

Rantala T, Väyrynen J, Kumpula R, Aksela S. 1979. Direct measurement of the kinetic energy shift between the molecular and atomic M4.5N4.5N4.5 Auger spectra of iodine. *Chemical Physics Letters*. 66(2):384-386. [https://doi.org/10.1016/0009-2614\(79\)85040-X](https://doi.org/10.1016/0009-2614(79)85040-X)

Väyrynen J, Rantala TT, Minni E, Suoninen E. 1983. Anomalous Auger-electron spectra of metallic calcium. *Journal of Electron Spectroscopy and Related Phenomena*. 31(3):293-305. [https://doi.org/10.1016/0368-2048\(83\)85077-4](https://doi.org/10.1016/0368-2048(83)85077-4)

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). *Journal of Electron Spectroscopy and Related Phenomena*. 39(C):173-181. [https://doi.org/10.1016/0368-2048\(86\)85045-9](https://doi.org/10.1016/0368-2048(86)85045-9)

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)

Rantala TT, Wästberg B, Rosén A. 1986. Potential energy curves for diatomic molecules calculated with numerical basis functions. *Chemical Physics*. 109(2-3):261-268. [https://doi.org/10.1016/0301-0104\(86\)87056-2](https://doi.org/10.1016/0301-0104(86)87056-2)

Levoska J, Rantala TT, Lenkkeri J. 1989. Numerical simulation of temperature distributions in layered structures during laser processing. *Applied Surface Science*. 36(1-4):12-22. [https://doi.org/10.1016/0169-4332\(89\)90895-7](https://doi.org/10.1016/0169-4332(89)90895-7)

Kellomäki A, Kuula-Väisänen P, Nieminen P. 1989. Sorption and retention of ethylene glycol monoethyl ether (EGME) on silicas. *Journal of Colloid and Interface Science*. 129(2):373-378. [https://doi.org/10.1016/0021-9797\(89\)90450-5](https://doi.org/10.1016/0021-9797(89)90450-5)

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*. 43(1-4):81-86. [https://doi.org/10.1016/0169-4332\(89\)90194-3](https://doi.org/10.1016/0169-4332(89)90194-3)

Rantala TT, Jelski DA, George TF. 1990. Electronic and structural properties of Si₁₀ cluster. *Journal of Cluster Science*. 1(2):189-200. <https://doi.org/10.1007/BF00702719>

Rantala TS, Lantto V, Rantala TT. 1993. Rate equation simulation of the height of Schottky barriers at the surface of oxidic semiconductors. *Sensors and Actuators B: Chemical*. 13(1-3):234-237. [https://doi.org/10.1016/0925-4005\(93\)85369-L](https://doi.org/10.1016/0925-4005(93)85369-L)

Valkealahti S, Manninen M. 1993. Melting of copper clusters. *Computational Materials Science*. 1(2):123-134. [https://doi.org/10.1016/0927-0256\(93\)90003-6](https://doi.org/10.1016/0927-0256(93)90003-6)

Rantala TS, Lantto V, Rantala TT. 1994. A cluster approach for the SnO₂ (110) face. *Sensors and Actuators B: Chemical*. 19(1-3):716-719. [https://doi.org/10.1016/0925-4005\(93\)01220-X](https://doi.org/10.1016/0925-4005(93)01220-X)

Rantala TT, Jelski DA, George TF. 1995. Si₁₀ and photoabsorption spectra of mid-sized silicon clusters. *Chemical Physics Letters*. 232(3):215-220. [https://doi.org/10.1016/0009-2614\(94\)01342-S](https://doi.org/10.1016/0009-2614(94)01342-S)

Franzén R, Kronberg L. 1995. Synthesis of chlorinated 5-hydroxy 4-methyl-2(5H)-furanones and mucochloric acid. *Tetrahedron Letters*. 36(22):3905-3908. [https://doi.org/10.1016/0040-4039\(95\)00638-S](https://doi.org/10.1016/0040-4039(95)00638-S)

Hyvönen M, Ala-Korpela M, Vaara J, Rantala TT, Jokisaari J. 1995. Effects of two double bonds on the hydrocarbon interior of a phospholipid bilayer. *Chemical Physics Letters*. 246(3):300-306. [https://doi.org/10.1016/0009-2614\(95\)01113-N](https://doi.org/10.1016/0009-2614(95)01113-N)

Knasmüller S, Zöhrer E, Kronberg L, Kundi M, Franzen R, Schulte-Hermann R. 1996. Mutational spectra of *Salmonella typhimurium* revertants induced by chlorohydroxyfuranones, byproducts of chlorine disinfection of drinking water. *Chemical Research in Toxicology*. 9(2):374-381. <https://doi.org/10.1021/tx9500686>

Rantala TT, Rantala TS, Lantto V, Vaara J. 1996. Surface relaxation of the (1010) face of wurtzite CdS. *Surface Science*. 352-354:77-82. [https://doi.org/10.1016/0039-6028\(95\)01094-7](https://doi.org/10.1016/0039-6028(95)01094-7)

Rytkönen A, Valkealahti S, Manninen M. 1997. Melting and evaporation of argon clusters. *Journal of Chemical Physics*. 106(5):1888-1892. <https://doi.org/10.1063/1.473327>

Lepistö SS, Rintala JA. 1997. Start-up and Operation of Laboratory-Scale Thermophilic Upflow Anaerobic Sludge Blanket Reactors Treating Vegetable Processing Wastewaters. *Journal of Chemical Technology and Biotechnology*. 68(3):331-339. [https://doi.org/10.1002/\(SICI\)1097-4660\(199703\)68:3<331::AID-JCTB657>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-4660(199703)68:3<331::AID-JCTB657>3.0.CO;2-Z)

Hyvönen M, Ala-Korpela M, Vaara J, Rantala TT, Jokisaari J. 1997. Inequivalence of single CH_a and CH_b methylene bonds in the interior of a diunsaturated lipid bilayer from a molecular dynamics simulation. *Chemical Physics Letters*. 268(1-2):55-60. [https://doi.org/10.1016/S0009-2614\(97\)00171-1](https://doi.org/10.1016/S0009-2614(97)00171-1)

Lesot P, Merlet D, Courtieu J, Emsley JW, Rantala TT, Jokisaari J. 1997. Calculation of the molecular ordering parameters of (±)-3-butyn-2-ol dissolved in an organic solution of poly(γ-benzyl-L-glutamate). *Journal of Physical Chemistry A*. 101(31):5719-5724. <https://doi.org/10.1021/jp9709262>

Franzén R, Morita M, Tanabe K, Takagi H, Shibata Y. 1997. Investigation of the adducts formed by reaction of butenedioic acids with adenosine. *Chemical Research in Toxicology*. 10(10):1186-1191. <https://doi.org/10.1021/tx970036d>

Rantala T, Lantto V, Rantala T. 1998. Computational approaches to the chemical sensitivity of semiconducting tin dioxide. *Sensors and Actuators B: Chemical*. 47(1-3):59-64. [https://doi.org/10.1016/S0925-4005\(98\)00007-0](https://doi.org/10.1016/S0925-4005(98)00007-0)

Kangas H, Franzén R, Tois J, Taskinen J, Kostianen R. 1999. Effect of nitro groups and alkyl chain length on the negative ion tandem mass spectra of alkyl 3-hydroxy-5-(4'-nitrophenoxy) and alkyl 3-hydroxy-5-(2', 4'-dinitrophenoxy) benzoates. *Rapid Communications in Mass Spectrometry*. 13(16):1680-1684. [https://doi.org/10.1002/\(SICI\)1097-0231\(19990830\)13:16<1680::AID-RCM698>3.0.CO;2-R](https://doi.org/10.1002/(SICI)1097-0231(19990830)13:16<1680::AID-RCM698>3.0.CO;2-R)

Rantala TT, Rantala TS, Lantto V. 1999. Surface relaxation of the (110) face of rutile SnO₂. *Surface Science*. 420(1):103-109. [https://doi.org/10.1016/S0039-6028\(98\)00833-4](https://doi.org/10.1016/S0039-6028(98)00833-4)

Kaski J, Lantto P, Rantala TT, Schroderus J, Vaara J, Jokisaari J. 1999. Experimental and theoretical study of the spin-spin coupling tensors in methylsilane. *Journal of Physical Chemistry A*. 103(48):9669-9677. <https://doi.org/10.1021/jp9920491>

Franzén R. 2000. The Suzuki, the Heck, and the Stille reaction - Three versatile methods, for the introduction of new C-C bonds on solid support. *Canadian Journal of Chemistry - Revue Canadienne de Chimie*. 78(7):957-962. <https://doi.org/10.1139/v00-089>

Franzén RG. 2000. Utilization of Grignard reagents in solid-phase synthesis: A review of the literature. *Tetrahedron*. 56(5):685-691. [https://doi.org/10.1016/S0040-4020\(99\)00963-1](https://doi.org/10.1016/S0040-4020(99)00963-1)

Tois J, Franzén R, Aitio O, Huikko K, Taskinen J. 2000. Preparation of 5-substituted 2-carboxyindoles on solid support. *Tetrahedron Letters*. 41(14):2443-2446. [https://doi.org/10.1016/S0040-4039\(00\)00151-9](https://doi.org/10.1016/S0040-4039(00)00151-9)

Franzén RG. 2000. Recent advances in the preparation of heterocycles on solid support: A review of the literature. *Journal of Combinatorial Chemistry*. 2(3):195-214. <https://doi.org/10.1021/cc000002f>

Rantala TS, Rantala TT, Lantto V. 2000. Computational studies for the interpretation of gas response of SnO₂(110) surface. *Sensors and Actuators B: Chemical*. 65(1):375-378. [https://doi.org/10.1016/S0925-4005\(99\)00292-0](https://doi.org/10.1016/S0925-4005(99)00292-0)

Tois J, Franzén R, Aitio O, Laakso I, Huuskonen J, Taskinen J. 2001. Solid-phase bromination and Suzuki coupling of 2-carboxyindoles. *Combinatorial Chemistry and High Throughput Screening*. 4(6):521-524. <https://doi.org/10.2174/1386207013330887>

Tois J, Franzén R, Aitio O, Laakso I, Kylänlahti I. 2001. Vilsmeier formylation of 2-carboxyindoles and preparation of O-benzylhydroxyureas on solid phase. *Journal of Combinatorial Chemistry*. 3(6):542-545. <https://doi.org/10.1021/cc010004f>

Väisänen A, Suontamo R, Rintala J. 2002. Control of matrix interferences by the multiple linear regression model in the determination of arsenic, antimony and tin in lead pellets by inductively coupled plasma atomic emission spectrometry. *Journal of Analytical Atomic Spectrometry*. 17(3):274-276. <https://doi.org/10.1039/b108543n>

Väisänen A, Suontamo R, Silvonen J, Rintala J. 2002. Ultrasound-assisted extraction in the determination of arsenic, cadmium, copper, lead, and silver in contaminated soil samples by inductively coupled plasma atomic emission spectrometry. *Analytical and Bioanalytical Chemistry*. 373(1-2):93-97. <https://doi.org/10.1007/s00216-002-1290-2>

Lahtinen K, Kuusipalo J. 2008. Statistical modeling of water vapor transmission rates for extrusion-coated papers. In TAPPI 2008 PLACE Conference: Innovations in Flexible Consumer Packaging.

Pakarinen O, Lehtomäki A, Rintala J. 2008. Batch dark fermentative hydrogen production from grass silage: The effect of inoculum, pH, temperature and VS ratio. *International Journal of Hydrogen Energy*. 33(2):594-601. <https://doi.org/10.1016/j.ijhydene.2007.10.008>

Dehmer M, Emmert-Streib F. 2008. The structural information content of chemical networks. *Zeitschrift fur Naturforschung Section A: A Journal of Physical Sciences*. 63(3-4):155-158.

Dehmer M, Emmert-Streib F. 2008. Structural information content of networks: Graph entropy based on local vertex functionals. *Computational Biology and Chemistry*. 32(2):131-138. <https://doi.org/10.1016/j.compbiolchem.2007.09.007>

Lahti J, Tuominen M, Penttinen T, Räsänen JP, Kuusipalo J. 2009. The effects of corona and flame treatment: Part 2. PE-HD and PP coated papers. In TAPPI Press - 12th European PLACE Conference 2009. pp. 278-314.

Dehmer M, Varmuza K, Borgert S, Emmert-Streib F. 2009. On entropy-based molecular descriptors: Statistical analysis of real and synthetic chemical structures. *Journal of Chemical Information and Modeling*. 49(7):1655-1663. <https://doi.org/10.1021/ci900060x>

Dantelle G, Slablab A, Rondin L, Lainé F, Carrel F, Bergonzo P, Perruchas S, Gacoin T, Treussart F, Roch JF. 2010. Efficient production of NV colour centres in nanodiamonds using high-energy electron irradiation. *Journal of Luminescence*. 130(9):1655-1658. <https://doi.org/10.1016/j.jlumin.2009.12.003>

Gilardi G, Asquini R, D'Alessandro A, Assanto G. 2011. An electro-optically tunable Bragg reflector based on liquid crystals. *Molecular Crystals and Liquid Crystals*. 549:62-68. <https://doi.org/10.1080/15421406.2011.581137>

Vähä-Nissi M, Hirvikorpi T, Sievänen J, Salo E, Harlin A, Johansson P, Kuusipalo J. 2011. Effect of pre-treatments on barrier properties of layers applied by atomic layer deposition onto polymer-coated substrates. In 13th European PLACE Conference 2011. pp. 447.

Giammarco JM, Zdyrko B, Hu J, Agarwal A, Kimerling L, Carlie N, Petit L, Richardson K, Luzinov I. 2011. Enrichment polymer layers for detection of volatile vapors by ATR FT-IR. ACS National Meeting Book of Abstracts.

