

- Donadei V, Koivuluoto H, Sarlin E, Vuoristo P. 2020. Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection. *Surface and Coatings Technology*. 403. <https://doi.org/10.1016/j.surfcoat.2020.126396>
- Juoksukangas J, Hintikka J, Lehtovaara A, Mäntylä A, Vaara J, Frondelius T. 2020. Avoiding the initial adhesive friction peak in fretting. *Wear*. 460-461. <https://doi.org/10.1016/j.wear.2020.203353>
- Haiko O, Kaikkonen P, Somani M, Valtonen K, Kömi J. 2020. Characteristics of carbide-free medium-carbon bainitic steels in high-stress abrasive wear conditions. *Wear*. 456-457. <https://doi.org/10.1016/j.wear.2020.203386>
- Ojha N, Bogdan M, Galatus R, Petit L. 2020. Effect of heat-treatment on the upconversion of  $\text{NaYF}_4:\text{Yb}^{3+}, \text{Er}^{3+}$  nanocrystals containing silver phosphate glass. *Journal of Non-Crystalline Solids*. 544. <https://doi.org/10.1016/j.jnoncrysol.2020.120243>
- Haiko O, Javaheri V, Valtonen K, Kaijalainen A, Hannula J, Kömi J. 2020. Effect of prior austenite grain size on the abrasive wear resistance of ultra-high strength martensitic steels. *Wear*. 454-455. <https://doi.org/10.1016/j.wear.2020.203336>
- Arvani M, Keskinen J, Railanmaa A, Siljander S, Björkqvist T, Tuukkanen S, Lupo D. 2020. Additive manufacturing of monolithic supercapacitors with biopolymer separator. *Journal of Applied Electrochemistry*. 50(6):689-697. <https://doi.org/10.1007/s10800-020-01423-2>
- Palola S, Vuorinen J, Noordermeer JWM, Sarlin E. 2020. Development in additive methods in aramid fiber surface modification to increase fiber-matrix adhesion: A review. *Coatings*. 10(6). <https://doi.org/10.3390/COATINGS10060556>
- Javanainen M, Ollila OHS, Martinez-Seara H. 2020. Rotational Diffusion of Membrane Proteins in Crowded Membranes. *Journal of Physical Chemistry B*. 124(15):2994-3001. <https://doi.org/10.1021/acs.jpcc.0c00884>
- Matikainen V, Koivuluoto H, Vuoristo P. 2020. A study of  $\text{Cr}_3\text{C}_2$ -based HVOF- and HVOF-sprayed coatings: Abrasion, dry particle erosion and cavitation erosion resistance. *Wear*. 446-447. <https://doi.org/10.1016/j.wear.2020.203188>
- Tainio JM, Salazar DAA, Nommeots-Nomm A, Roiland C, Bureau B, Neuville DR, Brauer DS, Massera J. 2020. Structure and in vitro dissolution of Mg and Sr containing borosilicate bioactive glasses for bone tissue engineering. *Journal of Non-Crystalline Solids*. 533. <https://doi.org/10.1016/j.jnoncrysol.2020.119893>
- Young DC, Tasior M, Laurent AD, Dobrzycki Ł, Cyrański MK, Tkachenko N, Jacquemin D, Gryko DT. 2020. Photostable orange-red fluorescent unsymmetrical diketopyrrolopyrrole-BF<sub>2</sub> hybrids. *Journal of Materials Chemistry C*. 8(23):7708-7717. <https://doi.org/10.1039/d0tc01202e>
- Hongisto M, Veber A, Boetti NG, Danto S, Jubera V, Petit L. 2020. Transparent  $\text{Yb}^{3+}$  doped phosphate glass-ceramics. *Ceramics International*. <https://doi.org/10.1016/j.ceramint.2020.01.121>
- Wani OM, Schenning APHJ, Priimagi A. 2020. A bifacial colour-tunable system via combination of a cholesteric liquid crystal network and hydrogel. *Journal of Materials Chemistry C*. 8(30):10191-10196. <https://doi.org/10.1039/d0tc02189j>
- Saarimaa V, Fuertes N, Persson D, Zavalis T, Kaleva A, Nikkanen J-P, Levänen E, Heydari G. 2020. Assessment of pitting corrosion in bare and passivated (wet  $\text{scCO}_2$ -induced patination and chemical passivation) hot-dip galvanized steel samples with SVET, FTIR, and SEM (EDS). *Materials and Corrosion*. <https://doi.org/10.1002/maco.202011653>
- Lehtonen J, Koivuluoto H, Ge Y, Juselius A, Hannula SP. 2020. Cold gas spraying of a high-entropy CrFeNiMn equiatomic alloy. *Coatings*. 10(1). <https://doi.org/10.3390/coatings10010053>
- Koivuluoto H, Larjo J, Marini D, Pulci G, Marra F. 2020. Cold-Sprayed Al6061 coatings: Online spray monitoring and influence of process parameters on coating properties. *Coatings*. 10(4). <https://doi.org/10.3390/coatings10040348>

- Jönkkäri I, Poliakova V, Mylläri V, Anderson R, Andersson M, Vuorinen J. 2020. Compounding and characterization of recycled multilayer plastic films. *Journal of Applied Polymer Science*. <https://doi.org/10.1002/app.49101>
- Poikelispää M, Honkanen M, Vippola M, Sarlin E. 2020. Effect of carbon nanotubes and nanodiamonds on the heat storage ability of natural rubber composites. *Journal of Elastomers and Plastics*. <https://doi.org/10.1177/0095244320933977>
- Donmez O, Aydin M, Ardali, Yildirim S, Tiraş E, Nutku F, Cetinkaya C, okduygular E, Puustinen J, Hilska J, Guina M, Erol A. 2020. 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. *Semiconductor Science and Technology*. 35(2). <https://doi.org/10.1088/1361-6641/ab5d8d>
- Shakun A, Sarlin E, Vuorinen J. 2020. Energy dissipation in natural rubber latex films: The effect of stabilizers, leaching and acetone-treatment. *Journal of Applied Polymer Science*. <https://doi.org/10.1002/app.49609>
- Varis T, Suhonen T, Laakso J, Jokipii M, Vuoristo P. 2020. Evaluation of Residual Stresses and Their Influence on Cavitation Erosion Resistance of High Kinetic HVOF and HVAF-Sprayed WC-CoCr Coatings. *Journal of Thermal Spray Technology*. <https://doi.org/10.1007/s11666-020-01037-2>
- Varis T, Suhonen T, Jokipii M, Vuoristo P. 2020. Influence of powder properties on residual stresses formed in high-pressure liquid fuel HVOF sprayed WC-CoCr coatings. *Surface and Coatings Technology*. 388. <https://doi.org/10.1016/j.surfcoat.2020.125604>
- Karhu M, Lagerbom J, Honkanen M, Huttunen-Saarivirta E, Kiilakoski J, Vuoristo P, Solismaa S, Kivikytö-Reponen P. 2020. Mining tailings as a raw material for glass-bonded thermally sprayed ceramic coatings: Microstructure and properties. *Journal of the European Ceramic Society*. 40(12):4111-4121. <https://doi.org/10.1016/j.jeurceramsoc.2020.04.038>
- Del Cerro PR, Teittinen H, Norrbo I, Lastusaari M, Massera J, Petit L. 2020. Novel borosilicate bioactive scaffolds with persistent luminescence. *Biomedical Glasses*. 6(1):1-9. <https://doi.org/10.1515/bglass-2020-0001>
- Poikelispää M, Ruokangas S, Honkanen M, Vippola M, Sarlin E. 2020. Phase-change material: Natural rubber composites for heat storage applications. *Rubber Chemistry and Technology*. 93(1):208-221. <https://doi.org/10.5254/rct.19.81468>
- Donmez O, Aydin M, Ardali, Yildirim S, Tiraş E, Erol A, Puustinen J, Hilska J, Guina M. 2020. Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures. *Semiconductor Science and Technology*. 35(9). <https://doi.org/10.1088/1361-6641/ab94d9>
- Khvorost TA, Beliaev LY, Potalueva E, Laptenkova AV, Selyutin AA, Bogachev NA, Skripkin MY, Ryazantsev MN, Tkachenko N, Mereshchenko AS. 2020. Ultrafast Photochemistry of the  $[\text{Cr}(\text{NCS})_6]^{3-}$  Complex in Dimethyl Sulfoxide and Dimethylformamide upon Excitation into Ligand-Field Electronic State. *Journal of Physical Chemistry B*. 124(18):3724-3733. <https://doi.org/10.1021/acs.jpcc.0c00088>
- Haiko O, Valtonen K, Kaijalainen A, Uusikallio S, Hannula J, Liimatainen T, Kömi J. 2019. Effect of tempering on the impact-abrasive and abrasive wear resistance of ultra-high strength steels. *Wear*. 440-441. <https://doi.org/10.1016/j.wear.2019.203098>
- Dongho-Nguimdo GM, Igumbor E, Zambou S, Joubert DP. 2019. First principles prediction of the solar cell efficiency of chalcopyrite materials  $\text{AgMX}_2$  (M=In, Al; X=S, Se, Te). *Computational Condensed Matter*. 21. <https://doi.org/10.1016/j.cocom.2019.e00391>
- Calejo MT, Haapala A, Skottman H, Kellomäki M. 2019. Porous polybutylene succinate films enabling adhesion of human embryonic stem cell-derived retinal pigment epithelial cells (hESC-RPE). *European Polymer Journal*. 118:78-87. <https://doi.org/10.1016/j.eurpolymj.2019.05.041>

Kanerva M, Puolakka A, Takala TM, Elert AM, Mylläri V, Jönkkäri I, Sarlin E, Seitsonen J, Ruokolainen J, Saris P, Vuorinen J. 2019. Antibacterial polymer fibres by rosin compounding and melt-spinning. *Materials Today Communications* . 20. <https://doi.org/10.1016/j.mtcomm.2019.05.003>

Lehmusto J, Olin M, Viljanen J, Kalliokoski J, Mylläri F, Toivonen J, Dal Maso M, Hupa L. 2019. Detection of gaseous species during KCl-induced high-temperature corrosion by the means of CPFAAS and CI-API-TOF. *Materials and Corrosion*. <https://doi.org/10.1002/maco.201910964>

Kiilakoski J, Langlade C, Koivuluoto H, Vuoristo P. 2019. Characterizing the micro-impact fatigue behavior of APS and HVOF-sprayed ceramic coatings. *Surface and Coatings Technology*. 371:245-254. <https://doi.org/10.1016/j.surfcoat.2018.10.097>

Szczodra A, Mardoukhi A, Hokka M, Boetti NG, Petit L. 2019. Fluorine losses in  $\text{Er}^{3+}$  oxyfluoride phosphate glasses and glass-ceramics. *Journal of Alloys and Compounds*. 797:797-803. <https://doi.org/10.1016/j.jallcom.2019.05.151>

Ruuskanen J, Stenvall A, Lahtinen V, Nugteren JV, Kirby G, Murtomäki J. 2019. Modelling thermodynamics in a high erature superconducting dipole magnet: An inverse problem based approach. *Superconductor Science and Technology*. 32(9). <https://doi.org/10.1088/1361-6668/ab2bc9>

