

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

Abada, A., Abbrescia, M., AbdusSalam, S. S., Abdulkhanov, I., Abelleira Fernandez, J., Abramov, A., Aburaia, M., Acar, A. O., Adzic, P. R., Agrawal, P., Aguilar-Saavedra, J. A., Aguilera-Verdugo, J. J., Aiba, M., Aichinger, I., Aielli, G., Akay, A., Akhundov, A., Aksakal, H., Albacete, J. L., Albergo, S., Alekou, A., Aleksa, M., Aleksan, R., Alemany Fernandez, R. M., Alexahin, Y., Alía, R. G., Alioli, S., Alipour Tehrani, N., Allanach, B. C., Allport, P. P., Altinli, M., Altmannshofer, W., Ambrosio, G., Amorim, D., Amstutz, O., Anderlini, L., 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

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

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

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

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

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

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

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

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

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

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

Airiskallio, E., Nurmi, E., Väyrynen, I. J., Kokko, K., Ropo, M., Punkkinen, M. P. J., Johansson, B. & Vitos, L., 2014, In : *Computational Materials Science*. 92, p. 135-140 6 p.

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

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

Aisala, H., Manninen, H., Laaksonen, T., Linderborg, K. M., Myoda, T., Hopia, A. & Sandell, M., 30 Jan 2020, In : *Food Chemistry*. 304, 125403.

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

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

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

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

### **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

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

Alanen, J., Saukko, E., Lehtoranta, K., Murtonen, T., Timonen, H., Hillamo, R., Karjalainen, P., Kuuluvainen, H., Harra, J., Keskinen, J. & Rönkkö, T., 15 Dec 2015, In : *Fuel*. 162, p. 155-161 7 p.

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

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

Alanen, J., Isotalo, M., Kuitinen, N., Simonen, P., Martikainen, S., Kuuluvainen, H., Honkanen, M., Lehtoranta, K., Nyyssönen, 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

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

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

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

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

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

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

#### **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

#### **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

#### **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

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

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

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

#### **Additive manufacturing of monolithic supercapacitors with biopolymer separator**

Arvani, M., Keskinen, J., Railanmaa, A., Siljander, S., Björkqvist, T., Tuukkanen, S. & Lupo, D., 1 Jun 2020, In : *Journal of Applied Electrochemistry*. 50, 6, p. 689-697 9 p.

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

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

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

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

#### **Synthesis of 6,12-disubstituted methanodibenzo[b,f][1,5]dioxocins: Pyrrolidine catalyzed self-condensation of 2'-Hydroxyacetophenones**

Assoah, B., Riihonen, V., Vale, J. R., Valkonen, A. & Candeias, N. R., 2019, In : *Molecules*. 24, 13, 2405.

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

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

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

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

#### **Synergistic Computational-Experimental Discovery of Highly Selective PtCu Nanocluster Catalysts for Acetylene Semihydrogenation**

Ayodele, O. B., Cai, R., Wang, J., Ziouani, Y., Liang, Z., Spadaro, M. C., Kovnir, K., Arbiol, J., Akola, J., Palmer, R. E. & Kolen'Ko, Y. V., 2019, In : *ACS CATALYSIS*. p. 451-457 7 p.

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

### **The role of symmetry in the aesthetics of residential building façades using cognitive science methods**

Azemati, H., Jam, F., Ghorbani, M., Dehmer, M., Ebrahimpour, R., Ghanbaran, A. & Emmert-Streib, F., 1 Sep 2020, In : *Symmetry*. 12, 9, 15 p., 1438.

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.

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

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

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

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

### **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

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

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

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

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

### **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

### **Water-Responsive and Mechanically Adaptive Natural Rubber Composites by in Situ Modification of Mineral Filler Structures**

Banerjee, S. S., Hait, S., Natarajan, T. S., Wießner, S., Stöckelhuber, K. W., Jehnichen, D., Janke, A., Fischer, D., Heinrich, G., Busfield, J. J. C. & Das, A., 20 Jun 2019, In : *Journal of Physical Chemistry B*. 123, 24, p. 5168-5175 8 p.

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

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

Banerjee, S. S., Natarajan, T. S., Subramani B., E., Wießner, S., Janke, A., Heinrich, G. & Das, A., 2019, In : *Journal of Applied Polymer Science*. 48344.

