

Direct measurement of the kinetic energy shift between the molecular and atomic M4.5N4.5N4.5 Auger spectra of iodine
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A finite cluster approach to the electron-hole pair damping of the adsorbate vibration: CO adsorbed on Cu(100)

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A Finite Cluster Approach to the Electron-Hole Pair Damping of the Adsorbate Vibration: CO Adsorbed on Cu(100)

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From a localized H₃O radical to a delocalized H₃O⁺••e⁻ solvent-separated pair by sequential hydration

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The Discovery of Compounds That Stimulate the Activity of Kallikrein-Related Peptidase3 (KLK3)

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Chasing charge localization and chemical reactivity following photoionization in liquid water

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Modification of olivomycin A at the side chain of the aglycon yields the derivative with perspective antitumor characteristics

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Conductive layers on surface modified natural fibre based substrates for printed functionality

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Location of the Azobenzene moieties within the cross-linked liquid-crystalline polymers can dictate the direction of photoinduced bending

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Research output: Contribution to journal > Article > Scientific > peer-review

Glycerol mediated synthesis of 5-substituted 1H-tetrazole under catalyst free conditions

Nandre, K. P., Salunke, J. K., Nandre, J. P., Patil, V. S., Borse, A. U. & Bhosale, S. V., Feb 2012, In : Chinese Chemical Letters. 23, 2, p. 161-164 4 p.

Research output: Contribution to journal > Article > Scientific > peer-review

A novel thermotropic elastomer based on highly-filled LDH-SSB composites

Das, A., George, J. J., Kutlu, B., Leuteritz, A., Wang, D. Y., Rooj, S., Jurk, R., Rajeshbabu, R., Stöckelhuber, K. W., Galiatsatos, V. & Heinrich, G., 27 Feb 2012, In : Macromolecular Rapid Communications. 33, 4, p. 337-342 6 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Excited-state polarizability in crystalline sexithiophene: Charge-transfer and vibronic effects

Stradomska, A., Kulig, W., Slawik, M. & Petelenz, P., 9 Mar 2012, In : Chemical Physics Letters. 529, p. 27-30 4 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Highly exfoliated natural rubber/Clay composites by "propping-open procedure": The influence of fatty-acid chain length on exfoliation

Rooj, S., Das, A., Stöckelhuber, K. W., Reuter, U. & Heinrich, G., Apr 2012, In : Macromolecular Materials and Engineering. 297, 4, p. 369-383 15 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Structural characteristics and flammability of fire retarding EPDM/layered double hydroxide (LDH) nanocomposites

Wang, D. Y., Das, A., Leuteritz, A., Mahaling, R. N., Jehnichen, D., Wagenknecht, U. & Heinrich, G., 21 Apr 2012, In : RSC Advances. 2, 9, p. 3927-3933 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Elemental and mixed actinide dioxides: An ab initio study

Ma, L., Atta-Fynn, R. & Ray, A. K., Jun 2012, In : Journal of Theoretical and Computational Chemistry. 11, 3, p. 611-629 19 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Behavior of 4-hydroxynonenal in phospholipid membranes

Vazdar, M., Jurkiewicz, P., Hof, M., Jungwirth, P. & Cwiklik, L., 7 Jun 2012, In : Journal of Physical Chemistry Part B. 116, 22, p. 6411-6415 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Halogen bonding versus hydrogen bonding in driving self-assembly and performance of light-responsive supramolecular polymers

Priimagi, A., Cavallo, G., Forni, A., Gorynsztejń-Leben, M., Kaivola, M., Metrangolo, P., Milani, R., Shishido, A., Pilati, T., Resnati, G. & Terraneo, G., 20 Jun 2012, In : Advanced Functional Materials. 22, 12, p. 2572-2579 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Molecular mechanisms of ion-specific effects on proteins

Rembert, K. B., Paterová, J., Heyda, J., Hilty, C., Jungwirth, P. & Cremer, P. S., 20 Jun 2012, In : Journal of the American Chemical Society. 134, 24, p. 10039-10046 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Accurate description of aqueous carbonate ions: An effective polarization model verified by neutron scattering

Mason, P. E., Wernersson, E. & Jungwirth, P., 19 Jul 2012, In : Journal of Physical Chemistry Part B. 116, 28, p. 8145-8153 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Nematicons in azobenzene liquid crystals

Serak, S. V., Tabiryani, N. V. & Assanto, G., 19 Jul 2012, In : Molecular Crystals and Liquid Crystals. 559, p. 202-213 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Impact of biodiesel application at various blending ratios on passenger cars of different fueling technologies

Kousoulidou, M., Ntziachristos, L., Fontaras, G., Martini, G., Dilara, P. & Samaras, Z., Aug 2012, In : Fuel. 98, p. 88-94 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Solvation and ion-pairing properties of the aqueous sulfate anion: Explicit versus effective electronic polarization

Pegado, L., Marsalek, O., Jungwirth, P. & Wernersson, E., 7 Aug 2012, In : Physical Chemistry Chemical Physics. 14, 29, p. 10248-10257 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends

Kapgate, B. P., Das, C., Das, A., Basu, D., Reuter, U. & Heinrich, G., Sep 2012, In : JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY. 63, 3, p. 501-509 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Affine-response model of molecular solvation of ions: Accurate predictions of asymmetric charging free energies

Bardhan, J. P., Jungwirth, P. & Makowski, L., 28 Sep 2012, In : Journal of Chemical Physics. 137, 12, 124101.

Research output: Contribution to journal › Article › Scientific › peer-review

Biomimetic surface modification of polycarbonateurethane film via phosphorylcholine-graft for resisting platelet adhesion

Gao, W., Feng, Y., Lu, J., Khan, M. & Guo, J., Oct 2012, In : Macromolecular Research. 20, 10, p. 1063-1069 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Kinetics of filler wetting and dispersion in carbon nanotube/rubber composites

Le, H. H., Hoang, X. T., Das, A., Gohs, U., Stoeckelhuber, K. W., Boldt, R., Heinrich, G., Adhikari, R. & Radusch, H. J., Oct 2012, In : Carbon. 50, 12, p. 4543-4556 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Fabrication of ssDNA/oligo(ethylene glycol) monolayers and complex nanostructures by an irradiation-promoted exchange reaction

Khan, M. N., Tjong, V., Chilkoti, A. & Zharnikov, M., 8 Oct 2012, In : Angewandte Chemie (International Edition). 51, 41, p. 10303-10306 4 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Azobenzene photomechanics: Prospects and potential applications

Mahimwalla, Z., Yager, K. G., Mamiya, J. I., Shishido, A., Priimagi, A. & Barrett, C. J., Nov 2012, In : Polymer Bulletin. 69, 8, p. 967-1006 40 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Influence of ionic liquids on the dielectric relaxation behavior of CNT based elastomer nanocomposites

Steinhauser, D., Subramaniam, K., Das, A., Heinrich, G. & Klüppel, M., Nov 2012, In : Express Polymer Letters. 6, 11, p. 927-936 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Superquenching of SYBRGreen dye fluorescence in complex with DNA by gold nanoparticles

Lisitsyna, E. S., Lygo, O. N., Durandin, N. A., Dement'eva, O. V., Rudoi, V. M. & Kuzmin, V. A., Nov 2012, In : HIGH ENERGY CHEMISTRY. 46, 6, p. 363-367 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Transforming anion instability into stability: Contrasting photoionization of three protonation forms of the phosphate ion upon moving into water

Pluhařová, E., Ončák, M., Seidel, R., Schroeder, C., Schroeder, W., Winter, B., Bradforth, S. E., Jungwirth, P. & Slaviček, P., 8 Nov 2012, In : Journal of Physical Chemistry Part B. 116, 44, p. 13254-13264 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Search for global minimum geometries of medium sized Cd_nTe_n clusters (n = 15, 16, 20, 24 and 28)

Ma, L., Wang, J. & Wang, G., 12 Nov 2012, In : Chemical Physics Letters. 552, p. 73-77 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Peptide salt bridge stability: From gas phase via microhydration to bulk water simulations

Pluhařová, E., Marsalek, O., Schmidt, B. & Jungwirth, P., 14 Nov 2012, In : Journal of Chemical Physics. 137, 18, 185101.

Research output: Contribution to journal > Article > Scientific > peer-review

Semiclassical hybrid approach to condensed phase molecular dynamics: Application to the I₂Kr₁₇ cluster

Buchholz, M., Goletz, C. M., Grossmann, F., Schmidt, B., Heyda, J. & Jungwirth, P., 26 Nov 2012, In : Journal of Physical Chemistry A. 116, 46, p. 11199-11210 12 p.

Research output: Contribution to journal > Article > Scientific > peer-review

New reports on anti-bacterial and anti-candidal activities of fatty acid methyl esters (FAME) obtained from *Scenedesmus bijugatus* var. *bicellularis* biomass

Mubarakali, D., Praveenkumar, R., Shenbagavalli, T., Mari Nivetha, T., Parveez Ahamed, A., Al-Dhabi, N. A. & Thajuddin, N., 28 Nov 2012, In : RSC Advances. 2, 30, p. 11552-11556 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Improving the effect of a nanoscale barrier coating on BOPP film properties by surface pretreatments

Lahtinen, K., Lahti, J., Johansson, P., Seppänen, T. & Cameron, D. C., 2013, *14th European PLACE Conference 2013*. TAPPI Press, Vol. 1. p. 469-493 25 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Molecular mechanism of T-cell protein tyrosine phosphatase (TCPTP) activation by mitoxantrone

Ylilauri, M., Mattila, E., Nurminen, E. M., Käpylä, J., Niinivehmas, S. P., Määttä, J. A., Pentikäinen, U., Ivaska, J. & Pentikäinen, O. T., 2013, In : *Biochimica et biophysica acta: proteins and proteomics*. 1834, 10, p. 1988-1997 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

A 'clusters-in-liquid' method for calculating infrared spectra identifies the proton-transfer mode in acidic aqueous solutions

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Research output: Contribution to journal > Article > Scientific > peer-review

A potential nonthrombogenic small-diameter vascular scaffold with polyurethane/poly(ethylene glycol) hybrid materials by electrospinning technique

Wang, H., Feng, Y., Zhao, H., Fang, Z., Khan, M. & Guo, J., Feb 2013, In : Journal Nanoscience and Nanotechnology. 13, 2, p. 1578-1582 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Density functional theory study of FePd_n (n = 2-14) clusters and interactions with small molecules

Ma, L., Wang, J., Hao, Y. & Wang, G., Feb 2013, In : Computational Materials Science. 68, p. 166-173 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Growth behavior and magnetic properties of spherical uranium oxide nanoclusters

Ma, L. & Ray, A. K., Feb 2013, In : Journal of Computational and Theoretical Nanoscience. 10, 2, p. 334-340 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Networking of ionic liquid modified CNTs in SSBR

Subramaniam, K., Das, A., Simon, F. & Heinrich, G., Feb 2013, In : European Polymer Journal. 49, 2, p. 345-352 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals

Fafarman, A. T., Hong, S. H., Caglayan, H., Ye, X., Diroll, B. T., Paik, T., Engheta, N., Murray, C. B. & Kagan, C. R., 13 Feb 2013, In : Nano Letters. 13, 2, p. 350-357 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Aqueous guanidinium-carbonate interactions by molecular dynamics and neutron scattering: Relevance to ion-protein interactions

Vazdar, M., Jungwirth, P. & Mason, P. E., 14 Feb 2013, In : Journal of Physical Chemistry Part B. 117, 6, p. 1844-1848 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Fabrication of a sub-10 nm silicon nanowire based ethanol sensor using block copolymer lithography

Rasappa, S., Borah, D., Faulkner, C. C., Lutz, T., Shaw, M. T., Holmes, J. D. & Morris, M. A., 15 Feb 2013, In : Nanotechnology. 24, 6, 065503.
Research output: Contribution to journal > Article > Scientific > peer-review

Optical vortex generation in nematic liquid crystal light valves

Barboza, R., Bortolozzo, U., Assanto, G. & Residori, S., 1 Mar 2013, In : Molecular Crystals and Liquid Crystals. 572, 1, p. 24-30 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Molecularly functionalized silicon substrates for orientation control of the microphase separation of PS-b-PMMA and PS-b-PDMS block copolymer systems

Borah, D., Ozmen, M., Rasappa, S., Shaw, M. T., Holmes, J. D. & Morris, M. A., 5 Mar 2013, In : Langmuir. 29, 9, p. 2809-2820 12 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Site-specific analysis of dipole polarizabilities of heterogeneous systems: Iron-doped Si_n (n = 1-14) clusters

Ma, L., Wang, J. & Wang, G., 7 Mar 2013, In : Journal of Chemical Physics. 138, 9, 094304.
Research output: Contribution to journal > Article > Scientific > peer-review

Biomimetic zinc chlorin-poly(4-vinylpyridine) assemblies: Doping level dependent emission-absorption regimes

