

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>

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>

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>

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>

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>

Ali-Löyhty, 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>

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>

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

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>

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>

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.

Nikkanen, J-P., Kaleva, A., Saarimaa, V., Honkanen, M., Vuorinen, T., Heinonen, S., ... Levänen, E. (2018). *Utilization of CO<sub>2</sub> in modification of galvanized steel surface*. Paper presented at The International Symposium on Inorganic and Environmental Materials 2018, Ghent, Belgium.

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>

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>

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 Borondipyromethene (Bodipy) and an Expanded Acridinium Cation. *ChemPhotoChem*, 2(3), 277-282. <https://doi.org/10.1002/cptc.201700184>

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>

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>

Solismaa, S., Ismailov, A., Karhu, M., Sreenivasan, H., Lehtonen, M., Kinnunen, P., ... Räsänen, 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>

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>

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>

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>

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>

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>

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>

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>

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>

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>

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

- 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>
- 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>
- 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>
- Timonen, J., Antikainen, M., Das, A., Sarlin, E., & Vuorinen, J. (2016). *Towards material excellence: Evaluation of Tekes' programmes on materials*. Tekes.
- Kölliö, 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>
- Grönqvist, S., Kamppuri, T., Maloney, T., Vehviläinen, M., Liitiä, 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>
- 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>
- 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>
- 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>
- 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>
- 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>
- 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>
- Vehviläinen, M., Kamppuri, T., Grönqvist, 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>

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>

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>

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>

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>

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>

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.

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>

Tuominen, J., Näkki, J., Pajukoski, H., Nyyssönen, 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.

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).

Sarlin, 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*

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>

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>

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>

- 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>
- Koivuluoto, H., Stenroos, C., Ruohomaa, R., Bolelli, G., Lusvardi, 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)
- 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.
- 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>
- 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., Kampuri, 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>
- 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>
- 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>
- 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..
- 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.
- 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.
- 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.polymerdegradstab.2014.08.003>
- 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, 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>

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>

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>

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>

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.

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.

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>

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>

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.

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.

Bollström, R., Tuominen, M., Määttä, 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>

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.

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>

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.

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>

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.

Tuominen, M., Lahti, J., & Kuusipalo, J. (2011). Effects of flame and corona treatment on extrusion coated paper properties. *TAPPI Journal*, 10(10), 29-36.

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. (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.

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.

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.

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>

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>

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)

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>

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.

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)

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)

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)

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)