. ISSN 1022-1360.

Citácie:

1. [1.1] KAMERLIN, N. - EKHOLM, T. - CARLSSON, T. - ELVINGSON, C. Construction of a closed polymer network for computer simulations. In JOURNAL OF CHEMICAL PHYSICS. ISSN 0021-9606, OCT 21 2014, vol. 141, no. 15., WOS

ADCB05 MOLEFI, J. A. - LUYT, A. S. - *KRUPA, Igor*. Comparison of the influence of Cu micro- and nano-particles on the thermal properties of polyethylene/Cu composites. In Express Polymer Letters, 2009, vol. 3, no.10, p. 639 - 649. ISSN 1788-618X.

Citácie:

1. [1.1] ANITHAMBIGAI, P. - SHANMUGAN, S. - MUTHARASU, D. - ZAHNER, T. - LACEY, D. Study on thermal performance of high power LED employing aluminum filled epoxy composite as thermal interface material. In MICROELECTRONICS JOURNAL. ISSN 0026-2692, DEC 2014, vol. 45, no. 12, p. 1726-1733., WOS

ADCB06 NOVÁK, Igor. Effect of surface pretreatment on wettability of polypropylene. In Journal of Materials Science Letters, 1996, vol. 15, p. 1137-1138.

Citácie:

1. [1.1] NUNTAPICHEDKUL, B. - TANTAYANON, S. - LAOHHASURAYOTIN, K. Practical approach in surface modification of biaxially oriented polypropylene films for gravure printability. In APPLIED SURFACE SCIENCE. ISSN 0169-4332, SEP 30 2014, vol. 314, p. 331-340., WOS

ADDA Vedecké práce v domácich karentovaných časopisoch impaktovaných

ADDA01 BEREK, Dušan - *RUSS, Albert*. Limited sample recovery in coupled methods of high-performance liquid chromatography of synthetic polymers. In Chemical papers, 2006, vol. 60, no. 3, p. 249 - 252. (2006 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADDA02 *BÚCSIOVÁ, Ľubica* - *BÚCSI, Alexander* - HRDLOVIČ, Pavol - CHMELA, Štefan. Characterization of stable nitroxide radicals on the basis of adduct chromophore-hindered amine utilizing EPR spectroscopy in solution and polymer matrix. In Chemical Papers - Chemické zvesti, 2002, vol. 56, iss. 4, p. 275 - 281. ISSN 0366-6352.

Citácie:

1. [1.2] KOKORIN, A.I.- KHRUSTALEV, V.N.- GOLUBEVA, E.N. The structure and EPR behavior of short nitroxide biradicals containing sulfur atom in the bridge. (2014) Applied Magnetic Resonance, 45 (4), p. 397-409. DOI: 10.1007/s00723-014-0528, Scopus

ADDA03 BÚZOVÁ, D. - *KASÁK, Peter* - MIŠKOVSKÝ, P. - JANCURA, D. Solubilization of poorly soluble photosensitizer hypericin by polymeric micelles and polyethylene glycol. In General Physiology and Biophysics, 2013, vol. 32, iss.2, p. 201 - 208. (0.852 - IF2012). (2013 - Current Contents, WOS, SCOPUS). ISSN 0231-5882.

Citácie:

1. [1.1] HE, Z.Y. - CHU, B.Y. - WEI, X.W. - LI, J. - CARL, K.E. - SONG, X.R. - HE, G. - XIE, Y.M. - WEI, Y.Q. - QIAN, Z.Y. Recent development of poly(ethylene glycol)-cholesterol conjugates as drug delivery systems. In INTERNATIONAL JOURNAL OF PHARMACEUTICS. ISSN 0378-5173, JUL 20 2014, vol. 469, no. 1, p. 168-178., WOS

2. [1.2] WANG, R.N.- DING, Y.- ZHOU, J.P. Advances in research of photosensitizer anti-tumor target delivery systems based on photodynamic therapy. (2014) Chinese Journal of New Drugs, 23 (16), p. 1897-1903., Scopus

ADDA04 CAPEK, Ignác - *BARTOŇ, Jaroslav*. Emulsion copolymerization of acrylonitrile and butyl acrylate.3. Effect of the radical scavenger on the kinetics and polymerization behavior. In Chemical Papers - Chemické zvesti, 1986, vol. 40, iss.1, p. 45-60. ISSN 0366-6352.

Citácie:

1. [1.1] BARATA, I. - FONSECA, A.C. - COSTA, C.S.M.F. - FERREIRA, L. - JULIO, E. - COELHO, J.F.J. Insights into the thermo-mechanical properties of

films cast from emulsion terpolymers. In PROGRESS IN ORGANIC COATINGS. ISSN 0300-9440, APR 2014, vol. 77, no. 4, p. 790-797., WOS

ADDA05 CAPEK, Ignác. Emulsion polymerization of butyl acrylate in the presence of hydrophilic seed polymer particles. In Chemical Papers - Chemické zvesti, 1991, vol.45, iss.4, p. 481-497. ISSN 0366-6352.