Pale, V., Nikkonen, T., Vapaavuori, J., Kostianen, M., Kavakka, J., Selin, J., Tittonen, I. & Helaja, J., 21 Mar 2013, In : Journal of Materials Chemistry C. 1, 11, p. 2166-2173 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Understanding the reinforcing behavior of expanded clay particles in natural rubber compounds

Rooj, S., Das, A., Stöckelhuber, K. W., Wang, D. Y., Galiatsatos, V. & Heinrich, G., 14 Apr 2013, In : Soft Matter. 9, 14, p. 3798-3808 11 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Nanoindentation study of light-induced softening of supramolecular and covalently functionalized azo polymers

Vapaavuori, J., Mahimwalla, Z., Chromik, R. R., Kaivola, M., Priimagi, A. & Barrett, C. J., 28 Apr 2013, In : Journal of Materials Chemistry C. 1, 16, p. 2806-2810 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Immobilized bioactive agents onto polyurethane surface with heparin and phosphorylcholine group

Tan, M., Feng, Y., Wang, H., Zhang, L., Khan, M., Guo, J., Chen, Q. & Liu, J., May 2013, In : Macromolecular Research. 21, 5, p. 541-549 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Screening pretreatment methods to enhance thermophilic anaerobic digestion of pulp and paper mill wastewater treatment secondary sludge

Bayr, S., Kaparaju, P. & Rintala, J., 1 May 2013, In : Chemical Engineering Journal. 223, p. 479-486 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Depth profiling of PLGA copolymer in a novel biomedical bilayer using confocal raman spectroscopy

McManamon, C., Delaney, P., Kavanagh, C., Wang, J. J., Rasappa, S. & Morris, M. A., 14 May 2013, In : Langmuir. 29, 19, p. 5905-5910 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Surface properties and interaction forces of biopolymer-doped conductive polypyrrole surfaces by atomic force microscopy

Pelto, J. M., Haimi, S. P., Siljander, A. S., Miettinen, S. S., Tappura, K. M., Higgins, M. J. & Wallace, G. G., 21 May 2013, In : Langmuir. 29, 20, p. 6099-6108 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Cation-specific effects on enzymatic catalysis driven by interactions at the tunnel mouth

Štěpánková, V., Paterová, J., Damborský, J., Jungwirth, P., Chaloupková, R. & Heyda, J., 30 May 2013, In : Journal of Physical Chemistry Part B. 117, 21, p. 6394-6402 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Cell toxicity and oxidative potential of engine exhaust particles: Impact of using particulate filter or biodiesel fuel blend

Gerlofs-Nijland, M. E., Totlandsdal, A. I., Tzamkiozis, T., Leseman, D. L. A. C., Samaras, Z., Låg, M., Schwarze, P., Ntziachristos, L. & Cassee, F. R., 4 Jun 2013, In : Environmental Science and Technology. 47, 11, p. 5931-5938 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO)

Gordon, T. R., Paik, T., Klein, D. R., Naik, G. V., Caglayan, H., Boltasseva, A. & Murray, C. B., 12 Jun 2013, In : Nano Letters. 13, 6, p. 2857-2863 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Development and characterization of poly(ϵ -caprolactone) hollow fiber membranes for vascular tissue engineering

Diban, N., Haimi, S., Bolhuis-Versteeg, L., Teixeira, S., Miettinen, S., Poot, A., Grijpma, D. & Stamatialis, D., 1 Jul 2013, In : Journal of Membrane Science. 438, p. 29-37 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Photoswitchable hydrogel surface topographies by polymerisation-induced diffusion

Stumpel, J. E., Liu, D., Broer, D. J. & Schenning, A. P. H. J., 2 Jul 2013, In : Chemistry: A European Journal. 19, 33, p. 10922-10927 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Reversal of the Hofmeister series: Specific ion effects on peptides

Paterová, J., Rembert, K. B., Heyda, J., Kurra, Y., Okur, H. I., Liu, W. R., Hilty, C., Cremer, P. S. & Jungwirth, P., 11 Jul 2013, In : Journal of Physical Chemistry Part B. 117, 27, p. 8150-8158 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Tuning PDMS brush chemistry by UV-O₃ exposure for PS-b-PDMS microphase separation and directed self-assembly

Borah, D., Rasappa, S., Sentharamaiah, R., Holmes, J. D. & Morris, M. A., 16 Jul 2013, In : Langmuir. 29, 28, p. 8959-8968 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Irradiation promoted exchange reaction with disulfide substituents

Khan, M. N. & Zharnikov, M., 18 Jul 2013, In : Journal of Physical Chemistry C. 117, 28, p. 14534-14543 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Mechanisms of acceleration and retardation of water dynamics by ions

Stirnemann, G., Wernersson, E., Jungwirth, P. & Laage, D., 14 Aug 2013, In : Journal of the American Chemical Society. 135, 32, p. 11824-11831 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Spectroscopic study of a DNA brush synthesized in situ by surface initiated enzymatic polymerization

Khan, M. N., Tjong, V., Chilkoti, A. & Zharnikov, M., 29 Aug 2013, In : Journal of Physical Chemistry Part B. 117, 34, p. 9929-9938 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Zinc coordination spheres in protein structures

Laitaoja, M., Valjakka, J. & Jänis, J., 7 Oct 2013, In : Inorganic Chemistry. 52, 19, p. 10983-10991 9 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Importance of the ion-pair interactions in the OPEP coarse-grained force field: Parametrization and validation

Sterpone, F., Nguyen, P. H., Kalimeri, M. & Derreumaux, P., 8 Oct 2013, In : Journal of Chemical Theory and Computation. 9, 10, p. 4574-4584 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Reversible biofunctionalization of surfaces with a switchable mutant of avidin

Pollheimer, P., Taskinen, B., Scherfler, A., Gusenkoy, S., Creus, M., Wiesauer, P., Zauner, D., Schöfberger, W., Schwarzinger, C., Ebner, A., Tampé, R., Stutz, H., Hytönen, V. P. & Gruber, H. J., 16 Oct 2013, In : Bioconjugate Chemistry. 24, 10, p. 1656-1668 13 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Porphyrin adsorbed on the (1010) surface of the wurtzite structure of ZnO-conformation induced effects on the electron transfer characteristics

Niskanen, M., Kuisma, M., Cramariuc, O., Golovanov, V., Hukka, T. I., Tkachenko, N. & Rantala, T. T., 28 Oct 2013, In : Physical Chemistry Chemical Physics. 15, 40, p. 17408-17418 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Embedded cluster models for reactivity of the hydrated electron

Uhlig, F. & Jungwirth, P., Nov 2013, In : ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY AND CHEMICAL PHYSICS. 227, 11, p. 1583-1593 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Soft-graphoepitaxy using nanoimprinted polyhedral oligomeric silsesquioxane substrates for the directed self-Assembly of PS-b-PDMS

Borah, D., Simao, C. D., Senthamarikannan, R., Rasappa, S., Francone, A., Lorret, O., Salaun, M., Kosmala, B., Kehagias, N., Zelsmann, M., Sotomayor-Torres, C. M. & Morris, M. A., Nov 2013, In : European Polymer Journal. 49, 11, p. 3512-3521 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

How conformational flexibility stabilizes the hyperthermophilic elongation factor G-domain

Kalimeri, M., Rahaman, O., Melchionna, S. & Sterpone, F., 7 Nov 2013, In : Journal of Physical Chemistry Part B. 117, 44, p. 13775-13785 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

The Halogen Bond in the Design of Functional Supramolecular Materials: Recent Advances

Priimagi, A., Cavallo, G., Metrangolo, P. & Resnati, G., 19 Nov 2013, In : Accounts of Chemical Research. 46, 11, p. 2686-2695 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Ion pairing in aqueous lithium salt solutions with monovalent and divalent counter-anions

Pluhařová, E., Mason, P. E. & Jungwirth, P., 21 Nov 2013, In : Journal of Physical Chemistry A. 117, 46, p. 11766-11773 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Release of halide ions from the buried active site of the haloalkane dehalogenase LinB revealed by stopped-flow fluorescence analysis and free energy calculations

Hladilkova, J., Prokop, Z., Chaloupkova, R., Damborsky, J. & Jungwirth, P., 21 Nov 2013, In : Journal of Physical Chemistry Part B. 117, 46, p. 14329-14335 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Fabrication of ssDNA/Oligo(ethylene glycol) monolayers and patterns by exchange reaction promoted by ultraviolet light irradiation

Khan, M. N. & Zharnikov, M., 27 Nov 2013, In : Journal of Physical Chemistry C. 117, 47, p. 24883-24893 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Effect of surface morphology of poly(ϵ -caprolactone) scaffolds on adipose stem cell adhesion and proliferation

Diban, N., Haimi, S. P., Bolhuis-Versteeg, L., Teixeira, S., Miettinen, S., Poot, A. A., Grijpma, D. W. & Stamatialis, D., Dec 2013, In : Macromolecular symposia. 334, 1, p. 126-132 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Human adipose stem cells in chondrogenic differentiation medium without growth factors differentiate towards annulus fibrosus phenotype in vitro

Gebraad, A. W. H., Miettinen, S., Grijpma, D. W. & Haimi, S. P., Dec 2013, In : Macromolecular symposia. 334, 1, p. 49-56 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Proliferation and differentiation of adipose stem cells towards smooth muscle cells on poly(trimethylene carbonate) membranes

German, S. J., Behbahani, M., Miettinen, S., Grijpma, D. W. & Haimi, S. P., Dec 2013, In : Macromolecular symposia. 334, 1, p. 133-142 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Location of dispersing agent in rubber nanocomposites during mixing process

Le, H. H., Oßwald, K., Wießner, S., Das, A., Stöckelhuber, K. W., Boldt, R., Gupta, G., Heinrich, G. & Radusch, H. J., 13 Dec 2013, In : Polymer. 54, 26, p. 7009-7021 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Analysis of free, mono- and diacetylated polyamines from human urine by LC-MS/MS

Häkkinen, M. R., Roine, A., Auriola, S., Tuokko, A., Veskimäe, E., Keinänen, T. A., Lehtimäki, T., Oksala, N. & Vepsäläinen, J., 15 Dec 2013, In : JOURNAL OF CHROMATOGRAPHY B: ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES. 941, p. 81-89 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Self-assembly of polystyrene-block-poly(4-vinylpyridine) block copolymer on molecularly functionalized silicon substrates: Fabrication of inorganic nanostructured etchmask for lithographic use

Cummins, C., Borah, D., Rasappa, S., Chaudhari, A., Ghoshal, T., O'Driscoll, B. M. D., Carolan, P., Petkov, N., Holmes, J. D. & Morris, M. A., 21 Dec 2013, In : Journal of Materials Chemistry C. 1, 47, p. 7941-7951 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A full-potential linearized augmented plane wave study of the interaction of CO₂ with α -Pu (020) surface nanolayers

Wang, J. & Ray, A. K., 2014, In : Journal of Computational and Theoretical Nanoscience. 11, 7, p. 1710-1717 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A microscopic view of the mechanisms of active transport across the cellular membrane

Enkavi, G., Li, J., Wen, P., Thangapandian, S., Moradi, M., Jiang, T., Han, W. & Tajkhorshid, E., 2014, In : Annual Reports in Computational Chemistry. 10, p. 77-125 49 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Direct observation of the collapse of the delocalized excess electron in water

Savolainen, J., Uhlig, F., Ahmed, S., Hamm, P. & Jungwirth, P., 2014, In : *Nature Chemistry*. 6, 8, p. 697-701 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of non-rubber components of NR on the carbon nanotube (CNT) localization in SBR/NR blends

Le, H. H., Parsekar, M., Ilisch, S., Henning, S., Das, A., Stöckelhuber, K. W., Beiner, M., Ho, C. A., Adhikari, R., Wießner, S., Heinrich, G. & Radosch, H. J., 2014, In : *Macromolecular Materials and Engineering*. 299, 5, p. 569-582 14 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Fabrication of 3-D nanodimensioned electric double layer capacitor structures using block copolymer templates

Rasappa, S., Borah, D., Sentharamaiah, R., Faulkner, C. C., Holmes, J. D. & Morris, M. A., 2014, In : *Journal of Nanoscience and Nanotechnology*. 14, 7, p. 5221-5227 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Improving the effect of nanoscale barrier coating on BOPP film properties: Influence of substrate contamination, web handling and pretreatments

Lahti, J., Johansson, P., Lahtinen, K., Cameron, D. C. & Seppänen, T., 2014, *TAPPI PLACE Conference 2014*. TAPPI Press, Vol. 2. p. 1039-1061 23 p.
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay

Näreoja, T., Ebner, A., Gruber, H. J., Taskinen, B., Kienberger, F., Hänninen, P. E., Hytönen, V. P., Hinterdorfer, P. & Härmä, H., 2014, In : *Analytical and Bioanalytical Chemistry*. 406, 2, p. 493-503 11 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Magnetic origin of the chemical balance in alloyed Fe-Cr stainless steels: First-principles and Ising model study

