

- Rantala, T. T., Rosén, A., & Helsing, 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)
- 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)
- Rintala, J. A., & Ahring, B. K. (1994). Thermophilic anaerobic digestion of source-sorted household solid waste: the effects of enzyme additions. *Applied Microbiology and Biotechnology*, 40(6), 916-919. <https://doi.org/10.1007/BF00173999>
- Rintala, J. A., & Ahring, B. K. (1994). A two-stage thermophilic anaerobic process for the treatment of source sorted household solid waste. *Biotechnology Letters*, 16(10), 1097-1102. <https://doi.org/10.1007/BF01022410>
- Lepistö, S. S., & Rintala, J. A. (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. T., Rantala, T. T., & Ala-Korpela, M. (1999). Biokalvojen rakenteen ja toiminnan simulointi tuo uutta tietoa rasvoista. *Kemia - Kemi*, 26(3), 222-225.
- Salminen, E., Rintala, J., Härkönen, J., Kuitunen, M., Högmander, H., & Oikari, A. (2001). Anaerobically digested poultry slaughterhouse wastes as fertiliser in agriculture. *Bioresource Technology*, 78(1), 81-88. [https://doi.org/10.1016/S0960-8524\(00\)00160-7](https://doi.org/10.1016/S0960-8524(00)00160-7)
- Suvilampi, J., Lepistö, R., & Rintala, J. (2001). Biological treatment of pulp and paper mill process and wastewaters under thermophilic conditions - A review. *Paperi ja puu*, 83(4), 320-325.
- Korhonen, H. M. E., Heikkilä, J., & Törnwall, J. M. (2001). A simulation case study of production planning and control in printed wiring board manufacturing. *Winter Simulation Conference Proceedings*, 2, 844-847.
- Salminen, E., & Rintala, J. (2002). Anaerobic digestion of organic solid poultry slaughterhouse waste - A review. *Bioresource Technology*, 83(1), 13-26. [https://doi.org/10.1016/S0960-8524\(01\)00199-7](https://doi.org/10.1016/S0960-8524(01)00199-7)
- Lokshina, L. Y., Vavilin, V. A., Salminen, E., & Rintala, J. (2003). Modeling of anaerobic degradation of solid slaughterhouse waste: Inhibition effects of long-chain fatty acids or ammonia. *Applied Biochemistry and Biotechnology*, 109(1-3), 15-32. <https://doi.org/10.1385/ABAB:109:1-3:15>
- Suvilampi, J., Lehtomäki, A., & Rintala, J. (2003). Comparison of laboratory-scale thermophilic biofilm and activated sludge processes integrated with a mesophilic activated sludge process. *Bioresource Technology*, 88(3), 207-214. [https://doi.org/10.1016/S0960-8524\(03\)00006-3](https://doi.org/10.1016/S0960-8524(03)00006-3)
- Vavilin, V. A., Lokshina, L. Y., Jokela, J. P. Y., & Rintala, J. A. (2004). Modeling solid waste decomposition. *Bioresource Technology*, 94(1), 69-81. <https://doi.org/10.1016/j.biortech.2003.10.034>
- Jokela, J. P. Y., Vavilin, V. A., & Rintala, J. A. (2005). Hydrolysis rates, methane production and nitrogen solubilisation of grey waste components during anaerobic degradation. *Bioresource Technology*, 96(4), 501-508. <https://doi.org/10.1016/j.biortech.2004.03.009>
- Luostarinen, S., & Rintala, J. (2007). Anaerobic on-site treatment of kitchen waste in combination with black water in UASB-septic tanks at low temperatures. *Bioresource Technology*, 98(9), 1734-1740. <https://doi.org/10.1016/j.biortech.2006.07.022>

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*

Kaparaju, P. L. N., & Rintala, J. A. (2008). Effects of solid-liquid separation on recovering residual methane and nitrogen from digested dairy cow manure. *Bioresource Technology*, *99*(1), 120-127. <https://doi.org/10.1016/j.biortech.2006.11.046>

Lehtomäki, A., Huttunen, S., Lehtinen, T. M., & Rintala, J. A. (2008). Anaerobic digestion of grass silage in batch leach bed processes for methane production. *Bioresource Technology*, *99*(8), 3267-3278. <https://doi.org/10.1016/j.biortech.2007.04.072>

Sormunen, K., Einola, J., Ettala, M., & Rintala, J. (2008). Leachate and gaseous emissions from initial phases of landfilling mechanically and mechanically-biologically treated municipal solid waste residuals. *Bioresource Technology*, *99*(7), 2399-2409. <https://doi.org/10.1016/j.biortech.2007.05.009>

Wang, H., Einola, J., Heinonen, M., Kulomaa, M., & Rintala, J. (2008). Group-specific quantification of methanotrophs in landfill gas-purged laboratory biofilters by tyramide signal amplification-fluorescence in situ hybridization. *Bioresource Technology*, *99*(14), 6426-6433. <https://doi.org/10.1016/j.biortech.2007.11.050>

Paavola, T., & Rintala, J. (2008). Effects of storage on characteristics and hygienic quality of digestates from four co-digestion concepts of manure and biowaste. *Bioresource Technology*, *99*(15), 7041-7050. <https://doi.org/10.1016/j.biortech.2008.01.005>

Pakarinen, O., Lehtomäki, A., Rissanen, S., & Rintala, J. (2008). Storing energy crops for methane production: Effects of solids content and biological additive. *Bioresource Technology*, *99*(15), 7074-7082. <https://doi.org/10.1016/j.biortech.2008.01.007>

Lahti, J., Tuominen, M., Penttinen, T., Räsänen, J. P., & 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* (Vol. 1, pp. 278-314)

Wang, H., Lehtomäki, A., Tolvanen, K., Puhakka, J., & Rintala, J. (2009). Impact of crop species on bacterial community structure during anaerobic co-digestion of crops and cow manure. *Bioresource Technology*, *100*(7), 2311-2315. <https://doi.org/10.1016/j.biortech.2008.10.040>

Seppälä, M., Paavola, T., Lehtomäki, A., & Rintala, J. (2009). Biogas production from boreal herbaceous grasses - Specific methane yield and methane yield per hectare. *Bioresource Technology*, *100*(12), 2952-2958. <https://doi.org/10.1016/j.biortech.2009.01.044>

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>

Kanninen, L., Jokinen, N., Lahtonen, K., Jussila, P., Ali-Löytty, H., Hirsimäki, M., ... Valden, M. (2010). Surface science analysis and surface modification methods for biomaterials research. *European Cells and Materials*, *20*(SUPPL. 3), 133.

Jagadabhi, P. S., Kaparaju, P., & Rintala, J. (2010). Effect of micro-aeration and leachate replacement on COD solubilization and VFA production during mono-digestion of grass-silage in one-stage leach-bed reactors. *Bioresource Technology*, *101*(8), 2818-2824. <https://doi.org/10.1016/j.biortech.2009.10.083>

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* (Vol. 1, pp. 447)

- Giammarco, J. M., Zdyrko, B., Hu, J., Agarwal, A., Kimerling, L., Carlie, N., ... Luzinov, I. (2011). Enrichment polymer layers for detection of volatile vapors by ATR FT-IR. *ACS National Meeting Book of Abstracts*.
- Teisala, H., Tuominen, M., Aromaa, M., Mäkelä, J. M., Stepien, M., Saarinen, J. J., ... Kuusipalo, J. (2011). Nanoparticle deposition on packaging materials by the liquid flame spray. In *13th European PLACE Conference 2011* (Vol. 1)
- Määttä, J. A. E., Eisenberg-Domovich, Y., Nordlund, H. R., Hayouka, R., Kulomaa, M. S., Livnah, O., & Hytönen, V. P. (2011). Chimeric avidin shows stability against harsh chemical conditions-biochemical analysis and 3D structure. *Biotechnology and Bioengineering*, *108*(3), 481-490. <https://doi.org/10.1002/bit.22962>
- Daculsi, G., Goyenvalle, E., Cagnet, R., Aguado, E., & Suokas, E. O. (2011). Osteoconductive properties of poly(96L/4D-lactide)/beta-tricalcium phosphate in long term animal model. *Biomaterials*, *32*(12), 3166-3177. <https://doi.org/10.1016/j.biomaterials.2011.01.033>
- Jagadabhi, P. S., Kaparaju, P., & Rintala, J. (2011). Two-stage anaerobic digestion of tomato, cucumber, common reed and grass silage in leach-bed reactors and upflow anaerobic sludge blanket reactors. *Bioresource Technology*, *102*(7), 4726-4733. <https://doi.org/10.1016/j.biortech.2011.01.052>
- Zorzi, G. K., Párraga, J. E., Seijo, B., & Sánchez, A. (2011). Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy. *MACROMOLECULAR BIOSCIENCE*, *11* (7), 905-913. <https://doi.org/10.1002/mabi.201100005>
- Linko, V., Leppiniemi, J., Paasonen, S. T., Hytönen, V. P., & Jussi Toppari, J. (2011). Defined-size DNA triple crossover construct for molecular electronics: Modification, positioning and conductance properties. *Nanotechnology*, *22*(27), [275610]. <https://doi.org/10.1088/0957-4484/22/27/275610>
- Giammarco, J., Zdyrko, B., Petit, L., Musgraves, J. D., Hu, J., Agarwal, A., ... Luzinov, I. (2011). Towards universal enrichment nanocoating for IR-ATR waveguides. *Chemical Communications*, *47*(32), 9104-9106. <https://doi.org/10.1039/c1cc12780b>
- Pakarinen, O., Kaparaju, P., & Rintala, J. (2011). The effect of organic loading rate and retention time on hydrogen production from a methanogenic CSTR. *Bioresource Technology*, *102*(19), 8952-8957. <https://doi.org/10.1016/j.biortech.2011.07.020>
- Heikkinen, J. J., Kivimäki, L., Määttä, J. A. E., Mäkelä, I., Hakalahti, L., Takkinen, K., ... Hormi, O. E. O. (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>
- Amps, K., Andrews, P. W., Anyfantis, G., Armstrong, L., Avery, S., Baharvand, H., ... Zhou, Q. (2011). Screening ethnically diverse human embryonic stem cells identifies a chromosome 20 minimal amplicon conferring growth advantage. *Nature Biotechnology*, *29*(12), 1132-1144. <https://doi.org/10.1038/nbt.2051>
- Cao, H., Feng, Y., Wang, H., Zhang, L., Khan, M., & Guo, J. (2011). Synthesis of depsipeptides from L-amino acids and lactones. *Frontiers of Chemical Science and Engineering*, *5*(4), 409-415. <https://doi.org/10.1007/s11705-011-1141-9>
- Valtakari, D., Bollström, R., Tuominen, M., Teisala, H., Aromaa, M., Toivakka, M., ... Saarinen, J. J. (2012). Conductive layers on surface modified natural fibre based substrates for printed functionality. In *AICHe 2012 - 2012 AICHe Annual Meeting, Conference Proceedings*
- Tirkkonen, L., Haimi, S., Huttunen, S., Wolff, J., Pirhonen, E., Sándor, G. K., & Miettinen, S. (2012). Osteogenic medium is superior to growth factors in differentiation of human adipose stem cells towards boneforming cells in 3D culture. *European Cells and Materials*, *25*, 144-158.

