

### **Highly Oxygenated Organic Molecules (HOM) from Gas-Phase Autoxidation Involving Peroxy Radicals: A Key Contributor to Atmospheric Aerosol**

Bianchi, F., Kurtén, T., Riva, M., Mohr, C., Rissanen, M. P., Roldin, P., Berndt, T., Crouse, J. D., Wennberg, P. O., Mentel, T. F., Wildt, J., Junninen, H., Jokinen, T., Kulmala, M., Worsnop, D. R., Thornton, J. A., Donahue, N., Kjaergaard, H. G. & Ehn, M., 27 Mar 2019, In : *Chemical Reviews*. 119, 6, p. 3472-3509 38 p.

Research output: [Contribution to journal](#) > [Review Article](#) > [Scientific](#) > [peer-review](#)

### **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](#)

### **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.

Research output: [Contribution to journal](#) > [Review Article](#) > [Scientific](#) > [peer-review](#)

### **Multiscale Simulations of Biological Membranes: The Challenge To Understand Biological Phenomena in a Living Substance**

Enkavi, G., Javanainen, M., Kulig, W., Róg, T. & Vattulainen, I., 8 May 2019, In : *Chemical Reviews*. 119, 9, p. 5607-5774 168 p.

Research output: [Contribution to journal](#) > [Review Article](#) > [Scientific](#) > [peer-review](#)

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

Köhler, M., Karner, A., Leitner, M., Hytönen, V. P., Kulomaa, M., Hinterdorfer, P. & Ebner, A., 2014, In : *Molecules*. 19, 8, p. 12531-12546 16 p.

Research output: [Contribution to journal](#) > [Review Article](#) > [Scientific](#) > [peer-review](#)

### **Stimuli-responsive photonic polymer coatings**

Stumpel, J. E., Broer, D. J. & Schenning, A. P. H. J., 28 Dec 2014, In : *Chemical Communications*. 50, 100, p. 15839-15848 10 p.

Research output: [Contribution to journal](#) > [Review Article](#) > [Scientific](#) > [peer-review](#)

### **Toward Rigorous Materials Production: New Approach Methodologies Have Extensive Potential to Improve Current Safety Assessment Practices**

Nymark, P., Bakker, M., Dekkers, S., Franken, R., Fransman, W., García-Bilbao, A., Greco, D., Gulumian, M., Hadrup, N., Halappanavar, S., Hongisto, V., Hougaard, K. S., Jensen, K. A., Kohonen, P., Koivisto, A. J., Dal Maso, M., Oosterwijk, T., Poikkimäki, M., Rodriguez-Llopis, I., Stierum, R., Sørli, J. B. & Grafström, R., 2020, In : *Small*. 16, 6, 13 p., 1904749.

Research output: [Contribution to journal](#) > [Review Article](#) > [Scientific](#) > [peer-review](#)

### **Organic and Printed Electronics: Fundamentals and Applications**

Nisato, G. (ed.), Lupo, D. (ed.) & Ganz, S. (ed.), 5 Apr 2016, 1 ed. Singapore: PAN STANFORD PUBLISHING. 580 p.

Research output: [Book/Report](#) > [Anthology](#) > [Professional](#)

### **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](#)

### **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](#)

#### **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

#### **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

#### **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 polyolefin molecular structure on product properties in extrusion coating**

Suokas, E., 2019, *17th Biennial TAPPI European PLACE Conference 2019*. TAPPI Press, p. 89-98 10 p.

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

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

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

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

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

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

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### **Nanocellulose and Polylactic Acid Based Multilayer Coatings for Barrier Applications**

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

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### **Optical Frequency Comb Photoacoustic Spectroscopy**

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

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### **Bioaerosols and Hospital Infections**

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### **Nanostructured Ionomeric Elastomers**

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

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### **New perspectives on proton pumping in cellular respiration**

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### **Supramolecular design principles for efficient photoresponsive polymer-azobenzene complexes**

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### **Waves in hyperbolic and double negative metamaterials including rogues and solitons**

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

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**A bifacial colour-tunable system via combination of a cholesteric liquid crystal network and hydrogel**

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

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

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

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

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

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

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

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

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**A full-potential linearized augmented plane wave study of the interaction of CO<sub>2</sub> with  $\alpha$ -Pu (020) surface nanolayers**

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

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

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

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**Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Pétasis 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.

