

- Lappalainen K, Wang GC, Kleissl J. **Estimation of the largest expected photovoltaic power ramp rates**. Applied Energy. 2020 Nov 15;278. 115636. <https://doi.org/10.1016/j.apenergy.2020.115636>
- Manganiello P, Govaerts J, Horvath IT, Chowdhury MG, Yordanov GH, Goverde H et al. **Tuning electricity generation throughout the year with PV module technology**. Renewable Energy. 2020 Nov 1;160:418-427. <https://doi.org/10.1016/j.renene.2020.06.106>
- Saari UA, Mäkinen SJ, Baumgartner RJ, Hillebrand B, Driessen PH. **How consumers' respect for nature and environmental self-assets influence their car brand experiences**. Journal of Cleaner Production. 2020 Jul 10;261. 121023. <https://doi.org/10.1016/j.jclepro.2020.121023>
- Marttila T, Lahdensivu J, Pekkanen J. **Comprehensive assessment brings out shortcomings in almost every school building**. E3S Web of Conferences. 2020 Jun 30;172. 23002. <https://doi.org/10.1051/e3sconf/202017223002>
- Laukkarinen A, Vinha J, Kalbe K, Kesti J, Kalamees T, Honkakoski E. **Laboratory tests and modelling of mineral wool insulated steel sandwich panels**. E3S Web of Conferences. 2020 Jun 30;172. 17006. <https://doi.org/10.1051/e3sconf/202017217006>
- Weijio I, Turunen T, Lahdensivu J, Sistonen E, Annala P. **Ministry of the Environment announces a Guide on Renovation and Repair of Buildings with Moisture and Microbial Damage - From theory to practice**. E3S Web of Conferences. 2020 Jun 30;172. 20007. <https://doi.org/10.1051/e3sconf/202017220007>
- Annala PJ, Lahdensivu J. **Reliability of the detection of moisture and mould damage in visual inspections**. E3S Web of Conferences. 2020 Jun 30;172. 23004. <https://doi.org/10.1051/e3sconf/202017223004>
- Arvani M, Keskinen J, Lupo D, Honkanen M. **Current collectors for low resistance aqueous flexible printed supercapacitors**. Journal of Energy Storage. 2020 Jun 1;29. 101384. <https://doi.org/10.1016/j.est.2020.101384>
- Järvelä M, Valkealahti S. **Operation of a PV power plant during overpower events caused by the cloud enhancement phenomenon**. Energies. 2020 May 1;13(9). 2185. <https://doi.org/10.3390/en13092185>
- Koponen P, Ikäheimo J, Koskela J, Brester C, Niska H. **Assessing and comparing short term load forecasting performance**. Energies. 2020 Apr 1;13(8). 2054. <https://doi.org/10.3390/en13082054>
- Luhtala R, Alenius H, Roinila T. **Practical implementation of adaptive SRF-PLL for three-phase inverters based on sensitivity function and real-time grid-impedance measurements**. Energies. 2020 Mar 1;13(5). 1173. <https://doi.org/10.3390/en13051173>
- Grigonytė-Lopez Rodriguez J, Suhonen H, Laitinen A, Tissari J, Kortelainen M, Tiitta P et al. **A novel electrical charging condensing heat exchanger for efficient particle emission reduction in small wood boilers**. Renewable Energy. 2020 Jan;145:521-529. <https://doi.org/10.1016/j.renene.2019.06.052>
- Kaksonen AH, Lakaniemi A-M, Tuovinen OH. **Acid and ferric sulfate bioleaching of uranium ores: A review**. Journal of Cleaner Production. 2020;264. 121586. <https://doi.org/10.1016/j.jclepro.2020.121586>
- Alenius H, Luhtala R, Messo T, Roinila T. **Autonomous reactive power support for smart photovoltaic inverter based on real-time grid-impedance measurements of a weak grid**. Electric Power Systems Research. 2020;182. 106207. <https://doi.org/10.1016/j.epsr.2020.106207>
- Li M, Alhussein O, Sofotasios PC, Muhaidat S, Yoo PD, Liang J et al. **Censor-Based Cooperative Multi-Antenna Spectrum Sensing with Imperfect Reporting Channels**. IEEE Transactions on Sustainable Computing. 2020;5(1):48-60. <https://doi.org/10.1109/TSUSC.2019.2896667>

Kastinen T, Hukka TI. **Charge transfer characteristics of fullerene-free polymer solar cells via multi-state electronic coupling treatment.** Sustainable Energy and Fuels. 2020;4(8):4137-4157. <https://doi.org/10.1039/d0se00306a>

