

**Considerations in analysing elemental carbon from marine engine exhaust using residual, distillate and biofuels.** / Aakko-Saksa, Päivi; Koponen, Päivi; Aurela, Minna; Vesala, Hannu; Piimäkorpi, Pekka; Murtonen, Timo; Sippula, Olli; Koponen, Hanna; Karjalainen, Panu; Kuittinen, Niina; Panteliadis, Pavlos; Rönkkö, Topi; Timonen, Hilikka.

In: *Journal of Aerosol Science*, Vol. 126, 12.2018, p. 191-204.

Research output: Contribution to journal › Article › Scientific › peer-review

**Physical Characteristics of Particle Emissions from a Medium Speed Ship Engine Fueled with Natural Gas and Low-Sulfur Liquid Fuels.** / Alanen, Jenni; Isotalo, Mia; Kuittinen, Niina; Simonen, Pauli; Martikainen, Sampsa; Kuuluvainen, Heino; Honkanen, Mari; Lehtoranta, Kati; Nyysönen, Sami; Vesala, Hannu; Timonen, Hilikka; Aurela, Minna; Keskinen, Jorma; Rönkkö, Topi.

In: *Environmental Science and Technology*, Vol. 54, No. 9, 05.05.2020, p. 5376-5384.

Research output: Contribution to journal › Article › Scientific › peer-review

**Impact of selective catalytic reduction on exhaust particle formation over excess ammonia events.** / Amanatidis, Stavros; Ntziachristos, Leonidas; Giechaskiel, Barouch; Bergmann, Alexander; Samaras, Zissis.

In: *Environmental Science and Technology*, Vol. 48, No. 19, 07.10.2014, p. 11527-11534.

Research output: Contribution to journal › Article › Scientific › peer-review

**Evaluation of an oxidation catalyst ("catalytic stripper") in eliminating volatile material from combustion aerosol.** /

Amanatidis, Stavros; Ntziachristos, Leonidas; Giechaskiel, Barouch; Katsaounis, Dimitrios; Samaras, Zissis; Bergmann, Alexander.

In: *Journal of Aerosol Science*, Vol. 57, 03.2013, p. 144-155.

Research output: Contribution to journal › Article › Scientific › peer-review

**Comparative performance of a thermal denuder and a catalytic stripper in sampling laboratory and marine exhaust aerosols.** / Amanatidis, Stavros; Ntziachristos, Leonidas; Karjalainen, Panu; Saukko, Erkki; Simonen, Pauli; Kuittinen, Niina; Aakko-Saksa, Päivi; Timonen, Hilikka; Rönkkö, Topi; Keskinen, Jorma.

In: *Aerosol Science and Technology*, Vol. 52, No. 4, 2018, p. 1-13.

Research output: Contribution to journal › Article › Scientific › peer-review

**The critical velocity of rebound determined for sub-micron silver particles with a variable nozzle area impactor.** / Arffman, Anssi; Kuuluvainen, Heino; Harra, Juha; Vuorinen, Ossi; Juuti, Paxton; Yli-Ojanperä, Jaakko; Mäkelä, Jyrki; Keskinen, Jorma.

In: *Journal of Aerosol Science*, Vol. 86, 01.08.2015, p. 32-43.

Research output: Contribution to journal › Article › Scientific › peer-review

**Differential diffusion analyzer.** / Arffman, A.; Juuti, P.; Harra, J.; Keskinen, J.

In: *Aerosol Science and Technology*, Vol. 51, No. 12, 2017, p. 1429-1437.

Research output: Contribution to journal › Article › Scientific › peer-review

**Screening pretreatment methods to enhance thermophilic anaerobic digestion of pulp and paper mill wastewater treatment secondary sludge.** / Bayr, Suvi; Kaparaju, Prasad; Rintala, Jukka.

In: *Chemical Engineering Journal*, Vol. 223, 01.05.2013, p. 479-486.

Research output: Contribution to journal › Article › Scientific › peer-review

**Distinguishing fuel and lubricating oil combustion products in diesel engine exhaust particles.** / Carbone, Samara; Timonen, Hilikka J.; Rostedt, Antti; Happonen, Matti; Rönkkö, Topi; Keskinen, Jorma; Ristimäki, Jyrki; Korpi, Heikki; Artaxo, Paulo; Canagaratna, Manjula; Worsnop, Douglas; Canonaco, Francesco; Prévôt, André S.H.; Hillamo, Risto; Saarikoski, Sanna.

In: *Aerosol Science and Technology*, Vol. 53, No. 5, 04.05.2019, p. 594-607.

Research output: Contribution to journal › Article › Scientific › peer-review

**Effect of tungsten and selenium on C<sub>1</sub> gas bioconversion by an enriched anaerobic sludge and microbial community analysis.** / Chakraborty, Samayita; Rene, Eldon R.; Lens, Piet N.L.; Rintala, Jukka; Veiga, María C.; Kennes, Christian.

In: *Chemosphere*, Vol. 250, 126105, 2020.

Research output: Contribution to journal › Article › Scientific › peer-review

**Particle growth with photochemical age from new particle formation to haze in the winter of Beijing, China.** / Chu, Biwu; Dada, Lubna; Liu, Yongchun; Yao, Lei; Wang, Yonghong; Du, Wei; Cai, Jing; Dällenbach, K. R.; Chen, Xuemeng; Simonen, Pauli; Zhou, Ying; Deng, Chenjuan; Fu, Yueyun; Yin, Rujing; Li, Haiyan; He, Xu Cheng; Feng, Zeming; Yan, Chao; Kangasluoma, Juha; Bianchi, Federico; Jiang, Jingkun; Kujansuu, Joni; Kerminen, Veli Matti; Petäjä, Tuukka; He, Hong; Kulmala, Markku.

