

- Haiko, O, Heino, V, Porter, DA, Uusitalo, J & Kömi, J 2019, 'Effect of microstructure on the abrasive wear resistance of steels with hardness 450 HV', *Tribologia*, vol. 36, no. 1, pp. 54-57. <https://doi.org/10.30678/FJT.82443>
- Matikainen, V, Rubio Peregrina, S, Ojala, N, Koivuluoto, H, Schubert, J, Houdková, & Vuoristo, P 2019, 'Slurry and dry particle erosion wear properties of WC-10Co4Cr and Cr<sub>3</sub>C<sub>2</sub>-25NiCr hardmetal coatings deposited by HVOF and HVOF spray processes', *Tribologia*, vol. 36, no. 1-2, pp. 58-61. <https://doi.org/10.30678/FJT.83590>
- 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*, vol. 609, pp. 190-194. <https://doi.org/10.1016/j.susc.2012.12.007>
- 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*, vol. 26, no. 8, pp. 2020-2029. <https://doi.org/10.1007/s11666-017-0638-2>
- 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*, vol. 122, no. 16, pp. 4546-4557. <https://doi.org/10.1021/acs.jpcc.7b12510>
- 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*, vol. 116, no. 28, pp. 8145-8153. <https://doi.org/10.1021/jp3008267>
- Kohagen, M, Mason, PE & Jungwirth, P 2014, 'Accurate description of calcium solvation in concentrated aqueous solutions', *Journal of Physical Chemistry Part B*, vol. 118, no. 28, pp. 7902-7909. <https://doi.org/10.1021/jp5005693>
- Juoksukangas, J, Lehtovaara, A & Mäntylä, A 2016, 'A comparison of relative displacement fields between numerical predictions and experimental results in fretting contact', *Proceedings of the Institution of Mechanical Engineers Part J: Journal of Engineering Tribology*, vol. 230, no. 10, pp. 1273-1287. <https://doi.org/10.1177/1350650116633573>
- Mylläri, V, Ruoko, T-P & Syrjäälä, S 2015, 'A comparison of rheology and FTIR in the study of polypropylene and polystyrene photodegradation', *Journal of Applied Polymer Science*, vol. 132, no. 28, 42246. <https://doi.org/10.1002/app.42246>
- 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*, vol. 26, no. C, pp. 173-181. [https://doi.org/10.1016/S0167-2991\(09\)61238-6](https://doi.org/10.1016/S0167-2991(09)61238-6)
- Ali-Löytty, H, Louie, MW, Singh, MR, Li, L, Sanchez Casalongue, HG, Ogasawara, H, Crumlin, EJ, Liu, Z, Bell, AT, Nilsson, A & Friebel, D 2016, 'Ambient-Pressure XPS Study of a Ni-Fe Electrocatalyst for the Oxygen Evolution Reaction', *Journal of Physical Chemistry C*, vol. 120, no. 4, pp. 2247-2253. <https://doi.org/10.1021/acs.jpcc.5b10931>
- 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*, vol. 117, no. 6, pp. 1844-1848. <https://doi.org/10.1021/jp310719g>
- 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*, vol. 8, no. 2, 71. <https://doi.org/10.3390/coatings8020071>
- 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*, vol. 574, pp. 196-206. <https://doi.org/10.1016/j.tsf.2014.12.007>

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>

Matikainen, V, Koivuluoto, H & Vuoristo, P 2020, 'A study of  $\text{Cr}_3\text{C}_2$ -based HVOF- and HVAF-sprayed coatings: Abrasion, dry particle erosion and cavitation erosion resistance', *Wear*, vol. 446-447, 203188. <https://doi.org/10.1016/j.wear.2020.203188>

Matikainen, V, Bolelli, G, Koivuluoto, H, Honkanen, M, Vippola, M, Lusvarghi, L & Vuoristo, P 2017, 'A Study of  $\text{Cr}_3\text{C}_2$ -Based HVOF- and HVAF-Sprayed Coatings: Microstructure and Carbide Retention', *Journal of Thermal Spray Technology*, vol. 26, no. 6, pp. 1-18. <https://doi.org/10.1007/s11666-017-0578-x>

Juoksukangas, J, Hintikka, J, Lehtovaara, A, Mäntylä, A, Vaara, J & Frondelius, T 2020, 'Avoiding the initial adhesive friction peak in fretting', *Wear*, vol. 460-461, 203353. <https://doi.org/10.1016/j.wear.2020.203353>

Vazdar, M, Jurkiewicz, P, Hof, M, Jungwirth, P & Cwiklik, L 2012, 'Behavior of 4-hydroxynonenal in phospholipid membranes', *Journal of Physical Chemistry Part B*, vol. 116, no. 22, pp. 6411-6415. <https://doi.org/10.1021/jp3044219>

Huttunen-Saarivirta, E, Isotahdon, E, Metsäjoki, J, Salminen, T, Ronkainen, H & Carpén, L 2019, 'Behaviour of leaded tin bronze in simulated seawater in the absence and presence of tribological contact with alumina counterbody: Corrosion, wear and tribocorrosion', *Tribology International*, vol. 129, pp. 257-271. <https://doi.org/10.1016/j.triboint.2018.08.021>

Rasappa, S, Borah, D, Senthamaraikannan, 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*, vol. 522, pp. 318-323. <https://doi.org/10.1016/j.tsf.2012.09.017>

Kulig, W & Agmon, N 2014, 'Both zundel and eigen isomers contribute to the IR spectrum of the gas-phase  $\text{H}_9\text{O}_4^+$  cluster', *Journal of Physical Chemistry Part B*, vol. 118, no. 1, pp. 278-286. <https://doi.org/10.1021/jp410446d>

Koivusaari, KJ, Rantala, TT & Leppävuori, S 2000, 'Calculated electronic density of states and structural properties of tetrahedral amorphous carbon', *Diamond and Related Materials*, vol. 9, no. 3, pp. 736-740. [https://doi.org/10.1016/S0925-9635\(99\)00286-1](https://doi.org/10.1016/S0925-9635(99)00286-1)

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*, vol. 131, no. 11. <https://doi.org/10.1002/app.40341>

Ma, L, Laasonen, K & Akola, J 2017, 'Catalytic Activity of AuCu Clusters on  $\text{MgO}(100)$ : Effect of Alloy Composition for CO Oxidation', *Journal of Physical Chemistry C*, vol. 121, no. 20, pp. 10876-10886. <https://doi.org/10.1021/acs.jpcc.6b12054>

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*, vol. 117, no. 21, pp. 6394-6402. <https://doi.org/10.1021/jp401506v>

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*, vol. 456-457, 203386. <https://doi.org/10.1016/j.wear.2020.203386>

Harra, J, Tuominen, M, Juuti, P, Rissler, J, Koivuluoto, H, Haapanen, J, Niemelä-Anttonen, H, Stenroos, C, Teisala, H, Lahti, J, Kuusipalo, J, Vuoristo, P & Mäkelä, JM 2018, 'Characteristics of nFOG, an aerosol-based wet thin film coating technique', *Journal of Coatings Technology Research*, vol. 15, no. 3, pp. 623-632. <https://doi.org/10.1007/s11998-017-0022-7>

