

**Why social sustainability counts: The impact of corporate social sustainability culture on financial success**

Schönborn, G., Berlin, C., Pinzone, M., Hanisch, C., Georgoulas, K. & Lanz, M., 1 Jan 2019, In : Sustainable Production and Consumption. 17, p. 1-10 10 p.

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

**Weathering of gasification and grate bottom ash in anaerobic conditions**

Sivula, L., Ilander, A., Väisänen, A. & Rintala, J., 15 Feb 2010, In : Journal of Hazardous Materials. 174, 1-3, p. 344-351 8 p.

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, T., Kokko, M. E., Rene, E. R., Rintala, J. & Lens, P. N. L., 2020, In : Environmental Technology (United Kingdom). 14 p.

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, J. Y., Lee, K., Ramasamy, P., Kim, B., Lee, S. Y., Oh, Y. K. & Park, S. B., 5 Nov 2015, In : Chemical Engineering Journal. 280, p. 206-214 9 p.

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

**Triboelectric charging of fungal spores during resuspension and rebound**

Kuuluvainen, H., Saari, S., Mensah-Attipoe, J., Arffman, A., Pasanen, P., Reponen, T. & Keskinen, J., 1 Feb 2016, In : Aerosol Science and Technology. 50, 2, p. 187-197 11 p.

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

**Towards bioproduction of poly- $\alpha$ -olefins from lignocellulose**

Salmela, M., Lehtinen, T., Efimova, E., Santala, S. & Santala, V., 2020, In : Green Chemistry. 22, 15, p. 5067-5076 10 p.

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, P., Rossi, J., Rostedt, A., Huhtala, J., Järvinen, A., Toivonen, J. & Keskinen, J., 2020, In : Aerosol Science and Technology.

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

**Thermophilic anaerobic digestion of industrial orange waste**

Kaparaju, P. L. N. & Rintala, J. A., Jun 2006, In : Environmental Technology. 27, 6, p. 623-633 11 p.

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., 2003, In : Environmental Technology. 24, 9, p. 1079-1086 8 p.

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, M. H. C. L., Stumpel, J. E., Van De Kruijs, B. H. P., Meuldijk, J., Vekemans, J. A. J. M. & Hulshof, L. A., 2009, In : Green Chemistry. 11, 1, p. 60-64 5 p.

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

**The evaluation of drinking water treatment performed with HPSEC**

Vuorio, E., Vahala, R., Rintala, J. & Laukkanen, R., Jul 1998, In : Environment International. 24, 5-6, p. 617-623 7 p.

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., Jun 2005, In : Environmental Technology. 26, 6, p. 625-631 7 p.

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., May 1998, In : Acta Hydrochimica et Hydrobiologica. 26, 3, p. 196-199 4 p.

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, A., Kuuluvainen, H., Harra, J., Vuorinen, O., Juuti, P., Yli-Ojanperä, J., Mäkelä, J. & Keskinen, J., 1 Aug 2015, In : Journal of Aerosol Science. 86, p. 32-43 12 p.

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. D., Nielsen, S. H., Jensen, K. A. & Koponen, I. K., 1 Jan 2015, In : Environmental Sciences: Processes and Impacts. 17, 1, p. 62-73 12 p.

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., 2002, In : Environmental Technology. 23, 6, p. 599-608 10 p.

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

**Strategies To Diminish the Emissions of Particles and Secondary Aerosol Formation from Diesel Engines**

Karjalainen, P., Rönkkö, T., Simonen, P., Ntziachristos, L., Juuti, P., Timonen, H., Teinilä, K., Saarikoski, S., Saveljeff, H., Lauren, M., Happonen, M., Matilainen, P., Maunula, T., Nuottimäki, J. & Keskinen, J., 3 Sep 2019, In : Environmental science & technology. 53, 17, p. 10408-10416 9 p.

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, H., Mpamah, P. A. & Rissanen, A. J., 2018, In : Isotopes in Environmental and Health Studies. 54, 6

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

**Stabilisation of MSWI bottom ash with sulphide-rich anaerobic effluent**

Sivula, L., Väisänen, A. & Rintala, J., Mar 2008, In : Chemosphere. 71, 1, p. 1-9 9 p.

