

Teisala, H., Tuominen, M., & Kuusipalo, J. (2011). Adhesion Mechanism of Water Droplets on Hierarchically Rough Superhydrophobic Rose Petal Surface. *Journal of Nanomaterials*, 2011, 1-6. [818707]. <https://doi.org/10.1155/2011/818707>

Lahtinen, K., Johansson, P., Kääriäinen, T., & Cameron, D. C. (2012). Adhesion of Extrusion-Coated Polymer Sealing Layers to a Fiber-Based Packaging Material with an Atomic Layer Deposited Aluminum Oxide Surface Coating. *Polymer Engineering and Science*, 52(9), 1985-1990. <https://doi.org/10.1002/pen.23148>

Eregowda, T. (2019). *Anaerobic treatment and resource recovery from methanol rich waste gases and wastewaters*. (Tampere University Dissertations). Tampere University.

Lahti, J., Eiroma, K., Tenhunen, T.-M., Pykönen, M., Toivakka, M., & Tuominen, M. (2011). Atmospheric Plasma Treatment of Plastic Packaging Film: Effects on Surface Properties and UV Inkjet Printability. In *13th TAPPI European PLACE Conference, Bregenz, Austria, 30 May - 1 June, 2011* (pp. 1-31). (TAPPI European PLACE Conference). Norcross, GA: TAPPI.

Aromaa, M., Arffman, A., Suhonen, H., Haapanen, J., Keskinen, J., Honkanen, M., ... Mäkelä, J. M. (2012). Atmospheric synthesis of superhydrophobic TiO<sub>2</sub> nanoparticle deposits in a single step using Liquid Flame Spray. *Journal of Aerosol Science*, 52, 57-68. <https://doi.org/10.1016/j.jaerosci.2012.04.009>

Kääriäinen, T. O., Maydannik, P., Cameron, D. C., Lahtinen, K., Johansson, P., & Kuusipalo, J. (2011). Atomic layer deposition on polymer based flexible packaging materials: Growth characteristics and diffusion barrier properties. *Thin Solid Films*, 519(10), 3146-3154. <https://doi.org/10.1016/j.tsf.2010.12.171>

Johansson, P., Lahtinen, K., Kuusipalo, J., Kääriäinen, T., Maydannik, P., & Cameron, D. (2010). Atomic layer deposition process for barrier applications of flexible packaging. In *TAPPI 2010 PLACE Conference, April 18-21, 2010, Albuquerque NM, USA* (pp. 1-12)

Vartiainen, J., Tuominen, M., & Nättinen, K. (2010). Bio-Hybrid Nanocomposite Coatings from Sonicated Chitosan and Nanoclay. *Journal of Applied Polymer Science*, 116(6), 3638-3647. <https://doi.org/10.1002/app.31922>

Kamppuri, T., Vehviläinen, M., Backfolk, K., & Heiskanen, I. (2016). Characterization of endoglucanase rich *Trichoderma reesei* cellulase mixtures and their effect on alkaline solubility of dissolving pulp. *Cellulose*, 23(6), 3901-3911. <https://doi.org/10.1007/s10570-016-1055-2>

He, X., Benniston, A. C., Lemmetyinen, H., & Tkachenko, N. V. (2018). Charge Shift/Recombination and Triplet Formation in a Closely-Spaced Molecular Dyad based on a Borondipyrromethene (Bodipy) and an Expanded Acridinium Cation. *ChemPhotoChem*, 2(3), 277-282. <https://doi.org/10.1002/cptc.201700184>

Ali-Löytty, H., Valden, M., Hannula, M., Eilert, A., Ogasawara, H., & Nilsson, A. (2019). Chemical Dissolution of Pt(111) During Potential Cycling Under Negative pH Conditions Studied by Operando X-ray Photoelectron Spectroscopy. *Journal of Physical Chemistry C*, 123(41), 25128-25134. <https://doi.org/10.1021/acs.jpcc.9b05201>

Harra, J., Juuti, P., Haapanen, J., Sorvali, M., Roumeli, E., Honkanen, M., ... Mäkelä, J. M. (2015). Coating of Silica and Titania Aerosol Nanoparticles by Silver Vapor Condensation. *Aerosol Science and Technology*, 49(9), 767-776. <https://doi.org/10.1080/02786826.2015.1072263>

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

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

Köliö, A., Honkanen, M., Lahdensivu, J., Vippola, M., & Pentti, M. (2015). Corrosion products of carbonation induced corrosion in existing reinforced concrete facades. *Cement and Concrete Research*, *78*, 200-207. <https://doi.org/10.1016/j.cemconres.2015.07.009>

Köliö, A., Honkanen, M., & Lahdensivu, J. (2015). Corrosion propagation phase studies on Finnish reinforced concrete facades. In *1st International Symposium on Building Pathology: ISBP 2015 Porto*: FEUP Edicoes (Faculdade de Engenharia da Universidade do Porto Edicoes).