Matikainen V, Rubio Peregrina S, Ojala N, Koivuluoto H, Schubert J, Houdková , Vuoristo P. 2019. Erosion wear performance of WC-10Co4Cr and  $\text{Cr}_3\text{C}_2$ -25NiCr coatings sprayed with high-velocity thermal spray processes. *Surface and Coatings Technology*. 370:196-212. <https://doi.org/10.1016/j.surfcoat.2019.04.067>

Banerjee SS, Hait S, Natarajan TS, Wießner S, Stöckelhuber KW, Jehnichen D, Janke A, Fischer D, Heinrich G, Busfield JJC, Das A. 2019. Water-Responsive and Mechanically Adaptive Natural Rubber Composites by in Situ Modification of Mineral Filler Structures. *Journal of Physical Chemistry B*. 123(24):5168-5175. <https://doi.org/10.1021/acs.jpcc.9b02125>

Hilksa J, Koivusalo E, Puustinen J, Suomalainen S, Guina M. 2019. Epitaxial phases of high Bi content GaSbBi alloys. *Journal of Crystal Growth*. 516:67-71. <https://doi.org/10.1016/j.jcrysgro.2019.03.028>

Chintha AR, Valtonen K, Kuokkala VT, Kundu S, Peet MJ, Bhadeshia HKDH. 2019. Role of fracture toughness in impact-abrasion wear. *Wear*. 428-429:430-437. <https://doi.org/10.1016/j.wear.2019.03.028>

Vuoristo P, Varis T, Meschini D, Bolelli G, Lusvarghi L. 2019. Corrosion properties of thermally sprayed bond coatings under plasma sprayed chromia coating in sulfuric acid solutions. Azarmi F, Lau Y, Veilleux J, Widener C, Toma F, Koivuluoto H, Balani K, Li H, Shinoda K, editors. In *International Thermal Spray Conference and Exposition, ITSC 2019: New Waves of Thermal Spray Technology for Sustainable Growth*. ASM International. pp. 923-930. (Proceedings of the International Thermal Spray Conference).

Valtonen K, Ojala N, Haiko O, Kuokkala V-T. 2019. Comparison of various high-stress wear conditions and wear performance of martensitic steels. *Wear*. 426-427(Part A):3-13. <https://doi.org/10.1016/j.wear.2018.12.006>

Puustinen J, Hilksa J, Guina M. 2019. Analysis of GaAsBi growth regimes in high resolution with respect to As/Ga ratio using stationary MBE growth. *Journal of Crystal Growth*. 511:33-41. <https://doi.org/10.1016/j.jcrysgro.2019.01.010>

Asikainen S, Paakinaho K, Kyhkynen AK, Hannula M, Malin M, Ahola N, Kellomäki M, Seppälä J. 2019. Hydrolysis and drug release from poly(ethylene glycol)-modified lactone polymers with open porosity. *European Polymer Journal*. 113:165-175. <https://doi.org/10.1016/j.eurpolymj.2019.01.056>

Karhu M, Lagerbom J, Solismaa S, Honkanen M, Ismailov A, Räisänen ML, Huttunen-Saarivirta E, Levänen E, Kivikytö-Reponen P. 2019. Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics: Effect of mineralogical composition on microstructure and properties. *Ceramics International*. 45(4):4840-4848. <https://doi.org/10.1016/j.ceramint.2018.11.180>

Reyes G, Borghei M, King AWT, Lahti J, Rojas OJ. 2019. Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids. *Biomacromolecules*. 20(1):502-514. <https://doi.org/10.1021/acs.biomac.8b01554>

Kiilakoski J, Puranen J, Heinonen E, Koivuluoto H, Vuoristo P. 2019. Characterization of Powder-Precursor HVOF-Sprayed Al<sub>2</sub>O<sub>3</sub>-YSZ/ZrO<sub>2</sub> Coatings. *Journal of Thermal Spray Technology*. 28(1-2):98-107. <https://doi.org/10.1007/s11666-018-0816-x>

Lopez-Iscoa P, Ojha N, Pugliese D, Mishra A, Gumenyuk R, Boetti NG, Janner D, Troles J, Bureau B, Boussard-Plédel C, Massera J, Milanese D, Petit L. 2019. Design, processing, and characterization of an optical core-bioactive clad phosphate fiber for biomedical applications. *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*. <https://doi.org/10.1111/jace.16553>

Mereuta A, Nechay K, Caliman A, Suruceanu G, Rudra A, Gallo P, Guina M, Kapon E. 2019. Flip-chip Wafer-fused OP-VECSELS emitting 3.65 W at the 1.55- $\mu$ m waveband. *IEEE Journal of Selected Topics in Quantum Electronics*. 25(6). <https://doi.org/10.1109/JSTQE.2019.2922819>

Passananti M, Zapadinsky E, Zanca T, Kangasluoma J, Mylly N, Rissanen MP, Kurtén T, Ehn M, Attoui M, Vehkamäki H. 2019. How well can we predict cluster fragmentation inside a mass spectrometer?. *Chemical Communications*. 55(42):5946-5949. <https://doi.org/10.1039/c9cc02896j>

Shin M, Kim J, Jung YK, Ruoko T-P, Priimagi A, Walsh A, Shin B. 2019. Low-dimensional formamidinium lead perovskite architectures via controllable solvent intercalation. *Journal of Materials Chemistry C*. 7(13):3945-3951. <https://doi.org/10.1039/c9tc00379g>

Barberi J, Nommets-Nomm A, Fiume E, Verné E, Massera J, Baino F. 2019. Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting. *Biomedical Glasses*. 5(1):140-147. <https://doi.org/10.1515/bglass-2019-0012>

Kiilakoski J, Trache R, Björklund S, Joshi S, Vuoristo P. 2019. Process Parameter Impact on Suspension-HVOF-Sprayed Cr<sub>2</sub>O<sub>3</sub> Coatings. *Journal of Thermal Spray Technology*. <https://doi.org/10.1007/s11666-019-00940-7>

Fliervoet LAL, Lisitsyna ES, Durandin NA, Kotsis I, Maas-Bakker RFM, Yliperttula M, Hennink WE, Vuorimaa-Laukkanen E, Vermonden T. 2019. Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy. *Biomacromolecules*. <https://doi.org/10.1021/acs.biomac.9b00896>

Banerjee SS, Natarajan TS, Subramani B. E, Wießner S, Janke A, Heinrich G, Das A. 2019. Temperature scanning stress relaxation behavior of water responsive and mechanically adaptive elastomer nanocomposites. *Journal of Applied Polymer Science*. <https://doi.org/10.1002/app.48344>

Joost U, Sutka A, Oja M, Smits K, Doebelin N, Loot A, Järvekülg M, Hirsimäki M, Valden M, Nommiste E. 2018. Reversible photodoping of TiO<sub>2</sub> nanoparticles. *Chemistry of Materials*. 30(24):8968-8974. <https://doi.org/10.1021/acs.chemmater.8b04813>

Gunes M, Ukelge MO, Donmez O, Erol A, Gumus C, Alghamdi H, Galeti HVA, Henini M, Schmidbauer M, Hilska J, Puustinen J, Guina M. 2018. Optical properties of GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates. *Semiconductor Science and Technology*. 33(12). <https://doi.org/10.1088/1361-6641/aaea2e>

Šutka A, Käämbre T, Joost U, Kooser K, Kook M, Duarte RF, Kisand V, Maiorov M, Döbelin N, Smits K. 2018. Solvothermal synthesis derived Co-Ga codoped ZnO diluted magnetic degenerated semiconductor nanocrystals. *Journal of Alloys and Compounds*. 763:164-172. <https://doi.org/10.1016/j.jallcom.2018.05.036>

- Rajan R, Rainosalto E, Ramamoorthy SK, Thomas SP, Zavašnik J, Vuorinen J, Skrifvars M. 2018. Mechanical, thermal, and burning properties of viscose fabric composites: Influence of epoxy resin modification. *Journal of Applied Polymer Science*. 135(36). <https://doi.org/10.1002/app.46673>
- Bomberg M, Miettinen H, Wahlström M, Kaartinen T, Ahoranta S, Lakaniemi A-M, Kinnunen P. 2018. Post operation inactivation of acidophilic bioleaching microorganisms using natural chloride-rich mine water. *Hydrometallurgy*. 180:236-245. <https://doi.org/10.1016/j.hydromet.2018.06.013>
- Kaksonen AH, Boxall NJ, Gumulya Y, Khaleque HN, Morris C, Bohu T, Cheng KY, Usher KM, Lakaniemi A-M. 2018. Recent progress in biohydrometallurgy and microbial characterisation. *Hydrometallurgy*. 180:7-25. <https://doi.org/10.1016/j.hydromet.2018.06.018>
- Cemlyn B, Adams M, Harbord E, Li N, Henning ID, Oulton R, Korpijärvi VM, Guina M. 2018. Near-threshold high spin amplification in a 1300 nm GaInNAs spin laser. *Semiconductor Science and Technology*. 33(9). <https://doi.org/10.1088/1361-6641/aad42e>
- Prando GA, Orsi Gordo V, Puustinen J, Hilska J, Alghamdi HM, Som G, Gunes M, Akyol M, Souto S, Rodrigues AD, Galeti HVA, Henini M, Gobato YG, Guina M. 2018. Exciton localization and structural disorder of GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum wells grown by molecular beam epitaxy on (311)B GaAs substrates. *Semiconductor Science and Technology*. 33(8). <https://doi.org/10.1088/1361-6641/aad02e>
- Nommeots-Nomm A, Boetti NG, Salminen T, Massera J, Hokka M, Petit L. 2018. Luminescence of Er<sup>3+</sup> doped oxyfluoride phosphate glasses and glass-ceramics. *Journal of Alloys and Compounds*. 751:224-230. <https://doi.org/10.1016/j.jallcom.2018.04.101>
- Kaunisto K, Kotilainen M, Karhu M, Lagerbom J, Vuorinen T, Honkanen M, Vippola M, Turunen E. 2018. The effect of carbon and nickel additions on the precursor synthesis of Cr<sub>3</sub>C<sub>2</sub>-Ni nanopowder. *Ceramics International*. 44(8):9338-9346. <https://doi.org/10.1016/j.ceramint.2018.02.146>
- Ojha N, Laihinne T, Salminen T, Lastusaari M, Petit L. 2018. Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics. *Ceramics International*. 44(10):11807-11811. <https://doi.org/10.1016/j.ceramint.2018.03.267>
- Goyos-Ball L, Prado C, Díaz R, Fernández E, Ismailov A, Kumpulainen T, Levänen E, Torrecillas R, Fernández A. 2018. The effects of laser patterning 10CeTzP-Al<sub>2</sub>O<sub>3</sub> nanocomposite disc surfaces: Osseous differentiation and cellular arrangement in vitro. *Ceramics International*. 44(8):9472-9478. <https://doi.org/10.1016/j.ceramint.2018.02.164>
- Sarcan F, Mutlu S, Cokduygulular E, Donmez O, Erol A, Puustinen J, Guina M. 2018. A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field. *Semiconductor Science and Technology*. 33(6). <https://doi.org/10.1088/1361-6641/aabc39>
- Melcr J, Martinez-Seara H, Nencini R, Kolafa J, Jungwirth P, Ollila OHS. 2018. Accurate Binding of Sodium and Calcium to a POPC Bilayer by Effective Inclusion of Electronic Polarization. *Journal of Physical Chemistry B*. 122(16):4546-4557. <https://doi.org/10.1021/acs.jpcc.7b12510>
- Nugteren JV, Kirby G, Bajas H, Bajko M, Ballarino A, Bottura L, Chiuchiolo A, Contat PA, Dhallé M, Durante M, Fazilleau P, Fontalva A, Gao P, Goldacker W, Kate HT, Kario A, Lahtinen V, Lorin C, Markelov A, Mazet J, Molodyk A, Murtomäki J, Long N, Perez J, Petrone C, Pincot F, Rijk GD, Rossi L, Russenschuck S, Ruuskanen J, Schmitz K, Stenvall A, Usoskin A, Willering G, Yang Y. 2018. Powering of an HTS dipole insert-magnet operated standalone in helium gas between 5 and 85 K. *Superconductor Science and Technology*. 31(6). <https://doi.org/10.1088/1361-6668/aab887>
- Magarkar A, Parkkila P, Viitala T, Lajunen T, Mobarak E, Licari G, Cramariuc O, Vauthey E, Róg T, Bunker A. 2018. Membrane bound COMT isoform is an interfacial enzyme: General mechanism and new drug design paradigm. *Chemical Communications*. 54(28):3440-3443. <https://doi.org/10.1039/c8cc00221e>

