

Singh S, Rinta-Kanto JM, Kettunen R, Tolvanen H, Lens P, Collins G, Kokko M, Rintala J. 2019. Anaerobic treatment of LCFA-containing synthetic dairy wastewater at 20°C: Process performance and microbial community dynamics. *Science of the Total Environment*. 691:960-968. <https://doi.org/10.1016/j.scitotenv.2019.07.136>

Järvinen A, Timonen H, Karjalainen P, Bloss M, Simonen P, Saarikoski S, Kuuluvainen H, Kalliokoski J, Dal Maso M, Niemi JV, Keskinen J, Rönkkö T. 2019. Particle emissions of Euro VI, EEV and retrofitted EEV city buses in real traffic. *Environmental Pollution*. 250:708-716. <https://doi.org/10.1016/j.envpol.2019.04.033>

Kuula J, Kuuluvainen H, Rönkkö T, Niemi JV, Saukko E, Portin H, Aurela M, Saarikoski S, Rostedt A, Hillamo R, Timonen H. 2019. Applicability of optical and diffusion charging-based particulate matter sensors to urban air quality measurements. *Aerosol and Air Quality Research*. 19(5):1024-1039. <https://doi.org/10.4209/aaqr.2018.04.0143>

Salo L, Mylläri F, Maasikmets M, Niemelä V, Konist A, Vainumäe K, Kupri HL, Titova R, Simonen P, Aurela M, Bloss M, Keskinen J, Timonen H, Rönkkö T. 2019. Emission measurements with gravimetric impactors and electrical devices: An aerosol instrument comparison. *Aerosol Science and Technology*. 53(5):526-539. <https://doi.org/10.1080/02786826.2019.1578858>

Aakko-Saksa P, Koponen P, Aurela M, Vesala H, Piimäkorpi P, Murtonen T, Sippula O, Koponen H, Karjalainen P, Kuitinen N, Panteliadis P, Rönkkö T, Timonen H. 2018. Considerations in analysing elemental carbon from marine engine exhaust using residual, distillate and biofuels. *Journal of Aerosol Science*. 126:191-204. <https://doi.org/10.1016/j.jaerosci.2018.09.005>

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

Chatterjee P, Lahtinen L, Kokko M, Rintala J. 2018. Remediation of sedimented fiber originating from pulp and paper industry: Laboratory scale anaerobic reactor studies and ideas of scaling up. *Water Research*. 143:209-217. <https://doi.org/10.1016/j.watres.2018.06.054>

Jain R, Peräniemi S, Jordan N, Vogel M, Weiss S, Foerstendorf H, Lakaniemi A-M. 2018. Removal and recovery of uranium(VI) by waste digested activated sludge in fed-batch stirred tank reactor. *Water Research*. 142:167-175. <https://doi.org/10.1016/j.watres.2018.05.042>

Kuuluvainen H, Poikkimäki M, Järvinen A, Kuula J, Irjala M, Dal Maso M, Keskinen J, Timonen H, Niemi JV, Rönkkö T. 2018. Vertical profiles of lung deposited surface area concentration of particulate matter measured with a drone in a street canyon. *Environmental Pollution*. 241:96-105. <https://doi.org/10.1016/j.envpol.2018.04.100>

Saari S, Arffman A, Harra J, Rönkkö T, Keskinen J. 2018. Performance evaluation of the HR-ELPI + inversion. *Aerosol Science and Technology*. 52(9):1037-1047. <https://doi.org/10.1080/02786826.2018.1500679>

Hyväluoma J, Kulju S, Hannula M, Wikberg H, Källi A, Rasa K. 2018. Quantitative characterization of pore structure of several biochars with 3D imaging. *Environmental Science and Pollution Research*. 25(26):1-11. <https://doi.org/10.1007/s11356-017-8823-x>

Järvinen A, Keskinen J, Yli-Ojanperä J. 2018. Extending the Faraday cup aerosol electrometer based calibration method up to 5 µm. *Aerosol Science and Technology*. 52(8):828-840. <https://doi.org/10.1080/02786826.2018.1472742>

