

**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

**A Bioscreening Technique for Ultraviolet Irradiation Protective Natural Substances**

Tienaho, J., Poikulainen, E., Sarjala, T., Muilu-Mäkelä, R., Santala, V. & Karp, M., 2018, In : Photochemistry and Photobiology. 94, 6, p. 1273-1280

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

**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

**Accurate description of calcium solvation in concentrated aqueous solutions**

Kohagen, M., Mason, P. E. & Jungwirth, P., 17 Jul 2014, In : Journal of Physical Chemistry Part B. 118, 28, p. 7902-7909 8 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

**A cluster approach for the SnO<sub>2</sub> (110) face**

Rantala, T. S., Lantto, V. & Rantala, T. T., 1994, In : Sensors and Actuators B: Chemical. 19, 1-3, p. 716-719 4 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**

Kulig, W. & Agmon, N., Jan 2013, In : Nature Chemistry. 5, 1, p. 29-35 7 p.

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

**A compact olfactometer for IMS measurements and testing human perception**

Nieminen, V., Karjalainen, M., Salminen, K., Rantala, J., Kontunen, A., Isokoski, P., Müller, P., Kallio, P., Surakka, V. & Leikkala, J., Sep 2018, In : International Journal for Ion Mobility Spectrometry. 21, 3, p. 71-80 10 p.

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

**A comparison of five optical surface topography measurement methods**

Mettänen, M. & Hirn, U., 1 Jan 2015, In : TAPPI Journal. 14, 1, p. 27-38 12 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. & Syrjäälä, S., 1 Jul 2015, In : Journal of Applied Polymer Science. 132, 28, 6 p., 42246.

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

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

Pirhonen, M., Peltokangas, M. & Vehkaoja, A., 1 Jun 2018, In : Sensors. 18, 6, 1693.

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

**Adsorption of furfural from torrefaction condensate using torrefied biomass**

Doddapaneni, T. R. K. C., Jain, R., Praveenkumar, R., Rintala, J., Romar, H. & Konttinen, J., 2018, In : Chemical Engineering Journal. 334, p. 558-568 11 p.

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

**A facile route to synthesis of S-doped TiO<sub>2</sub> 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

**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

**A finite cluster approach to the electron-hole pair damping of the adsorbate vibration: CO adsorbed on Cu(100)**

Rantala, T. T., Rosén, A. & Hellsing, B., 1986, In : Journal of Electron Spectroscopy and Related Phenomena. 39, C, p. 173-181 9 p.

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

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

Rantala, T. T., Rosén, A. & Hellsing, B., 1986, In : Studies in Surface Science and Catalysis. 26, C, p. 173-181 9 p.

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

**A full-potential linearized augmented plane wave study of the interaction of CO<sub>2</sub> 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

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

Lee, T. Y., Ramasamy, P., Oh, Y. K., Lee, K. & Kim, S. H., 2016, In : Journal of Materials Chemistry B. 4, 19, p. 3232-3238 7 p.

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

**Alpha radiation-induced luminescence by am-241 in aqueous nitric acid solution**

Kerst, T., Malmbeck, R., Ial Banik, N. L. & Toivonen, J., 1 Apr 2019, In : Sensors (Switzerland). 19, 7, 1602.

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

**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

**Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Petasis Borono-Mannich Reaction**

Rimpiläinen, T., Andrade, J., Nunes, A., Ntungwe, E., Fernandes, A. S., Vale, J. R., Rodrigues, J., Gomes, J. P., Rijo, P. & Candeias, N. R., 29 Nov 2018, In : ACS Omega. 3, 11, p. 16191-16202 12 p.

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

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

Mehrang, S., Pietilä, J. & Korhonen, I., 22 Feb 2018, In : Sensors. 18, 2, 613.

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

**Analysis of GaAsBi growth regimes in high resolution with respect to As/Ga ratio using stationary MBE growth**

Puustinen, J., Hilska, J. & Guina, M., 1 Apr 2019, In : Journal of Crystal Growth. 511, p. 33-41 9 p.

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

**Analytical Expressions for Spring Constants of Capillary Bridges and Snap-in Forces of Hydrophobic Surfaces**

Sariola, V., 4 Jun 2019, In : Langmuir. 35, 22, p. 7129-7135 7 p.

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

**An automated algorithm for reliable equation of state fitting of magnetic systems**

Levämäki, H., Tian, L-Y., Vitos, L. & Ropo, M., 2019, In : Computational Materials Science. 156, p. 121-128 8 p.

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

**An electro-optically tunable Bragg reflector based on liquid crystals**

Gilardi, G., Asquini, R., D'Alessandro, A. & Assanto, G., 2011, In : Molecular Crystals and Liquid Crystals. 549, p. 62-68 7 p.

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

**Anomalous Auger-electron spectra of metallic calcium**

Väyrynen, J., Rantala, T. T., Minni, E. & Suoninen, E., 1983, In : Journal of Electron Spectroscopy and Related Phenomena. 31, 3, p. 293-305 13 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

**A Pentacene-based Nanotube Displaying Enriched Electrochemical and Photochemical Activities**

Kuroda, K., Yazaki, K., Tanaka, Y., Akita, M., Sakai, H., Hasobe, T., Tkachenko, N. V. & Yoshizawa, M., Jan 2019, In : Angewandte Chemie - International Edition. 58, 4, p. 1115-1119

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

**Appropriate pricing policy needed worldwide for improving water services infrastructure**

Hukka, J. J. & Katko, T. S., 1 Jan 2015, In : Journal American Water Works Association. 107, 1, p. E37-E46

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

#### **Architectures and codecs for real-time light field streaming**

Kovács, P. T., Zare, A., Balogh, T., Bregovic, R. & Gotchev, A., 1 Jan 2017, In : Journal of Imaging Science and Technology. 61, 1, 010403.

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

#### **Arrhenius analysis of anisotropic surface self-diffusion on the prismatic facet of ice**

Gladich, I., Pfalzgraff, W., Maršálek, O., Jungwirth, P., Roeselová, M. & Neshyba, S., 28 Nov 2011, In : Physical Chemistry Chemical Physics. 13, 44, p. 19960-19969 10 p.

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

#### **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

#### **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

#### **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

#### **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

#### **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

#### **Ballistic and numerical simulation of impacting goods on conveyor belt rubber**

Molnar, W., Nugent, S., Lindroos, M., Apostol, M. & Varga, M., 2015, In : Polymer Testing. 42, p. 1-7 7 p.

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

#### **Batch dark fermentative hydrogen production from grass silage: The effect of inoculum, pH, temperature and VS ratio**

Pakarinen, O., Lehtomäki, A. & Rintala, J., Jan 2008, In : International Journal of Hydrogen Energy. 33, 2, p. 594-601 8 p.

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

#### **Bayesian inversion of a forest reflectance model using Sentinel-2 and Landsat 8 satellite images**

Schraik, D., Varvia, P., Korhonen, L. & Rautiainen, M., 1 Aug 2019, In : JOURNAL OF QUANTITATIVE SPECTROSCOPY AND RADIATIVE TRANSFER. 233, p. 1-12 12 p.

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

#### **Beaming random lasers with soliton control**

Perumbilavil, S., Piccardi, A., Barboza, R., Buchnev, O., Kauranen, M., Strangi, G. & Assanto, G., 1 Dec 2018, In : Nature Communications. 9, 1, 7 p., 3863.

