

### **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.

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

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

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

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

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

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

### **Erosive-abrasive wear behavior of carbide-free bainitic and boron steels compared in simulated field conditions**

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

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

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

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

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

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

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

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

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

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

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

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

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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

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

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

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

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

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#### **Effect of melting state on the thermal shock resistance and thermal conductivity of APS $ZrO_2$ -7.5wt.% $Y_2O_3$ coatings**

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

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

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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**

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

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#### **Roll-to-roll application of photocatalytic TiO<sub>2</sub> nanoparticles for printed functionality**

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

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**Atomikerroskasvatusmenetelmällä kasvatetun titaanidioksidikalvon ominaisuudet valosähkökemiallisessa veden hajottamisessa**

Translated title of the contribution: : Properties of Atomic Layer Deposited Titanium Dioxide Film in Photoelectrochemical Water Splitting

Saari, J., 4 Oct 2017, 74 p.

Research output: Book/Report › Master's Thesis › Scientific

**Role of Oxide Defects in ALD grown TiO<sub>2</sub> Coatings on Performance as Photoanode Protection Layer**

Saari, J., Ali-Löytty, H. & Valden, M., 29 May 2018.

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

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Rubio Hernandez, R., 2009, *Proceedings of the 11th International Conference: Glass Performace Days*.

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

**Envolvente de Vidrio Electrocrómico**

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**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.

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**Magnetic non-contact friction from domain wall dynamics actuated by oscillatory mechanical motion**

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

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

**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.

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**Influence of As/group-III flux ratio on defects formation and photovoltaic performance of GaInNAs solar cells**

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**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

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

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

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

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

Pitkänen, H., Alatalo, M., Puisto, A., Ropo, M., Kokko, K. & Vitos, L., Mar 2013, In : Surface Science. 609, p. 190-194 5 p.

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

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

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

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

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

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

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

**Microwave induced hierarchical nanostructures on aramid fibers and their influence on adhesion properties in a rubber matrix**

Palola, S., Sarlin, E., Kolahgar Azari, S., Koutsos, V. & Vuorinen, J., 15 Jul 2017, In : Applied Surface Science. 410, p. 145-153 9 p.

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**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

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

Palmolahti, L., Ali-Löyty, H., Khan, R., Saari, J., Tkachenko, N. V. & Valden, M., 2020, In : Journal of Physical Chemistry C. 124, 24, p. 13094-13101 8 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

**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

**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

**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

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

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

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

Ojha, N., Laihininen, 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

**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

**The formation and characterization of fretting-induced degradation layers using quenched and tempered steel**

Nurmi, V., Hintikka, J., Juoksukangas, J., Honkanen, M., Vippola, M., Lehtovaara, A., Mäntylä, A., Vaara, J. & Frondelius, T., 1 Mar 2019, In : Tribology International. 131, p. 258-267 10 p.

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

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

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

**RF measurements to pinpoint defects in inkjet-printed, thermally and mechanically stressed coplanar waveguides**

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

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

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

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

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

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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**

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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**

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

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**Evaluation of screen printed silver trace performance and long-term reliability against environmental stress on a low surface energy substrate**

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

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

**Advanced coatings by novel high-kinetic thermal spray processes**

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Research output: Contribution to journal > Article > Professional

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

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

**A Study of Cr<sub>3</sub>C<sub>2</sub>-Based HVOF- and HVOF-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

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

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

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

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

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

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

**Slurry and dry particle erosion wear properties of WC-10Co4Cr and Cr<sub>3</sub>C<sub>2</sub>-25NiCr hardmetal coatings deposited by HVOF and HVOF spray processes**

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

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

**Tribocorrosion behaviour of two low-alloy steel grades in simulated waste solution**

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

**Prediction of contact condition and surface damage by simulating variable friction coefficient and wear**

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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

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

Mahmood, N., Khan, A. U., Stöckelhuber, K. W., Das, A., Jehnichen, D. & Heinrich, G., 5 Jun 2014, In : Journal of Applied Polymer Science. 131, 11

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

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

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

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

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**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