- Juoksukangas, J, Nurmi, V, Hintikka, J, Vippola, M, Lehtovaara, A, Mäntylä, A, Vaara, J & Frondelius, T 2019, 'Characterization of cracks formed in large flat-on-flat fretting contact', *International Journal of Fatigue*, vol. 124, pp. 361-370. <https://doi.org/10.1016/j.ijfatigue.2019.03.004>
- 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*, vol. 25, pp. 1127-1137. <https://doi.org/10.1007/s11666-016-0428-2>
- 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*, vol. 28, no. 1-2, pp. 98-107. <https://doi.org/10.1007/s11666-018-0816-x>
- 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*, vol. 371, pp. 245-254. <https://doi.org/10.1016/j.surfcoat.2018.10.097>
- Lehtonen, J, Koivuluoto, H, Ge, Y, Juselius, A & Hannula, SP 2020, 'Cold gas spraying of a high-entropy CrFeNiMn equiatomic alloy', *Coatings*, vol. 10, no. 1, 53. <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*, vol. 10, no. 4, 348. <https://doi.org/10.3390/coatings10040348>
- 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*, vol. 340-341, pp. 73-81. <https://doi.org/10.1016/j.wear.2015.07.006>
- Valtonen, K, Ojala, N, Haiko, O & Kuokkala, V-T 2019, 'Comparison of various high-stress wear conditions and wear performance of martensitic steels', *Wear*, vol. 426-427, no. Part A, pp. 3-13. <https://doi.org/10.1016/j.wear.2018.12.006>
- Aho, A, Polojärvi, V, Korpijärvi, VM, Salmi, J, Tukiainen, A, Laukkanen, P & Guina, M 2014, 'Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells', *Solar Energy Materials and Solar Cells*, vol. 124, pp. 150-158. <https://doi.org/10.1016/j.solmat.2014.01.044>
- 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>
- 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*, vol. 121, no. 28, pp. 6792-6798. <https://doi.org/10.1021/acs.jpcc.7b03888>
- Bhagavatheswaran, ES, Parsekar, M, Das, A, Le, HH, Wiessner, S, Stöckelhuber, KW, Schmaucks, G & Heinrich, G 2015, 'Construction of an Interconnected Nanostructured Carbon Black Network: Development of Highly Stretchable and Robust Elastomeric Conductors', *Journal of Physical Chemistry C*, vol. 119, no. 37, pp. 21723-21731. <https://doi.org/10.1021/acs.jpcc.5b06629>
- 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*, vol. 50, no. 5, pp. 564-570. <https://doi.org/10.1002/sia.6429>
- 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*, vol. 171-172, pp. 440-448. <https://doi.org/10.1016/j.snb.2012.05.008>

Ghabchi, A, Sampath, S, Holmberg, K & Varis, T 2014, 'Damage mechanisms and cracking behavior of thermal sprayed WC-CoCr coating under scratch testing', *Wear*, vol. 313, no. 1-2, pp. 97-105. <https://doi.org/10.1016/j.wear.2014.02.017>

Hiltunen, A, Ruoko, T-P, Iivonen, T, Lahtonen, K, Ali-Löytty, H, Sarlin, E, Valden, M, Leskelä, M & Tkachenko, N 2018, 'Design aspects of all atomic layer deposited TiO<sub>2</sub>-Fe<sub>2</sub>O<sub>3</sub> scaffold-absorber photoanodes for water splitting', *Sustainable Energy & Fuels*, vol. 2, no. 9, pp. 2124-2130. <https://doi.org/10.1039/C8SE00252E>

Vikholm-Lundin, I, Auer, S & Hellgren, AC 2011, 'Detection of 3,4-methylenedioxymethamphetamine (MDMA, ecstasy) by displacement of antibodies', *Sensors and Actuators B: Chemical*, vol. 156, no. 1, pp. 28-34. <https://doi.org/10.1016/j.snb.2011.03.069>

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>

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*, vol. 133, no. 31, 43766. <https://doi.org/10.1002/app.43766>

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*, vol. 24, no. 3, pp. 542-551. <https://doi.org/10.1007/s11666-014-0211-1>

Singh, S, Valkama, M, Epp, M, Anttila, L, Schlecker, W & Ingber, E 2015, 'Digital correction of frequency response mismatches in 2-channel time-interleaved ADCs using adaptive I/Q signal processing', *Analog Integrated Circuits and Signal Processing*, vol. 82, no. 3, pp. 543-555. <https://doi.org/10.1007/s10470-014-0476-9>

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*, vol. 118, no. 48, pp. 13833-13837. <https://doi.org/10.1021/jp5111086>

Haiko, O, Miettunen, I, Porter, D, Ojala, N, Ratia, V, Heino, V & Kemppainen, A 2017, 'Effect of finish rolling and quench stop temperatures on impact-abrasive wear resistance of 0.35 % carbon direct-quenched steel', *Tribologia*, vol. 35, no. 1-2, pp. 5-21.

Hakola, H, Sariola-Leikas, E, Efimov, A & Tkachenko, NV 2016, 'Effect of Hole Transporting Material on Charge Transfer Processes in Zinc Phthalocyanine Sensitized ZnO Nanorods', *Journal of Physical Chemistry C*, vol. 120, no. 13, pp. 7044-7051. <https://doi.org/10.1021/acs.jpcc.6b01583>

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*, vol. 270, pp. 132-138. <https://doi.org/10.1016/j.surfcoat.2015.03.011>

Ratia, V, Rojacz, H, Terva, J, Valtonen, K, Badisch, E & Kuokkala, VT 2015, 'Effect of Multiple Impacts on the Deformation of Wear-Resistant Steels', *Tribology Letters*, vol. 57, no. 2, 15. <https://doi.org/10.1007/s11249-014-0460-7>

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*, vol. 27, no. 4, pp. 680-694. <https://doi.org/10.1007/s11666-018-0717-z>

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*, vol. 119, no. 31, pp. 10042-10051. <https://doi.org/10.1021/acs.jpcc.5b03604>

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*, vol. 454-455, 203336. <https://doi.org/10.1016/j.wear.2020.203336>

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*, vol. 131, no. 15, 40531. <https://doi.org/10.1002/app.40531>

Milanti, A, Matikainen, V, Koivuluoto, H, Bolelli, G, Lusvarghi, 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*, vol. 277, pp. 81-90. <https://doi.org/10.1016/j.surfcoat.2015.07.018>

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*, vol. 440-441. <https://doi.org/10.1016/j.wear.2019.203098>

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*, vol. 317, no. 1-2, pp. 225-232. <https://doi.org/10.1016/j.wear.2014.06.003>

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*, vol. 54, no. 99, pp. 14029-14032. <https://doi.org/10.1039/c8cc07592a>

Lepcha, A, Maccato, C, Mettenböcker, A, Andreu, T, Mayrhofer, L, Walter, M, Olthof, S, Ruoko, TP, Klein, A, Moseler, M, Meerholz, K, Morante, JR, Barreca, D & Mathur, S 2015, 'Electrospun Black Titania Nanofibers: Influence of Hydrogen Plasma-Induced Disorder on the Electronic Structure and Photoelectrochemical Performance', *Journal of Physical Chemistry C*, vol. 119, no. 33, pp. 18835-18842. <https://doi.org/10.1021/acs.jpcc.5b02767>

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*, vol. 115, no. 16, pp. 4745-4751. <https://doi.org/10.1021/jp2015676>