Tan LC, Espinosa-Ortiz EJ, Nancharaiah YV, van Hullebusch ED, Gerlach R, Lens PN. 2018. Selenate removal in biofilm systems: Effect of nitrate and sulfate on selenium removal efficiency, biofilm structure and microbial community. *Journal of Chemical Technology and Biotechnology*. 93(8):2380-2389. <https://doi.org/10.1002/jctb.5586>

Oluoti K, Doddapaneni TRKC, Richards T. 2018. Investigating the kinetics and biofuel properties of *Alstonia congestis* and *Ceiba pentandra* via torrefaction. *Energy*. 150:134-141. <https://doi.org/10.1016/j.energy.2018.02.086>

Kokko M, Koskue V, Rintala J. 2018. Anaerobic digestion of 30–100-year-old boreal lake sedimented fibre from the pulp industry: Extrapolating methane production potential to a practical scale. *Water Research*. 133:218-226. <https://doi.org/10.1016/j.watres.2018.01.041>

Šutka A, Vanags M, Joost U, Šmits K, Ruža J, Ločs J, Kleperis 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>

Leivo V, Prasauskas T, Du L, Turunen M, Kiviste M, Aaltonen A, Martuzevicius D, Haverinen-Shaughnessy U. 2018. Indoor thermal environment, air exchange rates, and carbon dioxide concentrations before and after energy retro fits in Finnish and Lithuanian multi-family buildings. *Science of the Total Environment*. 621:398-406. <https://doi.org/10.1016/j.scitotenv.2017.11.227>

Streck J, Hank C, Neuner M, Gil-Carrera L, Kokko M, Pauliuk S, Schaadt A, Kerzenmacher S, White RJ. 2018. Bio-electrochemical conversion of industrial wastewater-COD combined with downstream methanol synthesis-an economic and life cycle assessment. *Green Chemistry*. 20(12):2742-2762. <https://doi.org/10.1039/c8gc00543e>

Amanatidis S, Ntziachristos L, Karjalainen P, Saukko E, Simonen P, Kuittinen N, Aakko-Saksa P, Timonen H, Rönkkö T, Keskinen J. 2018. Comparative performance of a thermal denuder and a catalytic stripper in sampling laboratory and marine exhaust aerosols. *Aerosol Science and Technology*. 52(4):1-13. <https://doi.org/10.1080/02786826.2017.1422236>

Rostedt A, Keskinen J. 2018. Flow rate-independent electrical aerosol sensor. *Aerosol Science and Technology*. 52(11):1283-1292. <https://doi.org/10.1080/02786826.2018.1498586>

Afolaranmi SO, Ramis Ferrer B, Martinez Lastra JL. 2018. Technology review: prototyping platforms for monitoring ambient conditions. *International Journal of Environmental Health Research*. 28(3):253-279. <https://doi.org/10.1080/09603123.2018.1468423>

Niemelä NP, Tolvanen H, Saarinen T, Leppänen A, Joronen T. 2017. CFD based reactivity parameter determination for biomass particles of multiple size ranges in high heating rate devolatilization. *Energy*. 128:676-687. <https://doi.org/10.1016/j.energy.2017.04.023>

Dessi P, Lakaniemi A-M, Lens PNL. 2017. Biohydrogen production from xylose by fresh and digested activated sludge at 37, 55 and 70 °C. *Water Research*. 115:120-129. <https://doi.org/10.1016/j.watres.2017.02.063>

Ledezma P, Jermakka J, Keller J, Freguia S. 2017. Recovering Nitrogen as a Solid without Chemical Dosing: Bio-Electroconcentration for Recovery of Nutrients from Urine. *Environmental Science and Technology Letters*. 4(3):119-124. <https://doi.org/10.1021/acs.estlett.7b00024>

Järvinen A, Karjalainen P, Bloss M, Potila O, Simonen P, Kuuluvainen H, Timonen H, Saarikoski S, Niemi JV, Keskinen J, Rönkkö T. 2017. Chasing measurements for real-world emissions of city buses. *Julkaisun esittämispaikka: European Aerosol Conference 2017, Zürich, Sveitsi*.

