

Institute of Macromolecular Chemistry of the ASCR, v. v. i.

ASEP Publications

Document types: Impacted Journal Article, Journal Article, Monograph, Monograph Chapter, Proceedings Paper (International conf.), Proceedings Paper (Czech conf.)

Year(s): 2014

Database: ASEP

0428446 - UMCH-V 2015 RIV US eng J - Journal Article

Angelov, Borislav - Angelova, A. - Filippov, Sergey - Drechsler, M. - Štěpánek, Petr - Lesieur, S.
Multicompartment lipid cubic nanoparticles with high protein upload: millisecond dynamics of formation.
ACS Nano. Roč. 8, č. 5 (2014), s. 5216-5226. ISSN 1936-0851

R&D Projects: GA ČR GAP208/10/1600

Institutional Support: RVO:61389013

Keywords: lipid- protein nanoassembly * dynamic membrane curvature * amphiphile nanoarchitectonics

Subject RIV: CF - Physical & Theoretical Chemistry

Impact factor: 12.033, year: 2013

Permanent link: <http://hdl.handle.net/11104/0234397>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0423554 - UMCH-V 2014 RIV DE eng J - Journal Article

Arslan, H. - Pfaff, A. - Lu, Y. - Štěpánek, Petr - Müller, A. H. E.

Stimuli-responsive spherical brushes based on D-galactopyranose and 2-(dimethylamino)ethyl methacrylate.
Macromolecular Bioscience. Roč. 14, č. 1 (2014), s. 81-91. ISSN 1616-5187

R&D Projects: GA ČR GA202/09/2078

Institutional Support: RVO:61389013

Keywords: atom transfer radical polymerization (ATRP) * glycopolymers * LCST

Subject RIV: BO - Biophysics

Impact factor: 3.650, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231646>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0426988 - UMCH-V 2015 CA eng B - Monograph kniha jako celek

Balköse, D. (ed.) - Horák, Daniel (ed.) - Šoltés, L. (ed.)

Key Engineering Materials, Volume 1: Current State of the Art on Novel Materials.
Oakville : Apple Academic Press, 2014. 584 s. ISBN 978-1-926895-73-4

Institutional Support: RVO:61389013

Keywords: engineering materials * functional materials

Subject RIV: CD - Macromolecular Chemistry

<http://www.crcpress.com/product/isbn/9781926895734>

Permanent link: <http://hdl.handle.net/11104/0235228>

0426956 - UMCH-V 2015 RIV GB eng J - Journal Article

Bober, Patrycja - Stejskal, Jaroslav - Trchová, Miroslava - Prokeš, J.

In-situ prepared polyaniline-silver composites: single- and two-step strategies.

Electrochimica acta. Roč. 122, 10 March (2014), s. 259-266. ISSN 0013-4686

R&D Projects: GA ČR(CZ) GA13-00270S

Institutional Support: RVO:61389013

Keywords: composites * conducting polymer * polyaniline

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 4.086, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233402>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0427980 - UMCH-V 2015 RIV US eng J - Journal Article

Bogomolova, Anna - Filippov, Sergey - Starovoytova, Larisa - Angelov, Borislav - Konarev, P. - Sedláček, Ondřej - Hrubý, Martin - Štěpánek, Petr

Study of complex thermosensitive amphiphilic polyoxazolines and their interaction with ionic surfactants. Are hydrophobic, thermosensitive, and hydrophilic moieties equally important?.

Journal of Physical Chemistry B. Roč. 118, č. 18 (2014), s. 4940-4950. ISSN 1520-6106

R&D Projects: GA ČR GAP205/11/1657; GA MPO FR-TI4/625

Not R&D Projects: AV ČR(CZ) M200501201

Institutional Support: RVO:61389013

Keywords: poly(2-alkyl-2-oxazoline) * thermosensitivity * ionic surfactant

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.377, year: 2013

Permanent link: <http://hdl.handle.net/11104/0234082>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0428635 - UMCH-V 2015 RIV DE eng J - Journal Article

Borisova, T. - Krisanova, N. - Borysov, A. - Sivko, R. - Ostapchenko, L. - Babič, Michal - Horák, Daniel

Manipulation of isolated brain nerve terminals by an external magnetic field using D-mannose-coated γ -Fe₂O₃ nano-sized particles and assessment of their effects on glutamate transport.

Beilstein Journal of Nanotechnology. Roč. 5, 4 June (2014), s. 778-788. ISSN 2190-4286

R&D Projects: GA MŠk EE2.3.30.0029; GA MŠk(CZ) ED1.1.00/02.0109

Institutional Support: RVO:61389013

Keywords: extracellular level * γ -Fe₂O₃ * glutamate uptake and release

Subject RIV: CE - Biochemistry

Impact factor: 2.326, year: 2013

Permanent link: <http://hdl.handle.net/11104/0234405>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0427377 - UMCH-V 2015 RIV US eng J - Journal Article

Brunátová, T. - Popelková, Daniela - Wan, W. - Oleynikov, P. - Daniš, S. - Zou, X. - Kužel, R.