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>

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*, vol. 122, no. 6, pp. 2010-2022. <https://doi.org/10.1021/acs.jpcc.7b11792>

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*, vol. 364-365, pp. 10-21. <https://doi.org/10.1016/j.wear.2016.06.007>

Suihkonen, R, Lindgren, M, Siljander, S, Sarlin, E & Vuorinen, J 2016, 'Erosion wear of vinylester matrix composites in aqueous and acidic environments at elevated temperatures', *Wear*, vol. 358-359, pp. 7-16. <https://doi.org/10.1016/j.wear.2016.03.026>

Matikainen, V, Rubio Peregrina, S, Ojala, N, Koivuluoto, H, Schubert, J, Houdková, & Vuoristo, P 2019, 'Erosion wear performance of WC-10Co4Cr and Cr<sub>3</sub>C<sub>2</sub>-25NiCr coatings sprayed with high-velocity thermal spray processes', *Surface and Coatings Technology*, vol. 370, pp. 196-212. <https://doi.org/10.1016/j.surfcoat.2019.04.067>

Vuorinen, E, Heino, V, Ojala, N, Haiko, O & Hedayati, A 2018, 'Erosive-abrasive wear behavior of carbide-free bainitic and boron steels compared in simulated field conditions', *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, vol. 232, no. 1, pp. 3-13. <https://doi.org/10.1177/1350650117739125>

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*, vol. 390-391, pp. 84-92. <https://doi.org/10.1016/j.wear.2017.07.011>

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*, vol. 328-329, pp. 391-400. <https://doi.org/10.1016/j.wear.2015.03.014>

Tamminen, P, Viheriäkoski, T, Sydänheimo, L & Ukkonen, L 2015, 'ESD qualification data used as the basis for building electrostatic discharge protected areas', *Journal of Electrostatics*, vol. 77, 3024, pp. 174-181. <https://doi.org/10.1016/j.elstat.2015.08.009>

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*, vol. 41, no. 7, pp. 8494-8500. <https://doi.org/10.1016/j.ceramint.2015.03.056>

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 HVOF-Sprayed WC-CoCr Coatings', *Journal of Thermal Spray Technology*. <https://doi.org/10.1007/s11666-020-01037-2>

Mikkonen, R & Mäntysalo, M 2018, 'Evaluation of screen printed silver trace performance and long-term reliability against environmental stress on a low surface energy substrate', *Microelectronics Reliability*, vol. 86, pp. 54-65. <https://doi.org/10.1016/j.microrel.2018.05.010>

Juoksukangas, J, Lehtovaara, A & Mäntylä, A 2016, 'Experimental and numerical investigation of fretting fatigue behavior in bolted joints', *Tribology International*, vol. 103, pp. 440-448. <https://doi.org/10.1016/j.triboint.2016.07.021>

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*, vol. 132, no. 9, 41539. <https://doi.org/10.1002/app.41539>

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*, vol. 23, no. 8, pp. 1302-1311. <https://doi.org/10.1007/s11666-014-0124-z>

Khan, MN & Zharnikov, M 2013, 'Fabrication of ssDNA/Oligo(ethylene glycol) monolayers and patterns by exchange reaction promoted by ultraviolet light irradiation', *Journal of Physical Chemistry C*, vol. 117, no. 47, pp. 24883-24893. <https://doi.org/10.1021/jp408819k>

Khan, MN & Zharnikov, M 2014, 'Fabrication of ssDNA/oligo(ethylene glycol) monolayers by promoted exchange reaction with thiol and disulfide substituents', *Journal of Physical Chemistry C*, vol. 118, no. 6, pp. 3093-3101. <https://doi.org/10.1021/jp411353f>

Kulju, S, Riegger, L, Koltay, P, Mattila, K & Hyväluoma, J 2018, 'Fluid flow simulations meet high-speed video: Computer vision comparison of droplet dynamics', *Journal of Colloid and Interface Science*, vol. 522, pp. 48-56. <https://doi.org/10.1016/j.jcis.2018.03.053>

Välimäki, H, Verho, J, Kreutzer, J, Kattiparambil Rajan, D, Rynnänen, 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*, vol. 249, pp. 738-746. <https://doi.org/10.1016/j.snb.2017.04.182>

Hintikka, J, Lehtovaara, A & Mäntylä, A 2015, 'Fretting-induced friction and wear in large flat-on-flat contact with quenched and tempered steel', *Tribology International*, vol. 92, pp. 191-202. <https://doi.org/10.1016/j.triboint.2015.06.008>

Goh, J-Q, Akola, J & Ferrando, R 2017, 'Geometric Structure and Chemical Ordering of Large AuCu Clusters: A Computational Study', *Journal of Physical Chemistry C*, vol. 121, no. 20, pp. 10809-10816. <https://doi.org/10.1021/acs.jpcc.6b11958>

Holmberg, K, Kivikytö-Reponen, P, Härkisaari, P, Valtonen, K & Erdemir, A 2017, 'Global energy consumption due to friction and wear in the mining industry', *Tribology International*, vol. 115, pp. 116-139. <https://doi.org/10.1016/j.triboint.2017.05.010>

Allolio, C, Baxova, K, Vazdar, M & Jungwirth, P 2016, 'Guanidinium Pairing Facilitates Membrane Translocation', *Journal of Physical Chemistry Part B*, vol. 120, no. 1, pp. 143-153. <https://doi.org/10.1021/acs.jpcc.5b10404>

Kotilainen, M, Krumpolec, R, Franta, D, Souček, P, Homola, T, Cameron, DC & Vuoristo, P 2017, 'Hafnium oxide thin films as a barrier against copper diffusion in solar absorbers', *Solar Energy Materials and Solar Cells*, vol. 166, pp. 140-146. <https://doi.org/10.1016/j.solmat.2017.02.033>

Tofanello, A, Freitas, ALM, Carvalho, WM, Salminen, T, Niemi, T & Souza, FL 2020, 'Hematite Surface Modification toward Efficient Sunlight-Driven Water Splitting Activity: The Role of Gold Nanoparticle Addition', *Journal of Physical Chemistry C*. <https://doi.org/10.1021/acs.jpcc.9b11966>

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*, vol. 265, pp. 235-243. <https://doi.org/10.1016/j.surfcoat.2014.11.012>

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*, vol. 117, no. 44, pp. 13775-13785. <https://doi.org/10.1021/jp407078z>

Passananti, M, Zapadinsky, E, Zanca, T, Kangasluoma, J, Myllys, 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*, vol. 55, no. 42, pp. 5946-5949. <https://doi.org/10.1039/c9cc02896j>

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*, vol. 26, no. 7, pp. 1720-1731. <https://doi.org/10.1007/s11666-017-0621-y>

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*, vol. 119, no. 21, pp. 6357-6365. <https://doi.org/10.1021/jp510528u>

Valtonen, K, Ratia, V, Ramakrishnan, KR, Apostol, M, Terva, J & Kuokkala, V-T 2019, 'Impact wear and mechanical behavior of steels at subzero temperatures', *Tribology International*, vol. 129, pp. 476-493. <https://doi.org/10.1016/j.triboint.2018.08.016>

Vuori, L, Ali-Löytty, H, Lahtonen, K, Hannula, M, Lehtonen, E, Niu, Y & Valden, M 2017, 'Improved corrosion properties of Hot Dip Galvanized Steel by nanomolecular silane layers as hybrid interface between zinc and top coatings', *Corrosion*, vol. 73, no. 2. <https://doi.org/10.5006/2206>