Mayrhofer, E., Janka, L., Mayr, W. P., Norpoth, J., Rodriguez Ripoll, M., & Gröschl, M. (2015). Cracking resistance of Cr<sub>3</sub>C<sub>2</sub>-NiCr and WC-Cr<sub>3</sub>C<sub>2</sub>-Ni thermally sprayed coatings under tensile bending stress. *Surface and Coatings Technology*, *281*, 169-175. <https://doi.org/10.1016/j.surfcoat.2015.09.002>

Tuominen, M., Teisala, H., Aromaa, M., Stepien, M., Mäkelä, J. M., Saarinen, J. J., ... Kuusipalo, J. (2014). Creation of superhydrophilic surfaces of paper and board. *Journal of Adhesion Science and Technology*, *28*(8-9), 864-879. <https://doi.org/10.1080/01694243.2012.697744>

Aromaa, M., Haapanen, J., Teisala, H., Tuominen, M., Kuusipalo, J., Stepien, M., ... Mäkelä, J. (2011). Deposition of flame synthesised nanoparticles on paperboard surface. In *NOSA & FAAR 2011, Nordic Aerosol Symposium, November 9-11, 2011, Tampere, Finland* (pp. 17-17). (Nordic Aerosol Symposium NOSA & FAAR). Tampere: Nordic Society for Aerosol Research.

Qvintus, P., Kataja, K., Heikkilä, P., Salmela, J., Lehmonen, J., Ketoja, J., ... Vuorinen, T. (2014). Design driven world of cellulose-from bulk to luxury? In *Fibre Value Chain Conference and Expo 2014: Pulp and Paper Bioenergy Bioproducts* (pp. 67-74). Appita Inc..

Markert, F., Breedveld, L., Lahti, J., & Vangeneugden, D. (2010). Development of sustainable paper coatings using nanoscale industrial. In *i-SUP 2010, Innovation for Sustainable Production, Conference 4, Materials for Sustainable Production, Bruges, Belgium, 18-21 April, 2010* (pp. 80-84)

Sarliin, E., Rosling, A., Mustakangas, M., Laihonon, P., Lindgren, M., & Vuorinen, J. (2015). Diffusion of acidic solution through rubber at high temperature and its effect on metal-rubber interface degradation. In *Proceedings of SAMPE Europe Conference*

Honkanen, M., Eloranta, H., & Saarenrinne, P. (2010). Digital imaging measurement of dense multiphase flows in industrial processes. *Flow Measurement and Instrumentation*, *21*(1), 25-32. <https://doi.org/10.1016/j.flowmeasinst.2009.11.001>

Vehviläinen, M., Kamppuri, T., Gronqvist, S., Rissanen, M., Maloney, T., Honkanen, M., & Nousiainen, P. (2015). Dissolution of enzyme-treated cellulose using freezing thawing method and the properties of fibres regenerated from the solution. *Cellulose*, *22*(3), 1653-1674. <https://doi.org/10.1007/s10570-015-0632-0>

Keipi, T., Tolvanen, H., & Konttinen, J. (2018). Economic analysis of hydrogen production by methane thermal decomposition: Comparison to competing technologies. *Energy Conversion and Management*, *159*, 264-273. <https://doi.org/10.1016/j.enconman.2017.12.063>

Ramamoorthy, S. K., Skrifvars, M., & Rissanen, M. (2015). Effect of alkali and silane surface treatments on regenerated cellulose fibre type (Lyocell) intended for composites. *Cellulose*, *22*(1), 637-654. <https://doi.org/10.1007/s10570-014-0526-6>

Larkomaa, J., Niinimäki, J., Honkanen, M., Hanif, M., & Saarenrinne, P. (2010). Effect of fibre properties on flocculation and fractionation of cellulosic fibres in dry state. *Journal of Engineered Fibers and Fabrics*, *5*(1), 1-10.