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

**Sorption of zinc onto elemental selenium nanoparticles immobilized in Phanerochaete chrysosporium pellets**

Espinosa-Ortiz, E. J., Shakya, M., Jain, R., Rene, E. R., van Hullebusch, E. D. & Lens, P. N. L., 2016, In : Environmental Science and Pollution Research. 23, 21, p. 21619-21630 12 p.

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, J., Joki, T., Ylä-Outinen, L., Koivisto, J. T., Narkilahti, S. & Kellomäki, M., 1 Mar 2018, In : Reactive and Functional Polymers. 124, p. 29-39 11 p.

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, S., Niemi, J. V., Rönkkö, T., Kuuluvainen, H., Järvinen, A., Pirjola, L., Aurela, M., Hillamo, R. & Keskinen, J., 2015, In : Aerosol and Air Quality Research. 15, 2, p. 572-581 10 p.

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, S., Kaparaju, P. & Rintala, J., 1 May 2013, In : Chemical Engineering Journal. 223, p. 479-486 8 p.

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., 2002, In : *Chemosphere*. 46, 6, p. 851-858 8 p.

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., Jun 2008, In : *Environmental Technology*. 29, 6, p. 691-699 9 p.

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

**Ring-chain tautomerism of chlorinated hydroxyfuranones and reaction with nucleosides**

Franzén, R., Tanabe, K. & Morita, M., Feb 1999, In : *Chemosphere*. 38, 5, p. 973-980 8 p.

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, B., Maricq, M., Ntziachristos, L., Dardiotis, C., Wang, X., Axmann, H., Bergmann, A. & Schindler, W., Jan 2014, In : *Journal of Aerosol Science*. 67, p. 48-86 39 p.

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

**Removal of DEHP in composting and aeration of sewage sludge**

Marttinen, S. K., Hänninen, K. & Rintala, J. A., Jan 2004, In : *Chemosphere*. 54, 3, p. 265-272 8 p.

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

**Release and characteristics of fungal fragments in various conditions**

Mensah-Attipoe, J., Saari, S., Veijalainen, A. M., Pasanen, P., Keskinen, J., Leskinen, J. T. T. & Reponen, T., 15 Mar 2016, In : *Science of the Total Environment*. 547, p. 234-243 10 p.

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

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

Ledezma, P., Jermakka, J., Keller, J. & Freguia, S., 14 Mar 2017, In : *Environmental Science and Technology Letters*. 4, 3, p. 119-124 6 p.

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

**Real-time effective density monitor (DENSMO) for aerosol nanoparticle production**

Juuti, P., Arffman, A., Rostedt, A., Harra, J., Mäkelä, J. M. & Keskinen, J., 3 May 2016, In : *Aerosol Science and Technology*. 50, 5, p. 487-496 10 p.

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

**Quantitative characterization of pore structure of several biochars with 3D imaging**

Hyväluoma, J., Kulju, S., Hannula, M., Wikberg, H., Källi, A. & Rasa, K., Sep 2018, In : *Environmental Science and Pollution Research*. 25, 26, p. 1-11 11 p.

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

**Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles**

Jain, R., Dominic, D., Jordan, N., Rene, E. R., Weiss, S., van Hullebusch, E. D., Hübner, R. & Lens, P. N. L., 2016, In : *Chemical Engineering Journal*. 284, p. 917-925

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, J., Isotalo, M., Kuittinen, N., Simonen, P., Martikainen, S., Kuuluvainen, H., Honkanen, M., Lehtoranta, K., Nyyssönen, S., Vesala, H., Timonen, H., Aurela, M., Keskinen, J. & Rönkkö, T., 5 May 2020, In : *Environmental Science and Technology*. 54, 9, p. 5376-5384 9 p.

**Physical and Chemical Characterization of Real-World Particle Number and Mass Emissions from City Buses in Finland**  
Pirjola, L., Dittrich, A., Niemi, J. V., Saarikoski, S., Timonen, H., Kuuluvainen, H., Järvinen, A., Kousa, A., Rönkkö, T. & Hillamo, R., 5 Jan 2016, In : *Environmental Science and Technology*. 50, 1, p. 294-304 11 p.