Arffman A, Juuti P, Harra J, Keskinen J. 2017. Differential diffusion analyzer. *Aerosol Science and Technology*. 51(12):1429-1437. <https://doi.org/10.1080/02786826.2017.1367089>

Auvinen H, Gagnon V, Rousseau DPL, du Laing G. 2017. Fate of metallic engineered nanomaterials in constructed wetlands: prospection and future research perspectives. *Reviews in Environmental Science and Bio-Technology*. 16(2):207–222. <https://doi.org/10.1007/s11157-017-9427-0>

Olin M, Kausiala O, Alanen J, Rönkkö T, Dal Maso M. 2017. Finding H<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O nucleation rates in high H<sub>2</sub>SO<sub>4</sub> concentrations. Halonen R, Nikandrova A, Kontkanen J, Enroth JA, Vehkamäki H, Toimittajat. *teoksessa Proceedings of the 20th International Conference on Nucleation and Atmospheric Aerosols*. Aerosolitutkimusseura r.y., Finnish Association for Aerosol Research c/o University of Helsinki, Department of Physics. Sivut 476-479. (Report Series in

Aerosol Science; 200).

Karjalainen P, Saari S, Kuuluvainen H, Kalliohaka T, Taipale A, Rönkkö T. 2017. Performance of ventilation filtration technologies on characteristic traffic related aerosol down to nanocluster size. *Aerosol Science and Technology*. 51(12):1398-1408. <https://doi.org/10.1080/02786826.2017.1356904>

Dal Maso M, Gao J, Järvinen A, Li H, Luo D, Janka K, Rönkkö T. 2016. Improving urban air quality measurements by a diffusion charger based electrical particle sensors: A field study in Beijing, China. *Aerosol and Air Quality Research*. 16(12):3001-3011.

van Hullebusch ED, Guibaud G, Simon S, Lenz M, Yekta SS, Feroso FG, Jain R, Duester L, Roussel J, Guillon E, Skyllberg U, Almeida CMR, Pechaud Y, Garuti M, Frunzo L, Esposito G, Carliell-Marquet C, Ortner M, Collins G. 2016. Methodological approaches for fractionation and speciation to estimate trace element bioavailability in engineered anaerobic digestion ecosystems: An overview. *Critical Reviews in Environmental Science and Technology*. 46(16):1324-1366. <https://doi.org/10.1080/10643389.2016.1235943>

Juuti P, Arffman A, Rostedt A, Harra J, Mäkelä JM, Keskinen J. 2016. Real-time effective density monitor (DENSMO) for aerosol nanoparticle production. *Aerosol Science and Technology*. 50(5):487-496. <https://doi.org/10.1080/02786826.2016.1168511>

Dessi P, Jain R, Singh S, Seder-Colomina M, van Hullebusch ED, Rene ER, Ahammad SZ, Carucci A, Lens PNL. 2016. Effect of temperature on selenium removal from wastewater by UASB reactors. *Water Research*. 94:146-154. <https://doi.org/10.1016/j.watres.2016.02.007>

Pihlava K, Keskinen J, Yli-Ojanperä J. 2016. Improving the signal-to-noise ratio of Faraday cup aerosol electrometer based aerosol instrument calibrations. *Aerosol Science and Technology*. 50(4):373-379. <https://doi.org/10.1080/02786826.2016.1153035>

Mensah-Attipoe J, Saari S, Veijalainen AM, Pasanen P, Keskinen J, Leskinen JTT, Reponen T. 2016. Release and characteristics of fungal fragments in various conditions. *Science of the Total Environment*. 547:234-243. <https://doi.org/10.1016/j.scitotenv.2015.12.095>

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

Saari S, Järvinen S, Reponen T, Mensah-Attipoe J, Pasanen P, Toivonen J, Keskinen J. 2016. Identification of single microbial particles using electro-dynamic balance assisted laser-induced breakdown and fluorescence spectroscopy. *Aerosol Science and Technology*. 50(2):126-132. <https://doi.org/10.1080/02786826.2015.1134764>