Petrov M, Cwiklik L, Jungwirth P. 2011. Interactions of molecular ions with model phospholipid membranes. *Collection of Czechoslovak Chemical Communications*. 76(6):695-711. <https://doi.org/10.1135/cccc2011026>

- Teisala H, Tuominen M, Aromaa M, Mäkelä JM, Stepien M, Saarinen JJ, Toivakka M, Kuusipalo J. 2011. Nanoparticle deposition on packaging materials by the liquid flame spray. In 13th European PLACE Conference 2011.
- Dehmer M, Emmert-Streib F, Tsoy YR, Varmuza K. 2011. Quantifying structural complexity of graphs: Information measures in mathematical chemistry. Putz MV, editor. In Quantum Frontiers of Atoms and Molecules. Nova Science Publishers, Inc. pp. 479-497.
- Ma L, Jackson KA, Jellinek J. 2011. Site-specific polarizabilities as predictors of favorable adsorption sites on Nan clusters . Chemical Physics Letters. 503(1-3):80-85. <https://doi.org/10.1016/j.cplett.2010.12.049>
- 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. 115(5):1294-1305. <https://doi.org/10.1021/jp110388v>
- Manna M, Mukhopadhyay C. 2011. Molecular dynamics simulations of the interactions of kinin peptides with an anionic POPG bilayer. Langmuir. 27(7):3713-3722. <https://doi.org/10.1021/la104046z>
- 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>
- Auer S, Nirschl M, Schreiter M, Vikholm-Lundin I. 2011. Detection of DNA hybridisation in a diluted serum matrix by surface plasmon resonance and film bulk acoustic resonators. Analytical and Bioanalytical Chemistry. 400(5):1387-1396. <https://doi.org/10.1007/s00216-011-4871-0>
- 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>
- Jagoda-Cwiklik B, Cwiklik L, Jungwirth P. 2011. Behavior of the eigen form of hydronium at the air/water interface. Journal of Physical Chemistry A. 115(23):5881-5886. <https://doi.org/10.1021/jp110078s>
- Miller AE, Petersen PB, Hollars CW, Saykally RJ, Heyda J, Jungwirth P. 2011. Behavior of β -amyloid 1-16 at the air-water interface at varying pH by nonlinear spectroscopy and molecular dynamics simulations. Journal of Physical Chemistry A. 115(23):5873-5880. <https://doi.org/10.1021/jp110103j>
- Kulig W, Kubisiak P, Cwiklik L. 2011. Steric and electronic effects in the host-guest hydrogen bonding in clathrate hydrates . Journal of Physical Chemistry A. 115(23):6149-6154. <https://doi.org/10.1021/jp111245z>
- Liu Y, Minofar B, Desyaterik Y, Dames E, Zhu Z, Cain JP, Hopkins RJ, Gilles MK, Wang H, Jungwirth P, Laskin A. 2011. Internal structure, hygroscopic and reactive properties of mixed sodium methanesulfonate-sodium chloride particles. Physical Chemistry Chemical Physics. 13(25):11846-11857. <https://doi.org/10.1039/c1cp20444k>
- Linko V, Leppiniemi J, Paasonen ST, Hytönen VP, Jussi Toppari J. 2011. Defined-size DNA triple crossover construct for molecular electronics: Modification, positioning and conductance properties. Nanotechnology. 22(27). <https://doi.org/10.1088/0957-4484/22/27/275610>
- Heyda J, Kožíšek M, Bednářová 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>

Uusitalo MA, Peltonen J, Ryhänen T. 2011. Machine learning: How it can help nanocomputing. *Journal of Computational and Theoretical Nanoscience*. 8(8):1347-1363. <https://doi.org/10.1166/jctn.2011.1821>

Uhlig F, Marsalek O, Jungwirth P. 2011. From a localized H₃O radical to a delocalized H₃O⁺·e⁻ solvent-separated pair by sequential hydration. *Physical Chemistry Chemical Physics*. 13(31):14003-14009. <https://doi.org/10.1039/c1cp20764d>

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>

Rooj S, Das A, Heinrich G. 2011. Tube-like natural halloysite/fluoroelastomer nanocomposites with simultaneous enhanced mechanical, dynamic mechanical and thermal properties. *European Polymer Journal*. 47(9):1746-1755. <https://doi.org/10.1016/j.eurpolymj.2011.06.007>

Tian Y, Bova GS, Zhang H. 2011. Quantitative glycoproteomic analysis of optimal cutting temperature-embedded frozen tissues identifying glycoproteins associated with aggressive prostate cancer. *Analytical Chemistry*. 83(18):7013-7019. <https://doi.org/10.1021/ac200815q>

Heikkinen JJ, Kivimäki L, Määttä JAE, Mäkelä I, Hakalahti L, Takkinen K, Kulomaa MS, Hytönen VP, Hormi OEO. 2011. Versatile bio-ink for covalent immobilization of chimeric avidin on sol-gel substrates. *Colloids and Surfaces B: Biointerfaces*. 87(2):409-414. <https://doi.org/10.1016/j.colsurfb.2011.05.052>

Vazdar M, Vymětal J, Heyda J, Vondrášek J, Jungwirth P. 2011. Like-charge guanidinium pairing from molecular dynamics and ab initio calculations. *Journal of Physical Chemistry A*. 115(41):11193-11201. <https://doi.org/10.1021/jp203519p>

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>

Lis M, Wizert A, Przybylo M, Langner M, Swiatek J, Jungwirth P, Cwiklik L. 2011. The effect of lipid oxidation on the water permeability of phospholipids bilayers. *Physical Chemistry Chemical Physics*. 13(39):17555-17563. <https://doi.org/10.1039/c1cp21009b>

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>

Li Y, Tao SC, Bova GS, Liu AY, Chan DW, Zhu H, Zhang H. 2011. Detection and verification of glycosylation patterns of glycoproteins from clinical specimens using lectin microarrays and lectin-based immunosorbent assays. *Analytical Chemistry*. 83(22):8509-8516. <https://doi.org/10.1021/ac201452f>

Gladich I, Pfalzgraff W, Maršálek O, Jungwirth P, Roeselová M, Neshyba S. 2011. Arrhenius analysis of anisotropic surface self-diffusion on the prismatic facet of ice. *Physical Chemistry Chemical Physics*. 13(44):19960-19969. <https://doi.org/10.1039/c1cp22238d>

Subramaniam K, Das A, Steinhauser D, Klüppel M, Heinrich G. 2011. Effect of ionic liquid on dielectric, mechanical and dynamic mechanical properties of multi-walled carbon nanotubes/polychloroprene rubber composites. *European Polymer Journal*. 47(12):2234-2243. <https://doi.org/10.1016/j.eurpolymj.2011.09.021>

Manna M, Mukhopadhyay C. 2011. Cholesterol driven alteration of the conformation and dynamics of phospholamban in model membranes. *Physical Chemistry Chemical Physics*. 13(45):20188-20198. <https://doi.org/10.1039/c1cp21793c>

Härkönen HH, Mattsson JM, Määttä JAE, Stenman UH, Koistinen H, Matero S, Windshügel B, Poso A, Lahtela-Kakkonen M. 2011. The Discovery of Compounds That Stimulate the Activity of Kallikrein-Related Peptidase3 (KLK3). CHEMMEDCHEM. 6(12):2170-2178. <https://doi.org/10.1002/cmdc.201100349>

Marsalek O, Elles CG, Pieniazek PA, Pluhaov E, Vandevondele J, Bradforth SE, Jungwirth P. 2011. Chasing charge localization and chemical reactivity following photoionization in liquid water. Journal of Chemical Physics. 135(22). <https://doi.org/10.1063/1.3664746>

Tevyashova AN, Shtil AA, Olsufyeva EN, Luzikov YN, Reznikova MI, Dezhenkova LG, Isakova EB, Bukhman VM, Durandin NA, Vinogradov AM, Kuzmin VA, Preobrazhenskaya MN. 2011. Modification of olivomycin A at the side chain of the aglycon yields the derivative with perspective antitumor characteristics. BIOORGANIC AND MEDICINAL CHEMISTRY . 19(24):7387-7393. <https://doi.org/10.1016/j.bmc.2011.10.055>

Valtakari D, Bollström R, Tuominen M, Teisala H, Aromaa M, Toivakka M, Kuusipalo J, Mäkelä JM, Uozumi J, Saarinen JJ. 2012. Conductive layers on surface modified natural fibre based substrates for printed functionality. In AIChE 2012 - 2012 AIChE Annual Meeting, Conference Proceedings.

Leuteritz A, Kutlu B, Meinel J, Wang D, Das A, Wagenknecht U, Heinrich G. 2012. Layered Double Hydroxides (LDH): A multifunctional versatile system for nanocomposites. Molecular Crystals and Liquid Crystals. 556:107-113. <https://doi.org/10.1080/15421406.2012.635923>

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>

Marsalek O, Uhlig F, Vandevondele J, Jungwirth P. 2012. Structure, dynamics, and reactivity of hydrated electrons by Ab initio molecular dynamics. Accounts of Chemical Research. 45(1):23-32. <https://doi.org/10.1021/ar200062m>

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. 116(3):2363-2370. <https://doi.org/10.1021/jp210706n>

Nandre KP, Salunke JK, Nandre JP, Patil VS, Borse AU, Bhosale SV. 2012. Glycerol mediated synthesis of 5-substituted 1H-tetrazole under catalyst free conditions. Chinese Chemical Letters. 23(2):161-164. <https://doi.org/10.1016/j.ccllet.2011.11.019>

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>

Stradomska A, Kulig W, Slawik M, Petelenz P. 2012. Excited-state polarizability in crystalline sexithiophene: Charge-transfer and vibronic effects. Chemical Physics Letters. 529:27-30. <https://doi.org/10.1016/j.cplett.2012.01.038>

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>

Wang DY, Das A, Leuteritz A, Mahaling RN, Jehnichen D, Wagenknecht U, Heinrich G. 2012. Structural characteristics and flammability of fire retarding EPDM/layered double hydroxide (LDH) nanocomposites. RSC Advances. 2(9):3927-3933. <https://doi.org/10.1039/c2ra20189e>

Ma L, Atta-Fynn R, Ray AK. 2012. Elemental and mixed actinide dioxides: An ab initio study. Journal of Theoretical and Computational Chemistry. 11(3):611-629. <https://doi.org/10.1142/S021963361250040X>

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>

Priimagi A, Cavallo G, Forni A, Gorynsztejn-Leben M, Kaivola M, Metrangolo P, Milani R, Shishido A, Pilati T, Resnati G, Terraneo G. 2012. Halogen bonding versus hydrogen bonding in driving self-assembly and performance of light-responsive supramolecular polymers. *Advanced Functional Materials*. 22(12):2572-2579. <https://doi.org/10.1002/adfm.201200135>

Rembert KB, Paterová J, Heyda J, Hilty C, Jungwirth P, Cremer PS. 2012. Molecular mechanisms of ion-specific effects on proteins. *Journal of the American Chemical Society*. 134(24):10039-10046. <https://doi.org/10.1021/ja301297g>

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>

Serak SV, Tabiryán NV, Assanto G. 2012. Nematicons in azobenzene liquid crystals. *Molecular Crystals and Liquid Crystals*. 559:202-213. <https://doi.org/10.1080/15421406.2012.658710>

Kousoulidou M, Ntziachristos L, Fontaras G, Martini G, Dilara P, Samaras Z. 2012. Impact of biodiesel application at various blending ratios on passenger cars of different fueling technologies. *Fuel*. 98:88-94. <https://doi.org/10.1016/j.fuel.2012.03.038>

Pegado L, Marsalek O, Jungwirth P, Wernersson E. 2012. Solvation and ion-pairing properties of the aqueous sulfate anion: Explicit versus effective electronic polarization. *Physical Chemistry Chemical Physics*. 14(29):10248-10257. <https://doi.org/10.1039/c2cp40711f>

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>

Bardhan JP, Jungwirth P, Makowski L. 2012. Affine-response model of molecular solvation of ions: Accurate predictions of asymmetric charging free energies. *Journal of Chemical Physics*. 137(12). <https://doi.org/10.1063/1.4752735>

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>

Le HH, Hoang XT, Das A, Gohs U, Stoeckelhuber KW, Boldt R, Heinrich G, Adhikari R, Radusch HJ. 2012. Kinetics of filler wetting and dispersion in carbon nanotube/rubber composites. *Carbon*. 50(12):4543-4556. <https://doi.org/10.1016/j.carbon.2012.05.039>

Khan MN, Tjong V, Chilkoti A, Zharnikov M. 2012. Fabrication of ssDNA/oligo(ethylene glycol) monolayers and complex nanostructures by an irradiation-promoted exchange reaction. *Angewandte Chemie (International Edition)*. 51(41):10303-10306. <https://doi.org/10.1002/anie.201204245>

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>

Lisitsyna ES, Lygo ON, Durandin NA, Dement'eva OV, Rudoi VM, Kuzmin VA. 2012. Superquenching of SYBRGreen dye fluorescence in complex with DNA by gold nanoparticles. *HIGH ENERGY CHEMISTRY*. 46(6):363-367. <https://doi.org/10.1134/S0018143912060057>

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>

Ma L, Wang J, Wang G. 2012. Search for global minimum geometries of medium sized Cd_nTe_n clusters ($n = 15, 16, 20, 24$ and 28). *Chemical Physics Letters*. 552:73-77. <https://doi.org/10.1016/j.cplett.2012.09.036>

Pluhařová E, Marsalek O, Schmidt B, Jungwirth P. 2012. Peptide salt bridge stability: From gas phase via microhydration to bulk water simulations. *Journal of Chemical Physics*. 137(18). <https://doi.org/10.1063/1.4765052>

Buchholz M, Goletz CM, Grossmann F, Schmidt B, Heyda J, Jungwirth P. 2012. Semiclassical hybrid approach to condensed phase molecular dynamics: Application to the I_2Kr_{17} cluster. *Journal of Physical Chemistry A*. 116(46):11199-11210. <https://doi.org/10.1021/jp305084f>

Mubarakali D, Praveenkumar R, Shenbagavalli T, Mari Nivetha T, Parveez Ahamed A, Al-Dhabi NA, Thajuddin N. 2012. New reports on anti-bacterial and anti-candidal activities of fatty acid methyl esters (FAME) obtained from *Scenedesmus bijugatus* var. *bicellularis* biomass. *RSC Advances*. 2(30):11552-11556. <https://doi.org/10.1039/c2ra21130k>

Lahtinen K, Lahti J, Johansson P, Seppänen T, Cameron DC. 2013. Improving the effect of a nanoscale barrier coating on BOPP film properties by surface pretreatments. In 14th European PLACE Conference 2013. TAPPI Press. pp. 469-493.

Ylilauri M, Mattila E, Nurminen EM, Käpylä J, Niinivehmas SP, Määttä JA, Pentikäinen U, Ivaska J, Pentikäinen OT. 2013. Molecular mechanism of T-cell protein tyrosine phosphatase (TCPTP) activation by mitoxantrone. *Biochimica et biophysica acta: proteins and proteomics*. 1834(10):1988-1997. <https://doi.org/10.1016/j.bbapap.2013.07.001>

Kulig W, Agmon N. 2013. A 'clusters-in-liquid' method for calculating infrared spectra identifies the proton-transfer mode in acidic aqueous solutions. *Nature Chemistry*. 5(1):29-35. <https://doi.org/10.1038/nchem.1503>

Wang H, Feng Y, Zhao H, Fang Z, Khan M, Guo J. 2013. A potential nonthrombogenic small-diameter vascular scaffold with polyurethane/poly(ethylene glycol) hybrid materials by electrospinning technique. *Journal Nanoscience and Nanotechnology*. 13(2):1578-1582. <https://doi.org/10.1166/jnn.2013.6051>

Ma L, Wang J, Hao Y, Wang G. 2013. Density functional theory study of $FePd_n$ ($n = 2-14$) clusters and interactions with small molecules. *Computational Materials Science*. 68:166-173. <https://doi.org/10.1016/j.commatsci.2012.10.014>

Ma L, Ray AK. 2013. Growth behavior and magnetic properties of spherical uranium oxide nanoclusters. *Journal of Computational and Theoretical Nanoscience*. 10(2):334-340. <https://doi.org/10.1166/jctn.2013.2701>

Subramaniam K, Das A, Simon F, Heinrich G. 2013. Networking of ionic liquid modified CNTs in SSBR. *European Polymer Journal*. 49(2):345-352. <https://doi.org/10.1016/j.eurpolymj.2012.10.023>

Fafarman AT, Hong SH, Caglayan H, Ye X, Diroll BT, Paik T, Engheta N, Murray CB, Kagan CR. 2013. Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals. *Nano Letters*. 13(2):350-357. <https://doi.org/10.1021/nl303161d>

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>

Rasappa S, Borah D, Faulkner CC, Lutz T, Shaw MT, Holmes JD, Morris MA. 2013. Fabrication of a sub-10 nm silicon nanowire based ethanol sensor using block copolymer lithography. *Nanotechnology*. 24(6). <https://doi.org/10.1088/0957-4484/24/6/065503>

Barboza R, Bortolozzo U, Assanto G, Residori S. 2013. Optical vortex generation in nematic liquid crystal light valves. *Molecular Crystals and Liquid Crystals*. 572(1):24-30. <https://doi.org/10.1080/15421406.2012.763206>