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

**Behavior of the DPH fluorescence probe in membranes perturbed by drugs**

Poojari, C., Wilkosz, N., Lira, R. B., Dimova, R., Jurkiewicz, P., Petka, R., Kepczynski, M. & Róg, T., 1 Sep 2019, In : Chemistry and Physics of Lipids. 223, 104784.

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

**Behavior of the eigen form of hydronium at the air/water interface**

Jagoda-Cwiklik, B., Cwiklik, L. & Jungwirth, P., 16 Jun 2011, In : Journal of Physical Chemistry A. 115, 23, p. 5881-5886 6 p.

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

**Behavior of  $\beta$ -amyloid 1-16 at the air-water interface at varying pH by nonlinear spectroscopy and molecular dynamics simulations**

Miller, A. E., Petersen, P. B., Hollars, C. W., Saykally, R. J., Heyda, J. & Jungwirth, P., 16 Jun 2011, In : Journal of Physical Chemistry A. 115, 23, p. 5873-5880 8 p.

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

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

Siiskonen, A. & Priimägi, A., 1 Feb 2017, In : Journal of Molecular Modeling. 23, 2, 50.

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

**Bi-directional cell-pericellular matrix interactions direct stem cell fate**

Ferreira, S. A., Motwani, M. S., Faull, P. A., Seymour, A. J., Yu, T. T. L., Enayati, M., Taheem, D. K., Salzlechner, C., Haghghi, T., Kania, E. M., Oommen, O. P., Ahmed, T., Loaiza, S., Parzych, K., Dazzi, F., Varghese, O. P., Festy, F., Grigoriadis, A. E., Auner, H. W., Snijders, A. P., Bozec, L. & Gentleman, E., Dec 2018, In : Nature Communications. 9, 1, 12 p., 4049.

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

**Bioimpedance Sensor Array for Long-Term Monitoring of Wound Healing from Beneath the Primary Dressings and Controlled Formation of  $H_2O_2$  Using Low-Intensity Direct Current**

Kekonen, A., Bergelin, M., Johansson, M., Kumar Joon, N., Bobacka, J. & Viik, J., 31 May 2019, In : Sensors. 19, 11

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

**Biological treatment of selenium-laden wastewater containing nitrate and sulfate in an upflow anaerobic sludge bed reactor at pH 5.0**

Tan, L. C., Nancharaiyah, Y. V., Lu, S., van Hullebusch, E. D., Gerlach, R. & Lens, P. N. L., 1 Nov 2018, In : Chemosphere. 211, p. 684-693 10 p.

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

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

Pale, V., Nikkonen, T., Vapaavuori, J., Kostiaainen, 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

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

Raghuwanshi, S., Deswal, D., Karp, M. & Kuhad, R. C., 15 May 2014, In : Fuel. 124, p. 183-189 7 p.

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

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

Borah, D., Rasappa, S., Senthamaraiannan, R., Holmes, J. D. & Morris, M. A., 2015, In : Polymers. 7, 4, p. 592-609 18 p.

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

**Both zundel and eigen isomers contribute to the IR spectrum of the gas-phase H<sub>9</sub>O<sub>4</sub> + 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

**Buckling Behavior of Cold-Formed Studs with Thermal Perforations**

Garifullin, M., Sinelnikov, A., Bronzova, M., Kovacic, B. & Kamnik, R., 11 Aug 2016, In : MATEC Web of Conferences. 73, 04011.

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

**Calculation of the molecular ordering parameters of (±)-3-butyn-2-ol dissolved in an organic solution of poly(γ-benzyl-L-glutamate)**

Lesot, P., Merlet, D., Courtieu, J., Emsley, J. W., Rantala, T. T. & Jokisaari, J., 31 Jul 1997, In : Journal of Physical Chemistry A. 101, 31, p. 5719-5724 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

**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

**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

**Catalytic effect of Ca and K on CO<sub>2</sub> 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

**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., Tzankiozis, 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

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

Kamppuri, T., Vehviläinen, M., Puolakka, A., Honkanen, M., Vippola, M. & Rissanen, M., 2015, In : Coloration Technology. 131, 5, p. 396-402 7 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.

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

#### **Characterizing the micro-impact fatigue behavior of APS and HVOF-sprayed ceramic coatings**

Kiilakoski, J., Langlade, C., Koivuluoto, H. & Vuoristo, P., 15 Aug 2019, In : Surface and Coatings Technology. 371, p. 245-254

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

#### **Charge carrier dynamics in tantalum oxide overlayers and tantalum doped hematite photoanodes**

Ruoko, T-P., Hiltunen, A., Iivonen, T., Ulkuniemi, R., Lahtonen, K., Ali-Löyty, H., Mizohata, K., Valden, M., Leskelä, M. & Tkachenko, N. V., Jan 2019, In : Journal of Materials Chemistry A. 7, 7, p. 3206-3215 10 p.

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

#### **Chasing charge localization and chemical reactivity following photoionization in liquid water**

Marsalek, O., Elles, C. G., Pieniazek, P. A., Pluhaov, E., Vandevondele, J., Bradforth, S. E. & Jungwirth, P., 14 Dec 2011, In : Journal of Chemical Physics. 135, 22, 224510.

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

#### **Chemolithotrophic denitrification in biofilm reactors**

Di Capua, F., Papirio, S., Lens, P. N. L. & Esposito, G., 2015, In : Chemical Engineering Journal. 280, p. 643-657 15 p.

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

#### **Cholesterol driven alteration of the conformation and dynamics of phospholamban in model membranes**

Manna, M. & Mukhopadhyay, C., 7 Dec 2011, In : Physical Chemistry Chemical Physics. 13, 45, p. 20188-20198 11 p.

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

#### **Cholesterol oxidation products and their biological importance**

Kulig, W., Cwiklik, L., Jurkiewicz, P., Rog, T. & Vattulainen, I., 2016, In : Chemistry and Physics of Lipids. 199, p. 144-160 17 p.

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

#### **Collective excitations and viscosity in liquid Bi**

Ropo, M., Akola, J. & Jones, R. O., 14 Nov 2016, In : Journal of Chemical Physics. 145, 18, 184502.

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

#### **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

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

Bansod, N. D., Kaggate, 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

**Complex Behavior of Phosphatidylcholine-Phosphatidic Acid Bilayers and Monolayers: Effect of Acyl Chain Unsaturation**

Kulig, W., Korolainen, H., Zatorska, M., Kwolek, U., Wydro, P., Kepczynski, M. & Róg, T., 30 Apr 2019, In : Langmuir. 35, 17, p. 5944-5956 13 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

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

Dessi, P., Porca, E., Haavisto, J., Lakaniemi, A-M., Collins, G. & Lens, P. N. L., 2018, In : RSC Advances. 8, 6, p. 3069-3080 12 p.

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

**Computational approaches to the chemical sensitivity of semiconducting tin dioxide**

Rantala, T., Lantto, V. & Rantala, T., 1 Jan 1998, In : Sensors and Actuators B: Chemical. 47, 1-3, p. 59-64 6 p.

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

**Computational studies for the interpretation of gas response of SnO<sub>2</sub>(110) surface**

Rantala, T. S., Rantala, T. T. & Lantto, V., 30 Jun 2000, In : Sensors and Actuators B: Chemical. 65, 1, p. 375-378 4 p.

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

**Computation of Dynamic Polarizabilities and van der Waals Coefficients from Path-Integral Monte Carlo**

Tiihonen, J., Kylänpää, I. & Rantala, T. T., 2 Oct 2018, In : Journal of Chemical Theory and Computation. 14, p. 5750-5763 14 p.