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

**Photo-oxidation of Aromatic Hydrocarbons Produces Low-Volatility Organic Compounds**

Wang, M., Chen, D., Xiao, M., Ye, Q., Stolzenburg, D., Hofbauer, V., Ye, P., Vogel, A. L., Mauldin, R. L., Amorim, A., Baccarini, A., Baumgartner, B., Brilke, S., Dada, L., Dias, A., Duplissy, J., Finkenzeller, H., Garmash, O., He, X. C., Hoyle, C. R., Kim, C., Kvashnin, A., Lehtipalo, K., Fischer, L., Molteni, U., Petäjä, T., Pospisilova, V., Quéléver, L. L. J., Rissanen, M., Simon, M., Tauber, C., Tomé, A., Wagner, A. C., Weitz, L., Volkamer, R., Winkler, P. M., Kirkby, J., Worsnop, D. R., Kulmala, M., Baltensperger, U., Dommen, J., El-Haddad, I. & Donahue, N. M., 2020, In : *Environmental Science and Technology*. 54, 13, p. 7911-7921 11 p.

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

**Performance of ventilation filtration technologies on characteristic traffic related aerosol down to nanocluster size**

Karjalainen, P., Saari, S., Kuuluvainen, H., Kalliohaka, T., Taipale, A. & Rönkkö, T., 2017, In : *Aerosol Science and Technology*. 51, 12, p. 1398-1408 11 p.

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

**Performance evaluation of the HR-ELPI + inversion**

Saari, S., Arffman, A., Harra, J., Rönkkö, T. & Keskinen, J., 2 Sep 2018, In : *Aerosol Science and Technology*. 52, 9, p. 1037-1047 11 p.

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, B., Dada, L., Liu, Y., Yao, L., Wang, Y., Du, W., Cai, J., Dällenbach, K. R., Chen, X., Simonen, P., Zhou, Y., Deng, C., Fu, Y., Yin, R., Li, H., He, X. C., Feng, Z., Yan, C., Kangasluoma, J., Bianchi, F., Jiang, J., Kujansuu, J., Kerminen, V. M., Petäjä, T., He, H. & Kulmala, M., 2020, In : *Science of the Total Environment*. 753, 7 p., 142207.

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., Ruusuvoori, K., Holmström, S. & Yli-Olli, S., Jul 2011, In : *Materials and Corrosion-Werkstoffe und Korrosion*. 62, 7, p. 642-649 8 p.

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., 1995, In : *Environmental Science and Technology*. 29, 7, p. 1839-1844 6 p.

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

**Occurrence and removal of organic pollutants in sewages and landfill leachates**

Martinen, S. K., Kettunen, R. H. & Rintala, J. A., 1 Jan 2003, In : *Science of the Total Environment*. 301, 1-3, p. 1-12 12 p.

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

**Nanocluster Aerosol Emissions of a 3D Printer**

Poikkimäki, M., Koljonen, V., Leskinen, N., Närhi, M., Kangasniemi, O., Kausiala, O. & Dal Maso, M., 7 Nov 2019, In : *Environmental Science and Technology*. 53, 23, p. 13618-13628 11 p.

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, D. T., Ohe, T., Landi, S., Warren, S. H., Richard, A. M., Munter, T., Franzén, R., Kronberg, L. & DeMarini, D. M., 2000, In : *Environmental and Molecular Mutagenesis*. 35, 2, p. 106-113 8 p.

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, Q., Wang, M., Hofbauer, V., Stolzenburg, D., Chen, D., Schervish, M., Vogel, A., Mauldin, R. L., Baalbaki, R., Briike, S., Dada, L., Dias, A., Duplissy, J., El Haddad, I., Finkenzeller, H., Fischer, L., He, X., Kim, C., Kürten, A., Lamkaddam, H., Lee, C. P., Lehtipalo, K., Leiminger, M., Manninen, H. E., Marten, R., Mentler, B., Partoll, E., Petäjä, T., Rissanen, M., Schobesberger, S., Schuchmann, S., Simon, M., Tham, Y. J., Vazquez-Pufleau, M., Wagner, A. C., Wang, Y., Wu, Y., Xiao, M., Baltensperger, U., Curtius, J., Flagan, R., Kirkby, J., Kulmala, M., Volkamer, R., Winkler, P. M., Worsnop, D. & Donahue, N. M., 5 Nov 2019, In : *Environmental Science and Technology*. 53, 21, p. 12357-12365 9 p.