Citácie:

1. [1.1] MANN, D. - CHATTOPADHYAY, S. - PARGEN, S. - VERHEIJEN, M. - KEUL, H. - BUSKENS, P. - MOLLER, M. Glucose-functionalized polystyrene particles designed for selective deposition of silver on the surface. In RSC ADVANCES. ISSN 2046-2069, 2014, vol. 4, no. 108, p. 62878-62881., WOS

ADDA06 CAPEK, Ignác - *CHUDEJ, Jakub*. On the kinetics of microemulsion copolymerization of acrylonitrile. In Chemické zvesti, 1997, vol. 51, no.3, p. 153 - 160. (0.140 - IF1996). (1997 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.2] HERRERA, J.R.- OVANDO-MEDINA, V.M.- LÓPEZ, R.G.- MENDIZÁBAL, E.- CORTEZ-MAZATÁN, G.Y.- PERALTA, R.D. Kinetics and monomer partitioning during polymerization of vinyl acetate in microemulsions stabilized with AOT and n-butanol. (2014) Colloid and Polymer Science, 293 (2), p. 655-664. DOI: 10.1007/s00396-014-3479-2, Scopus

ADDA07 CAPEK, P. - KARDOŠOVÁ, A. - *LATH, Dieter*. A neutral heteropoly-saccharide from the flowers of Malva mauritiana L. In Chemical Papers - Chemické zvesti, 1999, vol. 53, p. 131-136. (0.140 - IF1998). ISSN 0366-6352.

Citácie:

1. [1.1] Chavan, Sujata; Baig, M. M. V., In: Journal of Pure and Applied Microbiology Volume: 8 Issue: 2 Pages: 1095-1099, WOS

ADDA08 HRACHOVÁ, J. - CHODÁK, Ivan - KOMADEL, Peter. Modification and characterization of montmorillonite fillers used in composites with vulcanized natural rubber. In Chemical papers, 2009, vol. 63, no. 1, p. 55-61. (0.758 - IF2008). (2009 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] ZHANG, Y.D. - XIANG, J.J. - ZHANG, Q. - LIU, Q.F. - FROST, R.L. Influence of kaolinite/carbon black hybridization on combustion and thermal decomposition behaviors of NR composites. In THERMOCHIMICA ACTA. ISSN 0040-6031, JAN 20 2014, vol. 576, p. 39-46., WOS

ADDA09 RYCHLÝ, Jozef - KOCER, A. - TANIS, F. - RYCHLÁ, Lýdia - JANIGOVÁ, Ivica - CSOMOROVÁ, Katarína. Comparison of isothermal and non-isothermal chemiluminescence and differential scanning calorimetry experiments with benzoyl peroxide. In Chemical papers, 2009, vol. 63, no. 4, p. 471 - 478. (0.758 - IF2008). (2009 - Current Contents). ISSN 0366-6352.

Citácie:

1. [1.1] BURNEA, L.C. - ZAHARESCU, T. - DUMITRU, A. - PLESA, I. - CIUPRINA, F. Radiation stability of polypropylene/lead zirconate composites. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, JAN 2014, vol. 94, p. 156-160., WOS

2. [1.1] ZAHARESCU, T. - PLESA, I. - JIPA, S. Improvement in the degradation resistance of LDPE for radiochemical processing. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, JAN 2014, vol. 94, p. 151-155., WOS

3. [1.1] ZAHARESCUA, T. - BORBATH, I. - VEKAS, L. Radiation effects in polyisobutylene succinic anhydride modified with silica and magnetite nanoparticles. In RADIATION PHYSICS AND CHEMISTRY. ISSN 0969-806X, DEC 2014, vol. 105, p. 22-25., WOS

ADEA Vedecké práce v ostatných zahraničných časopisoch impaktovaných

ADEA01 FISZER-KIERZKOWSKA, A. - VYDRA, N. - WYSOCKA-WYCISK, A. - KRONEKOVÁ, Zuzana - JARZAB, M. - LISOWSKA, K. M. - KRAWCZYK, Z. Liposome-based DNA carries may induce cellular stress response and change gene expression pattern in transfected cells. In BMC Molecular Biology, 2011, vol. 12, art.no. 27, p. [9]. (3.188 - IF2010). ISSN 1471-2199.

Citácie:

1. [1.1] GODINHO, B.M.D.C. - MCCARTHY, D.J. - TORRES-FUENTES, C. - BELTRAN, C.J. - MCCARTHY, J. - QUINLAN, A. - OGIER, J.R. - DARCY, R. - O'DRISCOLL, C.M. - CRYAN, J.F. Differential nanotoxicological and neuroinflammatory liabilities of non-viral vectors for RNA interference in the central nervous system. In BIOMATERIALS. ISSN 0142-9612, JAN 2014, vol. 35, no. 1, p. 489-499., WOS

2. [1.2] MURAKAMI, M. Benzo[a]pyrene paradoxically inhibits aryl hydrocarbon receptor activity in EA.hy926 cells after transient transfection. (2014) Teikyo Medical Journal, 37 (1), p. 11-20., Scopus

ADEA02 MOUČKA, Robert - *MRAVČÁKOVÁ, Miroslava* - VILČÁKOVÁ, J - OMASTOVÁ, Mária - SÁHA, P. Electromagnetic absorption efficiency of polypropylene/montmorillonite/polypyrrole nanocomposites. In Materials and Design, 2011, vol. 32, p. 2006 - 2011. (1.694 - IF2010). ISSN 0261-3armila069.

Citácie:

1. [1.1] CAMPOS, R.A.M. - FAEZ, R. - REZENDE, M.C. Synthesis of polypyrrole with anionic surfactants targeting applications such as microwave absorbers. In POLIMEROS-CIENCIA E TECNOLOGIA. ISSN 0104-1428, MAY-JUN 2014, vol. 24, no. 3, p. 351-359., WOS

2. [1.1] FAISAL, M. - KHASIM, S. Ku-band EMI shielding effectiveness and dielectric properties of Polyaniline-Y2O3 composites. In POLYMER SCIENCE SERIES A. ISSN 0965-545X, MAY 2014, vol. 56, no. 3, p. 366-372., WOS

3. [1.1] FAISAL, M. - KHASIM, S. X-band microwave absorption and dielectric properties of polyaniline-yttrium oxide composites. In E-POLYMERS. ISSN 1618-7229, MAY 2014, vol. 14, no. 3., WOS