In: *Science of the Total Environment*, Vol. 753, 142207, 2020.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Improving urban air quality measurements by a diffusion charger based electrical particle sensors : A field study in Beijing, China.** / Dal Maso, Miikka; Gao, Jian; Järvinen, Anssi; Li, Hui; Luo, Datong; Janka, Kauko; Rönkkö, Topi.

In: *Aerosol and Air Quality Research*, Vol. 16, No. 12, 01.12.2016, p. 3001-3011.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Chemolithotrophic denitrification in biofilm reactors.** / Di Capua, Francesco; Papirio, Stefano; Lens, Piet N L; Esposito, Giovanni.

In: *Chemical Engineering Journal*, Vol. 280, 2015, p. 643-657.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Adsorption of furfural from torrefaction condensate using torrefied biomass.** / Doddapaneni, Tharaka Rama Krishna C.; Jain, Rohan; Praveenkumar, Ramasamy; Rintala, Jukka; Romar, Henrik; Kontinen, Jukka.

In: *Chemical Engineering Journal*, Vol. 334, 2018, p. 558-568.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**The mechanism of the oxidation of benzyl alcohol by iron(III)nitrate : Conventional versus microwave heating.** / Dressen, Mark H C L; Stumpel, Jelle E.; Van De Kruijs, Bastiaan H P; Meuldijk, Jan; Vekemans, Jef A J M; Hulshof, Lambertus A.

In: *Green Chemistry*, Vol. 11, No. 1, 2009, p. 60-64.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Methane oxidation in a boreal climate in an experimental landfill cover composed from mechanically-biologically treated waste.** / Einola, J.-K. M.; Sormunen, K. M.; Rintala, J. A.

In: *Science of the Total Environment*, Vol. 407, No. 1, 15.12.2008, p. 67-83.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Volatile fatty acid production from Kraft mill foul condensate in upflow anaerobic sludge blanket reactors.** / Eregowda, Tejaswini; Kokko, Marika E.; Rene, Eldon R.; Rintala, Jukka; Lens, Piet N.L.

In: *Environmental Technology (United Kingdom)*, 2020.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Sorption of zinc onto elemental selenium nanoparticles immobilized in Phanerochaete chrysosporium pellets.** / Espinosa-Ortiz, Erika J.; Shakya, Manisha; Jain, Rohan; Rene, Eldon R.; van Hullebusch, Eric D.; Lens, Piet N. L.

In: *Environmental Science and Pollution Research*, Vol. 23, No. 21, 2016, p. 21619-21630.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Induction of genotoxic effects by chlorohydroxyfuranones, byproducts of water disinfection, in E. coli K-12 cells recovered from various organs of mice.** / Fekadu, K.; Parzefall, W.; Kronberg, L.; Franzen, R.; Schulte-Hermann, R.; Knasmüller, S.

In: *Environmental and Molecular Mutagenesis*, Vol. 24, No. 4, 1994, p. 317-324.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Ring-chain tautomerism of chlorinated hydroxyfuranones and reaction with nucleosides.** / Franzén, Robert; Tanabe, Kiyoshi; Morita, Masatoshi.

In: *Chemosphere*, Vol. 38, No. 5, 02.1999, p. 973-980.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Isolation of a MX-guanosine adduct formed at physiological conditions.** / Franzén, Robert; Tanabe, Kiyoshi; Morita, Masatoshi.

In: *Chemosphere*, Vol. 36, No. 13, 06.1998, p. 2803-2808.

Research output: [Contribution to journal](#) › [Article](#) › [Scientific](#) › [peer-review](#)

**Determination of chlorinated 5-methyl-5-hydroxyfuranones in drinking water, in chlorinated humic water, and in pulp bleaching liquor.** / Franzén, Robert; Kronberg, Leif.

In: Environmental Science and Technology, Vol. 28, No. 12, 1994, p. 2222-2227.

Research output: Contribution to journal > Article > Scientific > peer-review

**Cell toxicity and oxidative potential of engine exhaust particles : Impact of using particulate filter or biodiesel fuel blend.** / Gerlofs-Nijland, Miriam E.; Totlandsdal, Annike I.; Tzamkiozis, Theodoros; Leseman, Daan L A C; Samaras, Zissis; Låg, Marit; Schwarze, Per; Ntziachristos, Leonidas; Cassee, Flemming R.

In: Environmental Science and Technology, Vol. 47, No. 11, 04.06.2013, p. 5931-5938.

Research output: Contribution to journal > Article > Scientific > peer-review

**Review of motor vehicle particulate emissions sampling and measurement : From smoke and filter mass to particle number.** / Giechaskiel, Barouch; Maricq, Matti; Ntziachristos, Leonidas; Dardiotis, Christos; Wang, Xiaoliang; Axmann, Harald; Bergmann, Alexander; Schindler, Wolfgang.

In: Journal of Aerosol Science, Vol. 67, 01.2014, p. 48-86.