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**A modular brain-on-a-chip for modelling epileptic seizures with functionally connected human neuronal networks**

Pelkonen, A., Mzezewa, R., Sukki, L., Rynnänen, T., Kreutzer, J., Hyvärinen, T., Vinogradov, A., Aarnos, L., Lekkala, J., Kallio, P. & Narkilahti, S., 2020, In : Biosensors and Bioelectronics. 168, 10 p., 112553.

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

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

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

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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<sub>2</sub>O<sub>2</sub> 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., Nancharaiah, 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., Kostiainen, 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., Sentharamaiah, 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<sup>+</sup> 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

**Bringing a Molecular Plus One: Synergistic Binding Creates Guest-Mediated Three-Component Complexes**

Taimoory, S. M., Twum, K., Dashti, M., Pan, F., Lahtinen, M., Rissanen, K., Puttreddy, R., Trant, J. F. & Beyeh, N. K., 2020, In : Journal of Organic Chemistry. 85, 9, p. 5884-5894 11 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.

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**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

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

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

#### **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 overlayered 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., Pieniasek, P. A., Pluhaov, E., Vandevondele, J., Bradforth, S. E. & Jungwirth, P., 14 Dec 2011, In : Journal of Chemical Physics. 135, 22, 224510.

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#### **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

#### **Chlorine induced high-temperature corrosion mechanisms in HVOF and HVOF sprayed Cr<sub>3</sub>C<sub>2</sub>-based hardmetal coatings**

Fantozzi, D., Matikainen, V., Uusitalo, M., Koivuluoto, H. & Vuoristo, P., 14 Aug 2019, In : Corrosion Science. 108166.

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**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.  
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**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

**ClothFace: A Batteryless RFID-Based Textile Platform for Handwriting Recognition**

He, H., Chen, X., Mehmood, A., Raivio, L., Huttunen, H., Raunonen, P. & Virkki, J., 28 Aug 2020, In : Sensors (Basel, Switzerland). 20, 17, 12 p., 4878.

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**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 and impact of different fiber debond techniques on fiber reinforced flexible composites**

Beter, J., Schrittmesser, B., Maroh, B., Sarlin, E., Fuchs, P. F. & Pinter, G., 2020, In : Polymers. 12, 2, 11 p., 472.

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.

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

Bansod, N. D., Kappate, 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.

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**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

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**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

**Compounding and characterization of recycled multilayer plastic films**

Jönkkäri, I., Poliakova, V., Mylläri, V., Anderson, R., Andersson, M. & Vuorinen, J., 2020, In : Journal of Applied Polymer Science. 8 p., e49101.

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#### **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.

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#### **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.

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

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#### **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

#### **Conductivity control via minimally invasive anti-Frenkel defects in a functional oxide**

Evans, D. M., Holstad, T. S., Mosberg, A. B., Småbråten, D. R., Vullum, P. E., Dadlani, A. L., Shapovalov, K., Yan, Z., Bourret, E., Gao, D., Akola, J., Torgersen, J., van Helvoort, A. T. J., Selbach, S. M. & Meier, D., 2020, In : Nature Materials. 7 p.

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#### **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.

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#### **Controllable Electronic Structures and Photoinduced Processes of Bay-Linked Perylene-3,4,9,10-tetracarboxylic Diimide 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**

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#### **Controlled Orientations of Neighboring Tetracene Units by Mixed Self-Assembled Monolayers on Gold Nanoclusters for High-Yield and Long-Lived Triplet Excited States through Singlet Fission**

Saegusa, T., Sakai, H., Nagashima, H., Kobori, Y., Tkachenko, N. V. & Hasobe, T., 18 Sep 2019, In : Journal of the American Chemical Society. 141, 37, p. 14720-14727 8 p.