- Johansson, K., Christophliemk, H., Jönsson, L. J., & Järnström, L. (2010). Effect of Pigment Volume Concentration and Drying Aspects on the Enzyme Activity of Clay Coatings. In *11th Advanced Coating Fundamentals Symposium Proceedings, The Latest Advances in Coating Research and Development, 11-13 October 2010, Munich, Germany* (pp. 129-143). (TAPPI Advanced Coating Fundamentals Symposium). USA: TAPPI Press.
- Saarikoski, E., Rissanen, M., & Seppälä, J. (2015). Effect of rheological properties of dissolved cellulose/microfibrillated cellulose blend suspensions on film forming. *Carbohydrate Polymers*, *119*, 62-70. <https://doi.org/10.1016/j.carbpol.2014.11.033>
- Tuominen, M., Lahti, J., & Kuusipalo, J. (2011). Effects of flame and corona treatment on extrusion coated paper properties. *TAPPI Journal*, *10*(10), 29-36.
- Leduc, J., Gönüllü, Y., Ruoko, T-P., Fischer, T., Mayrhofer, L., Tkachenko, N. V., ... Mathur, S. (2019). Electronically Coupled Uranium and Iron Oxide Heterojunctions as Efficient Water Oxidation Catalysts. *Advanced Functional Materials*, [1905005]. <https://doi.org/10.1002/adfm.201905005>
- Kastinen, T., da Silva Filho, D. A., Paunonen, L., Linares, M., Ribeiro Junior, L. A., Cramariuc, O., & Hukka, T. I. (2019). Electronic couplings and rates of excited state charge transfer processes at poly(thiophene-*co*-quinoxaline)-PC<sub>71</sub>BM interfaces: two- versus multi-state treatments. *Physical Chemistry Chemical Physics*, *21*(46), 25606-25625. <https://doi.org/10.1039/C9CP04837E>
- Lepcha, A., Maccato, C., Mettenbörger, A., Andreu, T., Mayrhofer, L., Walter, M., ... Mathur, S. (2015). Electrospun Black Titania Nanofibers: Influence of Hydrogen Plasma-Induced Disorder on the Electronic Structure and Photoelectrochemical Performance. *Journal of Physical Chemistry C*, *119*(33), 18835-18842. <https://doi.org/10.1021/acs.jpcc.5b02767>
- Mangayil, R., Rajala, S., Pammo, A., Sarlin, E., Luo, J., Santala, V., ... Tuukkanen, S. (2017). Engineering and Characterization of Bacterial Nanocellulose Films as Low Cost and Flexible Sensor Material. *ACS Applied Materials & Interfaces*, *9*(22), 19048-19056. <https://doi.org/10.1021/acsami.7b04927>
- Grönqvist, S., Kamppuri, T., Maloney, T., Vehviläinen, M., Liittä, T., & Suurnäkki, A. (2015). Enhanced pre-treatment of cellulose pulp prior to dissolution into NaOH/ZnO. *Cellulose*, *22*(6), 3981-3990. <https://doi.org/10.1007/s10570-015-0742-8>
- Sriplai, N., Mangayil, R., Pammo, A., Santala, V., Tuukkanen, S., & Pinitsoontorn, S. (2019). Enhancing piezoelectric properties of bacterial cellulose films by incorporation of MnFe<sub>2</sub>O<sub>4</sub> nanoparticles. *Carbohydrate Polymers*, *231*. <https://doi.org/10.1016/j.carbpol.2019.115730>
- Vaikuntam, S. R., Stöckelhuber, K. W., Subramani Bhagavatheswaran, E., Wießner, S., Scheler, U., Saalwächter, K., ... Das, A. (2018). Entrapped Styrene Butadiene Polymer Chains by Sol-Gel-Derived Silica Nanoparticles with Hierarchical Raspberry Structures. *Journal of Physical Chemistry B*, *122*(6), 2010-2022. <https://doi.org/10.1021/acs.jpcc.7b11792>
- Carver, S. M., Nelson, M. C., Yu, Z., & Tuovinen, O. H. (2015). Fermentative metabolism of an anaerobic, thermophilic consortium on plant polymers and commercial paper samples. *Biomass & Bioenergy*, *75*, 11-22. <https://doi.org/10.1016/j.biombioe.2015.02.005>
- Aromaa, M., Haapanen, J., Teisala, H., Tuominen, M., Kuusipalo, J., Stepien, M., ... Mäkelä, J. M. (2012). Flame deposition of superhydrophobic and superhydrophilic nanoparticle coating on paperboard materials. In *Nanotechnology 2012: Advanced Materials, CNTs, Particles, Films and Composites - 2012 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2012, Santa Clara, CA, USA, 18-21 June 2012* (pp. 365-367). (Nanotechnology Conference and Expo Nanotech). Nano Science and Technology Institute NSTI.
- Vapaavuori, J., Ras, R. H. A., Kaivola, M., Bazuin, C. G., & Priimägi, A. (2015). From partial to complete optical erasure of azobenzene-polymer gratings: effect of molecular weight. *Journal of Materials Chemistry C*, *3*(42), 11011-11016. <https://doi.org/10.1039/C5TC01776A>

