

### **Wear of cemented tungsten carbide percussive drill-bit inserts: Laboratory and field study**

Tkalich, D., Li, C. C., Kane, A., Saai, A., Tkalich, D., Yastrebov, V. A., Hokka, M., Kuokkala, V-T., Bengtsson, M. & From, A., 15 Sep 2017, In : *Wear*. 386-387, p. 106-117 12 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

### **Vegetable fillers for electric stimuli responsive elastomers**

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

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

### **Vacancy-type defect distributions near argon sputtered Al(100) surface studied by variable-energy positrons and molecular dynamics simulations**

Mäkinen, J., Vehanen, A., Hautojärvi, P., Huomo, H., Lahtinen, J., Nieminen, R. M. & Valkealahti, S., 2 Sep 1986, In : *Surface Science*. 175, 2, p. 385-414 30 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

### **Unmodified LDH as reinforcing filler for XNBR and the development of flame-retardant elastomer composites**

Basu, D., Das, A., Jacobgeorge, J., Wang, D. Y., Stöckelhuber, K., Wagenknecht, U., Leuteritz, A., Kutlu, B., Reuter, U. & Heinrich, G., 1 Dec 2014, In : *Rubber Chemistry and Technology*. 87, 4, p. 606-616 11 p.

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

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

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

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

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

Khvorost, T. A., Beliaev, L. Y., Potalueva, E., Laptchenkova, A. V., Selyutin, A. A., Bogachev, N. A., Skripkin, M. Y., Ryazantsev, M. N., Tkachenko, N. & Mereshchenko, A. S., 2020, In : *Journal of Physical Chemistry B*. 124, 18, p. 3724-3733 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

### **Tribology of HVOF- and HVAF-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

### **Tribology of FeVCrC coatings deposited by HVOF and HVAF thermal spray processes**

Bolelli, G., Bursi, M., Lusvarghi, L., Manfredini, T., Matikainen, V., Rigon, R., Sassatelli, P. & Vuoristo, P., 2018, In : *Wear*. 394-395, p. 113-133 21 p.

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

### **Transparent Yb<sup>3+</sup> doped phosphate glass-ceramics**

Hongisto, M., Veber, A., Boetti, N. G., Danto, S., Jubera, V. & Petit, L., 1 Jan 2020, In : *Ceramics International*.

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

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

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

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

### **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.

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

### **Thermal, structural and optical properties of Er<sup>3+</sup> doped phosphate glasses containing silver nanoparticles**

Soltani, I., Hraiech, S., Horchani-Naifer, K., Massera, J., Petit, L. & Férid, M., 15 Apr 2016, In : *Journal of Non-Crystalline Solids*. 438, p. 67-73 7 p.

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

### **Thermally evaporated single-crystal Germanium on Silicon**

Sorianello, V., Colace, L., Nardone, M. & Assanto, G., 1 Sep 2011, In : *Thin Solid Films*. 519, 22, p. 8037-8040 4 p.

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

### **Thermal Isomerization of Hydroxyazobenzenes as a Platform for Vapor Sensing**

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

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

### **The red, purple and blue modifications of polymeric unsymmetrical hydroxyalkadiynyl-N-arylcarbamate derivatives in Langmuir-Schaefer films**

Alekseev, A., Ihalainen, P., Ivanov, A., Domnin, I., Klechkovskaya, V., Orekhov, A., Lemmetyinen, H., Vuorimaa-Laukkanen, E., Peltonen, J. & Vyaz'min, S., 1 Aug 2016, In : *Thin Solid Films*. 612, p. 463-471 9 p.

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

### **The effects of UV irradiation to polyetheretherketone fibres: Characterization by different techniques**

Mylläri, V., Ruoko, T. P. & Järvelä, P., 2014, In : *Polymer Degradation and Stability*. 109, p. 278-284 7 p.

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

### **The effects of laser patterning 10CeTZP-Al<sub>2</sub>O<sub>3</sub> nanocomposite disc surfaces: Osseous differentiation and cellular arrangement in vitro**

Goyos-Ball, L., Prado, C., Díaz, R., Fernández, E., Ismailov, A., Kumpulainen, T., Levänen, E., Torrecillas, R. & Fernández, A., Jun 2018, In : *Ceramics International*. 44, 8, p. 9472-9478

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

### **The effect of impact conditions on the wear and deformation behavior of wear resistant steels**

Lindroos, M., Ratiä, V., Apostol, M., Valtonen, K., Laukkanen, A., Molnar, W., Holmberg, K. & Kuokkala, V. T., 5 Apr 2015, In : *Wear*. 328-329, p. 197-205 9 p.

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

**The effect of carbon and nickel additions on the precursor synthesis of Cr<sub>3</sub>C<sub>2</sub>-Ni nanopowder**

Kaunisto, K., Kotilainen, M., Karhu, M., Lagerbom, J., Vuorinen, T., Honkanen, M., Vippola, M. & Turunen, E., 1 Jun 2018, In : *Ceramics International*. 44, 8, p. 9338-9346

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

**The 5th international workshop on numerical modelling of high temperature superconductors**

Morandi, A., Ainslie, M. D., Grilli, F. & Stenvall, A., 2017, In : *Superconductor Science and Technology*. 30, 8, 080201.

Research output: Contribution to journal > Editorial > Scientific

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

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

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

**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

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

Werner, J., Wernersson, E., Ekholm, V., Ottosson, N., Öhrwall, G., Heyda, J., Persson, I., Söderström, J., Jungwirth, P. & Björneholm, O., 26 Jun 2014, In : *Journal of Physical Chemistry Part B*. 118, 25, p. 7119-7127 9 p.

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

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

Saccone, M., Dichiarante, V., Forni, A., Goulet-Hanssens, A., Cavallo, G., Vapaavuori, J., Terraneo, G., Barrett, C. J., Resnati, G., Metrangolo, P. & Priimägi, A., 28 Jan 2015, In : *Journal of Materials Chemistry C*. 3, p. 759-768 10 p.

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

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

Vapaavuori, J., Bazuin, C. G. & Priimägi, A., 2018, In : *Journal of Materials Chemistry C*. 6, 9, p. 2168-2188 21 p.

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

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

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

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

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

Fatarelle, E., Mylläri, V., Ruzzante, M., Pogni, R., Baratto, M. C., Skrifvars, M., Syrjälä, S. & Järvelä, P., 1 Feb 2015, In : *Journal of Applied Polymer Science*. 132, 8, 41509.