Research output: Contribution to journal > Review Article > Scientific > peer-review

**Effects of anode materials on electricity production from xylose and treatability of TMP wastewater in an up-flow microbial fuel cell.** / Haavisto, Johanna; Dessì, Paolo; Chatterjee, Pritha; Honkanen, Mari; Noori, Md Tabish; Kokko, Marika; Lakaniemi, Aino Maija; Lens, Piet N.L.; Puhakka, Jaakko A.

In: Chemical Engineering Journal, Vol. 372, 15.09.2019, p. 141-150.

Research output: Contribution to journal > Article > Scientific > peer-review

**Kinetics and modelling of thiosulphate biotransformations by haloalkaliphilic Thioalkalivibrio versutus.** / Hajdu-Rahkama, Réka; Özkaya, Bestamin; Lakaniemi, Aino Maija; Puhakka, Jaakko A.

In: Chemical Engineering Journal, Vol. 401, 126047, 2020.

Research output: Contribution to journal > Article > Scientific > peer-review

**Toward elemental analysis of ambient single particles using electrodynamic balance and laser-induced breakdown spectroscopy.** / Heikkilä, Paavo; Rossi, Jussi; Rostedt, Antti; Huhtala, Janne; Järvinen, Anssi; Toivonen, Juha; Keskinen, Jorma.

In: Aerosol Science and Technology, 2020.

Research output: Contribution to journal > Article > Scientific > peer-review

**Quantitative characterization of pore structure of several biochars with 3D imaging.** / Hyväluoma, Jari; Kulju, Sampo; Hannula, Markus; Wikberg, Hanne; Källi, Anssi; Rasa, Kimmo.

In: Environmental Science and Pollution Research, Vol. 25, No. 26, 09.2018, p. 1-11.

Research output: Contribution to journal > Article > Scientific > peer-review

**CO-digestion of grass silage and cow manure in a CSTR by re-circulation of alkali treated solids of the digestate.** / Jagadabhi, P. S.; Lehtomäki, A.; Rintala, J.

In: Environmental Technology, Vol. 29, No. 10, 10.2008, p. 1085-1093.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effect of macro- and micro-nutrients addition during anaerobic mono-digestion of grass silage in leach-bed reactors.** / Jagadabhi, Padma Shanthi; Kaparaju, Prasad; Väisänen, Ari; Rintala, Jukka.

In: Environmental Technology, Vol. 40, No. 4, 2019, p. 418-429.

Research output: Contribution to journal > Article > Scientific > peer-review

**Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles.** / Jain, Rohan; Dominic, Domician; Jordan, Norbert; Rene, Eldon R.; Weiss, Stephan; van Hullebusch, Eric D.; Hübner, René; Lens, Piet N L.

In: Chemical Engineering Journal, Vol. 284, 2016, p. 917-925.

Research output: Contribution to journal > Article > Scientific > peer-review

**Higher Cd adsorption on biogenic elemental selenium nanoparticles.** / Jain, Rohan; Dominic, Domician; Jordan, Norbert; Rene, Eldon R.; Weiss, Stephan; van Hullebusch, Eric D.; Hübner, René; Lens, Piet N L.  
In: ENVIRONMENTAL CHEMISTRY LETTERS, Vol. 14, No. 3, 09.2016, p. 381–386.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Extending the Faraday cup aerosol electrometer based calibration method up to 5 µm.** / Järvinen, A.; Keskinen, J.; Yli-Ojanperä, J.  
In: Aerosol Science and Technology, Vol. 52, No. 8, 03.08.2018, p. 828-840.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Real-time effective density monitor (DENSMO) for aerosol nanoparticle production.** / Juuti, Paxton; Arffman, Anssi; Rostedt, Antti; Harra, Juha; Mäkelä, Jyrki M.; Keskinen, Jorma.  
In: Aerosol Science and Technology, Vol. 50, No. 5, 03.05.2016, p. 487-496.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Fabrication of fiber filters with antibacterial properties for VOC and particle removal.** / Juuti, Paxton; Nikka, Markus; Gunell, Marianne; Eerola, Erkki; Saarinen, Jarkko J.; Omori, Youichi; Seto, Takafumi; Mäkelä, Jyrki M.  
In: Aerosol and Air Quality Research, Vol. 19, No. 8, 01.08.2019, p. 1892-1899.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Thermophilic anaerobic digestion of industrial orange waste.** / Kaparaju, P. L N; Rintala, J. A.  
In: Environmental Technology, Vol. 27, No. 6, 06.2006, p. 623-633.  
Research output: Contribution to journal › Article › Scientific › peer-review