**Running-in effects on friction of journal bearings under slow sliding speeds**

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

**The deformation, strain hardening, and wear behavior of chromium-alloyed hadfield steel in abrasive and impact conditions**

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

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

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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**

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

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

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

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

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

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

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

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

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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**

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**Optimization of convectively cooled heat sinks**

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

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

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

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

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**Fluid flow simulations meet high-speed video: Computer vision comparison of droplet dynamics**

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

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

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

**Influence of temperature-induced copper diffusion on degradation of selective chromium oxy-nitride solar absorber coatings**

Kotilainen, M., Honkanen, M., Mizohata, K. & Vuoristo, P., 2016, In : *Solar Energy Materials and Solar Cells*. 145, p. 323-332 10 p.

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

**Hafnium oxide thin films as a barrier against copper diffusion in solar absorbers**

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

**Surface-relief gratings and stable birefringence inscribed using light of broad spectral range in supramolecular polymer-bisazobenzene complexes**

Koskela, J. E., Vapaavuori, J., Hautala, J., Priimagi, A., Faul, C. F. J., Kaivola, M. & Ras, R. H. A., 26 Jan 2012, In : Journal of Physical Chemistry C. 116, 3, p. 2363-2370 8 p.

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

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

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**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

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

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

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

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

**Characterization Of High-Velocity Single Particle Impacts On Thermally Sprayed Ceramic Coatings**

Kiilakoski, J., Lindroos, M., Matikainen, V., Apostol, N., Koivuluoto, H. & Vuoristo, P., 13 May 2015, (Unpublished) *International Thermal Spray Conference & Exposition 2015*.

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**Wear Properties of Thermally Sprayed Tungsten-Carbide Coatings in Paper Machine Environments**

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

**Fracture Characteristics of High-Velocity Suspension Flame-Sprayed Aluminum Oxide Coatings**

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**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

**Cavitation wear characteristics of Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub>-ceramic coatings deposited by APS and HVOF -processes**

Kiilakoski, J., Lukac, F., Koivuluoto, H. & Vuoristo, P., 9 Jun 2017, *International Thermal Spray Conference ITSC 2017, Conference Proceedings: June 7-9, 2017, Düsseldorf, Germany..* Düsseldorf: DVS Media GmbH, Vol. 336. p. 928-933 6 p. (DVS-Berichte / DVS - Deutscher Verband für Schweißen und Verwandte Verfahren e.V.).

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

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

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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

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

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

### **Ultrafast Photochemistry of the [Cr(NCS)<sub>6</sub>]<sup>3-</sup> 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

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

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

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

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

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

### **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

### **Irradiation promoted exchange reaction with disulfide substituents**

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

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

### **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

### **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

### **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

### **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

**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

**Evaluation of crushing strength of spray-dried MgAl<sub>2</sub>O<sub>4</sub> 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

**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

**A comparison of relative displacement fields between numerical predictions and experimental results in fretting contact**

Juoksukangas, J., Lehtovaara, A. & Mäntylä, A., 1 Oct 2016, In : Proceedings of the institution of Mechanical Engineers Part J: Journal of Engineering Tribology. 230, 10, p. 1273-1287 15 p.

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

**Experimental and numerical investigation of fretting fatigue behavior in bolted joints**

Juoksukangas, J., Lehtovaara, A. & Mäntylä, A., 1 Nov 2016, In : Tribology International. 103, p. 440-448 9 p.

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

**Characterization of cracks formed in large flat-on-flat fretting contact**

Juoksukangas, J., Nurmi, V., Hintikka, J., Vippola, M., Lehtovaara, A., Mäntylä, A., Vaara, J. & Frondelius, T., Jul 2019, In : International Journal of Fatigue. 124, p. 361-370 10 p.

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.

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

**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

**Active packaging by paper coating**

Jarnstrom, L., Johansson, K., Kuusipalo, J. & Jonsson, L., 1 Jan 2016, *14th TAPPI Advanced Coating Symposium 2016*. TAPPI Press, p. 88-92 5 p.