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

**Structure and in vitro dissolution of Mg and Sr containing borosilicate bioactive glasses for bone tissue engineering**

Tainio, J. M., Salazar, D. A. A., Nommeots-Nomm, A., Roiland, C., Bureau, B., Neuville, D. R., Brauer, D. S. & Massera, J., 1 Apr 2020, In : *Journal of Non-Crystalline Solids*. 533, 10 p., 119893.

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

**Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy**  
Fliervoet, L. A. L., Lisitsyna, E. S., Durandin, N. A., Kotsis, I., Maas-Bakker, R. F. M., Yliperttula, M., Hennink, W. E., Vuorimaa-Laukkanen, E. & Vermonden, T., 2019, In : *Biomacromolecules*.

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

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

Poutanen, M., Ikkala, O. & Priimägi, A., 14 Jun 2016, In : *Macromolecules*. 49, 11, p. 4095-4101 7 p.

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

**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

**Stearate Modified Zinc-Aluminum Layered Double Hydroxides and Acrylonitrile Butadiene Rubber Nanocomposites**

Eshwaran, S. B., Basu, D., Kutlu, B., Leuteritz, A., Wagenknecht, U., Stöckelhuber, K. W., Naskar, K., Das, A. & Heinrich, G., Jan 2014, In : *Polymer-Plastics Technology and Engineering*. 53, 1, p. 65-73 9 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

**Stable blue phase polymeric Langmuir-Schaefer films based on unsymmetrical hydroxyalkadiynyl N-arylcarbamate derivatives**

Alekseev, A., Ihalainen, P., Ivanov, A., Domnin, I., Rosqvist, E., Lemmetyinen, H., Vuorimaa-Laukkanen, E., Peltonen, J. & Vyaz'min, S., 2018, In : *Thin Solid Films*. 645, p. 108-118 11 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

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

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

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

**Solvothermal synthesis derived Co-Ga codoped ZnO diluted magnetic degenerated semiconductor nanocrystals**

Šutka, A., Käämbre, T., Joost, U., Kooser, K., Kook, M., Duarte, R. F., Kisand, V., Maiorov, M., Döbelin, N. & Smits, K., 30 Sep 2018, In : *Journal of Alloys and Compounds*. 763, p. 164-172 9 p.

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

**Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids**

Reyes, G., Borghei, M., King, A. W. T., Lahti, J. & Rojas, O. J., 14 Jan 2019, In : *Biomacromolecules*. 20, 1, p. 502-514

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

### **Sliding wear behaviour of HVOF and HVOF sprayed Cr<sub>3</sub>C<sub>2</sub>-based coatings**

Matikainen, V., Bolelli, G., Koivuluoto, H., Sassatelli, P., Lusvarghi, L. & Vuoristo, P., 2017, In : *Wear*. 388-389, p. 57-71  
Research output: Contribution to journal > Article > Scientific > peer-review

### **Sliding and abrasive wear behaviour of HVOF- and HVOF-sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr hardmetal coatings**

Bolelli, G., Berger, L. M., Börner, T., Koivuluoto, H., Matikainen, V., Lusvarghi, L., Lyphout, C., Markocsan, N., Nylén, P., Sassatelli, P., Trache, R. & Vuoristo, P., 15 Jul 2016, In : *Wear*. 358-359, p. 32-50 19 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

### **Simultaneous removal of tetrathionate and copper from simulated acidic mining water in bioelectrochemical and electrochemical systems**

Sulonen, M. L. K., Kokko, M. E., Lakaniemi, A.-M. & Puhakka, J. A., 2018, (Unpublished) In : *Hydrometallurgy*. 176, p. 129-138 10 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

### **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

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

Rahaman, O., Kalimeri, M., Melchionna, S., Hénin, J. & Sterpone, F., 23 Jul 2015, In : *Journal of Physical Chemistry Part B*. 119, 29, p. 8939-8949 11 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

### **Role of fracture toughness in impact-abrasion wear**

Chintha, A. R., Valtonen, K., Kuokkala, V. T., Kundu, S., Peet, M. J. & Bhadeshia, H. K. D. H., 15 Jun 2019, In : *Wear*. 428-429, p. 430-437 8 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

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

Joost, U., Sutka, A., Oja, M., Smits, K., Doebelin, N., Loot, A., Järvekülg, M., Hirsimäki, M., Valden, M. & Nommiste, E., 26 Dec 2018, In : *Chemistry of Materials*. 30, 24, p. 8968-8974  
Research output: Contribution to journal > Article > Scientific > peer-review

### **Reversal of the Hofmeister series: Specific ion effects on peptides**

Paterová, J., Rembert, K. B., Heyda, J., Kurra, Y., Okur, H. I., Liu, W. R., Hilty, C., Cremer, P. S. & Jungwirth, P., 11 Jul 2013, In : *Journal of Physical Chemistry Part B*. 117, 27, p. 8150-8158 9 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

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

Hladilková, J., Prokop, Z., Chaloupková, 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

### **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

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

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

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

#### **Recent progress in biohydrometallurgy and microbial characterisation**

Kaksonen, A. H., Boxall, N. J., Gumulya, Y., Khaleque, H. N., Morris, C., Bohu, T., Cheng, K. Y., Usher, K. M. & Lakaniemi, A-M., 1 Sep 2018, In : Hydrometallurgy. 180, p. 7-25 19 p.

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

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

Rasappa, S., Schulte, L., Borah, D., Morris, M. A. & Ndoni, S., 1 Oct 2014, In : Colloids and Interface Science Communications. 2, p. 1-5 5 p.

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

#### **Rapid and sensitive detection of norovirus antibodies in human serum with a bilayer interferometry biosensor**

Auer, S., Koho, T., Uusi-Kerttula, H., Vesikari, T., Blazevic, V. & Hytönen, V. P., 31 Dec 2015, In : Sensors and Actuators B: Chemical. 221, p. 507-514 8 p.

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

#### **Quench absorption coils: A quench protection concept for high-field superconducting accelerator magnets**

Mentink, M. & Salmi, T., 3 May 2017, In : Superconductor Science and Technology. 30, 6, 064002.

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

#### **Properties of HVOF-sprayed Stellite-6 coatings**

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

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

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

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

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

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

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

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

#### **Process time importance in the product properties evolvement during extrusion coating of different LDPE grades**

Suokas, E. & Kuusipalo, J., 1 Jan 2018, *15th TAPPI Advanced Coating Fundamentals Symposium 2018: Charlotte; United States; 14 April 2018 through 15 April 2018*. TAPPI Press, p. 151-159 9 p.