Airiskallio, E., Nurmi, E., Väyrynen, I. J., Kokko, K., Ropo, M., Punkkinen, M. P. J., Johansson, B. & Vitos, L., 2014, In : *Computational Materials Science*. 92, p. 135-140 6 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Molekuly a ionty v pohybu: Počítačové simulace biochemických a biofyzikálních procesů

Jungwirth, P., 2014, In : *Chemické Listy*. 108, 4, p. 278-284 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Novel derivatives of bacteriochlorophyll a: Complex formation with albumin and the mechanism of tumor cell photodamage

Akimova, A. V., Grin, M. A., Golovina, G. V., Kokrashvili, T. A., Vinogradov, A. M., Mironov, A. F., Rychkov, G. N., Shtil, A. A., Kuzmin, V. A. & Durandin, N. A., 2014, In : *DOKLADY BIOCHEMISTRY AND BIOPHYSICS*. 454, 1, p. 17-20 4 p.
Research output: Contribution to journal > Article > Scientific > peer-review

pH-dependent deformations of the energy landscape of avidin-like proteins investigated by single molecule force spectroscopy

Köhler, M., Karner, A., Leitner, M., Hytönen, V. P., Kulomaa, M., Hinterdorfer, P. & Ebner, A., 2014, In : *Molecules*. 19, 8, p. 12531-12546 16 p.
Research output: Contribution to journal > Review Article > Scientific > peer-review

Study of the kinetics and mechanism of rapid self-assembly in block copolymer thin films during solvo-microwave annealing

Mokarian-Tabari, P., Cummins, C., Rasappa, S., Simao, C., Torres, C. M. S., Holmes, J. D. & Morris, M. A., 2014, In : *Langmuir*. 30, 35, p. 10728-10739 12 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Natural thermal adaptation increases heat shock protein levels and decreases oxidative stress

Oksala, N. K. J., Ekmekçi, F. G., Özsoy, E., Kirankaya, Ş., Kokkola, T., Emecen, G., Lappalainen, J., Kaarniranta, K. & Atalay, M., 1 Jan 2014, In : *REDOX BIOLOGY*. 3, p. 25-28 4 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Both zundel and eigen isomers contribute to the IR spectrum of the gas-phase H₉O₄ + cluster

Kulig, W. & Agmon, N., 9 Jan 2014, In : Journal of Physical Chemistry Part B. 118, 1, p. 278-286 9 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Azopolymer-based micro- and nanopatterning for photonic applications

Priimagi, A. & Shevchenko, A., 1 Feb 2014, In : Journal of Polymer Science. Part B, Polymer Physics. 52, 3, p. 163-182 20 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Fabrication of ssDNA/oligo(ethylene glycol) monolayers by promoted exchange reaction with thiol and disulfide substituents

Khan, M. N. & Zharnikov, M., 13 Feb 2014, In : Journal of Physical Chemistry C. 118, 6, p. 3093-3101 9 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Deciphering the infrared spectrum of the protonated water pentamer and the hybrid Eigen-Zundel cation

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Research output: Contribution to journal > Article > Scientific > peer-review

Protein conformation as a regulator of cell-matrix adhesion

Hytönen, V. P. & Wehrle-Haller, B., 14 Apr 2014, In : Physical Chemistry Chemical Physics. 16, 14, p. 6342-6357 16 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Microphase mechanism of "superquenching" of luminescent probes in aqueous solutions of DNA and some other polyelectrolytes

Kuzmin, M. G., Soboleva, I. V., Durandin, N. A., Lisitsyna, E. S. & Kuzmin, V. A., 17 Apr 2014, In : Journal of Physical Chemistry Part B. 118, 15, p. 4245-4252 8 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Light-fuelled transport of large dendrimers and proteins

Koskela, J. E., Liljeström, V., Lim, J., Simanek, E. E., Ras, R. H. A., Priimagi, A. & Kostianen, M. A., 14 May 2014, In : Journal of the American Chemical Society. 136, 19, p. 6850-6853 4 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Bioprocessing of enhanced cellulase production from a mutant of Trichoderma asperellum RCK2011 and its application in hydrolysis of cellulose

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Research output: Contribution to journal > Article > Scientific > peer-review

Hydration of the chloride ion in concentrated aqueous solutions using neutron scattering and molecular dynamics

Pluhařová, E., Fischer, H. E., Mason, P. E. & Jungwirth, P., 19 May 2014, In : Molecular Physics. 112, 9-10, p. 1230-1240 11 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Carbon nanotubes-filled thermoplastic polyurethane-urea and carboxylated acrylonitrile butadiene rubber blend nanocomposites

Mahmood, N., Khan, A. U., Stöckelhuber, K. W., Das, A., Jehnichen, D. & Heinrich, G., 5 Jun 2014, In : Journal of Applied Polymer Science. 131, 11
Research output: Contribution to journal > Article > Scientific > peer-review

Surface behavior of hydrated guanidinium and ammonium ions: A comparative study by photoelectron spectroscopy and molecular dynamics

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Accurate description of calcium solvation in concentrated aqueous solutions

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Research output: Contribution to journal › Article › Scientific › peer-review

Performance testing of iron based thermally sprayed HVOF coatings in a biomass-fired fluidised bed boiler

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Research output: Contribution to journal › Article › Scientific › peer-review

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Research output: Contribution to journal › Article › Scientific › peer-review

Effect of silane integrated sol-gel derived in situ silica on the properties of nitrile rubber

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Research output: Contribution to journal › Article › Scientific › peer-review

The role of linked phospholipids in the rubber-filler interaction in carbon nanotube (CNT) filled natural rubber (NR) composites

Le, H. H., Abhijeet, S., Ilisch, S., Klehm, J., Henning, S., Beiner, M., Sarkawi, S. S., Dierkes, W., Das, A., Fischer, D., Stöckelhuber, K. W., Wiessner, S., Khatiwada, S. P., Adhikari, R., Pham, T., Heinrich, G. & Radusch, H. J., 2 Sep 2014, In : Polymer. 55, 18, p. 4738-4747 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Optical spectroscopy of the bulk and interfacial hydrated electron from ab initio calculations

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Recent twists in photoactuation and photoalignment control

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Density functional theory study of transition metals doped B₈₀ fullerene

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Pyrene based conjugated materials: Synthesis, characterization and electroluminescent properties

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Effect of head group size on the photoswitching applications of azobenzene Disperse Red 1 analogues

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Rapid, Brushless Self-assembly of a PS-b-PDMS Block Copolymer for Nanolithography

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Global analysis of human nonreceptor tyrosine kinase specificity using high-density peptide microarrays

Deng, Y., Alicea-Velázquez, N. L., Bannwarth, L., Lehtonen, S. I., Boggon, T. J., Cheng, H. C., Hytönen, V. P. & Turk, B. E., 3 Oct 2014, In : Journal of Proteome Research. 13, 10, p. 4339-4346 8 p.

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Impact of selective catalytic reduction on exhaust particle formation over excess ammonia events

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A supramolecular approach to photoresponsive thermo/solvoplastic block copolymer elastomers

Wang, X., Vapaavuori, J., Zhao, Y. & Bazuin, C. G., 28 Oct 2014, In : Macromolecules. 47, 20, p. 7099-7108 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Electromagnetic interference shielding effectiveness of MWCNT filled poly(ether sulfone) and poly(ether imide) nanocomposites

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Processable aromatic polyesters based on bisphenol derived from cashew nut shell liquid: synthesis and characterization

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Time-resolved fluorescence methods (IUPAC technical report)

Lemmetyinen, H., Tkachenko, N. V., Valeur, B., Hotta, J. I., Ameloot, M., Ernsting, N. P., Gustavsson, T. & Boens, N., 1 Dec 2014, In : Pure and Applied Chemistry. 86, 12, p. 1969-1998 30 p.

Research output: Contribution to journal > Article > Scientific > peer-review

DNA lesion can facilitate base ionization: Vertical ionization energies of aqueous 8-oxoguanine and its nucleoside and nucleotide

Palivec, V., Pluharová, E., Unger, I., Winter, B. & Jungwirth, P., 4 Dec 2014, In : Journal of Physical Chemistry Part B. 118, 48, p. 13833-13837 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Switchavidin: Reversible biotin-avidin-biotin bridges with high affinity and specificity

Taskinen, B., Zauner, D., Lehtonen, S. I., Koskinen, M., Thomson, C., Kähkönen, N., Kukkurainen, S., Määttä, J. A. E., Ihalainen, T. O., Kulomaa, M. S., Gruber, H. J. & Hytönen, V. P., 17 Dec 2014, In : Bioconjugate Chemistry. 25, 12, p. 2233-2243 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Stimuli-responsive photonic polymer coatings

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Research output: Contribution to journal > Review Article > Scientific > peer-review

Ballistic and numerical simulation of impacting goods on conveyor belt rubber

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Research output: Contribution to journal > Article > Scientific > peer-review

Block co-polymers for nanolithography: Rapid microwave annealing for pattern formation on substrates

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Research output: Contribution to journal > Article > Scientific > peer-review

Characterisation of novel regenerated cellulosic, viscose, and cotton fibres and the dyeing properties of fabrics

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Research output: Contribution to journal › Article › Scientific › peer-review

Coulomb explosion during the early stages of the reaction of alkali metals with water

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Research output: Contribution to journal › Article › Scientific › peer-review

Halogen-bonded photoresponsive materials

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Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

Role of the bridge in photoinduced electron transfer in porphyrin-fullerene dyads

Pelado, B., Abou-Chahine, F., Calbo, J., Caballero, R., delaCruz, P., Junquera-Hernández, J. M., Ortí, E., Tkachenko, N. V. & Langa, F., 2015, In : *Chemistry: A European Journal*. 21, 15, p. 5814-5825 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels

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Research output: Contribution to journal › Article › Scientific › peer-review

Synthesis, crystal structure, spectral, dielectric characteristics and conduction mechanism of two novel carboxylates of 1-benzhydrylpiperazine

Wacharine, I., Valkonen, A., Rzaigui, M. & Smirani, W., 2015, In : *Monatshefte fur Chemie*. 146, 12, p. 2007-2020 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Synthesis of fluorescent naphthoquinolizines via intramolecular houben-hoesch reaction

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Research output: Contribution to journal › Article › Scientific › peer-review

Van der Waals interactions are critical in Car-Parrinello molecular dynamics simulations of porphyrin-fullerene dyads

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Research output: Contribution to journal › Article › Scientific › peer-review

Water-responsive dual-coloured photonic polymer coatings based on cholesteric liquid crystals

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π -Expanded α,β -unsaturated ketones: Synthesis, optical properties, and two-photon-induced polymerization

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A comparison of five optical surface topography measurement methods

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Appropriate pricing policy needed worldwide for improving water services infrastructure

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Research output: Contribution to journal > Article > Scientific > peer-review

Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as π -acceptors for anions

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Research output: Contribution to journal > Article > Scientific > peer-review

Photophysical properties of Sn (IV)tetraphenylporphyrin-pyrene dyad with a β -vinyl linker

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Research output: Contribution to journal > Article > Scientific > peer-review

Manipulation of polycarbonate urethane bulk properties via incorporated zwitterionic polynorborene for tissue engineering application

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Research output: Contribution to journal > Article > Scientific > peer-review

Oxidation half-reaction of aqueous nucleosides and nucleotides via photoelectron spectroscopy augmented by ab initio calculations

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Second-Harmonic Generation from Metal Nanoparticles: Resonance Enhancement versus Particle Geometry

Czaplicki, R., Mäkitalo, J., Siikanen, R., Husu, H., Lehtolahti, J., Kuitinen, M. & Kauranen, M., 14 Jan 2015, In : Nano Letters. 15, 1, p. 530-534 5 p.