Michalás A, Kiss T. **Charlie and the CryptoFactory: Towards Secure and Trusted Manufacturing Environments.** In 20th IEEE Mediterranean Electrotechnical Conference, MELECON 2020: Proceedings. IEEE. 2020. p. 141-146. (IEEE Mediterranean Electrotechnical Conference). <https://doi.org/10.1109/MELECON48756.2020.9140712>

Peltonen L, Järventausta P, Repo S, Rauhala T. **Distributed small loads as fast frequency reserves: Impact on system performance.** In 2020 IEEE Texas Power and Energy Conference, TPEC 2020. IEEE. 2020. p. 114-119 <https://doi.org/10.1109/TPEC48276.2020.9042522>

Aho T, Tukiainen A, Ranta S, Elsehrawy F, Raappana M, Isoaho R et al. **Enhancement of EQE for MBE grown InAs/GaAs Quantum Dot Solar Cell with Back Reflector.** In 2019 IEEE 46th Photovoltaic Specialists Conference (PVSC). IEEE. 2020. p. 2593-2596. (Conference record of the IEEE Photovoltaic Specialists Conference). <https://doi.org/10.1109/PVSC40753.2019.8981170>

Okonkwo O, Papirio S, Trably E, Escudie R, Lakaniemi A-M, Esposito G. **Enhancing thermophilic dark fermentative hydrogen production at high glucose concentrations via bioaugmentation with Thermotoga neapolitana.** International Journal of Hydrogen Energy. 2020;45(35):17241-17249. <https://doi.org/10.1016/j.ijhydene.2020.04.231>

Tofanello A, Freitas ALM, Carvalho WM, Salminen T, Niemi T, Souza FL. **Hematite Surface Modification toward Efficient Sunlight-Driven Water Splitting Activity: The Role of Gold Nanoparticle Addition.** Journal of Physical Chemistry C. 2020. <https://doi.org/10.1021/acs.jpcc.9b11966>

Haußmann L, Neumeier S, Kolb M, Ast J, Mohanty G, Michler J et al. **Local Mechanical Properties at the Dendrite Scale of Ni-Based Superalloys Studied by Advanced High Temperature Indentation Creep and Micropillar Compression Tests.** In Tin S, Hardy M, Clews J, Cormier J, Feng Q, Marcin J, O'Brien C, Suzuki A, editors, Superalloys 2020: Proceedings of the 14th International Symposium on Superalloys. Springer. 2020. p. 273-281. (The Minerals, Metals and Materials Series). [https://doi.org/10.1007/978-3-030-51834-9\\_26](https://doi.org/10.1007/978-3-030-51834-9_26)

Ghazy A, Safdar M, Lastusaari M, Aho A, Tukiainen A, Savin H et al. **Luminescent (Er,Ho)<sub>2</sub>O<sub>3</sub> thin films by ALD to enhance the performance of silicon solar cells.** Solar Energy Materials and Solar Cells. 2020;219. 110787. <https://doi.org/10.1016/j.solmat.2020.110787>

Aagaard A, Saari UA, Mäkinen SJ. **Mapping the types of business experimentation in creating sustainable value: A case study of cleantech start-ups.** Journal of Cleaner Production. 2020;279. 123182. <https://doi.org/10.1016/j.jclepro.2020.123182>

Palmolahti L, Ali-Löytty H, Khan R, Saari J, Tkachenko NV, Valden M. **Modification of Surface States of Hematite-Based Photoanodes by Submonolayer of TiO<sub>2</sub> for Enhanced Solar Water Splitting.** Journal of Physical Chemistry C. 2020;124(24):13094-13101. <https://doi.org/10.1021/acs.jpcc.0c00798>

Mardalizad A, Saksala T, Manes A, Giglio M. **Numerical modeling of the tool-rock penetration process using FEM coupled with SPH technique.** JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING. 2020;189. 107008. <https://doi.org/10.1016/j.petrol.2020.107008>

Elsayes A, Sharma V, Yiannacou K, Koivikko A, Rasheed A, Sariola V. **Plant-Based Biodegradable Capacitive Tactile Pressure Sensor Using Flexible and Transparent Leaf Skeletons as Electrodes and Flower Petal as Dielectric Layer.** Advanced Sustainable Systems. 2020. <https://doi.org/10.1002/adsu.202000056>