Teisala, H., Tuominen, M., Aromaa, M., Stepien, M., Mäkelä, J. M., Saarinen, J. J., ... Kuusipalo, J. (2013). High- and low-adhesive superhydrophobicity on the liquid flame spray-coated board and paper: structural effects on surface wetting and transition between the low- and high-adhesive states. *Colloid and Polymer Science*, 291(2), 447-455. <https://doi.org/10.1007/s00396-012-2833-5>

Tuominen, J., Näkki, J., Pajukoski, H., Nyysönen, T., Ristonen, T., Peltola, T., & Vuoristo, P. (2015). High performance wear and corrosion resistant coatings by novel cladding techniques. In T. S. Sudarshan, P. Vuoristo, & H. Koivuluoto (Eds.), *Surface Modification Technologies XXVIII: Proceedings of the 28th International Conference on Surface Modification Technologies* (pp. 105-117). Valardocs.

Puranen, J., Laakso, J., Honkanen, M., Heinonen, S., Kylmälahti, M., Lugowski, S., ... Vuoristo, P. (2015). High temperature oxidation tests for the high velocity solution precursor flame sprayed manganese-cobalt oxide spinel protective coatings on SOFC interconnector steel. *International Journal of Hydrogen Energy*, 40(18), 6216-6227. <https://doi.org/10.1016/j.ijhydene.2015.02.129>

Sarlin, E. L., Lindgren, M., Suihkonen, R. J., Siljander, S. M. K., Kakkonen, M. M. S., & Vuorinen, J. E. (2015). High-temperature slurry erosion of vinylester matrix composites – The effect of test parameters. *Wear*, 328-329, 488-497. <https://doi.org/10.1016/j.wear.2015.03.021>

Peltola, J., Kallio, S., Honkanen, M., & Saarenrinne, P. (2010). Image based measurement of particle phase reynolds stresses in a laboratory scale circulating fluidized bed. In *7th International Conference on Multiphase Flow ICMF2010, May 30 - June 4, 2010, Tampa, Florida* (pp. 1-9)

Virtanen, T., Penttilä, P. A., Maloney, T. C., Grönqvist, S., Kamppuri, T., Vehviläinen, M., ... Maunu, S. L. (2015). Impact of mechanical and enzymatic pretreatments on softwood pulp fiber wall structure studied with NMR spectroscopy and X-ray scattering. *Cellulose*, 22(3), 1565-1576. <https://doi.org/10.1007/s10570-015-0619-x>

Leppänen, A., & Välimäki, E. (2016). Improving Recovery Boiler Availability through Understanding Fume Behavior. *TAPPI Journal*, 15(3), 187-193.

Vishtal, A., & Retulainen, E. (2014). Improving the extensibility, wet web and dry strength of paper by addition of agar. *Nordic Pulp and Paper Research Journal*, 29(3), 434-443.

Lahti, J., Eiroma, K., Tenhunen, T.-M., Pykönen, M., & Toivakka, M. (2010). Influence of Atmospheric Plasma Treatment on Surface Properties and Inkjet Printability of Plastic Packaging Film. In N. Enlund, & M. Lovrecek (Eds.), *Advances in Printing and Media Technology* (pp. 197-203)

Zeng, H., Lahikainen, M., Liu, L., Ahmed, Z., Wani, O. M., Wang, M., ... Priimagi, A. (2019). Light-fuelled freestyle self-oscillators. *Nature Communications*, 10(1), [5057]. <https://doi.org/10.1038/s41467-019-13077-6>

Aghaee, M., Maydannik, P. S., Johansson, P., Kuusipalo, J., Creatore, M., Homola, T., & Cameron, D. C. (2015). Low temperature temporal and spatial atomic layer deposition of TiO<sub>2</sub> films. *Journal of Vacuum Science & Technology A*, 33(4), [041512]. <https://doi.org/10.1116/1.4922588>