Matikainen V, Koivuluoto H, Vuoristo P, Schubert J, Houdková. 2018. Effect of nozzle geometry on the microstructure and properties of hvaf-sprayed wc-10co4cr and cr3c2-25nicr coatings. *Journal of Thermal Spray Technology*. 27(4):680-694. <https://doi.org/10.1007/s11666-018-0717-z>

Sassatelli P, Bolelli G, Lassinantti Gualtieri M, Heinonen E, Honkanen M, Lusvarghi L, Manfredini T, Rigon R, Vippola M. 2018. Properties of HVOF-sprayed Stellite-6 coatings. *Surface and Coatings Technology*. 338:45-62. <https://doi.org/10.1016/j.surfcoat.2018.01.078>

Poutanen M, Ahmed Z, Rautkari L, Ikkala O, Priimägi A. 2018. Thermal Isomerization of Hydroxyazobenzenes as a Platform for Vapor Sensing. *ACS Macro Letters*. 7(3):381-386. <https://doi.org/10.1021/acsmacrolett.8b00093>

Janka L, Berger LM, Norpoth J, Trache R, Thiele S, Tomastik C, Matikainen V, Vuoristo P. 2018. Improving the high temperature abrasion resistance of thermally sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr coatings by WC addition. *Surface and Coatings Technology*. 337:296-305. <https://doi.org/10.1016/j.surfcoat.2018.01.035>

Bhagavatheswaran ES, Vaikuntam SR, Stöckelhuber KW, Wießner S, Heinrich G, Das A. 2018. High-performance elastomeric strain sensors based on nanostructured carbon fillers for potential tire applications. *Materials Today Communications*. 14:240-248. <https://doi.org/10.1016/j.mtcomm.2018.01.013>

Karvinen J, Joki T, Ylä-Outinen L, Koivisto JT, Narkilahti S, Kellomäki M. 2018. Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells. *Reactive and Functional Polymers*. 124:29-39. <https://doi.org/10.1016/j.reactfunctpolym.2017.12.019>

Hannula M, Ali-Löytty H, Lahtonen K, Sarlin E, Saari J, Valden M. 2018. Improved Stability of Atomic Layer Deposited Amorphous TiO<sub>2</sub> Photoelectrode Coatings by Thermally Induced Oxygen Defects. *Chemistry of Materials*. 30(4):1199-1208. <https://doi.org/10.1021/acs.chemmater.7b02938>

Vaikuntam SR, Stöckelhuber KW, Subramani Bhagavatheswaran E, Wießner S, Scheler U, Saalwächter K, Formanek P, Heinrich G, Das A. 2018. Entrapped Styrene Butadiene Polymer Chains by Sol-Gel-Derived Silica Nanoparticles with Hierarchical Raspberry Structures. *Journal of Physical Chemistry B*. 122(6):2010-2022. <https://doi.org/10.1021/acs.jpcc.7b11792>

Yury K, Filippov M, Makarov A, Malygina I, Soboleva N, Fantozzi D, Andrea M, Koivuluoto H, Vuoristo P. 2018. Arc-sprayed Fe-based coatings from coredwires for wear and corrosion protection in power engineering. *Coatings*. 8(2). <https://doi.org/10.3390/coatings8020071>

Saccone M, Kuntze K, Ahmed Z, Siiskonen A, Giese M, Priimagi A. 2018. Ortho-Fluorination of azophenols increases the mesophase stability of photoresponsive hydrogen-bonded liquid crystals. *Journal of Materials Chemistry C*. 6(37):9958-9963. <https://doi.org/10.1039/c8tc02611d>

Suokas E, Kuusipalo J. 2018. Process time importance in the product properties evolution during extrusion coating of different LDPE grades. In 15th TAPPI Advanced Coating Fundamentals Symposium 2018: Charlotte; United States; 14 April 2018 through 15 April 2018. TAPPI Press. pp. 151-159.

Glorieux B, Salminen T, Massera J, Laštusaari M, Petit L. 2018. Better understanding of the role of SiO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub> and Al<sub>2</sub>O<sub>3</sub> on the spectroscopic properties of Yb<sup>3+</sup> doped silica sol-gel glasses. *Journal of Non-Crystalline Solids*. 482:46-51. <https://doi.org/10.1016/j.jnoncrysol.2017.12.021>

Saarimaa V, Kaleva A, Paunikallio T, Nikkanen J-P, Heinonen S, Levänen E, Väisänen P, Markkula A. 2018. Convenient extraction method for quantification of thin zinc patina layers. *Surface and Interface Analysis*. 50(5):564-570. <https://doi.org/10.1002/sia.6429>

- Durandin NA, Isokuortti J, Efimov A, Vuorimaa-Laukkanen E, Tkachenko NV, Laaksonen T. 2018. Efficient photon upconversion at remarkably low annihilator concentrations in a liquid polymer matrix: when less is more. *Chemical Communications*. 54(99):14029-14032. <https://doi.org/10.1039/c8cc07592a>
- Kiilakoski J, Musalek R, Lukac F, Koivuluoto H, Vuoristo P. 2018. Evaluating the toughness of APS and HVOF-sprayed Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub>-coatings by in-situ- and macroscopic bending. *Journal of the European Ceramic Society*. 38(4):1908-1918. <https://doi.org/10.1016/j.jeurceramsoc.2017.11.056>
- Shakun A, Poikelispää M, Das A, Vuorinen J. 2018. Improved electromechanical response in acrylic rubber by different carbon-based fillers. *Polymer Engineering and Science*. 58(3):395-404. <https://doi.org/10.1002/pen.24586>
- Rajan R, Rainosalo E, Thomas SP, Ramamoorthy SK, Zavašnik J, Vuorinen J, Skrifvars M. 2018. Modification of epoxy resin by silane-coupling agent to improve tensile properties of viscose fabric composites. *Polymer Bulletin*. 75(1):167-195. <https://doi.org/10.1007/s00289-017-2022-2>
- Koivuluoto H, Matikainen V, Larjo J, Vuoristo P. 2018. Novel Online Diagnostic Analysis for In-Flight Particle Properties in Cold Spraying. *Journal of Thermal Spray Technology*. 27(3):423-432. <https://doi.org/10.1007/s11666-018-0685-3>
- Saarinen M, Nommeots-Nomm A, Hokka M, Laurila J, Norrbo I, Lastusaari M, Massera J, Petit L. 2018. Persistent luminescent particles containing bioactive glasses: Prospect toward tracking in-vivo implant mineralization using biophotonic ceramics. *Journal of the European Ceramic Society*. 38(1):287-295. <https://doi.org/10.1016/j.jeurceramsoc.2017.08.024>
- Sulonen MLK, Kokko ME, Lakaniemi A-M, Puhakka JA. 2018. Simultaneous removal of tetrathionate and copper from simulated acidic mining water in bioelectrochemical and electrochemical systems. *Hydrometallurgy*. 176:129-138. <https://doi.org/10.1016/j.hydromet.2018.01.023>
- Alekseev A, Ihalainen P, Ivanov A, Domnin I, Rosqvist E, Lemmetyinen H, Vuorimaa-Laukkanen E, Peltonen J, Vyaz'min S. 2018. Stable blue phase polymeric Langmuir-Schaefer films based on unsymmetrical hydroxyalkadiynyl N-arylcarbamate derivatives. *Thin Solid Films*. 645:108-118. <https://doi.org/10.1016/j.tsf.2017.10.018>
- Vapaavuori J, Bazuin CG, Priimagi A. 2018. Supramolecular design principles for efficient photoresponsive polymer-azobenzene complexes. *Journal of Materials Chemistry C*. 6(9):2168-2188. <https://doi.org/10.1039/c7tc05005d>
- Bolelli G, Bursi M, Lusvarghi L, Manfredini T, Matikainen V, Rigon R, Sassatelli P, Vuoristo P. 2018. Tribology of FeVCrC coatings deposited by HVOF and HVOF thermal spray processes. *Wear*. 394-395:113-133. <https://doi.org/10.1016/j.wear.2017.10.014>
- Saarimaa V, Kaleva A, Nikkanen J-P, Heinonen S, Levänen E, Väisänen P, Markkula A, Juhanoja J. 2017. Supercritical carbon dioxide treatment of hot dip galvanized steel as a surface treatment before coating. *Surface and Coatings Technology*. 331:137-142. <https://doi.org/10.1016/j.surfcoat.2017.10.047>
- Lisitsyna ES, Ketola T-M, Morin-Picardat E, Liang H, Hanzlíková M, Urtti A, Yliperttula M, Vuorimaa-Laukkanen E. 2017. Time-Resolved Fluorescence Spectroscopy Reveals Fine Structure and Dynamics of Poly(L-lysine) and Polyethylenimine Based DNA Polyplexes. *Journal of Physical Chemistry B*. 121(48):10782-10792. <https://doi.org/10.1021/acs.jpcc.7b08394>
- Christophliemk H, Johansson C, Ullsten H, Järnström L. 2017. Oxygen and water vapor transmission rates of starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper. *Progress in Organic Coatings*. 113:218-224. <https://doi.org/10.1016/j.porgcoat.2017.04.019>
- Santangelo PE, Allesina G, Bolelli G, Lusvarghi L, Matikainen V, Vuoristo P. 2017. Infrared Thermography as a Non-destructive Testing Solution for Thermal Spray Metal Coatings. *Journal of Thermal Spray Technology*. 26(8):1982-1993. <https://doi.org/10.1007/s11666-017-0642-6>

Sarlin E, Saarimäki M, Sironen R, Lindgren M, Siljander S, Kanerva M, Vuorinen J. 2017. Erosive wear of filled vinylester composites in water and acidic media at elevated temperature. *Wear*. 390-391:84-92. <https://doi.org/10.1016/j.wear.2017.07.011>