4. [1.1] GUAN, Y. - ZHANG, B. - TAN, X. - QI, X.M. - BIAN, J. - PENG, F. - SUN, R.G. Organic-inorganic composite films based on modified hemicelluloses with clay nanoplatelets. In ACS SUSTAINABLE CHEMISTRY & ENGINEERING. ISSN 2168-0485, JUL 2014, vol. 2, no. 7, p. 1811-1818., WOS

5. [1.1] WANG, Y. - HUANG, Y. - DING, J. Synthesis and electromagnetic absorption properties of polypyrrole/BaFe12O19-Ni0.8Zn0.2Fe2O4/multi-walled carbon nanotube composites. In MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING. ISSN 1369-8001, OCT 2014, vol. 26, p. 632-641., WOS

6. [1.1] WANG, Y. - HUANG, Y. - DING, J. Synthesis and enhanced electromagnetic absorption properties of polypyrrole-BaFe12O19/Ni0.8Zn0.2Fe2O4 on graphene nanosheet. In SYNTHETIC METALS. ISSN 0379-6779, OCT 2014, vol. 196, p. 125-130., WOS

7. [1.2] DA SILVA RAMÔA, S.D.A.- MERLINI, C.- DE OLIVEIRA BARRA, G.M.- SOARES, B.G. The preparation of montmorillonite/polypyrrole nanocomposites: The effect of surfactant incorporation on the structure and properties [Obtenção de nanocompósitos condutores de montmorilonita/polipirrol: efeito da incorporação do surfactante na estrutura e propriedades]. (2014) Polimeros, 24 (SPEC. ISSUE), p. 57-62., Scopus

8. [1.2] ZHU, S.- CHEN, J.- LI, H.- CAO, Y.- YANG, Y.- FENG, Z. Preparation

and properties of montmorillonite/poly(ethylene glycol) grafted polypropylene/polypropylene nanocomposites. (2014) Applied Clay Science, 87, p. 303-310., Scopus

ADEA03 ROKSTAD, A. M. - BREKKE, O.-L. - STEINKJER, B. - RYAN, L. - HLOUŠKOVÁ, Gabriela - STRAND, B. L. - SKJAK-BRAEK, G. - LACÍK, Igor - ESPEVIK, T. - MOLLNES, T. E. Alginate microbeads are complement compatible, in contrast to polycation containing microcapsules, as revealed in a human whole blood model. In Acta biomaterialia, 2011, vol. 7, p. 2566 - 2578. (4.822 - IF2010). ISSN 1742-7061.

Citácie:

1. [1.1] DE VOS, P. - LAZARJANI, H.A. - PONCELET, D. - FAAS, M.M. Polymers in cell encapsulation from an enveloped cell perspective. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 15-34., WOS

2. [1.1] DE VRIES-VAN MELLE, M.L. - TIHAYA, M.S. - KOPS, N. - KOEVOET, W.J.L.M. - MURPHY, J.M. - VERHAAR, J.A.N. - ALINI, M. - EGLIN, D. - VAN OSCH, G.J.V.M. Chondrogenic differentiation of human bone marrow-derived mesenchymal stem cells in a simulated osteochondral environment is hydrogel dependent. In EUROPEAN CELLS & MATERIALS. ISSN 1473-2262, JAN-JUN 2014, vol. 27, p. 112-123., WOS

3. [1.1] GRYSHKOV, O. - POGOZHYKH, D. - HOFMANN, N. - POGOZHYKH, O. - MUELLER, T. - GLASMACHER, B. Encapsulating non-human Primate Multipotent Stromal cells in alginate via high voltage for cell-based therapies and cryopreservation. In PLOS ONE. ISSN 1932-6203, SEP 26 2014, vol. 9, no. 9., WOS

4. [1.1] GRYSHKOV, O. - POGOZHYKH, D. - ZERNETSCH, H. - HOFMANN, N. - MUELLER, T. - GLASMACHER, B. Process engineering of high voltage alginate encapsulation of mesenchymal stem cells. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, MAR 1 2014, vol. 36, p. 77-83., WOS

5. [1.1] JITRARUCH, S. - DHAWAN, A. - HUGHES, R.D. - FILIPPI, C. - SOONG, D. - PHILIPPEOS, C. - LEHEC, S.C. - HEATON, N.D. - LONGHI, M.S. - MITRY, R.R. Alginate microencapsulated hepatocytes optimised for transplantation in acute liver failure. In PLOS ONE. ISSN 1932-6203, DEC 1 2014, vol. 9, no. 12., WOS

6. [1.1] MAHOU, R. - MEIER, R.P.H. - BUHLER, L.H. - WANDREY, C. Alginate-poly(ethylene glycol) hybrid microspheres for primary cell microencapsulation. In MATERIALS. ISSN 1996-1944, JAN 2014, vol. 7, no. 1, p. 275-286., WOS

7. [1.1] ROTTENSTEINER, U. - SARKER, B. - HEUSINGER, D. - DAFINOVA, D. - RATH, S.N. - BEIER, J.P. - KNESER, U. - HORCH, R.E. - DETSCH, R. - BOCCACCINI, A.R. - ARKUDAS, A. In vitro and in vivo biocompatibility of alginate dialdehyde/gelatin hydrogels with and without nanoscaled bioactive glass for bone tissue engineering applications. In MATERIALS. ISSN 1996-1944, MAR 2014, vol. 7, no. 3, p. 1957-1974., WOS