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Kinetics of polymer looping with macromolecular crowding: Effects of volume fraction and crowder size

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Non-universal tracer diffusion in crowded media of non-inert obstacles

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Research output: Contribution to journal > Article > Scientific > peer-review

Rational design of a printable, highly conductive silicone-based electrically conductive adhesive for stretchable radio-frequency antennas

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Silver sulfide nanoclusters and the superatom model

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Research output: Contribution to journal > Article > Scientific > peer-review

Supramolecular hierarchy among halogen and hydrogen bond donors in light-induced surface patterning

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Sulfonated polyetheretherketone/polypropylene polymer blends for the production of photoactive materials

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Second-harmonic generation imaging of semiconductor nanowires with focused vector beams

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Encapsulation of secondary and tertiary ammonium salts by resorcinarenes and pyrogallarenes: The effect of size and charge concentration

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Neutralized chimeric avidin binding at a reference biosensor surface

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Polymer looping is controlled by macromolecular crowding, spatial confinement, and chain stiffness

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Crystal structure of 2-methylpiperazine-1,4-dium bis(hydrogen maleate)

Wecharine, I., Valkonen, A., Rzaigui, M., Sta, W. S. & Smith, G., 1 Mar 2015, In : *Acta Crystallographica Section E : Structure Reports Online*. 71, 3, p. o193-o194
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Exploring the role of stearic acid in modified zinc aluminum layered double hydroxides and their acrylonitrile butadiene rubber nanocomposites

Eshwaran, S. B., Basu, D., Vaikuntam, S. R., Kutlu, B., Wiessner, S., Das, A., Naskar, K. & Heinrich, G., 1 Mar 2015, In : *Journal of Applied Polymer Science*. 132, 9, 41539.
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Resveratrol interferes with the aggregation of membrane-bound human-IAPP: A molecular dynamics study

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Synthesis, characterization and solid-state photoluminescence studies of six alkoxy phenylene ethynylene dinuclear palladium(II) rods

Figueira, J., Czardybon, W., Mesquita, J. C., Rodrigues, J., Lahoz, F., Russo, L., Valkonen, A. & Rissanen, K., 7 Mar 2015, In : *DALTON TRANSACTIONS*. 44, 9, p. 4003-4015 13 p.
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New perspectives on proton pumping in cellular respiration

Wikström, M., Sharma, V., Kaila, V. R. I., Hosler, J. P. & Hummer, G., 11 Mar 2015, In : *Chemical Reviews*. 115, 5, p. 2196-2221 26 p.
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CO oxidation catalyzed by neutral and anionic Cu₂₀ clusters: Relationship between charge and activity

Ma, L., Melander, M., Laasonen, K. & Akola, J., 14 Mar 2015, In : Physical Chemistry Chemical Physics. 17, 10, p. 7067-7076 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Oxidation of the GaAs semiconductor at the Al₂O₃/GaAs junction

Tuominen, M., Yasir, M., Lång, J., Dahl, J., Kuzmin, M., Mäkelä, J., Punkkinen, M., Laukkanen, P., Kokko, K., Schulte, K., Punkkinen, R., Korpijärvi, V-M., Polojärvi, V. & Guina, M., 14 Mar 2015, In : Physical Chemistry Chemical Physics. 17, 10, p. 7060-7066 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a KCl-K₂SO₄ salt mixture

Varis, T., Bankiewicz, D., Yrjas, P., Oksa, M., Suhonen, T., Tuurna, S., Ruusuvoori, K. & Holmström, S., 15 Mar 2015, In : Surface and Coatings Technology. 265, p. 235-243 9 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Tribology of HVOF- and HVOF-sprayed WC-10Co4Cr hardmetal coatings: A comparative assessment

Bolelli, G., Berger, L. M., Börner, T., Koivuluoto, H., Lusvardi, L., Lyphout, C., Markocsan, N., Matikainen, V., Nylén, P., Sassatelli, P., Trache, R. & Vuoristo, P., 15 Mar 2015, In : Surface and Coatings Technology. 265, p. 125-144 20 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Effects of fresh lubricant oils on particle emissions emitted by a modern gasoline direct injection passenger car

Pirjola, L., Karjalainen, P., Heikkilä, J., Saari, S., Tzamkiozis, T., Ntziachristos, L., Kulmala, K., Keskinen, J. & Rönkkö, T., 17 Mar 2015, In : Environmental Science and Technology. 49, 6, p. 3644-3652 9 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Effect of rheological properties of dissolved cellulose/microfibrillated cellulose blend suspensions on film forming

Saarikoski, E., Rissanen, M. & Seppälä, J., 30 Mar 2015, In : Carbohydrate Polymers. 119, p. 62-70 9 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Oxidation of cholesterol does not alter significantly its uptake into high-density lipoprotein particles

Karilainen, T., Timr, Š., Vattulainen, I. & Jungwirth, P., 2 Apr 2015, In : Journal of Physical Chemistry Part B. 119, 13, p. 4594-4600 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Rate constant and thermochemistry for K + O₂ + N₂ = KO₂ + N₂

Sorvajärvi, T., Viljanen, J., Toivonen, J., Marshall, P. & Glarborg, P., 9 Apr 2015, In : Journal of Physical Chemistry A. 119, 14, p. 3329-3336 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Workplace performance of a loose-fitting powered air purifying respirator during nanoparticle synthesis

Koivisto, A. J., Aromaa, M., Koponen, I. K., Fransman, W., Jensen, K. A., Mäkelä, J. M. & Hämeri, K. J., 9 Apr 2015, In : Journal of Nanoparticle Research. 17, 4

Research output: Contribution to journal > Article > Scientific > peer-review

Ergodicity breaking and particle spreading in noisy heterogeneous diffusion processes

Cherstvy, A. G. & Metzler, R., 14 Apr 2015, In : Journal of Chemical Physics. 142, 14, 144105.

Research output: Contribution to journal > Article > Scientific > peer-review

Energy degradation in photoexcited complexes of indocarbocyanine with albumin

Kuzmin, V. A., Durandin, N. A., Lisitsyna, E. S., Litvinkova, L. V., Nekipelova, T. D., Podrugina, T. A., Matveeva, E. D., Proskurnina, M. V. & Zefirov, N. S., 1 May 2015, In : HIGH ENERGY CHEMISTRY. 49, 3, p. 211-212 2 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Multistep reactions of water with small Pd_n clusters: A first principles study

Liang, Y., Ma, L., Wang, J. & Wang, G., 1 May 2015, In : Journal of Theoretical and Computational Chemistry. 14, 3, 1550017.

Research output: Contribution to journal › Article › Scientific › peer-review

Modeling photoionization of aqueous DNA and its components

Pluhařová, E., Slavíček, P. & Jungwirth, P., 19 May 2015, In : Accounts of Chemical Research. 48, 5, p. 1209-1217 9 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Effect of melting state on the thermal shock resistance and thermal conductivity of APS ZrO₂-7.5wt.% Y₂O₃ coatings

Song, X., Liu, Z., Suhonen, T., Varis, T., Huang, L., Zheng, X. & Zeng, Y., 25 May 2015, In : Surface and Coatings Technology. 270, p. 132-138 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Hydration of hydroxyl and amino groups examined by molecular dynamics and neutron scattering

Hladílková, J., Fischer, H. E., Jungwirth, P. & Mason, P. E., 28 May 2015, In : Journal of Physical Chemistry Part B. 119, 21, p. 6357-6365 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Spectral and kinetic characteristics of indotricarbocyanine complexation with albumin

Kuz'min, V. A., Durandin, N. A., Lisitsyna, E. S., Nekipelova, T. D., Podrugina, T. A., Matveeva, E. D., Proskurnina, M. V. & Zefirov, N. S., 28 May 2015, In : DOKLADY PHYSICAL CHEMISTRY. 462, 1, p. 107-109 3 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A facile route to synthesis of S-doped TiO₂ nanoparticles for photocatalytic activity

McManamon, C., O'Connell, J., Delaney, P., Rasappa, S., Holmes, J. D. & Morris, M. A., 30 May 2015, In : Journal of Molecular Catalysis A: Chemical. 406, p. 51-57!

Research output: Contribution to journal › Article › Scientific › peer-review

Equipment for obtaining polymeric nanofibres by electrospinning technology: II. The obtaining of polymeric nanofibers

Manea, L. R., Cramariuc, B., Popescu, V., Cramariuc, R., Sandu, I. & Cramariuc, O., 1 Jun 2015, In : Materiale Plastice. 52, 2, p. 180-185 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

La thérapie photodynamique: État de l'art et perspectives

Frochot, C., Barberi-Heyob, M., Blanchard-Desce, M., Bolotine, L., Bonneau, S., Jimenez, C. M., Durand, J. O., Lassalle, H. P., Lemerrier, G., Mordon, S., Maillard, P., Sol, V., Vever-Bizet, C. & Vicendo, P., 1 Jun 2015, In : ACTUALITE CHIMIQUE. 397-398, p. 46-50 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Photodiagnostic et chirurgie guidés par la fluorescence

Mordon, S. & Bourg-Heckly, G., 1 Jun 2015, In : ACTUALITE CHIMIQUE. 397-398, p. 41-45 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Polymorph crystal packing effects on charge transfer emission in the solid state

He, X., Benniston, A. C., Saarenpää, H., Lemmetyinen, H., Tkachenko, N. V. & Baisch, U., 1 Jun 2015, In : Chemical Science. 6, 6, p. 3525-3532 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned pass substrates fabricated by nanoimprint lithography

Borah, D., Rasappa, S., Salaun, M., Zellsman, M., Lorret, O., Lontos, G., Ntetsikas, K., Avgeropoulos, A. & Morris, M. A., 1 Jun 2015, In : Advanced Functional Materials. 25, 22, p. 3425-3432 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

PEGylated liposomes as carriers of hydrophobic porphyrins

Dzieciuch, M., Rissanen, S., Szydłowska, N., Bunker, A., Kumorek, M., Jamróz, D., Vattulainen, I., Nowakowska, M., Róg, T. & Kepczynski, M., 4 Jun 2015, In : Journal of Physical Chemistry Part B. 119, 22, p. 6646-6657 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Inverted critical adsorption of polyelectrolytes in confinement

De Carvalho, S. J., Metzler, R. & Cherstvy, A. G., 14 Jun 2015, In : *Soft Matter*. 11, 22, p. 4430-4443 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Catalytic effect of Ca and K on CO₂ gasification of spruce wood char

Perander, M., DeMartini, N., Brink, A., Kramb, J., Karlström, O., Hemming, J., Moilanen, A., Konttinen, J. & Hupa, M., 15 Jun 2015, In : *Fuel*. 150, p. 464-472 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Synthesis and Photophysical Properties of Two Diazaporphyrin-Porphyrin Hetero Dimers in Polar and Nonpolar Solutions

Abou-Chahine, F., Fujii, D., Imahori, H., Nakano, H., Tkachenko, N. V., Matano, Y. & Lemmetyinen, H., 18 Jun 2015, In : *Journal of Physical Chemistry Part B*. 119, 24, p. 7328-7337 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A comparison of rheology and FTIR in the study of polypropylene and polystyrene photodegradation

Mylläri, V., Ruoko, T-P. & Syrjälä, S., 1 Jul 2015, In : *Journal of Applied Polymer Science*. 132, 28, 6 p., 42246.

Research output: Contribution to journal › Article › Scientific › peer-review

On the biomaterials for nanostructured ocular therapeutics

Zorzi, G. K., Párraga, J. E., Seijo, B. & Sánchez, A., 1 Jul 2015, In : *Current Organic Chemistry*. 19, 15, p. 1443-1459 17 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Optimal emission enhancement in orthogonal double-pulse laser-induced breakdown spectroscopy

Sanginés, R., Contreras, V., Sobral, H. & Robledo-Martinez, A., 6 Jul 2015, In : *Spectrochimica Acta Part B: Atomic Spectroscopy*. 110, p. 139-145 7 p., 4935.

Research output: Contribution to journal › Article › Scientific › peer-review

Synthesis and study of electrochemical and optical properties of substituted perylenemonoimides in solutions and on solid surfaces

Ahmed, Z., George, L., Hiltunen, A., Lemmetyinen, H., Hukka, T. & Efimov, A., 7 Jul 2015, In : *Journal of Materials Chemistry A*. 3, 25, p. 13332-13339 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene): poly(styrene sulfonate) films with added graphene

Isoniemi, T., Tuukkanen, S., Cameron, D. C., Simonen, J. & Toppari, J. J., 9 Jul 2015, In : *Organic Electronics*. 25, p. 317-323 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Lithography-free oxide patterns as templates for self-catalyzed growth of highly uniform GaAs nanowires on Si(111)

Hakkarainen, T. V., Schramm, A., Mäkelä, J., Laukkanen, P. & Guina, M., 18 Jul 2015, In : *Nanotechnology*. 26, 27, 275301.

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Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration

Çetinkaya, A. Y., Koroğlu, E. O., Demir, N. M., Baysoy, D. Y., Özkaya, B. & Çakmakçı, M., 20 Jul 2015, In : *Chinese Journal of Catalysis*. 36, 7, p. 1068-1076 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Photoinduced Electron Transfer in CdSe/ZnS Quantum Dot-Fullerene Hybrids

Virkki, K., Demir, S., Lemmetyinen, H. & Tkachenko, N. V., 23 Jul 2015, In : *Journal of Physical Chemistry C*. 119, 31, p. 17561-17572 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Role of Internal Water on Protein Thermal Stability: The Case of Homologous G Domains

Rahaman, O., Kalimeri, M., Melchionna, S., Hénin, J. & Sterpone, F., 23 Jul 2015, In : Journal of Physical Chemistry Part B. 119, 29, p. 8939-8949 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Quantifying non-ergodic dynamics of force-free granular gases

Bodrova, A., Chechkin, A. V., Cherstvy, A. G. & Metzler, R., 27 Jul 2015, In : Physical Chemistry Chemical Physics. 17, 34, p. 21791-21798 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

High quality sub-10 nm graphene nanoribbons by on-chip PS-b-PDMS block copolymer lithography

Rasappa, S., Caridad, J. M., Schulte, L., Cagliani, A., Borah, D., Morris, M. A., Bøggild, P. & Ndoni, S., 29 Jul 2015, In : RSC Advances. 5, 82, p. 66711-66717 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Nonlinear Optical Properties of Fluorescent Dyes Allow for Accurate Determination of Their Molecular Orientations in Phospholipid Membranes

Timr, Š., Brabec, J., Bondar, A., Ryba, T., Železný, M., Lazar, J. & Jungwirth, P., 30 Jul 2015, In : Journal of Physical Chemistry Part B. 119, 30, p. 9706-9716 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Responsive Polymer Photonics

Stumpel, J. E., 1 Aug 2015, In : Chemistryopen. 4, 4, p. 533-535 3 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Formation and stability of carbon nanotube network in natural rubber: Effect of non-rubber components

Le, H. H., Pham, T., Henning, S., Klehm, J., Wießner, S., Stöckelhuber, K. W., Das, A., Hoang, X. T., Do, Q. K., Wu, M., Vennemann, N., Heinrich, G. & Radusch, H. J., 5 Aug 2015, In : Polymer. 73, p. 111-121 11 p., 18004.