Välimäki H, Verho J, Kreutzer J, Kattippambil Rajan D, Ryyänen T, Pekkanen-Mattila M, Ahola A, Tappura K, Kallio P, Lekkala J. 2017. Fluorimetric oxygen sensor with an efficient optical read-out for in vitro cell models. *Sensors and Actuators B: Chemical*. 249:738-746. <https://doi.org/10.1016/j.snb.2017.04.182>

Christophliemk H, Ullsten H, Johansson C, Järnström L. 2017. Starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper and their effects of phase interactions. *Progress in Organic Coatings*. 111:13-22. <https://doi.org/10.1016/j.porgcoat.2017.04.018>

Heinonen S, Nikkanen J-P, Huttunen-Saarivirta E, Levänen E. 2017. Investigation of long-term chemical stability of structured ZnO films in aqueous solutions of varying conditions. *Thin Solid Films*. 638:410-419. <https://doi.org/10.1016/j.tsf.2017.07.055>

Isakov M, Matikainen V, Koivuluoto H, May M. 2017. Systematic analysis of coating-substrate interactions in the presence of flow localization. *Surface and Coatings Technology*. 324:264-280. <https://doi.org/10.1016/j.surfcoat.2017.05.040>

Tkalich D, Li CC, Kane A, Saai A, Tkalich D, Yastrebov VA, Hokka M, Kuokkala V-T, Bengtsson M, From A. 2017. Wear of cemented tungsten carbide percussive drill-bit inserts: Laboratory and field study. *Wear*. 386-387:106-117. <https://doi.org/10.1016/j.wear.2017.05.010>

Matikainen V, Bolelli G, Koivuluoto H, Honkanen M, Vippola M, Lusvarghi L, Vuoristo P. 2017. A Study of Cr<sub>3</sub>C<sub>2</sub>-Based HVOF- and HVOF-Sprayed Coatings: Microstructure and Carbide Retention. *Journal of Thermal Spray Technology*. 26(6):1-18. <https://doi.org/10.1007/s11666-017-0578-x>

Rahaman O, Kalimeri M, Katava M, Paciaroni A, Sterpone F. 2017. Configurational Disorder of Water Hydrogen-Bond Network at the Protein Dynamical Transition. *Journal of Physical Chemistry Part B*. 121(28):6792-6798. <https://doi.org/10.1021/acs.jpcc.7b03888>

Poikelispää M, Shakun A, Sarlin E, Das A, Vuorinen J. 2017. Vegetable fillers for electric stimuli responsive elastomers. *Journal of Applied Polymer Science*. 134(28). <https://doi.org/10.1002/app.45081>

Mentink M, Salmi T. 2017. Quench absorption coils: A quench protection concept for high-field superconducting accelerator magnets. *Superconductor Science and Technology*. 30(6). <https://doi.org/10.1088/1361-6668/aa6678>

Saccone M, Siiskonen A, Fernandez-Palacio F, Priimägi A, Terraneo G, Resnati G, Metrangolo P. 2017. Halogen bonding stabilizes a cis-azobenzene derivative in the solid state: A crystallographic study. *ACTA CRYSTALLOGRAPHICA SECTION B: STRUCTURAL SCIENCE, CRYSTAL ENGINEERING AND MATERIALS*. 73(2):227-233. <https://doi.org/10.1107/S2052520617003444>

Lopez-Iscoa P, Petit L, Massera J, Janner D, Boetti NG, Pugliese D, Fiorilli S, Novara C, Giorgis F, Milanese D. 2017. Effect of the addition of Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub> and ZnO on the thermal, structural and luminescence properties of Er<sup>3+</sup>-doped phosphate glasses. *Journal of Non-Crystalline Solids*. 460:161-168. <https://doi.org/10.1016/j.jnoncrysol.2017.01.030>

Milani R, Houbenov N, Fernandez-Palacio F, Cavallo G, Luzio A, Haataja J, Giancane G, Saccone M, Priimägi A, Metrangolo P, Ikkala O. 2017. Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains. *CheM*. 2(3):417-426. <https://doi.org/10.1016/j.chempr.2017.02.003>

Ruuskanen J, Stenvall A, Lahtinen V, Pardo E. 2017. Electromagnetic nonlinearities in a Roebel-cable-based accelerator magnet prototype: Variational approach. *Superconductor Science and Technology*. 30(2). <https://doi.org/10.1088/1361-6668/30/2/024008>



- Isotahdon E, Huttunen-Saarivirta E, Kuokkala V. 2017. Characterization of the microstructure and corrosion performance of Ce-alloyed Nd-Fe-B magnets. *Journal of Alloys and Compounds*. 692:190-197. <https://doi.org/10.1016/j.jallcom.2016.09.058>
- Sarjas H, Surzhenkov A, Juhani K, Antonov M, Adoberg E, Kulu P, Viljus M, Traksmäa R, Matikainen V, Vuoristo P. 2017. Abrasive-Erosive Wear of Thermally Sprayed Coatings from Experimental and Commercial Cr<sub>3</sub>C<sub>2</sub>-Based Powders. *Journal of Thermal Spray Technology*. 26(8):2020–2029. <https://doi.org/10.1007/s11666-017-0638-2>
- Hyysalo A, Ristola M, Joki T, Honkanen M, Vippola M, Narkilahti S. 2017. Aligned Poly(ε-caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro. *MACROMOLECULAR BIOSCIENCE*. 17(7). <https://doi.org/10.1002/mabi.201600517>
- Janka L, Norpoth J, Trache R, Thiele S, Berger LM. 2017. HVOF- and HVOF-Sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr Coatings Deposited from Feedstock Powders of Spherical Morphology: Microstructure Formation and High-Stress Abrasive Wear Resistance Up to 800 °C. *Journal of Thermal Spray Technology*. 26(7):1720–1731. <https://doi.org/10.1007/s11666-017-0621-y>
- Oksanen VT, Lehtovaara AJ, Kallio MH. 2017. Load capacity of lubricated bismuth bronze bimetal bearing under elliptical sliding motion. *Wear*. 388-389:72-80. <https://doi.org/10.1016/j.wear.2017.05.001>
- Salpavaara T, Hänninen A, Antniemi A, Lekkala J, Kellomäki M. 2017. Non-destructive and wireless monitoring of biodegradable polymers. *Sensors and Actuators B: Chemical*. 251:1018-1025. <https://doi.org/10.1016/j.snb.2017.05.116>
- Matikainen V, Bolelli G, Koivuluoto H, Sassatelli P, Lusvarghi L, Vuoristo P. 2017. Sliding wear behaviour of HVOF and HVOF sprayed Cr<sub>3</sub>C<sub>2</sub>-based coatings. *Wear*. 388-389:57-71. <https://doi.org/10.1016/j.wear.2017.04.001>
- Morandi A, Ainslie MD, Grilli F, Stenvall A. 2017. The 5th international workshop on numerical modelling of high temperature superconductors. *Superconductor Science and Technology*. 30(8). <https://doi.org/10.1088/1361-6668/aa7676>
- Javanainen M, Melcrová A, Magarkar A, Jurkiewicz P, Hof M, Jungwirth P, Martinez-Seara H. 2017. Two cations, two mechanisms: Interactions of sodium and calcium with zwitterionic lipid membranes. *Chemical Communications*. 53(39):5380-5383. <https://doi.org/10.1039/c7cc02208e>
- Varis T, Suhonen T, Caloni O, Čubán J, Pietola M. 2016. Optimization of HVOF Cr<sub>3</sub>C<sub>2</sub>-NiCr coating for increased fatigue performance. *Surface and Coatings Technology*. 305:123-131. <https://doi.org/10.1016/j.surfcoat.2016.08.012>
- Poikelispää M, Shakun A, Das A, Vuorinen J. 2016. Improvement of actuation performance of dielectric elastomers by barium titanate and carbon black fillers. *Journal of Applied Polymer Science*. 133(42). <https://doi.org/10.1002/app.44116>
- Lindgren M, Siljander S, Suihkonen R, Pohjanne P, Vuorinen J. 2016. Erosion–corrosion resistance of various stainless steel grades in high-temperature sulfuric acid solution. *Wear*. 364-365:10-21. <https://doi.org/10.1016/j.wear.2016.06.007>
- Heinonen S, Kannisto M, Nikkanen J-P, Huttunen-Saarivirta E, Karp M, Levänen E. 2016. Photocatalytic and antibacterial properties of ZnO films with different surface topographies on stainless steel substrate. *Thin Solid Films*. 616:842-849. <https://doi.org/10.1016/j.tsf.2016.10.002>
- Robison AD, Sun S, Poyton MF, Johnson GA, Pellois JP, Jungwirth P, Vazdar M, Cremer PS. 2016. Polyarginine Interacts More Strongly and Cooperatively than Polylysine with Phospholipid Bilayers. *Journal of Physical Chemistry Part B*. 120(35):9287-9296. <https://doi.org/10.1021/acs.jpcc.6b05604>
- Lindgren M, Santa-aho S, Vippola M. 2016. Barkhausen noise response of three different welded duplex stainless steels. *Insight*. 58(9):480-486. <https://doi.org/10.1784/insi.2016.58.9.480>