**The effects of post-treatments and temperature on recovering the methane potential of >2 mm solid fraction of digested cow manure.** / Kaparaju, P. L N; Rintala, J. A.  
In: Environmental Technology, Vol. 26, No. 6, 06.2005, p. 625-631.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Effects of temperature on post-methanation of digested dairy cow manure in a farm-scale biogas production system.** / Kaparaju, P. L N; Rintala, J. A.  
In: Environmental Technology, Vol. 24, No. 10, 2003, p. 1315-1321.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Agricultural potential of anaerobically digested industrial orange waste with and without aerobic post-treatment.** / Kaparaju, Prasad; Rintala, Jukka; Oikari, Aimo.  
In: Environmental Technology, Vol. 33, No. 1, 01.01.2012, p. 85-94.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Performance of ventilation filtration technologies on characteristic traffic related aerosol down to nanocluster size.** / Karjalainen, Panu; Saari, Sampo; Kuuluvainen, Heino; Kalliohaka, Tapio; Taipale, Aimo; Rönkkö, Topi.  
In: Aerosol Science and Technology, Vol. 51, No. 12, 2017, p. 1398-1408.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Strategies To Diminish the Emissions of Particles and Secondary Aerosol Formation from Diesel Engines.** / Karjalainen, Panu; Rönkkö, Topi; Simonen, Pauli; Ntziachristos, Leonidas; Juuti, Paxton; Timonen, Hilikka; Teinilä, Kimmo; Saarikoski, Sanna; Saveljeff, Henna; Lauren, Mika; Happonen, Matti; Matilainen, Pekka; Maunula, Teuvo; Nuottimäki, Jukka; Keskinen, Jorma.  
In: Environmental science & technology, Vol. 53, No. 17, 03.09.2019, p. 10408-10416.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells.** / Karvinen, Jennika; Joki, Tiina; Ylä-Outinen, Laura; Koivisto, Janne T.; Narkilahti, Susanna; Kellomäki, Minna.  
In: Reactive and Functional Polymers, Vol. 124, 01.03.2018, p. 29-39.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Landfill methane oxidation in engineered soil columns at low temperature.** / Kettunen, Riitta H.; Einola, Juha Kalle M; Rintala, Jukka A.

In: *Water Air and Soil Pollution*, Vol. 177, No. 1-4, 11.2006, p. 313-334.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Testing the near field/far field model performance for prediction of particulate matter emissions in a paint factory.** /

Koivisto, A. J.; Jensen, A. C Ø; Levin, M.; Kling, K. I.; Maso, M. Dal; Nielsen, S. H.; Jensen, K. A.; Koponen, I. K.

In: *Environmental Sciences: Processes and Impacts*, Vol. 17, No. 1, 01.01.2015, p. 62-73.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Applicability of optical and diffusion charging-based particulate matter sensors to urban air quality measurements.** / Kuula, Joel; Kuuluvainen, Heino; Rönkkö, Topi; Niemi, Jarkko V.; Saukko, Erkka; Portin, Harri; Aurela, Minna; Saarikoski, Sanna; Rostedt, Antti; Hillamo, Risto; Timonen, Hilka.

In: *Aerosol and Air Quality Research*, Vol. 19, No. 5, 01.05.2019, p. 1024-1039.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Triboelectric charging of fungal spores during resuspension and rebound.** / Kuuluvainen, Heino; Saari, Sampo; Mensah-Attipoe, Jacob; Arffman, Anssi; Pasanen, Pertti; Reponen, Tiina; Keskinen, Jorma.

In: *Aerosol Science and Technology*, Vol. 50, No. 2, 01.02.2016, p. 187-197.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Editorial.** / Lämsivaara, Tim.

In: *Environmental Geotechnics*, Vol. 5, No. 6, 17.12.2018.

Research output: [Contribution to journal](#) > [Editorial](#) > [Scientific](#)

**Recovering Nitrogen as a Solid without Chemical Dosing : Bio-Electroconcentration for Recovery of Nutrients from Urine.** /

Ledezma, Pablo; Jermakka, Johannes; Keller, Jurg; Freguia, Stefano.

In: *Environmental Science and Technology Letters*, Vol. 4, No. 3, 14.03.2017, p. 119-124.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Detection of gaseous species during KCl-induced high-temperature corrosion by the means of CPFAAS and CI-API-TOF.** / Lehmusto, Juho; Olin, Miska; Viljanen, Jan; Kalliokoski, Joni; Mylläri, Fanni; Toivonen, Juha; Dal Maso, Miikka; Hupa, Leena.

In: *Materials and Corrosion*, 30.08.2019.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Indoor thermal environment, air exchange rates, and carbon dioxide concentrations before and after energy retro fits in Finnish and Lithuanian multi-family buildings.** / Leivo, Virpi; Prasauskas, Tadas; Du, Liuliu; Turunen, Mari; Kiviste, Mihkel; Aaltonen, Anu; Martuzevicius, Dainius; Haverinen-Shaughnessy, Ulla.

In: *Science of the Total Environment*, Vol. 621, 2017, p. 398-406.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Measurement of the human respiratory tract deposited surface area of particles with an electrical low pressure impactor.** /

Lepistö, Teemu; Kuuluvainen, Heino; Juuti, Paxton; Järvinen, Anssi; Arffman, Anssi; Rönkkö, Topi.

In: *Aerosol Science and Technology*, Vol. 54, No. 8, 2020, p. 958-971.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Screening for potential fermentative hydrogen production from black water and kitchen waste in on-site UASB reactor at 20°C.** / Luostarinen, S.; Pakarinen, O.; Rintala, J.

In: *Environmental Technology*, Vol. 29, No. 6, 06.2008, p. 691-699.

Research output: [Contribution to journal](#) > [Article](#) > [Scientific](#) > [peer-review](#)

**Assessing urban population vulnerability and environmental risks across an urban area during heatwaves – Implications for health protection.** / Macintyre, H. L.; Heaviside, C.; Taylor, J.; Picetti, R.; Symonds, P.; Cai, X. M.; Vardoulakis, S.

In: *Science of the Total Environment*, Vol. 610-611, 01.01.2018, p. 678-690.