Research output: Contribution to journal > Article > Scientific > peer-review

Effect of Phosphatidic Acid on Biomembrane: Experimental and Molecular Dynamics Simulations Study

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Research output: Contribution to journal > Article > Scientific > peer-review

Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials: implications for testing and risk assessment

Levin, M., Rojas, E., Vanhala, E., Vippola, M., Liguori, B., Kling, K. I., Koponen, I. K., Mølhav, K., Tuomi, T., Gregurec, D., Moya, S. & Jensen, K. A., 14 Aug 2015, In : Journal of Nanoparticle Research. 17, 8, 337.

Research output: Contribution to journal > Article > Scientific > peer-review

Electrospun Black Titania Nanofibers: Influence of Hydrogen Plasma-Induced Disorder on the Electronic Structure and Photoelectrochemical Performance

Lepcha, A., Maccato, C., Mettenbörger, A., Andreu, T., Mayrhofer, L., Walter, M., Olthof, S., Ruoko, T. P., Klein, A., Moseler, M., Meerholz, K., Morante, J. R., Barreca, D. & Mathur, S., 20 Aug 2015, In : Journal of Physical Chemistry C. 119, 33, p. 18835-18842 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Effects of thinning and heating for TiO₂/AlInP junctions

Mäkelä, J., Tuominen, M., Yasir, M., Polojärvi, V., Aho, A., Tukiainen, A., Kuzmin, M., Punkkinen, M. P. J., Laukkanen, P., Kokko, K. & Guina, M., 24 Aug 2015, In : Journal of Electron Spectroscopy and Related Phenomena. 205, p. 6-9 4 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Fe₂O₃-TiO₂ nanosystems by a hybrid PE-CVD/ALD approach: controllable synthesis, growth mechanism, and photocatalytic properties

Barreca, D., Carraro, G., Warwick, M. E. A., Kaunisto, K., Gasparotto, A., Gombac, V., Sada, C., Turner, S., Van Tendeloo, G., Maccato, C. & Fornasiero, P., 28 Aug 2015, In : CrystEngComm. 17, 32, p. 6219-6226 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

How large are nonadiabatic effects in atomic and diatomic systems?

Yang, Y., Kylänpää, I., Tubman, N. M., Krogel, J. T., Hammes-Schiffer, S. & Ceperley, D. M., Sep 2015, In : Journal of Chemical Physics. 143, 12, 124308.

Research output: Contribution to journal › Article › Scientific › peer-review

Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel

Bajamundi, C. J. E., Vainikka, P., Hedman, M., Silvennoinen, J., Heinanen, T., Taipale, R. & Konttinen, J., 1 Sep 2015, In : Fuel. 155, p. 25-36 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Unintentional boron contamination of MBE-grown GaInP/AlGaInP quantum wells

Tukiainen, A., Likonen, J., Toikkanen, L. & Leinonen, T., 1 Sep 2015, In : Journal of Crystal Growth. 425, p. 60-63

Research output: Contribution to journal › Article › Scientific › peer-review

Measuring synthesis yield in graphene oxide synthesis by modified hummers method

Frankberg, E. J., George, L., Efimov, A., Honkanen, M., Pessi, J. & Levänen, E., 2 Sep 2015, In : Fullerenes Nanotubes and Carbon Nanostructures. 23, 9, p. 755-759 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Molecular Design of Light-Responsive Hydrogels, for in Situ Generation of Fast and Reversible Valves for Microfluidic Applications

Ter Schiphorst, J., Coleman, S., Stumpel, J. E., Ben Azouz, A., Diamond, D. & Schenning, A. P. H. J., 8 Sep 2015, In : Chemistry of Materials. 27, 17, p. 5925-5931 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Superatom Model for Ag-S Nanocluster with Delocalized Electrons

Goh, J. Q. & Akola, J., 10 Sep 2015, In : Journal of Physical Chemistry C. 119, 36, p. 21165-21172 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Effect of spraying parameters on the microstructural and corrosion properties of HVOF-sprayed Fe-Cr-Ni-B-C coatings

Milanti, A., Matikainen, V., Koivuluoto, H., Bolelli, G., Lusvardi, L. & Vuoristo, P., 15 Sep 2015, In : Surface and Coatings Technology. 277, p. 81-90 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Construction of an Interconnected Nanostructured Carbon Black Network: Development of Highly Stretchable and Robust Elastomeric Conductors

Bhagavatheswaran, E. S., Parsekar, M., Das, A., Le, H. H., Wiessner, S., Stöckelhuber, K. W., Schmaucks, G. & Heinrich, G., 17 Sep 2015, In : Journal of Physical Chemistry C. 119, 37, p. 21723-21731 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

PIP2 and Talin Join Forces to Activate Integrin

Orlowski, A., Kukkurainen, S., Pöyry, A., Rissanen, S., Vattulainen, I., Hytönen, V. P. & Róg, T., 24 Sep 2015, In : Journal of Physical Chemistry Part B. 119, 38, p. 12381-12389 9 p.

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Atomic-level characterization of transport cycle thermodynamics in the glycerol-3-phosphate: Phosphate antiporter

Moradi, M., Enkavi, G. & Tajkhorshid, E., 29 Sep 2015, In : Nature Communications. 6, 8393.

Research output: Contribution to journal › Article › Scientific › peer-review

Production of sulfonated polyetheretherketone/polypropylene fibers for photoactive textiles

Mylläri, V., Fatarella, E., Ruzzante, M., Pogni, R., Baratto, M. C., Skrifvars, M., Syrjälä, S. & Järvelä, P., 1 Oct 2015, In : Journal of Applied Polymer Science. 132, 39, 42595.

Research output: Contribution to journal › Article › Scientific › peer-review

In Situ Photocontrol of Block Copolymer Morphology during Dip-Coating of Thin Films

Vapaavuori, J., Grosrenaud, J., Pellerin, C. & Bazuin, C. G., 20 Oct 2015, In : ACS Macro Letters. 4, 10, p. 1158-1162 5 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Photomechanical Energy Transfer to Photopassive Polymers through Hydrogen and Halogen Bonds

Vapaavuori, J., Heikkinen, I. T. S., Dichiarante, V., Resnati, G., Metrangolo, P., Sabat, R. G., Bazuin, C. G., Priimagi, A. & Pellerin, C., 27 Oct 2015, In : Macromolecules. 48, 20, p. 7535-7542 8 p.
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Submolecular Plasticization Induced by Photons in Azobenzene Materials

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Research output: Contribution to journal > Article > Scientific > peer-review

Comparison of different cationized proteins as biomaterials for nanoparticle-based ocular gene delivery

Zorzi, G. K., Párraga, J. E., Seijo, B. & Sanchez, A., 1 Nov 2015, In : Colloids and Surfaces B: Biointerfaces. 135, p. 533-541 9 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of rubber polarity on selective wetting of carbon nanotubes in ternary blends

Le, H. H., Parsaker, M., Sriharish, M. N., Henning, S., Menzel, M., Wießner, S., Das, A., Do, Q. K., Heinrich, G. & Radosch, H. J., 1 Nov 2015, In : Express Polymer Letters. 9, 11, p. 960-971 12 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Tri-functionality of Fe₃O₄-embedded carbon microparticles in microalgae harvesting

Seo, J. Y., Lee, K., Ramasamy, P., Kim, B., Lee, S. Y., Oh, Y. K. & Park, S. B., 5 Nov 2015, In : Chemical Engineering Journal. 280, p. 206-214 9 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Graphene-intercalated Fe₂O₃/TiO₂ heterojunctions for efficient photoelectrolysis of water

Kaouk, A., Ruoko, T. P., Gönüllü, Y., Kaunisto, K., Mettenböcker, A., Gurevich, E., Lemmetyinen, H., Ostendorf, A. & Mathur, S., 13 Nov 2015, In : RSC Advances. 5, 123, p. 101401-101407 7 p.
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Differential basal-to-apical accessibility of lamin A/C epitopes in the nuclear lamina regulated by changes in cytoskeletal tension

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Research output: Contribution to journal > Article > Scientific > peer-review

Modeling carbon dioxide transport in PDMS-based microfluidic cell culture devices

Mäki, A. J., Peltokangas, M., Kreuzer, J., Auvinen, S. & Kallio, P., 1 Dec 2015, In : Chemical Engineering Science. 137, p. 515-524 10 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Synthesis, crystal structure, physico-chemical characterization and dielectric properties of a new hybrid material, 1-Ethylpiperazine-1,4-dium tetrachlorocadmate

Dhieb, A. C., Valkonen, A., Rzaigui, M. & Smirani, W., 15 Dec 2015, In : Journal of Molecular Structure. 1102, p. 50-56 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

The formation and physical properties of the particle emissions from a natural gas engine

Alanen, J., Saukko, E., Lehtoranta, K., Murtonen, T., Timonen, H., Hillamo, R., Karjalainen, P., Kuuluvainen, H., Harra, J., Keskinen, J. & Rönkkö, T., 15 Dec 2015, In : Fuel. 162, p. 155-161 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Evaluating transparent liquid screen overlay as a haptic conductor: Method of enhancing touchscreen based user interaction by a transparent deformable liquid screen overlay

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Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Inkjet-printed dual microfluidic-based sensor integrated system

Su, W., Cooper, J. R., Cook, B. S., Tentzeris, M. M., Mariotti, C. & Roselli, L., 31 Dec 2015, *2015 IEEE SENSORS - Proceedings*. Institute of Electrical and Electronics Engineers Inc., 7370300

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Alginate microgels created by selective coalescence between core drops paired with an ultrathin shell

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Research output: Contribution to journal > Article > Scientific > peer-review

A Three-Component Assembly Promoted by Boronic Acids Delivers a Modular Fluorophore Platform (BASHY Dyes)

Santos, F. M. F., Rosa, J. N., Candeias, N. R., Carvalho, C. P., Matos, A. I., Ventura, A. E., Florindo, H. F., Silva, L. C., Pischel, U. & Gois, P. M. P., 2016, In : *Chemistry: A European Journal*. 22, 5, p. 1631-1637

Research output: Contribution to journal > Article > Scientific > peer-review

Cholesterol oxidation products and their biological importance

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Research output: Contribution to journal > Article > Scientific > peer-review

Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method

Bansod, N. D., Kapgade, B. P., Das, C., Das, A., Basu, D. & Debnath, S. C., 2016, In : *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 80, 2, p. 548-559 12 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Controllable Electronic Structures and Photoinduced Processes of Bay-Linked Perylenediimide Dimers and a Ferrocene-Linked Triad

Horinouchi, H., Sakai, H., Araki, Y., Sakanoue, T., Takenobu, T., Wada, T., Tkachenko, N. V. & Hasobe, T., 2016, In : *Chemistry: A European Journal*. 22, 28, p. 9631-9641

Research output: Contribution to journal > Article > Scientific > peer-review

Decoding the Morphological Diversity in Two Dimensional Crystalline Porous Polymers by Core Planarity Modulation

Halder, A., Kandambeth, S., Biswal, B. P., Kaur, G., Roy, N. C., Addicoat, M., Salunke, J. K., Banerjee, S., Vanka, K., Heine, T., Verma, S. & Banerjee, R., 2016, In : *Angewandte Chemie (International Edition)*. 55, 27, p. 7806-7810 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Enhanced adsorption of orthophosphate and copper onto hydrochar derived from sewage sludge by KOH activation

Spataru, A., Jain, R., Chung, J. W., Gerner, G., Krebs, R. & Lens, P. N. L., 2016, In : *RSC Advances*. 6, 104, p. 101827-101834 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Fire-safe and environmentally friendly nanocomposites based on layered double hydroxides and ethylene propylene diene elastomer

Basu, D., Das, A., Wang, D. Y., George, J. J., Stöckelhuber, K. W., Boldt, R., Leuteritz, A. & Heinrich, G., 2016, In : *RSC Advances*. 6, 31, p. 26425-26436 12 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Heat capacities of crystalline and glassy lithium metaphosphate up to the transition region