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

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

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

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

### **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., Nazarchuk, B. & Golovanov, V., 30 Oct 2020, In : *Applied Surface Science*. 528, 146959.

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

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

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

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

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

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

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

**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

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

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

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

**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

**Nanostructured Ionomeric Elastomers**

Basu, D., Das, A., Stöckelhuber, K. W. & Wießner, S., 17 Aug 2016, *Designing of Elastomer Nanocomposites: From Theory to Applications*. Stöckelhuber, K. W., Das, A. & Klüppel, M. (eds.). Springer International Publishing, p. 235-266 32 p. (Advances in Polymer Science; vol. 275).

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

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

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

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

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

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

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

**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

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

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

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

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

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

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

**Tuning of nonlinear absorption in highly luminescent CdSe based quantum dots with core-shell and core/multi-shell architectures**

Bhagyaraj, S., Perumbilavil, S., Udayabashkar, R., Mangalaraja, R. V., Thomas, S., Kalarikkal, N. & Oluwafemi, O. S., 2019, In : *Physical Chemistry Chemical Physics*. 21, 21, p. 11424-11434 11 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

#### **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

#### **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

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

Boardman, A. D., Alberucci, A., Assanto, G., Grimalsky, V. V., Kibler, B., McNiff, J., Nefedov, I. S., Rapoport, Y. G. & Valagiannopoulos, C. A., 9 Oct 2017, In : *Nanotechnology*. 28, 44, 444001.  
Research output: Contribution to journal › Review Article › Scientific › peer-review

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

Bodrova, A., Chechkin, A. V., Cherstvy, A. G. & Metzler, R., 27 Jul 2015, In : *Physical Chemistry Chemical Physics*. 17, 34, p. 21791-21798 8 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

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

Bolelli, G., Berger, L. M., Börner, T., Koivuluoto, H., Lusvarghi, L., Lyphout, C., Markocsan, N., Matikainen, V., Nylén, P., Sassatelli, P., Trache, R. & Vuoristo, P., 15 Mar 2015, In : *Surface and Coatings Technology*. 265, p. 125-144 20 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

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

Borah, D., Rasappa, S., Salaun, M., Zellsman, M., Lorret, O., Liontos, G., Ntetsikas, K., Avgeropoulos, A. & Morris, M. A., 1 Jun 2015, In : *Advanced Functional Materials*. 25, 22, p. 3425-3432 8 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

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

Borah, D., Rasappa, S., Senthamarikannan, 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

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

Borah, D., Simao, C. D., Senthamarikannan, R., Rasappa, S., Francone, A., Lorret, O., Salaun, M., Kosmala, B., Kehagias, N., Zelsmann, M., Sotomayor-Torres, C. M. & Morris, M. A., Nov 2013, In : *European Polymer Journal*. 49, 11, p. 3512-3521 10 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

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

Borah, D., Rasappa, S., Senthamarikannan, R., Holmes, J. D. & Morris, M. A., 16 Jul 2013, In : *Langmuir*. 29, 28, p. 8959-8968 10 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

#### **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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chakraborty, S., Rene, E. R., Lens, P. N. L., Rintala, J., Veiga, M. C. & Kennes, C., 2020, In : Chemosphere. 250, 9 p., 126105.

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

### **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

### **Starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper and their effects of phase interactions**

Christophliemk, H., Ullsten, H., Johansson, C. & Järnström, L., 1 Oct 2017, In : Progress in Organic Coatings. 111, p. 13-22 10 p.

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

### **Oxygen and water vapor transmission rates of starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper**

Christophliemk, H., Johansson, C., Ullsten, H. & Järnström, L., 1 Dec 2017, In : Progress in Organic Coatings. 113, p. 218-224 7 p.

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

### **Syndecan-4 tunes cell mechanics by activating the kindlin-integrin-RhoA pathway**

Chronopoulos, A., Thorpe, S. D., Cortes, E., Lachowski, D., Rice, A. J., Mykuliak, V. V., Rog, T., Lee, D. A., Hytönen, V. P. & del Río Hernández, A. E., 2020, In : Nature Materials. 15 p.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **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

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

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

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

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

Das, A., Sallat, A., Böhme, F., Sarlin, E., Vuorinen, J., Vennemann, N., Heinrich, G. & Stöckelhuber, K. W., 19 Jan 2018, In : *Polymers*. 10, 1, 94.