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#### **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.

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#### **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**

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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., Laihinen, 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.

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**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.

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

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**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

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**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.

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**Design principles for non-reciprocal photomechanical actuation**

Lahikainen, M., Zeng, H. & Priimagi, A., 7 Jul 2020, In : Soft Matter. 16, 25, p. 5951-5958 8 p.

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.

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**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.

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

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**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.

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

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

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

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

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

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

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**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

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

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

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**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**

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**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**

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

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

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

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

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

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**Effect of spraying parameters on the microstructural and corrosion properties of HVAF-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**

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**Effect of tungsten and selenium on  $C_1$  gas bioconversion by an enriched anaerobic sludge and microbial community analysis**

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**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.

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

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**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.

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

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

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#### **Efficient Conversion of Light to Chemical Energy: Directional, Chiral Photoswitches with Very High Quantum Yields**

Moormann, W., Tellkamp, T., Stadler, E., Röhrich, F., Näther, C., Puttreddy, R., Rissanen, K., Gescheidt, G. & Herges, R., 2020, In : Angewandte Chemie - International Edition. 59, 35, p. 15081-15086 6 p.  
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#### **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.  
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#### **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.  
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#### **Efficient surface structuring and photoalignment of supramolecular polymer-azobenzene complexes through rational chromophore design**

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

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

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

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### **Electropolymerized polyazulene as active material in flexible supercapacitors**

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

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

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### **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.

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

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### **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.

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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.

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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

**Environmental monitoring with distributed mesh networks: An overview and practical implementation perspective for urban scenario**

Ometov, A., Bezzateev, S., Voloshina, N., Masek, P. & Komarov, M., 2 Dec 2019, In : Sensors (Switzerland). 19, 24, 19 p., 5548.

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

**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 study on axially loaded square hollow section T-joints under fire conditions**

Bączkiewicz, J., Malaska, M., Pajunen, S., Alanen, M. & Heinisuo, M., 2020, In : FIRE SAFETY JOURNAL. 114, 15 p., 102993.

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**Exploring the role of stearic acid in modified zinc aluminum layered double hydroxides and their acrylonitrile butadiene rubber nanocomposites**

Eshwaran, S. B., Basu, D., Vaikuntam, S. R., Kutlu, B., Wiessner, S., Das, A., Naskar, K. & Heinrich, G., 1 Mar 2015, In : Journal of Applied Polymer Science. 132, 9, 41539.

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., Sentharamakannan, 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.

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**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.

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

**Fast Switching of Bright Whiteness in Channeled Hydrogel Networks**

Eklund, A., Zhang, H., Zeng, H., Priimägi, A. & Ikkala, O., 2020, In : Advanced Functional Materials. 2000754.

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

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

Abada, A., Abbrescia, M., AbdusSalam, S. S., Abdyukhanov, I., Abelleira Fernandez, J., Abramov, A., Aburabia, 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., Altınlı, M., Altmannshofer, W., Ambrosio, G., Amorim, D., Amstutz, O., Anderlini, L., Andreatza, 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

#### **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. & Radosch, H. J., 5 Aug 2015, In : *Polymer*. 73, p. 111-121 11 p., 18004.

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

#### **Formation of corrosion products on zinc in wet supercritical and subcritical CO<sub>2</sub>: In-situ spectroscopic study**

Kaleva, A., Tassaing, T., Saarimaa, V., Le Bourdon, G., Väisänen, P., Markkulā, A. & Levänen, E., 1 Sep 2020, In : *Corrosion Science*. 174, 10 p.

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

#### **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

#### **Fusionsense: Emotion classification using feature fusion of multimodal data and deep learning in a brain-inspired spiking neural network**

Tan, C., Ceballos, G., Kasabov, N. & Subramaniam, N. P., 17 Sep 2020, In : *Sensors (Switzerland)*. 20, 18, 27 p., 5328.