Study of titanate nanotubes by X-ray and electron diffraction and electron microscopy.

Materials Characterization. Roč. 87, January (2014), s. 166-171. ISSN 1044-5803

Institutional Support: RVO:61389013

Keywords: computer simulations * transmission electron microscopy * electron diffraction

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 1.925, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235080>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429821 - UMCH-V 2015 RIV US eng J - Journal Article

Ciric-Marjanovic, G. - Mentus, S. - Pašti, I. - Gavrilov, N. - Krstic, J. - Travas-Sejdic, J. - Strover, L. T. - Kopecká, J. - Morávková, Zuzana - Trchová, Miroslava - Stejskal, Jaroslav

Synthesis, characterization, and electrochemistry of nanotubular polypyrrole and polypyrrole-derived carbon nanotubes. *Journal of Physical Chemistry C*. Roč. 118, č. 27 (2014), s. 14770-14784. ISSN 1932-7447

R&D Projects: GA ČR GAP205/12/0911; GA ČR(CZ) GA13-00270S

Institutional Support: RVO:61389013

Keywords: polypyrrole * conductive polymer * nanotubes

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 4.835, year: 2013

Ciric-Marjanovic, G.

Permanent link: <http://hdl.handle.net/11104/0235722>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429249 - UMCH-V 2015 RIV NL eng J - Journal Article

Czernek, Jiří - Brus, Jiří

The covariance of the differences between experimental and theoretical chemical shifts as an aid for assigning two-dimensional heteronuclear correlation solid-state NMR spectra.

Chemical Physics Letters. Roč. 608, 21 July (2014), s. 334-339. ISSN 0009-2614

R&D Projects: GA ČR(CZ) GA14-03636S

Institutional Support: RVO:61389013

Keywords: NMR * DFT * covariance

Subject RIV: CF - Physical & Theoretical Chemistry

Impact factor: 1.991, year: 2013

Czernek, Jiří

Permanent link: <http://hdl.handle.net/11104/0235828>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431000 - UMCH-V 2015 RIV US eng J - Journal Article

de Castro, C. E. - Mattei, B. - Riske, K. A. - Jäger, Eliezer - Jäger, Alessandro - Štěpánek, Petr - Giacomelli, F. C.

Understanding the structural parameters of biocompatible nanoparticles dictating protein fouling.

Langmuir. Roč. 30, č. 32 (2014), s. 9770-9779. ISSN 0743-7463

R&D Projects: GA ČR GAP208/10/1600

Institutional Support: RVO:61389013

Keywords: nanoparticles * light scattering * protein adsorption

Subject RIV: CF - Physical & Theoretical Chemistry

Impact factor: 4.384, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236304>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429950 - UMCH-V 2015 RIV CH eng J - Journal Article

de los Santos Pereira, Andres - Riedel, Tomáš - Brynda, Eduard - Rodriguez-Emmenegger, Cesar

Hierarchical antifouling brushes for biosensing applications.

Sensors and Actuators B - Chemical. Roč. 202, 31 October (2014), s. 1313-1321. ISSN 0925-4005

R&D Projects: GA ČR GAP205/12/1702; GA MŠk(CZ) EE2.3.30.0029; GA MŠk(CZ) ED1.1.00/02.0109

Institutional Support: RVO:61389013

Keywords: hierarchically structured brushes * affinity biosensors * fouling

Subject RIV: CE - Biochemistry

Impact factor: 3.840, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235825>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0420875 - UMCH-V 2014 RIV GB eng J - Journal Article

de los Santos Pereira, Andres - Rodriguez-Emmenegger, Cesar - Surman, František - Riedel, Tomáš - Bologna Alles, A. - Brynda, Eduard

Use of pooled blood plasmas in the assessment of fouling resistance.

RSC Advances. Roč. 4, č. 5 (2014), s. 2318-2321. ISSN 2046-2069

R&D Projects: GA MŠk EE2.3.30.0029; GA ČR GAP106/12/1451; GA ČR GAP205/12/1702; GA MŠk(CZ) ED1.1.00/02.0109

Institutional Support: RVO:61389013

Keywords: blood plasma * fouling * biomaterials

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.708, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231733>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0429952 - UMCH-V 2015 RIV US eng J - Journal Article

Dušek, Karel - Choukourov, A. - Dušková-Smrčková, Miroslava - Biederman, H.

Constrained swelling of polymer networks: characterization of vapor-deposited cross-linked polymer thin films.

Macromolecules. Roč. 47, č. 13 (2014), s. 4417-4427. ISSN 0024-9297

R&D Projects: GA ČR GAP101/12/1306

Institutional Support: RVO:61389013

Keywords: swelling * cross-linked polymer * elasticity

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 5.927, year: 2013

Dušek, Karel

Permanent link: <http://hdl.handle.net/11104/0235153>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0427397 - UMCH-V 2015 RIV NL eng J - Journal Article

Etrych, Tomáš - Šubr, Vladimír - Laga, Richard - Říhová, Blanka - Ulbrich, Karel

Polymer conjugates of doxorubicin bound through an amide and hydrazone bond: impact of the carrier structure onto synergistic action in the treatment of solid tumours.

