

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

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

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

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

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

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 TiO₂ 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

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

Hannula, M. K., Lahtonen, K. T., Isotalo, T. J., Saari, J. S. & Valden, M. O., 15 Dec 2016.

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

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.

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

Adjustable wetting properties of paperboard by liquid flame spray process

Stepien, M., Saarinen, J. J., Teisala, H., Tuominen, M., Aromaa, M., Kuusipalo, J., Mäkelä, J. & Toivakka, M., 2010, *11th Advanced Coating Fundamentals Symposium Proceedings: The Latest Advances in Coating Research and Development*. p. 80-88 9 p.

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

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

CLC a Colored Liquid Crystal: Prototype Description and Design Opportunities

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

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

Vuoristo, P., Varis, T., Meschini, D., Bolelli, G. & Lusvarghi, 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

Envolvente de Vidrio Electrocrómico

Translated title of the contribution: : Electrochromic Glass Envelope

Rubio Hernandez, R., Marshall-Berenguer, R. & De la Flor San Vicente, L., 2004, *Foro ARCA II. Arquitectura y Calidad de vida. : Edificación y sostenibilidad: un compromiso posible*.

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

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

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

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

Roll-to-roll application of photocatalytic TiO₂ nanoparticles for printed functionality

Saarinen, J. J., Valtakari, D., Bollström, R., Stepien, M., Haapanen, J., Mäkelä, J. M. & Toivakka, M., 2016, *Advanced Manufacturing, Electronics and Microsystems: TechConnect Briefs 2016*. TechConnect, Vol. 4. p. 47-50 4 p.

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Cavitation wear characteristics of Al₂O₃-ZrO₂-ceramic coatings deposited by APS and HVOF -processes

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

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

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

Advanced coatings by novel high-kinetic thermal spray processes

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Research output: Contribution to journal › Article › Professional

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

Abrasive-Erosive Wear of Thermally Sprayed Coatings from Experimental and Commercial Cr₃C₂-Based Powders

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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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Assessment of pitting corrosion in bare and passivated (wet scCO₂-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.

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

A study of Cr₃C₂-based HVOF- and HVAF-sprayed coatings: Abrasion, dry particle erosion and cavitation erosion resistance

Matikainen, V., Koivuluoto, H. & Vuoristo, P., 15 Apr 2020, In : *Wear*. 446-447, 11 p., 203188.

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A Study of Cr₃C₂-Based HVOF- and HVAF-Sprayed Coatings: Microstructure and Carbide Retention

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Avoiding the initial adhesive friction peak in fretting

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

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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

Both zundel and eigen isomers contribute to the IR spectrum of the gas-phase H₉O₄ + cluster

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

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

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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

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

Characteristics of nFOG, an aerosol-based wet thin film coating technique

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

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

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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

Characterization of Powder-Precursor HVOF-Sprayed Al₂O₃-YSZ/ZrO₂ Coatings

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

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

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Compounding and characterization of recycled multilayer plastic films

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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

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

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

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

Design aspects of all atomic layer deposited TiO₂-Fe₂O₃ scaffold-absorber photoanodes for water splitting

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

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

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

Detergent impurity effect on recycled HDPE: Properties after repetitive processing

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

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

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

Digital correction of frequency response mismatches in 2-channel time-interleaved ADCs using adaptive I/Q signal processing

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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

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

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

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

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

Effect of melting state on the thermal shock resistance and thermal conductivity of APS ZrO₂-7.5wt.% Y₂O₃ coatings

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

Effect of Multiple Impacts on the Deformation of Wear-Resistant Steels

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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.

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

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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

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

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

Lepcha, A., Maccato, C., Mettenböcker, A., Andreu, T., Mayrhofer, L., Walter, M., Olthof, S., Ruoko, T. P., Klein, A., Moseler, M., Meerholz, K., Morante, J. R., Barreca, D. & Mathur, S., 20 Aug 2015, In : *Journal of Physical Chemistry C*. 119, 33, p. 18835-18842 8 p.

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

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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

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

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.

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

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

Erosion wear performance of WC-10Co4Cr and Cr₃C₂-25NiCr coatings sprayed with high-velocity thermal spray processes

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

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

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

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

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ESD qualification data used as the basis for building electrostatic discharge protected areas

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Evaluation of crushing strength of spray-dried MgAl₂O₄ granule beds

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

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

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

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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.