Mousa, A., Heinrich, G., Kretzschmar, B., Wagenknecht, U., & Das, A. (2012). Utilization of agrowaste polymers in PVC/NBR alloys: Tensile, thermal, and morphological properties. *INTERNATIONAL JOURNAL OF CHEMICAL ENGINEERING*, [121496]. <https://doi.org/10.1155/2012/121496>

Sarkanen, J. R., Kaila, V., Mannerström, B., Rätty, S., Kuokkanen, H., Miettinen, S., & Ylikomi, T. (2012). Human adipose tissue extract induces angiogenesis and adipogenesis in vitro. *Tissue Engineering Part A*, 18(1-2), 17-25. <https://doi.org/10.1089/ten.tea.2010.0712>

Praveenkumar, R., Johncy, K., MubarakAli, D., Vijayan, D., Thajuddin, N., & Gunasekaran, M. (2012). Demonstration of increased lipid accumulation potential of *Stigeoclonium* sp., Kütz. BUM11007 under nitrogen starved regime: A new source of lipids for biodiesel production. *Journal of Biobased Materials and Bioenergy*, 6(2), 209-213. <https://doi.org/10.1166/jbmb.2012.1200>

Roop, S., Das, A., Stöckelhuber, K. W., 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, D. Y., Das, A., Leuteritz, A., Mahaling, R. N., 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>

Rembert, K. B., Paterová, J., Heyda, J., Hilty, C., Jungwirth, P., & Cremer, P. S. (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>

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>

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>

Khan, M. N., 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>

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>

Mubarakali, D., Praveenkumar, R., Shenbagavalli, T., Mari Nivetha, T., Parveez Ahamed, A., Al-Dhabi, N. A., & 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, D. C. (2013). Improving the effect of a nanoscale barrier coating on BOPP film properties by surface pretreatments. In *14th European PLACE Conference 2013* (Vol. 1, pp. 469-493). TAPPI Press.

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>

Fafarman, A. T., Hong, S. H., Caglayan, H., Ye, X., Diroll, B. T., Paik, T., ... Kagan, C. R. (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>

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

Borah, D., Rasappa, S., Senthamaraiannan, R., Shaw, M. T., Holmes, J. D., & Morris, M. A. (2013). The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions. *Journal of Colloid and Interface Science*, 393(1), 192-202. <https://doi.org/10.1016/j.jcis.2012.10.070>

Tan, M., Feng, Y., Wang, H., Zhang, L., Khan, M., Guo, J., ... 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>

Gordon, T. R., Paik, T., Klein, D. R., Naik, G. V., Caglayan, H., Boltasseva, A., & Murray, C. B. (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., ... 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>

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>

Pollheimer, P., Taskinen, B., Scherfler, A., Gusenkoy, S., Creus, M., Wiesauer, P., ... Gruber, H. J. (2013). Reversible biofunctionalization of surfaces with a switchable mutant of avidin. *Bioconjugate Chemistry*, 24(10), 1656-1668. <https://doi.org/10.1021/bc400087e>

Lee, K., Lee, S. Y., Na, J. G., Jeon, S. G., Praveenkumar, R., Kim, D. M., ... Oh, Y. K. (2013). Magnetophoretic harvesting of oleaginous *Chlorella* sp. by using biocompatible chitosan/magnetic nanoparticle composites. *Bioresource Technology*, 149, 575-578. <https://doi.org/10.1016/j.biortech.2013.09.074>

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, H. H., Parsekar, M., Ilisch, S., Henning, S., Das, A., Stöckelhuber, K. W., ... Radosch, H. J. (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., Senthamaraiannan, R., Faulkner, C. C., Holmes, J. D., & Morris, M. A. (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, D. C., & 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* (Vol. 2, pp. 1039-1061). TAPPI Press.

Oksa, M., Auerkari, P., Salonen, J., & Varis, T. (2014). Nickel-based HVOF coatings promoting high temperature corrosion resistance of biomass-fired power plant boilers. *Fuel Processing Technology*, *125*, 236-245. <https://doi.org/10.1016/j.fuproc.2014.04.006>

Lee, K., Lee, S. Y., Praveenkumar, R., Kim, B., Seo, J. Y., Jeon, S. G., ... Oh, Y. K. (2014). Repeated use of stable magnetic flocculant for efficient harvest of oleaginous *Chlorella* sp. *Bioresource Technology*, *167*, 284-290. <https://doi.org/10.1016/j.biortech.2014.06.055>

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

Moerland, R. J., Koskela, J. E., Kravchenko, A., Simberg, M., Van Der Vegte, S., Kaivola, M., ... Ras, R. H. A. (2014). Large-area arrays of three-dimensional plasmonic subwavelength-sized structures from azopolymer surface-relief gratings. *Materials Horizons*, *1*(1), 74-80. <https://doi.org/10.1039/c3mh00008g>

Zhang, D., Pekkanen-Mattila, M., Shahsavani, M., Falk, A., Teixeira, A. I., & Herland, A. (2014). A 3D Alzheimer's disease culture model and the induction of P21-activated kinase mediated sensing in iPSC derived neurons. *Biomaterials*, *35*(5), 1420-1428. <https://doi.org/10.1016/j.biomaterials.2013.11.028>

Sorkio, A., Hongisto, H., Kaarniranta, K., Uusitalo, H., Juuti-Uusitalo, K., & Skottman, H. (2014). Structure and barrier properties of human embryonic stem cell-derived retinal pigment epithelial cells are affected by extracellular matrix protein coating. *Tissue Engineering Part A*, *20*(3-4), 622-634. <https://doi.org/10.1089/ten.tea.2013.0049>

Ciranna, A., Pawar, S. S., Santala, V., Karp, M., & van Niel, E. W. J. (2014). Assessment of metabolic flux distribution in the thermophilic hydrogen producer *Caloramator celer* as affected by external pH and hydrogen partial pressure. *Microbial Cell Factories*, *13*(1), [48]. <https://doi.org/10.1186/1475-2859-13-48>

Koskela, J. E., Liljeström, V., Lim, J., Simanek, E. E., Ras, R. H. A., Priimagi, A., & Kostianen, M. A. (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, R. C. (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>

Kurppa, K., Hytönen, V. P., Nakari-Setälä, T., Kulomaa, M. S., & Linder, M. B. (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>

Praveenkumar, R., Kim, B., Choi, E., Lee, K., Cho, S., Hyun, J. S., ... Oh, Y. K. (2014). Mixotrophic cultivation of oleaginous *Chlorella* sp. KR-1 mediated by actual coal-fired flue gas for biodiesel production. *Bioprocess and Biosystems Engineering*, *37*(10), 2083-2094. <https://doi.org/10.1007/s00449-014-1186-5>

Rasappa, S., Schulte, L., Borah, D., Morris, M. A., & 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>

- Praveenkumar, R., Kim, B., Choi, E., Lee, K., Park, J. Y., Lee, J. S., ... Oh, Y. K. (2014). Improved biomass and lipid production in a mixotrophic culture of *Chlorella* sp. KR-1 with addition of coal-fired flue-gas. *Bioresource Technology*, *171*, 500-505. <https://doi.org/10.1016/j.biortech.2014.08.112>
- Lemmetyinen, H., Tkachenko, N. V., Valeur, B., Hotta, J. I., Ameloot, M., Ernsting, N. P., ... 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>
- Taskinen, B., Zauner, D., Lehtonen, S. I., Koskinen, M., Thomson, C., Kähkönen, N., ... Hytönen, V. P. (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, J. E., Broer, D. J., & Schenning, A. P. H. J. (2014). Stimuli-responsive photonic polymer coatings. *Chemical Communications*, *50*(100), 15839-15848. <https://doi.org/10.1039/c4cc05072j>
- 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, P. N. L., & 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, P. E., 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>
- Lehtonen, S. I., Taskinen, B., Ojala, E., Kukkurainen, S., Rahikainen, R., Riihimäki, T. A., ... Hytönen, V. P. (2015). Efficient preparation of shuffled DNA libraries through recombination (Gateway) cloning. *Protein Engineering Design and Selection*, *28*(1), 23-28. <https://doi.org/10.1093/protein/gzu050>
- Karvountzis-Kontakiotis, A., & Ntziachristos, L. (2015). Enquête de la variabilité cycle-cycle du NO dans la combustion homogène. *OIL AND GAS SCIENCE AND TECHNOLOGY : REVUE DE L'INSTITUT FRANCAIS DU PETROLE*, *70*(1), 111-123. <https://doi.org/10.2516/ogst/2013199>
- Palmroth, M. R. T., Mönkäre, T. J., & Steffen, K. T. (2015). Fungal treatment of landfill mining fine fraction to increase its stability and end-use potential. In N. Kalogerakis, F. Fava, & E. Manousaki (Eds.), *Book of abstracts of the 6th European Bioremediation Conference* (pp. 47). [169]
- Nancharaiah, Y. V., Venkata Mohan, S., & Lens, P. N. L. (2015). Metals removal and recovery in bioelectrochemical systems: A review. *Bioresource Technology*, *195*, 102-114. <https://doi.org/10.1016/j.biortech.2015.06.058>
- Bechet, D., Auger, F., Couleaud, P., Marty, E., Ravasi, L., Durieux, N., ... Barberi-Heyob, M. (2015). Multifunctional ultrasmall nanoplateforms for vascular-targeted interstitial photodynamic therapy of brain tumors guided by real-time MRI. *NANOMEDICINE: NANOTECHNOLOGY BIOLOGY AND MEDICINE*, *11*(3), 657-670. <https://doi.org/10.1016/j.nano.2014.12.007>
- Stumpel, J. E., Broer, D. J., & Schenning, A. P. H. J. (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>
- Mettänen, M., & Hirn, U. (2015). A comparison of five optical surface topography measurement methods. *TAPPI Journal*, *14*(1), 27-38.
- 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>