Kolisoja P, Kalliainen A. **Structural Compatibility of Infrastructures Utilizing Alternative Earth Construction Materials.** Waste and Biomass Valorization. 2020. <https://doi.org/10.1007/s12649-020-01061-x>

Kurvinen A, Saari A. **Urban housing density and infrastructure costs**. Sustainability (Switzerland). 2020;12(2). 497. <https://doi.org/10.3390/su12020497>

Dessi P, Chatterjee P, Mills S, Kokko M, Lakaniemi A-M, Collins G et al. **Power production and microbial community composition in thermophilic acetate-fed up-flow and flow-through microbial fuel cells**. Bioresource Technology. 2019 Dec 1;294. 122115. <https://doi.org/10.1016/j.biortech.2019.122115>

Hirvonen J, Jokisalo J, Heljo J, Kosonen R. **Towards the EU emission targets of 2050: Cost-effective emission reduction in Finnish detached houses**. Energies. 2019 Nov 19;12(22). 4395. <https://doi.org/10.3390/en12224395>

Pirjola L, Kuuluvainen H, Timonen H, Saarikoski S, Teinilä K, Salo L et al. **Potential of renewable fuel to reduce diesel exhaust particle emissions**. Applied Energy. 2019 Nov 15;254. 113636. <https://doi.org/10.1016/j.apenergy.2019.113636>

Suntio T, Kuperman A. **Maximum perturbation step size in MPP-Tracking control for ensuring predicted PV power settling behavior**. Energies. 2019 Oct 19;12(20). 3984. <https://doi.org/10.3390/en12203984>

Raappana M, Aho A, Aho T, Isoaho R, Anttola E, Kajas N et al. **Performance of Solar Cell Grids based on Ag, Au, and Al for Cost-Effective Manufacturing**. In 2019 European Space Power Conference (ESPC). IEEE. 2019 <https://doi.org/10.1109/ESPC.2019.8932002>

Cai Y, Ferrer BR, Lastra JLM. **Building university-industry co-innovation networks in transnational innovation ecosystems: Towards a transdisciplinary approach of integrating social sciences and artificial intelligence**. Sustainability. 2019 Sep 1;11(17). 4633. <https://doi.org/10.3390/su11174633>

Pääkkönen A, Aro K, Aalto P, Konttinen J, Kojo M. **The potential of biomethane in replacing fossil fuels in heavy transport- a case study on Finland**. Sustainability. 2019 Sep 1;11(17). 4750. <https://doi.org/10.3390/su11174750>

Tura N, Ahola T. **Towards a circular economy by leveraging hazardous resources: A case study of Fortum HorsePower**. Journal of Cleaner Production. 2019 Sep 1;230:518-526. <https://doi.org/10.1016/j.jclepro.2019.05.121>

Jokisalo J, Sankelo P, Vinha J, Sirén K, Kosonen R. **Cost optimal energy performance renovation measures in a municipal service building in a cold climate**. In CLIMA 2019 Congress: Bucharest, Romania, May 26-29, 2019. EDP Sciences. 2019. (E3S Web of Conferences). <https://doi.org/10.1051/e3sconf/201911103022>

Hirvonen J, Jokisalo J, Heljo J, Kosonen R. **Optimization of emission reducing energy retrofits in Finnish apartment buildings**. In CLIMA 2019 Congress: Bucharest, Romania, May 26-29, 2019. EDP Sciences. 2019. 03002. (E3S Web of Conferences). <https://doi.org/10.1051/e3sconf/201911103002>

Küfeoğlu S, Melchiorre DA, Kotilainen K. **Understanding tariff designs and consumer behaviour to employ electric vehicles for secondary purposes in the United Kingdom**. ELECTRICITY JOURNAL. 2019 Jul 1;32(6):1-6. <https://doi.org/10.1016/j.tej.2019.05.011>

Isoaho R, Aho A, Tukiainen A, Aho T, Raappana M, Salminen T et al. **Photovoltaic properties of low-bandgap (0.7–0.9eV) lattice-matched GaInNAsSb solar junctions grown by molecular beam epitaxy on GaAs**. Solar Energy Materials and Solar Cells. 2019 Jun 15;195:198-203. <https://doi.org/10.1016/j.solmat.2019.02.030>

Asp A, Hentilä T, Valkama M, Pikkuvirta J, Hujanen A, Huhtinen I. **Impact of Different Concrete Types on Radio Propagation: Fundamentals and Practical RF Measurements**. In Rodrigues JJPC, Solic P, Perkovic T, Vukojevic K, Rodrigues JJPC, Patrono L, Nizetic S, editors, 2019 4th International Conference on Smart and Sustainable Technologies, SpliTech 2019. IEEE. 2019 <https://doi.org/10.23919/SpliTech.2019.8783022>

