

A Finite Cluster Approach to the Electron-Hole Pair Damping of the Adsorbate Vibration : CO Adsorbed on Cu(100). /

Rantala, T. T.; Rosén, A.; Hellsing, B.

In: *Studies in Surface Science and Catalysis*, Vol. 26, No. C, 1986, p. 173-181.

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.

In: *Surface Science*, Vol. 175, No. 2, 02.09.1986, p. 385-414.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Calculated electronic density of states and structural properties of tetrahedral amorphous carbon. / Koivusaari, K. Jarmo; Rantala, Tapio T.; Leppävuori, Seppo.

In: *Diamond and Related Materials*, Vol. 9, No. 3, 04.2000, p. 736-740.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Gas atomized thermal spray powders of various metals and alloys. / Lagerbom, Juha; Ritvonen, Tapio; Suhonen, Tomi; Varis, Tommi.

Proceedings of the Euro International Powder Metallurgy Congress and Exhibition, Euro PM 2011. Vol. 2 European Powder Metallurgy Association (EPMA), 2011.

Research output: [Chapter in Book/Report/Conference proceeding](#) > [Conference contribution](#) > [Scientific](#) > [peer-review](#)

Ionization of purine tautomers in nucleobases, nucleosides, and nucleotides : From the gas phase to the aqueous environment. / Pluhařová, Eva; Jungwirth, Pavel; Bradforth, Stephen E.; Slaviček, Petr.

In: *Journal of Physical Chemistry Part B*, Vol. 115, No. 5, 10.02.2011, p. 1294-1305.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Preintercalation of an organic accelerator into nanogalleries and preparation of ethylene propylene diene terpolymer rubber-clay nanocomposites. / Rooj, Sandip; Das, Amit; Heinrich, Gert.

In: *POLYMER JOURNAL*, Vol. 43, No. 3, 03.2011, p. 285-292.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Energetic origin of proton affinity to the air/water interface. / Takahashi, Hideaki; Maruyama, Kunihiro; Karino, Yasuhito; Morita, Akihiro; Nakano, Masayoshi; Jungwirth, Pavel; Matubayasi, Nobuyuki.

In: *Journal of Physical Chemistry Part B*, Vol. 115, No. 16, 28.04.2011, p. 4745-4751.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Preparation of zinc oxide free, transparent rubber nanocomposites using a layered double hydroxide filler. / Das, Amit; Wang, De Yi; Leuteritz, Andreas; Subramaniam, Kalaivani; Greenwell, H. Chris; Wagenknecht, Udo; Heinrich, Gert.

In: *Journal of Materials Chemistry*, Vol. 21, No. 20, 28.05.2011, p. 7194-7200.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Optimised selection of new protective coatings for biofuel boiler applications. / Tuurna, S.; Varis, T.; Penttilä, K.; Ruusuvuori, K.; Holmström, S.; Yli-Olli, S.

In: *Materials and Corrosion-Werkstoffe und Korrosion*, Vol. 62, No. 7, 07.2011, p. 642-649.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy. / Zorzi, Giovanni Konat; Párraga, Jenny Evelin; Seijo, Begoña; Sánchez, Alejandro.

In: *MACROMOLECULAR BIOSCIENCE*, Vol. 11, No. 7, 07.07.2011, p. 905-913.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Urea and guanidinium induced denaturation of a Trp-cage miniprotein. / Heyda, Jan; Kožíšek, Milan; Bednářova, Lucie; Thompson, Gary; Konvalinka, Jan; Vondrášek, Jiří; Jungwirth, Pavel.

In: *Journal of Physical Chemistry Part B*, Vol. 115, No. 28, 21.07.2011, p. 8910-8924.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Detection of 3,4-methylenedioxyamphetamine (MDMA, ecstasy) by displacement of antibodies. / Vikholm-Lundin, Inger; Auer, Sanna; Hellgren, Ann Charlotte.

In: *Sensors and Actuators B: Chemical*, Vol. 156, No. 1, 10.08.2011, p. 28-34.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Towards universal enrichment nanocoating for IR-ATR waveguides. / Giammarco, James; Zdyrko, Bogdan; Petit, Laetitia; Musgraves, J. David; Hu, Juejun; Agarwal, Anu; Kimerling, Lionel; Richardson, Kathleen; Luzinov, Igor.

In: *Chemical Communications*, Vol. 47, No. 32, 28.08.2011, p. 9104-9106.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Thermally evaporated single-crystal Germanium on Silicon. / Sorianello, V.; Colace, L.; Nardone, M.; Assanto, G.

In: *Thin Solid Films*, Vol. 519, No. 22, 01.09.2011, p. 8037-8040.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Efficient surface structuring and photoalignment of supramolecular polymer-azobenzene complexes through rational chromophore design. / Vapaavuori, Jaana; Valtavirta, Ville; Alasaarela, Tapani; Mamiya, Jun Ichi; Priimagi, Arri; Shishido, Atsushi; Kaivola, Matti.

In: *Journal of Materials Chemistry*, Vol. 21, No. 39, 21.10.2011, p. 15437-15441.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Oriental dependence of the affinity of guanidinium ions to the water surface. / Wernersson, Erik; Heyda, Jan; Vazdar, Mario; Lund, Mikael; Mason, Philip E.; Jungwirth, Pavel.

In: *Journal of Physical Chemistry Part B*, Vol. 115, No. 43, 03.11.2011, p. 12521-12526.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

HVOF process control enabling strategies. / Ghabchi, A.; Varis, T.; Holmberg, K.; Sampath, S.

International Thermal Spray Conference and Exposition, ITSC 2012 - Air, Land, Water and the Human Body: Thermal Spray Science and Applications. ASM International, 2012. p. 465-471.

Research output: [Chapter in Book/Report/Conference proceeding](#) > [Conference contribution](#) > [Scientific](#) > [peer-review](#)

Location of the Azobenzene moieties within the cross-linked liquid-crystalline polymers can dictate the direction of photoinduced bending. / Priimagi, Arri; Shimamura, Aki; Kondo, Mizuho; Hiraoka, Tomohiro; Kubo, Shoichi; Mamiya, Jun Ichi; Kinoshita, Motoi; Ikeda, Tomiki; Shishido, Atsushi.

In: *ACS Macro Letters*, Vol. 1, No. 1, 2012, p. 96-99.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Printable and flexible macroporous organosilica film with high protein adsorption capacity. / Heikkinen, Jarkko J.; Kivimäki, Liisa; Hytönen, Vesa P.; Kulomaa, Markku S.; Hormi, Osmo E O.

In: *Thin Solid Films*, Vol. 520, No. 6, 01.01.2012, p. 1934-1937.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Crystallization mechanism of the bioactive glasses, 45S5 and S53P4. / Massera, Jonathan; Fagerlund, Susanne; Hupa, Leena; Hupa, Mikko.

In: *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*, Vol. 95, No. 2, 02.2012, p. 607-613.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

A novel thermotropic elastomer based on highly-filled LDH-SSB composites. / Das, Amit; George, Jinu Jacob; Kutlu, Burak; Leuteritz, Andreas; Wang, De Yi; Rooj, Sandip; Jurk, René; Rajeshbabu, Ramanujam; Stöckelhuber, Klaus Werner; Galiatsatos, Vassilios; Heinrich, Gert.

In: *Macromolecular Rapid Communications*, Vol. 33, No. 4, 27.02.2012, p. 337-342.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Highly exfoliated natural rubber/Clay composites by "propping-open procedure" : The influence of fatty-acid chain length on exfoliation. / Rooj, Sandip; Das, Amit; Stöckelhuber, Klaus Werner; Reuter, Uta; Heinrich, Gert.

In: *Macromolecular Materials and Engineering*, Vol. 297, No. 4, 04.2012, p. 369-383.

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

Enhanced thermal stability of polychloroprene rubber composites with ionic liquid modified MWCNTs. / Subramaniam, Kalaivani; Das, Amit; Häußler, Liane; Harnisch, Christina; Stöckelhuber, Klaus Werner; Heinrich, Gert.

In: *Polymer Degradation and Stability*, Vol. 97, No. 5, 05.2012, p. 776-785.

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

Behavior of 4-hydroxynonenal in phospholipid membranes. / Vazdar, Mario; Jurkiewicz, Piotr; Hof, Martin; Jungwirth, Pavel; Cwiklik, Lukasz.

In: *Journal of Physical Chemistry Part B*, Vol. 116, No. 22, 07.06.2012, p. 6411-6415.

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

Highly conducting polychloroprene composites based on multi-walled carbon nanotubes and 1-butyl 3-methyl imidazolium bis(trifluoromethylsulphonyl)imide. / Subramaniam, Kalaivani; Das, Amit; Heinrich, Gert.

In: *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*, Vol. 65, No. 7-8, 07.2012, p. 44-46.

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

Accurate description of aqueous carbonate ions : An effective polarization model verified by neutron scattering. / Mason, Philip E.; Wernersson, Erik; Jungwirth, Pavel.

In: *Journal of Physical Chemistry Part B*, Vol. 116, No. 28, 19.07.2012, p. 8145-8153.

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

Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold. / Vikholm-Lundin, Inger; Auer, Sanna; Paakkunainen, Maija; Määttä, Juha A E; Munter, Tony; Leppiniemi, Jenni; Hytönen, Vesa P.; Tappura, Kirsi.

In: *Sensors and Actuators B: Chemical*, Vol. 171-172, 08.2012, p. 440-448.

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

Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends. / Kapgate, Bharat P.; Das, Chayan; Das, Amit; Basu, Debdipta; Reuter, Uta; Heinrich, Gert.

In: *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*, Vol. 63, No. 3, 09.2012, p. 501-509.

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

Biomimetic surface modification of polycarbonateurethane film via phosphorylcholine-graft for resisting platelet adhesion. / Gao, Wei; Feng, Yakai; Lu, Jian; Khan, Musammir; Guo, Jintang.

In: *Macromolecular Research*, Vol. 20, No. 10, 10.2012, p. 1063-1069.

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

Azobenzene photomechanics : Prospects and potential applications. / Mahimwalla, Zahid; Yager, Kevin G.; Mamiya, Jun Ichi; Shishido, Atsushi; Priimagi, Arri; Barrett, Christopher J.

In: *Polymer Bulletin*, Vol. 69, No. 8, 11.2012, p. 967-1006.

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

Influence of ionic liquids on the dielectric relaxation behavior of CNT based elastomer nanocomposites. / Steinhauser, D.; Subramaniam, K.; Das, A.; Heinrich, G.; Klüppel, M.

In: *Express Polymer Letters*, Vol. 6, No. 11, 11.2012, p. 927-936.

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

Block copolymer lithography : Feature size control and extension by an over-etch technique. / Rasappa, Sozaraj; Borah, Dipu; Sentharamaikkannan, Ramsankar; Faulkner, Colm C.; Shaw, Matthew T.; Gleeson, Peter; Holmes, Justin D.; Morris, Michael A.

In: *Thin Solid Films*, Vol. 522, 01.11.2012, p. 318-323.

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, Eva; Ončák, Milan; Seidel, Robert; Schroeder, Christi; Schroeder, William; Winter, Bernd; Bradforth, Stephen E.; Jungwirth, Pavel; Slavíček, Petr.

In: Journal of Physical Chemistry Part B, Vol. 116, No. 44, 08.11.2012, p. 13254-13264.

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

Elastomer composites based on carbon nanotubes and ionic liquid. / Subramaniam, Kalaivani; Das, Amit; Stöckelhuber, Klaus Werner; Heinrich, Gert.

In: Rubber Chemistry and Technology, Vol. 86, No. 3, 2013, p. 367-400.