Borah D, Ozmen M, Rasappa S, Shaw MT, Holmes JD, Morris MA. 2013. Molecularly functionalized silicon substrates for orientation control of the microphase separation of PS-b-PMMA and PS-b-PDMS block copolymer systems. *Langmuir*. 29(9):2809-2820. <https://doi.org/10.1021/la304140q>

Ma L, Wang J, Wang G. 2013. Site-specific analysis of dipole polarizabilities of heterogeneous systems: Iron-doped Si_n (n = 1-14) clusters. *Journal of Chemical Physics*. 138(9). <https://doi.org/10.1063/1.4793276>

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>

Rooj S, Das A, Stöckelhuber KW, Wang DY, Galiatsatos V, Heinrich G. 2013. Understanding the reinforcing behavior of expanded clay particles in natural rubber compounds. *Soft Matter*. 9(14):3798-3808. <https://doi.org/10.1039/c3sm27519a>

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>

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>

Bayr S, Kaparaju P, Rintala J. 2013. Screening pretreatment methods to enhance thermophilic anaerobic digestion of pulp and paper mill wastewater treatment secondary sludge. *Chemical Engineering Journal*. 223:479-486. <https://doi.org/10.1016/j.cej.2013.02.119>

McManamon C, Delaney P, Kavanagh C, Wang JJ, Rasappa S, Morris MA. 2013. Depth profiling of PLGA copolymer in a novel biomedical bilayer using confocal raman spectroscopy. *Langmuir*. 29(19):5905-5910. <https://doi.org/10.1021/la400402a>

Pelto JM, Haimi SP, Siljander AS, Miettinen SS, Tappura KM, Higgins MJ, Wallace GG. 2013. Surface properties and interaction forces of biopolymer-doped conductive polypyrrole surfaces by atomic force microscopy. *Langmuir*. 29(20):6099-6108. <https://doi.org/10.1021/la4009366>

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>

Gerlofs-Nijland ME, Totlandsdal AI, Tzamkiozis T, Leseman DLAC, Samaras Z, Låg M, Schwarze P, Ntziachristos L, Cassee FR. 2013. Cell toxicity and oxidative potential of engine exhaust particles: Impact of using particulate filter or biodiesel fuel blend. *Environmental Science and Technology*. 47(11):5931-5938. <https://doi.org/10.1021/es305330y>

Gordon TR, Paik T, Klein DR, Naik GV, Caglayan H, Boltasseva A, Murray CB. 2013. Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO). *Nano Letters*. 13(6):2857-2863. <https://doi.org/10.1021/nl4012003>

Diban N, Haimi S, Bolhuis-Versteeg L, Teixeira S, Miettinen S, Poot A, Grijpma D, Stamatialis D. 2013. Development and characterization of poly(ϵ -caprolactone) hollow fiber membranes for vascular tissue engineering. *Journal of Membrane Science*. 438:29-37. <https://doi.org/10.1016/j.memsci.2013.03.024>

Stumpel JE, Liu D, Broer DJ, Schenning APHJ. 2013. Photoswitchable hydrogel surface topographies by polymerisation-induced diffusion. *Chemistry: A European Journal*. 19(33):10922-10927. <https://doi.org/10.1002/chem.201300852>

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>

Borah D, Rasappa S, Sentharamaikannan R, Holmes JD, Morris MA. 2013. Tuning PDMS brush chemistry by UV-O₃ exposure for PS-b-PDMS microphase separation and directed self-assembly. *Langmuir*. 29(28):8959-8968. <https://doi.org/10.1021/la401561k>

Khan MN, Zharnikov M. 2013. Irradiation promoted exchange reaction with disulfide substituents. *Journal of Physical Chemistry C*. 117(28):14534-14543. <https://doi.org/10.1021/jp4006026>

Stirnemann G, Wernersson E, Jungwirth P, Laage D. 2013. Mechanisms of acceleration and retardation of water dynamics by ions. *Journal of the American Chemical Society*. 135(32):11824-11831. <https://doi.org/10.1021/ja405201s>

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>

Laitaoja M, Valjakka J, Jänis J. 2013. Zinc coordination spheres in protein structures. *Inorganic Chemistry*. 52(19):10983-10991. <https://doi.org/10.1021/ic401072d>

Sterpone F, Nguyen PH, Kalimeri M, Derreumaux P. 2013. Importance of the ion-pair interactions in the OPEP coarse-grained force field: Parametrization and validation. *Journal of Chemical Theory and Computation*. 9(10):4574-4584. <https://doi.org/10.1021/ct4003493>

Pollheimer P, Taskinen B, Scherfler A, Gusenkov S, Creus M, Wiesauer P, Zauner D, Schöfberger W, Schwarzinger C, Ebner A, Tampé R, Stutz H, Hytönen VP, Gruber HJ. 2013. Reversible biofunctionalization of surfaces with a switchable mutant of avidin. *Bioconjugate Chemistry*. 24(10):1656-1668. <https://doi.org/10.1021/bc400087e>

Niskanen M, Kuisma M, Cramariuc O, Golovanov V, Hukka TI, Tkachenko N, Rantala TT. 2013. Porphyrin adsorbed on the (1010) surface of the wurtzite structure of ZnO-conformation induced effects on the electron transfer characteristics. *Physical Chemistry Chemical Physics*. 15(40):17408-17418. <https://doi.org/10.1039/c3cp51685g>

Uhlig F, Jungwirth P. 2013. Embedded cluster models for reactivity of the hydrated electron. *ZEITSCHRIFT FÜR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF RESEARCH IN PHYSICAL CHEMISTRY AND CHEMICAL PHYSICS*. 227(11):1583-1593. <https://doi.org/10.1524/zpch.2013.0402>

Borah D, Simao CD, Sentharamaikannan R, Rasappa S, Francone A, Lorret O, Salaun M, Kosmala B, Kehagias N, Zelsmann M, Sotomayor-Torres CM, Morris MA. 2013. Soft-graphoepitaxy using nanoimprinted polyhedral oligomeric silsesquioxane substrates for the directed self-assembly of PS-b-PDMS. *European Polymer Journal*. 49(11):3512-3521. <https://doi.org/10.1016/j.eurpolymj.2013.08.011>

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>

- Priimagi A, Cavallo G, Metrangolo P, Resnati G. 2013. The Halogen Bond in the Design of Functional Supramolecular Materials: Recent Advances. *Accounts of Chemical Research*. 46(11):2686-2695. <https://doi.org/10.1021/ar400103r>
- Pluhařová E, Mason PE, Jungwirth P. 2013. Ion pairing in aqueous lithium salt solutions with monovalent and divalent counter-anions. *Journal of Physical Chemistry A*. 117(46):11766-11773. <https://doi.org/10.1021/jp402532e>
- 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>
- 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*. 117(47):24883-24893. <https://doi.org/10.1021/jp408819k>
- Diban N, Haimi SP, Bolhuis-Versteeg L, Teixeira S, Miettinen S, Poot AA, Grijpma DW, Stamatialis D. 2013. Effect of surface morphology of poly(ϵ -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>
- Le HH, Oßwald K, Wießner S, Das A, Stöckelhuber KW, Boldt R, Gupta G, Heinrich G, Radosch HJ. 2013. Location of dispersing agent in rubber nanocomposites during mixing process. *Polymer*. 54(26):7009-7021. <https://doi.org/10.1016/j.polymer.2013.10.038>
- Häkkinen MR, Roine A, Auriola S, Tuokko A, Veskimäe E, Keinänen TA, Lehtimäki T, Oksala N, Vepsäläinen J. 2013. Analysis of free, mono- and diacetylated polyamines from human urine by LC-MS/MS. *JOURNAL OF CHROMATOGRAPHY B: ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES*. 941:81-89. <https://doi.org/10.1016/j.jchromb.2013.10.009>
- 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>
- Wang J, Ray AK. 2014. A full-potential linearized augmented plane wave study of the interaction of CO₂ with α -Pu (020) surface nanolayers. *Journal of Computational and Theoretical Nanoscience*. 11(7):1710-1717. <https://doi.org/10.1166/jctn.2014.3555>
- Enkavi G, Li J, Wen P, Thangapandian S, Moradi M, Jiang T, Han W, Tajkhorshid E. 2014. A microscopic view of the mechanisms of active transport across the cellular membrane. *Annual Reports in Computational Chemistry*. 10:77-125. <https://doi.org/10.1016/B978-0-444-63378-1.00004-5>
- Savolainen J, Uhlig F, Ahmed S, Hamm P, Jungwirth P. 2014. Direct observation of the collapse of the delocalized excess electron in water. *Nature Chemistry*. 6(8):697-701. <https://doi.org/10.1038/nchem.1995>
- Le HH, Parsekar M, Ilisch S, Henning S, Das A, Stöckelhuber KW, Beiner M, Ho CA, Adhikari R, Wießner S, Heinrich G, Radosch 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>

Rasappa S, Borah D, Senthamaraiyannan R, Faulkner CC, Holmes JD, Morris MA. 2014. Fabrication of 3-D nanodimensioned electric double layer capacitor structures using block copolymer templates. *Journal Nanoscience and Nanotechnology*. 14(7):5221-5227. <https://doi.org/10.1166/jnn.2014.8668>

Lahti J, Johansson P, Lahtinen K, Cameron DC, Seppänen T. 2014. Improving the effect of nanoscale barrier coating on BOPP film properties: Influence of substrate contamination, web handling and pretreatments. In *TAPPI PLACE Conference 2014*. TAPPI Press. pp. 1039-1061.

Näreoja T, Ebner A, Gruber HJ, Taskinen B, Kienberger F, Hänninen PE, Hytönen VP, Hinterdorfer P, Härmä H. 2014. Kinetics of bioconjugate nanoparticle label binding in a sandwich-type immunoassay. *Analytical and Bioanalytical Chemistry*. 406(2):493-503. <https://doi.org/10.1007/s00216-013-7474-0>

Airiskallio E, Nurmi E, Väyrynen IJ, Kokko K, Ropo M, Punkkinen MPJ, Johansson B, Vitos L. 2014. Magnetic origin of the chemical balance in alloyed Fe-Cr stainless steels: First-principles and Ising model study. *Computational Materials Science*. 92:135-140. <https://doi.org/10.1016/j.commatsci.2014.05.036>

Jungwirth P. 2014. Molekuly a ionty v pohybu: Počítačové simulace biochemických a biofyzikálních procesů. *Chemické Listy*. 108(4):278-284.

Akimova AV, Grin MA, Golovina GV, Kokrashvili TA, Vinogradov AM, Mironov AF, Rychkov GN, Shtil AA, Kuzmin VA, Durandin NA. 2014. Novel derivatives of bacteriochlorophyll a: Complex formation with albumin and the mechanism of tumor cell photodamage. *DOKLADY BIOCHEMISTRY AND BIOPHYSICS*. 454(1):17-20. <https://doi.org/10.1134/S1607672914010062>

Köhler M, Karner A, Leitner M, Hytönen VP, Kulomaa M, Hinterdorfer P, Ebner A. 2014. pH-dependent deformations of the energy landscape of avidin-like proteins investigated by single molecule force spectroscopy. *Molecules*. 19(8):12531-12546. <https://doi.org/10.3390/molecules190812531>

Mokarian-Tabari P, Cummins C, Rasappa S, Simao C, Torres CMS, Holmes JD, Morris MA. 2014. Study of the kinetics and mechanism of rapid self-assembly in block copolymer thin films during solvo-microwave annealing. *Langmuir*. 30(35):10728-10739. <https://doi.org/10.1021/la503137q>

Oksala NKJ, Ekmekçi FG, Özsoy E, Kirankaya Ş, Kokkola T, Emecen G, Lappalainen J, Kaarniranta K, Atalay M. 2014. Natural thermal adaptation increases heat shock protein levels and decreases oxidative stress. *REDOX BIOLOGY*. 3:25-28. <https://doi.org/10.1016/j.redox.2014.10.003>

Kulig W, Agmon N. 2014. Both zundel and eigen isomers contribute to the IR spectrum of the gas-phase H₉O₄ + cluster. *Journal of Physical Chemistry Part B*. 118(1):278-286. <https://doi.org/10.1021/jp410446d>

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>

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*. 118(6):3093-3101. <https://doi.org/10.1021/jp411353f>

Kulig W, Agmon N. 2014. Deciphering the infrared spectrum of the protonated water pentamer and the hybrid Eigen-Zundel cation. *Physical Chemistry Chemical Physics*. 16(10):4933-4941. <https://doi.org/10.1039/c3cp54029d>

Hytönen VP, Wehrle-Haller B. 2014. Protein conformation as a regulator of cell-matrix adhesion. *Physical Chemistry Chemical Physics*. 16(14):6342-6357. <https://doi.org/10.1039/c3cp54884h>

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>

Koskela JE, Liljeström V, Lim J, Simanek EE, Ras RHA, Priimagi A, Kostianen MA. 2014. Light-fuelled transport of large dendrimers and proteins. *Journal of the American Chemical Society*. 136(19):6850-6853. <https://doi.org/10.1021/ja502623m>

Raghuwanshi S, Deswal D, Karp M, Kuhad RC. 2014. Bioprocessing of enhanced cellulase production from a mutant of *Trichoderma asperellum* RCK2011 and its application in hydrolysis of cellulose. *Fuel*. 124:183-189. <https://doi.org/10.1016/j.fuel.2014.01.107>

Pluhařová E, Fischer HE, Mason PE, Jungwirth P. 2014. Hydration of the chloride ion in concentrated aqueous solutions using neutron scattering and molecular dynamics. *Molecular Physics*. 112(9-10):1230-1240. <https://doi.org/10.1080/00268976.2013.875231>

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>

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>

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>

Oksa M, Varis T, Ruusuvoori 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>

Kurppa K, Hytönen VP, Nakari-Setälä T, Kulomaa MS, Linder MB. 2014. Molecular engineering of avidin and hydrophobin for functional self-assembling interfaces. *Colloids and Surfaces B: Biointerfaces*. 120:102-109. <https://doi.org/10.1016/j.colsurfb.2014.05.010>

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>

Le HH, Abhijeet S, Ilisch S, Klehm J, Henning S, Beiner M, Sarkawi SS, Dierkes W, Das A, Fischer D, Stöckelhuber KW, Wiessner S, Khatiwada SP, Adhikari R, Pham T, Heinrich G, Radsch HJ. 2014. The role of linked phospholipids in the rubber-filler interaction in carbon nanotube (CNT) filled natural rubber (NR) composites. *Polymer*. 55(18):4738-4747. <https://doi.org/10.1016/j.polymer.2014.07.043>

Uhlig F, Herbert JM, Coons MP, Jungwirth P. 2014. Optical spectroscopy of the bulk and interfacial hydrated electron from ab initio calculations. *Journal of Physical Chemistry A*. 118(35):7507-7515. <https://doi.org/10.1021/jp5004243>

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>

Wang J, Ma L, Liang Y, Gao M, Wang G. 2014. Density functional theory study of transition metals doped B₈₀ fullerene. *Journal of Theoretical and Computational Chemistry*. 13(6). <https://doi.org/10.1142/S0219633614500503>

Salunke JK, Sonar P, Wong FL, Roy VAL, Lee CS, Wadgaonkar PP. 2014. Pyrene based conjugated materials: Synthesis, characterization and electroluminescent properties. *Physical Chemistry Chemical Physics*. 16(42):23320-23328. <https://doi.org/10.1039/c4cp03693j>