**Occurrence and removal of organic pollutants in sewages and landfill leachates.** / Marttinen, Sanna K.; Kettunen, Riitta H.; Rintala, Jukka A.

In: Science of the Total Environment, Vol. 301, No. 1-3, 01.01.2003, p. 1-12.

Research output: Contribution to journal > Article > Scientific > peer-review

**Screening of physical-chemical methods for removal of organic material, nitrogen and toxicity from low strength landfill leachates.** / Marttinen, S. K.; Kettunen, R. H.; Sormunen, K. M.; Soimasuo, R. M.; Rintala, J. A.

In: Chemosphere, Vol. 46, No. 6, 2002, p. 851-858.

Research output: Contribution to journal > Article > Scientific > peer-review

**Removal of DEHP in composting and aeration of sewage sludge.** / Marttinen, Sanna K.; Hänninen, Kari; Rintala, Jukka A.

In: Chemosphere, Vol. 54, No. 3, 01.2004, p. 265-272.

Research output: Contribution to journal > Article > Scientific > peer-review

**Release and characteristics of fungal fragments in various conditions.** / Mensah-Attipoe, Jacob; Saari, Sampo; Veijalainen, Anna Maria; Pasanen, Pertti; Keskinen, Jorma; Leskinen, Jari T T; Reponen, Tiina.

In: Science of the Total Environment, Vol. 547, 15.03.2016, p. 234-243.

Research output: Contribution to journal > Article > Scientific > peer-review

**Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains.** / Milani, Roberto; Houbenov, Nikolay; Fernandez-Palacio, Francisco; Cavallo, Gabriella; Luzio, Alessandro; Haataja, Johannes; Giancane, Gabriele; Saccone, Marco; Priimägi, Arri; Metrangolo, Pierangelo; Ikkala, Olli.

In: Chem, Vol. 2, No. 3, 09.03.2017, p. 417-426.

Research output: Contribution to journal > Article > Scientific > peer-review

**Influence of electron acceptor availability and microbial community structure on sedimentary methane oxidation in a boreal estuary.** / Myllykangas, Jukka Pekka; Rissanen, Antti J.; Hietanen, Susanna; Jilbert, Tom.

In: BIOGEOCHEMISTRY, Vol. 148, No. 3, 2020, p. 291-309.

Research output: Contribution to journal > Article > Scientific > peer-review

**Stable carbon isotopic composition of peat columns, subsoil and vegetation on natural and forestry-drained boreal peatlands.** / Nykänen, Hannu; Mpamah, Promise A.; Rissanen, Antti J.

In: Isotopes in Environmental and Health Studies, Vol. 54, No. 6, 2018.

Research output: Contribution to journal > Article > Scientific > peer-review

**High-solids anaerobic digestion requires a trade-off between total solids, inoculum-to-substrate ratio and ammonia inhibition.** / Pastor-Poquet, V.; Papirio, S.; Trably, E.; Rintala, J.; Escudé, R.; Esposito, G.

In: INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY, 2019.

Research output: Contribution to journal > Article > Scientific > peer-review

**Improving the signal-to-noise ratio of Faraday cup aerosol electrometer based aerosol instrument calibrations.** / Pihlava, Katri; Keskinen, Jorma; Yli-Ojanperä, Jaakko.

In: Aerosol Science and Technology, Vol. 50, No. 4, 02.04.2016, p. 373-379.

Research output: Contribution to journal > Article > Scientific > peer-review

**Effects of fresh lubricant oils on particle emissions emitted by a modern gasoline direct injection passenger car.** / Pirjola, Liisa; Karjalainen, Panu; Heikkilä, Juha; Saari, Sampo; Tzamkiozis, Theodoros; Ntziachristos, Leonidas; Kulmala, Kari; Keskinen, Jorma; Rönkkö, Topi.

In: Environmental Science and Technology, Vol. 49, No. 6, 17.03.2015, p. 3644-3652.

Research output: Contribution to journal > Article > Scientific > peer-review

**Physical and Chemical Characterization of Real-World Particle Number and Mass Emissions from City Buses in Finland.** / Pirjola, Liisa; Dittrich, Aleš; Niemi, Jarkko V.; Saarikoski, Sanna; Timonen, Hilikka; Kuuluvainen, Heino; Järvinen, Anssi; Kousa, Anu; Rönkkö, Topi; Hillamo, Risto.

In: Environmental Science and Technology, Vol. 50, No. 1, 05.01.2016, p. 294-304.

Research output: Contribution to journal › Article › Scientific › peer-review

**Nanocluster Aerosol Emissions of a 3D Printer.** / Poikkimäki, Mikko; Koljonen, Ville; Leskinen, Niko; Närhi, Mikko; Kangasniemi, Oskari; Kausiala, Oskari; Dal Maso, Miiikka.

In: Environmental Science and Technology, Vol. 53, No. 23, 07.11.2019, p. 13618–13628.

Research output: Contribution to journal › Article › Scientific › peer-review

**Breaking dormancy : An energy-efficient means of recovering astaxanthin from microalgae.** / Ramasamy, Praveenkumar; Lee, Kyubock; Lee, Jiye; Oh, You Kwan.

In: Green Chemistry, Vol. 17, No. 2, 01.02.2015, p. 1226-1234.

Research output: Contribution to journal › Article › Scientific › peer-review

**Flow rate-independent electrical aerosol sensor.** / Rostedt, A.; Keskinen, J.

In: Aerosol Science and Technology, Vol. 52, No. 11, 2018, p. 1283-1292.