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

Naturally occurring amino acids : A suitable substitute of N-N-di-phenyl guanidine (DPG) in silica tyre formulation? / Debnath, Subhas Ch; Das, Amit; Basu, Debdipta; Heinrich, G.

In: KGK: KAUTSCHUK GUMMI KUNSTSTOFFE, Vol. 66, No. 1-2, 01.2013, p. 25-31.

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, Mario; Jungwirth, Pavel; Mason, Philip E.

In: Journal of Physical Chemistry Part B, Vol. 117, No. 6, 14.02.2013, p. 1844-1848.

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

Ab initio study of the surface properties of austenitic stainless steel alloys. / Pitkänen, H.; Alatalo, M.; Puisto, A.; Ropo, M.; Kokko, K.; Vitos, L.

In: Surface Science, Vol. 609, 03.2013, p. 190-194.

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

Biomimetic zinc chlorin-poly(4-vinylpyridine) assemblies : Doping level dependent emission-absorption regimes. / Pale, Ville; Nikkonen, Taru; Vapaavuori, Jaana; Kostianen, Mauri; Kavakka, Jari; Selin, Jorma; Tittonen, Ilkka; Helaja, Juho.

In: Journal of Materials Chemistry C, Vol. 1, No. 11, 21.03.2013, p. 2166-2173.

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

Nanoindentation study of light-induced softening of supramolecular and covalently functionalized azo polymers. / Vapaavuori, Jaana; Mahimwalla, Zahid; Chromik, Richard R.; Kaivola, Matti; Priimagi, Arri; Barrett, Christopher J.

In: Journal of Materials Chemistry C, Vol. 1, No. 16, 28.04.2013, p. 2806-2810.

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

Immobilized bioactive agents onto polyurethane surface with heparin and phosphorylcholine group. / Tan, Mingqi; Feng, Yakai; Wang, Heyun; Zhang, Li; Khan, Musammir; Guo, Jintang; Chen, Qingliang; Liu, Jianshi.

In: Macromolecular Research, Vol. 21, No. 5, 05.2013, p. 541-549.

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

Cation-specific effects on enzymatic catalysis driven by interactions at the tunnel mouth. / Štěpánková, Veronika; Paterová, Jana; Damborský, Jiří; Jungwirth, Pavel; Chaloupková, Radka; Heyda, Jan.

In: Journal of Physical Chemistry Part B, Vol. 117, No. 21, 30.05.2013, p. 6394-6402.

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

Development and application of HVOF sprayed spinel protective coating for SOFC interconnects. / Thomann, O.; Pihlatie, M.; Rautanen, M.; Himanen, O.; Lagerbom, J.; Mäkinen, M.; Varis, T.; Suhonen, T.; Kiviahio, J.

In: Journal of Thermal Spray Technology, Vol. 22, No. 5, 06.2013, p. 631-639.

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, Maria; Tuurna, Satu; Varis, Tommi.

In: Journal of Thermal Spray Technology, Vol. 22, No. 5, 06.2013, p. 783-796.

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

Reversal of the Hofmeister series : Specific ion effects on peptides. / Paterová, Jana; Rembert, Kelvin B.; Heyda, Jan; Kurra, Yadagiri; Okur, Halil I.; Liu, Wenshe R.; Hilty, Christian; Cremer, Paul S.; Jungwirth, Pavel.

In: Journal of Physical Chemistry Part B, Vol. 117, No. 27, 11.07.2013, p. 8150-8158.

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. Nuruzzaman; Tjong, Vinalia; Chilkoti, Ashutosh; Zharnikov, Michael.

In: Journal of Physical Chemistry Part B, Vol. 117, No. 34, 29.08.2013, p. 9929-9938.

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

How conformational flexibility stabilizes the hyperthermophilic elongation factor G-domain. / Kalimeri, Maria; Rahaman, Obaidur; Melchionna, Simone; Sterpone, Fabio.

In: Journal of Physical Chemistry Part B, Vol. 117, No. 44, 07.11.2013, p. 13775-13785.

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. / Hladikova, Jana; Prokop, Zbynek; Chaloupkova, Radka; Damborsky, Jiri; Jungwirth, Pavel.

In: Journal of Physical Chemistry Part B, Vol. 117, No. 46, 21.11.2013, p. 14329-14335.

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

Effect of surface morphology of poly(ϵ -caprolactone) scaffolds on adipose stem cell adhesion and proliferation. / Diban, Nazely; Haimi, Suvi P.; Bolhuis-Versteeg, Lydia; Teixeira, Sandra; Miettinen, Susanna; Poot, André A.; Grijpma, Dirk W.; Stamatialis, Dimitrios.

In: Macromolecular symposia, Vol. 334, No. 1, 12.2013, p. 126-132.

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

Human adipose stem cells in chondrogenic differentiation medium without growth factors differentiate towards annulus fibrosus phenotype in vitro. / Gebraad, A. W H; Miettinen, S.; Grijpma, D. W.; Haimi, S. P.

In: Macromolecular symposia, Vol. 334, No. 1, 12.2013, p. 49-56.

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

Proliferation and differentiation of adipose stem cells towards smooth muscle cells on poly(trimethylene carbonate) membranes. / German, Salvador Jimenez; Behbahani, Mehdi; Miettinen, Susanna; Grijpma, Dirk W.; Haimi, Suvi P.

In: Macromolecular symposia, Vol. 334, No. 1, 12.2013, p. 133-142.

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

Self-assembly of polystyrene-block-poly(4-vinylpyridine) block copolymer on molecularly functionalized silicon substrates : Fabrication of inorganic nanostructured etchmask for lithographic use. / Cummins, C.; Borah, D.; Rasappa, S.; Chaudhari, A.; Ghoshal, T.; O'Driscoll, B. M D; Carolan, P.; Petkov, N.; Holmes, J. D.; Morris, M. A.

In: Journal of Materials Chemistry C, Vol. 1, No. 47, 21.12.2013, p. 7941-7951.

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

Abrasion and compression resistance of liquid-flame-spray-deposited functional nanoparticle coatings on paper. / Stepien, Milena; Chinga-Carrasco, Gary; Saarinen, Jarkko J.; Teisala, Hannu; Tuominen, Mikko; Haapanen, Janne; Kuusipalo, Jurkka; Mäkelä, Jyrki M.; Toivakka, Martti.

13th TAPPI Advanced Coating Fundamentals Symposium 2014. TAPPI Press, 2014. p. 68-82.

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

Effect of non-rubber components of NR on the carbon nanotube (CNT) localization in SBR/NR blends. / Le, Hai Hong; Parsekar, Meenali; Ilisch, Sybill; Henning, Sven; Das, Amit; Stöckelhuber, Klaus Werner; Beiner, Mario; Ho, Chi Anh; Adhikari, Rameshwar; Wießner, Sven; Heinrich, Gert; Radusch, Hans Joachim.

In: Macromolecular Materials and Engineering, Vol. 299, No. 5, 2014, p. 569-582.

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. / Varis, T.; Suhonen, T.; Ghabchi, A.; Valarezo, A.; Sampath, S.; Liu, X.; Hannula, S. P.

In: Journal of Thermal Spray Technology, Vol. 23, No. 6, 2014, p. 1009-1018.

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

The effects of UV irradiation to polyetheretherketone fibres : Characterization by different techniques. / Mylläri, Ville; Ruoko, Tero Petri; Järvelä, Pentti.

In: *Polymer Degradation and Stability*, Vol. 109, 2014, p. 278-284.

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

Stearate Modified Zinc-Aluminum Layered Double Hydroxides and Acrylonitrile Butadiene Rubber Nanocomposites. / Eshwaran, S. B.; Basu, D.; Kutlu, B.; Leuteritz, A.; Wagenknecht, U.; Stöckelhuber, K. W.; Naskar, K.; Das, A.; Heinrich, G.

In: *Polymer-Plastics Technology and Engineering*, Vol. 53, No. 1, 01.2014, p. 65-73.

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. / Kulig, Waldemar; Agmon, Noam.

In: *Journal of Physical Chemistry Part B*, Vol. 118, No. 1, 09.01.2014, p. 278-286.

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

Azopolymer-based micro- and nanopatterning for photonic applications. / Priimagi, Arri; Shevchenko, Andriy.

In: *Journal of Polymer Science. Part B, Polymer Physics*, Vol. 52, No. 3, 01.02.2014, p. 163-182.

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

Microphase mechanism of "superquenching" of luminescent probes in aqueous solutions of DNA and some other polyelectrolytes. / Kuzmin, Michael G.; Soboleva, Irina V.; Durandin, Nikita A.; Lisitsyna, Ekaterina S.; Kuzmin, Vladimir A.

In: *Journal of Physical Chemistry Part B*, Vol. 118, No. 15, 17.04.2014, p. 4245-4252.

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

Damage mechanisms and cracking behavior of thermal sprayed WC-CoCr coating under scratch testing. / Ghabchi, Arash; Sampath, Sanjay; Holmberg, Kenneth; Varis, Tommi.

In: *Wear*, Vol. 313, No. 1-2, 15.05.2014, p. 97-105.

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

Carbon nanotubes-filled thermoplastic polyurethane-urea and carboxylated acrylonitrile butadiene rubber blend nanocomposites. / Mahmood, Nasir; Khan, Asad Ullah; Stöckelhuber, Klaus Werner; Das, Amit; Jehnichen, Dieter; Heinrich, Gert.

In: *Journal of Applied Polymer Science*, Vol. 131, No. 11, 05.06.2014.

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, Josephina; Wernersson, Erik; Ekholm, Victor; Ottosson, Niklas; Öhrwall, Gunnar; Heyda, Jan; Persson, Ingmar; Söderström, Johan; Jungwirth, Pavel; Björneholm, Olle.

In: *Journal of Physical Chemistry Part B*, Vol. 118, No. 25, 26.06.2014, p. 7119-7127.

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

Accurate description of calcium solvation in concentrated aqueous solutions. / Kohagen, Miriam; Mason, Philip E.; Jungwirth, Pavel.

In: *Journal of Physical Chemistry Part B*, Vol. 118, No. 28, 17.07.2014, p. 7902-7909.

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, Maria; Varis, Tommi; Ruusuvaori, Kimmo.

In: *Surface and Coatings Technology*, Vol. 251, 25.07.2014, p. 191-200.

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. / Kappgate, Bharat P.; Das, Chayan; Basu, Debdipta; Das, Amit; Heinrich, Gert; Reuter, Uta.

In: *Journal of Applied Polymer Science*, Vol. 131, No. 15, 40531, 05.08.2014.

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, Niko; Valtonen, Kati; Heino, Vuokko; Kallio, Marke; Aaltonen, Joonas; Siitonen, Pekka; Kuokkala, Veli Tapani.
In: *Wear*, Vol. 317, No. 1-2, 15.09.2014, p. 225-232.

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

Recent twists in photoactuation and photoalignment control. / Priimagi, Arri; Barrett, Christopher J.; Shishido, Atsushi.
In: *Journal of Materials Chemistry C*, Vol. 2, No. 35, 21.09.2014, p. 7155-7162.

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

Effect of head group size on the photoswitching applications of azobenzene Disperse Red 1 analogues. / Goulet-Hanssens, Alexis; Corkery, T. Christopher; Priimagi, Arri; Barrett, Christopher J.
In: *Journal of Materials Chemistry C*, Vol. 2, No. 36, 28.09.2014, p. 7505-7512.

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

Rapid, Brushless Self-assembly of a PS-b-PDMS Block Copolymer for Nanolithography. / Rasappa, Sozaraj; Schulte, Lars; Borah, Dipu; Morris, Michael A.; Ndoni, Sokol.
In: *Colloids and Interface Science Communications*, Vol. 2, 01.10.2014, p. 1-5.