Research output: Contribution to journal › 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

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

Valtakari, D., Bollström, R., Tuominen, M., Teisala, H., Aromaa, M., Toivakka, M., Kuusipalo, J., Mäkelä, J. M., Uozumi, J. & Saarinen, J. J., 2012, *AIChE 2012 - 2012 AIChE Annual Meeting, Conference Proceedings*.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › 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

**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



**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

**Controlled Growth of Supported ZnO Inverted Nanopyramids with Downward Pointing Tips**

Barreca, D., Carraro, G., Maccato, C., Altantzis, T., Kaunisto, K. & Gasparotto, A., Feb 2018, In : Crystal Growth and Design. 18, 4, p. 2579-2587 9 p.

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

**Controlling the motion of multiple objects on a Chladni plate**

Zhou, Q., Sariola, V., Latifi, K. & Liimatainen, V., 9 Sep 2016, In : Nature Communications. 7, 12764.

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

**Control of matrix interferences by the multiple linear regression model in the determination of arsenic, antimony and tin in lead pellets by inductively coupled plasma atomic emission spectrometry**

Väisänen, A., Suontamo, R. & Rintala, J., 2002, In : Journal of Analytical Atomic Spectrometry. 17, 3, p. 274-276 3 p.

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

**Convenient extraction method for quantification of thin zinc patina layers**

Saarimaa, V., Kaleva, A., Paunikallio, T., Nikkanen, J-P., Heinonen, S., Levänen, E., Väisänen, P. & Markkula, A., 2018, In : Surface and Interface Analysis. 50, 5, p. 564-570

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

**Coordination networks incorporating halogen-bond donor sites and azobenzene groups**

Fernandez-Palacio, F., Saccone, M., Priimägi, A., Terraneo, G., Pilati, T., Metrangolo, P. & Resnati, G., 7 Apr 2016, In : CrystEngComm. 18, 13, p. 2251-2257 7 p.

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

**CO oxidation catalyzed by neutral and anionic Cu<sub>20</sub> 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

**Correlation of Surface Morphology and Interfacial Adhesive Behavior between Cellulose Surfaces: Quantitative Measurements in Peak-Force Mode with the Colloidal Probe Technique**

Lai, Y., Zhang, H., Sugano, Y., Xie, H. & Kallio, P., 4 Jun 2019, In : Langmuir. 35, 22, p. 7312-7321 10 p.

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

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

Mason, P. E., Uhlig, F., Vaněk, V., Buttersack, T., Bauerecker, S. & Jungwirth, P., 2015, In : Nature Chemistry. 7, 3, p. 250-254 5 p.

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

**Crystalline Wax Esters Regulate the Evaporation Resistance of Tear Film Lipid Layers Associated with Dry Eye Syndrome**

Paananen, R. O., Javanainen, M., Holopainen, J. M. & Vattulainen, I., 25 Jun 2019, In : Journal of Physical Chemistry Letters. 10, 14, p. 3893-3898 6 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

**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

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

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

Kulig, W. & Agmon, N., 14 Mar 2014, In : Physical Chemistry Chemical Physics. 16, 10, p. 4933-4941 9 p.

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

**Decomposition of persistent luminescent microparticles in corrosive phosphate glass melt**

Ojha, N., Nguyen, H., Laihininen, T., Salminen, T., Lastusaari, M. & Petit, L., 2018, In : Corrosion Science. 135, p. 207-214

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

**Defined-size DNA triple crossover construct for molecular electronics: Modification, positioning and conductance properties**

Linko, V., Leppiniemi, J., Paasonen, S. T., Hytönen, V. P. & Jussi Toppari, J., 8 Jul 2011, In : Nanotechnology. 22, 27, 275610.

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

**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

**Density functional theory study of transition metals doped  $B_{80}$  fullerene**

Wang, J., Ma, L., Liang, Y., Gao, M. & Wang, G., 22 Sep 2014, In : Journal of Theoretical and Computational Chemistry. 13, 6, 1450050.

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

**Design aspects of all atomic layer deposited  $TiO_2-Fe_2O_3$  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

**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

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

Kordmahaleh, A. A., Naghashzadegan, M., Javaherdeh, K. & Khoshgoftar, M., 2017, In : International Journal of Photoenergy. 2017, 4210184.

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

**Detection and characterization at nM concentration of oligomers formed by hIAPP, A $\beta$ (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

**Detection and verification of glycosylation patterns of glycoproteins from clinical specimens using lectin microarrays and lectin-based immunosorbent assays**

Li, Y., Tao, S. C., Bova, G. S., Liu, A. Y., Chan, D. W., Zhu, H. & Zhang, H., 15 Nov 2011, In : Analytical Chemistry. 83, 22, p. 8509-8516 8 p.

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

**Detection of DNA hybridisation in a diluted serum matrix by surface plasmon resonance and film bulk acoustic resonators**

Auer, S., Nirschl, M., Schreiter, M. & Vikholm-Lundin, I., May 2011, In : Analytical and Bioanalytical Chemistry. 400, 5, p. 1387-1396 10 p.

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

**Detergent impurity effect on recycled HDPE: Properties after repetitive processing**

Mylläri, V., Hartikainen, S., Poliakova, V., Anderson, R., Jönkkäri, I., Pasanen, P., Andersson, M. & Vuorinen, J., 15 Aug 2016, In : Journal of Applied Polymer Science. 133, 31, 43766.

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

**Development and characterization of poly( $\epsilon$ -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

**Development of Magnetic Losses During Accelerated Corrosion Tests for Nd-Fe-B Magnets Used in Permanent Magnet Generators**

Isotahdon, E., Huttunen-Saarivirta, E. & Kuokkala, V-T., 1 Jun 2016, In : Corrosion. 72, 6, p. 732-741 10 p.

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

**DFT simulations and microkinetic modelling of 1-pentyne hydrogenation on Cu<sub>20</sub> model catalysts**

Ma, L., Melander, M., Weckman, T., Lipasti, S., Laasonen, K. & Akola, J., 1 Apr 2016, In : Journal of Molecular Graphics and Modelling. 65, p. 61-70 10 p.

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

**Differential basal-to-apical accessibility of lamin A/C epitopes in the nuclear lamina regulated by changes in cytoskeletal tension**

Ihalainen, T. O., Aires, L., Herzog, F. A., Schwartlander, R., Moeller, J. & Vogel, V., 1 Dec 2015, In : Nature Materials. 14, 12, p. 1252-1261 10 p.

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

**Direct measurement of the kinetic energy shift between the molecular and atomic M4.5N4.5N4.5 Auger spectra of iodine**

Rantala, T., Väyrynen, J., Kumpula, R. & Aksela, S., 1 Oct 1979, In : Chemical Physics Letters. 66, 2, p. 384-386 3 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

**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

**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

**Double-side pumped membrane external-cavity surface-emitting laser (MECSEL) with increased efficiency emitting > 3 W in the 780 nm region**

Kahle, H., Phung, H-M., Penttinen, J-P., Rajala, P., Tukiainen, A., Ranta, S. & Guina, M., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › 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

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

Suokas, E., 1 Jan 2017, *16th TAPPI European PLACE Conference 2017*. TAPPI Press, p. 529-544 16 p.

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

**Effect of Co-Adsorbate and Hole Transporting Layer on the Photoinduced Charge Separation at the TiO<sub>2</sub>-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.