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

#### **Process Parameter Impact on Suspension-HVOF-Sprayed Cr<sub>2</sub>O<sub>3</sub> Coatings**

Kiilakoski, J., Trache, R., Björklund, S., Joshi, S. & Vuoristo, P., 2019, In : Journal of Thermal Spray Technology. 12 p.

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

#### **Processing and characterization of phosphate glasses containing CaAl<sub>2</sub>O<sub>4</sub>:Eu<sup>2+</sup>,Nd<sup>3+</sup> and SrAl<sub>2</sub>O<sub>4</sub>:Eu<sup>2+</sup>,Dy<sup>3+</sup> microparticles**

Massera, J., Gaussiran, M., Gluchowski, P., Lastusaari, M., Hupa, L. & Petit, L., 1 Nov 2015, In : Journal of the European Ceramic Society. 35, 14, p. 3863-3871 9 p.

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

**Processable aromatic polyesters based on bisphenol derived from cashew nut shell liquid: synthesis and characterization**  
Tawade, B. V., Salunke, J. K., Sane, P. S. & Wadgaonkar, P. P., 18 Nov 2014, In : JOURNAL OF POLYMER RESEARCH. 21, 12

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

**Printable and flexible macroporous organosilica film with high protein adsorption capacity**

Heikkinen, J. J., Kivimäki, L., Hytönen, V. P., Kulomaa, M. S. & Hormi, O. E. O., 1 Jan 2012, In : Thin Solid Films. 520, 6, p. 1934-1937 4 p.

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

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

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

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

**Preintercalation of an organic accelerator into nanogalleries and preparation of ethylene propylene diene terpolymer rubber-clay nanocomposites**

Rooj, S., Das, A. & Heinrich, G., Mar 2011, In : POLYMER JOURNAL. 43, 3, p. 285-292 8 p.

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

**Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures**

Donmez, O., Aydin, M., Ardali, Yildirim, S., Tiraş, E., Erol, A., Puustinen, J., Hilska, J. & Guina, M., 2020, In : Semiconductor Science and Technology. 35, 9, 095038.

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

**Powering of an HTS dipole insert-magnet operated standalone in helium gas between 5 and 85 K**

Nugteren, J. V., Kirby, G., Bajas, H., Bajko, M., Ballarino, A., Bottura, L., Chiuchiolo, A., Contat, P. A., Dhallé, M., Durante, M., Fazilleau, P., Fontalva, A., Gao, P., Goldacker, W., Kate, H. T., Kario, A., Lahtinen, V., Lorin, C., Markelov, A., Mazet, J., Molodyk, A., Murtomäki, J., Long, N., Perez, J., Petrone, C., Pincot, F., Rijk, G. D., Rossi, L., Russenschuck, S., Ruuskanen, J., Schmitz, K., Stenvall, A., Usoskin, A., Willering, G. & Yang, Y., 25 Apr 2018, In : Superconductor Science and Technology. 31, 6, 065002.

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

**Post operation inactivation of acidophilic bioleaching microorganisms using natural chloride-rich mine water**

Bomberg, M., Miettinen, H., Wahlström, M., Kaartinen, T., Ahoranta, S., Lakaniemi, A-M. & Kinnunen, P., 1 Sep 2018, In : Hydrometallurgy. 180, p. 236-245 10 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

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

Shin, J., Cherstvy, A. G. & Metzler, R., 17 Feb 2015, In : ACS Macro Letters. 4, 2, p. 202-206 5 p.

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

**Polyarginine Interacts More Strongly and Cooperatively than Polylysine with Phospholipid Bilayers**

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

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

**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

**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

**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

**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.

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

**Photocatalytic and antibacterial properties of ZnO films with different surface topographies on stainless steel substrate**

Heinonen, S., Kannisto, M., Nikkanen, J.-P., Huttunen-Saarivirta, E., Karp, M. & Levänen, E., 1 Oct 2016, In : Thin Solid Films. 616, p. 842-849 8 p.

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

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

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

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

**Phase-change material: Natural rubber composites for heat storage applications**

Poikelispää, M., Ruokangas, S., Honkanen, M., Vippola, M. & Sarlin, E., 2020, In : Rubber Chemistry and Technology. 93, 1, p. 208-221 14 p.

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

**Persistent luminescent particles containing bioactive glasses: Prospect toward tracking in-vivo implant mineralization using biophotonic ceramics**

Saarinen, M., Nommeots-Nomm, A., Hokka, M., Laurila, J., Norrbo, I., Lastusaari, M., Massera, J. & Petit, L., 2018, In : Journal of the European Ceramic Society. 38, 1, p. 287-295

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

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

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

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

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

Yi, H., Albrecht, M., Valkonen, A. & Rissanen, K., 1 Jan 2015, In : New Journal of Chemistry. 39, 1, p. 746-749 4 p.

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

**PEGylated liposomes as carriers of hydrophobic porphyrins**

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

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

**Passive resonance sensor based method for monitoring particle suspensions**

Salpavaara, T., Järveläinen, M., Seppälä, S., Yli-Hallila, T., Verho, J., Vilkkö, M., Lekkala, J. & Levänen, E., 8 Jun 2015, In : Sensors and Actuators B: Chemical. 219, p. 324-330 7 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

**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

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

Saccone, M., Kuntze, K., Ahmed, Z., Siiskonen, A., Giese, M. & Priimagi, A., 1 Jan 2018, In : Journal of Materials Chemistry C. 6, 37, p. 9958-9963 6 p.

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

**Orientalional dependence of the affinity of guanidinium ions to the water surface**

Wernersson, E., Heyda, J., Vazdar, M., Lund, M., Mason, P. E. & Jungwirth, P., 3 Nov 2011, In : Journal of Physical Chemistry Part B. 115, 43, p. 12521-12526 6 p.

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**

Varis, T., Suhonen, T., Calonius, O., Čuban, J. & Pietola, M., 15 Nov 2016, In : Surface and Coatings Technology. 305, p. 123-131 9 p.

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

**Optimised selection of new protective coatings for biofuel boiler applications**

Tuurna, S., Varis, T., Penttilä, K., Ruusuvuori, K., Holmström, S. & Yli-Olli, S., Jul 2011, In : Materials and Corrosion-Werkstoffe und Korrosion. 62, 7, p. 642-649 8 p.

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

**Optical properties of GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates**

Gunes, M., Ukelge, M. O., Donmez, O., Erol, A., Gumus, C., Alghamdi, H., Galeti, H. V. A., Henini, M., Schmidbauer, M., Hilska, J., Puustinen, J. & Guina, M., 13 Nov 2018, In : Semiconductor Science and Technology. 33, 12, 124015.