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*, vol. 133, no. 42, 44116. <https://doi.org/10.1002/app.44116>

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  $\text{Cr}_3\text{C}_2$ -NiCr coatings by WC addition', *Surface and Coatings Technology*, vol. 337, pp. 296-305. <https://doi.org/10.1016/j.surfcoat.2018.01.035>

Polojärvi, V, Aho, A, Tukiainen, A, Raappana, M, Aho, T, Schramm, A & Guina, M 2016, 'Influence of As/group-III flux ratio on defects formation and photovoltaic performance of GaInNAs solar cells', *Solar Energy Materials and Solar Cells*, vol. 149, pp. 213-220. <https://doi.org/10.1016/j.solmat.2016.01.024>

Janka, L, Norpoth, J, Trache, R & Berger, LM 2016, 'Influence of heat treatment on the abrasive wear resistance of a  $\text{Cr}_3\text{C}_2$ -NiCr coating deposited by an ethene-fuelled HVOF spray process', *Surface and Coatings Technology*, vol. 291, pp. 444-451. <https://doi.org/10.1016/j.surfcoat.2016.02.066>

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*, vol. 388, 125604. <https://doi.org/10.1016/j.surfcoat.2020.125604>

Kotilainen, M, Honkanen, M, Mizohata, K & Vuoristo, P 2016, 'Influence of temperature-induced copper diffusion on degradation of selective chromium oxy-nitride solar absorber coatings', *Solar Energy Materials and Solar Cells*, vol. 145, pp. 323-332. <https://doi.org/10.1016/j.solmat.2015.10.034>

Ojha, N, Laihin, 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*, vol. 44, no. 10, pp. 11807-11811. <https://doi.org/10.1016/j.ceramint.2018.03.267>

Milanti, A, Koivuluoto, H & Vuoristo, P 2015, 'Influence of the Spray Gun Type on Microstructure and Properties of HVOF Sprayed Fe-Based Corrosion Resistant Coatings', *Journal of Thermal Spray Technology*, vol. 24, no. 7, pp. 1312-1322. <https://doi.org/10.1007/s11666-015-0298-z>

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*, vol. 26, no. 8, pp. 1982-1993. <https://doi.org/10.1007/s11666-017-0642-6>

Gupta, SK, Wu, HH, Kwak, KJ, Casal, P, Nicholson, TR, Wen, X, Anisha, R, Bhushan, B, Berger, PR, Lu, W, Brillson, LJ & Lee, SC 2011, 'Interfacial design and structure of protein/polymer films on oxidized AlGaN surfaces', *Journal of Physics D: Applied Physics*, vol. 44, no. 3, 34010. <https://doi.org/10.1088/0022-3727/44/3/034010>

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*, vol. 638, pp. 410-419. <https://doi.org/10.1016/j.tsf.2017.07.055>

Pluhařová, E, Jungwirth, P, Bradforth, SE & Slavíček, 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*, vol. 115, no. 5, pp. 1294-1305. <https://doi.org/10.1021/jp110388v>

Khan, MN & Zharnikov, M 2013, 'Irradiation promoted exchange reaction with disulfide substituents', *Journal of Physical Chemistry C*, vol. 117, no. 28, pp. 14534-14543. <https://doi.org/10.1021/jp4006026>

Cappelluti, F, Kim, D, van Eerden, M, Cédola, AP, Aho, T, Bissels, G, Elsehrawy, F, Wu, J, Liu, H, Mulder, P, Bauhuis, G, Schermer, J, Niemi, T & Guina, M 2018, 'Light-trapping enhanced thin-film III-V quantum dot solar cells fabricated by epitaxial lift-off', *Solar Energy Materials and Solar Cells*, vol. 181, pp. 83-92. <https://doi.org/10.1016/j.solmat.2017.12.014>

Oksanen, VT, Lehtovaara, AJ & Kallio, MH 2017, 'Load capacity of lubricated bismuth bronze bimetal bearing under elliptical sliding motion', *Wear*, vol. 388-389, pp. 72-80. <https://doi.org/10.1016/j.wear.2017.05.001>



Baek, J, Umeyama, T, Stranius, K, Yamada, H, Tkachenko, NV & Imahori, H 2017, 'Long-Range Observation of Exciplex Formation and Decay Mediated by One-Dimensional Bridges', *Journal of Physical Chemistry C*, vol. 121, no. 25, pp. 13952-13961. <https://doi.org/10.1021/acs.jpcc.7b04483>

Donadei, V, Koivuluoto, H, Sarlin, E & Vuoristo, P 2020, 'Lubricated icephobic coatings prepared by flame spraying with hybrid feedstock injection', *Surface and Coatings Technology*, vol. 403, 126396. <https://doi.org/10.1016/j.surfcoat.2020.126396>

Ghazy, A, Safdar, M, Lastusaari, M, Aho, A, Tukiainen, A, Savin, H, Guina, M & Karppinen, M 2020, 'Luminescent (Er,Ho)<sub>2</sub>O<sub>3</sub> thin films by ALD to enhance the performance of silicon solar cells', *Solar Energy Materials and Solar Cells*, vol. 219, 110787. <https://doi.org/10.1016/j.solmat.2020.110787>

Rissanen, I & Laurson, L 2019, 'Magnetic non-contact friction from domain wall dynamics actuated by oscillatory mechanical motion', *Journal of Physics D: Applied Physics*, vol. 52, no. 44, 445002. <https://doi.org/10.1088/1361-6463/ab351f>

Barberi, J, Nommeots-Nomm, A, Fiume, E, Verné, E, Massera, J & Baino, F 2019, 'Mechanical characterization of pore-graded bioactive glass scaffolds produced by robocasting', *Biomedical Glasses*, vol. 5, no. 1, pp. 140-147. <https://doi.org/10.1515/bglass-2019-0012>

Rajan, R, Rainosalu, 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*, vol. 135, no. 36, 46673. <https://doi.org/10.1002/app.46673>

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*, vol. 54, no. 28, pp. 3440-3443. <https://doi.org/10.1039/c8cc00221e>

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*, vol. 118, no. 15, pp. 4245-4252. <https://doi.org/10.1021/jp500713q>

Sorianello, V, Colace, L, Assanto, G & Nardone, M 2011, 'Micro-Raman characterization of Germanium thin films evaporated on various substrates', *Microelectronic Engineering*, vol. 88, no. 4, pp. 492-495. <https://doi.org/10.1016/j.mee.2010.10.028>

Tuominen, J, Näkki, J, Pajukoski, H, Hyvärinen, L & Vuoristo, P 2016, 'Microstructural and abrasion wear characteristics of laser-clad tool steel coatings', *Surface Engineering*, vol. 32, no. 12, pp. 923-933. <https://doi.org/10.1080/02670844.2016.1180496>

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*, vol. 25, no. 5, pp. 1040-1055. <https://doi.org/10.1007/s11666-016-0410-z>

Palola, S, Sarlin, E, Kolahgar Azari, S, Koutsos, V & Vuorinen, J 2017, 'Microwave induced hierarchical nanostructures on aramid fibers and their influence on adhesion properties in a rubber matrix', *Applied Surface Science*, vol. 410, pp. 145-153. <https://doi.org/10.1016/j.apsusc.2017.03.070>