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

### **Inverted critical adsorption of polyelectrolytes in confinement**

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

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

### **Structural information content of networks: Graph entropy based on local vertex functionals**

Dehmer, M. & Emmert-Streib, F., Apr 2008, In : *Computational Biology and Chemistry*. 32, 2, p. 131-138 8 p.

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

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

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

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

### **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

#### **The structural information content of chemical networks**

Dehmer, M. & Emmert-Streib, F., Mar 2008, In : Zeitschrift für Naturforschung Section A: A Journal of Physical Sciences. 63, 3-4, p. 155-158 4 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

#### **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

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

Dhieb, A. C., Valkonen, A., Rzaigui, M. & Smirani, W., 15 Dec 2015, In : Journal of Molecular Structure. 1102, p. 50-56 7 p.

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

#### **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

#### **Development and characterization of poly( $\epsilon$ -caprolactone) hollow fiber membranes for vascular tissue engineering**

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

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

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

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

#### **Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection**

Donadei, V., Koivuluoto, H., Sarlin, E. & Vuoristo, P., 15 Dec 2020, In : Surface and Coatings Technology. 403, 13 p., 126396.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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#### **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.

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

#### **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.

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

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#### **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

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

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**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.

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**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.

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

Figueira, J., Czardybon, W., Mesquita, J. C., Rodrigues, J., Lahoz, F., Russo, L., Valkonen, A. & Rissanen, K., 7 Mar 2015, In : DALTON TRANSACTIONS. 44, 9, p. 4003-4015 13 p.

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

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

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

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

**The Suzuki, the Heck, and the Stille reaction - Three versatile methods, for the introduction of new C-C bonds on solid support**

Franzén, R., 2000, In : Canadian Journal of Chemistry - Revue Canadienne de Chimie. 78, 7, p. 957-962 6 p.

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

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

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

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

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

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

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

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

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

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**Pyrolytic behavior of lignocellulosic-based polysaccharides**

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**The Hosoya entropy of graphs revisited**

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

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**Towards universal enrichment nanocoating for IR-ATR waveguides**

Giammarco, J., Zdyrko, B., Petit, L., Musgraves, J. D., Hu, J., Agarwal, A., Kimerling, L., Richardson, K. & Luzinov, I., 28 Aug 2011, In : *Chemical Communications*. 47, 32, p. 9104-9106 3 p.

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

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#### **Thermal desorption of molecular oxygen from SnO<sub>2</sub> (110) surface: Insights from first-principles calculations**

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

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

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

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

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### **The Devil Is in the Details: What Do We Really Track in Single-Particle Tracking Experiments of Diffusion in Biological Membranes?**

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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**

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### **Kinetics and modelling of thiosulphate biotransformations by haloalkaliphilic Thioalkalivibrio versutus**

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

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

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

Hakola, H., Sariola-Leikas, E., Efimov, A. & Tkachenko, N. V., 21 Apr 2016, In : Journal of Physical Chemistry C. 120, 13, p. 7044-7051 8 p.

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

### **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

### **Improved Stability of Atomic Layer Deposited Amorphous TiO<sub>2</sub> Photoelectrode Coatings by Thermally Induced Oxygen Defects**

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

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

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

Härkönen, H. H., Mattsson, J. M., Määttä, J. A. E., Stenman, U. H., Koistinen, H., Matero, S., Windshügel, B., Poso, A. & Lahtela-Kakkonen, M., 9 Dec 2011, In : CHEMMEDCHEM. 6, 12, p. 2170-2178 9 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

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

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

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

### **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.

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

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

Heijne, A. T., Liu, D., Sulonen, M., Sleutels, T. & Fabregat-Santiago, F., 1 Oct 2018, In : Journal of Power Sources. 400, p. 533-538 6 p.

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

### **Versatile bio-ink for covalent immobilization of chimeric avidin on sol-gel substrates**

Heikkinen, J. J., Kivimäki, L., Määttä, J. A. E., Mäkelä, I., Hakalahti, L., Takkinen, K., Kulomaa, M. S., Hytönen, V. P. & Hormi, O. E. O., 15 Oct 2011, In : Colloids and Surfaces B: Biointerfaces. 87, 2, p. 409-414 6 p.