Rocherullé, J., Massera, J., Oudadesse, H., Calvez, L., Trolès, J. & Zhang, X. H., 2016, In : *Journal of Thermal Analysis and Calorimetry*. 123, 1, p. 401-407 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

High-Yield Excited Triplet States in Pentacene Self-Assembled Monolayers on Gold Nanoparticles through Singlet Exciton Fission

Kato, D., Sakai, H., Tkachenko, N. V. & Hasobe, T., 2016, In : *Angewandte Chemie (International Edition)*. 55, 17, p. 5230-5234

Research output: Contribution to journal › Article › Scientific › peer-review

Nanoscale barrier coating on BOPP packaging film by ALD

Lahti, J., 2016, *TAPPI PLACE Conference 2016: Exploring New Frontiers*. TAPPI Press, p. 493-505 13 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Nonlinear transmittance and optical power limiting in magnesium ferrite nanoparticles: effects of laser pulsewidth and particle size

Perumbilavil, S., Sridharan, K., Abraham, A. R., Janardhanan, H. P., Kalarikkal, N. & Philip, R., 2016, In : *RSC Advances*. 6, 108, p. 106754-106761 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

On describing the optoelectronic characteristics of poly(benzodithiophene-: Co -quinoxaline)-fullerene complexes: The influence of optimally tuned density functionals

Kastinen, T., Niskanen, M., Risko, C., Cramariuc, O. & Hukka, T. I., 2016, In : *Physical Chemistry Chemical Physics*. 18, 39, p. 27654-27670 17 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Optical non-contact pH measurement in cell culture with sterilizable, modular parts

Kattiparambil Rajan, D., Patrikoski, M., Verho, J., Sivula, J., Ihalainen, H., Miettinen, S. & Lekkala, J., 2016, In : *Talanta*. 161, p. 755-761 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Photoresponsive liquid-crystalline polymer films bilayered with an inverse opal structure

Akamatsu, N., Aizawa, M., Tatsumi, R., Hisano, K., Priimägi, A. & Shishido, A., 2016, In : *JOURNAL OF PHOTOPOLYMER SCIENCE AND TECHNOLOGY*. 29, 1, p. 145-148 4 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles

Jain, R., Dominic, D., Jordan, N., Rene, E. R., Weiss, S., van Hullebusch, E. D., Hübner, R. & Lens, P. N. L., 2016, In : *Chemical Engineering Journal*. 284, p. 917-925

Research output: Contribution to journal › Article › Scientific › peer-review

Remarkable Dependence of the Final Charge Separation Efficiency on the Donor-Acceptor Interaction in Photoinduced Electron Transfer

Higashino, T., Yamada, T., Yamamoto, M., Furube, A., Tkachenko, N. V., Miura, T., Kobori, Y., Jono, R., Yamashita, K. & Imahori, H., 2016, In : *Angewandte Chemie (International Edition)*. 55, 2, p. 629-633

Research output: Contribution to journal › Article › Scientific › peer-review

Superfluorinated Ionic Liquid Crystals Based on Supramolecular, Halogen-Bonded Anions

Cavallo, G., Terraneo, G., Monfredini, A., Saccone, M., Priimägi, A., Pilati, T., Resnati, G., Metrangolo, P. & Bruce, D. W., 2016, In : *Angewandte Chemie (International Edition)*. 55, 21, p. 6300-6304

Research output: Contribution to journal › Article › Scientific › peer-review

The electrooxidation-induced structural changes of gold di-superatomic molecules: Au₂₃ vs. Au₂₅

Matsuo, S., Yamazoe, S., Goh, J-Q., Akola, J. & Tsukuda, T., 2016, In : *Physical Chemistry Chemical Physics*. 18, 6, p. 4822-4827 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Thermal desorption of molecular oxygen from SnO₂ (110) surface: Insights from first-principles calculations

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Research output: Contribution to journal > Article > Scientific > peer-review

Physical and Chemical Characterization of Real-World Particle Number and Mass Emissions from City Buses in Finland

Pirjola, L., Dittrich, A., Niemi, J. V., Saarikoski, S., Timonen, H., Kuuluvainen, H., Järvinen, A., Kousa, A., Rönkkö, T. & Hillamo, R., 5 Jan 2016, In : Environmental Science and Technology. 50, 1, p. 294-304 11 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Guanidinium Pairing Facilitates Membrane Translocation

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Research output: Contribution to journal > Article > Scientific > peer-review

Ambient-Pressure XPS Study of a Ni-Fe Electrocatalyst for the Oxygen Evolution Reaction

Ali-Löytty, H., Louie, M. W., Singh, M. R., Li, L., Sanchez Casalongue, H. G., Ogasawara, H., Crumlin, E. J., Liu, Z., Bell, A. T., Nilsson, A. & Friebel, D., 4 Feb 2016, In : Journal of Physical Chemistry C. 120, 4, p. 2247-2253 7 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices

Salunke, J. K., Wong, F. L., Feron, K., Manzhos, S., Lo, M. F., Shinde, D., Patil, A., Lee, C. S., Roy, V. A. L., Sonar, P. & Wadgaonkar, P. P., 7 Feb 2016, In : Journal of Materials Chemistry C. 4, 5, p. 1009-1018 10 p.
Research output: Contribution to journal > Article > Scientific > peer-review

HPLC-SEC: a new approach to characterise complex wastewater effluents

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Research output: Contribution to journal > Article > Scientific > peer-review

Stability and Function at High Temperature. What Makes a Thermophilic GTPase Different from Its Mesophilic Homologue

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Research output: Contribution to journal > Article > Scientific > peer-review

Long-Lived Triplet Excited States of Bent-Shaped Pentacene Dimers by Intramolecular Singlet Fission

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Research output: Contribution to journal > Article > Scientific > peer-review

Metal chalcogenide quantum dots: Biotechnological synthesis and applications

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Research output: Contribution to journal > Article > Scientific > peer-review

DFT simulations and microkinetic modelling of 1-pentyne hydrogenation on Cu₂₀ model catalysts

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Research output: Contribution to journal > Article > Scientific > peer-review

Microwave assisted laser-induced breakdown spectroscopy at ambient conditions

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Strain rate change tests with the Split Hopkinson Bar method

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Research output: Book/Report › Anthology › Professional

Coordination networks incorporating halogen-bond donor sites and azobenzene groups

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Research output: Contribution to journal › Article › Scientific › peer-review

Influence of heat treatment on the abrasive wear resistance of a Cr₃C₂NiCr coating deposited by an ethene-fuelled HVOF spray process

Janka, L., Norpoth, J., Trache, R. & Berger, L. M., 15 Apr 2016, In : Surface and Coatings Technology. 291, p. 444-451 8 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Effect of Hole Transporting Material on Charge Transfer Processes in Zinc Phthalocyanine Sensitized ZnO Nanorods

Hakola, H., Sariola-Leikas, E., Efimov, A. & Tkachenko, N. V., 21 Apr 2016, In : Journal of Physical Chemistry C. 120, 13, p. 7044-7051 8 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Lipid-assisted protein transport: A diffusion-reaction model supported by kinetic experiments and molecular dynamics simulations

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Research output: Contribution to journal › Article › Scientific › peer-review

Optical Projection Tomography Technique for Image Texture and Mass Transport Studies in Hydrogels Based on Gellan Gum

Soto, A. M., Koivisto, J. T., Parraga, J. E., Silva-Correia, J., Oliveira, J. M., Reis, R. L., Kellomäki, M., Hyttinen, J. & Figueiras, E., 24 May 2016, In : Langmuir. 32, 20, p. 5173-5182 10 p.
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Development of Magnetic Losses During Accelerated Corrosion Tests for Nd-Fe-B Magnets Used in Permanent Magnet Generators

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Research output: Contribution to journal › Article › Scientific › peer-review

Effect of incorporation of CdS NPs on performance of PTB7: PCBM organic solar cells

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Robust statistical approaches for RSS-based floor detection in indoor localization

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Research output: Contribution to journal › Article › Scientific › peer-review

Structurally Controlled Dynamics in Azobenzene-Based Supramolecular Self-Assemblies in Solid State

Poutanen, M., Ikkala, O. & Priimägi, A., 14 Jun 2016, In : Macromolecules. 49, 11, p. 4095-4101 7 p.
Research output: Contribution to journal › Article › Scientific › peer-review

Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs_{1-x}Bi_x/GaAs quantum wells

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Research output: Contribution to journal › Article › Scientific › peer-review

The Influence of Phosphorus Exposure on a Natural-Gas-Oxidation Catalyst

Kärkkäinen, M., Kolli, T., Honkanen, M., Heikkinen, O., Väliheikki, A., Huuhtanen, M., Kallinen, K., Lahtinen, J., Vippola, M. & Keiski, R. L., 1 Jul 2016, In : *Topics in Catalysis*. 59, 10-12, p. 1044-1048 5 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Reinforced chloroprene rubber by in situ generated silica particles: Evidence of bound rubber on the silica surface

Kapgate, B. P., Das, C., Das, A., Basu, D., Wiessner, S., Reuter, U. & Heinrich, G., 10 Aug 2016, In : *Journal of Applied Polymer Science*. 133, 30, 43717.

Research output: Contribution to journal > Article > Scientific > peer-review

Buckling Behavior of Cold-Formed Studs with Thermal Perforations

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Research output: Contribution to journal > Article > Scientific > peer-review

Detergent impurity effect on recycled HDPE: Properties after repetitive processing

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Research output: Contribution to journal > Article > Scientific > peer-review

Designing of Elastomer Nanocomposites: From Theory to Application

Stöckelhuber, K. W. (ed.), Das, A. (ed.) & Klüppel, M. (ed.), 17 Aug 2016, Springer International Publishing. (*Advances in Polymer Science*; vol. 275)

Research output: Book/Report > Anthology > Scientific > peer-review

Nanostructured Ionomeric Elastomers

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Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review

3D micro-nano structured hybrid scaffolds: An investigation into the role of nanofiber coating on viability, proliferation and differentiation of seeded mesenchymal stem cells

Pilehrood, M. K., Atashi, A., Sadeghi-Aliabadi, H., Nousiainen, P. & Harlin, A., 1 Sep 2016, In : *Journal Nanoscience and Nanotechnology*. 16, 9, p. 9000-9007 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Polyarginine Interacts More Strongly and Cooperatively than Polylysine with Phospholipid Bilayers

Robison, A. D., Sun, S., Poyton, M. F., Johnson, G. A., Pellois, J. P., Jungwirth, P., Vazdar, M. & Cremer, P. S., 8 Sep 2016, In : *Journal of Physical Chemistry Part B*. 120, 35, p. 9287-9296 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Controlling the motion of multiple objects on a Chladni plate

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Research output: Contribution to journal > Article > Scientific > peer-review

Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood

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Research output: Contribution to journal > Article > Scientific > peer-review

Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma

Will, O. M., Purcz, N., Chalaris, A., Heneweer, C., Boretius, S., Purcz, L., Nikkola, L., Ashammakhi, N., Kalthoff, H., Glüer, C. C., Wiltfang, J., Açıllı, Y. & Tiwari, S., 12 Oct 2016, In : *International Journal of Nanomedicine*. 11, p. 5311-5321 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Grain orientation dependent Nb-Ti microalloying mediated surface segregation on ferritic stainless steel

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Research output: Contribution to journal > Article > Scientific > peer-review

UPS and DFT investigation of the electronic structure of gas-phase trimesic acid

Reisberg, L., Pärna, R., Kikas, A., Kuusik, I., Kisand, V., Hirsimäki, M., Valden, M. & Nõmmiste, E., Nov 2016, In : Journal of Electron Spectroscopy and Related Phenomena. 213, p. 11-16 6 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Improvement of actuation performance of dielectric elastomers by barium titanate and carbon black fillers

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Research output: Contribution to journal > Article > Scientific > peer-review

Collective excitations and viscosity in liquid Bi

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Research output: Contribution to journal > Article > Scientific > peer-review

Optimization of HVOF Cr₃C₂-NiCr coating for increased fatigue performance

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Research output: Contribution to journal > Article > Scientific > peer-review

Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions

Ntziachristos, L., Saukko, E., Lehtoranta, K., Rönkkö, T., Timonen, H., Simonen, P., Karjalainen, P. & Keskinen, J., 15 Dec 2016, In : Fuel. 186, p. 456-465 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Crystallization and sintering of borosilicate bioactive glasses for application in tissue engineering

Fabert, M., Ojha, N., Erasmus, E., Hannula, M., Hokka, M., Hyttinen, J., Rocherullé, J., Sigalas, I. & Massera, J., 2017, In : Journal of Materials Chemistry B. 5, 23, p. 4514-4525 12 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Design of a 25 MWe Solar Thermal Power Plant in Iran with Using Parabolic Trough Collectors and a Two-Tank Molten Salt Storage System

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Research output: Contribution to journal > Article > Scientific > peer-review

Effects of orientation at the phthalocyanine-CdSe interface on the electron transfer characteristics

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Research output: Contribution to journal > Article > Scientific > peer-review

Fluorescence spectroscopy "knife" for polyplex "cakes": taste the filling

Vuorimaa-Laukkanen, E., Lisitsyna, E. S., Ketola, T-M., Morin-Pickardat, E., Liang, H., Hanzlikova, M., Urtti, A., Yliperttula, M. L., Lisitsyna, E. & Laaksonen, T., 2017.