Research output: Contribution to journal › Article › Scientific › peer-review

**Seasonal and diurnal variations of fluorescent bioaerosol concentration and size distribution in the urban environment.** / Saari, Sampo; Niemi, Jarkko V.; Rönkkö, Topi; Kuuluvainen, Heino; Järvinen, Anssi; Pirjola, Liisa; Aurela, Minna; Hillamo, Risto; Keskinen, Jorma.

In: Aerosol and Air Quality Research, Vol. 15, No. 2, 2015, p. 572-581.

Research output: Contribution to journal › Article › Scientific › peer-review

**Identification of single microbial particles using electro-dynamic balance assisted laser-induced breakdown and fluorescence spectroscopy.** / Saari, S.; Järvinen, S.; Reponen, T.; Mensah-Attipoe, J.; Pasanen, P.; Toivonen, J.; Keskinen, Jorma.

In: Aerosol Science and Technology, Vol. 50, No. 2, 01.02.2016, p. 126-132.

Research output: Contribution to journal › Article › Scientific › peer-review

**Performance evaluation of the HR-ELPI + inversion.** / Saari, Sampo; Arffman, Anssi; Harra, Juha; Rönkkö, Topi; Keskinen, Jorma.

In: Aerosol Science and Technology, Vol. 52, No. 9, 02.09.2018, p. 1037-1047.

Research output: Contribution to journal › Article › Scientific › peer-review

**Assessment of pitting corrosion in bare and passivated (wet scCO<sub>2</sub>-induced patination and chemical passivation) hot-dip galvanized steel samples with SVET, FTIR, and SEM (EDS).** / Saarimaa, Ville; Fuertes, Nuria; Persson, Dan; Zavalis, Tommy; Kaleva, Aaretti; Nikkanen, Juha-Pekka; Levänen, Erkki; Heydari, Golrokh.

In: Materials and Corrosion, 2020.

Research output: Contribution to journal › Article › Scientific › peer-review

**Towards bioproduction of poly- $\alpha$ -olefins from lignocellulose.** / Salmela, Milla; Lehtinen, Tapio; Efimova, Elena; Santala, Suvi; Santala, Ville.

In: Green Chemistry, Vol. 22, No. 15, 2020, p. 5067-5076.

Research output: Contribution to journal › Article › Scientific › peer-review

**Anaerobic digestion of poultry slaughtering wastes.** / Salminen, E. A.; Rintala, J. A.

In: Environmental Technology, Vol. 20, No. 1, 1999, p. 21-28.

Research output: Contribution to journal › Article › Scientific › peer-review

**The methane production of poultry slaughtering residues and effects of pre-treatments on the methane production of poultry feather.** / Salminen, E.; Einola, J.; Rintala, J.

In: Environmental Technology, Vol. 24, No. 9, 2003, p. 1079-1086.

Research output: Contribution to journal › Article › Scientific › peer-review

**Characterisation and anaerobic batch degradation of materials accumulating in anaerobic digesters treating poultry slaughterhouse waste.** / Salminen, E.; Einola, J.; Rintala, J.

In: Environmental Technology, Vol. 22, No. 5, 2001, p. 577-585.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Emission measurements with gravimetric impactors and electrical devices : An aerosol instrument comparison.** / Salo, Laura; Mylläri, Fanni; Maasikmets, Marek; Niemelä, Ville; Konist, Alar; Vainumäe, Keio; Kupri, Hanna Lii; Titova, Riina; Simonen, Pauli; Aurela, Minna; Bloss, Matthew; Keskinen, Jorma; Timonen, Hilkka; Rönkkö, Topi.  
In: Aerosol Science and Technology, Vol. 53, No. 5, 01.03.2019, p. 526-539.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Why social sustainability counts : The impact of corporate social sustainability culture on financial success.** / Schönborn, Gregor; Berlin, Cecilia; Pinzone, Marta; Hanisch, Christoph; Georgoulas, Konstantinos; Lanz, Minna.  
In: Sustainable Production and Consumption, Vol. 17, 01.01.2019, p. 1-10.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Tri-functionality of Fe<sub>3</sub>O<sub>4</sub>-embedded carbon microparticles in microalgae harvesting.** / Seo, Jung Yoon; Lee, Kyubock; Ramasamy, Praveenkumar; Kim, Bohwa; Lee, So Yeun; Oh, You Kwan; Park, Seung Bin.  
In: Chemical Engineering Journal, Vol. 280, 05.11.2015, p. 206-214.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Downstream integration of microalgae harvesting and cell disruption by means of cationic surfactant-decorated Fe<sub>3</sub>O<sub>4</sub> nanoparticles.** / Seo, Jung Yoon; Ramasamy, Praveenkumar; Kim, Bohwa; Seo, Jeong Cheol; Park, Ji Yeon; Na, Jeong Geol; Jeon, Sang Goo; Park, Seung Bin; Lee, Kyubock; Oh, You Kwan.  
In: Green Chemistry, Vol. 18, No. 14, 2016, p. 3981-3989.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Mutation spectra of the drinking water mutagen 3-chloro-4-methyl-5-hydroxy-2(5H)-furanone (MCF) in Salmonella TA100 and TA104 : Comparison to MX.** / Shaughnessy, Daniel T.; Ohe, Takeshi; Landi, Stefano; Warren, Sarah H.; Richard, Ann M.; Munter, Tony; Franzén, Robert; Kronberg, Leif; DeMarini, David M.  
In: Environmental and Molecular Mutagenesis, Vol. 35, No. 2, 2000, p. 106-113.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Anaerobic treatment of LCFA-containing synthetic dairy wastewater at 20°C : Process performance and microbial community dynamics.** / Singh, Suniti; Rinta-Kanto, Johanna M.; Kettunen, Riitta; Tolvanen, Henrik; Lens, Piet; Collins, Gavin; Kokko, Marika; Rintala, Jukka.  
In: Science of the Total Environment, Vol. 691, 15.11.2019, p. 960-968.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Weathering of gasification and grate bottom ash in anaerobic conditions.** / Sivula, Leena; Ilander, Aki; Väisänen, Ari; Rintala, Jukka.  
In: Journal of Hazardous Materials, Vol. 174, No. 1-3, 15.02.2010, p. 344-351.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Stabilisation of MSWI bottom ash with sulphide-rich anaerobic effluent.** / Sivula, Leena; Väisänen, Ari; Rintala, Jukka.  
In: Chemosphere, Vol. 71, No. 1, 03.2008, p. 1-9.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Occurrence of some chlorinated enol lactones and cyclopentene-1,3-diones in chlorine-treated waters.** / Smeds, A.; Franzen, R.; Kronberg, L.  
In: Environmental Science and Technology, Vol. 29, No. 7, 1995, p. 1839-1844.  
Research output: Contribution to journal > Article > Scientific > peer-review