8. [1.1] SONG, K.D. - YANG, Y.F. - LI, S.X. - WU, M.L. - WU, Y.X. - LIM, M. - LIU, T.Q. In vitro culture and oxygen consumption of NSCs in size-controlled neurospheres of Ca-alginate/gelatin microbead. In MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS. ISSN 0928-4931, JUL 1 2014, vol. 40, p. 197-203., WOS

9. [1.1] SPASOJEVIC, M. - PAREDES-JUAREZ, G.A. - VORENKAMP, J. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Reduction of the inflammatory responses against alginate-poly-l-lysine microcapsules by anti-biofouling surfaces

of PEG-b-PLL diblock copolymers. In PLOS ONE. ISSN 1932-6203, OCT 27 2014, vol. 9, no. 10., WOS

10. [1.2] GIMI, B.- NEMANI, K.V. Advances in alginate gel microencapsulation of therapeutic cells. (2014) Critical Reviews in Biomedical Engineering, 41 (6), p. 469-481., Scopus

11. [1.2] KRISHNAN, R.- ALEXANDER, M.- ROBLES, L.- FOSTER, C.E.- LAKEY, J.R.T. Islet and stem cell encapsulation for clinical transplantation. (2014) Review of Diabetic Studies, 11 (1), p. 84-101. DOI: 10.1900/RDS.2014.11.84, Scopus

ADEB Vedecké práce v ostatných zahraničných časopisoch neimpaktovaných

ADEB01 HUNKELER, D. - *MACKO, Tibor* - BEREK, Dušan. Critical conditions in the liquid chromatography of polymers. In ACS Symposium Series, 1993, vol. 521, p. 90 - 102.

Citácie:

1. [1.1] MALIK, M.I. - PASCH, H. Novel developments in the multidimensional characterization of segmented copolymers. In PROGRESS IN POLYMER SCIENCE. ISSN 0079-6700, JAN 2014, vol. 39, no. 1, p. 87-123., WOS

ADEB02 JANIGOVÁ, Ivica - LEDNICKÝ, F. - JOCHEC MOŠKOVÁ, Daniela - CHODÁK, Ivan. Nanocomposites with biodegradable polycaprolactone matrix. In Macromolecular Symposia, 2011, vol. 301, p. 1-8. ISSN 1022-1360.

Citácie:

1. [1.1] LUDUENA, L.N. - KENNY, J.M. - VAZQUEZ, A. - ALVAREZ, V.A. Effect of extrusion conditions and post-extrusion techniques on the morphology and thermal/mechanical properties of polycaprolactone/clay nanocomposites. In JOURNAL OF COMPOSITE MATERIALS. ISSN 0021-9983, JUL 2014, vol. 48, no. 17, p. 2059-2070., WOS

2. [1.1] NERANTZAKI, M. - PAPAGEORGIOU, G.Z. - BIKIARIS, D.N. Effect of nanofiller's type on the thermal properties and enzymatic degradation of poly(epsilon-caprolactone). In POLYMER DEGRADATION AND STABILITY. ISSN 0141-3910, OCT 2014, vol. 108, SI, p. 257-268., WOS

3. [1.1] SAYYAR, S. - CORNOCK, R. - MURRAY, E. - BEIRNE, S. - OFFICER, D.L. - WALLACE, G.G. Extrusion printed graphene/polycaprolactone/composites for tissue engineering. In ADVANCES IN MATERIALS AND PROCESSING TECHNOLOGIES XV. ISSN 0255-5476, 2014, vol. 773-774, p. 496-502., WOS

4. [1.2] YAHIAOUI, F.- BENHACINE, F.- FERFERA-HARRAR, H.- HABI, A.- HADJ-HAMOU, A.S.- GROHENS, Y. Development of antimicrobial PCL/nanoclay nanocomposite films with enhanced mechanical and water vapor barrier properties for packaging applications. (2014) Polymer Bulletin, 72 (2), p. 235-254. DOI: 10.1007/s00289-014-1269-0, Scopus

ADEB03 NOVÁK, Igor - *FLORIÁN, Štepán*. Investigation of hydrophilicity of polyethylene modofied by electric discharge in the course of aging. In Journal of Materials Science Letters, 2001, vol. 20, p. 1289-1291. (0.496 - IF2000). ISSN 0261-8028.

Citácie:

1. [1.1] PANDIYARAJ, K.N. - DESHMUKH, R.R. - RUZYBAYEV, I. - SHAH, S.I. - SU, P.G. - HALLELUYAH, M. - HALIM, A.S. Influence of non-thermal plasma forming gases on improvement of surface properties of low density polyethylene (LDPE). In APPLIED SURFACE SCIENCE. ISSN 0169-4332, JUL 15 2014, vol. 307, p. 109-119., WOS

ADEB04 POWERS, A. C. - BRIŠŠOVÁ, M. - LACÍK, Igor - ANILKUMAR, A. V. - SHAHROKHI, K. - WANG, T. G. Permeability assessment of capsules for islet

transplantation : Bioartificial organs. In Annals of The New York Academy of Sciences, 1997, vol. 831, p. 208 - 216. ISSN 0077-8923.

Citácie:

1. [1.1] SCHARP, D.W. - MARCHETTI, P. Encapsulated islets for diabetes therapy: History, current progress, and critical issues requiring solution. In ADVANCED DRUG DELIVERY REVIEWS. ISSN 0169-409X, APR 10 2014, vol. 67-68, p. 35-73., WOS

2. [1.1] SPASOJEVIC, M. - BHUJBAL, S. - PAREDES, G. - DE HAAN, B.J. - SCHOUTEN, A.J. - DE VOS, P. Considerations in binding diblock copolymers on hydrophilic alginate beads for providing an immunoprotective membrane. In JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART A. ISSN 1549-3296, JUN 2014, vol. 102, no. 6, p. 1887-1896., WOS

ADEB05 RAHEL, J. - ČERNÁK, M. - HUDEC, I. - ŠTEFEČKA, M. - KANDO, M. - CHODÁK, Ivan. Surface modification of polyester monofilaments by atmospheric-pressure nitrogen plasma. In Plasmas and Polymers, 2000, vol. 5, no. 3 - 4, p. 119 - 127.