Research output: Other conference contribution > Paper, poster or abstract > Scientific

High-resolution coded-aperture design for compressive X-ray tomography using low resolution detectors

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Research output: Contribution to journal > Article > Scientific > peer-review

Improved corrosion properties of Hot Dip Galvanized Steel by nanomolecular silane layers as hybrid interface between zinc and top coatings

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Research output: Contribution to journal > Article > Scientific > peer-review

Liquid flame spray—a hydrogen-oxygen flame based method for nanoparticle synthesis and functional nanocoatings

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Research output: Contribution to journal > Review Article > Scientific > peer-review

Photophysical properties of porphyrin dimer-single-walled carbon nanotube linked systems

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Research output: Contribution to journal > Article > Scientific > peer-review

Photoresponsive ionic liquid crystals assembled: Via halogen bond: En route towards light-controllable ion transporters

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Research output: Contribution to journal > Article > Scientific > peer-review

Supramolecular control of liquid crystals by doping with halogen-bonding dyes

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Research output: Contribution to journal > Article > Scientific > peer-review

Synthesis, Structural Characterization, Hirshfeld Surface and Antioxidant Activity Analysis of a Novel Organic Cation Antimonate Complex

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Research output: Contribution to journal > Article > Scientific > peer-review

Two cations, two mechanisms: Interactions of sodium and calcium with zwitterionic lipid membranes

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Research output: Contribution to journal > Article > Scientific > peer-review

Architectures and codecs for real-time light field streaming

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Effect of air gap on the adhesion of PET layer on cardboard substrate in extrusion coating

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Tampere University of Technology, laboratory of materials science, paper converting and packaging technology Tampere, Finland

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Polarization resolved photoluminescence in GaAs_{1-x}Bi_x/GaAs quantum wells

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Research output: Contribution to journal > Article > Scientific > peer-review

Benchmarking DFT methods with small basis sets for the calculation of halogen-bond strengths

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Magnetic routing of light-induced waveguides

Izdebskaya, Y., Shvedov, V., Assanto, G. & Krolikowski, W., 15 Feb 2017, In : Nature Communications. 8, 14452.

Research output: Contribution to journal > Article > Scientific > peer-review

Membrane cholesterol access into a G-protein-coupled receptor

Guixà-González, R., Albasanz, J. L., Rodriguez-Espigares, I., Pastor, M., Sanz, F., Martí-Solano, M., Manna, M., Martínez-Seara, H., Hildebrand, P. W., Martín, M. & Selent, J., 21 Feb 2017, In : Nature Communications. 8, 14505.

Research output: Contribution to journal > Article > Scientific > peer-review

Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains

Milani, R., Houbenov, N., Fernandez-Palacio, F., Cavallo, G., Luzio, A., Haataja, J., Giancane, G., Saccone, M., Priimägi, A., Metrangolo, P. & Ikkala, O., 9 Mar 2017, In : Chem. 2, 3, p. 417-426 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Calcium Directly Regulates Phosphatidylinositol 4,5-Bisphosphate Headgroup Conformation and Recognition

Bilkova, E., Pleskot, R., Rissanen, S., Sun, S., Czogalla, A., Cwiklik, L., Róg, T., Vattulainen, I., Cremer, P. S., Jungwirth, P. & Coskun, Ü., 22 Mar 2017, In : Journal of the American Chemical Society. 139, 11, p. 4019-4024 6 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Hexaphyrin as a Potential Theranostic Dye for Photothermal Therapy and ¹⁹F Magnetic Resonance Imaging

Higashino, T., Nakatsuji, H., Fukuda, R., Okamoto, H., Imai, H., Matsuda, T., Tochio, H., Shirakawa, M., Tkachenko, N. V., Hashida, M., Murakami, T. & Imahori, H., 24 Mar 2017, In : ChemBioChem. 18, 10, p. 951-959 9 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Elucidation of Compression-Induced Surface Crystallization in Amorphous Tablets Using Sum Frequency Generation (SFG) Microscopy

Mah, P. T., Novakovic, D., Saarinen, J., van Landeghem, S., Peltonen, L., Laaksonen, T., Isomäki, A. & Strachan, C. J., May 2017, In : Pharmaceutical Research. 34, 5, p. 957-970 14 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Electron microscopic studies of natural gas oxidation catalyst – Effects of thermally accelerated aging on catalyst microstructure

Honkanen, M., Hansen, T. W., Jiang, H., Kärkkäinen, M., Huuhtanen, M., Heikkinen, O., Kallinen, K., Lahtinen, J., Keiski, R. L., Wagner, J. B. & Vippola, M., 1 May 2017, In : Journal of Catalysis. 349, p. 19-29 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Photoinduced Electron Injection from Zinc Phthalocyanines into Zinc Oxide Nanorods: Aggregation Effects

Virkki, K., Hakola, H., Urbani, M., Tejerina, L., Ince, M., Martínez-Díaz, M. V., Torres, T., Golovanova, V., Golovanov, V. & Tkachenko, N. V., 4 May 2017, In : Journal of Physical Chemistry C. 121, 17, p. 9594-9605 12 p.

Research output: Contribution to journal > Article > Scientific > peer-review

The effects of calcium and potassium on CO₂ gasification of birch wood in a fluidized bed

Kramb, J., Gómez-Barea, A., DeMartini, N., Romar, H., Doddapaneni, T. R. K. C. & Kontinen, J., 15 May 2017, In : Fuel. 196, p. 398-407 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Density functional study of structure and dynamics in liquid antimony and Sb_n clusters

Jones, R. O., Ahlstedt, O., Akola, J. & Ropo, M., 21 May 2017, In : Journal of Chemical Physics. 146, 19, 194502.

Research output: Contribution to journal > Article > Scientific > peer-review

Nematicon-enhanced spontaneous symmetry breaking

Piccardi, A., Alberucci, A., Kravets, N., Buchnev, O. & Assanto, G., 24 May 2017, In : Molecular Crystals and Liquid Crystals. 649, 1, p. 59-65 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Catalytic Activity of AuCu Clusters on MgO(100): Effect of Alloy Composition for CO Oxidation

Ma, L., Laasonen, K. & Akola, J., 25 May 2017, In : Journal of Physical Chemistry C. 121, 20, p. 10876-10886 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Geometric Structure and Chemical Ordering of Large AuCu Clusters: A Computational Study

Goh, J-Q., Akola, J. & Ferrando, R., 25 May 2017, In : Journal of Physical Chemistry C. 121, 20, p. 10809-10816 8 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Comparison of starch and gelatin hydrogels for non-toxic supercapacitor electrolytes

Railanmaa, A., Lehtimäki, S. & Lupo, D., 1 Jun 2017, In : Applied Physics A-Materials Science and Processing. 123, 6, 459.

Research output: Contribution to journal > Article > Scientific > peer-review

Long-Range Observation of Exciplex Formation and Decay Mediated by One-Dimensional Bridges

Baek, J., Umeyama, T., Stranius, K., Yamada, H., Tkachenko, N. V. & Imahori, H., 29 Jun 2017, In : Journal of Physical Chemistry C. 121, 25, p. 13952-13961 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Dynamics of a True Moving Bed separation process: Linear model identification and advanced process control

Nogueira, I. B. R., Ribeiro, A. M., Martins, M. A. F., Rodrigues, A. E., Koivisto, H. & Loureiro, J. M., 30 Jun 2017, In : Journal of Chromatography A. 1504

Research output: Contribution to journal > Article > Scientific > peer-review

Electropolymerized polyazulene as active material in flexible supercapacitors

Suominen, M., Lehtimäki, S., Yewale, R., Damlin, P., Tuukkanen, S. & Kvarnström, C., 15 Jul 2017, In : Journal of Power Sources. 356, p. 181-190 10 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Configurational Disorder of Water Hydrogen-Bond Network at the Protein Dynamical Transition

Rahaman, O., Kalimeri, M., Katava, M., Paciaroni, A. & Sterpone, F., 20 Jul 2017, In : Journal of Physical Chemistry Part B. 121, 28, p. 6792-6798 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Vegetable fillers for electric stimuli responsive elastomers

Poikelispää, M., Shakun, A., Sarlin, E., Das, A. & Vuorinen, J., 20 Jul 2017, In : Journal of Applied Polymer Science. 134, 28, 45081.

Research output: Contribution to journal > Article > Scientific > peer-review

Exhaust emissions of non-road mobile machine: Real-world and laboratory studies with diesel and HVO fuels

Pirjola, L., Rönkkö, T., Saukko, E., Parviainen, H., Malinen, A., Alanen, J. & Saveljeff, H., 15 Aug 2017, In : Fuel. 202, p. 154-164 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Feed-hopper level estimation and control in cone crushers

Itävuo, P., Hulthén, E. & Vilkkö, M., 15 Aug 2017, In : Minerals Engineering. 110, p. 82-95 14 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Membrane Binding of Recoverin: From Mechanistic Understanding to Biological Functionality

Timr, Š., Pleskot, R., Kadlec, J., Kohagen, M., Magarkar, A. & Jungwirth, P., 23 Aug 2017, In : ACS Central Science. 3, 8, p. 868-874 7 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Understanding selenium biogeochemistry in engineered ecosystems: Transformation and analytical methods

Jain, R., Van Hullebusch, E. D., Lenz, M. & Farges, F., 2 Sep 2017, *Bioremediation of Selenium Contaminated Wastewater*. Springer International Publishing, p. 33-56 24 p.

Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review

Systematic analysis of coating-substrate interactions in the presence of flow localization

Isakov, M., Matikainen, V., Koivuluoto, H. & May, M., 15 Sep 2017, In : Surface and Coatings Technology. 324, p. 264-280 17 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Waves in hyperbolic and double negative metamaterials including rogues and solitons

Boardman, A. D., Alberucci, A., Assanto, G., Grimalsky, V. V., Kibler, B., McNiff, J., Nefedov, I. S., Rapoport, Y. G. & Valagiannopoulos, C. A., 9 Oct 2017, In : Nanotechnology. 28, 44, 444001.

Research output: Contribution to journal > Review Article > Scientific > peer-review

DoGlycans-Tools for Preparing Carbohydrate Structures for Atomistic Simulations of Glycoproteins, Glycolipids, and Carbohydrate Polymers for GROMACS

Danne, R., Poojari, C., Martinez-Seara, H., Rissanen, S., Lolicato, F., Róg, T. & Vattulainen, I., 23 Oct 2017, In : Journal of Chemical Information and Modeling. 57, 10, p. 2401-2406 6 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Carbazole-based small molecule electron donors: Syntheses, characterization, and material properties

Sippola, R. J., Hadipour, A., Kastinen, T., Vivo, P., Hukka, T. I., Aernouts, T. & Heiskanen, J. P., 8 Nov 2017, In : Dyes and Pigments. 150, p. 79-88 10 p., j.dyepig.2017.11.014.

Research output: Contribution to journal > Article > Scientific > peer-review

Mapping microscale wetting variations on biological and synthetic water-repellent surfaces

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Research output: Contribution to journal > Article > Scientific > peer-review

Time-Resolved Fluorescence Spectroscopy Reveals Fine Structure and Dynamics of Poly(L-lysine) and Polyethylenimine Based DNA Polyplexes

Lisitsyna, E. S., Ketola, T.-M., Morin-Picardat, E., Liang, H., Hanzlíková, M., Urtti, A., Yliperttula, M. & Vuorimaa-Laukkanen, E., 7 Dec 2017, In : Journal of Physical Chemistry B. 121, 48, p. 10782-10792 11 p.

Research output: Contribution to journal > Article > Scientific > peer-review

Supercritical carbon dioxide treatment of hot dip galvanized steel as a surface treatment before coating

Saarimaa, V., Kaleva, A., Nikkanen, J.-P., Heinonen, S., Levänen, E., Väisänen, P., Markkula, A. & Juhanoja, J., 15 Dec 2017, In : Surface and Coatings Technology. 331, p. 137-142 6 p.