Kuuluvainen H, Saari S, Mensah-Attipoe J, Arffman A, Pasanen P, Reponen T, Keskinen J. 2016. Triboelectric charging of fungal spores during resuspension and rebound. *Aerosol Science and Technology*. 50(2):187-197. <https://doi.org/10.1080/02786826.2016.1141164>

Seo JY, Ramasamy P, Kim B, Seo JC, Park JY, Na JG, Jeon SG, Park SB, Lee K, Oh YK. 2016. Downstream integration of microalgae harvesting and cell disruption by means of cationic surfactant-decorated Fe<sub>3</sub>O<sub>4</sub> nanoparticles. *Green Chemistry*. 18(14):3981-3989. <https://doi.org/10.1039/c6gc00904b>

Espinosa-Ortiz EJ, Shakya M, Jain R, Rene ER, van Hullebusch ED, Lens PNL. 2016. Sorption of zinc onto elemental selenium nanoparticles immobilized in Phanerochaete chrysosporium pellets. *Environmental Science and Pollution Research*. 23(21):21619-21630. <https://doi.org/10.1007/s11356-016-7333-6>

Kinnunen V, Ylä-Outinen A, Rintala J. 2015. Mesophilic anaerobic digestion of pulp and paper industry biosludge-long-term reactor performance and effects of thermal pretreatment. *Water Research*. 87:105-111. <https://doi.org/10.1016/j.watres.2015.08.053>

Lay C-H, Kokko ME, Puhakka JA. 2015. Power generation in fed-batch and continuous up-flow microbial fuel cell from synthetic wastewater. *Energy*. 91:235-241. <https://doi.org/10.1016/j.energy.2015.08.029>

Olin M, Dal Maso M. 2015. Modelling new particle formation and growth using combined power law and log-normal distribution model. teoksessa EAC 2015, European Aerosol Conference. Milan, Italy: Italian Aerosol Society.

Arffman A, Kuuluvainen H, Harra J, Vuorinen O, Juuti P, Yli-Ojanperä J, Mäkelä J, Keskinen J. 2015. The critical velocity of rebound determined for sub-micron silver particles with a variable nozzle area impactor. *Journal of Aerosol Science*. 86:32-43. <https://doi.org/10.1016/j.jaerosci.2015.04.003>

Karvountzis-Kontakiotis A, Ntziachristos L, Samaras Z, Dimaratos A, Peckham M. 2015. Experimental Investigation of Cyclic Variability on Combustion and Emissions of a High-Speed SI Engine. teoksessa SAE 2015 World Congress and Exhibition. April toim. SAE International. <https://doi.org/10.4271/2015-01-0742>

Olin MP, Dal Maso MI. 2015. Modelling particle distribution using combined power-law and log-normal distribution model. teoksessa Proceedings of the NOSA-FAAR Symposium 2015. Kuopio, Finland: Aerosolitutkimusseura r.y., Finnish Association for Aerosol Research c/o University of Helsinki, Department of Physics.

Ramasamy P, Lee K, Lee J, Oh YK. 2015. Breaking dormancy: An energy-efficient means of recovering astaxanthin from microalgae. *Green Chemistry*. 17(2):1226-1234. <https://doi.org/10.1039/c4gc01413h>

Saari S, Niemi JV, Rönkkö T, Kuuluvainen H, Järvinen A, Pirjola L, Aurela M, Hillamo R, Keskinen J. 2015. Seasonal and diurnal variations of fluorescent bioaerosol concentration and size distribution in the urban environment. *Aerosol and Air Quality Research*. 15(2):572-581. <https://doi.org/10.4209/aaqr.2014.10.0258>

Karavalakis G, Short D, Chen V, Espinoza C, Berte T, Durbin T, Asa-Awuku A, Jung H, Ntziachristos L, Amanatidis S, Bergmann A. 2014. Evaluating Particulate Emissions from a Flexible Fuel Vehicle with Direct Injection when Operated on Ethanol and Iso-butanol Blends. teoksessa SAE 2014 International Powertrains, Fuels and Lubricants Meeting, FFL 2014. SAE International. <https://doi.org/10.4271/2014-01-2768>

Olin MP, Arffman AS, Dal Maso MI, Keskinen JO, Rönkkö TS. 2014. Simulation of the Formation Process of Diesel Exhaust Particle Emissions. teoksessa Physics Days 2014. Tampere, Finland: Finnish Physical Society.