Citácie:

1. [1.2] KUSANO, Y. Atmospheric pressure plasma processing for polymer adhesion: A review. (2014) Journal of Adhesion, 90 (9), p. 755-777.DOI: 10.1080/00218464.2013.804407, Scopus

ADEB06 SANTANAKRISHNAN, S. - HUTCHINSON, R. A. - UHELSKÁ, Lucia - *STACH, Marek* - LACÍK, Igor - BUBACK, M.Polymerization kinetics of water-soluble N-vinyl monomers in aqueous and organic solution. In Macromolecular Symposia, 2011, vol. 302, p. 216 - 223. ISSN 1022-1360.

Citácie:

1. [1.1] BARTOSZEK, N. - SAWICKI, P. - KADLUBOWSKI, S. - ULANSKI, P. - ROSIAK, J.M. Determination of propagation rate coefficient for the polymerization of N-vinylpyrrolidone in aqueous solution by pulsed electron polymerization and size exclusion chromatography. In ACS MACRO LETTERS. ISSN 2161-1653, JUL 2014, vol. 3, no. 7, p. 639-642., WOS

ADEB07 ŠOLTÉS, L. - SÉBILLE, B. - TILLEMENT, J. P. - BEREK, Dušan. Study of bilirubin binding in human serum by high-performance liquid chromatography. In Journal of clinical chemistry and clinical biochemistry : Zeitschrift für klinische Chemie und klinische Biochemie, 1989, vol. 27, no. 12, p. 935-939. ISSN 0340-076X.

Citácie:

1. [1.2] HANAI, T. Quantitative in silico chromatography: Computational modelling of molecular interactions. In RSC CHROMATOGRAPHY MONOGRAPHS. ISSN 17577055, 2014, vol. 2014, no. 19, p. 1-353., SCOPUS

ADFA Vedecké práce v ostatných domácich časopisoch impaktovaných

ADFA01 HURAN, J.- VALOVIČ, A. - KUČERA, M. - KLEINOVÁ, Angela - KOVÁČOVÁ, E. - BOHÁČEK, P. - SEKÁČOVÁ, M. Hydrogenated amorphous silicon carbon nitride films prepared by PECVD technology: properties. In Journal of Electrical Engineering, 2012, vol. 65, p. 333-335. (0.370 - IF2011). (2012 - INSPEC, SCOPUS). ISSN 1335-3632.

Citácie:

1. [1.1] IVASHCHENKO, V.I. - KOZAK, A.O. - PORADA, O.K. - IVASHCHENKO, L.A. - SINELNICHENKO, O.K. - LYTVYN, O.S. - TOMILA, T.V. - MALAKHOV, V.J. Characterization of SiCN thin films: Experimental and theoretical investigations. In THIN SOLID FILMS. OCT 31 2014, vol. 569, p. 57-

63., WOS
2. [1.2] Kozak, A.O., Ivashchenko, V.I., Porada, O.K., Ivashchenko, L.A., Tomila, T.V.: Journal of Nano- and Electronic Physics 6 (2014), 04047, SCOPUS

***AEC Vedecké práce v zahraničných recenzovaných vedeckých zborníkoch (aj konferenčných), monografiách**

AEC01 CAMPO, E. M. - ROIG, J. - ROEDER, B. - WENN, D. - MAMOJKA, B. - OMASTOVÁ, Mária - TERENTJEV, E. M. - ESTEVE, J. Nano opto-mechanical systems NOMS as a proposal for tactile displays. In Nano-Opto-Mechanical Systems (NOMS) : Proceedings of SPIE. - Bellingham, USA : SPIE - Int. Soc. Opt. Engineering, 2011, vol. 8107, art.n. 8107OH - p.1-10. ISBN 978-0-81948-717-9. ISSN 0277-786X.

Citácie:
1. [1.1] GARCIA-AMOROS, J. - MARTINEZ, M. - FINKELMANN, H. - VELASCO, D. Photoactuation and thermal isomerisation mechanism of cyanoazobenzene-based liquid crystal elastomers. In PHYSICAL CHEMISTRY CHEMICAL PHYSICS. ISSN 1463-9076, 2014, vol. 16, no. 18, p. 8448-8454., WOS

AECA Vedecké práce v zahraničných recenzovaných zborníkoch a kratšie kapitoly / state v zahraničných vedeckých monografiách alebo vysokoškolských učebniciach

AECA01 MATISOVÁ- RYCHLÁ, Lýdia - RYCHLÝ, Jozef. Inherent relations of chemiluminescence and thermooxidation of polymers. In Advances in Chemistry Series : Polymer Durability, Degradation, Stabilization, and Liftime Prediction, 1996, vol. 249, p. 175 - 193. ISBN 0-8412-3134-6. ISSN 0065-2393.

Citácie:
1. [1.1] LUNGULESCU, M.E. - ZAHARESCU, T. - PLESA, I. - PODINA, C. Thermal and radiation stability of polyolefins modified with silica nanoparticles. In JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS. ISSN 1454-4164, MAY-JUN 2014, vol. 16, no. 5-6, p. 719-725., WOS

***AFHA Abstrakty príspevkov z medzinárodných vedeckých konferenciách poriadaných v SR**

AFHA01 BAŇASOVÁ, Mária - VALACHOVÁ, K. - RYCHLÝ, Jozef - PRIESOLOVÁ, E. - NAGY, M. - JURÁNEK, I. - ŠOLTÉS, L. Scavening and chain-breaking activity of bucillamine on free-radical-mediated degradation of high-molar-mass hyaluronan. In ChemZi : slovenský časopis o chémii pre chemické vzdelávanie, výskum a priemysel, 2011, roč. 7, č.13, s. 205-206. ISSN 1336-7242. VEGA 2/0083/09, VEGA 2/0011/11, VEGA 2/0081/11.