Koivula, H. M., Jalkanen, L., Saukkonen, E., Ovaska, S.-S., Lahti, J., Christophliemk, H., & Mikkonen, K. S. (2016). Machine-coated starch-based dispersion coatings prevent mineral oil migration from paperboard. *Progress in Organic Coatings*, 99, 173-181. <https://doi.org/10.1016/j.porgcoat.2016.05.017>

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

Keipi, T., Li, T., Løvås, T., Tolvanen, H., & Konttinen, J. (2017). Methane thermal decomposition in regenerative heat exchanger reactor: Experimental and modeling study. *Energy*, 135, 823-832. <https://doi.org/10.1016/j.energy.2017.06.176>

Järvinen, H., Honkanen, M., Oja, O., Järvenpää, M., & Peura, P. (2019). Microstructure-property relationships of novel ultra-high strength press hardening steels. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, 50(2), 816-836. <https://doi.org/10.1007/s11661-018-4967-7>

Leppänen, A. (2015). *Modeling Fume Particle Dynamics and Deposition with Alkali Metal Chemistry in Kraft Recovery Boilers*. (Tampere University of Technology. Publication; Vol. 1273). Tampere: Tampere University of Technology.

Leppänen, A., Tran, H., Välimäki, E., & Oksanen, A. (2014). Modelling fume deposit growth in recovery boilers: effect of flue gas and deposit temperature. *Journal of Science and Technology for Forest Products and Processes*, 4(1), 50-57.

Beyeh, N. K., Valkonen, A., Bhowmik, S., Pan, F., & Rissanen, K. (2015). N-Alkyl ammonium resorcinarene salts: multivalent halogen-bonded deep-cavity cavitands. *Organic chemistry frontiers*, 2(4), 340-345. <https://doi.org/10.1039/c4qo00326h>

Mäkelä, J. M., Aromaa, M., Teisala, H., Tuominen, M., Stepien, M., Saarinen, J. J., ... Kuusipalo, J. (2011). Nanoparticle Deposition from Liquid Flame Spray onto Moving Roll-to-Roll Paperboard Material. *Aerosol Science and Technology*, 45(7), 827-837. <https://doi.org/10.1080/02786826.2011.566292>

Lahti, J., & Lavonen, J. (2012). Nanoscale surface processing of extrusion coated substrates and plastic films with atmospheric plasma activation and deposition. In *TAPPI PLACE Conference 2012, Helping Me Do My Job Better, Seattle, Washington, USA, 6-9 May 2012* (pp. 588-600). (TAPPI PLACE Conference). TAPPI Press; Curran Associates, Inc.

Lahti, J., & Lavonen, J. (2011). Nanoscale Surface Processing of Extrusion Coated Substrates and Plastic Films with Atmospheric Plasma Activation and Deposition. In M. Vähä-Nissi (Ed.), *Novel nanostructured polymeric materials for food packaging and beyond, International COST Workshop, Espoo, Finland, September 15-16, 2011. VTT Symposium* (pp. 29-30). (International COST Workshop; Vol. 270). Espoo: VTT.

Teisala, H., Tuominen, M., Aromaa, M., Stepien, M., Mäkelä, J. M., Saarinen, J. J., ... Kuusipalo, J. (2012). Nanostructures Increase Water Droplet Adhesion on Hierarchically Rough Superhydrophobic Surfaces. *Langmuir*, 28(6), 3138-3145. <https://doi.org/10.1021/la203155d>

Layek, R. K., Uddin, M. E., Kim, N. H., Tak Lau, A. K., & Lee, J. H. (2017). Noncovalent functionalization of reduced graphene oxide with pluronic F127 and its nanocomposites with gum arabic. *Composites Part B : Engineering*, 128, 155-163. <https://doi.org/10.1016/j.compositesb.2017.07.010>

Leppänen, A., Tran, H., Taipale, R., Välimäki, E., & Oksanen, A. (2014). Numerical modeling of fine particle and deposit formation in a recovery boiler. *Fuel*, 129, 45-53. <https://doi.org/10.1016/j.fuel.2014.03.046>