- Mylläri V, Hartikainen S, Poliakova V, Anderson R, Jönkkäri I, Pasanen P, Andersson M, Vuorinen J. 2016. Detergent impurity effect on recycled HDPE: Properties after repetitive processing. *Journal of Applied Polymer Science*. 133(31). <https://doi.org/10.1002/app.43766>
- Kapgate BP, Das C, Das A, Basu D, Wiessner S, Reuter U, Heinrich G. 2016. Reinforced chloroprene rubber by in situ generated silica particles: Evidence of bound rubber on the silica surface. *Journal of Applied Polymer Science*. 133(30). <https://doi.org/10.1002/app.43717>
- Cui S, Massera J, Lastusaari M, Hupa L, Petit L. 2016. Novel oxyfluorophosphate glasses and glass-ceramics. *Journal of Non-Crystalline Solids*. 445-446:40-44. <https://doi.org/10.1016/j.jnoncrysol.2016.05.005>
- Alekseev A, Ihalainen P, Ivanov A, Domnin I, Klechkovskaya V, Orekhov A, Lemmetyinen H, Vuorimaa-Laukkanen E, Peltonen J, Vyaz'min S. 2016. The red, purple and blue modifications of polymeric unsymmetrical hydroxyalkadiynyl-N-arylcarbamate derivatives in Langmuir-Schaefer films. *Thin Solid Films*. 612:463-471. <https://doi.org/10.1016/j.tsf.2016.06.044>
- Suihkonen R, Lindgren M, Siljander S, Sarlin E, Vuorinen J. 2016. Erosion wear of vinyl ester matrix composites in aqueous and acidic environments at elevated temperatures. *Wear*. 358-359:7-16. <https://doi.org/10.1016/j.wear.2016.03.026>
- Bolelli G, Berger LM, Börner T, Koivuluoto H, Matikainen V, Lusvarghi L, Lyphout C, Markocsan N, Nylén P, Sassatelli P, Trache R, Vuoristo P. 2016. Sliding and abrasive wear behaviour of HVOF- and HVOF-sprayed Cr<sub>3</sub>C<sub>2</sub>-NiCr hardmetal coatings. *Wear*. 358-359:32-50. <https://doi.org/10.1016/j.wear.2016.03.034>
- Kiilakoski J, Lindroos M, Apostol M, Koivuluoto H, Kuokkala V-T, Vuoristo P. 2016. Characterization of High-Velocity Single Particle Impacts on Plasma-Sprayed Ceramic Coatings. *Journal of Thermal Spray Technology*. 25:1127-1137. <https://doi.org/10.1007/s11666-016-0428-2>
- Poutanen M, Ikkala O, Priimägi A. 2016. Structurally Controlled Dynamics in Azobenzene-Based Supramolecular Self-Assemblies in Solid State. *Macromolecules*. 49(11):4095-4101. <https://doi.org/10.1021/acs.macromol.6b00562>
- Sharma R, Bhalerao S, Gupta D. 2016. Effect of incorporation of CdS NPs on performance of PTB7: PCBM organic solar cells. *Organic Electronics: physics, materials, applications*. 33:274-280. <https://doi.org/10.1016/j.orgel.2016.03.030>
- Milanti A, Matikainen V, Bolelli G, Koivuluoto H, Lusvarghi L, Vuoristo P. 2016. Microstructure and Sliding Wear Behavior of Fe-Based Coatings Manufactured with HVOF and HVOF Thermal Spray Processes. *Journal of Thermal Spray Technology*. 25(5):1040-1055. <https://doi.org/10.1007/s11666-016-0410-z>
- Janka L, Norpoth J, Trache R, Berger LM. 2016. Influence of heat treatment on the abrasive wear resistance of a Cr<sub>3</sub>C<sub>2</sub> NiCr coating deposited by an ethene-fuelled HVOF spray process. *Surface and Coatings Technology*. 291:444-451. <https://doi.org/10.1016/j.surfcoat.2016.02.066>
- Soltani I, Hraiech S, Horchani-Naifer K, Massera J, Petit L, Férid M. 2016. Thermal, structural and optical properties of Er<sup>3+</sup> doped phosphate glasses containing silver nanoparticles. *Journal of Non-Crystalline Solids*. 438:67-73. <https://doi.org/10.1016/j.jnoncrysol.2015.12.022>
- Kanerva U, Karhu M, Lagerbom J, Kronlöf A, Honkanen M, Turunen E, Laitinen T. 2016. Chemical synthesis of WC-Co from water-soluble precursors: The effect of carbon and cobalt additions to WC synthesis. *International Journal of Refractory Metals and Hard Materials*. 56:69-75. <https://doi.org/10.1016/j.jrmhm.2015.11.014>
- Ma L, Melander M, Weckman T, Lipasti S, Laasonen K, Akola J. 2016. DFT simulations and microkinetic modelling of 1-pentyne hydrogenation on Cu<sub>20</sub> model catalysts. *Journal of Molecular Graphics and Modelling*. 65:61-70. <https://doi.org/10.1016/j.jmgm.2016.02.007>

Katava M, Kalimeri M, Stirnemann G, Sterpone F. 2016. Stability and Function at High Temperature. What Makes a Thermophilic GTPase Different from Its Mesophilic Homologue. *Journal of Physical Chemistry Part B*. 120(10):2721-2730. <https://doi.org/10.1021/acs.jpcc.6b00306>

Salunke JK, Wong FL, Feron K, Manzhos S, Lo MF, Shinde D, Patil A, Lee CS, Roy VAL, Sonar P, Wadgaonkar PP. 2016. Phenothiazine and carbazole substituted pyrene based electroluminescent organic semiconductors for OLED devices. *Journal of Materials Chemistry C*. 4(5):1009-1018. <https://doi.org/10.1039/c5tc03690a>

Allolio C, Baxova K, Vazdar M, Jungwirth P. 2016. Guanidinium Pairing Facilitates Membrane Translocation. *Journal of Physical Chemistry Part B*. 120(1):143-153. <https://doi.org/10.1021/acs.jpcc.5b10404>

Jarnstrom L, Johansson K, Kuusipalo J, Jonsson L. 2016. Active packaging by paper coating. In 14th TAPPI Advanced Coating Symposium 2016. TAPPI Press. pp. 88-92.

Kaksonen AH, Särkijärvi S, Puhakka JA, Peuraniemi E, Junnikkala S, Tuovinen OH. 2016. Chemical and bacterial leaching of metals from a smelter slag in acid solutions. *Hydrometallurgy*. 159:46-53. <https://doi.org/10.1016/j.hydromet.2015.10.032>

Bansod ND, Kapgate BP, Das C, Das A, Basu D, Debnath SC. 2016. Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method. *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 80(2):548-559. <https://doi.org/10.1007/s10971-016-4114-0>

Hupa L, Fagerlund S, Massera J, Björkvik L. 2016. Dissolution behavior of the bioactive glass S53P4 when sodium is replaced by potassium, and calcium with magnesium or strontium. *Journal of Non-Crystalline Solids*. 41-46. <https://doi.org/10.1016/j.jnoncrysol.2015.03.026>

Lahti J, Lavonen J, Lahtinen K, Johansson P, Seppänen T, Cameron DC. 2016. Improved properties for packaging materials by nanoscale surface modification and ALD barrier coating. In TAPPI International Conference on Nanotechnology for Renewable Materials 2016. TAPPI Press. pp. 684-706.

Tuominen J, Näkki J, Pajukoski H, Hyvärinen L, Vuoristo P. 2016. Microstructural and abrasion wear characteristics of laser-clad tool steel coatings. *Surface Engineering*. 32(12):923-933. <https://doi.org/10.1080/02670844.2016.1180496>

Akamatsu N, Aizawa M, Tatsumi R, Hisano K, Priimägi A, Shishido A. 2016. Photoresponsive liquid-crystalline polymer films bilayered with an inverse opal structure. *JOURNAL OF PHOTOPOLYMER SCIENCE AND TECHNOLOGY*. 29(1):145-148. <https://doi.org/10.2494/photopolymer.29.145>

Auer S, Koho T, Uusi-Kerttula H, Vesikari T, Blazevic V, Hytönen VP. 2015. Rapid and sensitive detection of norovirus antibodies in human serum with a bilayer interferometry biosensor. *Sensors and Actuators B: Chemical*. 221:507-514. <https://doi.org/10.1016/j.snb.2015.06.088>

Le HH, Parsaker M, Sriharish MN, Henning S, Menzel M, Wießner S, Das A, Do QK, Heinrich G, Radusch HJ. 2015. Effect of rubber polarity on selective wetting of carbon nanotubes in ternary blends. *Express Polymer Letters*. 9(11):960-971. <https://doi.org/10.3144/expresspolymlett.2015.87>

Massera J, Gaussiran M, Gluchowski P, Lastusaari M, Hupa L, Petit L. 2015. Processing and characterization of phosphate glasses containing CaAl<sub>2</sub>O<sub>4</sub>:Eu<sup>2+</sup>,Nd<sup>3+</sup> and SrAl<sub>2</sub>O<sub>4</sub>:Eu<sup>2+</sup>,Dy<sup>3+</sup> microparticles. *Journal of the European Ceramic Society*. 35(14):3863-3871. <https://doi.org/10.1016/j.jeurceramsoc.2015.06.031>

Vapaavuori J, Heikkinen ITS, Dichiarante V, Resnati G, Metrangolo P, Sabat RG, Bazuin CG, Priimägi A, Pellerin C. 2015. Photomechanical Energy Transfer to Photopassive Polymers through Hydrogen and Halogen Bonds. *Macromolecules*. 48(20):7535-7542. <https://doi.org/10.1021/acs.macromol.5b01813>

Vapaavuori J, Grosrenaud J, Pellerin C, Bazuin CG. 2015. In Situ Photocontrol of Block Copolymer Morphology during Dip-Coating of Thin Films. *ACS Macro Letters*. 4(10):1158-1162. <https://doi.org/10.1021/acsmacrolett.5b00483>

Oksanen V, Valtonen K, Andersson P, Vaajoki A, Laukkanen A, Holmberg K, Kuokkala VT. 2015. Comparison of laboratory rolling-sliding wear tests with in-service wear of nodular cast iron rollers against wire ropes. *Wear*. 340-341:73-81. <https://doi.org/10.1016/j.wear.2015.07.006>

Mylläri V, Ruoko T-P, Vuorinen J, Lemmetyinen H. 2015. Characterization of thermally aged polyetheretherketone fibres: Mechanical, thermal, rheological and chemical property changes. *Polymer Degradation and Stability*. 120:419-426. <https://doi.org/10.1016/j.polymdegradstab.2015.08.003>

Mylläri V, Fatarella E, Ruzzante M, Pogni R, Baratto MC, Skrifvars M, Syrjälä S, Järvelä P. 2015. Production of sulfonated polyetheretherketone/polypropylene fibers for photoactive textiles. *Journal of Applied Polymer Science*. 132(39). <https://doi.org/10.1002/app.42595>

Orlowski A, Kukkurainen S, Pöyry A, Rissanen S, Vattulainen I, Hytönen VP, Róg T. 2015. PIP2 and Talin Join Forces to Activate Integrin. *Journal of Physical Chemistry Part B*. 119(38):12381-12389. <https://doi.org/10.1021/acs.jpccb.5b06457>

Milanti A, Matikainen V, Koivuluoto H, Bolelli G, Lusvardi L, Vuoristo P. 2015. Effect of spraying parameters on the microstructural and corrosion properties of HVAF-sprayed Fe-Cr-Ni-B-C coatings. *Surface and Coatings Technology*. 277:81-90. <https://doi.org/10.1016/j.surfcoat.2015.07.018>

Ter Schiphorst J, Coleman S, Stumpel JE, Ben Azouz A, Diamond D, Schenning APHJ. 2015. Molecular Design of Light-Responsive Hydrogels, for in Situ Generation of Fast and Reversible Valves for Microfluidic Applications. *Chemistry of Materials*. 27(17):5925-5931. <https://doi.org/10.1021/acs.chemmater.5b01860>

Tukiainen A, Likonen J, Toikkanen L, Leinonen T. 2015. Unintentional boron contamination of MBE-grown GaInP/AlGaInP quantum wells. *Journal of Crystal Growth*. 425:60-63. <https://doi.org/10.1016/j.jcrysro.2015.02.048>

Kwolek U, Kulig W, Wydro P, Nowakowska M, Róg T, Kepczynski M. 2015. Effect of Phosphatidic Acid on Biomembrane: Experimental and Molecular Dynamics Simulations Study. *Journal of Physical Chemistry Part B*. 119(31):10042-10051. <https://doi.org/10.1021/acs.jpccb.5b03604>

Kanerva U, Suhonen T, Lagerbom J, Levänen E. 2015. Evaluation of crushing strength of spray-dried MgAl<sub>2</sub>O<sub>4</sub> granule beds. *Ceramics International*. 41(7):8494-8500. <https://doi.org/10.1016/j.ceramint.2015.03.056>