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

**Novel oxyfluorophosphate glasses and glass-ceramics**

Cui, S., Massera, J., Lastusaari, M., Hupa, L. & Petit, L., 1 Aug 2016, In : Journal of Non-Crystalline Solids. 445-446, p. 40-44 5 p.

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

**Novel Online Diagnostic Analysis for In-Flight Particle Properties in Cold Spraying**

Koivuluoto, H., Matikainen, V., Larjo, J. & Vuoristo, P., 2018, In : Journal of Thermal Spray Technology. 27, 3, p. 423-432 10 p.

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

**Novel borosilicate bioactive scaffolds with persistent luminescence**

Del Cerro, P. R., Teittinen, H., Norrbo, I., Lastusaari, M., Massera, J. & Petit, L., 2020, In : Biomedical Glasses. 6, 1, p. 1-9 9 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

#### **Non-destructive and wireless monitoring of biodegradable polymers**

Salpavaara, T., Hänninen, A., Antniemi, A., Lekkala, J. & Kellomäki, M., 2017, In : *Sensors and Actuators B: Chemical*. 251, p. 1018-1025

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

#### **Near-threshold high spin amplification in a 1300 nm GaInNAs spin laser**

Cemlyn, B., Adams, M., Harbord, E., Li, N., Henning, I. D., Oulton, R., Korpijärvi, V. M. & Guina, M., 1 Aug 2018, In : *Semiconductor Science and Technology*. 33, 9, 094005.

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

#### **Naturally occurring amino acids: A suitable substitute of N-N'-di-phenyl guanidine (DPG) in silica tyre formulation?**

Debnath, S. C., Das, A., Basu, D. & Heinrich, G., Jan 2013, In : *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*. 66, 1-2, p. 25-31 7 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

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

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

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

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

Rajan, R., Rainosalo, E., Thomas, S. P., Ramamoorthy, S. K., Zavašnik, J., Vuorinen, J. & Skrifvars, M., 2018, In : *Polymer Bulletin*. 75, 1, p. 167-195 29 p.

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

#### **Modelling thermodynamics in a high erature superconducting dipole magnet: An inverse problem based approach**

Ruuskanen, J., Stenvall, A., Lahtinen, V., Nugteren, J. V., Kirby, G. & Murtomäki, J., 2 Aug 2019, In : *Superconductor Science and Technology*. 32, 9, 094007.

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

#### **Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics: Effect of mineralogical composition on microstructure and properties**

Karhu, M., Lagerbom, J., Solismaa, S., Honkanen, M., Ismailov, A., Räisänen, M. L., Huttunen-Saarivirta, E., Levänen, E. & Kivikytö-Reponen, P., Mar 2019, In : *Ceramics International*. 45, 4, p. 4840-4848

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

#### **Mining tailings as a raw material for glass-bonded thermally sprayed ceramic coatings: Microstructure and properties**

Karhu, M., Lagerbom, J., Honkanen, M., Huttunen-Saarivirta, E., Kiilakoski, J., Vuoristo, P., Solismaa, S. & Kivikytö-Reponen, P., 2020, In : *Journal of the European Ceramic Society*. 40, 12, p. 4111-4121 11 p.

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

#### **Microstructure and Sliding Wear Behavior of Fe-Based Coatings Manufactured with HVOF and HVOF Thermal Spray Processes**

Milanti, A., Matikainen, V., Bolelli, G., Koivuluoto, H., Lusvarghi, L. & Vuoristo, P., Jun 2016, In : *Journal of Thermal Spray Technology*. 25, 5, p. 1040-1055 16 p.

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

#### **Microstructural and abrasion wear characteristics of laser-clad tool steel coatings**

Tuominen, J., Näkki, J., Pajukoski, H., Hyvärinen, L. & Vuoristo, P., 2016, In : Surface Engineering. 32, 12, p. 923-933 11 p.

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

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

Kuzmin, M. G., Soboleva, I. V., Durandin, N. A., Lisitsyna, E. S. & Kuzmin, V. A., 17 Apr 2014, In : Journal of Physical Chemistry Part B. 118, 15, p. 4245-4252 8 p.

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

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

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

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

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

Rajan, R., Rainosalu, E., Ramamoorthy, S. K., Thomas, S. P., Zavašnik, J., Vuorinen, J. & Skrifvars, M., 20 Sep 2018, In : Journal of Applied Polymer Science. 135, 36, 46673.

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

#### **Mechanical performance and CO<sub>2</sub> uptake of ion-exchanged zeolite A structured by freeze-casting**

Ojuva, A., Järveläinen, M., Bauer, M., Keskinen, L., Valkonen, M., Akhtar, F., Levänen, E. & Bergström, L., 2015, In : Journal of the European Ceramic Society. 35, 9, p. 2607-2618 12 p.

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

#### **Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting**

Barberi, J., Nommeots-Nomm, A., Fiume, E., Verné, E., Massera, J. & Bairo, F., 2019, In : Biomedical Glasses. 5, 1, p. 140-147 8 p.

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

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

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

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

#### **Luminescence of Er<sup>3+</sup> doped oxyfluoride phosphate glasses and glass-ceramics**

Nommeots-Nomm, A., Boetti, N. G., Salminen, T., Massera, J., Hokka, M. & Petit, L., 30 Jun 2018, In : Journal of Alloys and Compounds. 751, p. 224-230 7 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.

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

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

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

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

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

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

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

**Load capacity of lubricated bismuth bronze bimetal bearing under elliptical sliding motion**

Oksanen, V. T., Lehtovaara, A. J. & Kallio, M. H., 2017, In : *Wear*. 388-389, p. 72-80

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

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

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

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

**Investigation of long-term chemical stability of structured ZnO films in aqueous solutions of varying conditions**

Heinonen, S., Nikkanen, J-P., Huttunen-Saarivirta, E. & Levänen, E., 30 Sep 2017, In : *Thin Solid Films*. 638, p. 410-419 10 p.

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

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

Vapaavuori, J., Grosrenaud, J., Pellerin, C. & Bazuin, C. G., 20 Oct 2015, In : *ACS Macro Letters*. 4, 10, p. 1158-1162 5 p.

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

**Infrared Thermography as a Non-destructive Testing Solution for Thermal Spray Metal Coatings**

Santangelo, P. E., Allesina, G., Bolelli, G., Lusvarghi, L., Matikainen, V. & Vuoristo, P., Dec 2017, In : *Journal of Thermal Spray Technology*. 26, 8, p. 1982-1993 12 p.