Lindroos, M., Laukkanen, A., Cailletaud, G., & Kuokkala, V-T. (2017). On the effect of deformation twinning and microstructure to strain hardening of high manganese austenitic steel 3D microstructure aggregates at large strains. *International Journal of Solids and Structures*, 125, 68-76. <https://doi.org/10.1016/j.ijsolstr.2017.07.015>

Yi, H., Albrecht, M., Valkonen, A., & Rissanen, K. (2015). Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as  $\pi$ -acceptors for anions. *New Journal of Chemistry*, 39(1), 746-749. <https://doi.org/10.1039/c4nj01654h>

Heinonen, S., Kannisto, M., Nikkanen, J-P., Huttunen-Saarivirta, E., Karp, M., & Levänen, E. (2016). Photocatalytic and antibacterial properties of ZnO films with different surface topographies on stainless steel substrate. *Thin Solid Films*, 616, 842-849. <https://doi.org/10.1016/j.tsf.2016.10.002>

Assoah, B., Veiros, L. F., & R. Candeias, N. (2019). Pinacol-Derived Chlorohydrosilane in Metal-Free Reductive Amination for the Preparation of Tertiary Alkylphenolmethyl Amines. *Organic Letters*, 21(5), 1402-1406. <https://doi.org/10.1021/acs.orglett.9b00121>

Diao, F., Liang, W., Tian, F., Wang, Y., Vivo, P., Efimov, A., & Lemmetyinen, H. (2015). Preferential Attachments of Organic Dyes onto {101} Facets of TiO<sub>2</sub> Nanoparticles. *Journal of Physical Chemistry C*, 119(16), 8960-8965. <https://doi.org/10.1021/acs.jpcc.5b01369>

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>

Koivuluoto, H., Stenroos, C., Ruohomaa, R., Bolelli, G., Lusvarghi, L., & Vuoristo, P. (2015). Research on icing behavior and ice adhesion testing of icephobic surfaces. In *16th International Workshop on Atmospheric Icing of Structures, IWAIS 2015, June 28-July 3, 2015, Uppsala, Sweden* (pp. 183-188)

Temerov, F., Pham, K., Juuti, P., Mäkelä, J. M., Grachova, E. V., Kumar, S., ... Saarinen, J. J. (2020). Silver-Decorated TiO<sub>2</sub> Inverse Opal Structure for Visible Light-Induced Photocatalytic Degradation of Organic Pollutants and Hydrogen Evolution. *ACS Applied Materials & Interfaces*, 12(37), 41200-41210. <https://doi.org/10.1021/acsami.0c08624>

Leppänen, A., Välimäki, E., & Oksanen, A. (2015). Simulation of ash-forming compounds in the kraft recovery boiler. In *10th European Conference on Industrial Furnaces and Boilers* Porto, Portugal.

Mahtabani, A., Rytöluoto, I., He, X., Saarimäki, E., Lahti, K., Paajanen, M., ... Blume, A. (2019). Solution Modified Fumed Silica and Its Effect on Charge Trapping Behavior of PP/POE/Silica Nanodielectrics. In *Proceedings of the 26th Nordic Insulation Symposium* (pp. 129-133). (Proceedings of the Nordic Insulation Symposium ). NTNU, Norway: Nordic Insulation Symposium. <https://doi.org/10.5324/nordis.v0i26.3292>

Stepien, M., Saarinen, J. J., Teisala, H., Tuominen, M., Aromaa, M., Kuusipalo, J., ... Toivakka, M. (2012). Surface chemical analysis of photocatalytic wettability conversion of TiO<sub>2</sub> nanoparticle coating. *Surface and Coatings Technology*, 208, 73-79. <https://doi.org/10.1016/j.surfcoat.2012.08.008>

Stepien, M., Saarinen, J. J., Teisala, H., Tuominen, M., Aromaa, M., Kuusipalo, J., ... Toivakka, M. (2012). Surface chemical characterization of nanoparticle coated paperboard. *Applied Surface Science*, 258(7), 3119-3125. <https://doi.org/10.1016/j.apsusc.2011.11.048>

Taddeo, R., Kolppo, K., & Lepistö, R. (2016). Sustainable nutrients recovery and recycling by optimizing the chemical addition sequence for struvite precipitation from raw swine slurries. *Journal of Environmental Management*, 180, 52-58. <https://doi.org/10.1016/j.jenvman.2016.05.009>

Wacharine, I., Valkonen, A., Rzaigui, M., & Smirani, W. (2015). Synthesis, crystal structure, spectral, dielectric characteristics and conduction mechanism of two novel carboxylates of 1-benzhydrylpiperazine. *Monatshefte für Chemie*, 146(12), 2007-2020. <https://doi.org/10.1007/s00706-015-1553-1>