Citácie:
1. [3] OMER, A.M. - TAMER, M. T. - MOHYELDIN, M.S. High-molecular weight of biopolymer. In SCIENCE JOURNAL OF VOLGOGRAD STATE UNIVERSITY : TECHNOLOGY AND INNOVATIONS. ISSN 2305-7815, 2014, vol. 12, no. 3, p. 56-70

Príloha D

Údaje o pedagogickej činnosti organizácie

Semestrálne prednášky:

Prof., RNDr. Ignác Capek, DrSc.
Názov semestr. predmetu: Technológia prípravy materiálov
Počet hodín za semester: 20
Názov katedry a vysokej školy: Trenčianska univerzita Alexandra Dubčeka v Trenčíne, Fakulta priemyselných technológií

RNDr. Peter Cifra, DrSc.
Názov semestr. predmetu: Makromolekulová chémia
Počet hodín za semester: 20
Názov katedry a vysokej školy: Prírodovedecká fakulta UK, 4-5 ročník

Mgr. Juraj Kronek, PhD.
Názov semestr. predmetu: Makromolekulová chémia
Počet hodín za semester: 6
Názov katedry a vysokej školy: Prírodovedecká fakulta UK, 4. ročník

Ing. Igor Lacík, DrSc.
Názov semestr. predmetu: Makromolekulová chémia
Počet hodín za semester: 30
Názov katedry a vysokej školy: Jan Dlugos University Czestochowa, Poľsko

Semestrálne cvičenia:

Mgr. Pavol Námer
Názov semestr. predmetu: cvičenia z fyziky
Počet hodín za semester: 84
Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, pre študentov 1. ročníka

Semináre:

Prof. Ing. Ivan Chodák, DrSc.
Názov semestr. predmetu: Fyzika polymérov – Mechanické vlastnosti
Počet hodín za semester: 2
Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, semináre pre doktorandov

Prof. Ing. Ivan Chodák, DrSc.
Názov semestr. predmetu: Príprava prednášky a prezentácia vedeckých výsledkov
Počet hodín za semester: 2
Názov katedry a vysokej školy: Slovenská technická univerzita v Bratislave, semináre pre doktorandov

Terénne cvičenia:

Ing. Daniela Moravčíková, PhD.
Názov semestr. predmetu: fotoATRP MMA
Počet hodín za semester: 164
Názov katedry a vysokej školy: Univerzita Komenského v Bratislave, vedenie študentky - 2 mesačná letná prax

Ing. Daniela Moravčíková, PhD.
Názov semestr. predmetu: Syntéza a purifikácia morfolínových nukleozidov
Počet hodín za semester: 160
Názov katedry a vysokej školy: Univerzita Komenského v Bratislave, VPS

Individuálne prednášky:

Prof. Ing. Ivan Chodák, DrSc.
Názov semestr. predmetu: Makromolekulová chémia
Počet hodín za semester: 4
Názov katedry a vysokej školy: Fakulta chemickej a potravinárskej technológie STU, pre doktorandov

Ing. Igor Novák, PhD.
Názov semestr. predmetu: Povrchová úprava dreva,
Počet hodín za semester: 2
Názov katedry a vysokej školy: Drevárska fakulta TUZVO, v rámci doktorandských študijných programov

Ing. Igor Novák, PhD.
Názov semestr. predmetu: Povrchové vlastnosti polymérnych a kovových materiálov
Počet hodín za semester: 2
Názov katedry a vysokej školy: Materiálovotechnologická fakulta STU v Trnave, pre 4. ročník štúdia

Ing. Igor Novák, PhD.
Názov semestr. predmetu: Spájanie polymérnych a kovových materiálov lepením
Počet hodín za semester: 2
Názov katedry a vysokej školy: Materiálovotechnologická fakulta STU v Trnave, pre 4. ročník štúdia

Ing. Mária Omastová, DrSc.
Názov semestr. predmetu: Elektricky vodivé polymérne kompozity
Počet hodín za semester: 2
Názov katedry a vysokej školy: Fakulta chemickej a potravinárskej technológie STU, pre doktorandov (1. ročník) - odbor Makromolekulová chémia

Mgr. Zdenko Špitálsky, PhD.
Názov semestr. predmetu: Elektricky vodivé polymérne kompozity
Počet hodín za semester: 2
Názov katedry a vysokej školy: Fakulta chemickej a potravinárskej technológie STU, pre doktorandov - odbor Makromolekulová chémia

Príloha E

Medzinárodná mobilita organizácie

(A) Vyslanie vedeckých pracovníkov do zahraničia na základe dohôd:

Krajina	**D r u h d o h o d y**					
	MAD, KD, VTS		**Medziústavná**		**Ostatné**	
	Meno pracovníka	**Počet dní**	**Meno pracovníka**	**Počet dní**	**Meno pracovníka**	**Počet dní**
Česko	Nikola Bugárová	3	Rastislav Baran	6	Eliška Číková	1
	Ivica Janigová	3	Juraj Kronek	1	Ivan Chodák	1
			Juraj Kronek	5	Ivan Chodák	1
			Juraj Kronek	2	Igor Lacík	1
			Peter Palenčár	91	Igor Lacík	1
			Petra Šrámková	4	Veronika Némethová	2
			Anna Zahoranová	12	Mária Omastová	1
					Filip Rázga	1
					Filip Rázga	1
					Filip Rázga	1
					Alena Šišková	2
					Dominika Vnuková	2
Francúzsko			Klaudia Czaniková	6		
			Ivan Chodák	3		
			Matej Mičušík	6		
			Mária Omastová	7		
Katar			Martin Danko	30		
			Markéta Ilčíková	227		
			Peter Kasák	334		
			Igor Krupa	243		
			Jaroslav Mosnáček	30		
			Zdenko Špitálsky	9		
Lichtenštajsko					Štefan Chmela	3
Litva			Mária Omastová	4		
Nemecko			Josef Bartoš	28		
			Ignác Capek	9		
			Ignác Capek	14		
			Jaroslav Kuliček	19		
			Miroslava Lukešová	28		
			Miroslava Lukešová	27		
			Pavol Námer	7		
			Mária Omastová	4		
			Helena Švajdlenková	91		
			Helena Švajdlenková	28		
			Anna Zahoranová	183		
Poľsko	Martin Danko	4	Juraj Kronek	5		

	Slávka Ďurkáčová	12	Igor Lacík	12		
	Jaroslav Mosnáček	4	Igor Lacík	5		
Portugalsko			Zuzana Benková	30		
Rakúsko					Katarína Borská	1
					Katarína Borská	1
					Katarína Borská	1
					Ivan Chodák	1
					Matej Mičušík	1
					Katarína Mosnáčková	1
					Mária Omastová	1
					Helena Švajdlenková	1
					Helena Švajdlenková	1
					Helena Švajdlenková	1
Rumunsko			Alena Šišková	4		
Srbsko			Nikola Bugárová	5		
			Jaroslav Kuliček	7		
Španielsko			Josef Bartoš	30		
			Helena Švajdlenková	30		
Švajčiarsko			Dušan Račko	365		
Taiwan			Daniela Moravčíková	9		
			Jaroslav Mosnáček	9		
Taliansko					Igor Lacík	2
Turecko			Eliška Číková	4		
			Jaroslav Kuliček	7		
			Alena Šišková	4		
USA			Igor Lacík	6		
			Igor Lacík	5		
			Lucia Uhelská	29		
Počet vyslaní spolu	**5**	**26**	**47**	**2024**	**24**	**30**

(B) Prijatie vedeckých pracovníkov zo zahraničia na základe dohôd:

Krajina	**D r u h d o h o d y**					
	MAD, KD, VTS		**Medziústavná**		**Ostatné**	
	Meno pracovníka	**Počet dní**	**Meno pracovníka**	**Počet dní**	**Meno pracovníka**	**Počet dní**
Belgicko			Stevens E.	14		
Česko	Stejskal J.	5	Cvek M.	30	Mrlík M.	130
	Trchová M.	5	Hanychová L.	2	Omelka L.	1
			Jelínková L.	7	Roda J.	1
			Nedbal J.	5	Stejskal J.	1
			Olejník R.	33		
			Pelka M.	5		
			Prokeš J.	4		
			Reddy P.R.	30		
			Shimoga G.D.	29		
			Stloukal P.	5		
			Stloukal P.	5		
			Tuba E.	30		
			Urbánek P.	30		
			Varga M.	4		
Francúzsko			Ben Sghaier A.	7		
			Ghehimi M.	7		
			Saad A.	7		
			Sghaier A	5		
Kanada					Rooney T.	30
Nemecko	Ehlers D.	14				
	Reuter D.	14				
Poľsko	Baško M.	5				
	Bochenek M.	5				
	Hertlein K.	5				
	Socka M.	5				
Rumunsko	Bele A.	7				
	Dascalu M.	7				
Rusko					Nikitin A.N.	61
Srbsko			Markovic B.T.	5		
			Markovic Z.	5		
Taliansko			Capasso U.	30		
Turecko			Cogal S.	7		
Ukrajina			Budniak M	4	Pidluzhna A.	270
			Grygorchak I.	3		
USA					Shipp D.A.	1
Veľká Británia			Stingelin N.	3		
Počet prijatí spolu	**10**	**72**	**26**	**316**	**8**	**495**

(C) Účasť pracovníkov pracoviska na konferenciách v zahraničí (nezahrnutých v "A"):

Krajina	Názov konferencie	Meno pracovníka	Počet dní
Austrália	IPITA-IXA-CTS 2015	Igor Lacík	11
Bulharsko	Challenges in Science and Technology of Polymer Ma	Alena Šišková	8
Česko	79th PMM Conference: Functional Polymers at Bio-Ma	Igor Lacík	5
		Daniela Moravčíková	5
		Veronika Némethová	5
		Filip Rázga	5
		Dominika Vnuková	5
	APROCHEM 2015	Igor Novák	2
	Biomacromolecular Ionic Systems	Peter Cifra	5
Dánsko	Thermodynamics 2015	Peter Cifra	6
Francúzsko	Eurofillers and Polymer Blends 2015	Ivan Chodák	5
		Jaroslav Kuliček	5
		Marta Malíková	5
		Mária Omastová	5
Nemecko	15th EPF Congress 2015	Ivica Janigová	6
		Zuzana Kroneková	6
		Mária Omastová	6
		Jozef Prachár	6
		Anna Zahoranová	5
	19th JCNS Laboratory Course Neutron Scattering	Miroslava Lukešová	14
	49th IFF Springschool 2015	Josef Bartoš	13
	Nanomechanical Testing Workshop & Hysitron User Me	Marian Valentin	4
	Würzburg Summer School on Supramolecular Nanosyste	Klaudia Czaniková	5
		Petra Šrámková	5
Poľsko	2nd I C on Wood Composites Modification and Machin	Igor Novák	4
	XXIXth I S C Wood – Material of the XXIst Century	Igor Novák	4
Portugalsko	ICCS18	Ivan Chodák	7
Rakúsko	DVS Polymer Meeting 2015	Igor Lacík	4
		Mária Omastová	4
		Marian Valentin	4
	(DVS) Polymer Meeting 2015	Anna Chovancová	4
	165. Österreichische Chemietage	Ivan Chodák	4
		Mária Omastová	5
	DVS Polymer Meeting 2015	Helena Švajdlenková	3
	XXVI. International EPR Seminar 2015	Josef Bartoš	3
		Helena Švajdlenková	3
Rumunsko	3rd CEEPN Workshop	Juraj Kronek	6
	3rd CEEPN Workshop on Polymer Science	Klaudia Czaniková	6
Srbsko	Electrospinning Workshop, MC meeting COST 1206	Eliška Číková	4
		Mária Omastová	4