**Influence of heat treatment on the abrasive wear resistance of a  $\text{Cr}_3\text{C}_2\text{NiCr}$  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

**HVOF- and HVOF-Sprayed  $\text{Cr}_3\text{C}_2\text{-NiCr}$  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

**Improving the high temperature abrasion resistance of thermally sprayed  $\text{Cr}_3\text{C}_2\text{-NiCr}$  coatings by WC addition**

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

**Photovoltaic properties of low-bandgap (0.7–0.9eV) lattice-matched  $\text{GaInNAsSb}$  solar junctions grown by molecular beam epitaxy on GaAs**

Isoaho, R., Aho, A., Tukiainen, A., Aho, T., Raappana, M., Salminen, T., Reuna, J. & Guina, M., 15 Jun 2019, In : Solar Energy Materials and Solar Cells. 195, p. 198-203 6 p.

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

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

**Behaviour of leaded tin bronze in simulated seawater in the absence and presence of tribological contact with alumina counterbody: Corrosion, wear and tribocorrosion**

Huttunen-Saarivirta, E., Isotahdon, E., Metsäjoki, J., Salminen, T., Ronkainen, H. & Carpen, L., 2019, In : Tribology International. 129, p. 257-271 15 p.

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

**Tribocorrosion behaviour of tin bronze  $\text{CuSn12}$  under a sliding motion in NaCl containing environment: Contact to inert vs. reactive counterbody**

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

**Transparent  $\text{Yb}^{3+}$  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

**Global energy consumption due to friction and wear in the mining industry**

Holmberg, K., Kivikytö-Reponen, P., Härkisaari, P., Valtonen, K. & Erdemir, A., 1 Nov 2017, In : Tribology International. 115, p. 116-139 24 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



**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

**Fretting-induced friction and wear in large flat-on-flat contact with quenched and tempered steel**

Hintikka, J., Lehtovaara, A. & Mäntylä, A., 2 Jul 2015, In : Tribology International. 92, p. 191-202 12 p.

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

**Normal displacements in non-Coulomb friction conditions during fretting**

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

**Third Particle Ejection Effects on Wear with Quenched and Tempered Steel Fretting Contact**

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

**Running-in in fretting, transition from near-stable friction regime to gross sliding**

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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

**Wetting hysteresis induced by temperature changes: Supercooled water on hydrophobic surfaces**

Heydari, G., Sedighi Moghaddam, M., Tuominen, M., Fielden, M., Haapanen, J., Mäkelä, J. M. & Claesson, P. M., 15 Apr 2016, In : Journal of Colloid and Interface Science. 468, p. 21-33 13 p.

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

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

Heyda, J., Kožíšek, M., Bednářova, 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

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

Heiskanen, J. P., Manninen, V. M., Pankov, D., Omar, W. A. E., Kastinen, T., Hukka, T. I., Lemmetyinen, H. J. & Hormi, O. E. O., 1 Jan 2015, In : Thin Solid Films. 574, p. 196-206 11 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**

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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**

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

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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

#### **Thermal Modification of ALD Grown Titanium Oxide Ultra Thin Film for Photoanode Applications**

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

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

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

#### **Effect of finish rolling and quench stop temperatures on impact-abrasive wear resistance of 0.35 % carbon direct-quenched steel**

Haiko, O., Miettunen, I., Porter, D., Ojala, N., Ratia, V., Heino, V. & Kemppainen, A., 2017, In : Tribologia. 35, 1-2, p. 5-21 17 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 prior austenite grain size on the abrasive wear resistance of ultra-high strength martensitic steels**

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

#### **Effect of microstructure on the abrasive wear resistance of steels with hardness 450 HV**

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Research output: Contribution to journal › Article › Scientific

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

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

#### **On the limit of superhydrophobicity: Defining the minimum amount of TiO<sub>2</sub> nanoparticle coating**

Haapanen, J., Aromaa, M., Teisala, H., Juuti, P., Tuominen, M., Sillanpää, M., Stepien, M., Saarinen, J. J., Toivakka, M., Kuusipalo, J. & Mäkelä, J. M., 2019, In : Materials Research Express. 6, 3, 035004.