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

**Influence of the Spray Gun Type on Microstructure and Properties of HVOF Sprayed Fe-Based Corrosion Resistant Coatings**

Milanti, A., Koivuluoto, H. & Vuoristo, P., 2015, In : *Journal of Thermal Spray Technology*. 24, 7, p. 1312-1322 11 p.

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

**Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics**

Ojha, N., Laihinne, T., Salminen, T., Lastusaari, M. & Petit, L., Jun 2018, In : *Ceramics International*. 44, 10, p. 11807-11811

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.

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

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

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

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

**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

**Increased lifetime for biomass and waste to energy power plant boilers with HVOF coatings: High temperature corrosion testing under chlorine-containing molten salt**

Oksa, M., Tuurna, S. & Varis, T., Jun 2013, In : *Journal of Thermal Spray Technology*. 22, 5, p. 783-796 14 p.

Research output: Contribution to journal > Review 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

**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

**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

**Improved properties for packaging materials by nanoscale surface modification and ALD barrier coating**

Lahti, J., Lavonen, J., Lahtinen, K., Johansson, P., Seppänen, T. & Cameron, D. C., 2016, *TAPPI International Conference on Nanotechnology for Renewable Materials 2016*. TAPPI Press, Vol. 2. p. 684-706 23 p.

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

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

Shakun, A., Poikelispää, M., Das, A. & Vuorinen, J., 2018, In : *Polymer Engineering and Science*. 58, 3, p. 395-404

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

**Immobilized bioactive agents onto polyurethane surface with heparin and phosphorylcholine group**

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

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

**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

**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

**Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy**

Zorzi, G. K., Párraga, J. E., Seijo, B. & Sánchez, A., 7 Jul 2011, In : *MACROMOLECULAR BIOSCIENCE*. 11, 7, p. 905-913 9 p.

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

**HVOF process control enabling strategies**

Ghabchi, A., Varis, T., Holmberg, K. & Sampath, S., 2012, *International Thermal Spray Conference and Exposition, ITSC 2012 - Air, Land, Water and the Human Body: Thermal Spray Science and Applications*. ASM International, p. 465-471 7 p.

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

**HVOF- and HVOF-Sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr Coatings Deposited from Feedstock Powders of Spherical Morphology: Microstructure Formation and High-Stress Abrasive Wear Resistance Up to 800 °C**

Janka, L., Norpoth, J., Trache, R., Thiele, S. & Berger, L. M., 2017, In : *Journal of Thermal Spray Technology*. 26, 7, p. 1720-1731 12 p.

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

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

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

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

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

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

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

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

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

**High-performance elastomeric strain sensors based on nanostructured carbon fillers for potential tire applications**

Bhagavatheswaran, E. S., Vaikuntam, S. R., Stöckelhuber, K. W., Wießner, S., Heinrich, G. & Das, A., 1 Mar 2018, In : *Materials Today Communications*. 14, p. 240-248 9 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

**Highly conducting polychloroprene composites based on multi-walled carbon nanotubes and 1-butyl 3-methyl imidazolium bis(trifluoromethylsulphonyl)imide**

Subramaniam, K., Das, A. & Heinrich, G., Jul 2012, In : *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*. 65, 7-8, p. 44-46 3 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

**Halogen bonding stabilizes a cis-azobenzene derivative in the solid state: A crystallographic study**

Saccone, M., Siiskonen, A., Fernandez-Palacio, F., Priimägi, A., Terraneo, G., Resnati, G. & Metrangolo, P., 1 Apr 2017, In : *ACTA CRYSTALLOGRAPHICA SECTION B : STRUCTURAL SCIENCE, CRYSTAL ENGINEERING AND MATERIALS*. 73, 2, p. 227-233 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

### Gas atomized thermal spray powders of various metals and alloys

Lagerbom, J., Ritvonen, T., Suhonen, T. & Varis, T., 2011, *Proceedings of the Euro International Powder Metallurgy Congress and Exhibition, Euro PM 2011*. European Powder Metallurgy Association (EPMA), Vol. 2.

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

### Formation mechanisms, structure, and properties of HVOF-sprayed WC-CoCr coatings: An approach toward process maps

Varis, T., Suhonen, T., Ghabchi, A., Valarezo, A., Sampath, S., Liu, X. & Hannula, S. P., 2014, In : *Journal of Thermal Spray Technology*. 23, 6, p. 1009-1018 10 p.

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

### Fluorine losses in Er<sup>3+</sup> oxyfluoride phosphate glasses and glass-ceramics

Szczodra, A., Mardoukhi, A., Hokka, M., Boetti, N. G. & Petit, L., 15 Aug 2019, In : *Journal of Alloys and Compounds*. 797, p. 797-803 7 p.

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

### Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models

Välimäki, H., Verho, J., Kreutzer, J., Kattipparambil Rajan, D., Rynnänen, T., Pekkanen-Mattila, M., Ahola, A., Tappura, K., Kallio, P. & Leikkala, J., 1 Oct 2017, In : *Sensors and Actuators B: Chemical*. 249, p. 738-746 9 p.

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

### Flip-chip Wafer-fused OP-VECSELs emitting 3.65 W at the 1.55- $\mu\text{m}$ waveband

Mereuta, A., Nechay, K., Caliman, A., Suruceanu, G., Rudra, A., Gallo, P., Guina, M. & Kapon, E., 2019, In : *IEEE Journal of Selected Topics in Quantum Electronics*. 25, 6

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

### First principles prediction of the solar cell efficiency of chalcopyrite materials $\text{AgMX}_2$ (M=In, Al; X=S, Se, Te)

Dongho-Nguimdo, G. M., Igumbor, E., Zambou, S. & Joubert, D. P., 1 Dec 2019, In : *Computational Condensed Matter*. 21, e00391.

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

### Fabrication and Characterization of Amorphous Alumina-Yttria-Stabilized Zirconia Coatings by Air Plasma Spraying

Song, X., Suhonen, T., Varis, T., Huang, L., Zheng, X. & Zeng, Y., 25 Nov 2014, In : *Journal of Thermal Spray Technology*. 23, 8, p. 1302-1311 10 p.