- 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>
- 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>
- Deng Y, Alicea-Velázquez NL, Bannwarth L, Lehtonen SI, Boggon TJ, Cheng HC, Hytönen VP, Turk BE. 2014. Global analysis of human nonreceptor tyrosine kinase specificity using high-density peptide microarrays. *Journal of Proteome Research*. 13(10):4339-4346. <https://doi.org/10.1021/pr500503q>
- Amanatidis S, Ntziachristos L, Giechaskiel B, Bergmann A, Samaras Z. 2014. Impact of selective catalytic reduction on exhaust particle formation over excess ammonia events. *Environmental Science and Technology*. 48(19):11527-11534. <https://doi.org/10.1021/es502895v>
- 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>
- 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>
- 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>
- Lemmetyinen H, Tkachenko NV, Valeur B, Hotta JI, Ameloot M, Ernsting NP, Gustavsson T, Boens N. 2014. Time-resolved fluorescence methods (IUPAC technical report). *Pure and Applied Chemistry*. 86(12):1969-1998. <https://doi.org/10.1515/pac-2013-0912>
- 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>
- Taskinen B, Zauner D, Lehtonen SI, Koskinen M, Thomson C, Kähkönen N, Kukkurainen S, Määttä JAE, Ihalainen TO, Kulomaa MS, Gruber HJ, Hytönen VP. 2014. Switchavidin: Reversible biotin-avidin-biotin bridges with high affinity and specificity. *Bioconjugate Chemistry*. 25(12):2233-2243. <https://doi.org/10.1021/bc500462w>
- Stumpel JE, Broer DJ, Schenning APHJ. 2014. Stimuli-responsive photonic polymer coatings. *Chemical Communications*. 50(100):15839-15848. <https://doi.org/10.1039/c4cc05072j>
- Molnar W, Nugent S, Lindroos M, Apostol M, Varga M. 2015. Ballistic and numerical simulation of impacting goods on conveyor belt rubber. *Polymer Testing*. 42:1-7. <https://doi.org/10.1016/j.polymertesting.2014.12.001>
- Borah D, Rasappa S, Senthamarai Kannan R, Holmes JD, Morris MA. 2015. Block co-polymers for nanolithography: Rapid microwave annealing for pattern formation on substrates. *Polymers*. 7(4):592-609. <https://doi.org/10.3390/polym7040592>
- Kamppuri T, Vehviläinen M, Puolakka A, Honkanen M, Vippola M, Rissanen M. 2015. Characterisation of novel regenerated cellulosic, viscose, and cotton fibres and the dyeing properties of fabrics. *Coloration Technology*. 131(5):396-402. <https://doi.org/10.1111/cote.12163>

- Di Capua F, Papirio S, Lens PNL, Esposito G. 2015. Chemolithotrophic denitrification in biofilm reactors. *Chemical Engineering Journal*. 280:643-657. <https://doi.org/10.1016/j.cej.2015.05.131>
- Mason PE, Uhlig F, Vaněk V, Buttersack T, Bauerecker S, Jungwirth P. 2015. Coulomb explosion during the early stages of the reaction of alkali metals with water. *Nature Chemistry*. 7(3):250-254. <https://doi.org/10.1038/nchem.2161>
- Mardoukhi Y, Jeon J-H, Metzler R. 2015. Geometry controlled anomalous diffusion in random fractal geometries: Looking beyond the infinite cluster. *Physical Chemistry Chemical Physics*. 17(44):30134-30147. <https://doi.org/10.1039/c5cp03548a>
- Saccone M, Cavallo G, Metrangolo P, Resnati G, Priimägi A. 2015. Halogen-bonded photoresponsive materials. In *Halogen Bonding II: Impact on Materials Chemistry and Life Sciences*. Springer International Publishing. pp. 147-166. (Topics in Current Chemistry). https://doi.org/10.1007/128_2014_615
- Pelado B, Abou-Chahine F, Calbo J, Caballero R, delaCruz P, Junquera-Hernández JM, Ortí E, Tkachenko NV, Langa F. 2015. Role of the bridge in photoinduced electron transfer in porphyrin-fullerene dyads. *Chemistry: A European Journal*. 21(15):5814-5825. <https://doi.org/10.1002/chem.201406514>
- Stumpel JE, Gil ER, Spoelstra AB, Bastiaansen CWM, Broer DJ, Schenning APHJ. 2015. Stimuli-Responsive Materials Based on Interpenetrating Polymer Liquid Crystal Hydrogels. *Advanced Functional Materials*. 25(22):3314-3320. <https://doi.org/10.1002/adfm.201500745>
- Wacharine I, Valkonen A, Rzaigui M, Smirani W. 2015. Synthesis, crystal structure, spectral, dielectric characteristics and conduction mechanism of two novel carboxylates of 1-benzhydrylpiperazine. *Monatshefte fur Chemie*. 146(12):2007-2020. <https://doi.org/10.1007/s00706-015-1553-1>
- Stasyuk AJ, Smoleń S, Glodkowska-Mrowka E, Brutkowski W, Cyrański MK, Tkachenko N, Gryko DT. 2015. Synthesis of fluorescent naphthoquinolizines via intramolecular houben-hoesch reaction. *Chemistry - An Asian Journal*. 10(3):553-558. <https://doi.org/10.1002/asia.201403339>
- Karilainen T, Cramariuc O, Kuisma M, Tappura K, Hukka TI. 2015. Van der Waals interactions are critical in Car-Parrinello molecular dynamics simulations of porphyrin-fullerene dyads. *Journal of Computational Chemistry*. 36(9):612-621. <https://doi.org/10.1002/jcc.23834>
- Stumpel JE, Broer DJ, Schenning APHJ. 2015. Water-responsive dual-coloured photonic polymer coatings based on cholesteric liquid crystals. *RSC Advances*. 5(115):94650-94653. <https://doi.org/10.1039/c5ra18017a>
- Nazir R, Bourquard F, Balčiūnas E, Smoleń S, Gray D, Tkachenko NV, Farsari M, Gryko DT. 2015. π -Expanded α,β -unsaturated ketones: Synthesis, optical properties, and two-photon-induced polymerization. *ChemPhysChem*. 16(3):682-690. <https://doi.org/10.1002/cphc.201402646>
- Mettänen M, Hirn U. 2015. A comparison of five optical surface topography measurement methods. *TAPPI Journal*. 14(1):27-38.
- Hukka JJ, Katko TS. 2015. Appropriate pricing policy needed worldwide for improving water services infrastructure. *Journal American Water Works Association*. 107(1):E37-E46. <https://doi.org/10.5942/jawwa.2015.107.0007>
- Yi H, Albrecht M, Valkonen A, Rissanen K. 2015. Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as π -acceptors for anions. *New Journal of Chemistry*. 39(1):746-749. <https://doi.org/10.1039/c4nj01654h>
- Reeta PS, Khetubol A, Jella T, Chukharev V, Abou-Chahine F, Tkachenko NV, Giribabu L, Lemmetyinen H. 2015. Photophysical properties of Sn (IV)tetraphenylporphyrin-pyrene dyad with a β -vinyl linker. *Journal of Porphyrins and Phthalocyanines*. 19(1-3):288-300. <https://doi.org/10.1142/S1088424615500108>

Khan M, Yang J, Shi C, Feng Y, Zhang W, Gibney K, Tew GN. 2015. Manipulation of polycarbonate urethane bulk properties via incorporated zwitterionic polynorbornene for tissue engineering application. *RSC Advances*. 5(15):11284-11292. <https://doi.org/10.1039/C4RA14608E>

Schroeder CA, Pluharová E, Seidel R, Schroeder WP, Faubel M, Slaviček P, Winter B, Jungwirth P, Bradforth SE. 2015. Oxidation half-reaction of aqueous nucleosides and nucleotides via photoelectron spectroscopy augmented by ab initio calculations. *Journal of the American Chemical Society*. 137(1):201-209. <https://doi.org/10.1021/ja508149e>

Czaplicki R, Mäkitalo J, Siikanen R, Husu H, Lehtolahti J, Kuittinen M, Kauranen M. 2015. Second-Harmonic Generation from Metal Nanoparticles: Resonance Enhancement versus Particle Geometry. *Nano Letters*. 15(1):530-534. <https://doi.org/10.1021/nl503901e>

Shin J, Cherstvy AG, Metzler R. 2015. Kinetics of polymer looping with macromolecular crowding: Effects of volume fraction and crowder size. *Soft Matter*. 11(3):472-488. <https://doi.org/10.1039/c4sm02007c>

Ghosh SK, Cherstvy AG, Metzler R. 2015. Non-universal tracer diffusion in crowded media of non-inert obstacles. *Physical Chemistry Chemical Physics*. 17(3):1847-1858. <https://doi.org/10.1039/c4cp03599b>

Li Z, Le T, Wu Z, Yao Y, Li L, Tentzeris M, Moon KS, Wong CP. 2015. Rational design of a printable, highly conductive silicone-based electrically conductive adhesive for stretchable radio-frequency antennas. *Advanced Functional Materials*. 25(3):464-470. <https://doi.org/10.1002/adfm.201403275>

Goh J-Q, Malola S, Häkkinen H, Akola J. 2015. Silver sulfide nanoclusters and the superatom model. *Journal of Physical Chemistry C*. 119(3):1583-1590. <https://doi.org/10.1021/jp511037x>

Saccone M, Dichiarante V, Forni A, Goulet-Hanssens A, Cavallo G, Vapaavuori J, Terraneo G, Barrett CJ, Resnati G, Mentrangolo 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>

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>

Bautista G, Mäkitalo J, Chen Y, Dhaka V, Grasso M, Karvonen L, Jiang H, Huttunen MJ, Huhtio T, Lipsanen H, Kauranen M. 2015. Second-harmonic generation imaging of semiconductor nanowires with focused vector beams. *Nano Letters*. 15(3):1564-1569. <https://doi.org/10.1021/nl503984b>

Beyeh NK, Pan F, Valkonen A, Rissanen K. 2015. Encapsulation of secondary and tertiary ammonium salts by resorcinarenes and pyrogallarenes: The effect of size and charge concentration. *CrystEngComm*. 17(5):1182-1188. <https://doi.org/10.1039/c4ce01927j>

Ray S, Steven RT, Green FM, Höök F, Taskinen B, Hytönen VP, Shard AG. 2015. Neutralized chimeric avidin binding at a reference biosensor surface. *Langmuir*. 31(6):1921-1930. <https://doi.org/10.1021/la503213f>

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>

Wecharine I, Valkonen A, Rzaigui M, Sta WS, Smith G. 2015. Crystal structure of 2-methylpiperazine-1,4-dium bis(hydrogen maleate). *Acta Crystallographica Section E : Structure Reports Online*. 71(3):o193-o194. <https://doi.org/10.1107/S2056989015003102>

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>

Lolicato F, Raudino A, Milardi D, La Rosa C. 2015. Resveratrol interferes with the aggregation of membrane-bound human-IAPP: A molecular dynamics study. *European Journal of Medicinal Chemistry*. 92:876-881. <https://doi.org/10.1016/j.ejmech.2015.01.047>

Figueira J, Czardybon W, Mesquita JC, Rodrigues J, Lahoz F, Russo L, Valkonen A, Rissanen K. 2015. Synthesis, characterization and solid-state photoluminescence studies of six alkoxy phenylene ethynylene dinuclear palladium(II) rods. *DALTON TRANSACTIONS*. 44(9):4003-4015. <https://doi.org/10.1039/c4dt00493k>

Wikström M, Sharma V, Kaila VRI, Hosler JP, Hummer G. 2015. New perspectives on proton pumping in cellular respiration. *Chemical Reviews*. 115(5):2196-2221. <https://doi.org/10.1021/cr500448t>

Ma L, Melander M, Laasonen K, Akola J. 2015. CO oxidation catalyzed by neutral and anionic Cu₂₀ clusters: Relationship between charge and activity. *Physical Chemistry Chemical Physics*. 17(10):7067-7076. <https://doi.org/10.1039/c5cp00365b>

Tuominen M, Yasir M, Lång J, Dahl J, Kuzmin M, Mäkelä J, Punkkinen M, Laukkanen P, Kokko K, Schulte K, Punkkinen R, Korpijärvi V-M, Polojärvi V, Guina M. 2015. Oxidation of the GaAs semiconductor at the Al₂O₃/GaAs junction. *Physical Chemistry Chemical Physics*. 17(10):7060-7066. <https://doi.org/10.1039/c4cp05972g>

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-K₂SO₄ 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 HVOF-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>

Pirjola L, Karjalainen P, Heikkilä J, Saari S, Tzamkiozis T, Ntziachristos L, Kulmala K, Keskinen J, Rönkkö T. 2015. Effects of fresh lubricant oils on particle emissions emitted by a modern gasoline direct injection passenger car. *Environmental Science and Technology*. 49(6):3644-3652. <https://doi.org/10.1021/es505109u>

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>

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>

Sorvajärvi T, Viljanen J, Toivonen J, Marshall P, Glarborg P. 2015. Rate constant and thermochemistry for K + O₂ + N₂ = KO₂ + N₂. *Journal of Physical Chemistry A*. 119(14):3329-3336. <https://doi.org/10.1021/acs.jpca.5b00755>

Koivisto AJ, Aromaa M, Koponen IK, Fransman W, Jensen KA, Mäkelä JM, Hämeri KJ. 2015. Workplace performance of a loose-fitting powered air purifying respirator during nanoparticle synthesis. *Journal of Nanoparticle Research*. 17(4). <https://doi.org/10.1007/s11051-015-2990-9>

Cherstvy AG, Metzler R. 2015. Ergodicity breaking and particle spreading in noisy heterogeneous diffusion processes. *Journal of Chemical Physics*. 142(14). <https://doi.org/10.1063/1.4917077>

Kuzmin VA, Durandin NA, Lisitsyna ES, Litvinkova LV, Nekipelova TD, Podrugina TA, Matveeva ED, Proskurnina MV, Zefirov NS. 2015. Energy degradation in photoexcited complexes of indocarbocyanine with albumin. *HIGH ENERGY CHEMISTRY*. 49(3):211-212. <https://doi.org/10.1134/S0018143915030108>

- Liang Y, Ma L, Wang J, Wang G. 2015. Multistep reactions of water with small Pd_n clusters: A first principles study. *Journal of Theoretical and Computational Chemistry*. 14(3). <https://doi.org/10.1142/S0219633615500170>
- Pluhařová E, Slavíček P, Jungwirth P. 2015. Modeling photoionization of aqueous DNA and its components. *Accounts of Chemical Research*. 48(5):1209-1217. <https://doi.org/10.1021/ar500366z>
- 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 ZrO₂-7.5wt.% Y₂O₃ coatings. *Surface and Coatings Technology*. 270:132-138. <https://doi.org/10.1016/j.surfcoat.2015.03.011>
- 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>
- Kuz'min VA, Durandin NA, Lisitsyna ES, Nekipelova TD, Podrugina TA, Matveeva ED, Proskurnina MV, Zefirov NS. 2015. Spectral and kinetic characteristics of indotricarbocyanine complexation with albumin. *DOKLADY PHYSICAL CHEMISTRY*. 462(1):107-109. <https://doi.org/10.1134/S0012501615050036>
- McManamon C, O'Connell J, Delaney P, Rasappa S, Holmes JD, Morris MA. 2015. A facile route to synthesis of S-doped TiO₂ nanoparticles for photocatalytic activity. *Journal of Molecular Catalysis A: Chemical*. 406:51-57!. <https://doi.org/10.1016/j.molcata.2015.05.002>
- 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.
- Frochot C, Barberi-Heyob M, Blanchard-Desce M, Bolotine L, Bonneau S, Jimenez CM, Durand JO, Lassalle HP, Lemerrier G, Mordon S, Maillard P, Sol V, Vever-Bizet C, Vicendo P. 2015. La thérapie photodynamique: État de l'art et perspectives. *ACTUALITE CHIMIQUE*. (397-398):46-50.
- Mordon S, Bourg-Heckly G. 2015. Photodiagnostic et chirurgie guidés par la fluorescence. *ACTUALITE CHIMIQUE*. (397-398):41-45.
- He X, Benniston AC, Saarenpää H, Lemmetyinen H, Tkachenko NV, Baisch U. 2015. Polymorph crystal packing effects on charge transfer emission in the solid state. *Chemical Science*. 6(6):3525-3532. <https://doi.org/10.1039/c5sc01151e>
- Borah D, Rasappa S, Salaun M, Zellsman M, Lorret O, Lontos G, Ntetsikas K, Avgeropoulos A, Morris MA. 2015. Soft graphoepitaxy for large area directed self-assembly of polystyrene-block-poly(dimethylsiloxane) block copolymer on nanopatterned poss substrates fabricated by nanoimprint lithography. *Advanced Functional Materials*. 25(22):3425-3432. <https://doi.org/10.1002/adfm.201500100>
- 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>
- De Carvalho SJ, Metzler R, Cherstvy AG. 2015. Inverted critical adsorption of polyelectrolytes in confinement. *Soft Matter*. 11(22):4430-4443. <https://doi.org/10.1039/c5sm00635j>
- Perander M, DeMartini N, Brink A, Kramb J, Karlström O, Hemming J, Moilanen A, Konttinen J, Hupa M. 2015. Catalytic effect of Ca and K on CO₂ gasification of spruce wood char. *Fuel*. 150:464-472. <https://doi.org/10.1016/j.fuel.2015.02.062>
- 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>

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>

Zorzi GK, Párraga JE, Seijo B, Sánchez A. 2015. On the biomaterials for nanostructured ocular therapeutics. *Current Organic Chemistry*. 19(15):1443-1459.