Giechaskiel B, Maricq M, Ntziachristos L, Dardiotis C, Wang X, Axmann H, Bergmann A, Schindler W. 2014. Review of motor vehicle particulate emissions sampling and measurement: From smoke and filter mass to particle number. *Journal of Aerosol Science*. 67:48-86. <https://doi.org/10.1016/j.jaerosci.2013.09.003>

Du L, Prasauskas T, Leivo V, Turunen M, Aaltonen A, Kiviste M, Martuzevicius D, Haverinen-Shaughnessy U. 2014. Building energy-efficiency interventions in North-East Europe: Effects on indoor environmental quality and public health. teoksessa Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate. International Society of Indoor Air Quality and Climate . Sivut 637-639.

Reponen T, Saari S, Mensah-Attipoe J, Ukkonen A, Veijalainen A, Pasanen P, Keskinen J. 2014. Characterization of charge in airborne fungal spores. teoksessa Indoor Air 2014 - 13th International Conference on Indoor Air Quality and Climate. International Society of Indoor Air Quality and Climate . Sivut 359-361.

Amanatidis S, Ntziachristos L, Samaras Z, Kouridis C, Janka K, Tikkanen J. 2014. Use of a PPS sensor in evaluating the impact of fuel efficiency improvement technologies on the particle emissions of a euro 5 diesel car. teoksessa SAE 2014 World Congress and Exhibition. SAE International. <https://doi.org/10.4271/2014-01-1601>

Caserini S, Pastorello C, Gaifami P, Ntziachristos L. 2013. Impact of the dropping activity with vehicle age on air pollutant emissions. *Atmospheric Pollution Research*. 4(3):282-289. <https://doi.org/10.5094/APR.2013.031>

Kumar MS, Praveenkumar R, Ilavarasi A, Rajeshwari K, Thajuddin N. 2013. Biochemical changes of fresh water cyanobacteria *dolichospermum flos-aquae* NTMS07 to chromium-induced stress with special reference to antioxidant enzymes and cellular fatty acids. *Bulletin of Environmental Contamination and Toxicology*. 90(6):730-735. <https://doi.org/10.1007/s00128-013-0984-9>

Rasi S, Seppälä M, Rintala J. 2013. Organic silicon compounds in biogases produced from grass silage, grass and maize in laboratory batch assays. *Energy*. 52:137-142. <https://doi.org/10.1016/j.energy.2013.01.015>

Ntziachristos L, Amanatidis S, Samaras Z, Janka K, Tikkanen J. 2013. Application of the Pegasor Particle Sensor for the Measurement of Mass and Particle Number Emissions. *SAE International Journal of Fuels and Lubricants*. 6(2).

Ntziachristos L, Amanatidis S, Samaras Z, Giechaskiel B, Bergmann A. 2013. Use of a Catalytic Stripper as an Alternative to the Original PMP Measurement Protocol. *SAE International Journal of Fuels and Lubricants*. 6(2).

Amanatidis S, Ntziachristos L, Giechaskiel B, Katsaounis D, Samaras Z, Bergmann A. 2013. Evaluation of an oxidation catalyst ("catalytic stripper") in eliminating volatile material from combustion aerosol. *Journal of Aerosol Science*. 57:144-155. <https://doi.org/10.1016/j.jaerosci.2012.12.001>

Amanatidis S, Ntziachristos L, Samaras Z, Janka K, Tikkanen J. 2013. Applicability of the Pegasor particle sensor to measure particle number, mass and PM emissions. teoksessa 11th International Conference on Engines and Vehicles, ICE 2013. <https://doi.org/10.4271/2013-24-0167>