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

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

### Exciton localization and structural disorder of $\text{GaAs}_{1-x}\text{Bi}_x$ /GaAs quantum wells grown by molecular beam epitaxy on (311)B GaAs substrates

Prando, G. A., Orsi Gordo, V., Puustinen, J., Hilska, J., Alghamdi, H. M., Som, G., Gunes, M., Akyol, M., Souto, S., Rodrigues, A. D., Galeti, H. V. A., Henini, M., Gobato, Y. G. & Guina, M., 17 Jul 2018, In : *Semiconductor Science and Technology*. 33, 8, 084002.

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

### Evaluation of Residual Stresses and Their Influence on Cavitation Erosion Resistance of High Kinetic HVOF and HVOF-Sprayed WC-CoCr Coatings

Varis, T., Suhonen, T., Laakso, J., Jokipii, M. & Vuoristo, P., 2020, In : *Journal of Thermal Spray Technology*. 17 p.

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

### Evaluation of crushing strength of spray-dried $\text{MgAl}_2\text{O}_4$ granule beds

Kanerva, U., Suhonen, T., Lagerbom, J. & Levänen, E., 1 Aug 2015, In : *Ceramics International*. 41, 7, p. 8494-8500 7 p.

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

**Evaluating the toughness of APS and HVOF-sprayed  $\text{Al}_2\text{O}_3\text{-ZrO}_2$ -coatings by in-situ- and macroscopic bending**  
Kiilakoski, J., Musalek, R., Lukac, F., Koivuluoto, H. & Vuoristo, P., 2018, In : Journal of the European Ceramic Society. 38, 4, p. 1908-1918

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

**Erosive wear of various stainless steel grades used as impeller blade materials in high temperature aqueous slurry**

Lindgren, M., Suihkonen, R. & Vuorinen, J., 5 Apr 2015, In : Wear. 328-329, p. 391-400 10 p.

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

**Erosive wear of filled vinylester composites in water and acidic media at elevated temperature**

Sarlin, E., Saarimäki, M., Sironen, R., Lindgren, M., Siljander, S., Kanerva, M. & Vuorinen, J., 15 Nov 2017, In : Wear. 390-391, p. 84-92 9 p.

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

**Erosion wear performance of WC-10Co4Cr and  $\text{Cr}_3\text{C}_2\text{-25NiCr}$  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

**Erosion wear of vinylester matrix composites in aqueous and acidic environments at elevated temperatures**

Suihkonen, R., Lindgren, M., Siljander, S., Sarlin, E. & Vuorinen, J., 15 Jul 2016, In : Wear. 358-359, p. 7-16 10 p.

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

**Erosion–corrosion resistance of various stainless steel grades in high-temperature sulfuric acid solution**

Lindgren, M., Siljander, S., Suihkonen, R., Pohjanne, P. & Vuorinen, J., 15 Oct 2016, In : Wear. 364-365, p. 10-21 12 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

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

Hilka, 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

**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

**Enhanced thermal stability of polychloroprene rubber composites with ionic liquid modified MWCNTs**

Subramaniam, K., Das, A., Häußler, L., Harnisch, C., Stöckelhuber, K. W. & Heinrich, G., May 2012, In : Polymer Degradation and Stability. 97, 5, p. 776-785 10 p.

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

**Energy dissipation in natural rubber latex films: The effect of stabilizers, leaching and acetone-treatment**

Shakun, A., Sarlin, E. & Vuorinen, J., 2020, In : Journal of Applied Polymer Science. 15 p.

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

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

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

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

#### **Electronic transport in n-type modulation-doped AlGaAs/GaAsBi quantum well structures: Influence of Bi and thermal annealing on electron effective mass and electron mobility**

Donmez, O., Aydin, M., Ardali, Yildirim, S., Tiraş, E., Nutku, F., Cetinkaya, C., okduygulular, E., Puustinen, J., Hilska, J., Guina, M. & Erol, A., 2020, In : Semiconductor Science and Technology. 35, 2, 025009.

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

#### **Electromagnetic nonlinearities in a Roebel-cable-based accelerator magnet prototype: Variational approach**

Ruuskanen, J., Stenvall, A., Lahtinen, V. & Pardo, E., 1 Feb 2017, In : Superconductor Science and Technology. 30, 2, 024008.

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

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

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

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

#### **Elastomer composites based on carbon nanotubes and ionic liquid**

Subramaniam, K., Das, A., Stöckelhuber, K. W. & Heinrich, G., 2013, In : Rubber Chemistry and Technology. 86, 3, p. 367-400 34 p.

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

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

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

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

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

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

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

#### **Effects of composition and microstructure on the abrasive wear performance of quenched wear resistant steels**

Ojala, N., Valtonen, K., Heino, V., Kallio, M., Aaltonen, J., Siitonen, P. & Kuokkala, V. T., 15 Sep 2014, In : Wear. 317, 1-2, p. 225-232 8 p.

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

#### **Effect of the addition of Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and ZnO on the thermal, structural and luminescence properties of Er<sup>3+</sup>-doped phosphate glasses**

Lopez-Iscoa, P., Petit, L., Massera, J., Janner, D., Boetti, N. G., Pugliese, D., Fiorilli, S., Novara, C., Giorgis, F. & Milanese, D., 15 Mar 2017, In : Journal of Non-Crystalline Solids. 460, p. 161-168 8 p.

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

#### **Effect of tempering on the impact-abrasive and abrasive wear resistance of ultra-high strength steels**

Haiko, O., Valtonen, K., Kaijalainen, A., Uusikallio, S., Hannula, J., Liimatainen, T. & Kömi, J., 15 Dec 2019, In : Wear. 440-441

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

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

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

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

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

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

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

Le, H. H., Parsaker, M., Sriharish, M. N., Henning, S., Menzel, M., Wießner, S., Das, A., Do, Q. K., Heinrich, G. & Radosch, H. J., 1 Nov 2015, In : Express Polymer Letters. 9, 11, p. 960-971 12 p.

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

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

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

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

**Effect of prior austenite grain size on the abrasive wear resistance of ultra-high strength martensitic steels**

Haiko, O., Javaheri, V., Valtonen, K., Kaijalainen, A., Hannula, J. & Kömi, J., 15 Aug 2020, In : Wear. 454-455, 203336.

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

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

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

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

**Effect of nozzle geometry on the microstructure and properties of hvaf-sprayed wc-10co4cr and cr3c2-25nicr coatings**

Matikainen, V., Koivuluoto, H., Vuoristo, P., Schubert, J. & Houdková, 1 Apr 2018, In : Journal of Thermal Spray Technology. 27, 4, p. 680-694 15 p.