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*, vol. 45, no. 4, pp. 4840-4848. <https://doi.org/10.1016/j.ceramint.2018.11.180>

- Palmolahti, L, Ali-Löytty, H, Khan, R, Saari, J, Tkachenko, NV & Valden, M 2020, 'Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO<sub>2</sub> for Enhanced Solar Water Splitting', *Journal of Physical Chemistry C*, vol. 124, no. 24, pp. 13094-13101. <https://doi.org/10.1021/acs.jpcc.0c00798>
- Milne, D, Wilson, JIB, Rantala, TT & Lenkkeri, J 1989, 'Morphological and structural changes in laser CVD of silicon: comparison of theoretical temperature calculations with experimental results', *Applied Surface Science*, vol. 43, no. 1-4, pp. 81-86. [https://doi.org/10.1016/0169-4332\(89\)90194-3](https://doi.org/10.1016/0169-4332(89)90194-3)
- Rasappa, S, Schulte, L, Borah, D, Hulkkonen, H, Ndoni, S, Salminen, T, Senthamarayanan, R, Morris, MA & Niemi, T 2018, 'Morphology evolution of PS-b-PDMS block copolymer and its hierarchical directed self-assembly on block copolymer templates', *Microelectronic Engineering*, vol. 192, pp. 1-7. <https://doi.org/10.1016/j.mee.2018.02.002>
- Salpavaara, T, Hänninen, A, Antniemi, A, Lekkala, J & Kellomäki, M 2017, 'Non-destructive and wireless monitoring of biodegradable polymers', *Sensors and Actuators B: Chemical*, vol. 251, pp. 1018-1025. <https://doi.org/10.1016/j.snb.2017.05.116>
- 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*, vol. 119, no. 30, pp. 9706-9716. <https://doi.org/10.1021/acs.jpbc.5b05123>
- Hintikka, J, Lehtovaara, A & Mäntylä, A 2016, 'Normal displacements in non-Coulomb friction conditions during fretting', *Tribology International*, vol. 94, pp. 633-639. <https://doi.org/10.1016/j.triboint.2015.10.029>
- Del Cerro, PR, Teittinen, H, Norrbo, I, Lastusaari, M, Massera, J & Petit, L 2020, 'Novel borosilicate bioactive scaffolds with persistent luminescence', *Biomedical Glasses*, vol. 6, no. 1, pp. 1-9. <https://doi.org/10.1515/bglass-2020-0001>
- 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*, vol. 27, no. 3, pp. 423-432. <https://doi.org/10.1007/s11666-018-0685-3>
- Levoska, J, Rantala, TT & Lenkkeri, J 1989, 'Numerical simulation of temperature distributions in layered structures during laser processing', *Applied Surface Science*, vol. 36, no. 1-4, pp. 12-22. [https://doi.org/10.1016/0169-4332\(89\)90895-7](https://doi.org/10.1016/0169-4332(89)90895-7)
- Caglayan, H, Bulu, I & Ozbay, E 2009, 'Observation of off-axis directional beaming via subwavelength asymmetric metallic gratings', *Journal of Physics D: Applied Physics*, vol. 42, no. 4, 045105. <https://doi.org/10.1088/0022-3727/42/4/045105>
- Brobbey, KJ, Haapanen, J, Gunell, M, Mäkelä, JM, Eerola, E, Toivakka, M & Saarinen, JJ 2017, 'One-step flame synthesis of silver nanoparticles for roll-to-roll production of antibacterial paper', *Applied Surface Science*, vol. 420, pp. 558-565. <https://doi.org/10.1016/j.apsusc.2017.05.143>
- Baratto, C, Golovanova, V, Faglia, G, Hakola, H, Niemi, T, Tkachenko, N, Nazarchurk, B & Golovanov, V 2020, 'On the alignment of ZnO nanowires by Langmuir – Blodgett technique for sensing application', *Applied Surface Science*, vol. 528, 146959. <https://doi.org/10.1016/j.apsusc.2020.146959>
- Haapanen, J, Aromaa, M, Teisala, H, Juuti, P, Tuominen, M, Sillanpää, M, Stepien, M, Saarinen, JJ, Toivakka, M, Kuusipalo, J & Mäkelä, JM 2019, 'On the limit of superhydrophobicity: Defining the minimum amount of TiO<sub>2</sub> nanoparticle coating', *Materials Research Express*, vol. 6, no. 3, 035004. <https://doi.org/10.1088/2053-1591/aaf2ee>
- Colace, L, Sorianello, V, Romagnoli, M, Socci, L & Assanto, G 2011, 'Optical power monitors in Ge monolithically integrated on SOI chips', *Microelectronic Engineering*, vol. 88, no. 4, pp. 514-517. <https://doi.org/10.1016/j.mee.2010.10.033>

Tuurna, S, Varis, T, Penttilä, K, Ruusu vuori, K, Holmström, S & Yli-Olli, S 2011, 'Optimised selection of new protective coatings for biofuel boiler applications', *Materials and Corrosion-Werkstoffe und Korrosion*, vol. 62, no. 7, pp. 642-649. <https://doi.org/10.1002/maco.201005898>

Lampio, K & Karvinen, R 2017, 'Optimization of convectively cooled heat sinks', *Microelectronics Reliability*, vol. 79, pp. 473-479. <https://doi.org/10.1016/j.microrel.2017.06.011>

Varis, T, Suhonen, T, Calonius, O, Čuban, 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*, vol. 305, pp. 123-131. <https://doi.org/10.1016/j.surfcoat.2016.08.012>

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*, vol. 115, no. 43, pp. 12521-12526. <https://doi.org/10.1021/jp207499s>

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*, vol. 119, no. 13, pp. 4594-4600. <https://doi.org/10.1021/acs.jpcc.5b00240>

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*, vol. 113, pp. 218-224. <https://doi.org/10.1016/j.porgcoat.2017.04.019>

Salpavaara, T, Järveläinen, M, Seppälä, S, Yli-Hallila, T, Verho, J, Vilkkö, M, Leikkala, J & Levänen, E 2015, 'Passive resonance sensor based method for monitoring particle suspensions', *Sensors and Actuators B: Chemical*, vol. 219, pp. 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*, vol. 119, no. 22, pp. 6646-6657. <https://doi.org/10.1021/acs.jpcc.5b01351>

Oksa, M, Varis, T & Ruusu vuori, K 2014, 'Performance testing of iron based thermally sprayed HVOF coatings in a biomass-fired fluidised bed boiler', *Surface and Coatings Technology*, vol. 251, pp. 191-200. <https://doi.org/10.1016/j.surfcoat.2014.04.025>

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*, vol. 616, pp. 842-849. <https://doi.org/10.1016/j.tsf.2016.10.002>

Virkki, K, Hakola, H, Urbani, M, Tejerina, L, Ince, M, Martínez-Díaz, MV, Torres, T, Golovanova, V, Golovanov, V & Tkachenko, NV 2017, 'Photoinduced Electron Injection from Zinc Phthalocyanines into Zinc Oxide Nanorods: Aggregation Effects', *Journal of Physical Chemistry C*, vol. 121, no. 17, pp. 9594-9605. <https://doi.org/10.1021/acs.jpcc.7b01562>