Sanginés R, Contreras V, Sobral H, Robledo-Martinez A. 2015. Optimal emission enhancement in orthogonal double-pulse laser-induced breakdown spectroscopy. *Spectrochimica Acta Part B: Atomic Spectroscopy*. 110:139-145. <https://doi.org/10.1016/j.sab.2015.06.012>

Ahmed Z, George L, Hiltunen A, Lemmetyinen H, Hukka T, Efimov A. 2015. Synthesis and study of electrochemical and optical properties of substituted perylenemonoimides in solutions and on solid surfaces. *Journal of Materials Chemistry A*. 3(25):13332-13339. <https://doi.org/10.1039/c5ta02241j>

Isoniemi T, Tuukkanen S, Cameron DC, Simonen J, Toppari JJ. 2015. Measuring optical anisotropy in poly(3,4-ethylene dioxythiophene): 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>

Hakkarainen TV, Schramm A, Mäkelä J, Laukkanen P, Guina M. 2015. Lithography-free oxide patterns as templates for self-catalyzed growth of highly uniform GaAs nanowires on Si(111). *Nanotechnology*. 26(27). <https://doi.org/10.1088/0957-4484/26/27/275301>

Çetinkaya AY, Köroğlu EO, Demir NM, Baysoy DY, Özkaya B, Çakmakçı M. 2015. Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration. *Chinese Journal of Catalysis*. 36(7):1068-1076. [https://doi.org/10.1016/S1872-2067\(15\)60833-6](https://doi.org/10.1016/S1872-2067(15)60833-6)

Virkki K, Demir S, Lemmetyinen H, Tkachenko NV. 2015. Photoinduced Electron Transfer in CdSe/ZnS Quantum Dot-Fullerene Hybrids. *Journal of Physical Chemistry C*. 119(31):17561-17572. <https://doi.org/10.1021/acs.jpcc.5b04251>

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>

Bodrova A, Chechkin AV, Cherstvy AG, Metzler R. 2015. Quantifying non-ergodic dynamics of force-free granular gases. *Physical Chemistry Chemical Physics*. 17(34):21791-21798. <https://doi.org/10.1039/c5cp02824h>

Rasappa S, Caridad JM, Schulte L, Cagliani A, Borah D, Morris MA, Bøggild P, Ndoni S. 2015. High quality sub-10 nm graphene nanoribbons by on-chip PS-b-PDMS block copolymer lithography. *RSC Advances*. 5(82):66711-66717. <https://doi.org/10.1039/c5ra11735f>

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.jpcc.5b05123>

Stumpel JE. 2015. Responsive Polymer Photonics. *Chemistryopen*. 4(4):533-535. <https://doi.org/10.1002/open.201500104>

Le HH, Pham T, Henning S, Klehm J, Wießner S, Stöckelhuber KW, Das A, Hoang XT, Do QK, Wu M, Vennemann N, Heinrich G, Radsch HJ. 2015. Formation and stability of carbon nanotube network in natural rubber: Effect of non-rubber components. *Polymer*. 73:111-121. <https://doi.org/10.1016/j.polymer.2015.07.044>

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.jpcc.5b03604>

Levin M, Rojas E, Vanhala E, Vippola M, Liguori B, Kling KI, Koponen IK, Mølhav K, Tuomi T, Gregurec D, Moya S, Jensen KA. 2015. Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials: implications for testing and risk assessment. *Journal of Nanoparticle Research*. 17(8). <https://doi.org/10.1007/s11051-015-3139-6>

Lepcha A, Maccato C, Mettenbörger 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*. 119(33):18835-18842. <https://doi.org/10.1021/acs.jpcc.5b02767>

Mäkelä J, Tuominen M, Yasir M, Polojärvi V, Aho A, Tukiainen A, Kuzmin M, Punkkinen MPJ, Laukkanen P, Kokko K, Guina M. 2015. Effects of thinning and heating for TiO₂/AlInP junctions. *Journal of Electron Spectroscopy and Related Phenomena*. 205:6-9. <https://doi.org/10.1016/j.elspec.2015.08.004>

Barreca D, Carraro G, Warwick MEA, Kaunisto K, Gasparotto A, Gombac V, Sada C, Turner S, Van Tendeloo G, Maccato C, Fornasiero P. 2015. Fe₂O₃-TiO₂ nanosystems by a hybrid PE-CVD/ALD approach: controllable synthesis, growth mechanism, and photocatalytic properties. *CrystEngComm*. 17(32):6219-6226. <https://doi.org/10.1039/c5ce00883b>

Yang Y, Kylänpää I, Tubman NM, Krogel JT, Hammes-Schiffer S, Ceperley DM. 2015. How large are nonadiabatic effects in atomic and diatomic systems?. *Journal of Chemical Physics*. 143(12). <https://doi.org/10.1063/1.4931667>

Bajamundi CJE, Vainikka P, Hedman M, Silvennoinen J, Heinanen T, Taipale R, Kontinen J. 2015. Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel. *Fuel*. 155:25-36. <https://doi.org/10.1016/j.fuel.2015.03.087>

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.jcrysgro.2015.02.048>

Frankberg EJ, George L, Efimov A, Honkanen M, Pessi J, Levänen E. 2015. Measuring synthesis yield in graphene oxide synthesis by modified hummers method. *Fullerenes Nanotubes and Carbon Nanostructures*. 23(9):755-759. <https://doi.org/10.1080/1536383X.2014.993754>

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>

Goh JQ, Akola J. 2015. Superatom Model for Ag-S Nanocluster with Delocalized Electrons. *Journal of Physical Chemistry C*. 119(36):21165-21172. <https://doi.org/10.1021/acs.jpcc.5b05824>

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

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*. 119(37):21723-21731. <https://doi.org/10.1021/acs.jpcc.5b06629>

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.jpcc.5b06457>

Moradi M, Enkavi G, Tajkhorshid E. 2015. Atomic-level characterization of transport cycle thermodynamics in the glycerol-3-phosphate: Phosphate antiporter. *Nature Communications*. 6. <https://doi.org/10.1038/ncomms9393>

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>

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>

Vapaavuori J, Heikkinen ITS, Dichiarante V, Resnati G, Metrangolo P, Sabat RG, Bazuin CG, Priimagi 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, Laventure A, Bazuin CG, Lebel O, Pellerin C. 2015. Submolecular Plasticization Induced by Photons in Azobenzene Materials. *Journal of the American Chemical Society*. 137(42):13510-13517. <https://doi.org/10.1021/jacs.5b06611>

Zorzi GK, Párraga JE, Seijo B, Sanchez A. 2015. Comparison of different cationized proteins as biomaterials for nanoparticle-based ocular gene delivery. *Colloids and Surfaces B: Biointerfaces*. 135:533-541. <https://doi.org/10.1016/j.colsurfb.2015.08.008>

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>

Seo JY, Lee K, Ramasamy P, Kim B, Lee SY, Oh YK, Park SB. 2015. Tri-functionality of Fe₃O₄-embedded carbon microparticles in microalgae harvesting. *Chemical Engineering Journal*. 280:206-214. <https://doi.org/10.1016/j.cej.2015.05.122>

Kaouk A, Ruoko TP, Gönüllü Y, Kaunisto K, Mettenböcker A, Gurevich E, Lemmetyinen H, Ostendorf A, Mathur S. 2015. Graphene-intercalated Fe₂O₃/TiO₂ heterojunctions for efficient photoelectrolysis of water. *RSC Advances*. 5(123):101401-101407. <https://doi.org/10.1039/c5ra18330h>

Ihalainen TO, Aires L, Herzog FA, Schwartlander R, Moeller J, Vogel V. 2015. Differential basal-to-apical accessibility of lamin A/C epitopes in the nuclear lamina regulated by changes in cytoskeletal tension. *Nature Materials*. 14(12):1252-1261. <https://doi.org/10.1038/nmat4389>

Mäki AJ, Peltokangas M, Kreutzer J, Auvinen S, Kallio P. 2015. Modeling carbon dioxide transport in PDMS-based microfluidic cell culture devices. *Chemical Engineering Science*. 137:515-524. <https://doi.org/10.1016/j.ces.2015.06.065>

Dhieb AC, Valkonen A, Rzaigui M, Smirani W. 2015. Synthesis, crystal structure, physico-chemical characterization and dielectric properties of a new hybrid material, 1-Ethylpiperazine-1,4-dium tetrachlorocadmate. *Journal of Molecular Structure*. 1102:50-56. <https://doi.org/10.1016/j.molstruc.2015.08.044>

Alanen J, Saukko E, Lehtoranta K, Murtonen T, Timonen H, Hillamo R, Karjalainen P, Kuuluvainen H, Harra J, Keskinen J, Rönkkö T. 2015. The formation and physical properties of the particle emissions from a natural gas engine. *Fuel*. 162:155-161. <https://doi.org/10.1016/j.fuel.2015.09.003>

Farooq A, Evreinov G, Raisamo R, Takahata D. 2015. Evaluating transparent liquid screen overlay as a haptic conductor: Method of enhancing touchscreen based user interaction by a transparent deformable liquid screen overlay. In 2015 IEEE SENSORS - Proceedings. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/ICSENS.2015.7370186>

Su W, Cooper JR, Cook BS, Tentzeris MM, Mariotti C, Roselli L. 2015. Inkjet-printed dual microfluidic-based sensor integrated system. In 2015 IEEE SENSORS - Proceedings. Institute of Electrical and Electronics Engineers Inc. <https://doi.org/10.1109/ICSENS.2015.7370300>

Lee TY, Ramasamy P, Oh YK, Lee K, Kim SH. 2016. Alginate microgels created by selective coalescence between core drops paired with an ultrathin shell. *Journal of Materials Chemistry B*. 4(19):3232-3238. <https://doi.org/10.1039/c6tb00580b>

Santos FMF, Rosa JN, Candeias NR, Carvalho CP, Matos AI, Ventura AE, Florindo HF, Silva LC, Pischel U, Gois PMP. 2016. A Three-Component Assembly Promoted by Boronic Acids Delivers a Modular Fluorophore Platform (BASHY Dyes). *Chemistry: A European Journal*. 22(5):1631-1637. <https://doi.org/10.1002/chem.201503943>

Kulig W, Cwiklik L, Jurkiewicz P, Rog T, Vattulainen I. 2016. Cholesterol oxidation products and their biological importance. *Chemistry and Physics of Lipids*. 199:144-160. <https://doi.org/10.1016/j.chemphyslip.2016.03.001>

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>

Horinouchi H, Sakai H, Araki Y, Sakanoue T, Takenobu T, Wada T, Tkachenko NV, Hasobe T. 2016. Controllable Electronic Structures and Photoinduced Processes of Bay-Linked Perylenediimide Dimers and a Ferrocene-Linked Triad. *Chemistry: A European Journal*. 22(28):9631-9641. <https://doi.org/10.1002/chem.201601058>

Halder A, Kandambeth S, Biswal BP, Kaur G, Roy NC, Addicoat M, Salunke JK, Banerjee S, Vanka K, Heine T, Verma S, Banerjee R. 2016. Decoding the Morphological Diversity in Two Dimensional Crystalline Porous Polymers by Core Planarity Modulation. *Angewandte Chemie (International Edition)*. 55(27):7806-7810. <https://doi.org/10.1002/anie.201600087>

Spataru A, Jain R, Chung JW, Gerner G, Krebs R, Lens PNL. 2016. Enhanced adsorption of orthophosphate and copper onto hydrochar derived from sewage sludge by KOH activation. *RSC Advances*. 6(104):101827-101834. <https://doi.org/10.1039/c6ra22327c>

Basu D, Das A, Wang DY, George JJ, Stöckelhuber KW, Boldt R, Leuteritz A, Heinrich G. 2016. Fire-safe and environmentally friendly nanocomposites based on layered double hydroxides and ethylene propylene diene elastomer. *RSC Advances*. 6(31):26425-26436. <https://doi.org/10.1039/c5ra27444c>

Rocherullé J, Massera J, Oudadesse H, Calvez L, Trolès J, Zhang XH. 2016. Heat capacities of crystalline and glassy lithium metaphosphate up to the transition region. *Journal of Thermal Analysis and Calorimetry*. 123(1):401-407. <https://doi.org/10.1007/s10973-015-4938-9>

Kato D, Sakai H, Tkachenko NV, Hasobe T. 2016. High-Yield Excited Triplet States in Pentacene Self-Assembled Monolayers on Gold Nanoparticles through Singlet Exciton Fission. *Angewandte Chemie (International Edition)*. 55(17):5230-5234. <https://doi.org/10.1002/anie.201601421>

Lahti J. 2016. Nanoscale barrier coating on BOPP packaging film by ALD. In *TAPPI PLACE Conference 2016: Exploring New Frontiers*. TAPPI Press. pp. 493-505.