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

A supramolecular approach to photoresponsive thermo/solvoplastic block copolymer elastomers. / Wang, Xin; Vapaavuori, Jaana; Zhao, Yue; Bazuin, C. Geraldine.

In: *Macromolecules*, Vol. 47, No. 20, 28.10.2014, p. 7099-7108.

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

Electromagnetic interference shielding effectiveness of MWCNT filled poly(ether sulfone) and poly(ether imide) nanocomposites. / Mohanty, Aruna Kumar; Ghosh, Anindita; Sawai, Pravin; Pareek, Kapil; Banerjee, Susanta; Das, Amit; Pötschke, Petra; Heinrich, Gert; Voit, Brigitte.

In: *Polymer Engineering and Science*, Vol. 54, No. 11, 01.11.2014, p. 2560-2570.

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

Processable aromatic polyesters based on bisphenol derived from cashew nut shell liquid : synthesis and characterization. / Tawade, Bhausaheb V.; Salunke, Jagadish K.; Sane, Prakash S.; Wadgaonkar, Prakash P.

In: *JOURNAL OF POLYMER RESEARCH*, Vol. 21, No. 12, 18.11.2014.

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

Fabrication and Characterization of Amorphous Alumina-Yttria-Stabilized Zirconia Coatings by Air Plasma Spraying. / Song, Xuemei; Suhonen, Tomi; Varis, Tommi; Huang, Liping; Zheng, Xuebin; Zeng, Yi.

In: *Journal of Thermal Spray Technology*, Vol. 23, No. 8, 25.11.2014, p. 1302-1311.

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

Unmodified LDH as reinforcing filler for XNBR and the development of flame-retardant elastomer composites. / Basu, Debdipta; Das, Amit; Jacobgeorge, Jinu; Wang, De Yi; Stöckelhuber, Klauswerner; Wagenknecht, Udo; Leuteritz, Andreas; Kutlu, Burak; Reuter, Uta; Heinrich, Gert.

In: *Rubber Chemistry and Technology*, Vol. 87, No. 4, 01.12.2014, p. 606-616.

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, Vladimír; Pluharová, Eva; Unger, Isaak; Winter, Bernd; Jungwirth, Pavel.

In: *Journal of Physical Chemistry Part B*, Vol. 118, No. 48, 04.12.2014, p. 13833-13837.

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

Stimuli-responsive photonic polymer coatings. / Stumpel, Jelle E.; Broer, Dirk J.; Schenning, Albertus P H J.

In: *Chemical Communications*, Vol. 50, No. 100, 28.12.2014, p. 15839-15848.

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

Dielectric Breakdown Strength of Thermally Sprayed Ceramic Coatings : Effects of Different Test Arrangements. / Niittymäki, Minna; Lahti, Kari; Suhonen, Tomi; Metsäjoki, Jarkko.
In: Journal of Thermal Spray Technology, Vol. 24, No. 3, 2015, p. 542-551.
Research output: Contribution to journal > Article > Scientific > peer-review

Influence of the Spray Gun Type on Microstructure and Properties of HVAF Sprayed Fe-Based Corrosion Resistant Coatings. / Milanti, A.; Koivuluoto, H.; Vuoristo, P.
In: Journal of Thermal Spray Technology, Vol. 24, No. 7, 2015, p. 1312-1322.
Research output: Contribution to journal > Article > Scientific > peer-review

Mechanical performance and CO₂ uptake of ion-exchanged zeolite A structured by freeze-casting. / Ojuva, Arto; Järveläinen, Matti; Bauer, Marcus; Keskinen, Lassi; Valkonen, Masi; Akhtar, Farid; Levänen, Erkki; Bergström, Lennart.
In: Journal of the European Ceramic Society, Vol. 35, No. 9, 2015, p. 2607-2618.
Research output: Contribution to journal > Article > Scientific > peer-review

Are coarse-grained models apt to detect protein thermal stability? the case of OPEP force field. / Kalimeri, Maria; Derreumaux, Philippe; Sterpone, Fabio.
In: Journal of Non-Crystalline Solids, Vol. 407, 01.01.2015, p. 494-501.
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.
In: Thin Solid Films, Vol. 574, 01.01.2015, p. 196-206.
Research output: Contribution to journal > Article > Scientific > peer-review

Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as π -acceptors for anions. / Yi, H.; Albrecht, M.; Valkonen, A.; Rissanen, K.
In: New Journal of Chemistry, Vol. 39, No. 1, 01.01.2015, p. 746-749.
Research output: Contribution to journal > Article > Scientific > peer-review

Supramolecular hierarchy among halogen and hydrogen bond donors in light-induced surface patterning. / Saccone, Marco; Dichiarante, Valentina; Forni, Alessandra; Goulet-Hanssens, Alexis; Cavallo, Gabriella; Vapaavuori, Jaana; Terraneo, Giancarlo; Barrett, Christopher J.; Resnati, Giuseppe; Metrangolo, Pierangelo; Priimägi, Arri.
In: Journal of Materials Chemistry C, Vol. 3, 28.01.2015, p. 759-768.
Research output: Contribution to journal > Article > Scientific > peer-review

Sulfonated polyetheretherketone/polypropylene polymer blends for the production of photoactive materials. / Fatarelle, Enrico; Mylläri, Ville; Ruzzante, Marco; Pogni, Rebecca; Baratto, Maria Camilla; Skrifvars, Mikael; Syrjälä, Seppo; Järvelä, Pentti.
In: Journal of Applied Polymer Science, Vol. 132, No. 8, 41509, 01.02.2015.
Research output: Contribution to journal > Article > Scientific > peer-review

Polymer looping is controlled by macromolecular crowding, spatial confinement, and chain stiffness. / Shin, Jaeoh; Cherstvy, Andrey G.; Metzler, Ralf.
In: ACS Macro Letters, Vol. 4, No. 2, 17.02.2015, p. 202-206.
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, Subramani Bhagavatheswaran; Basu, Debdipta; Vaikuntam, Sankar Raman; Kutlu, Burak; Wiessner, Sven; Das, Amit; Naskar, Kinsuk; Heinrich, Gert.
In: Journal of Applied Polymer Science, Vol. 132, No. 9, 41539, 01.03.2015.
Research output: Contribution to journal > Article > Scientific > peer-review

High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a KCl-K₂SO₄ salt mixture. / Varis, T.; Bankiewicz, D.; Yrjas, P.; Oksa, M.; Suhonen, T.; Tuurna, S.; Ruusuvaori, K.; Holmström, S.

In: Surface and Coatings Technology, Vol. 265, 15.03.2015, p. 235-243.
Research output: Contribution to journal > Article > Scientific > peer-review

Tribology of HVOF- and HVOF-sprayed WC-10Co4Cr hardmetal coatings : A comparative assessment. / Bolelli, G.; Berger, L. M.; Börner, T.; Koivuluoto, H.; Lusvardi, L.; Lyphout, C.; Markocsan, N.; Matikainen, V.; Nylén, P.; Sassatelli, P.; Trache, R.; Vuoristo, P.

In: Surface and Coatings Technology, Vol. 265, 15.03.2015, p. 125-144.
Research output: Contribution to journal > Article > Scientific > peer-review

Corrosion mechanisms of sintered Nd-Fe-B magnets in the presence of water as vapour, pressurised vapour and liquid. / Isotahdon, E.; Huttunen-Saarivirta, E.; Heinonen, S.; Kuokkala, V. T.; Paju, M.

In: Journal of Alloys and Compounds, Vol. 626, 25.03.2015, p. 349-359.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of rheological properties of dissolved cellulose/microfibrillated cellulose blend suspensions on film forming. / Saarikoski, Eve; Rissanen, Marja; Seppälä, Jukka.

In: Carbohydrate Polymers, Vol. 119, 30.03.2015, p. 62-70.
Research output: Contribution to journal > Article > Scientific > peer-review

Oxidation of cholesterol does not alter significantly its uptake into high-density lipoprotein particles. / Karilainen, Topi; Timr, Štěpán; Vattulainen, Ilpo; Jungwirth, Pavel.

In: Journal of Physical Chemistry Part B, Vol. 119, No. 13, 02.04.2015, p. 4594-4600.
Research output: Contribution to journal > Article > Scientific > peer-review

Erosive wear of various stainless steel grades used as impeller blade materials in high temperature aqueous slurry. / Lindgren, M.; Suihkonen, R.; Vuorinen, J.

In: Wear, Vol. 328-329, 05.04.2015, p. 391-400.
Research output: Contribution to journal > Article > Scientific > peer-review

The effect of impact conditions on the wear and deformation behavior of wear resistant steels. / Lindroos, Matti; Ratia, Vilma; Apostol, Marian; Valtonen, Kati; Laukkanen, Anssi; Molnar, Wolfgang; Holmberg, Kenneth; Kuokkala, Veli Tapani.

In: Wear, Vol. 328-329, 05.04.2015, p. 197-205.
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. / Song, Xuemei; Liu, Ziwei; Suhonen, Tomi; Varis, Tommi; Huang, Liping; Zheng, Xuebin; Zeng, Yi.

In: Surface and Coatings Technology, Vol. 270, 25.05.2015, p. 132-138.
Research output: Contribution to journal > Article > Scientific > peer-review

Hydration of hydroxyl and amino groups examined by molecular dynamics and neutron scattering. / Hladílková, Jana; Fischer, Henry E.; Jungwirth, Pavel; Mason, Philip E.

In: Journal of Physical Chemistry Part B, Vol. 119, No. 21, 28.05.2015, p. 6357-6365.
Research output: Contribution to journal > Article > Scientific > peer-review

Equipment for obtaining polymeric nanofibres by electrospinning technology : II. The obtaining of polymeric nanofibers. / Manea, Liliana Rozemarie; Cramariuc, Bogdan; Popescu, Vasilica; Cramariuc, Radu; Sandu, Ion; Cramariuc, Oana.

In: Materiale Plastice, Vol. 52, No. 2, 01.06.2015, p. 180-185.
Research output: Contribution to journal > Article > Scientific > peer-review

PEGylated liposomes as carriers of hydrophobic porphyrins. / Dzieciuch, Monika; Rissanen, Sami; Szydłowska, Natalia; Bunker, Alex; Kumorek, Marta; Jamróz, Dorota; Vattulainen, Ilpo; Nowakowska, Maria; Róg, Tomasz; Kepczynski, Mariusz.