European Journal of Pharmaceutical Sciences. Roč. 58, 16 July (2014), s. 1-12. ISSN 0928-0987

R&D Projects: GA ČR GAP301/11/0325; GA MŠk EE2.3.30.0029; GA MŠk(CZ) ED1.1.00/02.0109

Institutional Support: RVO:61389013 ; RVO:61388971

Keywords: HPMa copolymer * synergistic effect * doxorubicin

Subject RIV: CE - Biochemistry; FD - Oncology & Hematology

Impact factor: 3.005, year: 2013

Permanent link: <http://hdl.handle.net/11104/0234394>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0428511 - UMCH-V 2015 DE eng M - Monograph chapter

Filippov, Sergey - Franklin, J. M. - Konarev, P. V. - Chytil, Petr - Etrych, Tomáš - Bogomolova, Anna - Dyakonova, M. - Papadakis, C. M. - Radulescu, A. - Ulbrich, Karel - Štěpánek, Petr - Svergun, D. I.

SANS kinetic study of pH degradable polyme micelles intended for controlled drug delivery.

Annual Report 2013. Garching : Heinz Maier-Leibnitz Zentrum, 2014, s. 48-49

Institutional Support: RVO:61389013

Keywords: HPMA * drug delivery * polymer micelles

Subject RIV: CD - Macromolecular Chemistry

Permanent link: <http://hdl.handle.net/11104/0235087>

0425258 - FGU-C 2014 RIV US eng J - Journal Article

Filová, Elena - Brynda, Eduard - Riedel, Tomáš - Chlupáč, Jaroslav - Vandrovcová, Marta - Švindrych, Zdeněk - Lisá, Věra - Houska, Milan - Pirk, J. - Bačáková, Lucie

Improved adhesion and differentiation of endothelial cells on surface-attached fibrin structures containing extracellular matrix proteins.

Journal of Biomedical Materials Research. Part A. Roč. 102, č. 3 (2014), s. 698-712. ISSN 1549-3296

R&D Projects: GA MZd(CZ) NT11270

Institutional Support: RVO:67985823 ; RVO:61389013

Keywords: two-dimensional assembly * fibrin * endothelial cells

Subject RIV: FA - Cardiovascular Diseases incl. Cardiotharic Surgery; CD - Macromolecular Chemistry

Impact factor: 2.841, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231157>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0431595 - FGU-C 2015 RIV NZ eng J - Journal Article

Filová, Elena - Suchý, Tomáš - Sucharda, Zbyněk - Šupová, Monika - Žaloudková, Margit - Balík, Karel - Lisá, Věra - Šlouf, Miroslav - Bačáková, Lucie

Support for the initial attachment, growth and differentiation of MG-63 cells: a comparison between nano-size hydroxyapatite and micro-size hydroxyapatite in composites.

International Journal of Nanomedicine. Roč. 9, č. 1 (2014), s. 3687-3706. ISSN 1178-2013

R&D Projects: GA MZd(CZ) NT13297; GA ČR(CZ) GA106/09/1000; GA MŠk(CZ) ED1.1.00/02.0109

Institutional Support: RVO:67985823 ; RVO:67985891 ; RVO:61389013

Keywords: nanoparticles * hydroxyapatite * osteoblasts * composite materials

Subject RIV: EI - Biotechnology & Bionics

Impact factor: 4.195, year: 2013

Filová, Elena

Permanent link: <http://hdl.handle.net/11104/0236228>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0427703 - UMCH-V 2015 RIV GB eng J - Journal Article

Fulín, P. - Pokorný, D. - Šlouf, Miroslav - Nevoralová, Martina - Vacková, Taťana - Dybal, Jiří - Pilar, Jan

Quantification of structural changes of UHMWPE components in total joint replacements.

BMC Musculoskeletal Disorders. Roč. 15, 28 March (2014), 109_1-109_8. ISSN 1471-2474

R&D Projects: GA TA ČR TA01011406; GA MZd NT12229

Institutional Support: RVO:61389013

Keywords: UHMWPE * oxidative damage * residual radicals

Subject RIV: FI - Traumatology, Orthopedics

Impact factor: 1.898, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233914>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0427491 - UMCH-V 2015 RIV CZ cze J - Journal Article

Fulín, P. - Pokorný, D. - Šlouf, Miroslav - Vacková, Taťana - Dybal, Jiří - Sosna, A.

Vliv sterilizace formaldehydem, gama zářením a etylenoxidem na vlastnosti polyetylenových komponent kloubních náhrad.

[Effect of sterilisation with formaldehyde, gamma irradiation and ethylene oxide on the properties of polyethylene joint replacement components.]