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

### **Urea and guanidinium induced denaturation of a Trp-cage miniprotein**

Heyda, J., Kožíšek, M., Bednářová, L., Thompson, G., Konvalinka, J., Vondrášek, J. & Jungwirth, P., 21 Jul 2011, In : Journal of Physical Chemistry Part B. 115, 28, p. 8910-8924 15 p.

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

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

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

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

### **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

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

Hiltska, 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

### **Design aspects of all atomic layer deposited TiO<sub>2</sub>-Fe<sub>2</sub>O<sub>3</sub> scaffold-absorber photoanodes for water splitting**

Hiltunen, A., Ruoko, T-P., Iivonen, T., Lahtonen, K., Ali-Löytty, H., Sarlin, E., Valden, M., Leskelä, M. & Tkachenko, N., 31 Jul 2018, In : Sustainable Energy & Fuels. 2, 9, p. 2124-2130

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

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

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

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

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

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

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

**A concise synthesis of carbasugars isolated from *Streptomyces lincolnensis***

Holmstedt, S. & Candeias, N. R., 2020, In : Tetrahedron. 6 p., 131346.

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

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

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

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

**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

**Controllable Electronic Structures and Photoinduced Processes of Bay-Linked Perylene-3,9-dimide 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

**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

**Tribocorrosion behaviour of aluminium bronze in 3.5 wt.% NaCl solution**

Huttunen-Saarivirta, E., Isotahdon, E., Metsäjoki, J., Salminen, T., Carpén, L. & Ronkainen, H., 1 Nov 2018, In : Corrosion Science. 144, p. 207-223 17 p.

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

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

Hytönen, V. P. & Wehrle-Haller, B., 14 Apr 2014, In : Physical Chemistry Chemical Physics. 16, 14, p. 6342-6357 16 p.

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

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

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

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

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

Hyvönen, M., Ala-Korpela, M., Vaara, J., Rantala, T. T. & Jokisaari, J., 4 Apr 1997, In : Chemical Physics Letters. 268, 1-2, p. 55-60 6 p.

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

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

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

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

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

Iantovics, L. B., Dehmer, M. & Emmert-Streib, F., 1 Feb 2018, In : Symmetry. 10, 2, 48.

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

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

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

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

#### **Strain rate change tests with the Split Hopkinson Bar method**

Isakov, M., Kokkonen, J., Östman, K. & Kuokkala, V-T., 1 Apr 2016, In : European Physical Journal. Special Topics. 225, 2, p. 231-242

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

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

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

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

#### **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.

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

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

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

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

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

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

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

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

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

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

#### **Mass balance control of crushing circuits**

Itävuo, P., Hulthén, E., Yahyaeei, M. & Vilkkö, M., May 2019, In : Minerals Engineering. 135, p. 37-47 11 p.

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

#### **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.

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



### **Magnetic routing of light-induced waveguides**

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

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

### **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

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

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

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

### **Understanding selenium biogeochemistry in engineered ecosystems: Transformation and analytical methods**

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

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

### **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

### **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

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

Javanainen, M., Melcrová, A., Magarkar, A., Jurkiewicz, P., Hof, M., Jungwirth, P. & Martinez-Seara, H., 2017, In : Chemical Communications. 53, 39, p. 5380-5383 4 p.

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

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

Javanainen, M., Ollila, O. H. S. & Martinez-Seara, H., 16 Apr 2020, In : Journal of Physical Chemistry B. 124, 15, p. 2994-3001 8 p.

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

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

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

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

### **Density functional study of structure and dynamics in liquid antimony and Sb<sub>n</sub> 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

### **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.

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

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

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

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

### 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

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

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

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

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

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

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

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

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

### How conformational flexibility stabilizes the hyperthermophilic elongation factor G-domain

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

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

### 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

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

Kangas, H., Franzén, R., Tois, J., Taskinen, J. & Kostianen, R., 1999, In : *Rapid Communications in Mass Spectrometry*. 13, 16, p. 1680-1684 5 p.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Karilainen, T., Cramariuc, O., Kuisma, M., Tappura, K. & Hukka, T. I., 2015, In : Journal of Computational Chemistry. 36, 9, p. 612-621 10 p.

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

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

Karjalainen, P., Rönkkö, T., Simonen, P., Ntziachristos, L., Juuti, P., Timonen, H., Teinilä, K., Saarikoski, S., Saveljeff, H., Lauren, M., Happonen, M., Matilainen, P., Maunula, T., Nuottimäki, J. & Keskinen, J., 3 Sep 2019, In : Environmental science & technology. 53, 17, p. 10408-10416 9 p.