In: Journal of Physical Chemistry Part B, Vol. 119, No. 22, 04.06.2015, p. 6646-6657.
Research output: Contribution to journal > Article > Scientific > peer-review

Passive resonance sensor based method for monitoring particle suspensions. / Salpavaara, Timo; Järveläinen, Matti; Seppälä, Sari; Yli-Hallila, Teemu; Verho, Jarmo; Viikko, Matti; Lekkala, Jukka; Levänen, Erkki.
In: *Sensors and Actuators B: Chemical*, Vol. 219, 08.06.2015, p. 324-330.
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, Fawzi; Fujii, Daisuke; Imahori, Hiroshi; Nakano, Haruyuki; Tkachenko, Nikolai V.; Matano, Yoshihiro; Lemmetyinen, Helge.
In: *Journal of Physical Chemistry Part B*, Vol. 119, No. 24, 18.06.2015, p. 7328-7337.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

A comparison of rheology and FTIR in the study of polypropylene and polystyrene photodegradation. / Mylläri, Ville; Ruoko, Tero-Petri; Syrjälä, Seppo.
In: *Journal of Applied Polymer Science*, Vol. 132, No. 28, 42246, 01.07.2015.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene) : poly(styrene sulfonate) films with added graphene. / Isoniemi, Tommi; Tuukkanen, Sampo; Cameron, David C.; Simonen, Janne; Toppari, J. Jussi.
In: *Organic Electronics*, Vol. 25, 09.07.2015, p. 317-323.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Role of Internal Water on Protein Thermal Stability : The Case of Homologous G Domains. / Rahaman, Obaidur; Kalimeri, Maria; Melchionna, Simone; Hénin, Jérôme; Sterpone, Fabio.
In: *Journal of Physical Chemistry Part B*, Vol. 119, No. 29, 23.07.2015, p. 8939-8949.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Nonlinear Optical Properties of Fluorescent Dyes Allow for Accurate Determination of Their Molecular Orientations in Phospholipid Membranes. / Timr, Štěpán; Brabec, Jiří; Bondar, Alexey; Ryba, Tomáš; Železný, Miloš; Lazar, Josef; Jungwirth, Pavel.
In: *Journal of Physical Chemistry Part B*, Vol. 119, No. 30, 30.07.2015, p. 9706-9716.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Evaluation of crushing strength of spray-dried MgAl₂O₄ granule beds. / Kanerva, Ulla; Suhonen, Tomi; Lagerbom, Juha; Levänen, Erkki.
In: *Ceramics International*, Vol. 41, No. 7, 01.08.2015, p. 8494-8500.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Effect of Phosphatidic Acid on Biomembrane : Experimental and Molecular Dynamics Simulations Study. / Kwolek, Urszula; Kulig, Waldemar; Wydro, Paweł; Nowakowska, Maria; Róg, Tomasz; Kepczynski, Mariusz.
In: *Journal of Physical Chemistry Part B*, Vol. 119, No. 31, 06.08.2015, p. 10042-10051.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Unintentional boron contamination of MBE-grown GaInP/AlGaInP quantum wells. / Tukiainen, Antti; Likonen, Jari; Toikkanen, Lauri; Leinonen, Tomi.
In: *Journal of Crystal Growth*, Vol. 425, 01.09.2015, p. 60-63.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Molecular Design of Light-Responsive Hydrogels, for in Situ Generation of Fast and Reversible Valves for Microfluidic Applications. / Ter Schiphorst, Jeroen; Coleman, Simon; Stumpel, Jelle E.; Ben Azouz, Aymen; Diamond, Dermot; Schenning, Albertus P. H. J.
In: *Chemistry of Materials*, Vol. 27, No. 17, 08.09.2015, p. 5925-5931.
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.
In: *Surface and Coatings Technology*, Vol. 277, 15.09.2015, p. 81-90.
Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

PIP2 and Talin Join Forces to Activate Integrin. / Orłowski, Adam; Kukkurainen, Sampo; Pöyry, Annika; Rissanen, Sami; Vattulainen, Ilpo; Hytönen, Vesa P.; Róg, Tomasz.
In: Journal of Physical Chemistry Part B, Vol. 119, No. 38, 24.09.2015, p. 12381-12389.
Research output: Contribution to journal > Article > Scientific > peer-review

Characterization of thermally aged polyetheretherketone fibres : Mechanical, thermal, rheological and chemical property changes. / Mylläri, Ville; Ruoko, Tero-Petri; Vuorinen, Jyrki; Lemmetyinen, Helge.
In: Polymer Degradation and Stability, Vol. 120, 01.10.2015, p. 419-426.
Research output: Contribution to journal > Article > Scientific > peer-review

Production of sulfonated polyetheretherketone/polypropylene fibers for photoactive textiles. / Mylläri, Ville; Fatarella, Enrico; Ruzzante, Marco; Pogni, Rebecca; Baratto, Maria Camilla; Skrifvars, Mikael; Syrjälä, Seppo; Järvelä, Pentti.
In: Journal of Applied Polymer Science, Vol. 132, No. 39, 42595, 01.10.2015.
Research output: Contribution to journal > Article > Scientific > peer-review

Comparison of laboratory rolling-sliding wear tests with in-service wear of nodular cast iron rollers against wire ropes. / Oksanen, V.; Valtonen, K.; Andersson, P.; Vaajoki, A.; Laukkanen, A.; Holmberg, K.; Kuokkala, V. T.
In: Wear, Vol. 340-341, 15.10.2015, p. 73-81.
Research output: Contribution to journal > Article > Scientific > peer-review

In Situ Photocontrol of Block Copolymer Morphology during Dip-Coating of Thin Films. / Vapaavuori, Jaana; Grosrenaud, Josué; Pellerin, Christian; Bazuin, C. Geraldine.
In: ACS Macro Letters, Vol. 4, No. 10, 20.10.2015, p. 1158-1162.
Research output: Contribution to journal > Article > Scientific > peer-review

Photomechanical Energy Transfer to Photopassive Polymers through Hydrogen and Halogen Bonds. / Vapaavuori, Jaana; Heikkinen, Ismo T S; Dichiarante, Valentina; Resnati, Giuseppe; Metrangolo, Pierangelo; Sabat, Ribal Georges; Bazuin, C. Geraldine; Priimagi, Arri; Pellerin, Christian.
In: Macromolecules, Vol. 48, No. 20, 27.10.2015, p. 7535-7542.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of rubber polarity on selective wetting of carbon nanotubes in ternary blends. / Le, H. H.; Parsaker, M.; Sriharish, M. N.; Henning, S.; Menzel, M.; Wießner, S.; Das, A.; Do, Q. K.; Heinrich, G.; Radsch, H. J.
In: Express Polymer Letters, Vol. 9, No. 11, 01.11.2015, p. 960-971.
Research output: Contribution to journal > Article > Scientific > peer-review

Processing and characterization of phosphate glasses containing CaAl₂O₄:Eu²⁺,Nd³⁺ and SrAl₂O₄:Eu²⁺,Dy³⁺ microparticles. / Massera, J.; Gaussiran, M.; Gluchowski, P.; Lastusaari, M.; Hupa, L.; Petit, L.
In: Journal of the European Ceramic Society, Vol. 35, No. 14, 01.11.2015, p. 3863-3871.
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, Sanna; Koho, Tiia; Uusi-Kerttula, Hanni; Vesikari, Timo; Blazevic, Vesna; Hytönen, Vesa P.
In: Sensors and Actuators B: Chemical, Vol. 221, 31.12.2015, p. 507-514.
Research output: Contribution to journal > Article > Scientific > peer-review

Chemical and bacterial leaching of metals from a smelter slag in acid solutions. / Kaksonen, Anna H.; Särkijärvi, Silja; Puhakka, Jaakko A.; Peuraniemi, Esa; Junnikkala, Saku; Tuovinen, Olli H.
In: Hydrometallurgy, Vol. 159, 2016, p. 46-53.
Research output: Contribution to journal > Article > Scientific > peer-review

Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method. / Bansod, Naresh D.; Kapgate, Bharat P.; Das, Chayan; Das, Amit; Basu, Debdipta; Debnath, Subhas Chandra.
In: JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, Vol. 80, No. 2, 2016, p. 548-559.
Research output: Contribution to journal > Article > Scientific > peer-review

Dissolution behavior of the bioactive glass S53P4 when sodium is replaced by potassium, and calcium with magnesium or strontium. / Hupa, Leena; Fagerlund, Susanne; Massera, Jonathan; Björkvik, Leena.

In: Journal of Non-Crystalline Solids, 2016, p. 41-46.

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

Improved properties for packaging materials by nanoscale surface modification and ALD barrier coating. / Lahti, Johanna; Lavonen, Juho; Lahtinen, Kimmo; Johansson, Petri; Seppänen, Tarja; Cameron, David C.

TAPPI International Conference on Nanotechnology for Renewable Materials 2016. Vol. 2 TAPPI Press, 2016. p. 684-706.

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

Microstructural and abrasion wear characteristics of laser-clad tool steel coatings. / Tuominen, J.; Näkki, J.; Pajukoski, H.; Hyvärinen, L.; Vuoristo, P.

In: Surface Engineering, Vol. 32, No. 12, 2016, p. 923-933.

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

Photoresponsive liquid-crystalline polymer films bilayered with an inverse opal structure. / Akamatsu, Norihisa; Aizawa, Miho; Tatsumi, Ryoichi; Hisano, Kyohei; Priimägi, Arri; Shishido, Atsushi.

In: JOURNAL OF PHOTOPOLYMER SCIENCE AND TECHNOLOGY, Vol. 29, No. 1, 2016, p. 145-148.

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

Active packaging by paper coating. / Jarnstrom, Lars; Johansson, Kristin; Kuusipalo, Jurkka; Jonsson, Leif .
14th TAPPI Advanced Coating Symposium 2016. TAPPI Press, 2016. p. 88-92.

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

Guanidinium Pairing Facilitates Membrane Translocation. / Allolio, Christoph; Baxova, Katarina; Vazdar, Mario; Jungwirth, Pavel.

In: Journal of Physical Chemistry Part B, Vol. 120, No. 1, 14.01.2016, p. 143-153.

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

Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices. / Salunke, Jagadish K.; Wong, F. L.; Feron, Krishna; Manzhos, Sergei; Lo, Ming Fai; Shinde, Durgaprasad; Patil, Abhijeet; Lee, C. S.; Roy, V. A L; Sonar, Prashant; Wadgaonkar, Prakash P.

In: Journal of Materials Chemistry C, Vol. 4, No. 5, 07.02.2016, p. 1009-1018.

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

Stability and Function at High Temperature. What Makes a Thermophilic GTPase Different from Its Mesophilic Homologue. / Katava, Marina; Kalimeri, Maria; Stirnemann, Guillaume; Sterpone, Fabio.

In: Journal of Physical Chemistry Part B, Vol. 120, No. 10, 17.03.2016, p. 2721-2730.

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

Chemical synthesis of WC-Co from water-soluble precursors : The effect of carbon and cobalt additions to WC synthesis. / Kanerva, Ulla; Karhu, Marjaana; Lagerbom, Juha; Kronlöf, Anna; Honkanen, Mari; Turunen, Erja; Laitinen, Tarja.

In: International Journal of Refractory Metals and Hard Materials, Vol. 56, 01.04.2016, p. 69-75.

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

DFT simulations and microkinetic modelling of 1-pentyne hydrogenation on Cu₂₀ model catalysts. / Ma, Li; Melander, Marko; Weckman, Timo; Lipasti, Saana; Laasonen, Kari; Akola, Jaakko.

In: Journal of Molecular Graphics and Modelling, Vol. 65, 01.04.2016, p. 61-70.

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, Leo; Norpoth, Jonas; Trache, Richard; Berger, Lutz Michael.

In: Surface and Coatings Technology, Vol. 291, 15.04.2016, p. 444-451.