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

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

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

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

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Guanidinium Pairing Facilitates Membrane Translocation

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

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

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High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a KCl-K₂SO₄ salt mixture

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

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

HVOF- and HVOF-Sprayed Cr₃C₂-NiCr Coatings Deposited from Feedstock Powders of Spherical Morphology: Microstructure Formation and High-Stress Abrasive Wear Resistance Up to 800 °C

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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

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

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Improvement of actuation performance of dielectric elastomers by barium titanate and carbon black fillers

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

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Improving the high temperature abrasion resistance of thermally sprayed Cr₃C₂-NiCr coatings by WC addition

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

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

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

Influence of heat treatment on the abrasive wear resistance of a Cr₃C₂NiCr coating deposited by an ethene-fuelled HVOF spray process

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

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

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

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

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

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

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

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Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection

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Luminescent (Er,Ho)₂O₃ thin films by ALD to enhance the performance of silicon solar cells

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

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

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

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

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

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

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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

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Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO₂ for Enhanced Solar Water Splitting

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

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

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Morphology evolution of PS-b-PDMS block copolymer and its hierarchical directed self-assembly on block copolymer templates

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Non-destructive and wireless monitoring of biodegradable polymers

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

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Normal displacements in non-Coulomb friction conditions during fretting

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Novel borosilicate bioactive scaffolds with persistent luminescence

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

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Numerical simulation of temperature distributions in layered structures during laser processing

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

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

Brobbey, 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.

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

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

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

On the limit of superhydrophobicity: Defining the minimum amount of TiO₂ 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.

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

Optical power monitors in Ge monolithically integrated on SOI chips

Colace, L., Soriano, 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

Optimised selection of new protective coatings for biofuel boiler applications

Tuurna, S., Varis, T., Penttilä, K., Ruusuvaori, 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

Optimization of convectively cooled heat sinks

Lampio, K. & Karvinen, R., 2017, In : Microelectronics Reliability. 79, p. 473-479

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

Optimization of HVOF Cr₃C₂-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

Oriental 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

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

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

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

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

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

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

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

Photoinduced Electron Injection from Zinc Phthalocyanines into Zinc Oxide Nanorods: Aggregation Effects

Virkki, K., Hakola, H., Urbani, M., Tejerina, L., Ince, M., Martínez-Díaz, M. V., Torres, T., Golovanova, V., Golovanov, V. & Tkachenko, N. V., 4 May 2017, In : Journal of Physical Chemistry C. 121, 17, p. 9594-9605 12 p.

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

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

Virkki, K., Demir, S., Lemmetyinen, H. & Tkachenko, N. V., 23 Jul 2015, In : Journal of Physical Chemistry C. 119, 31, p. 17561-17572 12 p.

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

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

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

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

Photovoltaic properties of low-bandgap (0.7–0.9eV) lattice-matched 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

Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications

Selvan, N. T., Eshwaran, S. B., Das, A., Stöckelhuber, K. W., Wießner, S., Pötschke, P., Nando, G. B., Chervanyov, A. I. & Heinrich, G., 1 Mar 2016, In : Sensors and Actuators, A: Physical. 239, p. 102-113 12 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.

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

Borah, D., Shaw, M. T., Rasappa, S., Farrell, R. A., O'Mahony, C., Faulkner, C. M., Bosea, M., Gleeson, P., Holmes, J. D. & Morris, M. A., 4 May 2011, In : Journal of Physics D: Applied Physics. 44, 17, 174012.

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

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

Mäntylä, A., Hintikka, J., Frondelius, T., Vaara, J., Lehtovaara, A. & Juoksukangas, J., 5 Nov 2019, In : Tribology International. 11 p., 106054.

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

Printable and flexible macroporous organosilica film with high protein adsorption capacity

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

Process Parameter Impact on Suspension-HVOF-Sprayed Cr₂O₃ 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

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

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

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

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

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

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

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

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

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

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

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

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

Myllymäki, S., Putaala, J., Hannu, J., Kunnari, E. & Mäntysalo, M., 1 Oct 2016, In : Microelectronics Reliability. 65, p. 142-150 9 p.

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

Role of fracture toughness in impact-abrasion wear

Chinthia, 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

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

Rahaman, O., Kalimeri, M., Melchionna, S., Hénin, J. & Sterpone, F., 23 Jul 2015, In : Journal of Physical Chemistry Part B. 119, 29, p. 8939-8949 11 p.

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Rotational Diffusion of Membrane Proteins in Crowded Membranes

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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

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

Silver sulfide nanoclusters and the superatom model

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

Sliding and abrasive wear behaviour of HVOF- and HVAF-sprayed Cr₃C₂-NiCr hardmetal coatings

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

Sliding wear behaviour of HVOF and HVAF sprayed Cr₃C₂-based coatings

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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

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

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

Stable and unstable friction in fretting contacts

Hintikka, J., Mäntylä, A., Vaara, J., Frondelius, T. & Lehtovaara, A., 1 Mar 2019, In : Tribology International. 131, p. 73-82 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

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

Static friction measurements on steel against uncoated and coated cast iron

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

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.