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

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

Goulet-Hanssens, A., Corkery, T. C., Priimagi, A. & Barrett, C. J., 28 Sep 2014, In : Journal of Materials Chemistry C. 2, 36, p. 7505-7512 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

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

Sharma, R., Bhalerao, S. & Gupta, D., 1 Jun 2016, In : Organic Electronics: physics, materials, applications. 33, p. 274-280 7 p.

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

**Effect of ionic liquid on dielectric, mechanical and dynamic mechanical properties of multi-walled carbon nanotubes/polychloroprene rubber composites**

Subramaniam, K., Das, A., Steinhauser, D., Klüppel, M. & Heinrich, G., Dec 2011, In : European Polymer Journal. 47, 12, p. 2234-2243 10 p.

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

**Effect of melting state on the thermal shock resistance and thermal conductivity of APS ZrO<sub>2</sub>-7.5wt.% Y<sub>2</sub>O<sub>3</sub> 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

**Effect of nitro groups and alkyl chain length on the negative ion tandem mass spectra of alkyl 3-hydroxy-5-(4'-nitrophenoxy) and alkyl 3-hydroxy-5-(2', 4'-dinitrophenoxy) benzoates**

Kangas, H., Franzén, R., Tois, J., Taskinen, J. & Kostainen, R., 1999, In : Rapid Communications in Mass Spectrometry. 13, 16, p. 1680-1684 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

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

Kwolek, U., Kulig, W., Wydro, P., Nowakowska, M., Róg, T. & Kepczynski, M., 6 Aug 2015, In : Journal of Physical Chemistry Part B. 119, 31, p. 10042-10051 10 p.

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

#### **Effect of pre-treatments on barrier properties of layers applied by atomic layer deposition onto polymer-coated substrates**

Vähä-Nissi, M., Hirvikorpi, T., Sievänen, J., Salo, E., Harlin, A., Johansson, P. & Kuusipalo, J., 2011, *13th European PLACE Conference 2011*. Vol. 1. p. 447 1 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > 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

#### **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

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

Kapgate, B. P., Das, C., Basu, D., Das, A., Heinrich, G. & Reuter, U., 5 Aug 2014, In : Journal of Applied Polymer Science. 131, 15, 40531.

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

#### **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

#### **Effect of surface morphology of poly( $\epsilon$ -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

#### **Effect of surfactant type and sonication energy on the electrical conductivity properties of nanocellulose-CNT nanocomposite films**

Siljander, S., Keinänen, P., Rätty, A., Ramakrishnan, K. R., Tuukkanen, S., Kunnari, V., Harlin, A., Vuorinen, J. & Kanerva, M., 20 Jun 2018, In : International Journal of Molecular Sciences. 19, 6, 1819.

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

**Effects of anode materials on electricity production from xylose and treatability of TMP wastewater in an up-flow microbial fuel cell**

Haavisto, J., Dessì, P., Chatterjee, P., Honkanen, M., Noori, M. T., Kokko, M., Lakaniemi, A. M., Lens, P. N. L. & Puhakka, J. A., 15 Sep 2019, In : Chemical Engineering Journal. 372, p. 141-150 10 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

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

Golovanov, V. V., Nazarchuk, B. V., Golovanova, V. V., Tkachenko, N. V. & Rantala, T. T., 2017, In : Physical Chemistry Chemical Physics. 19, 16, p. 10511-10517 7 p.

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

**Effects of pyrolysis temperature on the hydrologically relevant porosity of willow biochar**

Hyväluoma, J., Hannula, M., Arstila, K., Wang, H., Kulju, S. & Rasa, K., Sep 2018, In : Journal of Analytical and Applied Pyrolysis. 134

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

**Effects of thinning and heating for TiO<sub>2</sub>/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

**Effects of two double bonds on the hydrocarbon interior of a phospholipid bilayer**

Hyvönen, M., Ala-Korpela, M., Vaara, J., Rantala, T. T. & Jokisaari, J., 24 Nov 1995, In : Chemical Physics Letters. 246, 3, p. 300-306 7 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

**Efficient production of NV colour centres in nanodiamonds using high-energy electron irradiation**

Dantelle, G., Slablab, A., Rondin, L., Lainé, F., Carrel, F., Bergonzo, P., Perruchas, S., Gacoin, T., Treussart, F. & Roch, J. F., Sep 2010, In : Journal of Luminescence. 130, 9, p. 1655-1658 4 p.

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

**Efficient surface structuring and photoalignment of supramolecular polymer-azobenzene complexes through rational chromophore design**

Vapaavuori, J., Valtavirta, V., Alasaarela, T., Mamiya, J. I., Priimagi, A., Shishido, A. & Kaivola, M., 21 Oct 2011, In : Journal of Materials Chemistry. 21, 39, p. 15437-15441 5 p.

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

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

Çetinkaya, A. Y., Köroğlu, 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

**Electro-concentration for chemical-free nitrogen capture as solid ammonium bicarbonate**

Jermakka, J., Thompson Brewster, E., Ledezma, P. & Freguia, S., 12 Sep 2018, In : Separation and Purification Technology. 203, p. 48-55 8 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**

Mohanty, A. K., Ghosh, A., Sawai, P., Pareek, K., Banerjee, S., Das, A., Pötschke, P., Heinrich, G. & Voit, B., 1 Nov 2014, In : Polymer Engineering and Science. 54, 11, p. 2560-2570 11 p.

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

**Electronic and structural properties of Si<sub>10</sub> cluster**

Rantala, T. T., Jelski, D. A. & George, T. F., Jun 1990, In : Journal of Cluster Science. 1, 2, p. 189-200 12 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

**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

**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

**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

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

Kramb, J., Konttinen, J., Backman, R., Salo, K. & Roberts, M., 1 Oct 2016, In : Fuel. 181, p. 319-324 6 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

**Embedded cluster models for reactivity of the hydrated electron**

Uhlig, F. & Jungwirth, P., Nov 2013, In : ZEITSCHRIFT FÜR 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

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

Beyeh, N. K., Pan, F., Valkonen, A. & Rissanen, K., 7 Feb 2015, In : CrystEngComm. 17, 5, p. 1182-1188 7 p.

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

**Energetic origin of proton affinity to the air/water interface**

Takahashi, H., Maruyama, K., Karino, Y., Morita, A., Nakano, M., Jungwirth, P. & Matubayasi, N., 28 Apr 2011, In : Journal of Physical Chemistry Part B. 115, 16, p. 4745-4751 7 p.

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

#### **Energy-dependent diffusion in a soft periodic Lorentz gas**

Gil-Gallegos, S., Klages, R., Solanpää, J. & Räsänen, E., 1 May 2019, In : European Physical Journal: Special Topics. 228, 1, p. 143-160 18 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

#### **Enrichment polymer layers for detection of volatile vapors by ATR FT-IR**

Giammarco, J. M., Zdyrko, B., Hu, J., Agarwal, A., Kimerling, L., Carlie, N., Petit, L., Richardson, K. & Luzinov, I., 2011, In : ACS National Meeting Book of Abstracts.

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

#### **Epitaxial phases of high Bi content GaSbBi alloys**

Hilska, J., Koivusalo, E., Puustinen, J., Suomalainen, S. & Guina, M., 15 Jun 2019, In : Journal of Crystal Growth. 516, p. 67-71 5 p.