- Schroeder, C. A., Pluharová, E., Seidel, R., Schroeder, W. P., Faubel, M., Slaviček, P., ... Bradforth, S. E. (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>
- Bautista, G., Mäkitalo, J., Chen, Y., Dhaka, V., Grasso, M., Karvonen, L., ... 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>
- Zou, G., Papirio, S., van Hullebusch, E. D., & Puhakka, J. A. (2015). Fluidized-bed denitrification of mining water tolerates high nickel concentrations. *Bioresource Technology*, *179*, 284-290. <https://doi.org/10.1016/j.biortech.2014.12.044>
- Potapov, I., Zhurov, B., & Volkov, E. (2015). Multi-stable dynamics of the non-adiabatic repressilator. *Journal of the Royal Society. Interface*, *12*(104), [20141315]. <https://doi.org/10.1098/rsif.2014.1315>
- Koivisto, A. J., Aromaa, M., Koponen, I. K., Fransman, W., Jensen, K. A., Mäkelä, J. M., & Hämeri, K. J. (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>
- Martins, L., Fonseca, J., & Ribeiro, A. (2015). 'miSimBa' - A simulator of synthetic time-lapsed microscopy images of bacterial cells. In *Proceedings - 2015 IEEE 4th Portuguese Meeting on Bioengineering, ENBENG 2015* [7088854] The Institute of Electrical and Electronics Engineers, Inc.. <https://doi.org/10.1109/ENBENG.2015.7088854>
- Sorkio, A. E., Vuorimaa-Laukkanen, E. P., Hakola, H. M., Liang, H., Ujula, T. A., Valle-Delgado, J. J., ... Skottman, H. (2015). Biomimetic collagen I and IV double layer Langmuir-Schaefer films as microenvironment for human pluripotent stem cell derived retinal pigment epithelial cells. *Biomaterials*, *51*, 257-269. <https://doi.org/10.1016/j.biomaterials.2015.02.005>
- McManamon, C., O'Connell, J., Delaney, P., Rasappa, S., Holmes, J. D., & Morris, M. A. (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>
- Perander, M., DeMartini, N., Brink, A., Kramb, J., Karlström, O., Hemming, 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>
- Massera, J., Kokkari, A., Närhi, T., & Hupa, L. (2015). The influence of SrO and CaO in silicate and phosphate bioactive glasses on human gingival fibroblasts. *Journal of Materials Science: Materials in Medicine*, *26*(6), [196]. <https://doi.org/10.1007/s10856-015-5528-x>
- Marjakangas, J. M., Lakaniemi, A. M., Koskinen, P. E. P., Chang, J. S., & Puhakka, J. A. (2015). Lipid production by eukaryotic microorganisms isolated from palm oil mill effluent. *Biochemical Engineering Journal*, *99*, 48-54. <https://doi.org/10.1016/j.bej.2015.03.006>
- Hakkarainen, T. V., 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), [275301]. <https://doi.org/10.1088/0957-4484/26/27/275301>
- Çetinkaya, A. Y., Köroğlu, E. O., Demir, N. M., Baysoy, D. Y., 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)

Rasappa, S., Caridad, J. M., Schulte, L., Cagliani, A., Borah, D., Morris, M. A., ... 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>

Kanerva, U., Suhonen, T., Lagerbom, J., & Levänen, E. (2015). Evaluation of crushing strength of spray-dried MgAl₂O₄ granule beds. *Ceramics International*, 41(7), 8494-8500. <https://doi.org/10.1016/j.ceramint.2015.03.056>

Foroutan, F., Walters, N. J., Owens, G. J., Mordan, N. J., Kim, H. W., de Leeuw, N. H., & Knowles, J. C. (2015). Sol-gel synthesis of quaternary (P₂O₅)₅₅-(CaO)₂₅-(Na₂O)_(20-x)-(TiO₂)_x bioresorbable glasses for bone tissue engineering applications (x = 0, 5, 10, or 15). *Biomedical materials (Bristol, England)*, 10(4), 45025. <https://doi.org/10.1088/1748-6041/10/4/045025>

Levin, M., Rojas, E., Vanhala, E., Vippola, M., Liguori, B., Kling, K. I., ... Jensen, K. A. (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), [337]. <https://doi.org/10.1007/s11051-015-3139-6>

Nikkanen, J. P., Huttunen-Saarivirta, E., Salminen, T., Hyvärinen, L., Honkanen, M., Isotahdon, E., ... Levänen, E. (2015). Enhanced photoactive and photoelectrochemical properties of TiO₂ sol-gel coated steel by the application of SiO₂ intermediate layer. *Applied Catalysis B-Environmental*, 174-175, 533-543. <https://doi.org/10.1016/j.apcatb.2015.03.014>

Bajamundi, C. J. E., Vainikka, P., Hedman, M., Silvennoinen, J., Heinanen, T., Taipale, R., & Konttinen, 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>

Sorkio, A., Porter, P. J., Juuti-Uusitalo, K., Meenan, B. J., Skottman, H., & Burke, G. A. (2015). Surface Modified Biodegradable Electrospun Membranes as a Carrier for Human Embryonic Stem Cell-Derived Retinal Pigment Epithelial Cells. *Tissue Engineering Part A*, 21(17-18), 2301-2314. <https://doi.org/10.1089/ten.tea.2014.0640>

Kokko, M. E., Mäkinen, A. E., Sulonen, M. L. K., & Puhakka, J. A. (2015). Effects of anode potentials on bioelectrogenic conversion of xylose and microbial community compositions. *Biochemical Engineering Journal*, 101, 248-252. <https://doi.org/10.1016/j.bej.2015.06.007>

Ter Schiphorst, J., Coleman, S., Stumpel, J. E., Ben Azouz, A., Diamond, D., & Schenning, A. P. H. J. (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>

Polishchuk, A., Valev, D., Tarvainen, M., Mishra, S., Kinnunen, V., Antal, T., ... Tyystjärvi, E. (2015). Cultivation of Nannochloropsis for eicosapentaenoic acid production in wastewaters of pulp and paper industry. *Bioresource Technology*, 193, 469-476. <https://doi.org/10.1016/j.biortech.2015.06.135>

Vapaavuori, J., Laventure, A., Bazuin, C. G., 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, G. K., Párraga, J. E., 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, H. H., Parsaker, M., Sriharish, M. N., Henning, S., Menzel, M., Wießner, S., ... Radusch, H. J. (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>

- Marjakangas, J. M., Chen, C. Y., Lakaniemi, A. M., Puhakka, J. A., Whang, L. M., & Chang, J. S. (2015). Simultaneous nutrient removal and lipid production with *Chlorella vulgaris* on sterilized and non-sterilized anaerobically pretreated piggy wastewater. *Biochemical Engineering Journal*, *103*, 177-184. <https://doi.org/10.1016/j.bej.2015.07.011>
- Seo, J. Y., Lee, K., Ramasamy, P., Kim, B., Lee, S. Y., Oh, Y. K., & Park, S. B. (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, T. P., Gönüllü, Y., Kaunisto, K., Mettenböcker, A., Gurevich, E., ... 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>
- Zhao, M. D., Björninen, M., Cao, L., Wang, H. R., Pelto, J., Li, X. Q., ... Dong, J. (2015). Polypyrrole coating on poly-(lactide/glycolide)-β-tricalcium phosphate screws enhances new bone formation in rabbits. *Biomedical Materials*, *10*(6), [065016]. <https://doi.org/10.1088/1748-6041/10/6/065016>
- Mäki, A. J., 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>
- Alanen, J., Saukko, E., Lehtoranta, K., Murtonen, T., Timonen, H., Hillamo, R., ... 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>
- Honkanen, M., Kärkkäinen, M., Kolli, T., Heikkinen, O., Viitanen, V., Zeng, L., ... Vippola, M. (2016). Accelerated deactivation studies of the natural-gas oxidation catalyst-Verifying the role of sulfur and elevated temperature in catalyst aging. *Applied Catalysis B-Environmental*, 439-448. <https://doi.org/10.1016/j.apcatb.2015.09.054>
- Mahdiani, S., Vanhala, J., & Viik, J. (2016). A novel generic algorithm for robust physiological signal classification. In *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st–April 2nd 2016, Paphos, Cyprus* (pp. 1038-1043). (IFMBE Proceedings; Vol. 57). Springer Verlag. https://doi.org/10.1007/978-3-319-32703-7_205
- Mahdiani, S., Jeyhani, V., & Vehkaoja, A. (2016). A review of transient suppression methods of IIR notch filters used for power-line interference rejection in ECG measurement. In *IFMBE Proceedings* (Vol. 57, pp. 151-156). (IFMBE Proceedings). Springer Verlag. https://doi.org/10.1007/978-3-319-32703-7_31
- Prakash, M., Peltomäki, T., & Eskola, H. (2016). A tool for geometrical measurements of orthognathic surgery changes using cone beam computed tomography. In *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st–April 2nd 2016, Paphos, Cyprus* (pp. 430-433). (IFMBE Proceedings; Vol. 57). Springer Verlag. https://doi.org/10.1007/978-3-319-32703-7_84
- Nancharaiah, Y. V., Mohan, S. V., & Lens, P. N. L. (2016). Biological and Bioelectrochemical Recovery of Critical and Scarce Metals. *Trends in Biotechnology*, *34*(2), 137-155. <https://doi.org/10.1016/j.tibtech.2015.11.003>
- Kim, D. Y., Vijayan, D., Praveenkumar, R., Han, J. I., Lee, K., Park, J. Y., ... Oh, Y. K. (2016). Cell-wall disruption and lipid/astaxanthin extraction from microalgae: *Chlorella* and *Haematococcus*. *Bioresource Technology*, *199*, 300-310. <https://doi.org/10.1016/j.biortech.2015.08.107>
- Solala, I., Koistinen, A., Siljander, S., Vuorinen, J., & Vuorinen, T. (2016). Composites of high-temperature thermomechanical pulps and polylactic acid. *BioResources*, *11*(1), 1125-1140. <https://doi.org/10.15376/biores.11.1.1125-1140>
- Halder, A., Kandambeth, S., Biswal, B. P., Kaur, G., Roy, N. C., Addicoat, M., ... 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, J. W., Gerner, G., Krebs, R., & Lens, P. N. L. (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, D. Y., George, J. J., Stöckelhuber, K. W., Boldt, R., ... 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>
- Porkka, P. L. (2016). Functional model for organisational and safety culture. In *Chemical Engineering Transactions* (pp. 907-912). (Chemical Engineering Transactions; Vol. 48). Italian Association of Chemical Engineering AIDIC. <https://doi.org/10.3303/CET1648152>
- Kato, D., Sakai, H., Tkachenko, N. V., & 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>
- Mesaros, A., Heittola, T., & Virtanen, T. (2016). Metrics for polyphonic sound event detection. *Applied Sciences*, 6(6), [162]. <https://doi.org/10.3390/app6060162>
- Lahti, J. (2016). Nanoscale barrier coating on BOPP packaging film by ALD. In *TAPPI PLACE Conference 2016: Exploring New Frontiers* (pp. 493-505). TAPPI Press.
- Perumbilavil, S., Sridharan, K., Abraham, A. R., Janardhanan, H. P., 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>
- Jeyhani, V., Vuorinen, T., Noponen, K., Mäntysalo, M., & Vehkaoja, A. (2016). Optimal short distance electrode locations for impedance pneumography measurement from the frontal thoracic area. In *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st-April 2nd 2016, Paphos, Cyprus* (pp. 1138-1143). (IFMBE Proceedings; Vol. 57). Springer Verlag. https://doi.org/10.1007/978-3-319-32703-7_223
- Jain, R., Dominic, D., Jordan, N., Rene, E. R., Weiss, S., van Hullebusch, E. D., ... Lens, P. N. L. (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, N. V., Miura, T., ... 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>
- Saarinen, J. J., Valtakari, D., Bollström, R., Stepien, M., Haapanen, J., Mäkelä, J. M., & Toivakka, M. (2016). Roll-to-roll application of photocatalytic TiO₂ nanoparticles for printed functionality. In *Advanced Manufacturing, Electronics and Microsystems: TechConnect Briefs 2016* (Vol. 4, pp. 47-50). TechConnect.
- Cavallo, G., Terraneo, G., Monfredini, A., Saccone, M., Priimägi, A., Pilati, T., ... Bruce, D. W. (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>
- Ylinen, A., Mäkinen, J., & Kouhia, R. (2016). Two models for hydraulic cylinders in flexible multibody simulations. In *Computational Methods for Solids and Fluids: Multiscale Analysis, Probability Aspects and Model Reduction* (pp. 463-493). (Computational Methods in Applied Sciences; Vol. 41). Springer. https://doi.org/10.1007/978-3-319-27996-1_17
- Hannula, M., Haaparanta, A. M., Tamminen, I., Aula, A., Kellomäki, M., & Hyttinen, J. (2016). X-ray microtomography of collagen and polylactide samples in liquids. In *XIV Mediterranean Conference on Medical and Biological Engineering and Computing 2016: MEDICON 2016, March 31st-April 2nd 2016, Paphos, Cyprus* (pp. 420-424). (IFMBE Proceedings; Vol.