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

Priimagi, 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

#### **Hematite Surface Modification toward Efficient Sunlight-Driven Water Splitting Activity: The Role of Gold Nanoparticle Addition**

Tofanello, A., Freitas, A. L. M., Carvalho, W. M., Salminen, T., Niemi, T. & Souza, F. L., 2020, In : Journal of Physical Chemistry C.

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 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.

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### **High-resolution analysis of the $\nu_3$ band of radiocarbon methane $^{14}\text{CH}_4$**

Larnimaa, S., Halonen, L., Karhu, J., Tomberg, T., Metsälä, M., Genoud, G., Hieta, T., Bell, S. & Vainio, M., 2020, In : *Chemical Physics Letters.* 750, 5 p., 137488.

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

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

### **High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a $\text{KCl-K}_2\text{SO}_4$ 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

### **Host-Guest Interactions of Sodiumsulfonatomethyleneresorcinarene and Quaternary Ammonium Halides: An Experimental-Computational Analysis of the Guest Inclusion Properties**

Twum, K., Rautiainen, J. M., Yu, S., Truong, K. N., Feder, J., Rissanen, K., Puttreddy, R. & Beyeh, N. K., 1 Apr 2020, In : *Crystal Growth and Design.* 20, 4, p. 2367-2376 10 p.

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#### **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.

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#### **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.

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#### **How well can we predict cluster fragmentation inside a mass spectrometer?**

Passananti, M., Zapadinsky, E., Zanca, T., Kangasluoma, J., Myllys, N., Rissanen, M. P., Kurtén, T., Ehn, M., Attoui, M. & Vehkamäki, H., 2019, In : Chemical Communications. 55, 42, p. 5946-5949 4 p.

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#### **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.

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

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Pluhařová, E., Fischer, H. E., Mason, P. E. & Jungwirth, P., 19 May 2014, In : Molecular Physics. 112, 9-10, p. 1230-1240 11 p.

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#### **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

#### **ILC1 drive intestinal epithelial and matrix remodelling**

Jowett, G. M., Norman, M. D. A., Yu, T. T. L., Rosell Arévalo, P., Hoogland, D., Lust, S. T., Read, E., Hamrud, E., Walters, N. J., Niazi, U., Chung, M. W. H., Marciano, D., Omer, O. S., Zabinski, T., Danovi, D., Lord, G. M., Hilborn, J., Evans, N. D., Dreiss, C. A., Bozec, L., Oommen, O. P., Lorenz, C. D., da Silva, R. M. P., Neves, J. F. & Gentleman, E., 2020, In : Nature Materials. 22 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.

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**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-Löyty, H., Lahtonen, K., Hannula, M., Lehtonen, E., Niu, Y. & Valden, M., 2017, In : Corrosion. 73, 2

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

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

**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 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.

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

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

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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**

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

**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**

Janka, L., Norpoth, J., Trache, R. & Berger, L. M., 15 Apr 2016, In : Surface and Coatings Technology. 291, p. 444-451 8 p.

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

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

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

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

**Influence of powder properties on residual stresses formed in high-pressure liquid fuel HVOF sprayed WC-CoCr coatings**

Varis, T., Suhonen, T., Jokipii, M. & Vuoristo, P., 2020, In : Surface and Coatings Technology. 388, 9 p., 125604.

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

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

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

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

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

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

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**Inverted critical adsorption of polyelectrolytes in confinement**

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

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

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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**

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#### **Large-scale efficient water harvesting using bioinspired micro-patterned copper oxide nanoneedle surfaces and guided droplet transport**

Sharma, V., Yiannacou, K., Karjalainen, M., Lahtonen, K., Valden, M. & Sariola, V., 2019, In : Nanoscale Advances. 1, 10, p. 4025-4040 16 p.  
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#### **La thérapie photodynamique: État de l'art et perspectives**

Translated title of the contribution : : The photodynamic therapy: State of the art and perspectives  
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#### **Layered Double Hydroxides (LDH): A multifunctional versatile system for nanocomposites**

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#### **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.  
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#### **Light-fuelled transport of large dendrimers and proteins**

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

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

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

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#### **Location of dispersing agent in rubber nanocomposites during mixing process**