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

Thermal, structural and optical properties of Er³⁺ doped phosphate glasses containing silver nanoparticles. / Soltani, I.; Hraiech, S.; Horchani-Naifer, K.; Massera, J.; Petit, L.; Férid, M.
In: *Journal of Non-Crystalline Solids*, Vol. 438, 15.04.2016, p. 67-73.
Research output: Contribution to journal > Article > Scientific > peer-review

Microstructure and Sliding Wear Behavior of Fe-Based Coatings Manufactured with HVOF and HVAF Thermal Spray Processes. / Milanti, A.; Matikainen, V.; Bolelli, G.; Koivuluoto, H.; Lusvarghi, L.; Vuoristo, P.
In: *Journal of Thermal Spray Technology*, Vol. 25, No. 5, 06.2016, p. 1040–1055.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of incorporation of CdS NPs on performance of PTB7 : PCBM organic solar cells. / Sharma, Ramakant; Bhalerao, Sagar; Gupta, Dipti.
In: *Organic Electronics: physics, materials, applications*, Vol. 33, 01.06.2016, p. 274-280.
Research output: Contribution to journal > Article > Scientific > peer-review

Structurally Controlled Dynamics in Azobenzene-Based Supramolecular Self-Assemblies in Solid State. / Poutanen, Mikko; Ikkala, Olli; Priimägi, Arri.
In: *Macromolecules*, Vol. 49, No. 11, 14.06.2016, p. 4095-4101.
Research output: Contribution to journal > Article > Scientific > peer-review

Characterization of High-Velocity Single Particle Impacts on Plasma-Sprayed Ceramic Coatings. / Kiilakoski, Jarkko; Lindroos, Matti; Apostol, Marian; Koivuluoto, Heli; Kuokkala, Veli-Tapani; Vuoristo, Petri.
In: *Journal of Thermal Spray Technology*, Vol. 25, 24.06.2016, p. 1127-1137.
Research output: Contribution to journal > Article > Scientific > peer-review

Erosion wear of vinylester matrix composites in aqueous and acidic environments at elevated temperatures. / Suihkonen, Reija; Lindgren, Mari; Siljander, Sanna; Sarlin, Essi; Vuorinen, Jyrki.
In: *Wear*, Vol. 358-359, 15.07.2016, p. 7-16.
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.
In: *Wear*, Vol. 358-359, 15.07.2016, p. 32-50.
Research output: Contribution to journal > Article > Scientific > peer-review

Novel oxyfluorophosphate glasses and glass-ceramics. / Cui, S.; Massera, J.; Lastusaari, M.; Hupa, L.; Petit, L.
In: *Journal of Non-Crystalline Solids*, Vol. 445-446, 01.08.2016, p. 40-44.
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, Alexander; Ihalainen, Petri; Ivanov, Artem; Domnin, Ivan; Klechkovskaya, Vera; Orekhov, Anton; Lemmetyinen, Helge; Vuorimaa-Laukkanen, Elina; Peltonen, Jouko; Vyaz'min, Sergey.
In: *Thin Solid Films*, Vol. 612, 01.08.2016, p. 463-471.
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. / Kapgata, Bharat P.; Das, Chayan; Das, Amit; Basu, Debdipta; Wiessner, Sven; Reuter, Uta; Heinrich, Gert.
In: *Journal of Applied Polymer Science*, Vol. 133, No. 30, 43717, 10.08.2016.
Research output: Contribution to journal > Article > Scientific > peer-review

Detergent impurity effect on recycled HDPE : Properties after repetitive processing. / Mylläri, Ville; Hartikainen, Samuel; Poliakova, Valeria; Anderson, Reetta; Jönkkäri, Ilari; Pasanen, Pertti; Andersson, Mirja; Vuorinen, Jyrki.
In: *Journal of Applied Polymer Science*, Vol. 133, No. 31, 43766, 15.08.2016.
Research output: Contribution to journal > Article > Scientific > peer-review

Barkhausen noise response of three different welded duplex stainless steels. / Lindgren, M.; Santa-aho, S.; Vippola, M.
In: Insight, Vol. 58, No. 9, 01.09.2016, p. 480-486.

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

Polyarginine Interacts More Strongly and Cooperatively than Polylysine with Phospholipid Bilayers. / Robison, Aaron D.; Sun, Simou; Poyton, Matthew F.; Johnson, Gregory A.; Pellois, Jean Philippe; Jungwirth, Pavel; Vazdar, Mario; Cremer, Paul S.

In: Journal of Physical Chemistry Part B, Vol. 120, No. 35, 08.09.2016, p. 9287-9296.

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, Saara; Kannisto, Matti; Nikkanen, Juha-Pekka; Huttunen-Saarivirta, Elina; Karp, Matti; Levänen, Erkki.

In: Thin Solid Films, Vol. 616, 01.10.2016, p. 842-849.

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.

In: Wear, Vol. 364-365, 15.10.2016, p. 10-21.

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

Improvement of actuation performance of dielectric elastomers by barium titanate and carbon black fillers. / Poikelispää, Minna; Shakun, Alexandra; Das, Amit; Vuorinen, Jyrki.

In: Journal of Applied Polymer Science, Vol. 133, No. 42, 44116, 10.11.2016.

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.

In: Surface and Coatings Technology, Vol. 305, 15.11.2016, p. 123-131.

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

Abrasive-Erosive Wear of Thermally Sprayed Coatings from Experimental and Commercial Cr₃C₂-Based Powders. / Sarjas, Heikki; Surzhenkov, Andrei; Juhani, Kristjan; Antonov, Maksim; Adoberg, Eron; Kulu, Priit; Viljus, Mart; Traksmäa, Rainer; Matikainen, Ville; Vuoristo, Petri.

In: Journal of Thermal Spray Technology, Vol. 26, No. 8, 2017, p. 2020-2029.

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

Aligned Poly(ϵ -caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro. / Hyysalo, Anu; Ristola, Mervi; Joki, Tiina; Honkanen, Mari; Vippola, Minnamari; Narkilahti, Susanna.

In: MACROMOLECULAR BIOSCIENCE, Vol. 17, No. 7, 1600517, 2017.

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. / Janka, L.; Norpoth, J.; Trache, R.; Thiele, S.; Berger, L. M.

In: Journal of Thermal Spray Technology, Vol. 26, No. 7, 2017, p. 1720-1731.

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

Load capacity of lubricated bismuth bronze bimetal bearing under elliptical sliding motion. / Oksanen, V. T.; Lehtovaara, A. J.; Kallio, M. H.

In: Wear, Vol. 388-389, 2017, p. 72-80.

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

Non-destructive and wireless monitoring of biodegradable polymers. / Salpavaara, Timo; Hänninen, Alekski; Antniemi, Anni; Leikkala, Jukka; Kellomäki, Minna.

In: Sensors and Actuators B: Chemical, Vol. 251, 2017, p. 1018-1025.
Research output: Contribution to journal > Article > Scientific > peer-review

Sliding wear behaviour of HVOF and HVAF sprayed Cr₃C₂-based coatings. / Matikainen, V.; Bolelli, G.; Koivuluoto, H.; Sassatelli, P.; Lusvardi, L.; Vuoristo, P.
In: Wear, Vol. 388-389, 2017, p. 57-71.

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

The 5th international workshop on numerical modelling of high temperature superconductors. / Morandi, Antonio; Ainslie, Mark D.; Grilli, Francesco; Stenvall, Antti.

In: Superconductor Science and Technology, Vol. 30, No. 8, 080201, 2017.

Research output: Contribution to journal > Editorial > Scientific

Two cations, two mechanisms : Interactions of sodium and calcium with zwitterionic lipid membranes. / Javanainen, Matti; Melcrová, Adéla; Magarkar, Aniket; Jurkiewicz, Piotr; Hof, Martin; Jungwirth, Pavel; Martinez-Seara, Hector.

In: Chemical Communications, Vol. 53, No. 39, 2017, p. 5380-5383.

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

Characterization of the microstructure and corrosion performance of Ce-alloyed Nd-Fe-B magnets. / Isotahdon, Elisa; Huttunen-Saarivirta, Elina; Kuokkala, Veli.

In: Journal of Alloys and Compounds, Vol. 692, 01.2017, p. 190-197.

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

Electromagnetic nonlinearities in a Roebel-cable-based accelerator magnet prototype : Variational approach. /

Ruuskanen, J.; Stenvall, A.; Lahtinen, V.; Pardo, E.

In: Superconductor Science and Technology, Vol. 30, No. 2, 024008, 01.02.2017.

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

Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains. / Milani, Roberto; Houbenov, Nikolay; Fernandez-Palacio, Francisco; Cavallo, Gabriella; Luzio, Alessandro; Haataja, Johannes; Giancane, Gabriele; Saccone, Marco; Priimägi, Arri; Metrangolo, Pierangelo; Ikkala, Olli.

In: Chem, Vol. 2, No. 3, 09.03.2017, p. 417-426.

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

Effect of the addition of Al₂O₃, TiO₂ and ZnO on the thermal, structural and luminescence properties of Er³⁺-doped phosphate glasses. / Lopez-Iscoa, Pablo; Petit, Laetitia; Massera, Jonathan; Janner, Davide; Boetti, Nadia G.; Pugliese, Diego; Fiorilli, Sonia; Novara, Chiara; Giorgis, Fabrizio; Milanese, Daniel.

In: Journal of Non-Crystalline Solids, Vol. 460, 15.03.2017, p. 161-168.

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

Halogen bonding stabilizes a cis-azobenzene derivative in the solid state : A crystallographic study. / Saccone, Marco; Siiskonen, Antti; Fernandez-Palacio, Francisco; Priimägi, Arri; Terraneo, Giancarlo; Resnati, Giuseppe; Metrangolo, Pierangelo.

In: ACTA CRYSTALLOGRAPHICA SECTION B : STRUCTURAL SCIENCE, CRYSTAL ENGINEERING AND MATERIALS, Vol. 73, No. 2, 01.04.2017, p. 227-233.

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

Quench absorption coils : A quench protection concept for high-field superconducting accelerator magnets. / Mentink, M.; Salmi, T.

In: Superconductor Science and Technology, Vol. 30, No. 6, 064002, 03.05.2017.

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

Configurational Disorder of Water Hydrogen-Bond Network at the Protein Dynamical Transition. / Rahaman, Obaidur; Kalimeri, Maria; Katava, Marina; Paciaroni, Alessandro; Sterpone, Fabio.

In: Journal of Physical Chemistry Part B, Vol. 121, No. 28, 20.07.2017, p. 6792-6798.

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

Vegetable fillers for electric stimuli responsive elastomers. / Poikelispää, Minna; Shakun, Alexandra; Sarlin, Essi; Das, Amit; Vuorinen, Jyrki.

In: Journal of Applied Polymer Science, Vol. 134, No. 28, 45081, 20.07.2017.

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

A Study of Cr₃C₂-Based HVOF- and HVAF-Sprayed Coatings : Microstructure and Carbide Retention. / Matikainen, V.; Bolelli, G.; Koivuluoto, H.; Honkanen, M.; Vippola, M.; Lusvarghi, L.; Vuoristo, P.

In: Journal of Thermal Spray Technology, Vol. 26, No. 6, 08.2017, p. 1-18.

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.

In: Surface and Coatings Technology, Vol. 324, 15.09.2017, p. 264-280.

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

Wear of cemented tungsten carbide percussive drill-bit inserts : Laboratory and field study. / Tkalich, Dmitry; Li, Charlie C.; Kane, Alexandre; Saai, Afaf; Tkalich, Dmitry; Yastrebov, Vladislav A.; Hokka, Mikko; Kuokkala, Veli-Tapani; Bengtsson, Maria; From, Anna.

In: Wear, Vol. 386-387, 15.09.2017, p. 106-117.

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, Saara; Nikkanen, Juha-Pekka; Huttunen-Saarivirta, Elina; Levänen, Erkki.

In: Thin Solid Films, Vol. 638, 30.09.2017, p. 410-419.

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

Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models. / Välimäki, Hannu; Verho, Jarmo; Kreuzer, Joose; Kattippambil Rajan, Dhanesh; Ryyänen, Tomi; Pekkanen-Mattila, Mari; Ahola, Antti; Tappura, Kirsi; Kallio, Pasi; Lekkala, Jukka.

In: Sensors and Actuators B: Chemical, Vol. 249, 01.10.2017, p. 738-746.

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, Hanna; Ullsten, Henrik; Johansson, Caisa; Järnström, Lars.

In: Progress in Organic Coatings, Vol. 111, 01.10.2017, p. 13-22.

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

Erosive wear of filled vinyl ester composites in water and acidic media at elevated temperature. / Sarlin, Essi; Saarimäki, Meri; Sironen, Reija; Lindgren, Mari; Siljander, Sanna; Kanerva, Mikko; Vuorinen, Jyrki.

In: Wear, Vol. 390-391, 15.11.2017, p. 84-92.