Acta chirurgiae orthopaedicae et traumatologiae Czechoslovaca. Roč. 81, č. 1 (2014), s. 33-39. ISSN 0001-5415

R&D Projects: GA TA ČR TA01011406; GA MZd NT12229

Institutional Support: RVO:61389013

Keywords: UHMWPE * sterilisation * ethylene oxide

Subject RIV: FI - Traumatology, Orthopedics

Impact factor: 0.415, year: 2013

<http://www.achot.cz/detail.php?stat=672>

Permanent link: <http://hdl.handle.net/11104/0233335>

- [SCOPUS](#)
- [WOS](#)

0431082 - UMCH-V 2015 RIV US eng J - Journal Article

Gospodinova, Natalia - Tomšík, Elena - Omelchenko, Olga

J-like liquid-crystalline and crystalline states of polyaniline revealed by thin, highly crystalline, and strongly oriented films.

Journal of Physical Chemistry B. Roč. 118, č. 29 (2014), s. 8901-8904. ISSN 1520-6106

R&D Projects: GA ČR(CZ) GA13-00270S

Institutional Support: RVO:61389013

Keywords: J-aggregates * organic semiconductors * polyaniline

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.377, year: 2013

Gospodinova, Natalia

Permanent link: <http://hdl.handle.net/11104/0235725>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0425554 - UMCH-V 2014 RIV NL eng J - Journal Article

Grama, Silvia - Plichta, Zdeněk - Trchová, Miroslava - Kovářová, Jana - Beneš, Milan J. - Horák, Daniel

Monodisperse macroporous poly(glycidyl methacrylate) microspheres coated with silica: Design, preparation and characterization.

Reactive and Functional Polymers. Roč. 77, April (2014), s. 11-17. ISSN 1381-5148

R&D Projects: GA MŠK EE2.3.30.0029

Institutional Support: RVO:61389013

Keywords: multistep swelling polymerization * poly(glycidyl methacrylate) * poly(2,3-dihydroxypropyl methacrylate)

Subject RIV: CE - Biochemistry

Impact factor: 2.822, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231423>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0427979 - UMCH-V 2015 RIV GB eng J - Journal Article

Grama, Silvia - Boiko, N. - Bilyy, R. - Klyuchivska, O. - Antonyuk, V. - Stoika, R. - Horák, Daniel

Novel fluorescent poly(glycidyl methacrylate) - silica microspheres.

European Polymer Journal. Roč. 56, July (2014), s. 92-104. ISSN 0014-3057

R&D Projects: GA MŠk EE2.3.30.0029; GA MŠk(CZ) ED1.1.00/02.0109

Institutional Support: RVO:61389013

Keywords: microspheres * silica * poly(glycidyl methacrylate)

Subject RIV: CE - Biochemistry

Impact factor: 3.242, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235054>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429252 - UMCH-V 2015 RIV NL eng J - Journal Article

Hajduová, J. - Procházka, K. - Raus, Vladimír - Šlouf, Miroslav - Krzyžánek, Vladislav - Garamus, V. M. - Štěpánek, M.

Structure of polymeric nanoparticles in surfactant-stabilized aqueous dispersions of high-molar-mass hydrophobic graft copolymers.

Colloids and Surfaces. A - Physicochemical and Engineering Aspects. Roč. 456, 20 August (2014), s. 10-17. ISSN 0927-7757

R&D Projects: GA TA ČR TE01020118

Institutional Support: RVO:61389013 ; RVO:68081731

Keywords: nanoprecipitation * graft copolymer * light scattering

Subject RIV: EA - Cell Biology; JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 2.354, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235826>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431088 - UMCH-V 2015 RIV US eng J - Journal Article

He, J. - Chen, J. - Hellwich, K. H. - Hess, M. - Horie, K. - Jones, R. G. - Kahovec, Jaroslav - Kitayama, T. - Kratochvíl, Pavel - Meille, S. V. - Mita, I. - dos Santos, C. - Vert, M. - Vohlídal, J.

Abbreviations of polymer names and guidelines for abbreviating polymer names (IUPAC Recommendations 2014). *Pure and Applied Chemistry*. Roč. 86, č. 6 (2014), s. 1003-1015. ISSN 0033-4545

Institutional Support: RVO:61389013

Keywords: abbreviations * IUPAC Polymer Division * polymer names

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.112, year: 2013

He, J.

Permanent link: <http://hdl.handle.net/11104/0235721>

- [SCOPUS](#)
- [WOS](#)

- [DOI](#)

0427362 - UMCH-V 2015 RIV US eng J - Journal Article

Hnát, J. - Paidar, M. - Schauer, Jan - Bouzek, K.

Polymer anion-selective membrane for electrolytic water splitting: the impact of a liquid electrolyte composition on the process parameters and long-term stability.