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, P., Hutchinson, E., Ibbetson, A., Taylor, J., Milner, J., Chalabi, Z., Davies, M. & Wilkinson, P., 20 Dec 2019, In : *Science of the Total Environment*. 697, 134105.

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., 15 Dec 2008, In : *Science of the Total Environment*. 407, 1, p. 67-83 17 p.

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, T., Kuuluvainen, H., Juuti, P., Järvinen, A., Arffman, A. & Rönkkö, T., 2020, In : *Aerosol Science and Technology*. 54, 8, p. 958-971 15 p.

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, R., Bair, R., Pickett, M., Calabria, J. L., Lakaniemi, A.-M., van Hullebusch, E. D., Rintala, J. A. & Yeh, D. H., 2020, In : *Environmental Technology*. 15 p.

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, J. D., Mitsakou, C., Kitwiroon, N., Barratt, B. M., Walton, H. A., Taylor, J. G., Anderson, H. R., Kelly, F. J. & Beevers, S. D., 1 Nov 2016, In : *Environmental Science and Technology*. 50, 21, p. 11760-11768 9 p.

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

#### **Landfill methane oxidation in engineered soil columns at low temperature**

Kettunen, R. H., Einola, J. K. M. & Rintala, J. A., Nov 2006, In : *Water Air and Soil Pollution*. 177, 1-4, p. 313-334 22 p.

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

#### **Kinetics and modelling of thiosulphate biotransformations by haloalkaliphilic Thioalkalivibrio versutus**

Hajdu-Rahkama, R., Özkaya, B., Lakaniemi, A. M. & Puhakka, J. A., 2020, In : *Chemical Engineering Journal*. 401, 9 p., 126047.

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

#### **Isolation of a MX-guanosine adduct formed at physiological conditions**

Franzén, R., Tanabe, K. & Morita, M., Jun 1998, In : *Chemosphere*. 36, 13, p. 2803-2808 6 p.

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, K., Ettala, M. & Rintala, J., 30 Dec 2008, In : *Journal of Hazardous Materials*. 160, 2-3, p. 601-607 7 p.

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, J. P., Rissanen, A. J., Hietanen, S. & Jilbert, T., 2020, In : *BIOGEOCHEMISTRY*. 148, 3, p. 291-309 19 p.  
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**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., 1994, In : *Environmental and Molecular Mutagenesis*. 24, 4, p. 317-324 8 p.

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, V., Prasauskas, T., Du, L., Turunen, M., Kiviste, M., Aaltonen, A., Martuzevicius, D. & Haverinen-Shaughnessy, U., 2017, In : *Science of the Total Environment*. 621, p. 398-406 9 p.

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, M., Gao, J., Järvinen, A., Li, H., Luo, D., Janka, K. & Rönkkö, T., 1 Dec 2016, In : *Aerosol and Air Quality Research*. 16, 12, p. 3001-3011 11 p.

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, K., Keskinen, J. & Yli-Ojanperä, J., 2 Apr 2016, In : *Aerosol Science and Technology*. 50, 4, p. 373-379 7 p.

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

**Impact of selective catalytic reduction on exhaust particle formation over excess ammonia events**

Amanatidis, S., Ntziachristos, L., Giechaskiel, B., Bergmann, A. & Samaras, Z., 7 Oct 2014, In : *Environmental Science and Technology*. 48, 19, p. 11527-11534 8 p.

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, J., 1 Feb 2016, In : *Aerosol Science and Technology*. 50, 2, p. 126-132 7 p.

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

**HPLC-SEC: a new approach to characterise complex wastewater effluents**

Szabo, H. M., Lepistö, R. & Tuhkanen, T., 19 Feb 2016, In : *International Journal of Environmental Analytical Chemistry*. 96, 3, p. 257-270 14 p.

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., Escudié, R. & Esposito, G., 2019, In : *INTERNATIONAL JOURNAL OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY*.