57). Springer Verlag. https://doi.org/10.1007/978-3-319-32703-7_82

Mahlamäki, K., Niemi, A., Jokinen, J., & Borgman, J. (2016). Importance of maintenance data quality in extended warranty simulation. *International Journal of COMADEM*, 19(1), 3-10.

Vuornos, K., Björninen, M., Talvitie, E., Paakinaho, K., Kellomäki, M., Huhtala, H., ... Haimi, S. (2016). Human Adipose Stem Cells Differentiated on Braided Polylactide Scaffolds is a Potential Approach for Tendon Tissue Engineering. *Tissue Engineering Part A*, 22(5-6), 513-523. <https://doi.org/10.1089/ten.tea.2015.0276>

Mal, J., Nancharaiah, Y. V., Van Hullebusch, E. D., & Lens, P. N. L. (2016). Metal chalcogenide quantum dots: Biotechnological synthesis and applications. *RSC Advances*, 6(47), 41477-41495. <https://doi.org/10.1039/c6ra08447h>

Mal, J., Nancharaiah, Y. V., van Hullebusch, E. D., & Lens, P. N. L. (2016). Effect of heavy metal co-contaminants on selenite bioreduction by anaerobic granular sludge. *Bioresource Technology*, 206, 1-8. <https://doi.org/10.1016/j.biortech.2016.01.064>

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

Isotahdon, E., Huttunen-Saarivirta, E., & Kuukkala, 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>

Suominen, O., Mörsky, V., Ritala, R., & Vilkkio, M. (2016). Framework for optimization and scheduling of a copper production plant. In *26th European Symposium on Computer Aided Process Engineering, 2016* (Vol. 38, pp. 1243-1248). (Computer Aided Chemical Engineering). Elsevier Science B.V.. <https://doi.org/10.1016/B978-0-444-63428-3.50212-5>

Wikberg, H., Ohra-aho, T., Honkanen, M., Kanerva, H., Harlin, A., Vippola, M., & Laine, C. (2016). Hydrothermal carbonization of pulp mill streams. *Bioresource Technology*, 212, 236-244. <https://doi.org/10.1016/j.biortech.2016.04.061>

Kramb, J., DeMartini, N., Perander, M., Moilanen, A., & Konttinen, J. (2016). Modeling of the catalytic effects of potassium and calcium on spruce wood gasification in CO₂. *Fuel Processing Technology*, 148, 50-59. <https://doi.org/10.1016/j.fuproc.2016.01.031>

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), [325603]. <https://doi.org/10.1088/0957-4484/27/32/325603>

Lindgren, M., Wallin, M., Kakkonen, M., Saarela, O., & Vuorinen, J. (2016). The influence of high-temperature sulfuric acid solution ageing on the properties of laminated vinyl-ester joints. *International Journal of Adhesion and Adhesives*, 68, 298-304. <https://doi.org/10.1016/j.ijadhadh.2016.04.011>

Kärkkäinen, M., Kolli, T., Honkanen, M., Heikkinen, O., Väliheikki, A., Huuhtanen, M., ... Keiski, R. L. (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>

Stöckelhuber, K. W., Das, A., & Klüppel, M. (Eds.) (2016). *Designing of Elastomer Nanocomposites: From Theory to Application*. (Advances in Polymer Science; Vol. 275). Springer International Publishing. <https://doi.org/10.1007/978-3-319-47696-4>

Basu, D., Das, A., Stöckelhuber, K. W., & Wießner, S. (2016). Nanostructured Ionomeric Elastomers. In K. W. Stöckelhuber, A. Das, & M. Klüppel (Eds.), *Designing of Elastomer Nanocomposites: From Theory to Applications* (pp. 235-266). (Advances in Polymer Science; Vol. 275). Springer International Publishing. https://doi.org/10.1007/12_2016_8

- Nancharaiah, Y. V., Venkata Mohan, S., & Lens, P. N. L. (2016). Recent advances in nutrient removal and recovery in biological and bioelectrochemical systems. *Bioresource Technology*, *215*, 173–185. <https://doi.org/10.1016/j.biortech.2016.03.129>
- Pilehrood, M. K., 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>
- Sulonen, M. L. K., Lakaniemi, A. M., Kokko, M. E., & Puhakka, J. A. (2016). Long-term stability of bioelectricity generation coupled with tetrathionate disproportionation. *Bioresource Technology*, *216*, 876-882. <https://doi.org/10.1016/j.biortech.2016.06.024>
- 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, O. M., Purcz, N., Chalaris, A., Heneweer, C., Boretius, S., Purcz, L., ... 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>
- Kim, B., Praveenkumar, R., Lee, J., Nam, B., Kim, D. M., Lee, K., ... Oh, Y. K. (2016). Magnesium aminoclay enhances lipid production of mixotrophic *Chlorella* sp. KR-1 while reducing bacterial populations. *Bioresource Technology*, *219*, 608-613. <https://doi.org/10.1016/j.biortech.2016.08.034>
- Ramasamy, P., Kim, B., Lee, J., Vijayan, D., Lee, K., Nam, B., ... Oh, Y. K. (2016). Mild pressure induces rapid accumulation of neutral lipid (triacylglycerol) in *Chlorella* spp. *Bioresource Technology*, *220*, 661-665. <https://doi.org/10.1016/j.biortech.2016.09.025>
- Kinnunen, V., & Rintala, J. (2016). The effect of low-temperature pretreatment on the solubilization and biomethane potential of microalgae biomass grown in synthetic and wastewater media. *Bioresource Technology*, *221*, 78-84. <https://doi.org/10.1016/j.biortech.2016.09.017>
- Ntziachristos, L., Saukko, E., Lehtoranta, K., Rönkkö, T., Timonen, H., Simonen, 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>
- Hyysalo, A., Ristola, M., Joki, T., Honkanen, M., Vippola, M., & Narkilahti, S. (2017). Aligned Poly(ε-caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro. *MACROMOLECULAR BIOSCIENCE*, *17*(7), [1600517]. <https://doi.org/10.1002/mabi.201600517>
- Mal, J., Nancharaiah, Y. V., van Hullebusch, E. D., & Lens, P. N. L. (2017). Biological removal of selenate and ammonium by activated sludge in a sequencing batch reactor. *Bioresource Technology*, *229*, 11-19. <https://doi.org/10.1016/j.biortech.2016.12.112>
- Tao, R., Lakaniemi, A-M., & Rintala, J. A. (2017). Cultivation of *Scenedesmus acuminatus* in different liquid digestates from anaerobic digestion of pulp and paper industry biosludge. *Bioresource Technology*, *245*(A), 706-713. <https://doi.org/10.1016/j.biortech.2017.08.218>

Peltokangas, M., Telembeci, A. A., Verho, J., Leikkala, J., Vehkaoja, A., & Oksala, N. (2017). Day-to-day repeatability of the results of the finger-toe-plot analysis. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 534-537). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_134

Nogueira, I. B. R., Ribeiro, A. M., Rodrigues, A. E., & Loureiro, J. M. (2017). Dynamic response to process disturbances—A comparison between TMB/SMB models in transient regime. *Computers and Chemical Engineering*, *99*, 230-244. <https://doi.org/10.1016/j.compchemeng.2017.01.026>

Tuohimäki, K., Mahdiani, S., Jeyhani, V., Vehkaoja, A., Iso-Ketola, P., Vanhala, J., ... Mäntysalo, M. (2017). Electrode comparison for textile-integrated electrocardiogram and impedance pneumography measurement. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (Vol. 65, pp. 302-305). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_76

Eskola, H., Väisänen, O., Viik, J., & Hyttinen, J. (Eds.) (2017). *EMBEC & NBC 2017: Joint Conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017*. (IFMBE Proceedings; Vol. 65). Springer. <https://doi.org/10.1007/978-981-10-5122-7>

Mäkelä, J. M., 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>

Peltokangas, M., Huotari, M., Verho, J., Mattila, V. M., Röning, J., Roms, P., ... Oksala, N. (2017). Short-term stability of combined finger and toe photoplethysmogram analysis. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 342-345). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_86

Vapaavuori, J., Siiskonen, A., Dichiarante, V., Forni, A., Saccone, M., Pilati, T., ... 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>

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>

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* (pp. 529-544). TAPPI Press.

Lahti, J., Kamppuri, 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* (pp. 237-248). TAPPI Press.

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* (Vol. May-2017). TAPPI Press.

Siiskonen, A., & Priimagi, A. (2017). Benchmarking DFT methods with small basis sets for the calculation of halogen-bond strengths. *Journal of Molecular Modeling*, *23*(2), [50]. <https://doi.org/10.1007/s00894-017-3212-4>

Milani, R., Houbenov, N., Fernandez-Palacio, F., Cavallo, G., Luzio, A., Haataja, J., ... 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., ... 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>

Koivisto, J. T., Joki, T., Parraga, J. E., Paakkönen, R., Ylä-Outinen, L., Salonen, L., ... Kellomäki, M. (2017). Bioamine-crosslinked gellan gum hydrogel for neural tissue engineering. *Biomedical Materials*, 12(2), [025014]. <https://doi.org/10.1088/1748-605X/aa62b0>

Honkanen, M., Hansen, T. W., Jiang, H., Kärkkäinen, M., Huuhtanen, M., Heikkinen, O., ... 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>

Kramb, J., Gómez-Barea, A., DeMartini, N., Romar, H., Doddapaneni, T. R. K. C., & 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>

Kaleva, A., Saarimaa, V., Heinonen, S., Nikkanen, J.-P., Markkula, A., Väisänen, P., & Levänen, E. (2017). Dissolution-induced nanowire synthesis on hot-dip galvanized surface in supercritical carbon dioxide. *Nanomaterials*, 7(7), [181]. <https://doi.org/10.3390/nano7070181>

Di Capua, F., Milone, I., Lakaniemi, A.-M., Hullebusch, E. D. V., Lens, P. N. L., & Esposito, G. (2017). Effects of different nickel species on autotrophic denitrification driven by thiosulfate in batch tests and a fluidized-bed reactor. *Bioresource Technology*, 238, 534-541. <https://doi.org/10.1016/j.biortech.2017.04.082>

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>

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

Uddin, R., Nur-E-Habiba, N., Rena, G., Hwu, E. T., & Boisen, A. (2017). New Evidence for the Mechanism of Action of a Type-2 Diabetes Drug Using a Magnetic Bead-Based Automated Biosensing Platform. *ACS Sensors*, 2(9), 1329-1336. <https://doi.org/10.1021/acssensors.7b00384>