International Journal of Hydrogen Energy. Roč. 39, č. 10 (2014), s. 4779-4787. ISSN 0360-3199

Institutional Support: RVO:61389013

Keywords: water electrolysis * alkaline environment * polymer electrolyte

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.930, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233545>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0427446 - UMCH-V 2015 RIV HU eng J - Journal Article

Homzová, K. - Györyová, K. - Bujdošová, Z. - Hudecová, D. - Ganajová, M. - Vargová, Z. - Kovářová, Jana

Synthesis, thermal, spectral and biological properties of zinc(II) 4-hydroxybenzoate complexes.

Journal of Thermal Analysis and Calorimetry. Roč. 116, č. 1 (2014), s. 77-91. ISSN 1388-6150

Institutional Support: RVO:61389013

Keywords: zinc * 4-hydroxybenzoate * thermal

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.206, year: 2013

Homzová, K.

Permanent link: <http://hdl.handle.net/11104/0235084>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0399459 - UMCH-V 2014 RIV SK eng J - Journal Article

Hrdlička, Z. - Kuta, A. - Poreba, Rafal - Špírková, Milena

Polycarbonate-based polyurethane elastomers: temperature-dependence of tensile properties.

Chemical Papers. Roč. 68, č. 2 (2014), s. 233-238. ISSN 0366-6352

R&D Projects: GA ČR GAP108/10/0195

Institutional Support: RVO:61389013

Keywords: polyurethane * elastomer * polycarbonate diol

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 1.193, year: 2013

Permanent link: <http://hdl.handle.net/11104/0226850>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0429004 - UMCH-V 2015 SK eng C - Proceedings Paper (International conf.)

Hrubý, Martin

Smart polymers in drug delivery systems on crossroads: which way deserves following?.

BYPOS Workshop Book. Bratislava : Young Scientists Council of Polymer Institute of Slovak Academy of Sciences, 2014, s. 31-34. ISBN 978-80-970923-5-1.

[Bratislava Young Polymer Scientists Workshop /5./ - BYPOS 2014. Zázrivá (SK), 16.06.2014-20.06.2014]

R&D Projects: GA MPO FR-TI4/625; GA MŠk(CZ) LH14079

Not R&D Projects: AV ČR(CZ) M200501201

Institutional Support: RVO:61389013

Keywords: stimuli-responsive polymers * drug delivery

Subject RIV: CD - Macromolecular Chemistry

Permanent link: <http://hdl.handle.net/11104/0235075>

0428972 - FGU-C 2015 RIV CZ eng J - Journal Article

Chlupáč, Jaroslav - Filová, Elena - Riedel, Tomáš - Houska, Milan - Brynda, Eduard - Remy-Zolghadri, M. - Bareille, R. - Fernandez, P. - Daculsi, R. - Bourget, C. - Bordenave, L. - Bačáková, Lucie

Attachment of Human Endothelial Cells to Polyester Vascular Grafts: Pre-Coating With Adhesive Protein Assemblies and Resistance to Short-Term Shear Stress.

Physiological Research. Roč. 63, č. 2 (2014), s. 167-177. ISSN 0862-8408

R&D Projects: GA ČR(CZ) GAP108/11/1857; GA MZd(CZ) NT11270; GA MŠk(CZ) ED1.1.00/02.0109; GA MŠk(CZ) EE2.3.30.0029

Institutional Support: RVO:67985823 ; RVO:61389013

Keywords: two-dimensional assembly * fibrin * laminin * collagen * endothelial cells

Subject RIV: EI - Biotechnology & Bionics; CD - Macromolecular Chemistry

Impact factor: 1.487, year: 2013

Chlupáč, Jaroslav

Permanent link: <http://hdl.handle.net/11104/0234183>

- [SCOPUS](#)

- [WOS](#)

0431010 - UMCH-V 2015 RIV CH eng J - Journal Article

Choukourov, A. - Melnichuk, I. - Gordeev, I. - Kylián, O. - Hanuš, J. - Kousal, J. - Solař, P. - Hanyková, L. - Brus, Jiří - Slavínská, D. - Biederman, H.

Dynamic scaling and kinetic roughening of poly(ethylene) islands grown by vapor phase deposition.

Thin Solid Films. Roč. 565, 28 August (2014), s. 249-260. ISSN 0040-6090

Institutional Support: RVO:61389013

Keywords: poly(ethylene) * physical vapor deposition * island growth

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 1.867, year: 2013

Choukourov, A.

Permanent link: <http://hdl.handle.net/11104/0236302>

- [SCOPUS](#)

- [WOS](#)

- [DOI](#)

0422351 - UMCH-V 2014 RIV GB eng J - Journal Article

Ilčíková, M. - Mrlík, M. - Sedláček, T. - Chorvát, D. - Krupa, I. - Šlouf, Miroslav - Koynov, K. - Mosnáček, J.
Viscoelastic and photo-actuation studies of composites based on polystyrene-grafted carbon nanotubes and styrene--isoprene-b-styrene block copolymer.