Španielsko	16th E C on Applicatrion of Surface and Interface	Matej Mičušík	6
Taliansko	ESMI Meeting 2015	Helena Švajdlenková	4
	EUPOC 2015	Marta Malíková	5
	EUPOC 2015	Eliška Číková	5
		Jaroslav Kuliček	5
		Matej Mičušík	5
		Mária Omastová	5
	Frontiers in Polymer Science 2015	Klaudia Czaniková	5
Turecko	COST MP 1105 Workshop on Flame Retardancy Applicat	Mária Omastová	4
	I C on Advances in Composite Materials	Ivan Chodák	5
USA	ISBPPB´2nd Conference	Juraj Kronek	6
	SPIE Optics and Photonics for Sustainable Energy	Angela Kleinová	10
Veľká Británia	CCP5 Annual Meeting 2015	Zuzana Benková	4
Spolu	**33**	**53**	**285**

Vysvetlivky: MAD - medziakademické dohody, KD - kultúrne dohody, VTS - vedecko-technická spolupráca v rámci vládnych dohôd

Skratky použité v tabuľke C:

DVS Polymer Meeting 2015 - Danube Vltava Sava (DVS) Polymer Meeting 2015
ESMI Meeting 2015 - European Soft Matter Infrastructure (ESMI) Meeting 2015
EUPOC 2015 - Europolymer Conference 2015 - Conducting Polymeric Materials - (EUPOC 2015)
ICCS18 - 18th International Conference on Composite Structures ICCS18
(DVS) Polymer Meeting 2015 - Danube Vltava Sava (DVS) Polymer Meeting 2015
15th EPF Congress 2015 - 15th EPF Congress 2015
165. Österreichische Chemietage - 165. Österreichische Chemietage
16th E C on Applicatrion of Surface and Interface - 16th European Conference on Applicatrion of Surface and Interface Analysis ECASIA´15
19th JCNS Laboratory Course Neutron Scattering - 19th JCNS Laboratory Course Neutron Scattering
2nd I C on Wood Composites Modification and Machin - 2nd International Conference on Wood Composites Modification and Machining
3rd CEEPN Workshop - 3rd CEEPN Workshop
3rd CEEPN Workshop on Polymer Science - 3rd CEEPN Workshop on Polymer Science
49th IFF Springschool 2015 - 49th IFF Springschool 2015
79th PMM Conference: Functional Polymers at Bio-Ma - 79th PMM Conference: Functional Polymers at Bio-Material Interfaces
APROCHEM 2015 - APROCHEM 2015
Biomacromolecular Ionic Systems - Biomacromolecular Ionic Systems
CCP5 Annual Meeting 2015 - CCP5 Annual Meeting 2015 - Condensed Phase Simulations: Recent Advances in Theory and Applications
Challenges in Science and Technology of Polymer Ma - Challenges in Science and Technology of Polymer Materials
COST MP 1105 Workshop on Flame Retardancy Applicat - COST MP 1105 Workshop on Flame Retardancy Applications and Related Regulations for Protective Textiles
DVS Polymer Meeting 2015 - Danube Vltava Sava (DVS) Polymer Meeting 2015
Electrospinning Workshop, MC meeting COST 1206 - Electrospinning Workshop, MC meeting COST 1206
EUPOC 2015 - Europolymer Conference 2015 - Conducting Polymeric Materials –(EUPOC 2015)
EUPOC 2015 - Europolymer Conference 2015 - Conducting Polymeric Materials
EUPOC 2015 - Europolymer Conference 2015 - Conducting Polymeric Materials -(EUPOC 2015)
Eurofillers and Polymer Blends 2015 - Eurofillers and Polymer Blends 2015
Frontiers in Polymer Science 2015 - Frontiers in Polymer Science 2015
I C on Advances in Composite Materials - International Conference on Advances in Composite Materials
IPITA-IXA-CTS 2015 - IPITA-IXA-CTS 2015 Joint-Congress f the International Pancreas and Islet Transplant Association, the International Xenotransplantation Association and the Cell Transplant Society
ISBPPB´2nd Conference - ISBPPB´2nd Conference
Nanomechanical Testing Workshop & Hysitron User Me - Nanomechanical Testing Workshop & Hysitron User Meeting

SPIE Optics and Photonics for Sustainable Energy - SPIE Optics and Photonics for Sustainable Energy
Thermodynamics 2015 - Thermodynamics 2015
Würzburg Summer School on Supramolecular Nanosyste - Würzburg Summer School on Supramolecular Nanosystems
XXIXth I S C Wood – Material of the XXIst Century - XXIXth International Scientific Conference Wood – Material of the XXIst Century
XXVI. International EPR Seminar 2015 - XXVI. International EPR Seminar 2015