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

#### **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

#### **Erosion wear performance of WC-10Co4Cr and Cr<sub>3</sub>C<sub>2</sub>-25NiCr coatings sprayed with high-velocity thermal spray processes**

Matikainen, V., Rubio Peregrina, S., Ojala, N., Koivuluoto, H., Schubert, J., Houdková & Vuoristo, P., 25 Jul 2019, In : Surface and Coatings Technology. 370, p. 196-212 17 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**

Farooq, A., Evreinov, G., Raisamo, R. & Takahata, D., 31 Dec 2015, *2015 IEEE SENSORS - Proceedings*. Institute of Electrical and Electronics Engineers Inc., 7370186

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

#### **Evaluation of dry electrodes in canine heart rate monitoring**

Virtanen, J., Somppi, S., Törnqvist, H., Jeyhani, V., Fiedler, P., Gizatdinova, Y., Majaranta, P., Väättäjä, H., Cardó, A. V., Lekkala, J., Tuukkanen, S., Surakka, V., Vainio, O. & Vehkaoja, A., 1 Jun 2018, In : Sensors. 18, 6, 1757.



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

**Exclusive occurrence of photoinduced energy transfer and switching of its direction by rectangular  $\pi$ -extension of nanographenes**

Umeyama, T., Hanaoka, T., Yamada, H., Namura, Y., Mizuno, S., Ohara, T., Baek, J., Park, J., Takano, Y., Stranius, K., Tkachenko, N. V. & Imahori, H., 2019, In : Chemical Science. 10, 27, p. 6642-6650 9 p.

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

**Experimental and theoretical study of the spin-spin coupling tensors in methylsilane**

Kaski, J., Lantto, P., Rantala, T. T., Schroderus, J., Vaara, J. & Jokisaari, J., 2 Dec 1999, In : Journal of Physical Chemistry A. 103, 48, p. 9669-9677 9 p.

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

**Experimental moment resistance of rectangular hollow section T joints**

Garifullin, M., 5 Dec 2018, In : MATEC Web of Conferences. 245, 08003.

Research output: Contribution to journal › Conference article › Scientific › peer-review

**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.

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., Senthamaraiannan, R., Faulkner, C. C., Holmes, J. D. & Morris, M. A., 2014, In : Journal Nanoscience and Nanotechnology. 14, 7, p. 5221-5227 7 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

**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

**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

**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.

### **FCC-hh: The Hadron Collider: Future Circular Collider Conceptual Design Report Volume 3**

the FCC Collaboration, Abada, A., Abbrescia, M., AbdusSalam, S. S., Abdyukhanov, I., Abelleira Fernandez, J., Abramov, A., Aburaia, M., Acar, A. O., Adzic, P. R., Agrawal, P., Aguilar-Saavedra, J. A., Aguilera-Verdugo, J. J., Aiba, M., Aichinger, I., Aielli, G., Akay, A., Akhundov, A., Aksakal, H., Albacete, J. L., Albergo, S., Alekou, A., Aleksa, M., Aleksan, R., Alemany Fernandez, R. M., Alexahin, Y., Alía, R. G., Alioli, S., Alipour Tehrani, N., Allanach, B. C., Allport, P. P., Altinli, M., Altmannshofer, W., Ambrosio, G., Amorim, D., Amstutz, O., Anderlini, L., Andreazza, A., Andreini, M., Andriatis, A., Andris, C., Andronic, A., Angelucci, M., Antinori, F., Antipov, S. A., Antonelli, M., Antonello, M., Lehtinen, T., Penttinen, J. P., Salmi, T. & Stenvall, A., 1 Jul 2019, In : *European Physical Journal: Special Topics*. 228, 4, p. 755-1107 353 p.

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

### **Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> 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

### **Feed-hopper level estimation and control in cone crushers**

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

### **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

### **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

### **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

### **Frequency Comb Generation in a Continuous-Wave Pumped Second-Order Nonlinear Waveguide Resonator**

Abdallah, Z., Stefszky, M., Ulvila, V., Silberhorn, C. & Vainio, M., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

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

### **From a localized H<sub>3</sub>O radical to a delocalized H<sub>3</sub>O<sup>+</sup>•••e<sup>-</sup> solvent-separated pair by sequential hydration**

Uhlig, F., Marsalek, O. & Jungwirth, P., 21 Aug 2011, In : *Physical Chemistry Chemical Physics*. 13, 31, p. 14003-14009 7 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

### **Geometry controlled anomalous diffusion in random fractal geometries: Looking beyond the infinite cluster**

Mardoukhi, Y., Jeon, J-H. & Metzler, R., 2015, In : *Physical Chemistry Chemical Physics*. 17, 44, p. 30134-30147 14 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

### **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.  
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**

Rokade, S. S., Joshi, K. A., Mahajan, K., Patil, S., Tomar, G., Dubal, D. S., Parihar, V. S., Kitture, R., Bellare, J. R. & Ghosh, S., 2018, In : *Bioinorganic Chemistry and Applications*. 2018, 4924186.  
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

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

Ali-Löytty, H., Hannula, M., Honkanen, M., Östman, K., Lahtonen, K. & Valden, M., Nov 2016, In : *Corrosion Science*. 112, p. 204-213  
Research output: Contribution to journal > Article > Scientific > peer-review

### **Graphene-intercalated Fe<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> 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.  
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

### **Guanidinium Pairing Facilitates Membrane Translocation**

Allolio, C., Baxova, K., Vazdar, M. & Jungwirth, P., 14 Jan 2016, In : *Journal of Physical Chemistry Part B*. 120, 1, p. 143-153 11 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

### **Halogen-bonded photoresponsive materials**

Saccone, M., Cavallo, G., Metrangolo, P., Resnati, G. & Priimägi, A., 2015, *Halogen Bonding II: Impact on Materials Chemistry and Life Sciences*. Springer International Publishing, p. 147-166 20 p. (Topics in Current Chemistry; vol. 359).  
Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review

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

Priimägi, A., Cavallo, G., Forni, A., Gorynsztejn-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

### **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

### Hexaphyrin as a Potential Theranostic Dye for Photothermal Therapy and <sup>19</sup>F 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

### 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

### 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.

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

### High Nitrogen Removal in a Constructed Wetland Receiving Treated Wastewater in a Cold Climate

Uusheimo, S., Huotari, J., Tulonen, T., Aalto, S. L., Rissanen, A. J. & Arvola, L., 20 Nov 2018, In : Environmental science & technology. 52, 22, p. 13343-13350 8 p.

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

### High-Q resonance train in a plasmonic metasurface

Saad-Bin-Alam, M., Reshef, O., Huttunen, M. J., Carlow, G., Sullivan, B., Menard, J. M., Dolgaleva, K. & Boyd, R. W., 1 May 2019, *2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings*. IEEE

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > 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

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

Mojica, E., Pertuz, S. & Arguello, H., 2017, In : Optics Communications. 404, p. 103-109

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

### High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a KCl-K<sub>2</sub>SO<sub>4</sub> 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

### 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

### 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

Sakai, H., Inaya, R., Tkachenko, N. V. & Hasobe, T., 16 Nov 2018, In : Chemistry - A European Journal. 24, 64, p. 17062-17071 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

#### **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

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

Szabo, H. M., Lepistö, R. & Tuhkanen, T., 19 Feb 2016, In : International Journal of Environmental Analytical Chemistry. 96, 3, p. 257-270 14 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

#### **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

#### **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

#### **Hydrolysis and drug release from poly(ethylene glycol)-modified lactone polymers with open porosity**

Asikainen, S., Paakinaho, K., Kyhkynen, A. K., Hannula, M., Malin, M., Ahola, N., Kellomäki, M. & Seppälä, J., 1 Apr 2019, In : European Polymer Journal. 113, p. 165-175 11 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