Polymer. Roč. 55, č. 1 (2014), s. 211-218. ISSN 0032-3861

R&D Projects: GA TA ČR TE01020118

Institutional Support: RVO:61389013

Keywords: thermoplastic elastomers * grafting from surface * smart materials

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 3.766, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231297>

- [SCOPUS](#)

- [WOS](#)

- [DOI](#)

- [Result - RIV](#)

0431416 - UCHP-M 2015 CZ eng C - Proceedings Paper (International conf.)

Izák, Pavel - Kačírková, Marie - Vychodilová, Hana - Červenková Šťastná, Lucie - Žitka, Jan - Brožová, Libuše - Storch, Jan - Randová, A. - Hovorka, Š.

Selective Enantiomer Separation by Pertraction.

Final program. Prague : Orgit, 2014, s. 41. ISBN 978-80-02-02555-9.

[International Congress of Chemical and Process Engineering /21./ - CHISA 2014 and Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction /17./ - PRES 2014. Prague (CZ), 23.08.2014-27.08.2014]

R&D Projects: GA ČR(CZ) GAP106/12/0569

Institutional Support: RVO:67985858 ; RVO:61389013

Keywords: enantiomer mixture * chiral room temperature ionic liquids * pertraction

Subject RIV: CI - Industrial Chemistry, Chemical Engineering

Izák, Pavel

Permanent link: <http://hdl.handle.net/11104/0235995>

- [Inst. Repository](#)

0428660 - UMCH-V 2015 RIV GB eng J - Journal Article

Jaisankar, S. N. - Haridharan, N. - Murali, A. - Ponyrko, Sergii - Špírková, Milena - Mandal, A. B. - Matějka, Libor

Single-electron transfer living radical copolymerization of SWCNT-g-PMMA via graft from approach.

Polymer. Roč. 55, č. 13 (2014), s. 2959-2966. ISSN 0032-3861

R&D Projects: GA ČR GAP108/12/1459

Institutional Support: RVO:61389013

Keywords: single electron transfer * single-walled carbon nanotubes * controlled radical polymerization

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.766, year: 2013

Jaisankar, S. N.

Permanent link: <http://hdl.handle.net/11104/0234855>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429911 - UMCH-V 2015 DE eng C - Proceedings Paper (International conf.)

Jůza, Josef - Fortelný, Ivan

Determination of flow-induced coalescence efficiency and effect of matrix elasticity on the rotation of droplet pairs.

Polymertec 2014. Merseburg : University of Applied Sciences Merseburg, 2014, s. 47-50.

[PolyMerTec 2014. Merseburg (DE), 25.06.2014-27.06.2014]

R&D Projects: GA ČR GAP106/11/1069

Institutional Support: RVO:61389013

Keywords: flow-induced coalescence * viscoelasticity * polymer blends

Subject RIV: BK - Fluid Dynamics

Permanent link: <http://hdl.handle.net/11104/0235018>

0429820 - UMCH-V 2015 RIV GB eng J - Journal Article

Kalemba-Jaje, Z. - Drelinkiewicz, A. - Lalik, E. - Konyushenko, Elena - Stejskal, Jaroslav

Bio-esters formation in transesterification and esterification reactions on carbon and silica supported organo-sulfonic acids-polyaniline solid catalysts.

Fuel. Roč. 135, 1 November (2014), s. 130-145. ISSN 0016-2361

Institutional Support: RVO:61389013

Keywords: sulfonic acids * transesterification * triacetin

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.406, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236610>

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0429819 - UMCH-V 2015 RIV NL eng J - Journal Article

Kalendová, A. - Veselý, D. - Kohl, M. - Stejskal, Jaroslav

Effect of surface treatment of pigment particles with polypyrrole and polyaniline phosphate on their corrosion inhibiting properties in organic coatings.

Progress in Organic Coatings. Roč. 77, č. 9 (2014), s. 1465-1483. ISSN 0300-9440

Institutional Support: RVO:61389013

Keywords: conductive polymer * polypyrrole * polyaniline phosphate

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.302, year: 2013

Kalendová, A.

Permanent link: <http://hdl.handle.net/11104/0235151>

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- [WOS](#)
- [DOI](#)

0427365 - UMCH-V 2015 RIV US eng J - Journal Article

Karas, F. - Hnát, J. - Paidar, M. - Schauer, Jan - Bouzek, K.

Determination of the ion-exchange capacity of anion-selective membranes.

International Journal of Hydrogen Energy. Roč. 39, č. 10 (2014), s. 5054-5062. ISSN 0360-3199

Institutional Support: RVO:61389013

Keywords: ion-exchange capacity * anion-selective membranes * titration

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.930, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233546>

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- [WOS](#)
- [DOI](#)

0425217 - UMCH-V 2014 RIV GB eng J - Journal Article

Kobera, Libor - Brus, Jiří - Klein, Petr - Dědeček, Jiří - Urbanová, Martina

Biaxial Q-shearing of ²⁷Al 3QMAS NMR spectra: insight into the structural disorder of framework aluminosilicates.