Ntziachristos L, Amanatidis S, Samaras Z, Janka K, Tikkanen J. 2013. Application of the pegasor particle sensor for the measurement of mass and particle number emissions. teoksessa SAE 2013 World Congress and Exhibition. SAE International. <https://doi.org/10.4271/2013-01-1561>

Ntziachristos L, Amanatidis S, Samaras Z, Giechaskiel B, Bergmann A. 2013. Use of a catalytic stripper as an alternative to the original PMP measurement protocol. teoksessa SAE 2013 World Congress and Exhibition. SAE International. <https://doi.org/10.4271/2013-01-1563>

Bayr S, Rintala J. 2012. Thermophilic anaerobic digestion of pulp and paper mill primary sludge and co-digestion of primary and secondary sludge. *Water Research*. 46(15):4713-4720. <https://doi.org/10.1016/j.watres.2012.06.033>

Ntziachristos L, Fragkiadoulakis P, Samaras Z, Janka K, Tikkanen J. 2011. Exhaust particle sensor for OBD application. teoksessa SAE 2011 World Congress and Exhibition. <https://doi.org/10.4271/2011-01-0626>

Sivula L, Ilander A, Väisänen A, Rintala J. 2010. Weathering of gasification and grate bottom ash in anaerobic conditions. *Journal of Hazardous Materials*. 174(1-3):344-351. <https://doi.org/10.1016/j.jhazmat.2009.09.056>

Dressen MHCL, Stumpel JE, Van De Kruijs BHP, Meuldijk J, Vekemans JAJM, Hulshof LA. 2009. The mechanism of the oxidation of benzyl alcohol by iron(III)nitrate: Conventional versus microwave heating. *Green Chemistry*. 11(1):60-64. <https://doi.org/10.1039/b813030b>

Sormunen K, Ettala M, Rintala J. 2008. Internal leachate quality in a municipal solid waste landfill: Vertical, horizontal and temporal variation and impacts of leachate recirculation. *Journal of Hazardous Materials*. 160(2-3):601-607. <https://doi.org/10.1016/j.jhazmat.2008.03.081>

Einola J-KM, Sormunen KM, Rintala JA. 2008. Methane oxidation in a boreal climate in an experimental landfill cover composed from mechanically-biologically treated waste. *Science of the Total Environment*. 407(1):67-83. <https://doi.org/10.1016/j.scitotenv.2008.08.016>

Sormunen K, Ettala M, Rintala J. 2008. Detailed internal characterisation of two Finnish landfills by waste sampling. *Waste Management*. 28(1):151-163. <https://doi.org/10.1016/j.wasman.2007.01.003>

Rasi S, Läntelä J, Veijanen A, Rintala J. 2008. Landfill gas upgrading with countercurrent water wash. *Waste Management*. 28(9):1528-1534. <https://doi.org/10.1016/j.wasman.2007.03.032>

Einola JKM, Karhu AE, Rintala JA. 2008. Mechanically-biologically treated municipal solid waste as a support medium for microbial methane oxidation to mitigate landfill greenhouse emissions. *Waste Management*. 28(1):97-111. <https://doi.org/10.1016/j.wasman.2007.01.002>

Kettunen RH, Einola JKM, Rintala JA. 2006. Landfill methane oxidation in engineered soil columns at low temperature. *Water Air and Soil Pollution*. 177(1-4):313-334. <https://doi.org/10.1007/s11270-006-9176-0>

Jokela JPY, Rintala JA. 2003. Anaerobic solubilisation of nitrogen from municipal solid waste (MSW). *Reviews in Environmental Science and Bio-Technology*. 2(1):67-77. <https://doi.org/10.1023/B:RESB.0000022830.62176.36>

Suvilampi J, Rintala J. 2003. Thermophilic aerobic wastewater treatment, process performance, biomass characteristics, and effluent quality. *Reviews in Environmental Science and Bio-Technology*. 2(1):35-51. <https://doi.org/10.1023/B:RESB.0000022959.46025.9a>