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

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

Le, H. H., Parsekar, M., Ilisch, S., Henning, S., Das, A., Stöckelhuber, K. W., Beiner, M., Ho, C. A., Adhikari, R., Wießner, S., Heinrich, G. & Radosch, H. J., 2014, In : Macromolecular Materials and Engineering. 299, 5, p. 569-582 14 p.

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

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

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

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

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

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

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

**Effect of heat-treatment on the upconversion of NaYF<sub>4</sub>:Yb<sup>3+</sup>, Er<sup>3+</sup> nanocrystals containing silver phosphate glass**

Ojha, N., Bogdan, M., Galatus, R. & Petit, L., 15 Sep 2020, In : Journal of Non-Crystalline Solids. 544, 120243.

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

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

Goulet-Hanssens, A., Corkery, T. C., Priimagi, A. & Barrett, C. J., 28 Sep 2014, In : Journal of Materials Chemistry C. 2, 36, p. 7505-7512 8 p.

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

**Effect of carbon nanotubes and nanodiamonds on the heat storage ability of natural rubber composites**

Poikelispää, M., Honkanen, M., Vippola, M. & Sarlin, E., 2020, In : Journal of Elastomers and Plastics. 12 p.

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

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

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

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

**Dissolution behavior of the bioactive glass S53P4 when sodium is replaced by potassium, and calcium with magnesium or strontium**

Hupa, L., Fagerlund, S., Massera, J. & Björkvik, L., 2016, In : Journal of Non-Crystalline Solids. p. 41-46 6 p.

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

**Dielectric Breakdown Strength of Thermally Sprayed Ceramic Coatings: Effects of Different Test Arrangements**

Niittymäki, M., Lahti, K., Suhonen, T. & Metsäjoki, J., 2015, In : Journal of Thermal Spray Technology. 24, 3, p. 542-551 10 p.

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

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

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

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

**Development in additive methods in aramid fiber surface modification to increase fiber-matrix adhesion: A review**

Palola, S., Vuorinen, J., Noordermeer, J. W. M. & Sarlin, E., 1 Jun 2020, In : Coatings. 10, 6, 31 p., 556.

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

**Development and application of HVOF sprayed spinel protective coating for SOFC interconnects**

Thomann, O., Pihlatie, M., Rautanen, M., Himanen, O., Lagerbom, J., Mäkinen, M., Varis, T., Suhonen, T. & Kiviaho, J., Jun 2013, In : Journal of Thermal Spray Technology. 22, 5, p. 631-639 9 p.

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

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

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

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

**Detection of gaseous species during KCl-induced high-temperature corrosion by the means of CPFAAS and CI-API-TOF**

Lehmusto, J., Olin, M., Viljanen, J., Kalliokoski, J., Mylläri, F., Toivonen, J., Dal Maso, M. & Hupa, L., 30 Aug 2019, In : Materials and Corrosion. 10 p.

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

**Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies**

Vikholm-Lundin, I., Auer, S. & Hellgren, A. C., 10 Aug 2011, In : *Sensors and Actuators B: Chemical*. 156, 1, p. 28-34 7 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Design, processing, and characterization of an optical core-bioactive clad phosphate fiber for biomedical applications**

Lopez-Iscoa, P., Ojha, N., Pugliese, D., Mishra, A., Gumenyuk, R., Boetti, N. G., Janner, D., Troles, J., Bureau, B., Boussard-Plédel, C., Massera, J., Milanese, D. & Petit, L., 2019, In : *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*.

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

**Damage mechanisms and cracking behavior of thermal sprayed WC-CoCr coating under scratch testing**

Ghabchi, A., Sampath, S., Holmberg, K. & Varis, T., 15 May 2014, In : *Wear*. 313, 1-2, p. 97-105 9 p.

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

**Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold**

Vikholm-Lundin, I., Auer, S., Paakkunainen, M., Määttä, J. A. E., Munter, T., Leppiniemi, J., Hytönen, V. P. & Tappura, K., Aug 2012, In : *Sensors and Actuators B: Chemical*. 171-172, p. 440-448 9 p.

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

**Crystallization mechanism of the bioactive glasses, 45S5 and S53P4**

Massera, J., Fagerlund, S., Hupa, L. & Hupa, M., Feb 2012, In : *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*. 95, 2, p. 607-613 7 p.

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

**Corrosion properties of thermally sprayed bond coatings under plasma sprayed chromia coating in sulfuric acid solutions**

Vuoristo, P., Varis, T., Meschini, D., Bolelli, G. & Lusvardi, L., May 2019, *International Thermal Spray Conference and Exposition, ITSC 2019: New Waves of Thermal Spray Technology for Sustainable Growth*. Azarmi, F., Lau, Y., Veilleux, J., Widener, C., Toma, F., Koivuluoto, H., Balani, K., Li, H. & Shinoda, K. (eds.). ASM International, p. 923-930 8 p. (Proceedings of the International Thermal Spray Conference).

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

**Corrosion mechanisms of sintered Nd-Fe-B magnets in the presence of water as vapour, pressurised vapour and liquid**

Isotahdon, E., Huttunen-Saarivirta, E., Heinonen, S., Kuokkala, V. T. & Paju, M., 25 Mar 2015, In : *Journal of Alloys and Compounds*. 626, p. 349-359 11 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

**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

**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

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

Bansod, N. D., Kavgate, 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

**Comparison of various high-stress wear conditions and wear performance of martensitic steels**

Valtonen, K., Ojala, N., Haiko, O. & Kuokkala, V-T., 30 Apr 2019, In : *Wear*. 426-427, Part A, p. 3-13 11 p.  
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**Comparison of laboratory rolling-sliding wear tests with in-service wear of nodular cast iron rollers against wire ropes**

Oksanen, V., Valtonen, K., Andersson, P., Vaajoki, A., Laukkanen, A., Holmberg, K. & Kuokkala, V. T., 15 Oct 2015, In : *Wear*. 340-341, p. 73-81 9 p.

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

**Cold-Sprayed Al6061 coatings: Online spray monitoring and influence of process parameters on coating properties**

Koivuluoto, H., Larjo, J., Marini, D., Pulci, G. & Marra, F., 2020, In : *Coatings*. 10, 4, 16 p., 348.

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

**Cold gas spraying of a high-entropy CrFeNiMn equiatomic alloy**

Lehtonen, J., Koivuluoto, H., Ge, Y., Juselius, A. & Hannula, S. P., 2020, In : *Coatings*. 10, 1, 12 p., 53.