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

Infrared Thermography as a Non-destructive Testing Solution for Thermal Spray Metal Coatings. / Santangelo, Paolo E.;

Allesina, Giulio; Bolelli, Giovanni; Lusvarghi, Luca; Matikainen, Ville; Vuoristo, Petri.

In: Journal of Thermal Spray Technology, Vol. 26, No. 8, 12.2017, p. 1982-1993.

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, Hanna; Johansson, Caisa; Ullsten, Henrik; Järnström, Lars.

In: Progress in Organic Coatings, Vol. 113, 01.12.2017, p. 218-224.

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, Ekaterina S.; Ketola, Tiia-Maaria; Morin-Picardat, Emmanuelle; Liang, Huamin; Hanzlíková, Martina; Urtti, Arto; Yliperttula, Marjo; Vuorimaa-Laukkanen, Elina.

In: Journal of Physical Chemistry B, Vol. 121, No. 48, 07.12.2017, p. 10782-10792.

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, Ville; Kaleva, Aaretti; Nikkanen, Juha-Pekka; Heinonen, Saara; Levänen, Erkki; Väisänen, Pasi; Markkula, Antti; Juhanoja, Jyrki.

In: Surface and Coatings Technology, Vol. 331, 15.12.2017, p. 137-142.

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

Better understanding of the role of SiO₂, P₂O₅ and Al₂O₃ on the spectroscopic properties of Yb³⁺ doped silica sol-gel glasses. / Glorieux, Benoit; Salminen, Turkkka; Massera, Jonathan; Lastusaari, Mika; Petit, Laeticia.

In: Journal of Non-Crystalline Solids, Vol. 482, 2018, p. 46-51.

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

Convenient extraction method for quantification of thin zinc patina layers. / Saarimaa, Ville; Kaleva, Aaretti; Paunikallio, Teemu; Nikkanen, Juha-Pekka; Heinonen, Saara; Levänen, Erkki; Väisänen, Pasi; Markkula, Antti.

In: Surface and Interface Analysis, Vol. 50, No. 5, 2018, p. 564-570.

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, Nikita A.; Isokuortti, Jussi; Efimov, Alexander; Vuorimaa-Laukkanen, Elina; Tkachenko, Nikolai V.; Laaksonen, Timo.

In: Chemical Communications, Vol. 54, No. 99, 2018, p. 14029-14032.

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

Evaluating the toughness of APS and HVOF-sprayed Al₂O₃-ZrO₂-coatings by in-situ- and macroscopic bending. / Kiilakoski, J.; Musalek, R.; Lukac, F.; Koivuluoto, H.; Vuoristo, P.

In: Journal of the European Ceramic Society, Vol. 38, No. 4, 2018, p. 1908-1918.

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

Improved electromechanical response in acrylic rubber by different carbon-based fillers. / Shakun, Alexandra; Poikelispää, Minna; Das, Amit; Vuorinen, Jyrki.

In: Polymer Engineering and Science, Vol. 58, No. 3, 2018, p. 395-404.

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

Modification of epoxy resin by silane-coupling agent to improve tensile properties of viscose fabric composites. / Rajan, Rathish; Rainosalu, Egidija; Thomas, Selvin P.; Ramamoorthy, Sunil Kumar; Zavašnik, Janez; Vuorinen, Jyrki; Skrifvars, Mikael.

In: Polymer Bulletin, Vol. 75, No. 1, 2018, p. 167-195.

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

Novel Online Diagnostic Analysis for In-Flight Particle Properties in Cold Spraying. / Koivuluoto, Heli; Matikainen, Ville; Larjo, Jussi; Vuoristo, Petri.

In: Journal of Thermal Spray Technology, Vol. 27, No. 3, 2018, p. 423-432.

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

Persistent luminescent particles containing bioactive glasses : Prospect toward tracking in-vivo implant mineralization using biophotonic ceramics. / Saarinen, M.; Nommeots-Nomm, A.; Hokka, M.; Laurila, J.; Norrbo, I.; Lastusaari, M.; Massera, J.; Petit, L.

In: Journal of the European Ceramic Society, Vol. 38, No. 1, 2018, p. 287-295.

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

Simultaneous removal of tetrathionate and copper from simulated acidic mining water in bioelectrochemical and electrochemical systems. / Sulonen, Mira L.K.; Kokko, Marika E.; Lakaniemi, Aino-Maija; Puhakka, Jaakko A.

In: Hydrometallurgy, Vol. 176, 2018, p. 129-138.

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

Stable blue phase polymeric Langmuir-Schaefer films based on unsymmetrical hydroxyalkadiynyl N-arylcarbamate derivatives. / Alekseev, Alexander; Ihalainen, Petri; Ivanov, Artem; Domnin, Ivan; Rosqvist, Emil; Lemmetyinen, Helge; Vuorimaa-Laukkanen, Elina; Peltonen, Jouko; Vyaz'min, Sergey.
In: Thin Solid Films, Vol. 645, 2018, p. 108-118.

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

Supramolecular design principles for efficient photoresponsive polymer-azobenzene complexes. / Vapaavuori, Jaana; Bazuin, C. Geraldine; Priimagi, Arri.
In: Journal of Materials Chemistry C, Vol. 6, No. 9, 2018, p. 2168-2188.

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

Tribology of FeVCrC coatings deposited by HVOF and HVAF thermal spray processes. / Bolelli, Giovanni; Bursi, Marcello; Lusvarghi, Luca; Manfredini, Tiziano; Matikainen, Ville; Rigon, Rinaldo; Sassatelli, Paolo; Vuoristo, Petri.
In: Wear, Vol. 394-395, 2018, p. 113-133.

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

Ortho-Fluorination of azophenols increases the mesophase stability of photoresponsive hydrogen-bonded liquid crystals. / Saccone, Marco; Kuntze, Kim; Ahmed, Zafar; Siiskonen, Antti; Giese, Michael; Priimagi, Arri.
In: Journal of Materials Chemistry C, Vol. 6, No. 37, 01.01.2018, p. 9958-9963.

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

Process time importance in the product properties evolution during extrusion coating of different LDPE grades. / Suokas, E.; Kuusipalo, J.

15th TAPPI Advanced Coating Fundamentals Symposium 2018: Charlotte; United States; 14 April 2018 through 15 April 2018. TAPPI Press, 2018. p. 151-159.

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

Arc-sprayed Fe-based coatings from coredwires for wear and corrosion protection in power engineering. / Yury, Korobov; Filippov, Michael; Makarov, Aleksey; Malygina, Irina; Soboleva, Natalia; Fantozzi, Davide; Andrea, Milanti; Koivuluoto, Heli; Vuoristo, Petri.

In: Coatings, Vol. 8, No. 2, 71, 01.02.2018.

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, Sankar Raman; Stöckelhuber, Klaus Werner; Subramani Bhagavatheswaran, Eshwaran; Wießner, Sven; Scheler, Ulrich; Saalwächter, Kay; Formanek, Petr; Heinrich, Gert; Das, Amit.

In: Journal of Physical Chemistry B, Vol. 122, No. 6, 15.02.2018, p. 2010-2022.

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

Improved Stability of Atomic Layer Deposited Amorphous TiO₂ Photoelectrode Coatings by Thermally Induced Oxygen Defects. / Hannula, Markku; Ali-Löytty, Harri; Lahtonen, Kimmö; Sarlin, Essi; Saari, Jesse; Valden, Mika.

In: Chemistry of Materials, Vol. 30, No. 4, 27.02.2018, p. 1199-1208.

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

High-performance elastomeric strain sensors based on nanostructured carbon fillers for potential tire applications. / Bhagavatheswaran, Eshwaran Subramani; Vaikuntam, Sankar Raman; Stöckelhuber, Klaus Werner; Wießner, Sven; Heinrich, Gert; Das, Amit.

In: Materials Today Communications, Vol. 14, 01.03.2018, p. 240-248.

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

Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells. / Karvinen, Jennika; Joki, Tiina; Ylä-Outinen, Laura; Koivisto, Janne T.; Narkilahti, Susanna; Kellomäki, Minna.

In: Reactive and Functional Polymers, Vol. 124, 01.03.2018, p. 29-39.

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, Leo; Berger, Lutz Michael; Norpoth, Jonas; Trache, Richard; Thiele, Sven; Tomastik, Christian; Matikainen, Ville; Vuoristo, Petri.

In: Surface and Coatings Technology, Vol. 337, 15.03.2018, p. 296-305.

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

Thermal Isomerization of Hydroxyazobenzenes as a Platform for Vapor Sensing. / Poutanen, Mikko; Ahmed, Zafar; Rautkari, Lauri; Ikkala, Olli; Priimägi, Arri.

In: ACS Macro Letters, Vol. 7, No. 3, 20.03.2018, p. 381-386.

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

Properties of HVOF-sprayed Stellite-6 coatings. / Sassatelli, Paolo; Bolelli, Giovanni; Lassinantti Gualtieri, Magdalena; Heinonen, Esa; Honkanen, Mari; Lusvarghi, Luca; Manfredini, Tiziano; Rigon, Rinaldo; Vippola, Minnamari.

In: Surface and Coatings Technology, Vol. 338, 25.03.2018, p. 45-62.

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.

In: Journal of Thermal Spray Technology, Vol. 27, No. 4, 01.04.2018, p. 680-694.

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

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

Magarkar, Aniket; Parkkila, Petteri; Viitala, Tapani; Lajunen, Tatu; Mobarak, Edouard; Licari, Giuseppe; Cramariuc, Oana; Vauthey, Eric; Róg, Tomasz; Bunker, Alex.

In: Chemical Communications, Vol. 54, No. 28, 11.04.2018, p. 3440-3443.

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

Powering of an HTS dipole insert-magnet operated standalone in helium gas between 5 and 85 K. / Nugteren, J. Van; Kirby, G.; Bajas, H.; Bajko, M.; Ballarino, A.; Bottura, L.; Chiuchiolo, A.; Contat, P. A.; Dhallé, M.; Durante, M.; Fazilleau, P.; Fontalva, A.; Gao, P.; Goldacker, W.; Kate, H. Ten; Kario, A.; Lahtinen, V.; Lorin, C.; Markelov, A.; Mazet, J.; Molodyk, A.; Murtomäki, J.; Long, N.; Perez, J.; Petrone, C.; Pincot, F.; Rijk, G. De; Rossi, L.; Russenschuck, S.; Ruuskanen, J.; Schmitz, K.; Stenvall, A.; Usoskin, A.; Willering, G.; Yang, Y.

In: Superconductor Science and Technology, Vol. 31, No. 6, 065002, 25.04.2018.

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

Accurate Binding of Sodium and Calcium to a POPC Bilayer by Effective Inclusion of Electronic Polarization. / Melcr, Josef; Martinez-Seara, Hector; Nencini, Ricky; Kolafa, Jiří; Jungwirth, Pavel; Ollila, O. H. Samuli.

In: Journal of Physical Chemistry B, Vol. 122, No. 16, 26.04.2018, p. 4546-4557.

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

A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field. / Sarcan, F.; Mutlu, S.; Cokduygular, E.; Donmez, O.; Erol, A.; Puustinen, J.; Guina, M.

In: Semiconductor Science and Technology, Vol. 33, No. 6, 064003, 04.05.2018.

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

Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics. / Ojha, N.; Laihinne, T.; Salminen, T.; Lastusaari, M.; Petit, L.

In: Ceramics International, Vol. 44, No. 10, 06.2018, p. 11807-11811.

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, Lidia; Prádo, Catuxa; Díaz, Raquel; Fernández, Elisa; Ismailov, Arnold; Kumpulainen, Tero; Levänen, Erkki; Torrecillas, Ramón; Fernández, Adolfo.