Hiltunen, A., Lahtonen, K., Saari, J., Ojanperä, A., Sarlin, E., Wondraczek, H., ... Lemmetyinen, H. (2017). Tailored Fabrication of Transferable and Hollow Weblike Titanium Dioxide Structures. *ChemPhysChem*, 18, 64-71. <https://doi.org/10.1002/cphc.201600930>

Keipi, T., Hankalin, V., Nummelin, J., & Raiko, R. (2016). Techno-economic analysis of four concepts for thermal decomposition of methane: Reduction of CO<sub>2</sub> emissions in natural gas combustion. *Energy Conversion and Management*, 110, 1-12. <https://doi.org/10.1016/j.enconman.2015.11.057>

Gonzalez, J. A., Tarao, H., & Korpinen, L. (2012). The Effect of ELF electric fields on Implantable Cardioverter Defibrillators (ICD). In *The Bioelectromagnetics Society 34th Annual Meeting, June 17, 2012 - June 22, 2012, Brisbane, Australia* (pp. 104-106). (The Bioelectromagnetics Society Annual Meeting). The Bioelectromagnetics Society.

- Tuominen, M., Ek, M., Saloranta, P., Toivakka, M., & Kuusipalo, J. (2013). The effect of flame treatment on surface properties and heat sealability of low-density polyethylene coating. *Packaging Technology and Science*, 26(4), 201-214. <https://doi.org/10.1002/pts.1975>
- Kärkkäinen, M., Kolli, T., Honkanen, M., Heikkinen, O., Huuhtanen, M., Kallinen, K., ... Keiski, R. L. (2015). The Effect of Phosphorus Exposure on Diesel Oxidation Catalysts-Part I: Activity Measurements, Elementary and Surface Analyses. *Topics in Catalysis*, 58(14), 961-970. <https://doi.org/10.1007/s11244-015-0464-z>
- Honkanen, M., Kärkkäinen, M., Heikkinen, O., Kallinen, K., Kolli, T., Huuhtanen, M., ... Vippola, M. (2015). The Effect of Phosphorus Exposure on Diesel Oxidation Catalysts-Part II: Characterization of Structural Changes by Transmission Electron Microscopy. *Topics in Catalysis*, 58(14), 971-976. <https://doi.org/10.1007/s11244-015-0465-y>
- Siljander, S., Lehmonen, J., Tanaka, A., Ketoja, J., Heikkilä, P., Lahti, J., ... Vuorinen, J. (2015). The effect of physical adhesion promotion treatments on interfacial adhesion in cellulose-epoxy composite. In *Proceedings of the 20th International Conference on Composite Materials*
- Grönqvist, S., Treimanis, A., Kamppuri, T., Maloney, T., Skute, M., Grinfelds, U., ... Suurnäkki, A. (2015). The effect of the outermost fibre layers on solubility of dissolving grade pulp. *Cellulose*, 22(6), 3955-3965. <https://doi.org/10.1007/s10570-015-0709-9>
- Johansson, K., Christophliemk, H., Johansson, C., Jönsson, L. J., & Järnström, L. (2012). The effects of coating structure and water-holding capacity on the oxygen-scavenging capacity of enzymes embedded in the coating layer. In *12th TAPPI Advanced Coating Fundamentals Symposium Proceedings, September 10-12, 2012, Atlanta, USA* (pp. 57-69). (TAPPI Advanced Coating Fundamentals Symposium). TAPPI.
- Mylläri, V., Ruoko, T. P., & Järvelä, P. (2014). The effects of UV irradiation to polyetheretherketone fibres: Characterization by different techniques. *Polymer Degradation and Stability*, 109, 278-284. <https://doi.org/10.1016/j.polyimdegradstab.2014.08.003>
- Tuominen, M. (2011). The name of the thesis: Atmospheric Plasma Treatment in Extrusion Coating, Topic: The Effect of Flame Treatment on the Sealability of Extrusion Coated Paper. In S. Kärkkäinen (Ed.), *PaPSaT, International Doctoral Programme in Pulp and Paper Science and Technology in Finland, Yearbook 2011* (pp. 1-5). Espoo: Aalto University School of science and technology.
- Tuominen, M. (2010). The name of the thesis: Surface Treatment in Extrusion Coating, Topic: The Influence of Corona and Flame Treatment on Sealability of Extrusion Coated Paper. In S. Kärkkäinen (Ed.), *PaPSaT, International Doctoral Programme in Pulp and Paper Science and Technology in Finland, Yearbook 2010* (pp. 1-5)
- Keipi, T., Tolvanen, K. E. S., Tolvanen, H., & Konttinen, J. (2016). Thermo-catalytic decomposition of methane: The effect of reaction parameters on process design and the utilization possibilities of the produced carbon. *Energy Conversion and Management*, 126, 923-934. <https://doi.org/10.1016/j.enconman.2016.08.060>
- Levänen, E., & Singh, A. (2018). *Titanium oxide based nanoparticles by laser ablation in supercritical carbon dioxide*. Paper presented at The 8th International Conference on Manipulation, Manufacturing and measurement on the Nanoscale, China.
- Bollström, R., Tuominen, M., Määttänen, A., Peltonen, J., & Toivakka, M. (2011). Top layer coatibility on barrier coatings. In *TAPPI's PaperCon 2011, May 1-4, 2011, Covington, KY, USA. Paper 360 - Special PaperCon Edition* (pp. 1-11). (TAPPI International Conference Papercon). Norcross, GA: TAPPI.
- Bollström, R., Tuominen, M., Määttänen, A., Peltonen, J., & Toivakka, M. (2012). Top layer coatibility on barrier coatings. *Progress in Organic Coatings*, 73(1), 26-32. <https://doi.org/10.1016/j.porgcoat.2011.08.015>
- Lahtinen, K., Johansson, P., Kääriäinen, T., Maydannik, P., Cameron, D., & Kuusipalo, J. (2012). Toward more controlled, nanoscale barrier layers in packaging. *Plastics Research Online*, (17th August), 1-3. <https://doi.org/10.2417/spepro.004237>