Research output: Contribution to journal > Article > Scientific > peer-review

A Bioscreening Technique for Ultraviolet Irradiation Protective Natural Substances

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Research output: Contribution to journal > Article > Scientific > peer-review

Adsorption of furfural from torrefaction condensate using torrefied biomass

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Research output: Contribution to journal › Article › Scientific › peer-review

Composition and role of the attached and planktonic microbial communities in mesophilic and thermophilic xylose-fed microbial fuel cells

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Research output: Contribution to journal › Article › Scientific › peer-review

Convenient extraction method for quantification of thin zinc patina layers

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Research output: Contribution to journal › Article › Scientific › peer-review

Decomposition of persistent luminescent microparticles in corrosive phosphate glass melt

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Research output: Contribution to journal › Article › Scientific › peer-review

Detection and characterization at nM concentration of oligomers formed by hIAPP, A β (1-40) and their equimolar mixture using SERS and MD simulations

D'Urso, L., Condorelli, M., Puglisi, O., Tempra, C., Lolicato, F., Compagnini, G. & La Rosa, C., 2018, In : Physical Chemistry Chemical Physics. 20, 31, p. 20588-20596 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Efficient photon upconversion at remarkably low annihilator concentrations in a liquid polymer matrix: when less is more

Durandin, N. A., Isokuortti, J., Efimov, A., Vuorimaa-Laukkanen, E., Tkachenko, N. V. & Laaksonen, T., 2018, In : Chemical Communications. 54, 99, p. 14029-14032 4 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Gloriosa superba Mediated Synthesis of Platinum and Palladium Nanoparticles for Induction of Apoptosis in Breast Cancer

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Research output: Contribution to journal › Article › Scientific › peer-review

Improved electromechanical response in acrylic rubber by different carbon-based fillers

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Modification of epoxy resin by silane-coupling agent to improve tensile properties of viscose fabric composites

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On the molecular optical nonlinearity of halogen-bond-forming azobenzenes

Virkki, M., Maurice, A., Forni, A., Sironi, M., Dichiarante, V., Brevet, P. F., Metrangolo, P., Kauranen, M. & Priimagi, A., 2018, In : Physical Chemistry Chemical Physics. 20, 45, p. 28810-28817 8 p.

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Research output: Contribution to journal › Article › Scientific › peer-review

Regeneration of sulfur-poisoned Pd-based catalyst for natural gas oxidation

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Stable carbon isotopic composition of peat columns, subsoil and vegetation on natural and forestry-drained boreal peatlands

Nykänen, H., Mpamah, P. A. & Rissanen, A. J., 2018, In : *Isotopes in Environmental and Health Studies*. 54, 6
Research output: Contribution to journal > Article > Scientific > peer-review

Supramolecular design principles for efficient photoresponsive polymer-azobenzene complexes

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Research output: Contribution to journal > Review Article > Scientific > peer-review

Concentration-dependent photophysical switching in mixed self-assembled monolayers of pentacene and perylene-3,4,9,10-tetracarboxylic diimide on gold nanoclusters

Kato, D., Sakai, H., Araki, Y., Wada, T., Tkachenko, N. V. & Hasobe, T., 1 Jan 2018, In : *Physical Chemistry Chemical Physics*. 20, 13, p. 8695-8706 12 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Ortho-Fluorination of azophenols increases the mesophase stability of photoresponsive hydrogen-bonded liquid crystals

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Research output: Contribution to journal > Article > Scientific > peer-review

Upconversion from fluorophosphate glasses prepared with NaYF₄:Er³⁺, Yb³⁺ nanocrystals

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Research output: Contribution to journal > Article > Scientific > peer-review

Temperature scanning stress relaxation of an autonomous self-healing elastomer containing non-covalent reversible network junctions

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Research output: Contribution to journal > Article > Scientific > peer-review

Controlled Growth of Supported ZnO Inverted Nanopyramids with Downward Pointing Tips

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Research output: Contribution to journal > Article > Scientific > peer-review

MetriIntSimil-an accurate and robust metric for comparison of similarity in intelligence of any number of cooperative multiagent systems

Iantovics, L. B., Dehmer, M. & Emmert-Streib, F., 1 Feb 2018, In : *Symmetry*. 10, 2, 48.
Research output: Contribution to journal > Article > Scientific > peer-review

Entrapped Styrene Butadiene Polymer Chains by Sol-Gel-Derived Silica Nanoparticles with Hierarchical Raspberry Structures

Vaikuntam, S. R., Stöckelhuber, K. W., Subramani Bhagavatheswaran, E., Wießner, S., Scheler, U., Saalwächter, K., Formanek, P., Heinrich, G. & Das, A., 15 Feb 2018, In : *Journal of Physical Chemistry B*. 122, 6, p. 2010-2022 13 p.
Research output: Contribution to journal > Article > Scientific > peer-review

Pot-economy autooxidative condensation of 2-Aryl-2-lithio-1,3-dithianes

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Research output: Contribution to journal > Article > Scientific > peer-review

UV-Blocking Synthetic Biopolymer from Biomass-Based Bifuran Diester and Ethylene Glycol

Kainulainen, T. P., Sirviö, J. A., Sethi, J., Hukka, T. I. & Heiskanen, J. P., 21 Feb 2018, In : *Macromolecules*. 51, 5, p. 1822-1829 8 p.

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An activity recognition framework deploying the random forest classifier and a single optical heart rate monitoring and triaxial accelerometer wrist-band

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Research output: Contribution to journal › Article › Scientific › peer-review

Improved Stability of Atomic Layer Deposited Amorphous TiO₂ Photoelectrode Coatings by Thermally Induced Oxygen Defects

Hannula, M., Ali-Löytty, H., Lahtonen, K., Sarlin, E., Saari, J. & Valden, M., 27 Feb 2018, In : *Chemistry of Materials*. 30, 4, p. 1199-1208 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells

Karvinen, J., Joki, T., Ylä-Outinen, L., Koivisto, J. T., Narkilahti, S. & Kellomäki, M., 1 Mar 2018, In : *Reactive and Functional Polymers*. 124, p. 29-39 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Improving the high temperature abrasion resistance of thermally sprayed Cr₃C₂-NiCr coatings by WC addition

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Research output: Contribution to journal › Article › Scientific › peer-review

Thermal Isomerization of Hydroxyazobenzenes as a Platform for Vapor Sensing

Poutanen, M., Ahmed, Z., Rautkari, L., Ikkala, O. & Priimägi, A., 20 Mar 2018, In : *ACS Macro Letters*. 7, 3, p. 381-386 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Properties of HVOF-sprayed Stellite-6 coatings

Sassatelli, P., Bolelli, G., Lassinantti Gualtieri, M., Heinonen, E., Honkanen, M., Lusvardi, L., Manfredini, T., Rigon, R. & Vippola, M., 25 Mar 2018, In : *Surface and Coatings Technology*. 338, p. 45-62 18 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Composite Hydrogels Using Bioinspired Approach with in Situ Fast Gelation and Self-Healing Ability as Future Injectable Biomaterial

Khan, M., Koivisto, J., Hukka, T., Hokka, M. & Kellomäki, M., 11 Apr 2018, In : *ACS Applied Materials & Interfaces*. 10, 14, p. 11950-11960

Research output: Contribution to journal › Article › Scientific › peer-review

Membrane bound COMT isoform is an interfacial enzyme: General mechanism and new drug design paradigm

Magarkar, A., Parkkila, P., Viitala, T., Lajunen, T., Mobarak, E., Licari, G., Cramariuc, O., Vauthey, E., Róg, T. & Bunker, A., 11 Apr 2018, In : *Chemical Communications*. 54, 28, p. 3440-3443 4 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Accurate Binding of Sodium and Calcium to a POPC Bilayer by Effective Inclusion of Electronic Polarization

Melcr, J., Martinez-Seara, H., Nencini, R., Kolafa, J., Jungwirth, P. & Ollila, O. H. S., 26 Apr 2018, In : *Journal of Physical Chemistry B*. 122, 16, p. 4546-4557 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Characteristics of nFOG, an aerosol-based wet thin film coating technique

Harra, J., Tuominen, M., Juuti, P., Rissler, J., Koivuluoto, H., Haapanen, J., Niemelä-Anttonen, H., Stenroos, C., Teisala, H., Lahti, J., Kuusipalo, J., Vuoristo, P. & Mäkelä, J. M., May 2018, In : *Journal of Coatings Technology Research*. 15, 3, p. 623-632 10 p.

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Free amino acids and 5'-nucleotides in Finnish forest mushrooms

Manninen, H., Rotola-Pukkila, M., Aisala, H., Hopia, A. & Laaksonen, T., May 2018, In : Food Chemistry. 247, p. 23-28 6 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Wet etching of dilute nitride GaInNAs, GaInNAsSb, and GaNAsSb alloys lattice-matched to GaAs

Raappana, M., Polojärvi, V., Aho, A., Mäkelä, J., Aho, T., Tukiainen, A., Laukkanen, P. & Guina, M., 15 May 2018, In : Corrosion Science. 136, p. 268-274 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A Ceramide-Regulated Element in the Late Endosomal Protein LAPT4B Controls Amino Acid Transporter Interaction

Zhou, K., Dichlberger, A., Martinez-Seara, H., Nyholm, T. K. M., Li, S., Kim, Y. A., Vattulainen, I., Ikonen, E. & Blom, T., 23 May 2018, In : ACS Central Science. 4, 5, p. 548-558 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Effect of Co-Adsorbate and Hole Transporting Layer on the Photoinduced Charge Separation at the TiO₂-Phthalocyanine Interface

Virkki, K., Tervola, E., Medel, M., Torres, T. & Tkachenko, N. V., 31 May 2018, In : ACS Omega. 3, 5, p. 4947-4958 12 p.

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Acquiring respiration rate from photoplethysmographic signal by recursive bayesian tracking of intrinsic modes in time-frequency spectra

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Research output: Contribution to journal › Article › Scientific › peer-review

Evaluation of dry electrodes in canine heart rate monitoring

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Research output: Contribution to journal › Article › Scientific › peer-review

Multifunctional nitrogen sulfur co-doped reduced graphene oxide – Ag nano hybrids (sphere, cube and wire) for nonlinear optical and SERS applications

Nair, A. K., Bhavitha, K. B., Perumbilavil, S., Sankar, P., Rouxel, D., Kala, M. S., Thomas, S. & Kalarikkal, N., 1 Jun 2018, In : Carbon. 132, p. 380-393 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Photo-antimicrobial efficacy of zinc complexes of porphyrin and phthalocyanine activated by inexpensive consumer LED lamp

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Research output: Contribution to journal › Article › Scientific › peer-review

Effect of surfactant type and sonication energy on the electrical conductivity properties of nanocellulose-CNT nanocomposite films

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Research output: Contribution to journal › Article › Scientific › peer-review

Pectin and Mucin Enhance the Bioadhesion of Drug Loaded Nanofibrillated Cellulose Films

Laurén, P., Paukkonen, H., Lipiäinen, T., Dong, Y., Oksanen, T., Rääkkönen, H., Ehlers, H., Laaksonen, P., Yliperttula, M. & Laaksonen, T., 1 Jul 2018, In : Pharmaceutical Research. 35, 7, 145.

Research output: Contribution to journal › Article › Scientific › peer-review

High Bending-Mode Sensitivity of Printed Piezoelectric Poly(vinylidene fluoride- co-trifluoroethylene) Sensors

Rajala, S., Schouten, M., Krijnen, G. & Tuukkanen, S., 23 Jul 2018, In : ACS Omega. 3, 7, p. 8067-8073 7 p.

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Design aspects of all atomic layer deposited TiO₂-Fe₂O₃ scaffold-absorber photoanodes for water splitting

Hiltunen, A., Ruoko, T-P., Iivonen, T., Lahtonen, K., Ali-Löytty, H., Sarlin, E., Valden, M., Leskelä, M. & Tkachenko, N., 31 Jul 2018, In : Sustainable Energy & Fuels. 2, 9, p. 2124-2130

Research output: Contribution to journal › Article › Scientific › peer-review

Selenate removal in biofilm systems: Effect of nitrate and sulfate on selenium removal efficiency, biofilm structure and microbial community

Tan, L. C., Espinosa-Ortiz, E. J., Nancharaiyah, Y. V., van Hullebusch, E. D., Gerlach, R. & Lens, P. N., Aug 2018, In : Journal of Chemical Technology and Biotechnology. 93, 8, p. 2380-2389

Research output: Contribution to journal › Article › Scientific › peer-review

Photoinduced Energy Transfer in ZnCdSeS Quantum Dot-Phthalocyanines Hybrids

Mandal, S., Garcia Iglesias, M., Ince, M., Torres, T. & Tkachenko, N. V., 31 Aug 2018, In : ACS Omega. 3, 8, p. 10048-10057 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A compact olfactometer for IMS measurements and testing human perception

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Mechanical, thermal, and burning properties of viscose fabric composites: Influence of epoxy resin modification

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High-Yield Generation of Triplet Excited States by an Efficient Sequential Photoinduced Process from Energy Transfer to Singlet Fission in Pentacene-Modified CdSe/ZnS Quantum Dots

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Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Petasis Borono-Mannich Reaction

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Synthesis of 6,12-disubstituted methanodibenzo[b,f][1,5]dioxocins: Pyrrolidine catalyzed self-condensation of 2'-Hydroxyacetophenones

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Tuning of nonlinear absorption in highly luminescent CdSe based quantum dots with core-shell and core/multi-shell architectures

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