In: Ceramics International, Vol. 44, No. 8, 06.2018, p. 9472-9478.

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, Kimmo; Kotilainen, Minna; Karhu, Marjaana; Lagerbom, Juha; Vuorinen, Tommi; Honkanen, Mari; Vippola, Minnamari; Turunen, Erja.

In: *Ceramics International*, Vol. 44, No. 8, 01.06.2018, p. 9338-9346.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Luminescence of Er³⁺ doped oxyfluoride phosphate glasses and glass-ceramics. / Nommeots-Nomm, A.; Boetti, N. G.; Salminen, T.; Massera, J.; Hokka, M.; Petit, L.

In: *Journal of Alloys and Compounds*, Vol. 751, 30.06.2018, p. 224-230.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Exciton localization and structural disorder of GaAs_{1-x}Bi_x/GaAs quantum wells grown by molecular beam epitaxy on (311)B GaAs substrates. / Prando, G. A.; Orsi Gordo, V.; Puustinen, J.; Hilska, J.; Alghamdi, H. M.; Som, G.; Gunes, M.; Akyol, M.; Souto, S.; Rodrigues, A. D.; Galeti, H. V.A.; Henini, M.; Gobato, Y. Galvão; Guina, M.

In: *Semiconductor Science and Technology*, Vol. 33, No. 8, 084002, 17.07.2018.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Near-threshold high spin amplification in a 1300 nm GaInNAs spin laser. / Cemlyn, Ben; Adams, Mike; Harbord, Edmund; Li, Nianqiang; Henning, Ian D.; Oulton, Ruth; Korpijärvi, Ville Markus; Guina, Mircea.

In: *Semiconductor Science and Technology*, Vol. 33, No. 9, 094005, 01.08.2018.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Post operation inactivation of acidophilic bioleaching microorganisms using natural chloride-rich mine water. / Bomberg, Malin; Miettinen, Hanna; Wahlström, Margareta; Kaartinen, Tommi; Ahoranta, Sarita; Lakaniemi, Aino-Maija; Kinnunen, Päivi.

In: *Hydrometallurgy*, Vol. 180, 01.09.2018, p. 236-245.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Recent progress in biohydrometallurgy and microbial characterisation. / Kaksonen, Anna H.; Boxall, Naomi J.; Gumulya, Yosephine; Khaleque, Himel N.; Morris, Christina; Bohu, Tsing; Cheng, Ka Yu; Usher, Kayley M.; Lakaniemi, Aino-Maija.

In: *Hydrometallurgy*, Vol. 180, 01.09.2018, p. 7-25.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Mechanical, thermal, and burning properties of viscose fabric composites : Influence of epoxy resin modification. / Rajan, Rathish; Rainosalu, Egidija; Ramamoorthy, Sunil Kumar; Thomas, Selvin P.; Zavašnik, Janez; Vuorinen, Jyrki; Skrifvars, Mikael.

In: *Journal of Applied Polymer Science*, Vol. 135, No. 36, 46673, 20.09.2018.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Solvothermal synthesis derived Co-Ga codoped ZnO diluted magnetic degenerated semiconductor nanocrystals. / Šutka, Andris; Käämbre, Tanel; Joost, Urmas; Kooser, Kuno; Kook, Mati; Duarte, Roberto Felix; Kisand, Vambola; Maiorov, Mikhael; Döbelin, Nicola; Smits, Krisjanis.

In: *Journal of Alloys and Compounds*, Vol. 763, 30.09.2018, p. 164-172.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Optical properties of GaAs_{1-x}Bi_x/GaAs quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates. / Gunes, M.; Ükelge, M. O.; Donmez, O.; Erol, A.; Gumus, C.; Alghamdi, H.; Galeti, H. V.A.; Henini, M.; Schmidbauer, M.; Hilska, J.; Puustinen, J.; Guina, M.

In: *Semiconductor Science and Technology*, Vol. 33, No. 12, 124015, 13.11.2018.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Reversible photodoping of TiO₂ nanoparticles. / Joost, Urmas; Sutka, Andris; Oja, Marek; Smits, Krisjanis; Doebelin, Nicola; Loot, Ardi; Järvekülg, Martin; Hirsimäki, Mika; Valden, Mika; Nommiste, Ergo.

In: *Chemistry of Materials*, Vol. 30, No. 24, 26.12.2018, p. 8968-8974.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

Design, processing, and characterization of an optical core-bioactive clad phosphate fiber for biomedical applications. / Lopez-Iscoa, Pablo; Ojha, Nirajan; Pugliese, Diego; Mishra, Ayush; Gumenyuk, Regina; Boetti, Nadia Giovanna; Janner, Davide; Troles, Johann; Bureau, Bruno; Boussard-Plédel, Catherine; Massera, Jonathan; Milanese, Daniel; Petit, Laetitia.
In: JOURNAL OF THE AMERICAN CERAMIC SOCIETY, 2019.

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

Flip-chip Wafer-fused OP-VECSELS emitting 3.65 W at the 1.55- μm waveband. / Mereuta, Alexandru; Nechay, Kostiantyn; Caliman, Andrei; Suruceanu, Grigore; Rudra, Alok; Gallo, Pascal; Guina, Mircea; Kapon, Eli.
In: IEEE Journal of Selected Topics in Quantum Electronics, Vol. 25, No. 6, 2019.

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

How well can we predict cluster fragmentation inside a mass spectrometer? / Passananti, Monica; Zapadinsky, Evgeni; Zanca, Tommaso; Kangasluoma, Juha; Myllys, Nanna; Rissanen, Matti P.; Kurtén, Theo; Ehn, Mikael; Attoui, Michel; Vehkamäki, Hanna.

In: Chemical Communications, Vol. 55, No. 42, 2019, p. 5946-5949.

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

Low-dimensional formamidinium lead perovskite architectures via controllable solvent intercalation. / Shin, Mingue; Kim, Joonyun; Jung, Young Kwang; Ruoko, Tero-Petri; Priimagi, Arri; Walsh, Aron; Shin, Byungha.

In: Journal of Materials Chemistry C, Vol. 7, No. 13, 2019, p. 3945-3951.

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

Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting. / Barberi, Jacopo; Nommeots-Nomm, Amy; Fiume, Elisa; Verné, Enrica; Massera, Jonathan; Bairo, Francesco.

In: Biomedical Glasses, Vol. 5, No. 1, 2019, p. 140-147.

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

Process Parameter Impact on Suspension-HVOF-Sprayed Cr_2O_3 Coatings. / Kiilakoski, Jarkko; Trache, Richard; Björklund, Stefan; Joshi, Shrikant; Vuoristo, Petri.

In: Journal of Thermal Spray Technology, 2019.

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

Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy. / Fliervoet, Lies A.L.; Lisitsyna, Ekaterina S.; Durandin, Nikita A.; Kotsis, Ilias; Maas-Bakker, Roel F.M.; Yliperttula, Marjo; Hennink, Wim E.; Vuorimaa-Laukkanen, Elina; Vermonden, Tina.

In: Biomacromolecules, 2019.

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

Temperature scanning stress relaxation behavior of water responsive and mechanically adaptive elastomer nanocomposites. / Banerjee, Shib Shankar; Natarajan, Tamil S.; Subramani B., Eshwaran; Wießner, Sven; Janke, Andreas; Heinrich, Gert; Das, Amit.

In: Journal of Applied Polymer Science, 2019.

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

Characterization of Powder-Precursor HVOF-Sprayed Al_2O_3 -YSZ/ ZrO_2 Coatings. / Kiilakoski, Jarkko; Puranen, Jouni; Heinonen, Esa; Koivuluoto, Heli; Vuoristo, Petri.

In: Journal of Thermal Spray Technology, Vol. 28, No. 1-2, 01.2019, p. 98-107.

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

Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids. / Reyes, Guillermo; Borghei, Maryam; King, Alistair W. T.; Lahti, Johanna; Rojas, Orlando J.

In: Biomacromolecules, Vol. 20, No. 1, 14.01.2019, p. 502-514.

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

Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics : Effect of mineralogical composition on microstructure and properties. / Karhu, Marjaana; Lagerbom, Juha; Solismaa, Soili; Honkanen, Mari; Ismailov, Arnold; Räisänen, Marja Liisa; Huttunen-Saarivirta, Elina; Levänen, Erkki; Kivikytö-Reponen, Päivi.
In: *Ceramics International*, Vol. 45, No. 4, 03.2019, p. 4840-4848.

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

Analysis of GaAsBi growth regimes in high resolution with respect to As/Ga ratio using stationary MBE growth. /

Puustinen, J.; Hilska, J.; Guina, M.

In: *Journal of Crystal Growth*, Vol. 511, 01.04.2019, p. 33-41.

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

Hydrolysis and drug release from poly(ethylene glycol)-modified lactone polymers with open porosity. / Asikainen, Sanja; Paakinaho, Kaarlo; Kyhkynen, Anna Kaisa; Hannula, Markus; Malin, Minna; Ahola, Niina; Kellomäki, Minna; Seppälä, Jukka.

In: *European Polymer Journal*, Vol. 113, 01.04.2019, p. 165-175.

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

Comparison of various high-stress wear conditions and wear performance of martensitic steels. / Valtonen, Kati; Ojala, Niko; Haiko, Oskari; Kuokkala, Veli-Tapani.

In: *Wear*, Vol. 426-427, No. Part A, 30.04.2019, p. 3-13.

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, Petri; Varis, Tommi; Meschini, Damiano; Bolelli, Giovanni; Lusvarghi, Luca.

International Thermal Spray Conference and Exposition, ITSC 2019: New Waves of Thermal Spray Technology for Sustainable Growth. ed. / F. Azarmi; Y. Lau; J. Veilleux; C. Widener; F. Toma; H. Koivuluoto; K. Balani; H. Li; K. Shinoda. ASM International, 2019. p. 923-930 (Proceedings of the International Thermal Spray Conference).

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

Epitaxial phases of high Bi content GaSbBi alloys. / Hilska, Joonas; Koivusalo, Eero; Puustinen, Janne; Suomalainen, Soile; Guina, Mircea.

In: *Journal of Crystal Growth*, Vol. 516, 15.06.2019, p. 67-71.

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.

In: *Wear*, Vol. 428-429, 15.06.2019, p. 430-437.

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, Shib Shankar; Hait, Sakrit; Natarajan, Tamil Selvan; Wießner, Sven; Stöckelhuber, Klaus Werner; Jehnichen, Dieter; Janke, Andreas; Fischer, Dieter; Heinrich, Gert; Busfield, James J.C.; Das, Amit.

In: *Journal of Physical Chemistry B*, Vol. 123, No. 24, 20.06.2019, p. 5168-5175.

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. / Matikainen, V.; Rubio Peregrina, S.; Ojalā, N.; Koivuluoto, H.; Schubert, J.; Houdková, ; Vuoristo, P.

In: *Surface and Coatings Technology*, Vol. 370, 25.07.2019, p. 196-212.

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

Modelling thermodynamics in a high erature superconducting dipole magnet : An inverse problem based approach. /

Ruuskanen, J.; Stenvall, A.; Lahtinen, V.; Nugteren, J. Van; Kirby, G.; Murtomäki, J.

In: *Superconductor Science and Technology*, Vol. 32, No. 9, 094007, 02.08.2019.

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

Characterizing the micro-impact fatigue behavior of APS and HVOF-sprayed ceramic coatings. / Kiilakoski, J.; Langlade, Cécile; Koivuluoto, H.; Vuoristo, P.