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

Superamphiphobic overhang structured coating on a biobased material

Tuominen, M., Teisala, H., Haapanen, J., Mäkelä, J. M., Honkanen, M., Vippola, M., Bardage, S., Wålander, M. E. P. & Swerin, A., 15 Dec 2016, In : Applied Surface Science. 389, p. 135-143 9 p.

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

Superatom Model for Ag-S Nanocluster with Delocalized Electrons

Goh, J. Q. & Akola, J., 10 Sep 2015, In : Journal of Physical Chemistry C. 119, 36, p. 21165-21172 8 p.

Research output: Contribution to journal > 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

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

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.

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

Switchable light reflectance in dilute magneto-optical colloids based on nickel ferrite nanowires

Sutka, A., Timusk, M., Joost, U., Ignatans, R. & Maiorov, M., 2 May 2018, In : e-Journal of Surface Science and Nanotechnology. 16, p. 119-121 3 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

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

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

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

Björling, M., Miettinen, J., Marklund, P., Lehtovaara, A. & Larsson, R., 2015, In : Tribology International. 83, p. 114-119 6 p.

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

Lindroos, M., Apostol, M., Heino, V., Valtonen, K., Laukkanen, A., Holmberg, K. & Kuokkala, V. T., 2015, In : Tribology Letters. 57, 3, 24.

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

The effect of carbon and nickel additions on the precursor synthesis of Cr₃C₂-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

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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

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

Sarlin, E., Honkanen, M., Lindgren, M., Laihonon, P., Juutilainen, M., Vippola, M. & Vuorinen, J., 1 Dec 2020, In : Surfaces and Interfaces. 21, 9 p., 100646.

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

The effects of laser patterning 10CeTZP-Al₂O₃ 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 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

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

Thermal evaporation of Ge on Si for near infrared detectors: Material and device characterization

Sorianello, V., Colace, L., Assanto, G., Notargiacomo, A., Armani, N., Rossi, F. & Ferrari, C., Apr 2011, In : Microelectronic Engineering. 88, 4, p. 526-529 4 p.

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The role of edge-concentrated wear in impact-abrasion testing

Ratia, V., Valtonen, K., Kemppainen, A. & Kuokkala, V. T., 2016, In : Tribology Online. 11, 2, p. 410-416 7 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., Senthamaraiannan, 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

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

Hintikka, J., Lehtovaara, A. & Mäntylä, A., 2017, In : TRIBOLOGY TRANSACTIONS. 60, 1, p. 70-78 9 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

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

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. & Slaviček, 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

Transparent Yb³⁺ 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

Tribocorrosion behaviour of tin bronze CuSn12 under a sliding motion in NaCl containing environment: Contact to inert vs. reactive counterbody

Huttunen-Saarivirta, E., Kilpi, L., Pasanen, A. T., Salminen, T. & Ronkainen, H., 1 Nov 2020, In : Tribology International. 151, 106389.

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

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

Mäntyranta, A., Heino, V., Isotahdon, E., Salminen, T. & Huttunen-Saarivirta, E., 1 Oct 2019, In : Tribology International. 138, p. 250-262 13 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

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

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

Ultrafast Photochemistry of the [Cr(NCS)₆]³⁻ Complex in Dimethyl Sulfoxide and Dimethylformamide upon Excitation into Ligand-Field Electronic State

Khvorost, T. A., Beliaev, L. Y., Potalueva, E., Laptenkova, 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-

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

Urea and guanidinium induced denaturation of a Trp-cage miniprotein

Heyda, J., Kožíšek, M., Bednárova, 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

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

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

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

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

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

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

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

Kiilakoski, J., Eronen, V. & Vuoristo, P., 21 Sep 2015, In : Tribologia - Finnish Journal of Tribology. 33, 2, p. 29 35 p.

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

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

Slurry and dry particle erosion wear properties of WC-10Co4Cr and Cr₃C₂-25NiCr hardmetal coatings deposited by HVOF and HVAF spray processes

Matikainen, V., Rubio Peregrina, S., Ojala, N., Koivuluoto, H., Schubert, J., Houdková & Vuoristo, P., 2019, In : Tribologia. 36, 1-2, p. 58-61 4 p.

Research output: Contribution to journal › Article › Scientific