Virkki, K, Demir, S, Lemmetyinen, H & Tkachenko, NV 2015, 'Photoinduced Electron Transfer in CdSe/ZnS Quantum Dot-Fullerene Hybrids', *Journal of Physical Chemistry C*, vol. 119, no. 31, pp. 17561-17572. <https://doi.org/10.1021/acs.jpcc.5b04251>

Baek, J, Umeyama, T, Mizuno, S, Tkachenko, NV & Imahori, H 2017, 'Photophysical properties of porphyrin dimer-single-walled carbon nanotube linked systems', *Journal of Physical Chemistry C*, vol. 121, no. 39. <https://doi.org/10.1021/acs.jpcc.7b08594>

Isoaho, R, Aho, A, Tukiainen, A, Aho, T, Raappana, M, Salminen, T, Reuna, J & Guina, M 2019, 'Photovoltaic properties of low-bandgap (0.7–0.9eV) lattice-matched GaInNAsSb solar junctions grown by molecular beam epitaxy on GaAs', *Solar Energy Materials and Solar Cells*, vol. 195, pp. 198-203. <https://doi.org/10.1016/j.solmat.2019.02.030>

Selvan, NT, Eshwaran, SB, Das, A, Stöckelhuber, KW, Wießner, S, Pötschke, P, Nando, GB, Chervanyov, AI & Heinrich, G 2016, 'Piezoresistive natural rubber-multiwall carbon nanotube nanocomposite for sensor applications', *Sensors and Actuators, A: Physical*, vol. 239, pp. 102-113. <https://doi.org/10.1016/j.sna.2016.01.004>

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*, vol. 119, no. 38, pp. 12381-12389. <https://doi.org/10.1021/acs.jpcc.5b06457>

Borah, D, Shaw, MT, Rasappa, S, Farrell, RA, O'Mahony, C, Faulkner, CM, Bosea, M, Gleeson, P, Holmes, JD & Morris, MA 2011, 'Plasma etch technologies for the development of ultra-small feature size transistor devices', *Journal of Physics D: Applied Physics*, vol. 44, no. 17, 174012. <https://doi.org/10.1088/0022-3727/44/17/174012>

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*, vol. 120, no. 35, pp. 9287-9296. <https://doi.org/10.1021/acs.jpcc.6b05604>

Mäntylä, A, Hintikka, J, Frondelius, T, Vaara, J, Lehtovaara, A & Juoksukangas, J 2019, 'Prediction of contact condition and surface damage by simulating variable friction coefficient and wear', *Tribology International*. <https://doi.org/10.1016/j.triboint.2019.106054>

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*, vol. 520, no. 6, pp. 1934-1937. <https://doi.org/10.1016/j.tsf.2011.09.041>

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>

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*, vol. 132, no. 39, 42595. <https://doi.org/10.1002/app.42595>

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*, vol. 338, pp. 45-62. <https://doi.org/10.1016/j.surfcoat.2018.01.078>

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 biolayer interferometry biosensor', *Sensors and Actuators B: Chemical*, vol. 221, pp. 507-514. <https://doi.org/10.1016/j.snb.2015.06.088>

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*, vol. 2, pp. 1-5. <https://doi.org/10.1016/j.colcom.2014.07.001>

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*, vol. 133, no. 30, 43717. <https://doi.org/10.1002/app.43717>

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*, vol. 117, no. 46, pp. 14329-14335. <https://doi.org/10.1021/jp409040u>

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*, vol. 117, no. 27, pp. 8150-8158. <https://doi.org/10.1021/jp405683s>

- Myllymäki, S, Putaala, J, Hannu, J, Kunnari, E & Mäntysalo, M 2016, 'RF measurements to pinpoint defects in inkjet-printed, thermally and mechanically stressed coplanar waveguides', *Microelectronics Reliability*, vol. 65, pp. 142-150. <https://doi.org/10.1016/j.microrel.2016.08.021>
- Chintha, AR, Valtonen, K, Kuokkala, VT, Kundu, S, Peet, MJ & Bhadeshia, HKDH 2019, 'Role of fracture toughness in impact-abrasion wear', *Wear*, vol. 428-429, pp. 430-437. <https://doi.org/10.1016/j.wear.2019.03.028>
- 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*, vol. 119, no. 29, pp. 8939-8949. <https://doi.org/10.1021/jp507571u>
- Javanainen, M, Ollila, OHS & Martinez-Seara, H 2020, 'Rotational Diffusion of Membrane Proteins in Crowded Membranes', *Journal of Physical Chemistry B*, vol. 124, no. 15, pp. 2994-3001. <https://doi.org/10.1021/acs.jpcc.0c00884>
- Linjamaa, A, Lehtovaara, A, Kallio, M & Léger, A 2019, 'Running-in effects on friction of journal bearings under slow sliding speeds', *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*. <https://doi.org/10.1177/1350650119864758>
- Hintikka, J, Mäntylä, A, Vaara, J, Frondelius, T, Juoksukangas, J & Lehtovaara, A 2019, 'Running-in in fretting, transition from near-stable friction regime to gross sliding', *Tribology International*, vol. 143, 106073. <https://doi.org/10.1016/j.triboint.2019.106073>
- Goh, J-Q, Malola, S, Häkkinen, H & Akola, J 2015, 'Silver sulfide nanoclusters and the superatom model', *Journal of Physical Chemistry C*, vol. 119, no. 3, pp. 1583-1590. <https://doi.org/10.1021/jp511037x>
- 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*, vol. 358-359, pp. 32-50. <https://doi.org/10.1016/j.wear.2016.03.034>
- 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*, vol. 388-389, pp. 57-71. <https://doi.org/10.1016/j.wear.2017.04.001>
- 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*, vol. 117, no. 34, pp. 9929-9938. <https://doi.org/10.1021/jp404774x>
- 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*, vol. 120, no. 10, pp. 2721-2730. <https://doi.org/10.1021/acs.jpcc.6b00306>
- Hintikka, J, Mäntylä, A, Vaara, J, Frondelius, T & Lehtovaara, A 2019, 'Stable and unstable friction in fretting contacts', *Tribology International*, vol. 131, pp. 73-82. <https://doi.org/10.1016/j.triboint.2018.10.014>
- 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*, vol. 645, pp. 108-118. <https://doi.org/10.1016/j.tsf.2017.10.018>
- 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*, vol. 111, pp. 13-22. <https://doi.org/10.1016/j.porgcoat.2017.04.018>