Solid State Nuclear Magnetic Resonance. 57-58, February-April (2014), s. 29-38. ISSN 0926-2040

R&D Projects: GA ČR(CZ) GA13-24155S; GA AV ČR IAA400400904

Institutional Support: RVO:61389013 ; RVO:61388955

Keywords: ²⁷Al 3QMAS NMR * biaxial shearing * zeolites

Subject RIV: JN - Civil Engineering; CF - Physical & Theoretical Chemistry

Impact factor: 2.864, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231692>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0424745 - UMCH-V 2014 RIV NL eng J - Journal Article

Kohl, M. - Kalendová, A. - Stejskal, Jaroslav

The effect of polyaniline phosphate on mechanical and corrosive properties of protective organic coatings containing high amounts of zinc metal particles.

Progress in Organic Coatings. Roč. 77, č. 2 (2014), s. 512-517. ISSN 0300-9440

R&D Projects: GA ČR(CZ) GA13-00270S

Institutional Support: RVO:61389013

Keywords: conductive polymers * zinc metal * organic coating

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.302, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231644>

- [SCOPUS](#)
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- [DOI](#)
- [Result - RIV](#)

0420696 - UMCH-V 2014 RIV GB eng J - Journal Article

Kopecká, J. - Kopecký, D. - Vrnáta, M. - Fitl, P. - Stejskal, Jaroslav - Trchová, Miroslava - Bober, Patrycja - Morávková, Zuzana - Prokeš, J. - Sapurina, I.

Polypyrrole nanotubes: mechanism of formation.

RSC Advances. Roč. 4, č. 4 (2014), s. 1551-1558. ISSN 2046-2069

R&D Projects: GA ČR(CZ) GA13-08944S

Institutional Support: RVO:61389013

Keywords: conducting polymer * polypyrrole * nanotubes

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.708, year: 2013

Permanent link: <http://hdl.handle.net/11104/0230408>

- [SCOPUS](#)
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- [DOI](#)
- [Result - RIV](#)

0429916 - UMCH-V 2015 DE eng C - Proceedings Paper (International conf.)

Kotek, Jiří - Brus, Jiří - Hodan, Jiří - Policianová, Olivia

Multiscale approach to fracture behaviour of polymeric materials.

Polymertec 2014. Merseburg : University of Applied Sciences Merseburg, 2014, s. 151-154.

[PolyMerTec 2014. Merseburg (DE), 25.06.2014-27.06.2014]

R&D Projects: GA ČR(CZ) GA13-29009S

Institutional Support: RVO:61389013

Keywords: polymeric materials * deformation * fracture

Subject RIV: JI - Composite Materials

Permanent link: <http://hdl.handle.net/11104/0235020>

0430063 - UMCH-V 2015 RIV NL eng J - Journal Article

Koubková, Jana - Müller, P. - Hlídková, Helena - Plichta, Zdeněk - Proks, Vladimír - Vojtěšek, B. - Horák, Daniel

Magnetic poly(glycidyl methacrylate) microspheres for protein capture.

New Biotechnology. Roč. 31, č. 5 (2014), s. 482-491. ISSN 1871-6784

R&D Projects: GA ČR GCP207/12/J013; GA MŠk 7E12053

Not R&D Projects: European Commission(XE) FP-7 NaDiNe No. 246513

Institutional Support: RVO:61389013

Keywords: glycidyl methacrylate * microspheres * protein p53

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.106, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236674>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429259 - UMCH-V 2015 RIV GB eng J - Journal Article

Kratochvíl, Jaroslav - Štuncová, Adriana - Sikora, Antonín - Dybal, Jiří

Fractional complexation in a miscible polymer blend. Calorimetry and size exclusion chromatography.

Polymer International. Roč. 63, č. 8 (2014), s. 1406-1413. ISSN 0959-8103

R&D Projects: GA AV ČR IAA200500903; GA ČR GAP108/12/0703

Institutional Support: RVO:61389013

Keywords: miscible blend * interpolymer complex * residual phase

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.247, year: 2013

Kratochvíl, Jaroslav

Permanent link: <http://hdl.handle.net/11104/0235723>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0424181 - UMCH-V 2014 RIV GB eng J - Journal Article

Kratochvíl, Pavel - Netopilík, Miloš

On the contraction factors of long-chain branched macromolecules.

European Polymer Journal. Roč. 51, February (2014), s. 177-181. ISSN 0014-3057

R&D Projects: GA ČR GCP205/11/J043

Institutional Support: RVO:61389013

Keywords: long-chain branching * contraction factor * radius of gyration

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 3.242, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231724>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)

0429917 - UMCH-V 2015 DE eng C - Proceedings Paper (International conf.)

Kruliš, Zdeněk - Rybníček, J. - Lach, R. - Tondl, D. - Kotek, Jiří - Šlouf, Miroslav - Grellmann, W.