Perumbilavil S, Sridharan K, Abraham AR, Janardhanan HP, Kalarikkal N, Philip R. 2016. Nonlinear transmittance and optical power limiting in magnesium ferrite nanoparticles: effects of laser pulsewidth and particle size. *RSC Advances*. 6(108):106754-106761. <https://doi.org/10.1039/c6ra15788b>

Kastinen T, Niskanen M, Risko C, Cramariuc O, Hukka TI. 2016. On describing the optoelectronic characteristics of poly(benzodithiophene-*Co*-quinoxaline)-fullerene complexes: The influence of optimally tuned density functionals. *Physical Chemistry Chemical Physics*. 18(39):27654-27670. <https://doi.org/10.1039/c6cp04567g>

Kattiparambil Rajan D, Patrikoski M, Verho J, Sivula J, Ihalainen H, Miettinen S, Leikkala J. 2016. Optical non-contact pH measurement in cell culture with sterilizable, modular parts. *Talanta*. 161:755-761. <https://doi.org/10.1016/j.talanta.2016.09.021>

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>

Jain R, Dominic D, Jordan N, Rene ER, Weiss S, van Hullebusch ED, Hübner R, Lens PNL. 2016. Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles. *Chemical Engineering Journal*. 284:917–925. <https://doi.org/10.1016/j.cej.2015.08.144>

Higashino T, Yamada T, Yamamoto M, Furube A, Tkachenko NV, Miura T, Kobori Y, Jono R, Yamashita K, Imahori H. 2016. Remarkable Dependence of the Final Charge Separation Efficiency on the Donor-Acceptor Interaction in Photoinduced Electron Transfer. *Angewandte Chemie (International Edition)*. 55(2):629-633. <https://doi.org/10.1002/anie.201509067>

Cavallo G, Terraneo G, Monfredini A, Saccone M, Priimägi A, Pilati T, Resnati G, Metrangolo P, Bruce DW. 2016. Superfluorinated Ionic Liquid Crystals Based on Supramolecular, Halogen-Bonded Anions. *Angewandte Chemie (International Edition)*. 55(21):6300-6304. <https://doi.org/10.1002/anie.201601278>

Matsuo S, Yamazoe S, Goh J-Q, Akola J, Tsukuda T. 2016. The electrooxidation-induced structural changes of gold di-superatomic molecules: Au₂₃ vs. Au₂₅. *Physical Chemistry Chemical Physics*. 18(6):4822-4827. <https://doi.org/10.1039/c5cp06969f>

Golovanov V, Golovanova V, Rantala TT. 2016. Thermal desorption of molecular oxygen from SnO₂ (110) surface: Insights from first-principles calculations. *Journal of Physics and Chemistry of Solids*. 89:15-22. <https://doi.org/10.1016/j.jpccs.2015.10.010>

Pirjola L, Dittrich A, Niemi JV, Saarikoski S, Timonen H, Kuuluvainen H, Järvinen A, Kousa A, Rönkkö T, Hillamo R. 2016. Physical and Chemical Characterization of Real-World Particle Number and Mass Emissions from City Buses in Finland. *Environmental Science and Technology*. 50(1):294-304. <https://doi.org/10.1021/acs.est.5b04105>

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>

Ali-Löyty 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*. 120(4):2247-2253. <https://doi.org/10.1021/acs.jpcc.5b10931>

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>

Szabo HM, Lepistö R, Tuhkanen T. 2016. HPLC-SEC: a new approach to characterise complex wastewater effluents. *International Journal of Environmental Analytical Chemistry*. 96(3):257-270. <https://doi.org/10.1080/03067319.2016.1150463>

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>

Sakuma T, Sakai H, Araki Y, Mori T, Wada T, Tkachenko NV, Hasobe T. 2016. Long-Lived Triplet Excited States of Bent-Shaped Pentacene Dimers by Intramolecular Singlet Fission. *Journal of Physical Chemistry A*. 120(11):1867-1875. <https://doi.org/10.1021/acs.jpca.6b00988>

- Mal J, Nancharaiah YV, Van Hullebusch ED, Lens PNL. 2016. Metal chalcogenide quantum dots: Biotechnological synthesis and applications. *RSC Advances*. 6(47):41477-41495. <https://doi.org/10.1039/c6ra08447h>
- Ma L, Melander M, Weckman T, Lipasti S, Laasonen K, Akola J. 2016. DFT simulations and microkinetic modelling of 1-pentyne hydrogenation on Cu₂₀ model catalysts. *Journal of Molecular Graphics and Modelling*. 65:61-70. <https://doi.org/10.1016/j.jmgm.2016.02.007>
- Viljanen J, Sun Z, Alwahabi ZT. 2016. Microwave assisted laser-induced breakdown spectroscopy at ambient conditions. *Spectrochimica Acta Part B: Atomic Spectroscopy*. 118:29-36. <https://doi.org/10.1016/j.sab.2016.02.002>
- Isakov M, Kokkonen J, Östman K, Kuokkala V-T. 2016. Strain rate change tests with the Split Hopkinson Bar method. *European Physical Journal. Special Topics*. 225(2):231-242. <https://doi.org/10.1140/epjst/e2015-99999-x>
- Nisato G, Lupo D, Ganz S, ed. 2016. *Organic and Printed Electronics: Fundamentals and Applications*. 1 ed. Singapore: PAN STANFORD PUBLISHING. 580 p. <https://doi.org/10.1201/b20043>
- Fernandez-Palacio F, Saccone M, Priimägi A, Terraneo G, Pilati T, Metrangolo P, Resnati G. 2016. Coordination networks incorporating halogen-bond donor sites and azobenzene groups. *CrystEngComm*. 18(13):2251-2257. <https://doi.org/10.1039/c6ce00059b>
- Janka L, Norpoth J, Trache R, Berger LM. 2016. Influence of heat treatment on the abrasive wear resistance of a Cr₃C₂ 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>
- 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*. 120(13):7044-7051. <https://doi.org/10.1021/acs.jpcc.6b01583>
- La Rosa C, Scalisi S, Lolicato F, Pannuzzo M, Raudino A. 2016. Lipid-assisted protein transport: A diffusion-reaction model supported by kinetic experiments and molecular dynamics simulations. *Journal of Chemical Physics*. 144(18). <https://doi.org/10.1063/1.4948323>
- Soto AM, Koivisto JT, Parraga JE, Silva-Correia J, Oliveira JM, Reis RL, Kellomäki M, Hyttinen J, Figueiras E. 2016. Optical Projection Tomography Technique for Image Texture and Mass Transport Studies in Hydrogels Based on Gellan Gum. *Langmuir*. 32(20):5173-5182. <https://doi.org/10.1021/acs.langmuir.6b00554>
- Isotahdon E, Huttunen-Saarivirta E, Kuokkala V-T. 2016. Development of Magnetic Losses During Accelerated Corrosion Tests for Nd-Fe-B Magnets Used in Permanent Magnet Generators. *Corrosion*. 72(6):732-741. <https://doi.org/10.5006/2037>
- 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>
- Razavi A, Valkama M, Lohan ES. 2016. Robust statistical approaches for RSS-based floor detection in indoor localization. *Sensors*. 16(6). <https://doi.org/10.3390/s16060793>
- 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>
- Luna E, Wu M, Hanke M, Puustinen J, Guina M, Trampert A. 2016. Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs_{1-x}Bi_x/GaAs quantum wells. *Nanotechnology*. 27(32). <https://doi.org/10.1088/0957-4484/27/32/325603>

Kärkkäinen M, Kolli T, Honkanen M, Heikkinen O, Väliheikki A, Huuhtanen M, Kallinen K, Lahtinen J, Vippola M, Keiski RL. 2016. The Influence of Phosphorus Exposure on a Natural-Gas-Oxidation Catalyst. *Topics in Catalysis*. 59(10-12):1044-1048. <https://doi.org/10.1007/s11244-016-0587-x>

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>

Garifullin M, Sinelnikov A, Bronzova M, Kovacic B, Kamnik R. 2016. Buckling Behavior of Cold-Formed Studs with Thermal Perforations. *MATEC Web of Conferences*. 73. <https://doi.org/10.1051/mateconf/20167304011>

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>

Stöckelhuber KW, Das A, Klüppel M, ed. 2016. *Designing of Elastomer Nanocomposites: From Theory to Application*. Springer International Publishing. (Advances in Polymer Science). <https://doi.org/10.1007/978-3-319-47696-4>

Basu D, Das A, Stöckelhuber KW, Wießner S. 2016. Nanostructured Ionomeric Elastomers. Stöckelhuber KW, Das A, Klüppel M, editors. In *Designing of Elastomer Nanocomposites: From Theory to Applications*. Springer International Publishing. pp. 235-266. (Advances in Polymer Science). https://doi.org/10.1007/12_2016_8

Pilehrood MK, Atashi A, Sadeghi-Aliabadi H, Nousiainen P, Harlin A. 2016. 3D micro-nano structured hybrid scaffolds: An investigation into the role of nanofiber coating on viability, proliferation and differentiation of seeded mesenchymal stem cells. *Journal Nanoscience and Nanotechnology*. 16(9):9000-9007. <https://doi.org/10.1166/jnn.2016.12740>

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>

Zhou Q, Sariola V, Latifi K, Liimatainen V. 2016. Controlling the motion of multiple objects on a Chladni plate. *Nature Communications*. 7. <https://doi.org/10.1038/ncomms12764>

Kramb J, Konttinen J, Backman R, Salo K, Roberts M. 2016. Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood. *Fuel*. 181:319-324. <https://doi.org/10.1016/j.fuel.2016.04.109>

Will OM, Purcz N, Chalaris A, Heneweer C, Boretius S, Purcz L, Nikkola L, Ashammakhi N, Kalthoff H, Glüer CC, Wiltfang J, Açil Y, Tiwari S. 2016. Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma. *International Journal of Nanomedicine*. 11:5311-5321. <https://doi.org/10.2147/IJN.S109199>

Ali-Löytty H, Hannula M, Honkanen M, Östman K, Lahtonen K, Valden M. 2016. Grain orientation dependent Nb-Ti microalloying mediated surface segregation on ferritic stainless steel. *Corrosion Science*. 112:204-213. <https://doi.org/10.1016/j.corsci.2016.07.024>

Reisberg L, Pärna R, Kikas A, Kuusik I, Kisand V, Hirsimäki M, Valden M, Nõmmiste E. 2016. UPS and DFT investigation of the electronic structure of gas-phase trimesic acid. *Journal of Electron Spectroscopy and Related Phenomena*. 213:11-16. <https://doi.org/10.1016/j.elspec.2016.10.004>

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>

- Ropo M, Akola J, Jones RO. 2016. Collective excitations and viscosity in liquid Bi. *Journal of Chemical Physics*. 145(18). <https://doi.org/10.1063/1.4965429>
- Varis T, Suhonen T, Calonius O, Čuban J, Pietola M. 2016. Optimization of HVOF Cr₃C₂-NiCr coating for increased fatigue performance. *Surface and Coatings Technology*. 305:123-131. <https://doi.org/10.1016/j.surfcoat.2016.08.012>
- Ntziachristos L, Saukko E, Lehtoranta K, Rönkkö T, Timonen H, Simonen P, Karjalainen P, Keskinen J. 2016. Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions. *Fuel*. 186:456-465. <https://doi.org/10.1016/j.fuel.2016.08.091>
- Fabert M, Ojha N, Erasmus E, Hannula M, Hokka M, Hyttinen J, Rocherullé J, Sigalas I, Massera J. 2017. Crystallization and sintering of borosilicate bioactive glasses for application in tissue engineering. *Journal of Materials Chemistry B*. 5(23):4514-4525. <https://doi.org/10.1039/c7tb00106a>
- Kordmahaleh AA, Naghashzadegan M, Javaherdeh K, Khoshgoftar M. 2017. Design of a 25 MWe Solar Thermal Power Plant in Iran with Using Parabolic Trough Collectors and a Two-Tank Molten Salt Storage System. *International Journal of Photoenergy*. 2017. <https://doi.org/10.1155/2017/4210184>
- Golovanov VV, Nazarchuk BV, Golovanova VV, Tkachenko NV, Rantala TT. 2017. Effects of orientation at the phthalocyanine-CdSe interface on the electron transfer characteristics. *Physical Chemistry Chemical Physics*. 19(16):10511-10517. <https://doi.org/10.1039/c7cp00833c>
- Vuorimaa-Laukkanen E, Lisitsyna ES, Ketola T-M, Morin-Pickardat E, Liang H, Hanzlikova M, Urtti A, Yliperttula ML, Lisitsyna E, Laaksonen T. 2017. Fluorescence spectroscopy "knife" for polyplex "cakes": taste the filling. Paper presented at 30 Years of Drug Delivery Research, Kuopio, Finland.
- Mojica E, Pertuz S, Arguello H. 2017. High-resolution coded-aperture design for compressive X-ray tomography using low resolution detectors. *Optics Communications*. 404:103-109. <https://doi.org/10.1016/j.optcom.2017.06.053>
- 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*. 73(2). <https://doi.org/10.5006/2206>
- Mäkelä JM, Haapanen J, Harra J, Juuti P, Kujanpää S. 2017. Liquid flame spray—a hydrogen-oxygen flame based method for nanoparticle synthesis and functional nanocoatings. *KONA POWDER AND PARTICLE JOURNAL*. 2017(34):141-154. <https://doi.org/10.14356/kona.2017020>
- 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*. 121(39). <https://doi.org/10.1021/acs.jpcc.7b08594>
- Saccone M, Palacio FF, Cavallo G, Dichiarante V, Virkki M, Terraneo G, Priimagi A, Metrangolo P. 2017. Photoresponsive ionic liquid crystals assembled: Via halogen bond: En route towards light-controllable ion transporters. *Faraday Discussions*. 203:407-422. <https://doi.org/10.1039/c7fd00120g>
- Vapaavuori J, Siiskonen A, Dichiarante V, Forni A, Saccone M, Pilati T, Pellerin C, Shishido A, Metrangolo P, Priimagi A. 2017. Supramolecular control of liquid crystals by doping with halogen-bonding dyes. *RSC Advances*. 7(64):40237-40242. <https://doi.org/10.1039/c7ra06397k>
- Lahbib I, Valkonen A, Rzaigui M, Smirani W. 2017. Synthesis, Structural Characterization, Hirshfeld Surface and Antioxidant Activity Analysis of a Novel Organic Cation Antimonate Complex. *Journal of Cluster Science*. 28(4):2239-2252. <https://doi.org/10.1007/s10876-017-1217-x>