- Andersson, P, Kilpi, L, Holmberg, K, Vaajoki, A & Oksanen, V 2016, 'Static friction measurements on steel against uncoated and coated cast iron', *Tribologia*, vol. 34, no. 1-2, pp. 5-40.
- 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*, vol. 132, no. 8, 41509. <https://doi.org/10.1002/app.41509>
- Tuominen, M, Teisala, H, Haapanen, J, Mäkelä, JM, Honkanen, M, Vippola, M, Bardage, S, Wålinder, MEP & Swerin, A 2016, 'Superamphiphobic overhang structured coating on a biobased material', *Applied Surface Science*, vol. 389, pp. 135-143. <https://doi.org/10.1016/j.apsusc.2016.05.095>
- Goh, JQ & Akola, J 2015, 'Superatom Model for Ag-S Nanocluster with Delocalized Electrons', *Journal of Physical Chemistry C*, vol. 119, no. 36, pp. 21165-21172. <https://doi.org/10.1021/acs.jpcc.5b05824>
- 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*, vol. 331, pp. 137-142. <https://doi.org/10.1016/j.surfcoat.2017.10.047>
- 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*, vol. 118, no. 25, pp. 7119-7127. <https://doi.org/10.1021/jp500867w>
- Ferraris, S, Nommeots-Nomm, A, Spriano, S, Vernè, E & Massera, J 2019, 'Surface reactivity and silanization ability of borosilicate and Mg-Sr-based bioactive glasses', *Applied Surface Science*, vol. 475, pp. 43-55. <https://doi.org/10.1016/j.apsusc.2018.12.218>
- Koskela, JE, Vapaavuori, J, Hautala, J, Priimagi, A, Faul, CFJ, Kaivola, M & Ras, RHA 2012, 'Surface-relief gratings and stable birefringence inscribed using light of broad spectral range in supramolecular polymer-bisazobenzene complexes', *Journal of Physical Chemistry C*, vol. 116, no. 3, pp. 2363-2370. <https://doi.org/10.1021/jp210706n>
- Sutka, A, Timusk, M, Joost, U, Ignatans, R & Maiorov, M 2018, 'Switchable light reflectance in dilute magneto-optical colloids based on nickel ferrite nanowires', *e-Journal of Surface Science and Nanotechnology*, vol. 16, pp. 119-121. <https://doi.org/10.1380/ejsnt.2018.119>
- 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*, vol. 119, no. 24, pp. 7328-7337. <https://doi.org/10.1021/jp510903a>
- 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*, vol. 324, pp. 264-280. <https://doi.org/10.1016/j.surfcoat.2017.05.040>
- 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>
- Björling, M, Miettinen, J, Marklund, P, Lehtovaara, A & Larsson, R 2015, 'The correlation between gear contact friction and ball on disc friction measurements', *Tribology International*, vol. 83, pp. 114-119. <https://doi.org/10.1016/j.triboint.2014.11.007>
- Lindroos, M, Apostol, M, Heino, V, Valtonen, K, Laukkanen, A, Holmberg, K & Kuokkala, VT 2015, 'The deformation, strain hardening, and wear behavior of chromium-alloyed hadfield steel in abrasive and impact conditions', *Tribology Letters*, vol. 57, no. 3, 24. <https://doi.org/10.1007/s11249-015-0477-6>

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*, vol. 44, no. 8, pp. 9338-9346. <https://doi.org/10.1016/j.ceramint.2018.02.146>

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*, vol. 328-329, pp. 197-205. <https://doi.org/10.1016/j.wear.2015.02.032>

Sarlin, E, Honkanen, M, Lindgren, M, Laihonon, P, Juutilainen, M, Vippola, M & Vuorinen, J 2020, 'The effect of substrate pre-treatment on durability of rubber-stainless steel adhesion', *Surfaces and Interfaces*, vol. 21, 100646. <https://doi.org/10.1016/j.surfin.2020.100646>

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*, vol. 44, no. 8, pp. 9472-9478. <https://doi.org/10.1016/j.ceramint.2018.02.164>

Nurmi, V, Hintikka, J, Juoksukangas, J, Honkanen, M, Vippola, M, Lehtovaara, A, Mäntylä, A, Vaara, J & Frondelius, T 2019, 'The formation and characterization of fretting-induced degradation layers using quenched and tempered steel', *Tribology International*, vol. 131, pp. 258-267. <https://doi.org/10.1016/j.triboint.2018.09.012>

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*, vol. 612, pp. 463-471. <https://doi.org/10.1016/j.tsf.2016.06.044>

Sorianello, V, Colace, L, Assanto, G, Notargiacomo, A, Armani, N, Rossi, F & Ferrari, C 2011, 'Thermal evaporation of Ge on Si for near infrared detectors: Material and device characterization', *Microelectronic Engineering*, vol. 88, no. 4, pp. 526-529. <https://doi.org/10.1016/j.mee.2010.09.024>

Sorianello, V, Colace, L, Nardone, M & Assanto, G 2011, 'Thermally evaporated single-crystal Germanium on Silicon', *Thin Solid Films*, vol. 519, no. 22, pp. 8037-8040. <https://doi.org/10.1016/j.tsf.2011.06.023>

Ratia, V, Valtonen, K, Kemppainen, A & Kuokkala, VT 2016, 'The role of edge-concentrated wear in impact-abrasion testing', *Tribology Online*, vol. 11, no. 2, pp. 410-416. <https://doi.org/10.2474/trol.11.410>

Borah, D, Rasappa, S, Senthamarai Kannan, R, Shaw, MT, Holmes, JD & Morris, MA 2013, 'The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions', *Journal of Colloid and Interface Science*, vol. 393, no. 1, pp. 192-202. <https://doi.org/10.1016/j.jcis.2012.10.070>

Hintikka, J, Lehtovaara, A & Mäntylä, A 2017, 'Third Particle Ejection Effects on Wear with Quenched and Tempered Steel Fretting Contact', *TRIBOLOGY TRANSACTIONS*, vol. 60, no. 1, pp. 70-78. <https://doi.org/10.1080/10402004.2016.1146813>

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*, vol. 121, no. 48, pp. 10782-10792. <https://doi.org/10.1021/acs.jpcc.7b08394>

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*, vol. 47, no. 32, pp. 9104-9106. <https://doi.org/10.1039/c1cc12780b>

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*, vol. 116, no. 44, pp. 13254-13264. <https://doi.org/10.1021/jp306348b>

Hongisto, M, Veber, A, Boetti, NG, Danto, S, Jubera, V & Petit, L 2020, 'Transparent Yb<sup>3+</sup> doped phosphate glass-ceramics', *Ceramics International*. <https://doi.org/10.1016/j.ceramint.2020.01.121>

Huttunen-Saarivirta, E, Kilpi, L, Pasanen, AT, Salminen, T & Ronkainen, H 2020, 'Tribocorrosion behaviour of tin bronze CuSn12 under a sliding motion in NaCl containing environment: Contact to inert vs. reactive counterbody', *Tribology International*, vol. 151, 106389. <https://doi.org/10.1016/j.triboint.2020.106389>

Mäntyranta, A, Heino, V, Isotahdon, E, Salminen, T & Huttunen-Saarivirta, E 2019, 'Tribocorrosion behaviour of two low-alloy steel grades in simulated waste solution', *Tribology International*, vol. 138, pp. 250-262. <https://doi.org/10.1016/j.triboint.2019.05.032>

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*, vol. 394-395, pp. 113-133. <https://doi.org/10.1016/j.wear.2017.10.014>

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 HVOF-sprayed WC-10Co4Cr hardmetal coatings: A comparative assessment', *Surface and Coatings Technology*, vol. 265, pp. 125-144. <https://doi.org/10.1016/j.surfcoat.2015.01.048>

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*, vol. 53, no. 39, pp. 5380-5383. <https://doi.org/10.1039/c7cc02208e>

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 [Cr(NCS)<sub>6</sub>]<sup>3-</sup> Complex in Dimethyl Sulfoxide and Dimethylformamide upon Excitation into Ligand-Field Electronic State', *Journal of Physical Chemistry B*, vol. 124, no. 18, pp. 3724-3733. <https://doi.org/10.1021/acs.jpcc.0c00088>