**London Hybrid Exposure Model : Improving Human Exposure Estimates to NO<sub>2</sub> and PM<sub>2.5</sub> in an Urban Setting.** / Smith, James David; Mitsakou, Christina; Kitwiroon, Nutthida; Barratt, Ben M.; Walton, Heather A.; Taylor, Jonathon G.; Anderson, Hugh Ross; Kelly, Frank J.; Beevers, Sean D.  
In: Environmental Science and Technology, Vol. 50, No. 21, 01.11.2016, p. 11760-11768.  
Research output: Contribution to journal > Article > Scientific > peer-review



**Are there environmental or agricultural benefits in using forest residue biochar in boreal agricultural clay soil?** / Soinne, Helena; Keskinen, Riikka; Heikkinen, Jaakko; Hyväluoma, Jari; Uusitalo, Risto; Peltoniemi, Krista; Velmala, Sannakajsa; Pennanen, Taina; Fritze, Hannu; Kaseva, Janne; Hannula, Markus; Rasa, Kimmo.  
In: *Science of the Total Environment*, Vol. 731, 138955, 20.08.2020.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Internal leachate quality in a municipal solid waste landfill : Vertical, horizontal and temporal variation and impacts of leachate recirculation.** / Sormunen, Kai; Ettala, Matti; Rintala, Jukka.  
In: *Journal of Hazardous Materials*, Vol. 160, No. 2-3, 30.12.2008, p. 601-607.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Bio-electrochemical conversion of industrial wastewater-COD combined with downstream methanol synthesis-an economic and life cycle assessment.** / Streeck, J.; Hank, C.; Neuner, M.; Gil-Carrera, L.; Kokko, M.; Pauliuk, S.; Schaadt, A.; Kerzenmacher, S.; White, R. J.  
In: *Green Chemistry*, Vol. 20, No. 12, 2018, p. 2742-2762.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Biomass characterization of laboratory-scale thermophilic-mesophilic wastewater treatment processes.** / Suvilampi, J.; Lehtomäki, A.; Rintala, J.  
In: *Environmental Technology*, Vol. 27, No. 1, 01.2006, p. 41-51.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Comparison of activated sludge processes at different temperatures : 35°C, 2-55°C, and 55°C.** / Suvilampi, J.; Rintala, J.  
In: *Environmental Technology*, Vol. 23, No. 10, 2002, p. 1127-1133.  
Research output: Contribution to journal › Article › Scientific › peer-review

**MicroEnv : A microsimulation model for quantifying the impacts of environmental policies on population health and health inequalities.** / Symonds, Phil; Hutchinson, Emma; Ibbetson, Andrew; Taylor, Jonathon; Milner, James; Chalabi, Zaid; Davies, Michael; Wilkinson, Paul.  
In: *Science of the Total Environment*, Vol. 697, 134105, 20.12.2019.  
Research output: Contribution to journal › Article › Scientific › peer-review

**HPLC-SEC : a new approach to characterise complex wastewater effluents.** / Szabo, Hilda Marta; Lepistö, Raghida; Tuhkanen, Tuula.  
In: *International Journal of Environmental Analytical Chemistry*, Vol. 96, No. 3, 19.02.2016, p. 257-270.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Biological treatment of selenium-laden wastewater containing nitrate and sulfate in an upflow anaerobic sludge bed reactor at pH 5.0.** / Tan, Lea Chua; Nancharaiah, Yarlagadda V.; Lu, Shipeng; van Hullebusch, Eric D.; Gerlach, Robin; Lens, Piet N.L.  
In: *Chemosphere*, Vol. 211, 01.11.2018, p. 684-693.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Low concentration of zeolite to enhance microalgal growth and ammonium removal efficiency in a membrane photobioreactor.** / Tao, Ran; Bair, Robert; Pickett, Melanie; Calabria, Jorge L.; Lakaniemi, Aino-Maija; van Hullebusch, Eric D.; Rintala, Jukka A.; Yeh, Daniel H.  
In: *Environmental Technology*, 2020.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Application of an indoor air pollution metamodel to a spatially-distributed housing stock.** / Taylor, Jonathon; Shrubsole, Clive; Symonds, Phil; Mackenzie, Ian; Davies, Michael.  
In: *Science of the Total Environment*, Vol. 667, 01.06.2019, p. 390-399.  
Research output: Contribution to journal › Article › Scientific › peer-review

**Sulphate-reducing laboratory-scale high-rate anaerobic reactors for treatment of metal-and sulphate-containing mine wastewater.** / Tuppurainen, K. O.; Väisänen, A. O.; Rintala, J. A.