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

**High Nitrogen Removal in a Constructed Wetland Receiving Treated Wastewater in a Cold Climate**

Uusheimo, S., Huotari, J., Tulonen, T., Aalto, S. L., Rissanen, A. J. & Arvola, L., 20 Nov 2018, In : *Environmental science & technology*. 52, 22, p. 13343-13350 8 p.

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

**Higher Cd adsorption on biogenic elemental selenium nanoparticles**

Jain, R., Dominic, D., Jordan, N., Rene, E. R., Weiss, S., van Hullebusch, E. D., Hübner, R. & Lens, P. N. L., Sep 2016, In : *ENVIRONMENTAL CHEMISTRY LETTERS*. 14, 3, p. 381-386 6 p.

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

### **Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains**

Milani, R., Houbenov, N., Fernandez-Palacio, F., Cavallo, G., Luzio, A., Haataja, J., Giancane, G., Saccone, M., Priimägi, A., Metrangolo, P. & Ikkala, O., 9 Mar 2017, In : *CheM.* 2, 3, p. 417-426 10 p.

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

### **Flow rate-independent electrical aerosol sensor**

Rostedt, A. & Keskinen, J., 2018, In : *Aerosol Science and Technology.* 52, 11, p. 1283-1292

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

### **Fabrication of fiber filters with antibacterial properties for VOC and particle removal**

Juuti, P., Nikka, M., Gunell, M., Eerola, E., Saarinen, J. J., Omori, Y., Seto, T. & Mäkelä, J. M., 1 Aug 2019, In : *Aerosol and Air Quality Research.* 19, 8, p. 1892-1899 8 p.

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., 3 Aug 2018, In : *Aerosol Science and Technology.* 52, 8, p. 828-840 13 p.

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

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

Amanatidis, S., Ntziachristos, L., Giechaskiel, B., Katsaounis, D., Samaras, Z. & Bergmann, A., Mar 2013, In : *Journal of Aerosol Science.* 57, p. 144-155 12 p.

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

### **Emission measurements with gravimetric impactors and electrical devices: An aerosol instrument comparison**

Salo, L., Mylläri, F., Maasikmets, M., Niemelä, V., Konist, A., Vainumäe, K., Kupri, H. L., Titova, R., Simonen, P., Aurela, M., Bloss, M., Keskinen, J., Timonen, H. & Rönkkö, T., 1 Mar 2019, In : *Aerosol Science and Technology.* 53, 5, p. 526-539 14 p.

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., 2003, In : *Environmental Technology.* 24, 10, p. 1315-1321 7 p.

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, L., Karjalainen, P., Heikkilä, J., Saari, S., Tzamkiozis, T., Ntziachristos, L., Kulmala, K., Keskinen, J. & Rönkkö, T., 17 Mar 2015, In : *Environmental Science and Technology.* 49, 6, p. 3644-3652 9 p.

Research output: Contribution to journal > 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**

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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, S., Rene, E. R., Lens, P. N. L., Rintala, J., Veiga, M. C. & Kennes, C., 2020, In : *Chemosphere.* 250, 9 p., 126105.

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, P. S., Kaparaju, P., Väisänen, A. & Rintala, J., 2019, In : *Environmental Technology.* 40, 4, p. 418-429 12 p.

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

## Editorial

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Research output: Contribution to journal › Editorial › Scientific

## Downstream integration of microalgae harvesting and cell disruption by means of cationic surfactant-decorated Fe<sub>3</sub>O<sub>4</sub> nanoparticles

Seo, J. Y., Ramasamy, P., Kim, B., Seo, J. C., Park, J. Y., Na, J. G., Jeon, S. G., Park, S. B., Lee, K. & Oh, Y. K., 2016, In : Green Chemistry. 18, 14, p. 3981-3989 9 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

## Distinguishing fuel and lubricating oil combustion products in diesel engine exhaust particles

Carbone, S., Timonen, H. J., Rostedt, A., Happonen, M., Rönkkö, T., Keskinen, J., Ristimäki, J., Korpi, H., Artaxo, P., Canagaratna, M., Worsnop, D., Canonaco, F., Prévôt, A. S. H., Hillamo, R. & Saarikoski, S., 4 May 2019, In : Aerosol Science and Technology. 53, 5, p. 594-607 14 p.  
Research output: Contribution to journal › Article › Scientific › peer-review