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

Boardman, A. D., Alberucci, A., Assanto, G., Grimalsky, V. V., Kibler, B., McNiff, J., ... Valagiannopoulos, C. A. (2017). Waves in hyperbolic and double negative metamaterials including rogues and solitons. *Nanotechnology*, 28(44), [444001]. <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>

Lehtinen, T., Efimova, E., Tremblay, P. L., Santala, S., Zhang, T., & Santala, V. (2017). Production of long chain alkyl esters from carbon dioxide and electricity by a two-stage bacterial process. *Bioresource Technology*, *243*, 30-36. <https://doi.org/10.1016/j.biortech.2017.06.073>

Christophliemk, H., Johansson, C., Ullsten, H., & Järnström, L. (2017). Oxygen and water vapor transmission rates of starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper. *Progress in Organic Coatings*, *113*, 218-224. <https://doi.org/10.1016/j.porgcoat.2017.04.019>

George, L., Müller, A., Röder, B., Santala, V., & Efimov, A. (2017). Photodynamic self-disinfecting surface using pyridinium phthalocyanine. *Dyes and Pigments*, *147*, 334-342. <https://doi.org/10.1016/j.dyepig.2017.08.021>

Väliheikki, A., Kärkkäinen, M., Honkanen, M., Heikkinen, O., Kolli, T., Kallinen, K., ... Keiski, R. L. (2017). Deactivation of Pt/SiO₂-ZrO₂ diesel oxidation catalysts by sulphur, phosphorus and their combinations. *Applied Catalysis B-Environmental*, *218*, 409-419. <https://doi.org/10.1016/j.apcatb.2017.06.068>

Miinalainen, T., & Pursiainen, S. (2018). A case study of focal bayesian EEG inversion for whitney element source spaces: Mesh-based vs. cartesian orientations. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1065-1068). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_266

Koivumäki, J., Zhu, W. H., & Mattila, J. (2018). Addressing closed-chain dynamics for high-precision control of hydraulic cylinder actuated manipulators. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018* ASME. <https://doi.org/10.1115/FPMC2018-8839>

Doddapaneni, T. R. K. C., 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>

Havela, R., Manninen, T., & Linne, M. L. (2018). Altered synaptic signaling due to β -amyloid interference in astrocytes: A modeling study. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 679-682). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_170

Nurmi, J., Aref, M. M., & Mattila, J. (2018). A neural network strategy for learning of nonlinearities toward feed-forward control of pressure-compensated hydraulic valves with a significant dead zone. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018* ASME. <https://doi.org/10.1115/FPMC2018-8847>

Lylykangas, J., Ilves, M., Venesvirta, H., Rantanen, V., Mäkelä, E., Vehkaoja, A., ... Surakka, V. (2018). Artificial eye blink pacemaker - A first investigation into the blink production using constant-interval electrical stimulation. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 522-525). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_131

Palma, C. S. D., Startceva, S., Neeli-Venkata, R., Zare, M., Goncalves, N. S. M., Fonseca, J. M., ... Ribeiro, A. S. (2018). A strategy for dissecting the kinetics of transcription repression mechanisms. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1097-1100). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_274

- Rezaei Yousefi, Z., Parak, J., Tarniceriu, A., Harju, J., Yli-Hankala, A., Korhonen, I., & Vehkaoja, A. (2018). Atrial fibrillation detection from wrist photoplethysmography data using artificial neural networks. In *World Congress on Medical Physics and Biomedical Engineering 2018* (Vol. 2, pp. 399-404). (IFMBE Proceedings; Vol. 68). Springer. https://doi.org/10.1007/978-981-10-9038-7_75
- Ilvesmäki, T., Hakulinen, U., & Eskola, H. (2018). Automated pipeline for brain ROI analysis with results comparable to previous freehand measures in clinical settings. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 635-638). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_159
- Pirhonen, M., Suominen, O., & Vehkaoja, A. (2018). Auto-regression-driven, reallocative particle filtering approaches in PPG-based respiration rate estimation. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1020-1024). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_255
- Lampinen, S., Koivumäki, J., & Mattila, J. (2018). Bilateral teleoperation of a hydraulic robotic manipulator in contact with physical and virtual constraints. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018* ASME. <https://doi.org/10.1115/FPMC2018-8842>
- Ojansivu, M., Wang, X., Hyväri, L., Kellomäki, M., Hupa, L., Vanhatupa, S., & Miettinen, S. (2018). Bioactive glass induced osteogenic differentiation of human adipose stem cells is dependent on cell attachment mechanism and mitogen-activated protein kinases. *European Cells and Materials*, 35, 53-71. <https://doi.org/10.22203/eCM.v035a05>
- Korkka, I., Johansson, J. K., Skottman, H., Hyttinen, J., & Nymark, S. (2018). Characterization of chloride channels in human embryonic stem cell derived retinal pigment epithelium. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 454-457). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_114
- Helander, E., Khodor, N., Kallonen, A., Värri, A., Patural, H., Carrault, G., & Pladys, P. (2018). Comparison of linear and non-linear heart rate variability indices between preterm infants at their theoretical term age and full term newborns. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 153-156). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_39
- Dessi, P., Porca, E., Haavisto, J., Lakaniemi, A-M., Collins, G., & Lens, P. N. L. (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>
- Koskela, O., Pursiainen, S., Belay, B., Montonen, T., Figueiras, E., & Hyttinen, J. (2018). Computational model for multifocal imaging in optical projection tomography and numerical analysis of all-in-focus fusion in tomographic image reconstruction. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 282-285). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_71
- Välilikangas, T., & Karvinen, R. (2018). Conjugated Heat Transfer Simulation of a Fin-and-Tube Heat Exchanger. *Heat Transfer Engineering*, 39(13-14), 1192-1200. <https://doi.org/10.1080/01457632.2017.1363628>
- Lipping, T., Erkintalo, N., Särkelä, M., Takala, R. S. K., Katila, A., Frantzén, J., ... Tenovuo, O. (2018). Connectivity analysis of full montage EEG in traumatic brain injury patients in the ICU. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 97-100). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_25

Hernando, D., Kähönen, M., Lázaro, J., Lehtinen, R., Nieminen, T., Nikus, K., ... Viik, J. (2018). Coronary artery disease diagnosis by means of heart rate variability analysis using respiratory information. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 270-273). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_68

Olejarczyk, E., Lipping, T., & Marciniak, R. (2018). Correlation of depth of anesthesia indexes with MAC in volatile anesthesia. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 972-975). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_243

Ojha, N., Nguyen, H., Laihininen, 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>

Tenhunen, M., Hyttinen, J., Viik, J., Perez-Macias, J. M., & Himanen, S. L. (2018). Detection and assessment of sleep-disordered breathing with emfit mattress. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 173-176). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_44

Danaee, S., Nurmi, J., Minav, T., Mattila, J., & Pietola, M. (2018). Direct position control of electro-hydraulic excavator. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018 ASME*. <https://doi.org/10.1115/FPMC2018-8896>

Joutsen, A. S., Kaappa, E. S., Karinsalo, T. J., & Vanhala, J. (2018). Dry electrode sizes in recording ECG and heart rate in wearable applications. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 735-738). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_184

Tikkanen, S., Ahola, V., & Koskela, E. (2018). Effect of driver and work cycle on losses of a loader. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018 ASME*. <https://doi.org/10.1115/FPMC2018-8919>

Khanongnuch, R., Di Capua, F., Lakaniemi, A.-M., Rene, E. R., & Lens, P. N. L. (2018). Effect of N/S ratio on anoxic thiosulfate oxidation in a fluidized bed reactor: Experimental and artificial neural network model analysis. *Process Biochemistry*, 68, 171-181. <https://doi.org/10.1016/j.procbio.2018.02.018>

Alametsä, J., & Viik, J. (2018). Effects of nitroglycerin to ballistocardiography by EMFi. In *World Congress on Medical Physics and Biomedical Engineering 2018* (Vol. 2, pp. 541-545). (IFMBE Proceedings; Vol. 68). Springer. https://doi.org/10.1007/978-981-10-9038-7_99

Durandin, N. A., Isokuortti, J., Efimov, A., Vuorimaa-Laukkanen, E., Tkachenko, N. V., & 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>

Jäntti, V., Subramaniam, N. P., Kamata, K., Ylinen, T., Yli-Hankala, A., Kauppinen, P., & Väisänen, O. (2018). Electric field of eeg during anesthesia. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 354-357). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_89

Chamrad, J., Marcián, P., Narra, N., & Borák, L. (2018). Evaluating different shapes of cranial fixation mini-plates using finite element method. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 747-750). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_187

Pietilä, J., Mehrang, S., Tolonen, J., Helander, E., Jimison, H., Pavel, M., & Korhonen, I. (2018). Evaluation of the accuracy and reliability for photoplethysmography based heart rate and beat-to-beat detection during daily activities. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 145-148). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_37

Välakangas, T., Singh, S., Sørensen, K., & Condra, T. (2018). Fin-and-tube heat exchanger enhancement with a combined herringbone and vortex generator design. *International Journal of Heat and Mass Transfer*, 118, 602-616. <https://doi.org/10.1016/j.ijheatmasstransfer.2017.11.006>

Koskela, O., Lehti-Polojärvi, M., Seppänen, A., Figueiras, E., & Hyttinen, J. (2018). Finite element mapping for efficient image reconstruction in rotational electrical impedance tomography. In *World Congress on Medical Physics and Biomedical Engineering 2018* (Vol. 2, pp. 901-904). (IFMBE Proceedings; Vol. 68). Springer. https://doi.org/10.1007/978-981-10-9038-7_166

Mäkinen, P., Dmitrochenko, O., & Mattila, J. (2018). Floating frame of reference formulation for a flexible manipulator with hydraulic actuation - Modelling and experimental validation. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018* ASME. <https://doi.org/10.1115/FPMC2018-8846>

Vuorinen, T., Laurila, M. M., Mangayil, R., Karp, M., & Mäntysalo, M. (2018). High resolution E-jet printed temperature sensor on artificial skin. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 839-842). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_210

Mehrang, S., Pietilä, J., Tolonen, J., Helander, E., Jimison, H., Pavel, M., & Korhonen, I. (2018). Human activity recognition using a single optical heart rate monitoring wristband equipped with triaxial accelerometer. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 587-590). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_147

Hassan, S. S., Mangayil, R., Aho, T., Yli-Harja, O., & Karp, M. (2018). Identification of feasible pathway information for c-di-GMP binding proteins in cellulose production. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 667-670). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_167

Teppola, H., Sarkanen, J. R., Jalonen, T. O., & Linne, M. L. (2018). Impacts of laminin and polyethyleneimine surface coatings on morphology of differentiating human SH-SY5Y cells and networks. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 298-301). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_75

Ince, T., Zabihi, M., Kiranyaz, S., & Gabbouj, M. (2018). Learned vs. hand-designed features for ECG beat classification: A comprehensive study. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 551-554). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_138

Jauhiainen, M., Gracia, J., Seppä, V. P., Mahrberg, H., Tuomisto, L., Laurikka, J., & Viik, J. (2018). Linearity of simultaneously recorded impedance pneumography and direct pneumotachography in thoracic surgery patients. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1077-1080). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_269