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#### **Interfacial design and structure of protein/polymer films on oxidized AlGaN surfaces**

Gupta, S. K., Wu, H. H., Kwak, K. J., Casal, P., Nicholson, T. R., Wen, X., Anisha, R., Bhushan, B., Berger, P. R., Lu, W., Brillson, L. J. & Lee, S. C., 26 Jan 2011, In : Journal of Physics D: Applied Physics. 44, 3, 34010.

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

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**Silver sulfide nanoclusters and the superatom model**

Goh, J.-Q., Malola, S., Häkkinen, H. & Akola, J., 22 Jan 2015, In : *Journal of Physical Chemistry C*. 119, 3, p. 1583-1590 8 p.

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

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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.

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

**Luminescent (Er,Ho)<sub>2</sub>O<sub>3</sub> thin films by ALD to enhance the performance of silicon solar cells**

Ghazy, A., Safdar, M., Lastusaari, M., Aho, A., Tukiainen, A., Savin, H., Guina, M. & Karppinen, M., 2020, In : *Solar Energy Materials and Solar Cells*. 219, 5 p., 110787.

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**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.

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**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

**Surface reactivity and silanization ability of borosilicate and Mg-Sr-based bioactive glasses**

Ferraris, S., Nommeots-Nomm, A., Spriano, S., Vernè, E. & Massera, J., 1 May 2019, In : *Applied Surface Science*. 475, p. 43-55 13 p.

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

Fatarella, 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.

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

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

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

#### **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

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

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

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

#### **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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#### **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.

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#### **Optical power monitors in Ge monolithically integrated on SOI chips**

Colace, L., Sorianello, V., Romagnoli, M., Socci, L. & Assanto, G., Apr 2011, In : *Microelectronic Engineering*. 88, 4, p. 514-517 4 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.

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

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#### **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

#### **Light-trapping enhanced thin-film III-V quantum dot solar cells fabricated by epitaxial lift-off**

Cappelluti, F., Kim, D., van Eerden, M., Cédola, A. P., Aho, T., Bissels, G., Elsehrawy, F., Wu, J., Liu, H., Mulder, P., Bauhuis, G., Schermer, J., Niemi, T. & Guina, M., 2018, In : *Solar Energy Materials and Solar Cells*. 181, p. 83-92

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

#### **Observation of off-axis directional beaming via subwavelength asymmetric metallic gratings**

Caglayan, H., Bulu, I. & Ozbay, E., 2009, In : *Journal of Physics D: Applied Physics*. 42, 4, 045105.

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

#### **One-step flame synthesis of silver nanoparticles for roll-to-roll production of antibacterial paper**

Brobbe, K. J., Haapanen, J., Gunell, M., Mäkelä, J. M., Eerola, E., Toivakka, M. & Saarinen, J. J., 31 Oct 2017, In : *Applied Surface Science*. 420, p. 558-565 8 p.

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

#### **The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions**

Borah, D., Rasappa, S., SenthamaraiKannan, R., Shaw, M. T., Holmes, J. D. & Morris, M. A., 1 Mar 2013, In : Journal of Colloid and Interface Science. 393, 1, p. 192-202 11 p.

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

#### **Plasma etch technologies for the development of ultra-small feature size transistor devices**

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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

#### **Wear and impact behaviour of High Velocity Air-Fuel sprayed Fe-Cr-Ni-B-C alloy coatings**

Bolelli, G., Milanti, A., Lusvarghi, L., Trombi, L., Koivuluoto, H. & Vuoristo, P., 2016, In : Tribology International. 95, p. 372-390

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

#### **Sliding and abrasive wear behaviour of HVOF- and HVAF-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

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

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#### **The correlation between gear contact friction and ball on disc friction measurements**

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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

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

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

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

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

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

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**

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

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

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**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.

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**Static friction measurements on steel against uncoated and coated cast iron**

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**Guanidinium Pairing Facilitates Membrane Translocation**

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**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.

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**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

**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

**Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells**

Aho, A., Polojärvi, V., Korpijärvi, V. M., Salmi, J., Tukiainen, A., Laukkanen, P. & Guina, M., May 2014, In : Solar Energy Materials and Solar Cells. 124, p. 150-158 9 p.

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

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