#### **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

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

Amanatidis, S., Ntziachristos, L., Giechaskiel, B., Bergmann, A. & Samaras, Z., 7 Oct 2014, In : Environmental Science and Technology. 48, 19, p. 11527-11534 8 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

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

Vuori, L., Ali-Löytty, H., Lahtonen, K., Hannula, M., Lehtonen, E., Niu, Y. & Valden, M., 2017, In : Corrosion. 73, 2  
Research output: Contribution to journal > Article > Scientific > peer-review

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

Shakun, A., Poikelispää, M., Das, A. & Vuorinen, J., 2018, In : Polymer Engineering and Science. 58, 3, p. 395-404  
Research output: Contribution to journal > Article > Scientific > peer-review

**Improved Stability of Atomic Layer Deposited Amorphous TiO<sub>2</sub> 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.  
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**Improvement of actuation performance of dielectric elastomers by barium titanate and carbon black fillers**

Poikelispää, M., Shakun, A., Das, A. & Vuorinen, J., 10 Nov 2016, In : Journal of Applied Polymer Science. 133, 42, 44116.  
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

**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

**Improving the high temperature abrasion resistance of thermally sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr coatings by WC addition**

Janka, L., Berger, L. M., Norpoth, J., Trache, R., Thiele, S., Tomastik, C., Mätikäinen, V. & Vuoristo, P., 15 Mar 2018, In : Surface and Coatings Technology. 337, p. 296-305 10 p.  
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**Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma**

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

**Inequivalence of single CH<sub>a</sub> and CH<sub>b</sub> methylene bonds in the interior of a diunsaturated lipid bilayer from a molecular dynamics simulation**

Hyvönen, M., Ala-Korpela, M., Vaara, J., Rantala, T. T. & Jokisaari, J., 4 Apr 1997, In : Chemical Physics Letters. 268, 1-2, p. 55-60 6 p.  
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**Influence of heat treatment on the abrasive wear resistance of a Cr<sub>3</sub>C<sub>2</sub>NiCr coating deposited by an ethene-fuelled HVOF spray process**

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**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.

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**Influence of ions to modulate hydrazone and oxime reaction kinetics to obtain dynamically cross-linked hyaluronic acid hydrogels**

Wang, S., Nawale, G. N., Oommen, O. P., Hilborn, J. & Varghese, O. P., 21 Aug 2019, In : *Polymer Chemistry*. 10, 31, p. 4322-4327 6 p.

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**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.

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**Inkjet-printed dual microfluidic-based sensor integrated system**

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**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.

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**Interactions of molecular ions with model phospholipid membranes**

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**Internal structure, hygroscopic and reactive properties of mixed sodium methanesulfonate-sodium chloride particles**

Liu, Y., Minofar, B., Desyaterik, Y., Dames, E., Zhu, Z., Cain, J. P., Hopkins, R. J., Gilles, M. K., Wang, H., Jungwirth, P. & Laskin, A., 7 Jul 2011, In : *Physical Chemistry Chemical Physics*. 13, 25, p. 11846-11857 12 p.

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**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

**Investigation of the adducts formed by reaction of butenedioic acids with adenosine**

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**Ionization of purine tautomers in nucleobases, nucleosides, and nucleotides: From the gas phase to the aqueous environment**

Pluhařová, E., Jungwirth, P., Bradforth, S. E. & Slavíček, P., 10 Feb 2011, In : *Journal of Physical Chemistry Part B*. 115, 5, p. 1294-1305 12 p.

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

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**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.

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### **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.

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### **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.

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

Shin, J., Cherstvy, A. G. & Metzler, R., 21 Jan 2015, In : *Soft Matter*. 11, 3, p. 472-488 17 p.

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

### **La thérapie photodynamique: État de l'art et perspectives**

Frucht, C., Barberi-Heyob, M., Blanchard-Desce, M., Bolotine, L., Bonneau, S., Jimenez, C. M., Durand, J. O., Lassalle, H. P., Lemercier, 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

### **Layered Double Hydroxides (LDH): A multifunctional versatile system for nanocomposites**

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

### **Less Is More: Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density**

Czaplicki, R., Kiviniemi, A., Huttunen, M. J., Zang, X., Stolt, T., Vartiainen, I., Butet, J., Kuittinen, M., Martin, O. J. F. & Kauranen, M., 12 Dec 2018, In : *Nano Letters*. 18, 12, p. 7709-7714 6 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.

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### **Like-charge guanidinium pairing from molecular dynamics and ab initio calculations**

Vazdar, M., Vymětal, J., Heyda, J., Vondrášek, J. & Jungwirth, P., 20 Oct 2011, In : *Journal of Physical Chemistry A*. 115, 41, p. 11193-11201 9 p.

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### **Linking volatile and non-volatile compounds to sensory profiles and consumer liking of wild edible Nordic mushrooms**

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

La Rosa, C., Scalisi, S., Lolicato, F., Pannuzzo, M. & Raudino, A., 14 May 2016, In : *Journal of Chemical Physics*. 144, 18, 184901.

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### **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



**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.

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. & Radsch, H. J., 13 Dec 2013, In : Polymer. 54, 26, p. 7009-7021 13 p.

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

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

Primagi, A., Shimamura, A., Kondo, M., Hiraoka, T., Kubo, S., Mamiya, J. I., Kinoshita, M., Ikeda, T. & Shishido, A., 2012, In : ACS Macro Letters. 1, 1, p. 96-99 4 p.

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

Sakuma, T., Sakai, H., Araki, Y., Mori, T., Wada, T., Tkachenko, N. V. & Hasobe, T., 31 Mar 2016, In : Journal of Physical Chemistry A. 120, 11, p. 1867-1875 9 p.

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

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**Low-dimensional formamidinium lead perovskite architectures via controllable solvent intercalation**

Shin, M., Kim, J., Jung, Y. K., Ruoko, T-P., Priimagi, A., Walsh, A. & Shin, B., 2019, In : Journal of Materials Chemistry C. 7, 13, p. 3945-3951 7 p.

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

**M2M Communication Assessment in Energy-Harvesting and Wake-Up Radio Assisted Scenarios Using Practical Components**

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**Machine learning: How it can help nanocomputing**

Uusitalo, M. A., Peltonen, J. & Ryhänen, T., Aug 2011, In : Journal of Computational and Theoretical Nanoscience. 8, 8, p. 1347-1363 17 p.

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

**Machine learning analysis of extreme events in optical fibre modulation instability**

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Salmenjoki, H., Alava, M. J. & Laurson, L., 1 Dec 2018, In : Nature Communications. 9, 1, 5307.

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

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

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

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

Liimatainen, V., Vuckovac, M., Jokinen, V., Sariola, V., Hokkanen, M. J., Zhou, Q. & Ras, R. H. A., 1 Dec 2017, In : Nature Communications. 8, 1, 1798.

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

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### **Measuring synthesis yield in graphene oxide synthesis by modified hummers method**

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### **Mechanical, thermal, and burning properties of viscose fabric composites: Influence of epoxy resin modification**

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### **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.

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#### **Membrane cholesterol access into a G-protein-coupled receptor**

Guixà-González, R., Albasanz, J. L., Rodríguez-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.

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#### **Metabolic profiling of water-soluble compounds from the extracts of dark septate endophytic fungi (DSE) isolated from scots pine (*Pinus sylvestris* L.) seedlings using UPLC–orbitrap–MS**

Tienaho, J., Karonen, M., Muilu-Mäkelä, R., Wähälä, K., Denegri, E. L., Franzén, R., Karp, M., Santala, V. & Sarjala, T., 2019, In : Molecules. 24, 12, 2330.