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

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#### **London Hybrid Exposure Model: Improving Human Exposure Estimates to NO<sub>2</sub> and PM<sub>2.5</sub> in an Urban Setting**

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

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

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

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

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

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**Mechanisms of acceleration and retardation of water dynamics by ions**

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**Membrane Binding of Recoverin: From Mechanistic Understanding to Biological Functionality**

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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**

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

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

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

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

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

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

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#### **Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO<sub>2</sub> for Enhanced Solar Water Splitting**

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

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#### **Molecular Composition and Volatility of Nucleated Particles from $\alpha$ -Pinene Oxidation between -50 °C and +25 °C**

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

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#### **Molecular Docking Studies of Royleanone Diterpenoids from Plectranthus spp. as P-Glycoprotein Inhibitors**

Isca, V. M. S., Ferreira, R. J., Garcia, C., Monteiro, C. M., Dinic, J., Holmstedt, S., André, V., Pesic, M., Dos Santos, D. J. V. A., Candeias, N. R., Afonso, C. A. M. & Rijo, P., 14 May 2020, In : ACS MEDICINAL CHEMISTRY LETTERS. 11, 5, p. 839-845 7 p.

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

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

Kurppa, K., Hytönen, V. P., Nakari-Setälä, T., Kulomaa, M. S. & Linder, M. B., 1 Aug 2014, In : Colloids and Surfaces B: Biointerfaces. 120, p. 102-109 8 p.

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

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

Borah, D., Ozmen, M., Rasappa, S., Shaw, M. T., Holmes, J. D. & Morris, M. A., 5 Mar 2013, In : Langmuir. 29, 9, p. 2809-2820 12 p.

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

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

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

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

**Molecular mechanisms of ion-specific effects on proteins**

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

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

**Molecular-Scale Ligand Effects in Small Gold-Thiolate Nanoclusters**

Chevrier, D. M., Raich, L., Rovira, C., Das, A., Luo, Z., Yao, Q., Chatt, A., Xie, J., Jin, R., Akola, J. & Zhang, P., 14 Nov 2018, In : Journal of the American Chemical Society. 140, 45, p. 15430-15436 7 p.

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

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

Translated title of the contribution: : Molecules and ions in motion: Computer simulations of biochemical and biophysical processes

Jungwirth, P., 2014, In : Chemické Listy. 108, 4, p. 278-284 7 p.

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

**Monitoring Charge Carrier Diffusion across a Perovskite Film with Transient Absorption Spectroscopy**

Pasanen, H. P., Vivo, P., Canil, L., Hempel, H., Unold, T., Abate, A. & Tkachenko, N. V., 2020, In : The journal of physical chemistry letters. 11, 2, p. 445-450 6 p.

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

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

Milne, D., Wilson, J. I. B., Rantala, T. T. & Lenkkeri, J., 2 Dec 1989, In : Applied Surface Science. 43, 1-4, p. 81-86 6 p.

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

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

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

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

**Multiphoton Excitation of CsPbBr<sub>3</sub> Perovskite Quantum Dots (PQDs): How Many Electrons Can One PQD Donate to Multiple Molecular Acceptors?**

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

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

#### **Multiresonant High-Q Plasmonic Metasurfaces**

Reshef, O., Saad-Bin-Alam, M., Huttunen, M. J., Carlow, G., Sullivan, B. T., Ménard, J. M., Dolgaleva, K. & Boyd, R. W., 11 Sep 2019, In : *Nano Letters*. 19, 9, p. 6429-6434 6 p.

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

#### **Multistep reactions of water with small Pd<sub>n</sub> clusters: A first principles study**

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

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

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

Knasmüller, S., Zöhrer, E., Kronberg, L., Kundi, M., Franzen, R. & Schulte-Hermann, R., 1996, In : *Chemical Research in Toxicology*. 9, 2, p. 374-381 8 p.

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

#### **Nanocluster Aerosol Emissions of a 3D Printer**

Poikkimäki, M., Koljonen, V., Leskinen, N., Närhi, M., Kangasniemi, O., Kausiala, O. & Dal Maso, M., 7 Nov 2019, In : *Environmental Science and Technology*. 53, 23, p. 13618-13628 11 p.