## Differential diffusion analyzer

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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, R. & Kronberg, L., 1994, In : Environmental Science and Technology. 28, 12, p. 2222-2227 6 p.  
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

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

## Considerations in analysing elemental carbon from marine engine exhaust using residual, distillate and biofuels

Aakko-Saksa, P., Koponen, P., Aurela, M., Vesala, H., Piimäkorpi, P., Murtonen, T., Sippula, O., Koponen, H., Karjalainen, P., Kuittinen, N., Panteliadis, P., Rönkkö, T. & Timonen, H., Dec 2018, In : Journal of Aerosol Science. 126, p. 191-204 14 p.  
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

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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, S., Ntziachristos, L., Karjalainen, P., Saukko, E., Simonen, P., Kuittinen, N., Aakko-Saksa, P., Timonen, H., Rönkkö, T. & Keskinen, J., 2018, In : Aerosol Science and Technology. 52, 4, p. 1-13 13 p.  
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

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

## Chemolithotrophic denitrification in biofilm reactors

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## Characterisation and anaerobic batch degradation of materials accumulating in anaerobic digesters treating poultry slaughterhouse waste



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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, M. E., Totlandsdal, A. I., Tzamkiozis, T., Leseman, D. L. A. C., Samaras, Z., Låg, M., Schwarze, P., Ntziachristos, L. & Cassee, F. R., 4 Jun 2013, In : Environmental Science and Technology. 47, 11, p. 5931-5938 8 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Breaking dormancy: An energy-efficient means of recovering astaxanthin from microalgae**  
Ramasamy, P., Lee, K., Lee, J. & Oh, Y. K., 1 Feb 2015, In : Green Chemistry. 17, 2, p. 1226-1234 9 p.  
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**Biomass characterization of laboratory-scale thermophilic-mesophilic wastewater treatment processes**  
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**Biological treatment of selenium-laden wastewater containing nitrate and sulfate in an upflow anaerobic sludge bed reactor at pH 5.0**  
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**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., 2018, In : Green Chemistry. 20, 12, p. 2742-2762 21 p.  
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**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, V., Fuertes, N., Persson, D., Zavalis, T., Kaleva, A., Nikkanen, J-P., Levänen, E. & Heydari, G., 2020, In : Materials and Corrosion. 10 p.  
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., 1 Jan 2018, In : Science of the Total Environment. 610-611, p. 678-690 13 p.  
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**Are there environmental or agricultural benefits in using forest residue biochar in boreal agricultural clay soil?**  
Soinne, H., Keskinen, R., Heikkinen, J., Hyväluoma, J., Uusitalo, R., Peltoniemi, K., Velmala, S., Pennanen, T., Fritze, H., Kaseva, J., Hannula, M. & Rasa, K., 20 Aug 2020, In : Science of the Total Environment. 731, 138955.  
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**Application of an indoor air pollution metamodel to a spatially-distributed housing stock**  
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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, J., Kuuluvainen, H., Rönkkö, T., Niemi, J. V., Saukko, E., Portin, H., Aurela, M., Saarikoski, S., Rostedt, A., Hillamo, R. & Timonen, H., 1 May 2019, In : Aerosol and Air Quality Research. 19, 5, p. 1024-1039 16 p.  
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, S., Rinta-Kanto, J. M., Kettunen, R., Tolvanen, H., Lens, P., Collins, G., Kokko, M. & Rintala, J., 15 Nov 2019, In : Science of the Total Environment. 691, p. 960-968 9 p.

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

**Anaerobic digestion of poultry slaughtering wastes**

Salminen, E. A. & Rintala, J. A., 1999, In : Environmental Technology. 20, 1, p. 21-28 8 p.

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

**Agricultural potential of anaerobically digested industrial orange waste with and without aerobic post-treatment**

Kaparaju, P., Rintala, J. & Oikari, A., 1 Jan 2012, In : Environmental Technology. 33, 1, p. 85-94 10 p.

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

**Adsorption of furfural from torrefaction condensate using torrefied biomass**

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