Gamma ray modification of PE-HD to improve toughness.

Polymertec 2014. Merseburg : University of Applied Sciences Merseburg, 2014, s. 520-523.

[PolyMerTec 2014. Merseburg (DE), 25.06.2014-27.06.2014]

Institutional Support: RVO:61389013

Keywords: Gamma ray * polymer blends

Subject RIV: CD - Macromolecular Chemistry

Permanent link: <http://hdl.handle.net/11104/0235021>

0399047 - UMCH-V 2014 RIV NL eng J - Journal Article

Kuan, W.-C. - Horák, Daniel - Plichta, Zdeněk - Lee, W.-C.

Immunocapture of CD133-positive cells from human cancer cell lines by using monodisperse magnetic poly(glycidyl methacrylate) microspheres containing amino groups.

Materials Science & Engineering C-Materials for Biological Applications. Roč. 34, 1 January (2014), s. 193-200. ISSN 0928-4931

R&D Projects: GA ČR GCP207/12/J013

Institutional Support: RVO:61389013

Keywords: magnetic * poly(glycidyl methacrylate) * microspheres

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 2.736, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231723>

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- [DOI](#)
- [Result - RIV](#)

0397918 - UEM-P 2015 RIV US eng J - Journal Article

Kubinová, Šárka - Horák, Daniel - Vaněček, Václav - Plichta, Zdeněk - Proks, Vladimír - Syková, Eva

The use of new surface-modified poly(2-hydroxyethyl methacrylate) hydrogels in tissue engineering: Treatment of the surface with fibronectin subunits versus Ac-CGGASIKVAVS-OH, cysteine, and 2-mercaptoethanol modification.

Journal of Biomedical Materials Research. Part A. Roč. 102, č. 7 (2014), s. 2315-2323. ISSN 1549-3296

R&D Projects: GA ČR GAP304/11/0731; GA ČR GAP304/11/0653; GA ČR GA13-00939S

Institutional Support: RVO:68378041 ; RVO:61389013

Keywords: 2-hydroxyethyl methacrylate * IKVAV (Ile-Lys-Val-Ala-Val) peptide * fibronectin

Subject RIV: FH - Neurology; CD - Macromolecular Chemistry

Impact factor: 2.841, year: 2013

Kubinová, Šárka

Permanent link: <http://hdl.handle.net/11104/0233918>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0428657 - BFU-R 2015 RIV NL eng J - Journal Article

Kuceková, Z. - Humpolíček, P. - Kašpárková, V. - Perečko, Tomáš - Lehocký, M. - Hauerlandova, I. - Saha, P. - Stejskal, Jaroslav

Colloidal polyaniline dispersions: Antibacterial activity, cytotoxicity and neutrophil oxidative burst.

Colloids and Surfaces B-Biointerfaces. Roč. 116, APR 2014 (2014), s. 411-417. ISSN 0927-7765

R&D Projects: GA ČR(CZ) GA13-08944S; GA MŠk(CZ) EE2.3.30.0030

Institutional Support: RVO:68081707

Keywords: Cytotoxicity * Apoptosis * Necrosis

Subject RIV: BO - Biophysics; CD - Macromolecular Chemistry

Impact factor: 4.287, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233967>

- [WOS](#)
- [DOI](#)

0428494 - UMCH-V 2015 RIV GB eng J - Journal Article

Kučerová, Z. - Wakil, W. - Yasin, M. - Yang, Q. - Li, Z.-H. - Hromádková, Jiřina - Kalinović, I. - Opit, G. - Lienhard, Ch.

Morphological and molecular characterization of a Pakistan strain of the stored-product pest *Liposcelis paeta* (Insecta: Psocodea: Liposcelidae) with observations on the variability of the head surface sculpture in liposcelidids.

Journal of Stored Products Research. Roč. 57, April (2014), s. 12-23. ISSN 0022-474X

Institutional Support: RVO:61389013

Keywords: psocids * morphological characteristics * SEM

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 1.491, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233913>

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- [WOS](#)
- [DOI](#)

0425232 - UMCH-V 2014 RIV US eng J - Journal Article

Kunjachan, S. - Pola, Robert - Gremse, F. - Theek, B. - Ehling, J. - Moeckel, D. - Hermanns-Sachweh, B. - Pechar, Michal - Ulbrich, Karel - Hennink, W. E. - Storm, G. - Lederle, W. - Kiessling, F. - Lammers, T.

Passive versus active tumor targeting using RGD- and NGR-modified polymeric nanomedicines.

Nano Letters. Roč. 14, č. 2 (2014), s. 972-981. ISSN 1530-6984

R&D Projects: GA ČR GCP207/12/J030

Institutional Support: RVO:61389013

Keywords: nanomedicine * drug targeting * EPR

Subject RIV: CD - Macromolecular Chemistry

Impact factor: 12.940, year: 2013

Permanent link: <http://hdl.handle.net/11104/0231626>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)
- [Result - RIV](#)