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

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

Vapaavuori, J., Mahimwalla, Z., Chromik, R. R., Kaivola, M., Priimagi, A. & Barrett, C. J., 28 Apr 2013, In : *Journal of Materials Chemistry C*. 1, 16, p. 2806-2810 5 p.

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

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

Oksala, N. K. J., Ekmekçi, F. G., Özsoy, E., Kirankaya, Ş., Kokkola, T., Emecen, G., Lappalainen, J., Kaarniranta, K. & Atalay, M., 1 Jan 2014, In : *REDOX BIOLOGY*. 3, p. 25-28 4 p.

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

#### **Nematicon-enhanced spontaneous symmetry breaking**

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

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

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

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

#### **Networking of ionic liquid modified CNTs in SSBR**

Subramaniam, K., Das, A., Simon, F. & Heinrich, G., Feb 2013, In : *European Polymer Journal*. 49, 2, p. 345-352 8 p.

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

#### **Neutralized chimeric avidin binding at a reference biosensor surface**

Ray, S., Steven, R. T., Green, F. M., Höök, F., Taskinen, B., Hytönen, V. P. & Shard, A. G., 17 Feb 2015, In : *Langmuir*. 31, 6, p. 1921-1930 10 p.

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

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

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

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

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

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

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

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

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

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

**Non-radiative decay and fragmentation in water molecules after 1 a 1-1 4 a 1 excitation and core ionization studied by electron-energy-resolved electron-ion coincidence spectroscopy**

Sankari, A., Stråhlman, C., Sankari, R., Partanen, L., Laksman, J., Kettunen, J. A., Galván, I. F., Lindh, R., Malmqvist, P. Å. & Sorensen, S. L., 2020, In : Journal of Chemical Physics. 152, 7, 7 p., 074302.

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

Ghosh, S. K., Cherstvy, A. G. & Metzler, R., 21 Jan 2015, In : Physical Chemistry Chemical Physics. 17, 3, p. 1847-1858 12 p.

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

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

Akimova, A. V., Grin, M. A., Golovina, G. V., Kokrashvili, T. A., Vinogradov, A. M., Mironov, A. F., Rychkov, G. N., Shtil, A. A., Kuzmin, V. A. & Durandin, N. A., 2014, In : DOKLADY BIOCHEMISTRY AND BIOPHYSICS. 454, 1, p. 17-20 4 p.

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

**Nucleation and growth behavior of Er<sup>3+</sup> doped oxyfluorophosphate glasses**

Ojha, N., Szczodra, A., Boetti, N. G., Massera, J. & Petit, L., 7 Jul 2020, In : RSC Advances. 10, 43, p. 25703-25716 14 p.

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**Numerical simulation of temperature distributions in layered structures during laser processing**

Levoska, J., Rantala, T. T. & Lenkkeri, J., 1989, In : Applied Surface Science. 36, 1-4, p. 12-22 11 p.

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

**Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations**

Kezilebieke, S., Žitko, R., Dvorak, M., Ojanen, T. & Liljeroth, P., 10 Jul 2019, In : Nano Letters. 19, 7, p. 4614-4619 6 p.

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

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

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

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

**On entropy-based molecular descriptors: Statistical analysis of real and synthetic chemical structures**

Dehmer, M., Varmuza, K., Borgert, S. & Emmert-Streib, F., 27 Jul 2009, In : Journal of Chemical Information and Modeling. 49, 7, p. 1655-1663 9 p.

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

**On the alignment of ZnO nanowires by Langmuir – Blodgett technique for sensing application**

Baratto, C., Golovanova, V., Faglia, G., Hakola, H., Niemi, T., Tkachenko, N., Nazarchurk, B. & Golovanov, V., 30 Oct 2020, In : Applied Surface Science. 528, 146959.