Timr Š, Brabec J, Bondar A, Ryba T, Železný M, Lazar J, Jungwirth P. 2015. Nonlinear Optical Properties of Fluorescent Dyes Allow for Accurate Determination of Their Molecular Orientations in Phospholipid Membranes. *Journal of Physical Chemistry Part B*. 119(30):9706-9716. <https://doi.org/10.1021/acs.jpccb.5b05123>

Rahaman O, Kalimeri M, Melchionna S, Hénin J, Sterpone F. 2015. Role of Internal Water on Protein Thermal Stability: The Case of Homologous G Domains. *Journal of Physical Chemistry Part B*. 119(29):8939-8949. <https://doi.org/10.1021/jp507571u>

Isoniemi T, Tuukkanen S, Cameron DC, Simonen J, Toppari JJ. 2015. Measuring optical anisotropy in poly(3,4-ethylene dioxathiophene): poly(styrene sulfonate) films with added graphene. *Organic Electronics*. 25:317-323. <https://doi.org/10.1016/j.orgel.2015.06.037>, <https://doi.org/10.1016/j.orgel.2015.06.037>

Mylläri V, Ruoko T-P, Syrjälä S. 2015. A comparison of rheology and FTIR in the study of polypropylene and polystyrene photodegradation. *Journal of Applied Polymer Science*. 132(28). <https://doi.org/10.1002/app.42246>

- Abou-Chahine F, Fujii D, Imahori H, Nakano H, Tkachenko NV, Matano Y, Lemmetyinen H. 2015. Synthesis and Photophysical Properties of Two Diazaporphyrin-Porphyrin Hetero Dimers in Polar and Nonpolar Solutions. *Journal of Physical Chemistry Part B*. 119(24):7328-7337. <https://doi.org/10.1021/jp510903a>
- Salpavaara T, Järveläinen M, Seppälä S, Yli-Hallila T, Verho J, Viikko M, Lekkala J, Levänen E. 2015. Passive resonance sensor based method for monitoring particle suspensions. *Sensors and Actuators B: Chemical*. 219:324-330. <https://doi.org/10.1016/j.snb.2015.04.121>
- Dzieciuch M, Rissanen S, Szydłowska N, Bunker A, Kumorek M, Jamróz D, Vattulainen I, Nowakowska M, Róg T, Kepczynski M. 2015. PEGylated liposomes as carriers of hydrophobic porphyrins. *Journal of Physical Chemistry Part B*. 119(22):6646-6657. <https://doi.org/10.1021/acs.jpcc.5b01351>
- Manea LR, Cramariuc B, Popescu V, Cramariuc R, Sandu I, Cramariuc O. 2015. Equipment for obtaining polymeric nanofibres by electrospinning technology: II. The obtaining of polymeric nanofibers. *Materiale Plastice*. 52(2):180-185.
- Hladílková J, Fischer HE, Jungwirth P, Mason PE. 2015. Hydration of hydroxyl and amino groups examined by molecular dynamics and neutron scattering. *Journal of Physical Chemistry Part B*. 119(21):6357-6365. <https://doi.org/10.1021/jp510528u>
- Song X, Liu Z, Suhonen T, Varis T, Huang L, Zheng X, Zeng Y. 2015. Effect of melting state on the thermal shock resistance and thermal conductivity of APS ZrO<sub>2</sub>-7.5wt.% Y<sub>2</sub>O<sub>3</sub> coatings. *Surface and Coatings Technology*. 270:132-138. <https://doi.org/10.1016/j.surfcoat.2015.03.011>
- Lindgren M, Suihkonen R, Vuorinen J. 2015. Erosive wear of various stainless steel grades used as impeller blade materials in high temperature aqueous slurry. *Wear*. 328-329:391-400. <https://doi.org/10.1016/j.wear.2015.03.014>
- Lindroos M, Ratia V, Apostol M, Valtonen K, Laukkanen A, Molnar W, Holmberg K, Kuokkala VT. 2015. The effect of impact conditions on the wear and deformation behavior of wear resistant steels. *Wear*. 328-329:197-205. <https://doi.org/10.1016/j.wear.2015.02.032>
- Karilainen T, Timr Š, Vattulainen I, Jungwirth P. 2015. Oxidation of cholesterol does not alter significantly its uptake into high-density lipoprotein particles. *Journal of Physical Chemistry Part B*. 119(13):4594-4600. <https://doi.org/10.1021/acs.jpcc.5b00240>
- Saarikoski E, Rissanen M, Seppälä J. 2015. Effect of rheological properties of dissolved cellulose/microfibrillated cellulose blend suspensions on film forming. *Carbohydrate Polymers*. 119:62-70. <https://doi.org/10.1016/j.carbpol.2014.11.033>
- Isotahdon E, Huttunen-Saarivirta E, Heinonen S, Kuokkala VT, Paju M. 2015. Corrosion mechanisms of sintered Nd-Fe-B magnets in the presence of water as vapour, pressurised vapour and liquid. *Journal of Alloys and Compounds*. 626:349-359. <https://doi.org/10.1016/j.jallcom.2014.12.048>
- Varis T, Bankiewicz D, Yrjas P, Oksa M, Suhonen T, Tuurna S, Ruusuvoori K, Holmström S. 2015. High temperature corrosion of thermally sprayed NiCr and FeCr coatings covered with a KCl-K<sub>2</sub>SO<sub>4</sub> salt mixture. *Surface and Coatings Technology*. 265:235-243. <https://doi.org/10.1016/j.surfcoat.2014.11.012>
- Bolelli G, Berger LM, Börner T, Koivuluoto H, Lusvarghi L, Lyphout C, Markocsan N, Matikainen V, Nylén P, Sassatelli P, Trache R, Vuoristo P. 2015. Tribology of HVOF- and HVAF-sprayed WC-10Co4Cr hardmetal coatings: A comparative assessment. *Surface and Coatings Technology*. 265:125-144. <https://doi.org/10.1016/j.surfcoat.2015.01.048>
- Eshwaran SB, Basu D, Vaikuntam SR, Kutlu B, Wiessner S, Das A, Naskar K, Heinrich G. 2015. Exploring the role of stearic acid in modified zinc aluminum layered double hydroxides and their acrylonitrile butadiene rubber nanocomposites. *Journal of Applied Polymer Science*. 132(9). <https://doi.org/10.1002/app.41539>

- Shin J, Cherstvy AG, Metzler R. 2015. Polymer looping is controlled by macromolecular crowding, spatial confinement, and chain stiffness. *ACS Macro Letters*. 4(2):202-206. <https://doi.org/10.1021/mz500709w>
- Fatarelle E, Mylläri V, Ruzzante M, Pogni R, Baratto MC, Skrifvars M, Syrjälä S, Järvelä P. 2015. Sulfonated polyetheretherketone/polypropylene polymer blends for the production of photoactive materials. *Journal of Applied Polymer Science*. 132(8). <https://doi.org/10.1002/app.41509>
- Saccone M, Dichiarante V, Forni A, Goulet-Hanssens A, Cavallo G, Vapaavuori J, Terraneo G, Barrett CJ, Resnati G, Metrangolo P, Priimägi A. 2015. Supramolecular hierarchy among halogen and hydrogen bond donors in light-induced surface patterning. *Journal of Materials Chemistry C*. 3:759-768. <https://doi.org/10.1039/c4tc02315c>
- Kalimeri M, Derreumaux P, Sterpone F. 2015. Are coarse-grained models apt to detect protein thermal stability? the case of OPEP force field. *Journal of Non-Crystalline Solids*. 407:494-501. <https://doi.org/10.1016/j.jnoncrysol.2014.07.005>
- Heiskanen JP, Manninen VM, Pankov D, Omar WAE, Kastinen T, Hukka TI, Lemmetyinen HJ, Hormi OEO. 2015. Aryl end-capped quaterthiophenes applied as anode interfacial layers in inverted organic solar cells. *Thin Solid Films*. 574:196-206. <https://doi.org/10.1016/j.tsf.2014.12.007>
- Yi H, Albrecht M, Valkonen A, Rissanen K. 2015. Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as  $\pi$ -acceptors for anions. *New Journal of Chemistry*. 39(1):746-749. <https://doi.org/10.1039/c4nj01654h>
- Niittymäki M, Lahti K, Suhonen T, Metsäjoki J. 2015. Dielectric Breakdown Strength of Thermally Sprayed Ceramic Coatings: Effects of Different Test Arrangements. *Journal of Thermal Spray Technology*. 24(3):542-551. <https://doi.org/10.1007/s11666-014-0211-1>
- Milanti A, Koivuluoto H, Vuoristo P. 2015. Influence of the Spray Gun Type on Microstructure and Properties of HVAF Sprayed Fe-Based Corrosion Resistant Coatings. *Journal of Thermal Spray Technology*. 24(7):1312-1322. <https://doi.org/10.1007/s11666-015-0298-z>
- Ojuva A, Järveläinen M, Bauer M, Keskinen L, Valkonen M, Akhtar F, Levänen E, Bergström L. 2015. Mechanical performance and CO<sub>2</sub> uptake of ion-exchanged zeolite A structured by freeze-casting. *Journal of the European Ceramic Society*. 35(9):2607-2618. <https://doi.org/10.1016/j.jeurceramsoc.2015.03.001>
- Stumpel JE, Broer DJ, Schenning APHJ. 2014. Stimuli-responsive photonic polymer coatings. *Chemical Communications*. 50(100):15839-15848. <https://doi.org/10.1039/c4cc05072j>
- Palivec V, Pluharová E, Unger I, Winter B, Jungwirth P. 2014. DNA lesion can facilitate base ionization: Vertical ionization energies of aqueous 8-oxoguanine and its nucleoside and nucleotide. *Journal of Physical Chemistry Part B*. 118(48):13833-13837. <https://doi.org/10.1021/jp5111086>
- Basu D, Das A, Jacobgeorge J, Wang DY, Stöckelhuber K, Wagenknecht U, Leuteritz A, Kutlu B, Reuter U, Heinrich G. 2014. Unmodified LDH as reinforcing filler for XNBR and the development of flame-retardant elastomer composites. *Rubber Chemistry and Technology*. 87(4):606-616. <https://doi.org/10.5254/rct.14.86920>
- Song X, Suhonen T, Varis T, Huang L, Zheng X, Zeng Y. 2014. Fabrication and Characterization of Amorphous Alumina-Yttria-Stabilized Zirconia Coatings by Air Plasma Spraying. *Journal of Thermal Spray Technology*. 23(8):1302-1311. <https://doi.org/10.1007/s11666-014-0124-z>
- Tawade BV, Salunke JK, Sane PS, Wadgaonkar PP. 2014. Processable aromatic polyesters based on bisphenol derived from cashew nut shell liquid: synthesis and characterization. *JOURNAL OF POLYMER RESEARCH*. 21(12). <https://doi.org/10.1007/s10965-014-0617-y>
- Mohanty AK, Ghosh A, Sawai P, Pareek K, Banerjee S, Das A, Pötschke P, Heinrich G, Voit B. 2014. Electromagnetic interference shielding effectiveness of MWCNT filled poly(ether sulfone) and poly(ether imide) nanocomposites. *Polymer Engineering and Science*. 54(11):2560-2570. <https://doi.org/10.1002/pen.23804>