Kontunen, A., Rantanen, V., Vehkaoja, A., Ilves, M., Lylykangas, J., Mäkelä, E., ... Lekkala, J. (2018). Low-latency EMG onset and termination detection for facial pacing. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1016-1019). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_254

Linjama, M. (2018). Model-based control of a digital hydraulic transformer-based hybrid actuator. In *BATH/ASME 2018 Symposium on Fluid Power and Motion Control, FPMC 2018* ASME. <https://doi.org/10.1115/FPMC2018-8866>

Acar, E., Baikoghli, M. A., Stark, M., Peltonen, S., Ruotsalainen, U., & Cheng, R. H. (2018). Multiresolution MAPEM method for 3D reconstruction of symmetrical particles with electron microscopy. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 141-144). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_36

Jokinen, V. I., Korpela, J., Lehtinen, E., Perttunen, J., & Viik, J. (2018). Nocturnal use of light compression garments and recovery. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 125-128). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_32

Milagro, J., Gil, E., Bolea, J., Seppä, V. P., Malmberg, L. P., Pelkonen, A. S., ... Bailón, R. (2018). Nonlinear dynamics of heart rate variability in children with asthmatic symptoms. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (Vol. 65, pp. 815-818). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_204

Gracia, J., Seppä, V. P., Pelkonen, A., Kotaniemi-Syrjänen, A., Mäkelä, M., Malmberg, P., & Viik, J. (2018). Nonlinear local projection filter for impedance pneumography. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 306-309). (IFMBE Proceedings; Vol. 65). Singapore: Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_77

Belay, B., Koivisto, J. T., Vuornos, K., Montonen, T., Koskela, O., Lehti-Polojärvi, M., ... Hyttinen, J. (2018). Optical projection tomography imaging of single cells in 3D gellan gum hydrogel. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 996-999). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_249

Tunninen, V., Kauppinen, T., & Eskola, H. (2018). Optimization of ^{99m}Tc -sestamibi/ ^{123}I subtraction SPECT/CT protocol for parathyroid scintigraphy. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 847-851). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_212

Losoi, P., & Aho, T. (2018). Pathvalue: Pathways with value. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 583-586). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_146

Kaappa, E. S., Joutsen, A. S., & Vanhala, J. (2018). Performance analysis of novel flexible electrodes for wearable ECG/heart rate monitoring. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 237-240). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_60

Tunninen, V., Kauppinen, T., & Eskola, H. (2018). Physical characteristics of collimators for dual-isotope imaging with ^{99m}Tc and ^{123}I . In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 245-249). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_62

Zhu, L., Kesseli, J., Nykter, M., & Huttunen, H. (2018). Predicting gene expression levels from histone modification signals with convolutional recurrent neural networks. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 555-558). (IFMBE Proceedings; Vol. 65). Springer Verlag. <https://doi.org/10.1007/978->

- Honkanen, M., Wang, J., Kärkkäinen, M., Huuhtanen, M., Jiang, H., Kallinen, K., ... 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>
- Gering, C., Koivisto, J. T., Parraga, J. E., & Kellomäki, M. (2018). Reproducible preparation method of hydrogels for cell culture applications – Case study with spermidine crosslinked gellan gum. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 811-814). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_203
- Rantanen, V., Vehkaoja, A., & Verho, J. (2018). Stimulation waveform selection to suppress functional electrical stimulation artifact from surface EMG signals. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 422-425). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_106
- Ryynänen, T., & Lekkala, J. (2018). Temperature effect on the baseline noise in MEA measurements. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 5-8). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_2
- Koivisto, J. T., Koskela, O., Montonen, T., Parraga, J. E., Joki, T., Ylä-Outinen, L., ... Kellomäki, M. (2018). Texture-property relations of bioamine crosslinked gellan gum hydrogels. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 189-192). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_48
- Perez-Macias, J. M., Viik, J., Värri, A., Himanen, S-L., & Tenhunen, M. (2018). Time characteristics of prolonged partial obstruction periods using an Emfit mattress. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 775-778). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_194
- Alametsä, J., & Viik, J. (2018). Twelve years follow-up of ballistocardiography. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1117-1120). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_279
- Mulholland, K., Virkki, J., Raunonen, P., & Merilampi, S. (2018). Wearable RFID perspiration sensor tags for well-being applications – From laboratory to field use. In *EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017* (pp. 1012-1015). (IFMBE Proceedings; Vol. 65). Springer Verlag. https://doi.org/10.1007/978-981-10-5122-7_253
- 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>
- Lopez-Iscoa, P., Pugliese, D., Boetti, N. G., Janner, D., Baldi, G., Petit, L., & Milanese, D. (2018). Design, synthesis, and structure-property relationships of Er³⁺-doped TiO₂ luminescent particles synthesized by sol-gel. *Nanomaterials*, 8(1), [20]. <https://doi.org/10.3390/nano8010020>
- Lehtinen, T., Efimova, E., Santala, S., & Santala, V. (2018). Improved fatty aldehyde and wax ester production by overexpression of fatty acyl-CoA reductases. *Microbial Cell Factories*, 17(1), [19]. <https://doi.org/10.1186/s12934-018-0869-z>

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, J. T., 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>

Šutka, A., Vanags, M., Joost, U., Šmits, K., Ruža, J., Ločs, J., ... Juhna, T. (2018). Aqueous synthesis of Z-scheme photocatalyst powders and thin-film photoanodes from earth abundant elements. *Journal of Environmental Chemical Engineering*, 6(2), 2606-2615. <https://doi.org/10.1016/j.jece.2018.04.003>

Åkerblom, M., Raunonen, P., Casella, E., Disney, M. I., Danson, F. M., Gaulton, R., ... Kaasalainen, M. (2018). Non-intersecting leaf insertion algorithm for tree structure models. *Interface Focus*, 8(2), [20170045]. <https://doi.org/10.1098/rsfs.2017.0045>

Kaasalainen, S., Åkerblom, M., Nevalainen, O., Hakala, T., & Kaasalainen, M. (2018). Uncertainty in multispectral lidar signals caused by incidence angle effects. *Interface Focus*, 8(2), [20170033]. <https://doi.org/10.1098/rsfs.2017.0033>

Disney, M. I., Boni Vicari, M., Burt, A., Calders, K., Lewis, S. L., Raunonen, P., & Wilkes, P. (2018). Weighing trees with lasers: Advances, challenges and opportunities. *Interface Focus*, 8(2), [20170048]. <https://doi.org/10.1098/rsfs.2017.0048>

Magarkar, A., Parkkila, P., Viitala, T., Lajunen, T., Mobarak, E., Licari, G., ... 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>

Harra, J., Tuominen, M., Juuti, P., Rissler, J., Koivuluoto, H., Haapanen, J., ... Mäkelä, J. M. (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>

Sutka, A., Timusk, M., Joost, U., Ignatans, R., & Maiorov, M. (2018). Switchable light reflectance in dilute magneto-optical colloids based on nickel ferrite nanowires. *e-Journal of Surface Science and Nanotechnology*, 16, 119-121. <https://doi.org/10.1380/ejssnt.2018.119>

Raappana, M., Polojärvi, V., Aho, A., Mäkelä, J., Aho, T., Tukiainen, A., ... 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, T. K. M., Li, S., Kim, Y. A., ... 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, N. V. (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>

Ojha, N., Laihinne, T., Salminen, T., Lastusaari, M., & Petit, L. (2018). Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics. *Ceramics International*, 44(10), 11807-11811. <https://doi.org/10.1016/j.ceramint.2018.03.267>

Goyos-Ball, L., Prado, C., Díaz, R., Fernández, E., Ismailov, A., Kumpulainen, T., ... Fernández, A. (2018). The effects of laser patterning 10CeTZP-Al₂O₃ nanocomposite disc surfaces: Osseous differentiation and cellular arrangement in vitro. *Ceramics International*, 44(8), 9472-9478. <https://doi.org/10.1016/j.ceramint.2018.02.164>

Kokko, M., Epple, S., Gescher, J., & Kerzenmacher, S. (2018). Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems. *Bioresource Technology*, 258, 376-389. <https://doi.org/10.1016/j.biortech.2018.01.090>

Kaunisto, K., Kotilainen, M., Karhu, M., Lagerbom, J., Vuorinen, T., Honkanen, M., ... Turunen, E. (2018). The effect of carbon and nickel additions on the precursor synthesis of Cr₃C₂-Ni nanopowder. *Ceramics International*, 44(8), 9338-9346. <https://doi.org/10.1016/j.ceramint.2018.02.146>

Siljander, S., Keinänen, P., Rätty, A., Ramakrishnan, K. R., Tuukkanen, S., Kunnari, V., ... 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), [1819]. <https://doi.org/10.3390/ijms19061819>

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

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>

Lampio, K., & Karvinen, R. (2018). A new method to optimize natural convection heat sinks. *Heat and Mass Transfer/Waerme- und Stoffuebertragung*, 54(8), 2571-2580. <https://doi.org/10.1007/s00231-017-2106-4>

Tan, L. C., Espinosa-Ortiz, E. J., Nancharaiyah, Y. V., van Hullebusch, E. D., Gerlach, R., & Lens, P. N. (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, N. V. (2018). Photoinduced Energy Transfer in ZnCdSeS Quantum Dot-Phthalocyanines Hybrids. *ACS Omega*, 3(8), 10048-10057. <https://doi.org/10.1021/acsomega.8b01623>

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>

Eregowda, T., Matanhike, L., Rene, E. R., & Lens, P. N. L. (2018). Performance of a biotrickling filter for the anaerobic utilization of gas-phase methanol coupled to thiosulphate reduction and resource recovery through volatile fatty acids production. *Bioresource Technology*, 263, 591-600. <https://doi.org/10.1016/j.biortech.2018.04.095>

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>

Dessi, P., Porca, E., Lakaniemi, A.-M., Collins, G., & Lens, P. N. L. (2018). Temperature control as key factor for optimal biohydrogen production from thermomechanical pulping wastewater. *Biochemical Engineering Journal*, 137, 214-221. <https://doi.org/10.1016/j.bej.2018.05.027>

Martins, D. P., Leetanaksakul, K., Barros, M. T., Thamchaipenet, A., Donnelly, W., & Balasubramaniam, S. (2018). Molecular Communications Pulse-based Jamming Model for Bacterial Biofilm Suppression. *IEEE Transactions on Nanobioscience*, 17(4), 533-542. <https://doi.org/10.1109/TNB.2018.2871276>

Pihlman, H., Keränen, P., Paakinaho, K., Linden, J., Hannula, M., Manninen, I. K., ... Laitinen-Vapaavuori, O. (2018). Novel osteoconductive β -tricalcium phosphate/poly(L-lactide-co- ϵ -caprolactone) scaffold for bone regeneration: a study in a rabbit calvarial defect. *Journal of Materials Science: Materials in Medicine*, 29(10), [156]. <https://doi.org/10.1007/s10856->