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#### **On the biomaterials for nanostructured ocular therapeutics**

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

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

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

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

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

Soto, A. M., Koivisto, J. T., Parraga, J. E., Silva-Correia, J., Oliveira, J. M., Reis, R. L., Kellomäki, M., Hyttinen, J. & Figueiras, E., 24 May 2016, In : Langmuir. 32, 20, p. 5173-5182 10 p.

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

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

Uhlig, F., Herbert, J. M., Coons, M. P. & Jungwirth, P., 4 Sep 2014, In : Journal of Physical Chemistry A. 118, 35, p. 7507-7515 9 p.

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Barboza, R., Bortolozzo, U., Assanto, G. & Residori, S., 1 Mar 2013, In : Molecular Crystals and Liquid Crystals. 572, 1, p. 24-30 7 p.

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

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

#### **Optimization of HVOF Cr<sub>3</sub>C<sub>2</sub>-NiCr coating for increased fatigue performance**

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

#### **Orientational dependence of the affinity of guanidinium ions to the water surface**

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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

### **O<sub>2</sub>-requiring molecular reporters of gene expression for anaerobic microorganisms**

Guglielmetti, S., Santala, V., Mangayil, R., Ciranna, A. & Karp, M. T., 2019, In : Biosensors and Bioelectronics. 123, p. 1-6 6 p.

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

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

Schroeder, C. A., Pluharová, E., Seidel, R., Schroeder, W. P., Faubel, M., Slaviček, P., Winter, B., Jungwirth, P. & Bradforth, S. E., 14 Jan 2015, In : Journal of the American Chemical Society. 137, 1, p. 201-209 9 p.

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

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

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

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

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

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

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

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

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

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

### **Pectin and Mucin Enhance the Bioadhesion of Drug Loaded Nanofibrillated Cellulose Films**

Laurén, P., Paukkonen, H., Lipiäinen, T., Dong, Y., Oksanen, T., Räikkönen, H., Ehlers, H., Laaksonen, P., Yliperttula, M. & Laaksonen, T., 1 Jul 2018, In : Pharmaceutical Research. 35, 7, 145.

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

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

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

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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**

Oksa, M., Varis, T. & Ruusuvoori, K., 25 Jul 2014, In : Surface and Coatings Technology. 251, p. 191-200 10 p.

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### Phase diagram of argon clusters

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

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

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

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

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

### Photochemistry of dithiophosphinate Ni(S<sub>2</sub>P(i-Bu)<sub>2</sub>)<sub>2</sub> complex in CCl<sub>4</sub>. Transient species and TD-DFT calculations

Solovyev, A. I., Mikheyilis, A. V., Plyusnin, V. F., Shubin, A. A., Grivin, V. P., Larionov, S. V., Tkachenko, N. V. & Lemmetyinen, H., 1 Aug 2019, In : Journal of Photochemistry and Photobiology A: Chemistry. 381, 111857.  
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### Photodiagnostic et chirurgie guidés par la fluorescence

Translated title of the contribution: : Fluorescence diagnosis and fluorescence-guided surgery  
Mordon, S. & Bourg-Heckly, G., 1 Jun 2015, In : ACTUALITE CHIMIQUE. 397-398, p. 41-45 5 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

### 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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Mandal, S., Garcia Iglesias, M., Ince, M., Torres, T. & Tkachenko, N. V., 31 Aug 2018, In : ACS Omega. 3, 8, p. 10048-10057 10 p.  
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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., Metrangolo, P., Sabat, R. G., Bazuin, C. G., Priimagi, A. & Pellerin, C., 27 Oct 2015, In : Macromolecules. 48, 20, p. 7535-7542 8 p.  
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### Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds

Wang, M., Chen, D., Xiao, M., Ye, Q., Stolzenburg, D., Hofbauer, V., Ye, P., Vogel, A. L., Mauldin, R. L., Amorim, A., Baccarini, A., Baumgartner, B., Brilke, S., Dada, L., Dias, A., Duplissy, J., Finkenzeller, H., Garmash, O., He, X. C., Hoyle, C. R., Kim, C., Kvashnin, A., Lehtipalo, K., Fischer, L., Molteni, U., Petäjä, T., Pospisilova, V., Quéléver, L. L. J., Rissanen, M., Simon, M., Tauber, C., Tomé, A., Wagner, A. C., Weitz, L., Volkamer, R., Winkler, P. M., Kirkby, J., Worsnop, D. R., Kulmala, M., Baltensperger, U., Dommen, J., El-Haddad, I. & Donahue, N. M., 2020, In : Environmental Science and Technology. 54, 13, p. 7911-7921 11 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