Wang X, Vapaavuori J, Zhao Y, Bazuin CG. 2014. A supramolecular approach to photoresponsive thermo/solvoplastic block copolymer elastomers. *Macromolecules*. 47(20):7099-7108. <https://doi.org/10.1021/ma501278b>

Rasappa S, Schulte L, Borah D, Morris MA, Ndoni S. 2014. Rapid, Brushless Self-assembly of a PS-b-PDMS Block Copolymer for Nanolithography. *Colloids and Interface Science Communications*. 2:1-5. <https://doi.org/10.1016/j.colcom.2014.07.001>

Goulet-Hanssens A, Corkery TC, Priimagi A, Barrett CJ. 2014. Effect of head group size on the photoswitching applications of azobenzene Disperse Red 1 analogues. *Journal of Materials Chemistry C*. 2(36):7505-7512. <https://doi.org/10.1039/c4tc00996g>

Priimagi A, Barrett CJ, Shishido A. 2014. Recent twists in photoactuation and photoalignment control. *Journal of Materials Chemistry C*. 2(35):7155-7162. <https://doi.org/10.1039/c4tc01236d>

Ojala N, Valtonen K, Heino V, Kallio M, Aaltonen J, Siitonen P, Kuokkala VT. 2014. Effects of composition and microstructure on the abrasive wear performance of quenched wear resistant steels. *Wear*. 317(1-2):225-232. <https://doi.org/10.1016/j.wear.2014.06.003>

Kapgate BP, Das C, Basu D, Das A, Heinrich G, Reuter U. 2014. Effect of silane integrated sol-gel derived in situ silica on the properties of nitrile rubber. *Journal of Applied Polymer Science*. 131(15). <https://doi.org/10.1002/app.40531>

Oksa M, Varis T, Ruusuvaori K. 2014. Performance testing of iron based thermally sprayed HVOF coatings in a biomass-fired fluidised bed boiler. *Surface and Coatings Technology*. 251:191-200. <https://doi.org/10.1016/j.surfcoat.2014.04.025>

Kohagen M, Mason PE, Jungwirth P. 2014. Accurate description of calcium solvation in concentrated aqueous solutions. *Journal of Physical Chemistry Part B*. 118(28):7902-7909. <https://doi.org/10.1021/jp5005693>

Werner J, Wernersson E, Ekholm V, Ottosson N, Öhrwall G, Heyda J, Persson I, Söderström J, Jungwirth P, Björneholm O. 2014. Surface behavior of hydrated guanidinium and ammonium ions: A comparative study by photoelectron spectroscopy and molecular dynamics. *Journal of Physical Chemistry Part B*. 118(25):7119-7127. <https://doi.org/10.1021/jp500867w>

Mahmood N, Khan AU, Stöckelhuber KW, Das A, Jehnichen D, Heinrich G. 2014. Carbon nanotubes-filled thermoplastic polyurethane-urea and carboxylated acrylonitrile butadiene rubber blend nanocomposites. *Journal of Applied Polymer Science*. 131(11). <https://doi.org/10.1002/app.40341>

Ghabchi A, Sampath S, Holmberg K, Varis T. 2014. Damage mechanisms and cracking behavior of thermal sprayed WC-CoCr coating under scratch testing. *Wear*. 313(1-2):97-105. <https://doi.org/10.1016/j.wear.2014.02.017>

Kuzmin MG, Soboleva IV, Durandin NA, Lisitsyna ES, Kuzmin VA. 2014. Microphase mechanism of "superquenching" of luminescent probes in aqueous solutions of DNA and some other polyelectrolytes. *Journal of Physical Chemistry Part B*. 118(15):4245-4252. <https://doi.org/10.1021/jp500713q>

Priimagi A, Shevchenko A. 2014. Azopolymer-based micro- and nanopatterning for photonic applications. *Journal of Polymer Science. Part B, Polymer Physics*. 52(3):163-182. <https://doi.org/10.1002/polb.23390>

Kulig W, Agmon N. 2014. Both zundel and eigen isomers contribute to the IR spectrum of the gas-phase H<sub>9</sub>O<sub>4</sub> + cluster. *Journal of Physical Chemistry Part B*. 118(1):278-286. <https://doi.org/10.1021/jp410446d>

Eshwaran SB, Basu D, Kutlu B, Leuteritz A, Wagenknecht U, Stöckelhuber KW, Naskar K, Das A, Heinrich G. 2014. Stearate Modified Zinc-Aluminum Layered Double Hydroxides and Acrylonitrile Butadiene Rubber Nanocomposites. *Polymer-Plastics Technology and Engineering*. 53(1):65-73. <https://doi.org/10.1080/03602559.2013.843690>

Stepien M, Chinga-Carrasco G, Saarinen JJ, Teisala H, Tuominen M, Haapanen J, Kuusipalo J, Mäkelä JM, Toivakka M. 2014. Abrasion and compression resistance of liquid-flame-spray-deposited functional nanoparticle coatings on paper. In 13th TAPPI Advanced Coating Fundamentals Symposium 2014. TAPPI Press. pp. 68-82.

Le HH, Parsekar M, Ilisch S, Henning S, Das A, Stöckelhuber KW, Beiner M, Ho CA, Adhikari R, Wießner S, Heinrich G, Radusch HJ. 2014. Effect of non-rubber components of NR on the carbon nanotube (CNT) localization in SBR/NR blends. *Macromolecular Materials and Engineering*. 299(5):569-582. <https://doi.org/10.1002/mame.201300254>

Varis T, Suhonen T, Ghabchi A, Valarezo A, Sampath S, Liu X, Hannula SP. 2014. Formation mechanisms, structure, and properties of HVOF-sprayed WC-CoCr coatings: An approach toward process maps. *Journal of Thermal Spray Technology*. 23(6):1009-1018. <https://doi.org/10.1007/s11666-014-0110-5>

Mylläri V, Ruoko TP, Järvelä P. 2014. The effects of UV irradiation to polyetheretherketone fibres: Characterization by different techniques. *Polymer Degradation and Stability*. 109:278-284. <https://doi.org/10.1016/j.polymdegradstab.2014.08.003>

Cummins C, Borah D, Rasappa S, Chaudhari A, Ghoshal T, O'Driscoll BMD, Carolan P, Petkov N, Holmes JD, Morris MA. 2013. Self-assembly of polystyrene-block-poly(4-vinylpyridine) block copolymer on molecularly functionalized silicon substrates: Fabrication of inorganic nanostructured etchmask for lithographic use. *Journal of Materials Chemistry C*. 1(47):7941-7951. <https://doi.org/10.1039/c3tc31498g>

Diban N, Haimi SP, Bolhuis-Versteeg L, Teixeira S, Miettinen S, Poot AA, Grijpma DW, Stamatialis D. 2013. Effect of surface morphology of poly( $\epsilon$ -caprolactone) scaffolds on adipose stem cell adhesion and proliferation. *Macromolecular symposia*. 334(1):126-132. <https://doi.org/10.1002/masy.201300106>

Gebraad AWH, Miettinen S, Grijpma DW, Haimi SP. 2013. Human adipose stem cells in chondrogenic differentiation medium without growth factors differentiate towards annulus fibrosus phenotype in vitro. *Macromolecular symposia*. 334(1):49-56. <https://doi.org/10.1002/masy.201300104>

German SJ, Behbahani M, Miettinen S, Grijpma DW, Haimi SP. 2013. Proliferation and differentiation of adipose stem cells towards smooth muscle cells on poly(trimethylene carbonate) membranes. *Macromolecular symposia*. 334(1):133-142. <https://doi.org/10.1002/masy.201300100>

Hladilkova J, Prokop Z, Chaloupkova R, Damborsky J, Jungwirth P. 2013. Release of halide ions from the buried active site of the haloalkane dehalogenase LinB revealed by stopped-flow fluorescence analysis and free energy calculations. *Journal of Physical Chemistry Part B*. 117(46):14329-14335. <https://doi.org/10.1021/jp409040u>

Kalimeri M, Rahaman O, Melchionna S, Sterpone F. 2013. How conformational flexibility stabilizes the hyperthermophilic elongation factor G-domain. *Journal of Physical Chemistry Part B*. 117(44):13775-13785. <https://doi.org/10.1021/jp407078z>

Khan MN, Tjong V, Chilkoti A, Zharnikov M. 2013. Spectroscopic study of a DNA brush synthesized in situ by surface initiated enzymatic polymerization. *Journal of Physical Chemistry Part B*. 117(34):9929-9938. <https://doi.org/10.1021/jp404774x>

Paterová J, Rembert KB, Heyda J, Kurra Y, Okur HI, Liu WR, Hilty C, Cremer PS, Jungwirth P. 2013. Reversal of the Hofmeister series: Specific ion effects on peptides. *Journal of Physical Chemistry Part B*. 117(27):8150-8158. <https://doi.org/10.1021/jp405683s>

Thomann O, Pihlatie M, Rautanen M, Himanen O, Lagerborg J, Mäkinen M, Varis T, Suhonen T, Kiviaho J. 2013. Development and application of HVOF sprayed spinel protective coating for SOFC interconnects. *Journal of Thermal Spray Technology*. 22(5):631-639. <https://doi.org/10.1007/s11666-012-9880-9>



Oksa M, Tuurna S, Varis T. 2013. Increased lifetime for biomass and waste to energy power plant boilers with HVOF coatings: High temperature corrosion testing under chlorine-containing molten salt. *Journal of Thermal Spray Technology*. 22(5):783-796. <https://doi.org/10.1007/s11666-013-9928-5>

Štěpánková V, Paterová J, Damborský J, Jungwirth P, Chaloupková R, Heyda J. 2013. Cation-specific effects on enzymatic catalysis driven by interactions at the tunnel mouth. *Journal of Physical Chemistry Part B*. 117(21):6394-6402. <https://doi.org/10.1021/jp401506v>

Tan M, Feng Y, Wang H, Zhang L, Khan M, Guo J, Chen Q, Liu J. 2013. Immobilized bioactive agents onto polyurethane surface with heparin and phosphorylcholine group. *Macromolecular Research*. 21(5):541-549. <https://doi.org/10.1007/s13233-013-1028-3>

Vapaavuori J, Mahimwalla Z, Chromik RR, Kaivola M, Priimagi A, Barrett CJ. 2013. Nanoindentation study of light-induced softening of supramolecular and covalently functionalized azo polymers. *Journal of Materials Chemistry C*. 1(16):2806-2810. <https://doi.org/10.1039/c3tc30246f>

Pale V, Nikkonen T, Vapaavuori J, Kostianen M, Kavakka J, Selin J, Tittonen I, Helaja J. 2013. Biomimetic zinc chlorin-poly(4-vinylpyridine) assemblies: Doping level dependent emission-absorption regimes. *Journal of Materials Chemistry C*. 1(11):2166-2173. <https://doi.org/10.1039/c3tc00499f>

Pitkänen H, Alatalo M, Puisto A, Ropo M, Kokko K, Vitos L. 2013. Ab initio study of the surface properties of austenitic stainless steel alloys. *Surface Science*. 609:190-194. <https://doi.org/10.1016/j.susc.2012.12.007>

Vazdar M, Jungwirth P, Mason PE. 2013. Aqueous guanidinium-carbonate interactions by molecular dynamics and neutron scattering: Relevance to ion-protein interactions. *Journal of Physical Chemistry Part B*. 117(6):1844-1848. <https://doi.org/10.1021/jp310719g>

Debnath SC, Das A, Basu D, Heinrich G. 2013. Naturally occurring amino acids: A suitable substitute of N-N'-di-phenyl guanidine (DPG) in silica tyre formulation?. *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*. 66(1-2):25-31.