- 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>
- Nogueira, I. B. R., Faria, R. P. V., Requião, R., Koivisto, H., Martins, M. A. F., Rodrigues, A. E., ... Ribeiro, A. M. (2018). Chromatographic studies of n-Propyl Propionate: Adsorption equilibrium, modelling and uncertainties determination. *Computers and Chemical Engineering*, *119*, 371-382. <https://doi.org/10.1016/j.compchemeng.2018.09.020>
- Chevrier, D. M., Raich, L., Rovira, C., Das, A., Luo, Z., Yao, Q., ... 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, N. V., & 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>
- Rimpiläinen, T., Andrade, J., Nunes, A., Ntungwe, E., Fernandes, A. S., Vale, J. R., ... Candeias, N. R. (2018). Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Petasis Borono-Mannich Reaction. *ACS Omega*, *3*(11), 16191-16202. <https://doi.org/10.1021/acsomega.8b02381>
- Gasik, M., Zühlke, A., Haaparanta, A-M., Muhonen, V., Laine, K., Bilotsky, Y., ... Kiviranta, I. (2018). The importance of controlled mismatch of biomechanical compliances of implantable scaffolds and native tissue for articular cartilage regeneration. *Frontiers in Bioengineering and Biotechnology*, *6*(NOV), [187]. <https://doi.org/10.3389/fbioe.2018.00187>
- Santala, S., Efimova, E., & Santala, V. (2018). Dynamic decoupling of biomass and wax ester biosynthesis in *Acinetobacter baylyi* by an autonomously regulated switch. *Metabolic Engineering Communications*, *7*, [e00078]. <https://doi.org/10.1016/j.mec.2018.e00078>
- Czaplicki, R., Kiviniemi, A., Huttunen, M. J., Zang, X., Stolt, T., Vartiainen, I., ... 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>
- Mänttari, S. K., Oksa, J. A. H., Virkkala, J., & Pietilä, J. A. K. (2019). Activity Level and Body Mass Index as Predictors of Physical Workload During Working Career. *Safety and Health at Work*. <https://doi.org/10.1016/j.shaw.2019.09.002>
- Soltani, A., Lahti, J., Järvelä, K., Laurikka, J., Kuokkala, V. T., & Hokka, M. (2019). Characterization of the anisotropic deformation of the right ventricle during open heart surgery. *COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING*. <https://doi.org/10.1080/10255842.2019.1703133>
- Sankelo, P., Jokisalo, J., Nyman, J., Vinha, J., & Sirén, K. (2019). Cost-optimal energy performance measures in a new daycare building in cold climate. *International Journal of Sustainable Energy*, *38*(2), 104-122. <https://doi.org/10.1080/14786451.2018.1448398>
- Hannula, M., Narra, N., Paakinaho, K., Haaparanta, A-M., Kellomäki, M., & Hyttinen, J. (2019). μ CT based characterization of biomaterial scaffold microstructure under compression. In *World Congress on Medical Physics and Biomedical Engineering 2018* (pp. 165-169). (IFMBE Proceedings; Vol. 68, No. 3). Springer. https://doi.org/10.1007/978-981-10-9023-3_30
- Välikangas, T., Hærvig, J., Kuuluvainen, H., Dal Maso, M., Peltonen, P., & Vuorinen, V. (2019). Deposition of dry particles on a fin-and-tube heat exchanger by a coupled soft-sphere DEM and CFD. *International Journal of Heat and Mass Transfer*, [119046]. <https://doi.org/10.1016/j.ijheatmasstransfer.2019.119046>

Hirvonen, J., Jokisalo, J., Heljo, J., & Kosonen, R. (2019). Effect of apartment building energy renovation on hourly power demand. *International Journal of Sustainable Energy*. <https://doi.org/10.1080/14786451.2019.1613992>

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

Lylykangas, J., Ilves, M., Venesvirta, H., Rantanen, V., Mäkelä, E., Vehkaoja, A., ... Surakka, V. (2019). Electrical stimulation of eye blink in individuals with dry eye symptoms caused by chronic unilateral facial palsy. In A. Badnjevic, L. Gurbeta Pokvić, R. Škrbić, A. Badnjevic, & L. Gurbeta Pokvić (Eds.), *CMBEBIH 2019 - Proceedings of the International Conference on Medical and Biological Engineering* (pp. 7-11). (IFMBE Proceedings; Vol. 73). Springer Verlag. https://doi.org/10.1007/978-3-030-17971-7_2

Ahonen, T., Hanski, J., Hyvärinen, M., Kortelainen, H., Uusitalo, T., Vainio, H., ... Koskinen, K. (2019). Enablers and barriers of smart data-based asset management services in industrial business networks. In *Lecture Notes in Mechanical Engineering* (pp. 51-60). (Lecture Notes in Mechanical Engineering). Pleiades Publishing. https://doi.org/10.1007/978-3-319-95711-1_6

Brobbey, K. J., Haapanen, J., Tuominen, M., Mäkelä, J., Gunell, M., Eerola, E., ... Toivakka, M. (2019). High-speed production of antibacterial fabrics using liquid flame spray. *Textile Research Journal*. <https://doi.org/10.1177/0040517519866952>

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

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>

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

Halonen, H. T., Hyttinen, J. A. K., & Ihalainen, T. O. (2019). Mechanical impact stimulation platform tailored for high-resolution light microscopy. *HEALTH AND TECHNOLOGY*. <https://doi.org/10.1007/s12553-019-00382-9>

Lahti, J. (2019). Nanocellulose and Polylactic Acid Based Multilayer Coatings for Barrier Applications. In *17th Biennial TAPPI European PLACE Conference 2019* (pp. 446-455). TAPPI Press.

Martins, D. P., Barros, M. T., & Balasubramaniam, S. (Accepted/In press). Quality and Capacity Analysis of Molecular Communications in Bacterial Synthetic Logic Circuits. *IEEE Transactions on Nanobioscience*. <https://doi.org/10.1109/TNB.2019.2930960>

Chen, X., Ukkonen, L., & Virkki, J. (2019). Reliability evaluation of wearable radio frequency identification tags: Design and fabrication of a two-part textile antenna. *Textile Research Journal*, *89*(4). <https://doi.org/10.1177/0040517517750651>

Fliervoet, L. A. L., Lisitsyna, E. S., Durandin, N. A., Kotsis, I., Maas-Bakker, R. F. M., Yliperttula, M., ... Vermonden, T. (2019). Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy. *Biomacromolecules*. <https://doi.org/10.1021/acs.biomac.9b00896>

Ayodele, O. B., Cai, R., Wang, J., Ziouani, Y., Liang, Z., Spadaro, M. C., ... Kolen'Ko, Y. V. (2019). Synergistic Computational-Experimental Discovery of Highly Selective PtCu Nanocluster Catalysts for Acetylene Semihydrogenation. *ACS CATALYSIS*, 451-457. <https://doi.org/10.1021/acscatal.9b03539>

He, H., Chen, X., Ukkonen, L., & Virkki, J. (2019). Textile-integrated three-dimensional printed and embroidered structures for wearable wireless platforms. *Textile Research Journal*, 89(4). <https://doi.org/10.1177/0040517517750649>

Latikka, J., & Eskola, H. (2019). The electrical conductivity of human cerebrospinal fluid in vivo. In *World Congress on Medical Physics and Biomedical Engineering 2018* (pp. 773-776). (IFMBE Proceedings; Vol. 68, No. 1). Springer. https://doi.org/10.1007/978-981-10-9035-6_142

Hirvonen, J., Jokisalo, J., Heljo, J., & Kosonen, R. (2019). Towards the EU emissions targets of 2050: optimal energy renovation measures of Finnish apartment buildings. *International Journal of Sustainable Energy*, 38(7). <https://doi.org/10.1080/14786451.2018.1559164>

Eregowda, T., Rene, E. R., Rintala, J., & Lens, P. N. L. (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., ... 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>

Pekkanen, T. T., Timonen, R. S., Lendvay, G., Rissanen, M. P., & Eskola, A. J. (2019). Kinetics and thermochemistry of the reaction of 3-methylpropargyl radical with molecular oxygen. *PROCEEDINGS OF THE COMBUSTION INSTITUTE*, 37(1), 299-306. <https://doi.org/10.1016/j.proci.2018.05.050>

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

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

Luo, J., Lehtinen, T., Efimova, E., Santala, V., & Santala, S. (2019). Synthetic metabolic pathway for the production of 1-alkenes from lignin-derived molecules. *Microbial Cell Factories*, 18(1), [48]. <https://doi.org/10.1186/s12934-019-1097-x>

Manna, M., Nieminen, T., & Vattulainen, I. (2019). Understanding the Role of Lipids in Signaling Through Atomistic and Multiscale Simulations of Cell Membranes. *ANNUAL REVIEW OF BIOPHYSICS*, 48, 421-439. <https://doi.org/10.1146/annurev-biophys-052118-115553>

Halonen, H. T., Hyttinen, J. A. K., & Ihalainen, T. O. (2019). Miniaturized stimulator for imaging of live cell responses to high frequency mechanical vibration. In A. Badnjevic, L. Gurbeta Pokvić, R. Škrbić, A. Badnjevic, & L. Gurbeta Pokvić (Eds.), *CMBEBIH 2019 - Proceedings of the International Conference on Medical and Biological Engineering* (pp. 21-27). (IFMBE Proceedings; Vol. 73). Springer Verlag. https://doi.org/10.1007/978-3-030-17971-7_4

Sautter, J. D., Xu, L., Miroshnichenko, A. E., Lysevych, M., Volkovskaya, I., Smirnova, D. A., ... Rahmani, M. (2019). Tailoring Second-Harmonic Emission from (111)-GaAs Nanoantennas. *Nano Letters*, 19(6), 3905-3911. <https://doi.org/10.1021/acs.nanolett.9b01112>

Jackson, T., Shenkin, A., Moore, J., Bunce, A., van Emmerik, T., Kane, B., ... Malhi, Y. (2019). An architectural understanding of natural sway frequencies in trees. *Journal of the Royal Society. Interface*, 16(155). <https://doi.org/10.1098/rsif.2019.0116>

Kezilebieke, S., Žitko, R., Dvorak, M., Ojanen, T., & Liljeroth, P. (2019). Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations. *Nano Letters*, 19(7), 4614-4619. <https://doi.org/10.1021/acs.nanolett.9b01583>

Salmela, M., Lehtinen, T., Efimova, E., Santala, S., & Santala, V. (2019). Alkane and wax ester production from lignin-related aromatic compounds. *Biotechnology and Bioengineering*, *116*(8), 1934-1945. <https://doi.org/10.1002/bit.27005>

Solovyev, A. I., Mikheyliis, A. V., Plyusnin, V. F., Shubin, A. A., Grivin, V. P., Larionov, S. V., ... Lemmetyinen, H. (2019). Photochemistry of dithiophosphinate Ni(S₂P(i-Bu)₂)₂ complex in CCl₄. Transient species and TD-DFT calculations. *Journal of Photochemistry and Photobiology A: Chemistry*, *381*, [111857]. <https://doi.org/10.1016/j.jphotochem.2019.111857>

Pitkänen, S., Paakinaho, K., Pihlman, H., Ahola, N., Hannula, M., Asikainen, S., ... Miettinen, S. (2019). Characterisation and in vitro and in vivo evaluation of supercritical-CO₂-foamed β-TCP/PLCL composites for bone applications. *European cells & materials*, *38*, 35-50. <https://doi.org/10.22203/eCM.v038a04>

