

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

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.

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

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

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

Ali-Löyty, 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

Guanidinium Pairing Facilitates Membrane Translocation

Allolio, C., Baxova, K., Vazdar, M. & Jungwirth, P., 14 Jan 2016, In : Journal of Physical Chemistry Part B. 120, 1, p. 143-153 11 p.

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

Static friction measurements on steel against uncoated and coated cast iron

Andersson, P., Kilpi, L., Holmberg, K., Vaajoki, A. & Oksanen, V., 1 Jan 2016, In : Tribologia. 34, 1-2, p. 5-40 36 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 Cr₃C₂-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

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

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

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

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.

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

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

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

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

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

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

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

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

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

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

Novel borosilicate bioactive scaffolds with persistent luminescence

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

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

Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection

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

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

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

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

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

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

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

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

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

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

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

Luminescent (Er,Ho)₂O₃ 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.

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

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.

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

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

Goh, J-Q., Akola, J. & Ferrando, R., 25 May 2017, In : Journal of Physical Chemistry C. 121, 20, p. 10809-10816 8 p.

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

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

Interfacial design and structure of protein/polymer films on oxidized AlGa_N 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

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

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

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

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

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

Haiko, O., Heino, V., Porter, D. A., Uusitalo, J. & Kömi, J., 2019, In : Tribologia. 36, 1, p. 54-57 4 p.

Research output: Contribution to journal > Article > Scientific

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

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

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

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

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

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

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

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

Printable and flexible macroporous organosilica film with high protein adsorption capacity

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

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

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

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

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

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

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

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

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

Design aspects of all atomic layer deposited TiO₂-Fe₂O₃ 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

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

Hintikka, J., Lehtovaara, A. & Mäntylä, A., 2016, In : Tribology International. 94, p. 633-639

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

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

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

Hintikka, J., Mäntylä, A., Vaara, J., Frondelius, T., Juoksukangas, J. & Lehtovaara, A., Nov 2019, In : Tribology International. 143, 9 p., 106073.

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

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

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

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

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

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

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

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

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

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. & Carpén, 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 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

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

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

Influence of heat treatment on the abrasive wear resistance of a Cr₃C₂NiCr 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 HVAF-Sprayed Cr₃C₂-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 Cr₃C₂-NiCr coatings by WC addition

Janka, L., Berger, L. M., Norpoth, J., Trache, R., Thiele, S., Tomastik, C., Matikainen, V. & Vuoristo, P., 15 Mar 2018, In : Surface and Coatings Technology. 337, p. 296-305 10 p.

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

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.

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.

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

Compounding and characterization of recycled multilayer plastic films

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

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

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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

Avoiding the initial adhesive friction peak in fretting

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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

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

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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

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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

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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

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

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

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

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

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

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

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

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

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

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

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

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Sliding wear behaviour of HVOF and HVAF sprayed Cr₃C₂-based 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

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

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Production of sulfonated polyetheretherketone/polypropylene fibers for photoactive textiles

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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

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

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

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

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

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

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

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

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

Comparison of laboratory rolling-sliding wear tests with in-service wear of nodular cast iron rollers against wire ropes

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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

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

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

Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO₂ 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

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.

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

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Research output: Contribution to journal > Review 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

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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

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

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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

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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

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

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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

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

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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

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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

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Envolvente de Vidrio Electrocrómico

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Atomikerroskasvatusmenetelmällä kasvatetun titaanidioksidikalvon ominaisuudet valosähkökemiallisessa veden hajottamisessa

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

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

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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)

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

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

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Passive resonance sensor based method for monitoring particle suspensions

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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

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

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

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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

Properties of HVOF-sprayed Stellite-6 coatings

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

Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications

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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

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

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

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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

Adjustable wetting properties of paperboard by liquid flame spray process

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Stimuli-responsive photonic polymer coatings

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

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

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

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

Energetic origin of proton affinity to the air/water interface

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

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

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

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

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

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

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

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Superamphiphobic overhang structured coating on a biobased material

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

Optimised selection of new protective coatings for biofuel boiler applications

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

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

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

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

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

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

Impact wear and mechanical behavior of steels at subzero temperatures

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

Optimization of HVOF Cr₃C₂-NiCr coating for increased fatigue performance

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

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

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

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

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

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

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

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

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

Vazdar, M., Jungwirth, P. & Mason, P. E., 14 Feb 2013, In : Journal of Physical Chemistry Part B. 117, 6, p. 1844-1848 5 p.

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

Behavior of 4-hydroxynonenal in phospholipid membranes

Vazdar, M., Jurkiewicz, P., Hof, M., Jungwirth, P. & Cwiklik, L., 7 Jun 2012, In : Journal of Physical Chemistry Part B. 116, 22, p. 6411-6415 5 p.

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

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

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

Vikholm-Lundin, I., Auer, S. & Hellgren, A. C., 10 Aug 2011, In : *Sensors and Actuators B: Chemical*. 156, 1, p. 28-34 7 p.

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

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

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

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

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

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

Vuorinen, E., Heino, V., Ojala, N., Haiko, O. & Hedayati, A., 2018, In : *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*. 232, 1, p. 3-13 11 p.

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

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

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

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

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

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

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

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