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#### **Metal chalcogenide quantum dots: Biotechnological synthesis and applications**

Mal, J., Nancharajah, Y. V., Van Hullebusch, E. D. & Lens, P. N. L., Apr 2016, In : RSC Advances. 6, 47, p. 41477-41495 19 p.

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#### **Methods for simultaneous robot-world-hand-eye calibration: A comparative study**

Ali, I., Suominen, O., Gotchev, A. & Morales, E. R., 2 Jun 2019, In : Sensors (Switzerland). 19, 12, 2837.

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#### **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.

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#### **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.

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#### **Microwave assisted laser-induced breakdown spectroscopy at ambient conditions**

Viljanen, J., Sun, Z. & Alwahabi, Z. T., 1 Apr 2016, In : Spectrochimica Acta Part B: Atomic Spectroscopy. 118, p. 29-36 8 p.

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

Mäki, A. J., Peltokangas, M., Kreutzer, J., Auvinen, S. & Kallio, P., 1 Dec 2015, In : Chemical Engineering Science. 137, p. 515-524 10 p.

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Pluhařová, E., Slavíček, P. & Jungwirth, P., 19 May 2015, In : Accounts of Chemical Research. 48, 5, p. 1209-1217 9 p.

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

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

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

Tevyashova, A. N., Shtil, A. A., Olsufyeva, E. N., Luzikov, Y. N., Reznikova, M. I., Dezhenkova, L. G., Isakova, E. B., Bukhman, V. M., Durandin, N. A., Vinogradov, A. M., Kuzmin, V. A. & Preobrazhenskaya, M. N., 15 Dec 2011, In : BIOORGANIC AND MEDICINAL CHEMISTRY. 19, 24, p. 7387-7393 7 p.

### **Moiré superlattices and 2D electronic properties of graphite/MoS<sub>2</sub> heterostructures**

Trainer, D. J., Putilov, A. V., Wang, B., Lane, C., Saari, T., Chang, T. R., Jeng, H. T., Lin, H., Xi, X., Nieminen, J., Bansil, A. & Iavarone, M., May 2019, In : *Journal of Physics and Chemistry of Solids*. 128, p. 325-330

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### **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.

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Manna, M. & Mukhopadhyay, C., 5 Apr 2011, In : *Langmuir*. 27, 7, p. 3713-3722 10 p.

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### **Molecular engineering of avidin and hydrophobin for functional self-assembling interfaces**

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

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### **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.

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### **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.

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

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### **Morphological and structural changes in laser CVD of silicon: comparison of theoretical temperature calculations with experimental results**

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

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Mandal, S. & Tkachenko, N. V., 2019, In : *Journal of Physical Chemistry Letters*. p. 2775-2781 7 p.

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**Mutational spectra of Salmonella typhimurium revertants induced by chlorohydroxyfuranones, byproducts of chlorine disinfection of drinking water**

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

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**Nanoparticle deposition on packaging materials by the liquid flame spray**

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

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**Optical Frequency Comb Photoacoustic Spectroscopy**

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

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

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**Optical vortex generation in nematic liquid crystal light valves**

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### **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

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

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### **Oxidation of the GaAs semiconductor at the Al<sub>2</sub>O<sub>3</sub>/GaAs junction**

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

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### **PEGylated liposomes as carriers of hydrophobic porphyrins**

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

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

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**Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as  $\pi$ -acceptors for anions**

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

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

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**Photo-antimicrobial efficacy of zinc complexes of porphyrin and phthalocyanine activated by inexpensive consumer LED lamp**

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**Photochemistry of dithiophosphate  $\text{Ni}(\text{S}_2\text{P}(\text{i-Bu})_2)_2$  complex in  $\text{CCl}_4$ . Transient species and TD-DFT calculations**

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**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.

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### **Photomechanical Energy Transfer to Photopassive Polymers through Hydrogen and Halogen Bonds**

Vapaavuori, J., Heikkinen, I. T. S., Dichiarante, V., Resnati, G., Mentrangolo, 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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Reeta, P. S., Khetubol, A., Jella, T., Chukharev, V., Abou-Chahine, F., Tkachenko, N. V., Giribabu, L. & Lemmetyinen, H., 1 Jan 2015, In : *Journal of Porphyrins and Phthalocyanines*. 19, 1-3, p. 288-300 13 p.

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

### **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

### **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

### **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

### **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.

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

### **Polarization resolved photoluminescence in GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum wells**

Balanta, M. A. G., Orsi Gordo, V., Carvalho, A. R. H., Puustinen, J., Alghamdi, H. M., Henini, M., Galeti, H. V. A., Guina, M. & Galvão Gobato, Y., Feb 2017, In : *Journal of Luminescence*. 182, p. 49-52 4 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

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

Shin, J., Cherstvy, A. G. & Metzler, R., 17 Feb 2015, In : *ACS Macro Letters*. 4, 2, p. 202-206 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

**Porous polybutylene succinate films enabling adhesion of human embryonic stem cell-derived retinal pigment epithelial cells (hESC-RPE)**

Calejo, M. T., Haapala, A., Skottman, H. & Kellomäki, M., 1 Sep 2019, In : European Polymer Journal. 118, p. 78-87 10 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

**Positioning information privacy in intelligent transportation systems: An overview and future perspective**

Ometov, A., Bezzateev, S., Davydov, V., Shchesniak, A., Masek, P., Lohan, E. S. & Koucheryavy, Y., 1 Apr 2019, In : Sensors. 19, 7, 1603.

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

**Possible strategy to use differential mobility spectrometry in real time applications**

Anttalainen, O., Puton, J., Kontunen, A., Karjalainen, M., Kumpulainen, P., Oksala, N., Safaei, Z. & Roine, A., 2019, In : International Journal for Ion Mobility Spectrometry.

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

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

Vale, J. R., Rimpiläinen, T., Sievänen, E., Rissanen, K., Afonso, C. A. M. & Candeias, N. R., 16 Feb 2018, In : Journal of Organic Chemistry. 83, 4, p. 1948-1958 11 p.

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

**Potential energy curves for diatomic molecules calculated with numerical basis functions**

Rantala, T. T., Wästberg, B. & Rosén, A., 15 Nov 1986, In : Chemical Physics. 109, 2-3, p. 261-268 8 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

**Preparation of 5-substituted 2-carboxyindoles on solid support**

Tois, J., Franzén, R., Aitio, O., Huikko, K. & Taskinen, J., 1 Apr 2000, In : Tetrahedron Letters. 41, 14, p. 2443-2446 4 p.

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

**Preparation of zinc oxide free, transparent rubber nanocomposites using a layered double hydroxide filler**

Das, A., Wang, D. Y., Leuteritz, A., Subramaniam, K., Greenwell, H. C., Wagenknecht, U. & Heinrich, G., 28 May 2011, In : Journal of Materials Chemistry. 21, 20, p. 7194-7200 7 p.

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

Tawade, B. V., Salunke, J. K., Sane, P. S. & Wadgaonkar, P. P., 18 Nov 2014, In : JOURNAL OF POLYMER RESEARCH. 21, 12

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

**Production of sulfonated polyetheretherketone/polypropylene fibers for photoactive textiles**

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**Programmable responsive hydrogels inspired by classical conditioning algorithm**

Zhang, H., Zeng, H., Priimägi, A. & Ikkala, O., 1 Dec 2019, In : Nature Communications. 10, 1, 3267.