Fantozzi, D., Matikainen, V., Uusitalo, M., Koivuluoto, H., & Vuoristo, P. (2019). Chlorine induced high-temperature corrosion mechanisms in HVOF and HVOF sprayed Cr₃C₂-based hardmetal coatings. *Corrosion Science*, [108166]. <https://doi.org/10.1016/j.corsci.2019.108166>

Wang, S., Nawale, G. N., Oommen, O. P., Hilborn, J., & Varghese, O. P. (2019). Influence of ions to modulate hydrazone and oxime reaction kinetics to obtain dynamically cross-linked hyaluronic acid hydrogels. *Polymer Chemistry*, *10*(31), 4322-4327. <https://doi.org/10.1039/c9py00862d>

Ylönen, M., Franc, J. P., Miettinen, J., Saarenrinne, P., & Fivel, M. (2019). Shedding frequency in cavitation erosion evolution tracking. *International Journal of Multiphase Flow*, *118*, 141-149. <https://doi.org/10.1016/j.ijmultiphaseflow.2019.06.009>

Reshef, O., Saad-Bin-Alam, M., Huttunen, M. J., Carlow, G., Sullivan, B. T., Ménard, J. M., ... Boyd, R. W. (2019). Multiresonant High-Q Plasmonic Metasurfaces. *Nano Letters*, *19*(9), 6429-6434. <https://doi.org/10.1021/acs.nanolett.9b02638>

Haavisto, J., Dessì, P., Chatterjee, P., Honkanen, M., Noori, M. T., Kokko, M., ... Puhakka, J. A. (2019). Effects of anode materials on electricity production from xylose and treatability of TMP wastewater in an up-flow microbial fuel cell. *Chemical Engineering Journal*, *372*, 141-150. <https://doi.org/10.1016/j.cej.2019.04.090>

Saegusa, T., Sakai, H., Nagashima, H., Kobori, Y., Tkachenko, N. V., & Hasobe, T. (2019). Controlled Orientations of Neighboring Tetracene Units by Mixed Self-Assembled Monolayers on Gold Nanoclusters for High-Yield and Long-Lived Triplet Excited States through Singlet Fission. *Journal of the American Chemical Society*, *141*(37), 14720-14727. <https://doi.org/10.1021/jacs.9b06567>

Hajdu-Rahkama, R., Ahoranta, S., Lakaniemi, A-M., & Puhakka, J. A. (2019). Effects of elevated pressures on the activity of acidophilic bioleaching microorganisms. *Biochemical Engineering Journal*, *150*, [107286]. <https://doi.org/10.1016/j.bej.2019.107286>

Dessì, P., Chatterjee, P., Mills, S., Kokko, M., Lakaniemi, A-M., Collins, G., & Lens, P. N. L. (2019). Power production and microbial community composition in thermophilic acetate-fed up-flow and flow-through microbial fuel cells. *Bioresource Technology*, *294*, [122115]. <https://doi.org/10.1016/j.biortech.2019.122115>

Häkkinen, A., Oliveira, S. M. D., Neeli-Venkata, R., & Ribeiro, A. S. (2019). Transcription closed and open complex formation coordinate expression of genes with a shared promoter region. *Journal of the Royal Society Interface*, *16*(161), [20190507]. <https://doi.org/10.1098/rsif.2019.0507>

Bacakova, L., Pajorova, J., Tomkova, M., Matejka, R., Broz, A., Stepanovska, J., ... Kallio, P. (2020). Applications of nanocellulose/nanocarbon composites: Focus on biotechnology and medicine. *Nanomaterials*, *10*(2), [196]. <https://doi.org/10.3390/nano10020196>

Olin, M., & Dal Maso, M. (2020). CFD modeling the diffusional losses of nanocluster-sized particles and condensing vapors in 90° bends of circular tubes. *Journal of Aerosol Science*, 150, [105618]. <https://doi.org/10.1016/j.jaerosci.2020.105618>

Di Vito, D., Mosallaei, M., Vahed, B. K., Kanerva, M., & Mäntysalo, M. (2020). Deformability analysis and improvement in stretchable electronics systems through finite element analysis. In A. Carcaterra, G. Graziani, & A. Paolone (Eds.), *Proceedings of XXIV AIMETA Conference 2019* (pp. 755-763). (Lecture Notes in Mechanical Engineering). Springer. https://doi.org/10.1007/978-3-030-41057-5_61

Haddad, S., Harju, J., Tarniceriu, A., Halkola, T., Parak, J., Korhonen, I., ... Vehkaoja, A. (2020). Ectopic Beat Detection from Wrist Optical Signals for Sinus Rhythm and Atrial Fibrillation Subjects. In J. Henriques, P. de Carvalho, & N. Neves (Eds.), *15th Mediterranean Conference on Medical and Biological Engineering and Computing – MEDICON 2019 - Proceedings of MEDICON 2019* (pp. 150-158). (IFMBE Proceedings; Vol. 76). Springer. https://doi.org/10.1007/978-3-030-31635-8_18

Moormann, W., Tellkamp, T., Stadler, E., Röhricht, F., Näther, C., Puttreddy, R., ... Herges, R. (2020). Efficient Conversion of Light to Chemical Energy: Directional, Chiral Photoswitches with Very High Quantum Yields. *Angewandte Chemie - International Edition*, 59(35), 15081-15086. <https://doi.org/10.1002/anie.202005361>

Hannula, M., Hyttinen, J. A. K., & Tanskanen, J. M. A. (2020). Enhancing CT 3D Images by Independent Component Analysis of Projection Images. In J. Henriques, P. de Carvalho, & N. Neves (Eds.), *15th Mediterranean Conference on Medical and Biological Engineering and Computing – MEDICON 2019 - Proceedings of MEDICON 2019* (pp. 381-389). (IFMBE Proceedings; Vol. 76). Springer. https://doi.org/10.1007/978-3-030-31635-8_46

Gao, H., Tao, J., Dehmer, M., Emmert-Streib, F., Sun, Q., Chen, Z., ... Zhou, Q. (2020). In-flight wind field identification and prediction of parafoil systems. *Applied Sciences (Switzerland)*, 10(6), [1958]. <https://doi.org/10.3390/app10061958>

Masood, M. T., Qudsia, S., Hadadian, M., Weinberger, C., Nyman, M., Ahläng, C., ... Smått, J. H. (2020). Investigation of well-defined pinholes in TiO₂ electron selective layers used in planar heterojunction perovskite solar cells. *Nanomaterials*, 10(1), [181]. <https://doi.org/10.3390/nano10010181>

Hajdu-Rahkama, R., Özkaya, B., Lakaniemi, A. M., & Puhakka, J. A. (2020). Kinetics and modelling of thiosulphate biotransformations by haloalkaliphilic Thioalkalivibrio versutus. *Chemical Engineering Journal*, 401, [126047]. <https://doi.org/10.1016/j.cej.2020.126047>

Oliveira, L. M. C., Koivisto, H., Iwakiri, I. G. I., Loureiro, J. M., Ribeiro, A. M., & Nogueira, I. B. R. (2020). Modelling of a pressure swing adsorption unit by deep learning and artificial intelligence tools. *Chemical Engineering Science*, 224, [115801]. <https://doi.org/10.1016/j.ces.2020.115801>

Banichuk, N., Ivanova, S., & Jeronen, J. (2020). Moving Web and Dynamic Problem of Aerothermoelastic Vibrations and Instability. In D. A. Indeitsev, & A. M. Krivtsov (Eds.), *Advanced Problems in Mechanics: Proceedings of the 47th International Summer School-Conference on Advanced Problems in Mechanics, APM 2019* (pp. 66-71). (Lecture Notes in Mechanical Engineering). Springer. https://doi.org/10.1007/978-3-030-49882-5_7

Silvonen, J., Levänen, E., & Uusitalo, M. (2020). The thermal contact resistance of a steel-ceramic interface with oxide intermediates. *Cogent Engineering*, 7(1), [1720057]. <https://doi.org/10.1080/23311916.2020.1720057>

Hongisto, M., Veber, A., Boetti, N. G., Danto, S., Jubera, V., & Petit, L. (2020). Transparent Yb³⁺ doped phosphate glass-ceramics. *Ceramics International*. <https://doi.org/10.1016/j.ceramint.2020.01.121>

Palmroth, A., Pitkänen, S., Hannula, M., Paakinaho, K., Hyttinen, J., Miettinen, S., & Kellomäki, M. (2020). Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools. *Journal of the Royal Society. Interface*, 17(165), [20200102]. <https://doi.org/10.1098/rsif.2020.0102>

Liu, N., Santala, S., & Stephanopoulos, G. (2020). Mixed carbon substrates: a necessary nuisance or a missed opportunity? *CURRENT OPINION IN BIOTECHNOLOGY*, 62, 15-21. <https://doi.org/10.1016/j.copbio.2019.07.003>

Adonias, G. L., Yastrebova, A., Barros, M. T., Koucheryavy, Y., Cleary, F., & Balasubramaniam, S. (2020). Utilizing Neurons for Digital Logic Circuits: A Molecular Communications Analysis. *IEEE Transactions on Nanobioscience*, 19(2), 224-236. <https://doi.org/10.1109/TNB.2020.2975942>

Unban, K., Khanongnuch, R., Kanpiengjai, A., Shetty, K., & Khanongnuch, C. (2020). Utilizing Gelatinized Starchy Waste from Rice Noodle Factory as Substrate for L(+)-Lactic Acid Production by Amylolytic Lactic Acid Bacterium *Enterococcus faecium* K-1. *Applied Biochemistry and Biotechnology*. <https://doi.org/10.1007/s12010-020-03314-w>

Kattipparambil Rajan, D. (2020). *Modular Instrumentation for Controlling and Monitoring In-Vitro Cultivation Environment and Image-based Functionality Measurements of Human Stem Cells*. (Tampere University Dissertations; Vol. 256). Tampere University.

Arvani, M., Keskinen, J., Railanmaa, A., Siljander, S., Björkqvist, T., Tuukkanen, S., & Lupo, D. (2020). Additive manufacturing of monolithic supercapacitors with biopolymer separator. *Journal of Applied Electrochemistry*, 50(6), 689-697. <https://doi.org/10.1007/s10800-020-01423-2>

Ojha, N., Szczodra, A., Boetti, N. G., Massera, J., & Petit, L. (2020). Nucleation and growth behavior of Er³⁺ doped oxyfluorophosphate glasses. *RSC Advances*, 10(43), 25703-25716. <https://doi.org/10.1039/d0ra04681g>

Khan, R., Ali-Löytty, H., Saari, J., Valden, M., Tukiainen, A., Lahtonen, K., & Tkachenko, N. V. (2020). Optimization of photogenerated charge carrier lifetimes in ald grown tio₂ for photonic applications. *Nanomaterials*, 10(8), [1567]. <https://doi.org/10.3390/nano10081567>

Kaleva, A., Tassaing, T., Saarimaa, V., Le Bourdon, G., Väisänen, P., Markkula, A., & Levänen, E. (2020). Formation of corrosion products on zinc in wet supercritical and subcritical CO₂: In-situ spectroscopic study. *Corrosion Science*, 174. <https://doi.org/10.1016/j.corsci.2020.108850>