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

**Chemical synthesis of WC-Co from water-soluble precursors: The effect of carbon and cobalt additions to WC synthesis**

Kanerva, U., Karhu, M., Lagerbom, J., Kronlöf, A., Honkanen, M., Turunen, E. & Laitinen, T., 1 Apr 2016, In : *International Journal of Refractory Metals and Hard Materials*. 56, p. 69-75 7 p.

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

**Chemical and bacterial leaching of metals from a smelter slag in acid solutions**

Kaksonen, A. H., Särkijärvi, S., Puhakka, J. A., Peuraniemi, E., Junnikkala, S. & Tuovinen, O. H., 2016, In : *Hydrometallurgy*. 159, p. 46-53

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

**Characterization of thermally aged polyetheretherketone fibres: Mechanical, thermal, rheological and chemical property changes**

Mylläri, V., Ruoko, T-P., Vuorinen, J. & Lemmetyinen, H., 1 Oct 2015, In : *Polymer Degradation and Stability*. 120, p. 419-426 8 p.

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

**Characterization of the microstructure and corrosion performance of Ce-alloyed Nd-Fe-B magnets**

Isotahdon, E., Huttunen-Saarivirta, E. & Kuokkala, V., Jan 2017, In : *Journal of Alloys and Compounds*. 692, p. 190-197

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

**Characterization of Powder-Precursor HVOF-Sprayed Al<sub>2</sub>O<sub>3</sub>-YSZ/ZrO<sub>2</sub> Coatings**

Kiilakoski, J., Puranen, J., Heinonen, E., Koivuluoto, H. & Vuoristo, P., Jan 2019, In : *Journal of Thermal Spray Technology*. 28, 1-2, p. 98-107

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

**Characterization of High-Velocity Single Particle Impacts on Plasma-Sprayed Ceramic Coatings**

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

**Characteristics of carbide-free medium-carbon bainitic steels in high-stress abrasive wear conditions**

Haiko, O., Kaikkonen, P., Somani, M., Valtonen, K. & Kömi, J., 15 Sep 2020, In : *Wear*. 456-457, 12 p., 203386.

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

**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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**Calculated electronic density of states and structural properties of tetrahedral amorphous carbon**

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

Kulig, W. & Agmon, N., 9 Jan 2014, In : Journal of Physical Chemistry Part B. 118, 1, p. 278-286 9 p.

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

**Block copolymer lithography: Feature size control and extension by an over-etch technique**

Rasappa, S., Borah, D., Senthamaraiannan, R., Faulkner, C. C., Shaw, M. T., Gleeson, P., Holmes, J. D. & Morris, M. A., 1 Nov 2012, In : Thin Solid Films. 522, p. 318-323 6 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., Kostianen, M., Kavakka, J., Selin, J., Tittonen, I. & Helaja, J., 21 Mar 2013, In : Journal of Materials Chemistry C. 1, 11, p. 2166-2173 8 p.

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**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

**Better understanding of the role of SiO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub> and Al<sub>2</sub>O<sub>3</sub> on the spectroscopic properties of Yb<sup>3+</sup> doped silica sol-gel glasses**

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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

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

**Azopolymer-based micro- and nanopatterning for photonic applications**

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#### **Azobenzene photomechanics: Prospects and potential applications**

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

#### **Avoiding the initial adhesive friction peak in fretting**

Juoksukangas, J., Hintikka, J., Lehtovaara, A., Mäntylä, A., Vaara, J. & Frondelius, T., 15 Nov 2020, In : Wear. 460-461, 12 p., 203353.

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#### **A supramolecular approach to photoresponsive thermo/solvoplastic block copolymer elastomers**

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

#### **A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field**

Sarcan, F., Mutlu, S., Cokduygulular, E., Donmez, O., Erol, A., Puustinen, J. & Guina, M., 4 May 2018, In : Semiconductor Science and Technology. 33, 6, 064003.

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#### **A Study of Cr<sub>3</sub>C<sub>2</sub>-Based HVOF- and HVAF-Sprayed Coatings: Microstructure and Carbide Retention**

Matikainen, V., Bolelli, G., Koivuluoto, H., Honkanen, M., Vippola, M., Lusvarghi, L. & Vuoristo, P., Aug 2017, In : Journal of Thermal Spray Technology. 26, 6, p. 1-18 18 p.

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

#### **A study of Cr<sub>3</sub>C<sub>2</sub>-based HVOF- and HVAF-sprayed coatings: Abrasion, dry particle erosion and cavitation erosion resistance**

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

#### **Assessment of pitting corrosion in bare and passivated (wet scCO<sub>2</sub>-induced patination and chemical passivation) hot-dip galvanized steel samples with SVET, FTIR, and SEM (EDS)**

Saarimaa, V., Fuertes, N., Persson, D., Zavalis, T., Kaleva, A., Nikkanen, J-P., Levänen, E. & Heydari, G., 2020, In : Materials and Corrosion. 10 p.

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#### **Aryl end-capped quaterthiophenes applied as anode interfacial layers in inverted organic solar cells**

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#### **Are coarse-grained models apt to detect protein thermal stability? the case of OPEP force field**

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#### **Arc-sprayed Fe-based coatings from coredwires for wear and corrosion protection in power engineering**

Yury, K., Filippov, M., Makarov, A., Malygina, I., Soboleva, N., Fantozzi, D., Andrea, M., Koivuluoto, H. & Vuoristo, P., 1 Feb 2018, In : Coatings. 8, 2, 71.

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

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#### **Antibacterial polymer fibres by rosin compounding and melt-spinning**

Kanerva, M., Puolakka, A., Takala, T. M., Elert, A. M., Mylläri, V., Jönkkäri, I., Sarlin, E., Seitsonen, J., Ruokolainen, J., Saris, P. & Vuorinen, J., Sep 2019, In : *Materials Today Communications*. 20, 100527.

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#### **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.

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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

#### **Aligned Poly( $\epsilon$ -caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro**

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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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#### **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.

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#### **Active packaging by paper coating**

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

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

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

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

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

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#### **Abrasive-Erosive Wear of Thermally Sprayed Coatings from Experimental and Commercial Cr<sub>3</sub>C<sub>2</sub>-Based Powders**

Sarjas, H., Surzhenkov, A., Juhani, K., Antonov, M., Adoberg, E., Kulu, P., Viljus, M., Traksmäa, R., Matikainen, V. & Vuoristo, P., 2017, In : *Journal of Thermal Spray Technology*. 26, 8, p. 2020-2029 10 p.

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

**Abrasion and compression resistance of liquid-flame-spray-deposited functional nanoparticle coatings on paper**

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

**Ab initio study of the surface properties of austenitic stainless steel alloys**

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

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