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**

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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., Lusvarghi, 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

**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

**Pyrene based conjugated materials: Synthesis, characterization and electroluminescent properties**

Salunke, J. K., Sonar, P., Wong, F. L., Roy, V. A. L., Lee, C. S. & Wadgaonkar, P. P., 26 Sep 2014, In : Physical Chemistry Chemical Physics. 16, 42, p. 23320-23328 9 p.

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**Pyrolytic behavior of lignocellulosic-based polysaccharides**

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

**Quantification of bio-anode capacitance in bioelectrochemical systems using Electrochemical Impedance Spectroscopy**

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

**Quantifying non-ergodic dynamics of force-free granular gases**

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

**Quantifying structural complexity of graphs: Information measures in mathematical chemistry**

Dehmer, M., Emmert-Streib, F., Tsoy, Y. R. & Varmuza, K., 2011, *Quantum Frontiers of Atoms and Molecules*. Putz, M. V. (ed.). Nova Science Publishers, Inc., p. 479-497 19 p.

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

**Quantitative glycoproteomic analysis of optimal cutting temperature-embedded frozen tissues identifying glycoproteins associated with aggressive prostate cancer**

Tian, Y., Bova, G. S. & Zhang, H., 15 Sep 2011, In : Analytical Chemistry. 83, 18, p. 7013-7019 7 p.

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

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

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

#### **Rate constant and thermochemistry for $K + O_2 + N_2 = KO_2 + N_2$**

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

#### **Rate equation simulation of the height of Schottky barriers at the surface of oxidic semiconductors**

Rantala, T. S., Lantto, V. & Rantala, T. T., 1993, In : Sensors and Actuators B: Chemical. 13, 1-3, p. 234-237 4 p.

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

Li, Z., Le, T., Wu, Z., Yao, Y., Li, L., Tentzeris, M., Moon, K. S. & Wong, C. P., 21 Jan 2015, In : Advanced Functional Materials. 25, 3, p. 464-470 7 p.

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#### **Reaction between Peroxy and Alkoxy Radicals Can Form Stable Adducts**

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

#### **Recent advances in the preparation of heterocycles on solid support: A review of the literature**

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#### **Recent twists in photoactuation and photoalignment control**

Primagi, A., Barrett, C. J. & Shishido, A., 21 Sep 2014, In : Journal of Materials Chemistry C. 2, 35, p. 7155-7162 8 p.

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

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

Honkanen, M., Wang, J., Kärkkäinen, M., Huuhtanen, M., Jiang, H., Kallinen, K., Keiski, R. L., Akola, J. & Vippola, M., 2018, In : Journal of Catalysis. 358, p. 253-265 13 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

#### **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

#### **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

#### **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

#### **Resveratrol interferes with the aggregation of membrane-bound human-IAPP: A molecular dynamics study**

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#### **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

#### **Reversible biofunctionalization of surfaces with a switchable mutant of avidin**

Pollheimer, P., Taskinen, B., Scherfler, A., Gusenkov, 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

#### **Reversible photodoping of TiO<sub>2</sub> nanoparticles**

Joost, U., Sutka, A., Oja, M., Smits, K., Doebelin, N., Loot, A., Järvekülg, M., Hirsimäki, M., Valden, M. & Nommiste, E., 26 Dec 2018, In : *Chemistry of Materials*. 30, 24, p. 8968-8974

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

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

Razavi, A., Valkama, M. & Lohan, E. S., 1 Jun 2016, In : *Sensors*. 16, 6, 793.

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.

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#### **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.

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#### **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

#### **Search for global minimum geometries of medium sized Cd<sub>n</sub>Te<sub>n</sub> clusters (n = 15, 16, 20, 24 and 28)**

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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.

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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., Kuittinen, M. & Kauranen, M., 14 Jan 2015, In : *Nano Letters*. 15, 1, p. 530-534 5 p.

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

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

Bautista, G., Mäkitalo, J., Chen, Y., Dhaka, V., Grasso, M., Karvonen, L., Jiang, H., Huttunen, M. J., Huhtio, T., Lipsanen, H. & Kauranen, M., 6 Feb 2015, In : *Nano Letters*. 15, 3, p. 1564-1569 6 p.

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

**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

**Semiclassical hybrid approach to condensed phase molecular dynamics: Application to the  $I_2Kr_{17}$  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

**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.

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**Si<sub>10</sub> and photoabsorption spectra of mid-sized silicon clusters**

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**Silver sulfide nanoclusters and the superatom model**

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**Site-specific analysis of dipole polarizabilities of heterogeneous systems: Iron-doped Si<sub>n</sub> (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

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Ma, L., Jackson, K. A. & Jellinek, J., 8 Feb 2011, In : Chemical Physics Letters. 503, 1-3, p. 80-85 6 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 poss 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

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

Borah, D., Simao, C. D., Senthamaraiannan, 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

**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.

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#### **Solid-phase bromination and Suzuki coupling of 2-carboxyindoles**

Tois, J., Franzén, R., Aitio, O., Laakso, I., Huuskonen, J. & Taskinen, J., 2001, In : *Combinatorial Chemistry and High Throughput Screening*. 4, 6, p. 521-524 4 p.

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

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#### **Sorption and retention of ethylene glycol monoethyl ether (EGME) on silicas**

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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

#### **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.

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#### **Spin filtering in silicene by edges and chemically or electrically induced interfaces**

Saari, T. & Nieminen, J., May 2019, In : *Journal of Physics and Chemistry of Solids*. 128, p. 316-324

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

#### **Spodumene tailings for porcelain and structural materials: Effect of temperature (1050–1200°C) on the sintering and properties**

Lemougna, P. N., Yliniemi, J., Ismailov, A., Levänen, E., Tanskanen, P., Kinnunen, P., Roning, J. & Illikainen, M., 2019, (Accepted/In press) In : *Minerals Engineering*. 105843.

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

#### **Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum wells**

Luna, E., Wu, M., Hanke, M., Puustinen, J., Guina, M. & Trampert, A., 1 Jul 2016, In : *Nanotechnology*. 27, 32, 325603.

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

Katava, M., Kalimeri, M., Stirnemann, G. & Sterpone, F., 17 Mar 2016, In : *Journal of Physical Chemistry Part B*. 120, 10, p. 2721-2730 10 p.

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

#### **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

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#### **Start-up and Operation of Laboratory-Scale Thermophilic Upflow Anaerobic Sludge Blanket Reactors Treating Vegetable Processing Wastewaters**

Lepistö, S. S. & Rintala, J. A., Mar 1997, In : *Journal of Chemical Technology and Biotechnology*. 68, 3, p. 331-339 9 p.



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#### **Statistical modeling of water vapor transmission rates for extrusion-coated papers**

Lahtinen, K. & Kuusipalo, J., 2008, *TAPPI 2008 PLACE Conference: Innovations in Flexible Consumer Packaging*.

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#### **Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels**

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#### **Strategies To Diminish the Emissions of Particles and Secondary Aerosol Formation from Diesel Engines**

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#### **Structural basis of actin monomer re-charging by cyclase-Associated protein**

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

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

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

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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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#### **Temperature scanning stress relaxation behavior of water responsive and mechanically adaptive elastomer nanocomposites**

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

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### **The Role of Temperature and Lipid Charge on Intake/Uptake of Cationic Gold Nanoparticles into Lipid Bilayers**

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