

Are there environmental or agricultural benefits in using forest residue biochar in boreal agricultural clay soil? / Soenne, 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

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, Hilkkka; 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

Assessment of pitting corrosion in bare and passivated (wet scCO_2 -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

Effect of tungsten and selenium on C_1 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

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

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

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

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

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, Xueming; 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

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

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

Towards bioproduction of poly- α -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

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

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

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

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

Molecular Composition and Volatility of Nucleated Particles from α -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

Effects of anode materials on electricity production from xylose and treatability of TMP wastewater in an up-flow microbial fuel cell. / Haavisto, Johanna; Dessi, 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

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

Detection of gaseous species during KCl-induced high-temperature corrosion by the means of CPFAAS and CI-API-TOF. / Lehmusto, Juh; 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

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

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

Distinguishing fuel and lubricating oil combustion products in diesel engine exhaust particles. / Carbone, Samara; Timonen, Hilka J.; Rostedt, Antti; Happonen, Matti; Rönkkö, Topi; Keskinen, Jorma; Ristimäki, Jyrki; Korpi, Heikki; Artaxo, Paulo; Canagaratna, Manjula; Worsnop, Douglas; Canonaco, Francesco; Prévôt, Andre 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

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, Erkki; 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

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, Hilka; 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

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

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

Editorial. / Lämsivaara, Tim.

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

Research output: Contribution to journal > Editorial > Scientific

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; Kuitinen, 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

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

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

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

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

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

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

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.

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

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

Comparative performance of a thermal denuder and a catalytic stripper in sampling laboratory and marine exhaust aerosols. / Amanatidis, Stavros; Ntziachristos, Leonidas; Karjalainen, Panu; Saukko, Erkka; 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

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

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

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

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

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

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

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

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

London Hybrid Exposure Model : Improving Human Exposure Estimates to NO₂ and PM_{2.5} 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

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

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

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

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

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

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

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

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

Downstream integration of microalgae harvesting and cell disruption by means of cationic surfactant-decorated Fe₃O₄ 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

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

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

Tri-functionality of Fe₃O₄-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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 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

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

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

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

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

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