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

**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.

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

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

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

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

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

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

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

**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

**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

**Stability and Function at High Temperature. What Makes a Thermophilic GTPase Different from Its Mesophilic Homologue**  
Katava, M., Kalimeri, M., Stirnemann, G. & Sterpone, F., 17 Mar 2016, In : Journal of Physical Chemistry Part B. 120, 10, p. 2721-2730 10 p.

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

**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

**Concentration-dependent photophysical switching in mixed self-assembled monolayers of pentacene and perylene 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

**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.

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**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**

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

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

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

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**Ultrafast Photochemistry of the  $[\text{Cr}(\text{NCS})_6]^{3-}$  Complex in Dimethyl Sulfoxide and Dimethylformamide upon Excitation into Ligand-Field Electronic State**

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

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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**

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#### **Energy degradation in photoexcited complexes of indocarbocyanine with albumin**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**The effect of lipid oxidation on the water permeability of phospholipids bilayers**

Lis, M., Wizert, A., Przybylo, M., Langner, M., Swiatek, J., Jungwirth, P. & Cwiklik, L., 21 Oct 2011, In : Physical Chemistry Chemical Physics. 13, 39, p. 17555-17563 9 p.

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

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

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

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

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

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

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

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

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

**The maximum Hosoya index of unicyclic graphs with diameter at most four**

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

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

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

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

Lolicato, F., Joly, L., Martinez-Seara, H., Fragneto, G., Scoppola, E., Baldelli Bombelli, F., Vattulainen, I., Akola, J. & Maccarini, M., 7 Jun 2019, In : Small. 15, 23, 1805046.

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

**Key drivers of cloud response to surface-active organics**

Lowe, S. J., Partridge, D. G., Davies, J. F., Wilson, K. R., Topping, D. & Riipinen, I., 1 Dec 2019, In : Nature Communications. 10, 1, 12 p., 5214.

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

**Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum wells**  
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**CO oxidation catalyzed by neutral and anionic Cu<sub>20</sub> clusters: Relationship between charge and activity**  
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Research output: Contribution to journal > Article > Scientific > peer-review

**DFT simulations and microkinetic modelling of 1-pentyne hydrogenation on Cu<sub>20</sub> model catalysts**  
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**Site-specific analysis of dipole polarizabilities of heterogeneous systems: Iron-doped Si<sub>n</sub> (n = 1-14) clusters**  
Ma, L., Wang, J. & Wang, G., 7 Mar 2013, In : *Journal of Chemical Physics*. 138, 9, 094304.  
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**Elucidation of Compression-Induced Surface Crystallization in Amorphous Tablets Using Sum Frequency Generation (SFG) Microscopy**  
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#### **Effects of thinning and heating for TiO<sub>2</sub>/AlInP junctions**

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

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

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

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

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

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

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

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

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

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

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**Efficient Conversion of Light to Chemical Energy: Directional, Chiral Photoswitches with Very High Quantum Yields**  
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**New reports on anti-bacterial and anti-candidal activities of fatty acid methyl esters (FAME) obtained from *Scenedesmus bijugatus* var. *bicellularis* biomass**  
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**Production of sulfonated polyetheretherketone/polypropylene fibers for photoactive textiles**  
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**Multifunctional nitrogen sulfur co-doped reduced graphene oxide – Ag nano hybrids (sphere, cube and wire) for nonlinear optical and SERS applications**  
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**$\pi$ -Expanded  $\alpha,\beta$ -unsaturated ketones: Synthesis, optical properties, and two-photon-induced polymerization**  
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#### **Porphyrin adsorbed on the (1010) surface of the wurtzite structure of ZnO-conformation induced effects on the electron transfer characteristics**

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

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#### **Upconversion from fluorophosphate glasses prepared with NaYF<sub>4</sub>:Er<sup>3+</sup>, Yb<sup>3+</sup> nanocrystals**

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

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

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

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

#### **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

#### **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

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

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

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



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

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### **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

### **The role of highly oxygenated organic molecules in the Boreal aerosol-cloud-climate system**

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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**

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

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

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**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**

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

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**The effect of substrate pre-treatment on durability of rubber-stainless steel adhesion**

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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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**Photochemistry of dithiophosphate 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**

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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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