In: Surface and Coatings Technology, Vol. 371, 15.08.2019, p. 245-254.
Research output: Contribution to journal > Article > Scientific > peer-review

Fluorine losses in Er³⁺ oxyfluoride phosphate glasses and glass-ceramics. / Szczodra, A.; Mardoukhi, A.; Hokka, M.; Boetti, N. G.; Petit, L.

In: Journal of Alloys and Compounds, Vol. 797, 15.08.2019, p. 797-803.
Research output: Contribution to journal > Article > Scientific > peer-review

Detection of gaseous species during KCl-induced high-temperature corrosion by the means of CPFAAS and CI-API-TOF. / Lehmusto, Juho; Olin, Miska; Viljanen, Jan; Kalliokoski, Joni; Mylläri, Fanni; Toivonen, Juha; Dal Maso, Miikka; Hupa, Leena.

In: Materials and Corrosion, 30.08.2019.
Research output: Contribution to journal > Article > Scientific > peer-review

Antibacterial polymer fibres by rosin compounding and melt-spinning. / Kanerva, M.; Puolakka, A.; Takala, T. M.; Elert, A. M.; Mylläri, V.; Jönkkäri, I.; Sarlin, E.; Seitsonen, J.; Ruokolainen, J.; Saris, P.; Vuorinen, J.

In: Materials Today Communications, Vol. 20, 100527, 09.2019.
Research output: Contribution to journal > Article > Scientific > peer-review

Porous polybutylene succinate films enabling adhesion of human embryonic stem cell-derived retinal pigment epithelial cells (hESC-RPE). / Calejo, M. Teresa; Haapala, Anne; Skottman, Heli; Kellomäki, Minna.

In: European Polymer Journal, Vol. 118, 01.09.2019, p. 78-87.
Research output: Contribution to journal > Article > Scientific > peer-review

First principles prediction of the solar cell efficiency of chalcopyrite materials AgMX₂ (M=In, Al; X=S, Se, Te). / Dongho-Nguimdo, G. M.; Igumbor, Emmanuel; Zambou, Serges; Joubert, Daniel P.

In: Computational Condensed Matter, Vol. 21, e00391, 01.12.2019.
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, Oskari; Valtonen, Kati; Kaijalainen, Antti; Uusikallio, Sampo; Hannula, Jaakko; Liimatainen, Tommi; Kömi, Jukka.

In: Wear, Vol. 440-441, 15.12.2019.
Research output: Contribution to journal > Article > Scientific > peer-review

A bifacial colour-tunable system via combination of a cholesteric liquid crystal network and hydrogel. / Wani, Owies M.; Schenning, Albertus P. H. J.; Priimagi, Arri.

In: Journal of Materials Chemistry C, Vol. 8, No. 30, 2020, p. 10191-10196.
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, Ville; Fuertes, Nuria; Persson, Dan; Zavalis, Tommy; Kaleva, Aaretti; Nikkanen, Juha-Pekka; Levänen, Erkki; Heydari, Golrokh.

In: Materials and Corrosion, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Cold gas spraying of a high-entropy CrFeNiMn equiatomic alloy. / Lehtonen, Joonas; Koivuluoto, Heli; Ge, Yanling; Juselius, Aapo; Hannula, Simo Pekka.

In: Coatings, Vol. 10, No. 1, 53, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Cold-Sprayed Al6061 coatings : Online spray monitoring and influence of process parameters on coating properties. / Koivuluoto, Heli; Larjo, Jussi; Marini, Danilo; Pulci, Giovanni; Marra, Francesco.

In: Coatings, Vol. 10, No. 4, 348, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Compounding and characterization of recycled multilayer plastic films. / Jönkkäri, Ilari; Poliakova, Valeria; Mylläri, Ville; Anderson, Reetta; Andersson, Mirja; Vuorinen, Jyrki.
In: Journal of Applied Polymer Science, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Effect of carbon nanotubes and nanodiamonds on the heat storage ability of natural rubber composites. / Poikelispää, Minna; Honkanen, Mari; Vippola, Minnamari; Sarlin, Essi.
In: Journal of Elastomers and Plastics, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Electronic transport in n-type modulation-doped AlGaAs/GaAsBi quantum well structures : Influence of Bi and thermal annealing on electron effective mass and electron mobility. / Donmez, O.; Aydin, M.; Ardali, Yildirim, S.; Tiraş, E.; Nutku, F.; Cetinkaya, C.; okduygular, E.; Puustinen, J.; Hilska, J.; Guina, M.; Erol, A.
In: Semiconductor Science and Technology, Vol. 35, No. 2, 025009, 2020.
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, Alexandra; Sarlin, Essi; Vuorinen, Jyrki.
In: Journal of Applied Polymer Science, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Evaluation of Residual Stresses and Their Influence on Cavitation Erosion Resistance of High Kinetic HVOF and HVOF-Sprayed WC-CoCr Coatings. / Varis, Tommi; Suhonen, Tomi; Laakso, Jarmo; Jokipii, Mika; Vuoristo, Petri.
In: Journal of Thermal Spray Technology, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Influence of powder properties on residual stresses formed in high-pressure liquid fuel HVOF sprayed WC-CoCr coatings. / Varis, Tommi; Suhonen, Tomi; Jokipii, Mika; Vuoristo, Petri.
In: Surface and Coatings Technology, Vol. 388, 125604, 2020.
Research output: Contribution to journal > Article > Scientific > peer-review

Local Mechanical Properties at the Dendrite Scale of Ni-Based Superalloys Studied by Advanced High Temperature Indentation Creep and Micropillar Compression Tests. / Haußmann, Lukas; Neumeier, Steffen; Kolb, Markus; Ast, Johannes; Mohanty, Gaurav; Michler, Johann; Göken, Mathias.
Superalloys 2020: Proceedings of the 14th International Symposium on Superalloys. ed. / Sammy Tin; Mark Hardy; Justin Clews; Jonathan Cormier; Qiang Feng; John Marcin; Chris O'Brien; Akane Suzuki. Springer, 2020. p. 273-281 (The Minerals, Metals and Materials Series).
Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Mining tailings as a raw material for glass-bonded thermally sprayed ceramic coatings : Microstructure and properties. / Karhu, Marjaana; Lagerbom, Juha; Honkanen, Mari; Huttunen-Saarivirta, Elina; Kiilakoski, Jarkko; Vuoristo, Petri; Solismaa, Soili; Kivikytö-Reponen, Päivi.
In: Journal of the European Ceramic Society, Vol. 40, No. 12, 2020, p. 4111-4121.
Research output: Contribution to journal > Article > Scientific > peer-review

Novel borosilicate bioactive scaffolds with persistent luminescence. / Del Cerro, Paloma Roldán; Teittinen, Henriikka; Norrbo, Isabella; Lastusaari, Mika; Massera, Jonathan; Petit, Laetitia.
In: Biomedical Glasses, Vol. 6, No. 1, 2020, p. 1-9.
Research output: Contribution to journal > Article > Scientific > peer-review

Phase-change material : Natural rubber composites for heat storage applications. / Poikelispää, Minna; Ruokangas, Sasu; Honkanen, Mari; Vippola, Minnamari; Sarlin, Essi.
In: Rubber Chemistry and Technology, Vol. 93, No. 1, 2020, p. 208-221.
Research output: Contribution to journal > Article > Scientific > peer-review

Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures. / Donmez, O.; Aydin, M.; Ardali, Yildirim, S.; Tiraş, E.; Erol, A.; Puustinen, J.; Hilska, J.; Guina, M.

In: Semiconductor Science and Technology, Vol. 35, No. 9, 095038, 2020.

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

Ultrafast Photochemistry of the $[\text{Cr}(\text{NCS})_6]^{3-}$ Complex in Dimethyl Sulfoxide and Dimethylformamide upon Excitation into Ligand-Field Electronic State. / Khvorost, Taras A.; Beliaev, Leonid Yu; Potalueva, Ekaterina; Laptchenkova, Anastasia V.; Selyutin, Artem A.; Bogachev, Nikita A.; Skripkin, Mikhail Yu; Ryazantsev, Mikhail N.; Tkachenko, Nikolai; Mereshchenko, Andrey S.

In: Journal of Physical Chemistry B, Vol. 124, No. 18, 2020, p. 3724-3733.

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

Transparent Yb^{3+} doped phosphate glass-ceramics. / Hongisto, M.; Veber, A.; Boetti, N. G.; Danto, S.; Jubera, V.; Petit, L.

In: Ceramics International, 01.01.2020.

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

Photostable orange-red fluorescent unsymmetrical diketopyrrolopyrrole- BF_2 hybrids. / Young, David C.; Tasiar, Mariusz; Laurent, Adèle D.; Dobrzycki, Łukasz; Cyrański, Michał K.; Tkachenko, Nikolai; Jacquemin, Denis; Gryko, Daniel T.

In: Journal of Materials Chemistry C, Vol. 8, No. 23, 04.2020, p. 7708-7717.

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

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

Tainio, J. M.; Salazar, D. A. Avila; Nommeots-Nomm, A.; Roiland, C.; Bureau, B.; Neuville, D. R.; Brauer, D. S.; Massera, J.

In: Journal of Non-Crystalline Solids, Vol. 533, 119893, 01.04.2020.

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

A study of Cr_3C_2 -based HVOF- and HVOF-sprayed coatings : Abrasion, dry particle erosion and cavitation erosion resistance. / Matkainen, V.; Koivuluoto, H.; Vuoristo, P.

In: Wear, Vol. 446-447, 203188, 15.04.2020.

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

Rotational Diffusion of Membrane Proteins in Crowded Membranes. / Javanainen, Matti; Ollila, O. H. Samuli; Martinez-Seara, Hector.

In: Journal of Physical Chemistry B, Vol. 124, No. 15, 16.04.2020, p. 2994-3001.

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

Additive manufacturing of monolithic supercapacitors with biopolymer separator. / Arvani, Maedeh; Keskinen, Jari; Railanmaa, Anna; Siljander, Sanna; Björkqvist, Tomas; Tuukkanen, Sampo; Lupo, Donald.

In: Journal of Applied Electrochemistry, Vol. 50, No. 6, 01.06.2020, p. 689-697.

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

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

Palola, Sarianna; Vuorinen, Jyrki; Noordermeer, Jacques W.M.; Sarlin, Essi.

In: Coatings, Vol. 10, No. 6, 556, 01.06.2020.

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

Effect of prior austenite grain size on the abrasive wear resistance of ultra-high strength martensitic steels. / Haiko, Oskari; Javaheri, Vahid; Valtonen, Kati; Kaijalainen, Antti; Hannula, Jaakko; Kömi, Jukka.

In: Wear, Vol. 454-455, 203336, 15.08.2020.

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

Characteristics of carbide-free medium-carbon bainitic steels in high-stress abrasive wear conditions. / Haiko, Oskari; Kaikkonen, Pentti; Somani, Mahesh; Valtonen, Kati; Kömi, Jukka.

In: Wear, Vol. 456-457, 203386, 15.09.2020.

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

Effect of heat-treatment on the upconversion of $\text{NaYF}_4:\text{Yb}^{3+}, \text{Er}^{3+}$ nanocrystals containing silver phosphate glass. /

Ojha, N.; Bogdan, M.; Galatus, R.; Petit, L.

In: *Journal of Non-Crystalline Solids*, Vol. 544, 120243, 15.09.2020.

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

Avoiding the initial adhesive friction peak in fretting. / Juoksukangas, Janne; Hintikka, Jouko; Lehtovaara, Arto; Mäntylä, Antti; Vaara, Joonas; Frondelius, Tero.

In: *Wear*, Vol. 460-461, 203353, 15.11.2020.

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

Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection. / Donadei, Valentina; Koivuluoto, Heli; Sarlin, Essi; Vuoristo, Petri.

In: *Surface and Coatings Technology*, Vol. 403, 126396, 15.12.2020.

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