In: *Environmental Technology*, Vol. 23, No. 6, 2002, p. 599-608.

Research output: Contribution to journal › Article › Scientific › peer-review

**Optimised selection of new protective coatings for biofuel boiler applications.** / Tuurna, S.; Varis, T.; Penttilä, K.; Ruusuvuori, K.; Holmström, S.; Yli-Olli, S.

In: *Materials and Corrosion-Werkstoffe und Korrosion*, Vol. 62, No. 7, 07.2011, p. 642-649.

Research output: Contribution to journal › Article › Scientific › peer-review

**High Nitrogen Removal in a Constructed Wetland Receiving Treated Wastewater in a Cold Climate.** / Uusheimo, Sari; Huotari, Jussi; Tulonen, Tiina; Aalto, Sanni L.; Rissanen, Antti J.; Arvola, Lauri.

In: *Environmental science & technology*, Vol. 52, No. 22, 20.11.2018, p. 13343-13350.

Research output: Contribution to journal › Article › Scientific › peer-review

**The effects of nutrients on natural organic matter (NOM) removal in biological activated carbon (BAC) filtration.** / Vahala, R.; Moramarco, V.; Niemi, R. M.; Rintala, J.; Laukkanen, R.

In: *Acta Hydrochimica et Hydrobiologica*, Vol. 26, No. 3, 05.1998, p. 196-199.

Research output: Contribution to journal › Article › Scientific › peer-review

**The evaluation of drinking water treatment performed with HPSEC.** / Vuorio, Elina; Vahala, Riku; Rintala, Jukka; Laukkanen, Risto.

In: *Environment International*, Vol. 24, No. 5-6, 07.1998, p. 617-623.

Research output: Contribution to journal › Article › Scientific › peer-review

**Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds.** / Wang, Mingyi; Chen, Dexian; Xiao, Mao; Ye, Qing; Stolzenburg, Dominik; Hofbauer, Victoria; Ye, Penglin; Vogel, Alexander L.; Mauldin, Roy L.; Amorim, Antonio; Baccarini, Andrea; Baumgartner, Bernhard; Brilke, Sophia; Dada, Lubna; Dias, António; Duplissy, Jonathan; Finkenzeller, Henning; Garmash, Olga; He, Xu Cheng; Hoyle, Christopher R.; Kim, Changhyuk; Kvashnin, Alexander; Lehtipalo, Katrianne; Fischer, Lukas; Molteni, Ugo; Petäjä, Tuukka; Pospisilova, Veronika; Quéléver, Lauriane L.J.; Rissanen, Matti; Simon, Mario; Tauber, Christian; Tomé, António; Wagner, Andrea C.; Weitz, Lena; Volkamer, Rainer; Winkler, Paul M.; Kirkby, Jasper; Worsnop, Douglas R.; Kulmala, Markku; Baltensperger, Urs; Dommen, Josef; El-Haddad, Imad; Donahue, Neil M.

In: *Environmental Science and Technology*, Vol. 54, No. 13, 2020, p. 7911-7921.

Research output: Contribution to journal › Article › Scientific › peer-review

**Molecular Composition and Volatility of Nucleated Particles from  $\alpha$ -Pinene Oxidation between -50 °C and +25 °C.** / Ye, Qing; Wang, Mingyi; Hofbauer, Victoria; Stolzenburg, Dominik; Chen, Dexian; Schervish, Meredith; Vogel, Alexander; Mauldin, Roy L.; Baalbaki, Rima; Brilke, Sophia; Dada, Lubna; Dias, António; Duplissy, Jonathan; El Haddad, Imad; Finkenzeller, Henning; Fischer, Lukas; He, Xucheng; Kim, Changhyuk; Kürten, Andreas; Lamkaddam, Houssni; Lee, Chuan Ping; Lehtipalo, Katrianne; Leiminger, Markus; Manninen, Hanna E.; Marten, Ruby; Mentler, Bernhard; Partoll, Eva; Petäjä, Tuukka; Rissanen, Matti; Schobesberger, Siegfried; Schuchmann, Simone; Simon, Mario; Tham, Yee Jun; Vazquez-Pufleau, Miguel; Wagner, Andrea C.; Wang, Yonghong; Wu, Yusheng; Xiao, Mao; Baltensperger, Urs; Curtius, Joachim; Flagan, Richard; Kirkby, Jasper; Kulmala, Markku; Volkamer, Rainer; Winkler, Paul M.; Worsnop, Douglas; Donahue, Neil M.

In: *Environmental Science and Technology*, Vol. 53, No. 21, 05.11.2019, p. 12357-12365.

Research output: Contribution to journal › Article › Scientific › peer-review