- 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>
- Kovács PT, Zare A, Balogh T, Bregovic R, Gotchev A. 2017. Architectures and codecs for real-time light field streaming. *Journal of Imaging Science and Technology*. 61(1). <https://doi.org/10.2352/J.ImagingSci.Technol.2017.61.1.010403>
- Suokas E. 2017. Effect of air gap on the adhesion of PET layer on cardboard substrate in extrusion coating. In 16th TAPPI European PLACE Conference 2017. TAPPI Press. pp. 529-544.
- Lahti J, Kampuri T, Kuusipalo J. 2017. Novel bio-based materials for active and intelligent packaging. In 16th TAPPI European PLACE Conference 2017. TAPPI Press.
- Lahti J, Kuusipalo J, Auvinen S. 2017. Novel equipment to simulate hot air heat sealability of packaging materials. In 16th TAPPI European PLACE Conference 2017. TAPPI Press. pp. 237-248.
- Kuusipalo J, Lahti J. 2017. Tampere University of Technology, laboratory of materials science, paper converting and packaging technology Tampere, Finland. In 16th TAPPI European PLACE Conference 2017: Basel; Switzerland; 22 May 2017 through 24 May 2017. TAPPI Press.
- Balanta MAG, Orsi Gordo V, Carvalho ARH, Puustinen J, Alghamdi HM, Henini M, Galeti HVA, Guina M, Galvão Gobato Y. 2017. Polarization resolved photoluminescence in GaAs_{1-x}Bi_x/GaAs quantum wells. *Journal of Luminescence*. 182:49-52. <https://doi.org/10.1016/j.jlumin.2016.10.008>
- Siiskonen A, Priimägi A. 2017. Benchmarking DFT methods with small basis sets for the calculation of halogen-bond strengths. *Journal of Molecular Modeling*. 23(2). <https://doi.org/10.1007/s00894-017-3212-4>
- Izdebskaya Y, Shvedov V, Assanto G, Krolikowski W. 2017. Magnetic routing of light-induced waveguides. *Nature Communications*. 8. <https://doi.org/10.1038/ncomms14452>
- Guixà-González R, Albasanz JL, Rodriguez-Espigares I, Pastor M, Sanz F, Martí-Solano M, Manna M, Martinez-Seara H, Hildebrand PW, Martín M, Selent J. 2017. Membrane cholesterol access into a G-protein-coupled receptor. *Nature Communications*. 8. <https://doi.org/10.1038/ncomms14505>
- 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>
- Bilkova E, Pleskot R, Rissanen S, Sun S, Czogalla A, Cwiklik L, Róg T, Vattulainen I, Cremer PS, Jungwirth P, Coskun Ü. 2017. Calcium Directly Regulates Phosphatidylinositol 4,5-Bisphosphate Headgroup Conformation and Recognition. *Journal of the American Chemical Society*. 139(11):4019-4024. <https://doi.org/10.1021/jacs.6b11760>
- Higashino T, Nakatsuji H, Fukuda R, Okamoto H, Imai H, Matsuda T, Tochio H, Shirakawa M, Tkachenko NV, Hashida M, Murakami T, Imahori H. 2017. Hexaphyrin as a Potential Theranostic Dye for Photothermal Therapy and ¹⁹F Magnetic Resonance Imaging. *ChemBioChem*. 18(10):951-959. <https://doi.org/10.1002/cbic.201700071>
- Mah PT, Novakovic D, Saarinen J, van Landeghem S, Peltonen L, Laaksonen T, Isomäki A, Strachan CJ. 2017. Elucidation of Compression-Induced Surface Crystallization in Amorphous Tablets Using Sum Frequency Generation (SFG) Microscopy. *Pharmaceutical Research*. 34(5):957-970. <https://doi.org/10.1007/s11095-016-2046-6>
- Honkanen M, Hansen TW, Jiang H, Kärkkäinen M, Huuhtanen M, Heikkinen O, Kallinen K, Lahtinen J, Keiski RL, Wagner JB, Vippola M. 2017. Electron microscopic studies of natural gas oxidation catalyst – Effects of thermally accelerated aging on catalyst microstructure. *Journal of Catalysis*. 349:19-29. <https://doi.org/10.1016/j.jcat.2017.03.003>

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*. 121(17):9594-9605. <https://doi.org/10.1021/acs.jpcc.7b01562>

Kramb J, Gómez-Barea A, DeMartini N, Romar H, Doddapaneni TRKC, Konttinen J. 2017. The effects of calcium and potassium on CO₂ gasification of birch wood in a fluidized bed. *Fuel*. 196:398-407. <https://doi.org/10.1016/j.fuel.2017.01.101>

Jones RO, Ahlstedt O, Akola J, Ropo M. 2017. Density functional study of structure and dynamics in liquid antimony and Sb_n clusters. *Journal of Chemical Physics*. 146(19). <https://doi.org/10.1063/1.4983219>

Piccardi A, Alberucci A, Kravets N, Buchnev O, Assanto G. 2017. Nematicon-enhanced spontaneous symmetry breaking. *Molecular Crystals and Liquid Crystals*. 649(1):59-65. <https://doi.org/10.1080/15421406.2017.1303916>

Ma L, Laasonen K, Akola J. 2017. Catalytic Activity of AuCu Clusters on MgO(100): Effect of Alloy Composition for CO Oxidation. *Journal of Physical Chemistry C*. 121(20):10876-10886. <https://doi.org/10.1021/acs.jpcc.6b12054>

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*. 121(20):10809-10816. <https://doi.org/10.1021/acs.jpcc.6b11958>

Railanmaa A, Lehtimäki S, Lupo D. 2017. Comparison of starch and gelatin hydrogels for non-toxic supercapacitor electrolytes. *Applied Physics A-Materials Science and Processing*. 123(6). <https://doi.org/10.1007/s00339-017-1068-1>

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*. 121(25):13952-13961. <https://doi.org/10.1021/acs.jpcc.7b04483>

Nogueira IBR, Ribeiro AM, Martins MAF, Rodrigues AE, Koivisto H, Loureiro JM. 2017. Dynamics of a True Moving Bed separation process: Linear model identification and advanced process control. *Journal of Chromatography A*. 1504. <https://doi.org/10.1016/j.chroma.2017.04.060>

Suominen M, Lehtimäki S, Yewale R, Damlin P, Tuukkanen S, Kvarnström C. 2017. Electropolymerized polyazulene as active material in flexible supercapacitors. *Journal of Power Sources*. 356:181-190. <https://doi.org/10.1016/j.jpowsour.2017.04.082>

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>

Pirjola L, Rönkkö T, Saukko E, Parviainen H, Malinen A, Alanen J, Saveljeff H. 2017. Exhaust emissions of non-road mobile machine: Real-world and laboratory studies with diesel and HVO fuels. *Fuel*. 202:154-164. <https://doi.org/10.1016/j.fuel.2017.04.029>

Itävuori P, Hulthén E, Vilkkonen M. 2017. Feed-hopper level estimation and control in cone crushers. *Minerals Engineering*. 110:82-95. <https://doi.org/10.1016/j.mineng.2017.04.010>

Timr Š, Pleskot R, Kadlec J, Kohagen M, Magarkar A, Jungwirth P. 2017. Membrane Binding of Recoverin: From Mechanistic Understanding to Biological Functionality. *ACS Central Science*. 3(8):868-874. <https://doi.org/10.1021/acscentsci.7b00210>

Jain R, Van Hullebusch ED, Lenz M, Farges F. 2017. Understanding selenium biogeochemistry in engineered ecosystems: Transformation and analytical methods. In *Bioremediation of Selenium Contaminated Wastewater*. Springer International Publishing. pp. 33-56. https://doi.org/10.1007/978-3-319-57831-6_2

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>

Boardman AD, Alberucci A, Assanto G, Grimalsky VV, Kibler B, McNiff J, Nefedov IS, Rapoport YG, Valagiannopoulos CA. 2017. Waves in hyperbolic and double negative metamaterials including rogues and solitons. *Nanotechnology*. 28(44). <https://doi.org/10.1088/1361-6528/aa6792>

Danne R, Poojari C, Martinez-Seara H, Rissanen S, Lolicato F, Róg T, Vattulainen I. 2017. DoGlycans-Tools for Preparing Carbohydrate Structures for Atomistic Simulations of Glycoproteins, Glycolipids, and Carbohydrate Polymers for GROMACS. *Journal of Chemical Information and Modeling*. 57(10):2401-2406. <https://doi.org/10.1021/acs.jcim.7b00237>

Sippola RJ, Hadipour A, Kastinen T, Vivo P, Hukka TI, Aernouts T, Heiskanen JP. 2017. Carbazole-based small molecule electron donors: Syntheses, characterization, and material properties. *Dyes and Pigments*. 150:79-88. <https://doi.org/10.1016/j.dyepig.2017.11.014>

Liimatainen V, Vuckovac M, Jokinen V, Sariola V, Hokkanen MJ, Zhou Q, Ras RHA. 2017. Mapping microscale wetting variations on biological and synthetic water-repellent surfaces. *Nature Communications*. 8(1). <https://doi.org/10.1038/s41467-017-01510-7>

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>

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>

Tienaho J, Poikulainen E, Sarjala T, Muilu-Mäkelä R, Santala V, Karp M. 2018. A Bioscreening Technique for Ultraviolet Irradiation Protective Natural Substances. *Photochemistry and Photobiology*. 94(6):1273-1280. <https://doi.org/10.1111/php.12954>

Doddapaneni TRKC, Jain R, Praveenkumar R, Rintala J, Romar H, Konttinen J. 2018. Adsorption of furfural from torrefaction condensate using torrefied biomass. *Chemical Engineering Journal*. 334:558-568. <https://doi.org/10.1016/j.cej.2017.10.053>

Dessi P, Porca E, Haavisto J, Lakaniemi A-M, Collins G, Lens PNL. 2018. Composition and role of the attached and planktonic microbial communities in mesophilic and thermophilic xylose-fed microbial fuel cells. *RSC Advances*. 8(6):3069-3080. <https://doi.org/10.1039/c7ra12316g>

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>

Ojha N, Nguyen H, Laihinne T, Salminen T, Lastusaari M, Petit L. 2018. Decomposition of persistent luminescent microparticles in corrosive phosphate glass melt. *Corrosion Science*. 135:207-214. <https://doi.org/10.1016/j.corsci.2018.02.050>

D'Urso L, Condorelli M, Puglisi O, Tempura C, Lolicato F, Compagnini G, La Rosa C. 2018. Detection and characterization at nM concentration of oligomers formed by hIAPP, A β (1-40) and their equimolar mixture using SERS and MD simulations. *Physical Chemistry Chemical Physics*. 20(31):20588-20596. <https://doi.org/10.1039/c7cp08552d>

- 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>
- Rokade SS, Joshi KA, Mahajan K, Patil S, Tomar G, Dubal DS, Parihar VS, Kitture R, Bellare JR, Ghosh S. 2018. Gloriosa superba Mediated Synthesis of Platinum and Palladium Nanoparticles for Induction of Apoptosis in Breast Cancer. *Bioinorganic Chemistry and Applications*. 2018. <https://doi.org/10.1155/2018/4924186>
- 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>
- Virkki M, Maurice A, Forni A, Sironi M, Dichiarante V, Brevet PF, Metrangolo P, Kauranen M, Priimagi A. 2018. On the molecular optical nonlinearity of halogen-bond-forming azobenzenes. *Physical Chemistry Chemical Physics*. 20(45):28810-28817. <https://doi.org/10.1039/c8cp05392h>
- Sadiek I, Mikkonen T, Vainio M, Toivonen J, Foltynowicz A. 2018. Optical frequency comb photoacoustic spectroscopy. *Physical Chemistry Chemical Physics*. 20(44):27849-27855. <https://doi.org/10.1039/c8cp05666h>
- Honkanen M, Wang J, Kärkkäinen M, Huuhtanen M, Jiang H, Kallinen K, Keiski RL, Akola J, Vippola M. 2018. Regeneration of sulfur-poisoned Pd-based catalyst for natural gas oxidation. *Journal of Catalysis*. 358:253-265. <https://doi.org/10.1016/j.jcat.2017.12.021>
- Nykänen H, Mpamah PA, Rissanen AJ. 2018. Stable carbon isotopic composition of peat columns, subsoil and vegetation on natural and forestry-drained boreal peatlands. *Isotopes in Environmental and Health Studies*. 54(6). <https://doi.org/10.1080/10256016.2018.1523158>
- 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>
- Kato D, Sakai H, Araki Y, Wada T, Tkachenko NV, Hasobe T. 2018. Concentration-dependent photophysical switching in mixed self-assembled monolayers of pentacene and perylene-3,4,9,10-tetracarboxylic diimide on gold nanoclusters. *Physical Chemistry Chemical Physics*. 20(13):8695-8706. <https://doi.org/10.1039/c8cp00174j>
- 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>
- Ojha N, Tuomisto M, Lastusaari M, Petit L. 2018. Upconversion from fluorophosphate glasses prepared with NaYF₄:Er³⁺, Yb³⁺ nanocrystals. *RSC Advances*. 8(34):19226-19236. <https://doi.org/10.1039/c8ra03298j>
- Das A, Sallat A, Böhme F, Sarlin E, Vuorinen J, Vennemann N, Heinrich G, Stöckelhuber KW. 2018. Temperature scanning stress relaxation of an autonomous self-healing elastomer containing non-covalent reversible network junctions. *Polymers*. 10(1). <https://doi.org/10.3390/polym10010094>
- Barreca D, Carraro G, Maccato C, Altantzi T, Kaunisto K, Gasparotto A. 2018. Controlled Growth of Supported ZnO Inverted Nanopyramids with Downward Pointing Tips. *Crystal Growth and Design*. 18(4):2579-2587. <https://doi.org/10.1021/acs.cgd.8b00198>

Iantovics LB, Dehmer M, Emmert-Streib F. 2018. MetrIntSimil-an accurate and robust metric for comparison of similarity in intelligence of any number of cooperative multiagent systems. *Symmetry*. 10(2). <https://doi.org/10.3390/sym10020048>

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>

Vale JR, Rimpiläinen T, Sievänen E, Rissanen K, Afonso CAM, Candeias NR. 2018. Pot-economy autooxidative condensation of 2-Aryl-2-lithio-1,3-dithianes. *Journal of Organic Chemistry*. 83(4):1948-1958. <https://doi.org/10.1021/acs.joc.7b02896>

Kainulainen TP, Sirviö JA, Sethi J, Hukka TI, Heiskanen JP. 2018. UV-Blocking Synthetic Biopolymer from Biomass-Based Bifuran Diester and Ethylene Glycol. *Macromolecules*. 51(5):1822-1829. <https://doi.org/10.1021/acs.macromol.7b02457>

Mehrang S, Pietilä J, Korhonen I. 2018. An activity recognition framework deploying the random forest classifier and a single optical heart rate monitoring and triaxial accelerometer wrist-band. *Sensors*. 18(2). <https://doi.org/10.3390/s18020613>

Hannula M, Ali-Löytty H, Lahtonen K, Sarlin E, Saari J, Valden M. 2018. Improved Stability of Atomic Layer Deposited Amorphous TiO₂ Photoelectrode Coatings by Thermally Induced Oxygen Defects. *Chemistry of Materials*. 30(4):1199-1208. <https://doi.org/10.1021/acs.chemmater.7b02938>

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>

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 Cr₃C₂-NiCr coatings by WC addition. *Surface and Coatings Technology*. 337:296-305. <https://doi.org/10.1016/j.surfcoat.2018.01.035>

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>

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>

Khan M, Koivisto J, Hukka T, Hokka M, Kellomäki M. 2018. Composite Hydrogels Using Bioinspired Approach with in Situ Fast Gelation and Self-Healing Ability as Future Injectable Biomaterial. *ACS Applied Materials & Interfaces*. 10(14):11950-11960. <https://doi.org/10.1021/acsami.8b01351>

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>

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>

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*. 15(3):623-632. <https://doi.org/10.1007/s11998-017-0022-7>