Timonen, J., Antikainen, M., Das, A., Sarlin, E., & Vuorinen, J. (2016). *Towards material excellence: Evaluation of Tekes' programmes on materials*. Tekes.

Haapanen, J., Aromaa, M., Teisala, H., Tuominen, M., Stepien, M., Saarinen, J. J., ... Mäkelä, J. M. (2012). Two-component aerosol nanoparticle coating for paperboard on roll-to-roll process. In *EAC-2012 Granada, European Aerosol Conference, 2-7 Sept 2012, Granada, Spain* (pp. 1-1). (European Aerosol Conference EAC). EAA, AECTA.

Honkanen, M., Jung, J., Kuo, C. J., Peles, Y., & Amitay, M. (2010). Two-phase PIV/PTV measurement of bubbly flow across pin fins in a micro-channel. In *7th International Conference on Multiphase Flow ICMF2010, May 30 - June 4, 2010, Tampa, Florida* (pp. 1-9)

Lahtinen, K., Maydannik, P., Johansson, P., Kääriäinen, T., Cameron, D. C., & Kuusipalo, J. (2011). Utilisation of continuous atomic layer deposition process for barrier enhancement of extrusion-coated paper. *Surface and Coatings Technology*, 205(15), 3916-3922. <https://doi.org/10.1016/j.surfcoat.2011.02.009>

Nikkanen, J-P., Kaleva, A., Saarimaa, V., Honkanen, M., Vuorinen, T., Heinonen, S., ... Levänen, E. (2018). *Utilization of CO2 in modification of galvanized steel surface*. Paper presented at The International Symposium on Inorganic and Environmental Materials 2018, Ghent, Belgium.

Solismaa, S., Ismailov, A., Karhu, M., Sreenivasan, H., Lehtonen, M., Kinnunen, P., ... Räisänen, M-L. (2018). Valorization of Finnish mining tailings for use in the ceramics industry. *BULLETIN OF THE GEOLOGICAL SOCIETY OF FINLAND*, 90(1), 33-54. <https://doi.org/10.17741/bgsf/90.1.002>

Teisala, H., Tuominen, M., Stepien, M., Haapanen, J., Mäkelä, J. M., Saarinen, J. J., ... Kuusipalo, J. (2013). Wettability conversion on the liquid flame spray generated superhydrophobic TiO<sub>2</sub> nanoparticle coating on paper and board by photocatalytic decomposition of spontaneously accumulated carbonaceous overlayer. *Cellulose*, 20(1), 391-408. <https://doi.org/10.1007/s10570-012-9825-y>