Subramaniam K, Das A, Stöckelhuber KW, Heinrich G. 2013. Elastomer composites based on carbon nanotubes and ionic liquid. *Rubber Chemistry and Technology*. 86(3):367-400. <https://doi.org/10.5254/rct.13.86984>

Pluhařová E, Ončák M, Seidel R, Schroeder C, Schroeder W, Winter B, Bradforth SE, Jungwirth P, Slaviček P. 2012. Transforming anion instability into stability: Contrasting photoionization of three protonation forms of the phosphate ion upon moving into water. *Journal of Physical Chemistry Part B*. 116(44):13254-13264. <https://doi.org/10.1021/jp306348b>

Rasappa S, Borah D, Sentharamaikannan R, Faulkner CC, Shaw MT, Gleeson P, Holmes JD, Morris MA. 2012. Block copolymer lithography: Feature size control and extension by an over-etch technique. *Thin Solid Films*. 522:318-323. <https://doi.org/10.1016/j.tsf.2012.09.017>

Mahimwalla Z, Yager KG, Mamiya JI, Shishido A, Priimagi A, Barrett CJ. 2012. Azobenzene photomechanics: Prospects and potential applications. *Polymer Bulletin*. 69(8):967-1006. <https://doi.org/10.1007/s00289-012-0792-0>

Steinhauser D, Subramaniam K, Das A, Heinrich G, Klüppel M. 2012. Influence of ionic liquids on the dielectric relaxation behavior of CNT based elastomer nanocomposites. *Express Polymer Letters*. 6(11):927-936. <https://doi.org/10.3144/expresspolymlett.2012.98>

Gao W, Feng Y, Lu J, Khan M, Guo J. 2012. Biomimetic surface modification of polycarbonateurethane film via phosphorylcholine-graft for resisting platelet adhesion. *Macromolecular Research*. 20(10):1063-1069. <https://doi.org/10.1007/s13233-012-0152-9>

Kapgate BP, Das C, Das A, Basu D, Reuter U, Heinrich G. 2012. Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends. *JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY*. 63(3):501-509. <https://doi.org/10.1007/s10971-012-2812-9>

Vikholm-Lundin I, Auer S, Paakkunainen M, Määttä JAE, Munter T, Leppiniemi J, Hytönen VP, Tappura K. 2012. Cysteine-tagged chimeric avidin forms high binding capacity layers directly on gold. *Sensors and Actuators B: Chemical*. 171-172:440-448. <https://doi.org/10.1016/j.snb.2012.05.008>

Mason PE, Wernersson E, Jungwirth P. 2012. Accurate description of aqueous carbonate ions: An effective polarization model verified by neutron scattering. *Journal of Physical Chemistry Part B*. 116(28):8145-8153. <https://doi.org/10.1021/jp3008267>

Subramaniam K, Das A, Heinrich G. 2012. Highly conducting polychloroprene composites based on multi-walled carbon nanotubes and 1-butyl 3-methyl imidazolium bis(trifluoromethylsulphonyl)imide. *KGK: KAUTSCHUK GUMMI KUNSTSTOFFE*. 65(7-8):44-46.

Vazdar M, Jurkiewicz P, Hof M, Jungwirth P, Cwiklik L. 2012. Behavior of 4-hydroxynonenal in phospholipid membranes. *Journal of Physical Chemistry Part B*. 116(22):6411-6415. <https://doi.org/10.1021/jp3044219>

Subramaniam K, Das A, Häußler L, Harnisch C, Stöckelhuber KW, Heinrich G. 2012. Enhanced thermal stability of polychloroprene rubber composites with ionic liquid modified MWCNTs. *Polymer Degradation and Stability*. 97(5):776-785. <https://doi.org/10.1016/j.polymdegradstab.2012.02.001>

Rooj S, Das A, Stöckelhuber KW, Reuter U, Heinrich G. 2012. Highly exfoliated natural rubber/Clay composites by "propping-open procedure": The influence of fatty-acid chain length on exfoliation. *Macromolecular Materials and Engineering*. 297(4):369-383. <https://doi.org/10.1002/mame.201100185>

Das A, George JJ, Kutlu B, Leuteritz A, Wang DY, Rooj S, Jurk R, Rajeshbabu R, Stöckelhuber KW, Galiatsatos V, Heinrich G. 2012. A novel thermotropic elastomer based on highly-filled LDH-SSB composites. *Macromolecular Rapid Communications*. 33(4):337-342. <https://doi.org/10.1002/marc.201100735>

Massera J, Fagerlund S, Hupa L, Hupa M. 2012. Crystallization mechanism of the bioactive glasses, 45S5 and S53P4. *JOURNAL OF THE AMERICAN CERAMIC SOCIETY*. 95(2):607-613. <https://doi.org/10.1111/j.1551-2916.2011.05012.x>

Heikkinen JJ, Kivimäki L, Hytönen VP, Kulomaa MS, Hormi OEO. 2012. Printable and flexible macroporous organosilica film with high protein adsorption capacity. *Thin Solid Films*. 520(6):1934-1937. <https://doi.org/10.1016/j.tsf.2011.09.041>

Ghabchi A, Varis T, Holmberg K, Sampath S. 2012. HVOF process control enabling strategies. In *International Thermal Spray Conference and Exposition, ITSC 2012 - Air, Land, Water and the Human Body: Thermal Spray Science and Applications*. ASM International. pp. 465-471.

Priimagi A, Shimamura A, Kondo M, Hiraoka T, Kubo S, Mamiya JI, Kinoshita M, Ikeda T, Shishido A. 2012. Location of the Azobenzene moieties within the cross-linked liquid-crystalline polymers can dictate the direction of photoinduced bending. *ACS Macro Letters*. 1(1):96-99. <https://doi.org/10.1021/mz200056w>

Wernersson E, Heyda J, Vazdar M, Lund M, Mason PE, Jungwirth P. 2011. Orientational dependence of the affinity of guanidinium ions to the water surface. *Journal of Physical Chemistry Part B*. 115(43):12521-12526. <https://doi.org/10.1021/jp207499s>

Vapaavuori J, Valtavirta V, Alasaarela T, Mamiya JI, Priimagi A, Shishido A, Kaivola M. 2011. Efficient surface structuring and photoalignment of supramolecular polymer-azobenzene complexes through rational chromophore design. *Journal of Materials Chemistry*. 21(39):15437-15441. <https://doi.org/10.1039/c1jm12642c>

Sorianello V, Colace L, Nardone M, Assanto G. 2011. Thermally evaporated single-crystal Germanium on Silicon. *Thin Solid Films*. 519(22):8037-8040. <https://doi.org/10.1016/j.tsf.2011.06.023>

Giammarco J, Zdyrko B, Petit L, Musgraves JD, Hu J, Agarwal A, Kimerling L, Richardson K, Luzinov I. 2011. Towards universal enrichment nanocoating for IR-ATR waveguides. *Chemical Communications*. 47(32):9104-9106. <https://doi.org/10.1039/c1cc12780b>

Vikholm-Lundin I, Auer S, Hellgren AC. 2011. Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies. *Sensors and Actuators B: Chemical*. 156(1):28-34. <https://doi.org/10.1016/j.snb.2011.03.069>

Heyda J, Kožíšek M, Bednárova L, Thompson G, Konvalinka J, Vondrášek J, Jungwirth P. 2011. Urea and guanidinium induced denaturation of a Trp-cage miniprotein. *Journal of Physical Chemistry Part B*. 115(28):8910-8924. <https://doi.org/10.1021/jp200790h>

Zorzi GK, Párraga JE, Seijo B, Sánchez A. 2011. Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy. *MACROMOLECULAR BIOSCIENCE*. 11(7):905-913. <https://doi.org/10.1002/mabi.201100005>

Tuurna S, Varis T, Penttilä K, Ruusuvoori K, Holmström S, Yli-Olli S. 2011. Optimised selection of new protective coatings for biofuel boiler applications. *Materials and Corrosion-Werkstoffe und Korrosion*. 62(7):642-649. <https://doi.org/10.1002/maco.201005898>

Das A, Wang DY, Leuteritz A, Subramaniam K, Greenwell HC, Wagenknecht U, Heinrich G. 2011. Preparation of zinc oxide free, transparent rubber nanocomposites using a layered double hydroxide filler. *Journal of Materials Chemistry*. 21(20):7194-7200. <https://doi.org/10.1039/c0jm03784b>

Takahashi H, Maruyama K, Karino Y, Morita A, Nakano M, Jungwirth P, Matubayasi N. 2011. Energetic origin of proton affinity to the air/water interface. *Journal of Physical Chemistry Part B*. 115(16):4745-4751. <https://doi.org/10.1021/jp2015676>

Rooj S, Das A, Heinrich G. 2011. Preintercalation of an organic accelerator into nanogalleries and preparation of ethylene propylene diene terpolymer rubber-clay nanocomposites. *POLYMER JOURNAL*. 43(3):285-292. <https://doi.org/10.1038/pj.2010.132>

Pluhařová E, Jungwirth P, Bradforth SE, Slaviček P. 2011. Ionization of purine tautomers in nucleobases, nucleosides, and nucleotides: From the gas phase to the aqueous environment. *Journal of Physical Chemistry Part B*. 115(5):1294-1305. <https://doi.org/10.1021/jp110388v>

Lagerbom J, Ritvonen T, Suhonen T, Varis T. 2011. Gas atomized thermal spray powders of various metals and alloys. In *Proceedings of the Euro International Powder Metallurgy Congress and Exhibition, Euro PM 2011*. European Powder Metallurgy Association (EPMA).

Koivusaari KJ, Rantala TT, Leppävuori S. 2000. Calculated electronic density of states and structural properties of tetrahedral amorphous carbon. *Diamond and Related Materials*. 9(3):736-740. [https://doi.org/10.1016/S0925-9635\(99\)00286-1](https://doi.org/10.1016/S0925-9635(99)00286-1)

Mäkinen J, Vehanen A, Hautojärvi P, Huomo H, Lahtinen J, Nieminen RM, Valkealahti S. 1986. Vacancy-type defect distributions near argon sputtered Al(100) surface studied by variable-energy positrons and molecular dynamics simulations. *Surface Science*. 175(2):385-414. [https://doi.org/10.1016/0039-6028\(86\)90242-6](https://doi.org/10.1016/0039-6028(86)90242-6)

Rantala TT, Rosén A, Hellsing B. 1986. A Finite Cluster Approach to the Electron-Hole Pair Damping of the Adsorbate Vibration: CO Adsorbed on Cu(100). *Studies in Surface Science and Catalysis*. 26(C):173-181. [https://doi.org/10.1016/S0167-2991\(09\)61238-6](https://doi.org/10.1016/S0167-2991(09)61238-6)