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*, vol. 115, no. 28, pp. 8910-8924. <https://doi.org/10.1021/jp200790h>

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*, vol. 175, no. 2, pp. 385-414. [https://doi.org/10.1016/0039-6028\(86\)90242-6](https://doi.org/10.1016/0039-6028(86)90242-6)

Poikelispää, M, Shakun, A, Sarlin, E, Das, A & Vuorinen, J 2017, 'Vegetable fillers for electric stimuli responsive elastomers', *Journal of Applied Polymer Science*, vol. 134, no. 28, 45081. <https://doi.org/10.1002/app.45081>

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*, vol. 123, no. 24, pp. 5168-5175. <https://doi.org/10.1021/acs.jpcc.9b02125>

Bolelli, G, Milanti, A, Lusvarghi, L, Trombi, L, Koivuluoto, H & Vuoristo, P 2016, 'Wear and impact behaviour of High Velocity Air-Fuel sprayed Fe-Cr-Ni-B-C alloy coatings', *Tribology International*, vol. 95, pp. 372-390. <https://doi.org/10.1016/j.triboint.2015.11.036>



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*, vol. 386-387, pp. 106-117. <https://doi.org/10.1016/j.wear.2017.05.010>

Kiilakoski, J, Eronen, V & Vuoristo, P 2015, 'Wear Properties of Thermally Sprayed Tungsten-Carbide Coatings in Paper Machine Environments', *Tribologia - Finnish Journal of Tribology*, vol. 33, no. 2, pp. 29.

Heydari, G, Sedighi Moghaddam, M, Tuominen, M, Fielden, M, Haapanen, J, Mäkelä, JM & Claesson, PM 2016, 'Wetting hysteresis induced by temperature changes: Supercooled water on hydrophobic surfaces', *Journal of Colloid and Interface Science*, vol. 468, pp. 21-33. <https://doi.org/10.1016/j.jcis.2016.01.040>

Matikainen, V, Koivuluoto, H, Milanti, A & Vuoristo, P 2015, 'Advanced coatings by novel high-kinetic thermal spray processes', *Materia*, vol. 73, no. 1, pp. 46-50.

Kiilakoski, J, Lukac, F, Koivuluoto, H & Vuoristo, P 2017, Cavitation wear characteristics of Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub>-ceramic coatings deposited by APS and HVOF -processes. in *International Thermal Spray Conference ITSC 2017, Conference Proceedings: June 7-9, 2017, Düsseldorf, Germany..* vol. 336, DVS-Berichte / DVS - Deutscher Verband für Schweißen und Verwandte Verfahren e.V., DVS Media GmbH, Düsseldorf, pp. 928-933, International Thermal Spray Conference, 1/01/00.

Kiilakoski, J, Lutoschkin, A, Plachetta, M, Apostol, M, Koivuluoto, H, Killinger, A & Vuoristo, P 2016, Fracture Characteristics of High-Velocity Suspension Flame-Sprayed Aluminum Oxide Coatings. in *International Thermal Spray Conference & Exposition, ITSC 2016*. DVS Media GmbH, pp. 466-471, International Thermal Spray Conference 2016, Shanghai, China, 10/05/16.

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, 14th TAPPI Advanced Coating Symposium 2016, Stockholm, Sweden, 4/10/16.

Stepien, M, Saarinen, JJ, Teisala, H, Tuominen, M, Aromaa, M, Kuusipalo, J, Mäkelä, J & Toivakka, M 2010, Adjustable wetting properties of paperboard by liquid flame spray process. in *11th Advanced Coating Fundamentals Symposium Proceedings: The Latest Advances in Coating Research and Development*. pp. 80-88, TAPPI 11th Advanced Coating Fundamentals Symposium: The Latest Advances in Coating Research and Development, Munich, Germany, 11/10/10.

Kiilakoski, J, Lindroos, M, Matikainen, V, Apostol, N, Koivuluoto, H & Vuoristo, P 2015, Characterization Of High-Velocity Single Particle Impacts On Thermally Sprayed Ceramic Coatings. in *International Thermal Spray Conference & Exposition 2015*. International Thermal Spray Conference, 1/01/00.

Rubio Hernandez, R 2009, CLC a Colored Liquid Crystal: Prototype Description and Design Opportunities. in *Proceedings of the 11th International Conference: Glass Performace Days*. 11th International Conference: Glass Performace Days, Tampere, Finland, 12/06/09.

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. in F Azarmi, Y Lau, J Veilleux, C Widener, F Toma, H Koivuluoto, K Balani, H Li & K Shinoda (eds), *International Thermal Spray Conference and Exposition, ITSC 2019: New Waves of Thermal Spray Technology for Sustainable Growth*. Proceedings of the International Thermal Spray Conference, ASM International, pp. 923-930, International Thermal Spray Conference, 1/01/00.

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

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, International Thermal Spray Conference and Exposition - Air, Land, Water and the Human Body: Thermal Spray Science and Applications, ITSC 2012, Houston, TX, United States, 21/05/12.

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*. vol. 2, TAPPI Press, pp. 684-706, TAPPI International Conference on Nanotechnology for Renewable Materials, 1/01/00.

Suokas, E & Kuusipalo, J 2018, Process time importance in the product properties evolvment 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, TAPPI Advanced Coating Fundamentals Symposium, 1/01/00.

Saarinen, JJ, Valtakari, D, Bollström, R, Stepien, M, Haapanen, J, Mäkelä, JM & Toivakka, M 2016, Roll-to-roll application of photocatalytic TiO<sub>2</sub> nanoparticles for printed functionality. in *Advanced Manufacturing, Electronics and Microsystems: TechConnect Briefs 2016*. vol. 4, TechConnect, pp. 47-50, TechConnect, 1/01/06.

Saari, J, Ali-Löyty, H & Valden, M 2018, 'Role of Oxide Defects in ALD grown TiO<sub>2</sub> Coatings on Performance as Photoanode Protection Layer' Paper presented at Optics & Photonics Days 2018, Jyväskylä, Finland, 28/05/18 - 30/05/18 , .

Hannula, MK, Lahtonen, KT, Isotalo, TJ, Saari, JS & Valden, MO 2016, 'Thermal Modification of ALD Grown Titanium Oxide Ultra Thin Film for Photoanode Applications' Paper presented at Symposium on Future Prospects for Photonics, Tampere, Finland, 14/12/16 - 15/12/16, .

Saari, J 2017, *Atomikerroskasvatusmenetelmällä kasvatetun titaanidioksidikalvon ominaisuudet valosähkökemiallisessa veden hajottamisessa*.

Thomann, O, Pihlatie, M, Rautanen, M, Himanen, O, Lagerbom, 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*, vol. 22, no. 5, pp. 631-639. <https://doi.org/10.1007/s11666-012-9880-9>

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*, vol. 10, no. 6, 556. <https://doi.org/10.3390/COATINGS10060556>

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*, vol. 23, no. 6, pp. 1009-1018. <https://doi.org/10.1007/s11666-014-0110-5>

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* , vol. 22, no. 5, pp. 783-796. <https://doi.org/10.1007/s11666-013-9928-5>

Stumpel, JE, Broer, DJ & Schenning, APHJ 2014, 'Stimuli-responsive photonic polymer coatings', *Chemical Communications*, vol. 50, no. 100, pp. 15839-15848. <https://doi.org/10.1039/c4cc05072j>