- Manninen H, Rotola-Pukkila M, Aisala H, Hopia A, Laaksonen T. 2018. Free amino acids and 5'-nucleotides in Finnish forest mushrooms. *Food Chemistry*. 247:23-28. <https://doi.org/10.1016/j.foodchem.2017.12.014>
- Raappana M, Polojärvi V, Aho A, Mäkelä J, Aho T, Tukiainen A, Laukkanen P, Guina M. 2018. Wet etching of dilute nitride GaInNAs, GaInNAsSb, and GaNAsSb alloys lattice-matched to GaAs. *Corrosion Science*. 136:268-274. <https://doi.org/10.1016/j.corsci.2018.03.018>
- Zhou K, Dichlberger A, Martinez-Seara H, Nyholm TKM, Li S, Kim YA, Vattulainen I, Ikonen E, Blom T. 2018. A Ceramide-Regulated Element in the Late Endosomal Protein LAPT4B Controls Amino Acid Transporter Interaction. *ACS Central Science*. 4(5):548-558. <https://doi.org/10.1021/acscentsci.7b00582>
- Virkki K, Tervola E, Medel M, Torres T, Tkachenko NV. 2018. Effect of Co-Adsorbate and Hole Transporting Layer on the Photoinduced Charge Separation at the TiO₂-Phthalocyanine Interface. *ACS Omega*. 3(5):4947-4958. <https://doi.org/10.1021/acsomega.8b00600>
- Pirhonen M, Peltokangas M, Vehkaoja A. 2018. Acquiring respiration rate from photoplethysmographic signal by recursive bayesian tracking of intrinsic modes in time-frequency spectra. *Sensors*. 18(6). <https://doi.org/10.3390/s18061693>
- Virtanen J, Somppi S, Törnqvist H, Jeyhani V, Fiedler P, Gizatdinova Y, Majaranta P, Väätäjä H, Cardó AV, Lekkala J, Tuukkanen S, Surakka V, Vainio O, Vehkaoja A. 2018. Evaluation of dry electrodes in canine heart rate monitoring. *Sensors*. 18(6). <https://doi.org/10.3390/s18061757>
- Nair AK, Bhavitha KB, Perumbilavil S, Sankar P, Rouxel D, Kala MS, Thomas S, Kalarikkal N. 2018. Multifunctional nitrogen sulfur co-doped reduced graphene oxide – Ag nano hybrids (sphere, cube and wire) for nonlinear optical and SERS applications. *Carbon*. 132:380-393. <https://doi.org/10.1016/j.carbon.2018.02.068>
- George L, Hiltunen A, Santala V, Efimov A. 2018. Photo-antimicrobial efficacy of zinc complexes of porphyrin and phthalocyanine activated by inexpensive consumer LED lamp. *Journal of Inorganic Biochemistry*. 183:94-100. <https://doi.org/10.1016/j.jinorgbio.2018.03.015>
- Siljander S, Keinänen P, Rätty A, Ramakrishnan KR, Tuukkanen S, Kunnari V, Harlin A, Vuorinen J, Kanerva M. 2018. Effect of surfactant type and sonication energy on the electrical conductivity properties of nanocellulose-CNT nanocomposite films. *International Journal of Molecular Sciences*. 19(6). <https://doi.org/10.3390/ijms19061819>
- Laurén P, Paukkonen H, Lipiäinen T, Dong Y, Oksanen T, Räikkönen H, Ehlers H, Laaksonen P, Yliperttula M, Laaksonen T. 2018. Pectin and Mucin Enhance the Bioadhesion of Drug Loaded Nanofibrillated Cellulose Films. *Pharmaceutical Research*. 35(7). <https://doi.org/10.1007/s11095-018-2428-z>
- Rajala S, Schouten M, Krijnen G, Tuukkanen S. 2018. High Bending-Mode Sensitivity of Printed Piezoelectric Poly(vinylidene fluoride- co-trifluoroethylene) Sensors. *ACS Omega*. 3(7):8067-8073. <https://doi.org/10.1021/acsomega.8b01185>
- 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 TiO₂-Fe₂O₃ scaffold-absorber photoanodes for water splitting. *Sustainable Energy & Fuels*. 2(9):2124-2130. <https://doi.org/10.1039/C8SE00252E>
- Tan LC, Espinosa-Ortiz EJ, Nancharaiyah YV, van Hullebusch ED, Gerlach R, Lens PN. 2018. Selenate removal in biofilm systems: Effect of nitrate and sulfate on selenium removal efficiency, biofilm structure and microbial community. *Journal of Chemical Technology and Biotechnology*. 93(8):2380-2389. <https://doi.org/10.1002/jctb.5586>
- Mandal S, Garcia Iglesias M, Ince M, Torres T, Tkachenko NV. 2018. Photoinduced Energy Transfer in ZnCdSeS Quantum Dot-Phthalocyanines Hybrids. *ACS Omega*. 3(8):10048-10057. <https://doi.org/10.1021/acsomega.8b01623>

Nieminen V, Karjalainen M, Salminen K, Rantala J, Kontunen A, Isokoski P, Müller P, Kallio P, Surakka V, Lekkala J. 2018. A compact olfactometer for IMS measurements and testing human perception. *International Journal for Ion Mobility Spectrometry*. 21(3):71-80. <https://doi.org/10.1007/s12127-018-0235-1>

Hyväluoma J, Hannula M, Arstila K, Wang H, Kulju S, Rasa K. 2018. Effects of pyrolysis temperature on the hydrologically relevant porosity of willow biochar. *Journal of Analytical and Applied Pyrolysis*. 134. <https://doi.org/10.1016/j.jaap.2018.07.011>

Jermakka J, Thompson Brewster E, Ledezma P, Freguia S. 2018. Electro-concentration for chemical-free nitrogen capture as solid ammonium bicarbonate. *Separation and Purification Technology*. 203:48-55. <https://doi.org/10.1016/j.seppur.2018.04.023>

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>

Heijne AT, Liu D, Sulonen M, Sleutels T, Fabregat-Santiago F. 2018. Quantification of bio-anode capacitance in bioelectrochemical systems using Electrochemical Impedance Spectroscopy. *Journal of Power Sources*. 400:533-538. <https://doi.org/10.1016/j.jpowsour.2018.08.003>

Tiihonen J, Kylänpää I, Rantala TT. 2018. Computation of Dynamic Polarizabilities and van der Waals Coefficients from Path-Integral Monte Carlo. *Journal of Chemical Theory and Computation*. 14:5750-5763. <https://doi.org/10.1021/acs.jctc.8b00859>

Tan LC, Nancharaiyah YV, Lu S, van Hullebusch ED, Gerlach R, Lens PNL. 2018. Biological treatment of selenium-laden wastewater containing nitrate and sulfate in an upflow anaerobic sludge bed reactor at pH 5.0. *Chemosphere*. 211:684-693. <https://doi.org/10.1016/j.chemosphere.2018.07.079>

Huttunen-Saarivirta E, Isotahdon E, Metsäjoki J, Salminen T, Carpén L, Ronkainen H. 2018. Tribocorrosion behaviour of aluminium bronze in 3.5 wt.% NaCl solution. *Corrosion Science*. 144:207-223. <https://doi.org/10.1016/j.corsci.2018.08.058>

Chevrier DM, Raich L, Rovira C, Das A, Luo Z, Yao Q, Chatt A, Xie J, Jin R, Akola J, Zhang P. 2018. Molecular-Scale Ligand Effects in Small Gold-Thiolate Nanoclusters. *Journal of the American Chemical Society*. 140(45):15430-15436. <https://doi.org/10.1021/jacs.8b09440>

Sakai H, Inaya R, Tkachenko NV, Hasobe T. 2018. High-Yield Generation of Triplet Excited States by an Efficient Sequential Photoinduced Process from Energy Transfer to Singlet Fission in Pentacene-Modified CdSe/ZnS Quantum Dots. *Chemistry - A European Journal*. 24(64):17062-17071. <https://doi.org/10.1002/chem.201803257>

Rinne J, Keskinen J, Berger PR, Lupo D, Valkama M. 2018. M2M Communication Assessment in Energy-Harvesting and Wake-Up Radio Assisted Scenarios Using Practical Components. *Sensors (Basel, Switzerland)*. 18(11). <https://doi.org/10.3390/s18113992>

Uusheimo S, Huotari J, Tulonen T, Aalto SL, Rissanen AJ, Arvola L. 2018. High Nitrogen Removal in a Constructed Wetland Receiving Treated Wastewater in a Cold Climate. *Environmental science & technology*. 52(22):13343-13350. <https://doi.org/10.1021/acs.est.8b03032>

Närhi M, Salmela L, Toivonen J, Billet C, Dudley JM, Genty G. 2018. Machine learning analysis of extreme events in optical fibre modulation instability. *Nature Communications*. 9(1). <https://doi.org/10.1038/s41467-018-07355-y>

Rimpiläinen T, Andrade J, Nunes A, Ntungwe E, Fernandes AS, Vale JR, Rodrigues J, Gomes JP, Rijo P, Candeias NR. 2018. Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Pétasis Borono-Mannich Reaction. *ACS Omega*. 3(11):16191-16202. <https://doi.org/10.1021/acsomega.8b02381>

Ferreira SA, Motwani MS, Faull PA, Seymour AJ, Yu TTL, Enayati M, Taheem DK, Salzechner C, Haghighi T, Kania EM, Oommen OP, Ahmed T, Loaiza S, Parzych K, Dazzi F, Varghese OP, Festy F, Grigoriadis AE, Auner HW, Snijders AP, Bozec L, Gentleman E. 2018. Bi-directional cell-pericellular matrix interactions direct stem cell fate. *Nature Communications*. 9(1). <https://doi.org/10.1038/s41467-018-06183-4>

Perumbilavil S, Piccardi A, Barboza R, Buchnev O, Kauranen M, Strangi G, Assanto G. 2018. Beaming random lasers with soliton control. *Nature Communications*. 9(1). <https://doi.org/10.1038/s41467-018-06170-9>

Salmenjoki H, Alava MJ, Laurson L. 2018. Machine learning plastic deformation of crystals. *Nature Communications*. 9(1). <https://doi.org/10.1038/s41467-018-07737-2>

Kotila T, Kogan K, Enkavi G, Guo S, Vattulainen I, Goode BL, Lappalainen P. 2018. Structural basis of actin monomer re-charging by cyclase-Associated protein. *Nature Communications*. 9(1). <https://doi.org/10.1038/s41467-018-04231-7>

Garifullin M. 2018. Experimental moment resistance of rectangular hollow section T joints. *MATEC Web of Conferences*. 245. <https://doi.org/10.1051/mateconf/201824508003>

Czaplicki R, Kiviniemi A, Huttunen MJ, Zang X, Stolt T, Vartiainen I, Butet J, Kuittinen M, Martin OJF, Kauranen M. 2018. Less Is More: Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density. *Nano Letters*. 18(12):7709-7714. <https://doi.org/10.1021/acs.nanolett.8b03378>

Joost U, Sutka A, Oja M, Smits K, Doebelin N, Loot A, Järvekülg M, Hirsimäki M, Valden M, Nommiste E. 2018. Reversible photodoping of TiO₂ nanoparticles. *Chemistry of Materials*. 30(24):8968-8974. <https://doi.org/10.1021/acs.chemmater.8b04813>

Levämäki H, Tian L-Y, Vitos L, Ropo M. 2019. An automated algorithm for reliable equation of state fitting of magnetic systems. *Computational Materials Science*. 156:121-128. <https://doi.org/10.1016/j.commatsci.2018.09.026>

Suokas E. 2019. Effect of polyolefin molecular structure on product properties in extrusion coating. In 17th Biennial TAPPI European PLACE Conference 2019. TAPPI Press. pp. 89-98.

Umeyama T, Hanaoka T, Yamada H, Namura Y, Mizuno S, Ohara T, Baek J, Park J, Takano Y, Stranius K, Tkachenko NV, Imahori H. 2019. Exclusive occurrence of photoinduced energy transfer and switching of its direction by rectangular π -extension of nanographenes. *Chemical Science*. 10(27):6642-6650. <https://doi.org/10.1039/c9sc01538h>

Sharma V, Yiannacou K, Karjalainen M, Lahtonen K, Valden M, Sariola V. 2019. Large-scale efficient water harvesting using bioinspired micro-patterned copper oxide nanoneedle surfaces and guided droplet transport. *Nanoscale Advances*. 1(10):4025-4040. <https://doi.org/10.1039/c9na00405j>

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>

Lahti J. 2019. Market implementation of active and intelligent packaging-opportunities from a socio-economic perspective. In 17th Biennial TAPPI European PLACE Conference 2019. TAPPI Press. pp. 419-427.

Tienaho J, Karonen M, Muilu-Mäkelä R, Wähälä K, Denegri EL, Franzén R, Karp M, Santala V, Sarjala T. 2019. Metabolic profiling of water-soluble compounds from the extracts of dark septate endophytic fungi (DSE) isolated from scots pine (*Pinus sylvestris* L.) seedlings using UPLC-orbitrap-MS. *Molecules*. 24(12). <https://doi.org/10.3390/molecules24122330>

- Mandal S, Tkachenko NV. 2019. Multiphoton Excitation of CsPbBr₃ Perovskite Quantum Dots (PQDs): How Many Electrons Can One PQD Donate to Multiple Molecular Acceptors?. *Journal of Physical Chemistry Letters*. 2775-2781. <https://doi.org/10.1021/acs.jpcllett.9b01045>
- Lahti J. 2019. Nanocellulose and Polylactic Acid Based Multilayer Coatings for Barrier Applications. In 17th Biennial TAPPI European PLACE Conference 2019. TAPPI Press. pp. 446-455.
- Guglielmetti S, Santala V, Mangayil R, Ciranna A, Karp MT. 2019. O₂-requiring molecular reporters of gene expression for anaerobic microorganisms. *Biosensors and Bioelectronics*. 123:1-6. <https://doi.org/10.1016/j.bios.2018.09.066>
- Anttalainen O, Puton J, Kontunen A, Karjalainen M, Kumpulainen P, Oksala N, Safaei Z, Roine A. 2019. Possible strategy to use differential mobility spectrometry in real time applications. *International Journal for Ion Mobility Spectrometry*. <https://doi.org/10.1007/s12127-019-00251-1>
- Lemougna PN, Yliniemi J, Ismailov A, Levänen E, Tanskanen P, Kinnunen P, Roning J, Illikainen M. 2019. Spodumene tailings for porcelain and structural materials: Effect of temperature (1050–1200°C) on the sintering and properties. *Minerals Engineering*. <https://doi.org/10.1016/j.mineng.2019.105843>
- Assoah B, Riihonen V, Vale JR, Valkonen A, Candeias NR. 2019. Synthesis of 6,12-disubstituted methanodibenzo[b,f][1,5]dioxocins: Pyrrolidine catalyzed self-condensation of 2'-Hydroxyacetophenones. *Molecules*. 24(13). <https://doi.org/10.3390/molecules24132405>
- 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>
- Ghorbani M, Dehmer M, Mowshowitz A, Tao J, Emmert-Streib F. 2019. The Hosoya entropy of graphs revisited. *Symmetry*. 11(8). <https://doi.org/10.3390/sym11081013>
- Liu W, Ban J, Feng L, Cheng T, Emmert-Streib F, Dehmer M. 2019. The maximum Hosoya index of unicyclic graphs with diameter at most four. *Symmetry*. 11(8). <https://doi.org/10.3390/sym11081034>
- Bhagyaraj S, Perumbilavil S, Udayabashkar R, Mangalaraja RV, Thomas S, Kalarikkal N, Oluwafemi OS. 2019. Tuning of nonlinear absorption in highly luminescent CdSe based quantum dots with core-shell and core/multi-shell architectures. *Physical Chemistry Chemical Physics*. 21(21):11424-11434. <https://doi.org/10.1039/c9cp00476a>
- Eregowda T, Rene ER, Rintala J, Lens PNL. 2019. Volatile fatty acid adsorption on anion exchange resins: kinetics and selective recovery of acetic acid. *Separation Science and Technology (Philadelphia)*. <https://doi.org/10.1080/01496395.2019.1600553>
- Kuroda K, Yazaki K, Tanaka Y, Akita M, Sakai H, Hasobe T, Tkachenko NV, Yoshizawa M. 2019. A Pentacene-based Nanotube Displaying Enriched Electrochemical and Photochemical Activities. *Angewandte Chemie - International Edition*. 58(4):1115-1119. <https://doi.org/10.1002/anie.201812976>