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

Baek, J., Umeyama, T., Mizuno, S., Tkachenko, N. V. & Imahori, H., 2017, In : Journal of Physical Chemistry C. 121, 39

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#### **Photophysical properties of Sn (IV)tetraphenylporphyrin-pyrene dyad with a $\beta$ -vinyl linker**

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.

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

Saccone, M., Palacio, F. F., Cavallo, G., Dichiarante, V., Virkki, M., Terraneo, G., Priimagi, A. & Metrangolo, P., 2017, In : Faraday Discussions. 203, p. 407-422 16 p.

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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.

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#### **Photostable orange-red fluorescent unsymmetrical diketopyrrolopyrrole-BF<sub>2</sub> hybrids**

Young, D. C., Tasiar, M., Laurent, A. D., Dobrzycki, Ł., Cyrański, M. K., Tkachenko, N., Jacquemin, D. & Gryko, D. T., Apr 2020, In : Journal of Materials Chemistry C. 8, 23, p. 7708-7717 10 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**

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

#### **Physical Characteristics of Particle Emissions from a Medium Speed Ship Engine Fueled with Natural Gas and Low-Sulfur Liquid Fuels**

Alanen, J., Isotalo, M., Kuittinen, N., Simonen, P., Martikainen, S., Kuuluvainen, H., Honkanen, M., Lehtoranta, K., Nyssönen, S., Vesala, H., Timonen, H., Aurela, M., Keskinen, J. & Rönkkö, T., 5 May 2020, In : Environmental Science and Technology. 54, 9, p. 5376-5384 9 p.

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

#### **PIP2 and Talin Join Forces to Activate Integrin**

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

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**

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

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

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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.

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

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**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.

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

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**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

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

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

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

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**Protein conformation as a regulator of cell-matrix adhesion**

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

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

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

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

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

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

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

Iyer, S., Rissanen, M. P. & Kurtén, T., 2 May 2019, In : Journal of Physical Chemistry Letters. 10, 9, p. 2051-2057 7 p.

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**Recovery characteristics of different tube materials in relation to combustion products**

Karjalainen, M., Kontunen, A., Mäkelä, M., Anttalainen, O., Vehkaoja, A., Oksala, N. & Roine, A., 2020, In : International Journal for Ion Mobility Spectrometry. 8 p.

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**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**

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

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**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

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**Responsive Polymer Photonics**

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**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.

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

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#### **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

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#### **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.

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

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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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#### **Rotational Diffusion of Membrane Proteins in Crowded Membranes**

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

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

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### **Selective hydrogen production at Pt(111) investigated by Quantum Monte Carlo methods for metal catalysis**

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### **Selenate removal in biofilm systems: Effect of nitrate and sulfate on selenium removal efficiency, biofilm structure and microbial community**

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### **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.

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### **Semiclassical hybrid approach to condensed phase molecular dynamics: Application to the I<sub>2</sub>Kr<sub>17</sub> 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.

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### **Sequential Collinear Photofragmentation and Atomic Absorption Spectroscopy for Online Laser Monitoring of Triatomic Metal Species**

Viljanen, J., Kalmankoski, K., Contreras, V., Sarin, J. K., Sorvajärvi, T., Kinnunen, H., Enestam, S. & Toivonen, J., 18 Jan 2020, In : Sensors (Basel, Switzerland). 20, 2, 14 p., 533.

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### **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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### **Site-specific polarizabilities as predictors of favorable adsorption sites on Nan clusters**

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

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**Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned porous 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.

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

Borah, D., Simao, C. D., Senthamarakannan, 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.

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**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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