Rostami S, Heiska K, Puchko O, Leppanen K, Valkama M. **Pre-Grant Signaling for Energy-Efficient 5G and Beyond Mobile Devices: Method and Analysis**. IEEE Transactions on Green Communications and Networking. 2019 Jun 1;3(2):418-432. 8616818. <https://doi.org/10.1109/TGCN.2019.2893504>

Jaakkola H, Henno J, Mäkelä J, Thalheim B. **Artificial intelligence yesterday, today and tomorrow**. In Skala K, Car Z, Pale P, Huljenic D, Janjic M, Koracic M, Sruk V, Ribaric S, Grbac TG, Butkovic Z, Cicin-Sain M, Skvorc D, Mauher M, Babic S, Gros S, Vrdoljak B, Tijan E, editors, 2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings. IEEE. 2019. p. 860-867 <https://doi.org/10.23919/MIPRO.2019.8756913>

Linna P, Narra N, Grönman J. **Intelligent data service for farmers**. In Skala K, Car Z, Pale P, Huljenic D, Janjic M, Koracic M, Sruk V, Ribaric S, Grbac TG, Butkovic Z, Cicin-Sain M, Skvorc D, Mauher M, Babic S, Gros S, Vrdoljak B, Tijan E, editors, 2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings. IEEE. 2019. p. 1072-1075 <https://doi.org/10.23919/MIPRO.2019.8756688>

Henno J, Jaakkola H, Mäkelä J. **Teaching for virtual work**. In Skala K, Car Z, Pale P, Huljenic D, Janjic M, Koracic M, Sruk V, Ribaric S, Grbac TG, Butkovic Z, Cicin-Sain M, Skvorc D, Mauher M, Babic S, Gros S, Vrdoljak B, Tijan E, editors, 2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics, MIPRO 2019 - Proceedings. IEEE. 2019. p. 818-826 <https://doi.org/10.23919/MIPRO.2019.8756778>

Laasasenaho K, Lensu A, Lauhanen R, Rintala J. **GIS-data related route optimization, hierarchical clustering, location optimization, and kernel density methods are useful for promoting distributed bioenergy plant planning in rural areas**. Sustainable Energy Technologies and Assessments. 2019 Apr 1;32:47-57. <https://doi.org/10.1016/j.seta.2019.01.006>

Yoo SK, Cotton SL, Sofotasios PC, Muhaidat S, Badarneh OS, Karagiannidis GK. **Energy Detection-Based Spectrum Sensing over Fisher-Snedecor F Fading Channels**. In 2018 IEEE Global Communications Conference. IEEE. 2019. 8647778 <https://doi.org/10.1109/GLOCOM.2018.8647778>

Kovalchukov R, Moltchanov D, Begishev V, Samuylov A, Andreev S, Koucheryavy Y et al. **Improved Session Continuity in 5G NR with Joint Use of Multi-Connectivity and Guard Bandwidth**. In 2018 IEEE Global Communications Conference, GLOBECOM 2018. IEEE. 2019 <https://doi.org/10.1109/GLOCOM.2018.8647608>

Liimatainen H, van Vliet O, Aplyn D. **The potential of electric trucks – An international commodity-level analysis**. Applied Energy. 2019 Feb 15;236:804-814. <https://doi.org/10.1016/j.apenergy.2018.12.017>

Suntio T, Messo T, Berg M, Alenius H, Reinikka T, Luhtala R et al. **Impedance-based interactions in grid-tied three-phase inverters in renewable energy applications**. Energies. 2019 Jan 31;12(3). 464. <https://doi.org/10.3390/en12030464>

Amer E, Kuperman A, Suntio T. **Direct fixed-step maximum power point tracking algorithms with adaptive perturbation frequency**. Energies. 2019 Jan 27;12(3). 399. <https://doi.org/10.3390/en12030399>

Pääkkönen A, Tolvanen H, Kokko L. **The economics of renewable CaC<sub>2</sub> and C<sub>2</sub>H<sub>2</sub> production from biomass and CaO**. Biomass and Bioenergy. 2019 Jan 1;120:40-48. <https://doi.org/10.1016/j.biombioe.2018.10.020>

Schönborn G, Berlin C, Pinzone M, Hanisch C, Georgoulas K, Lanz M. **Why social sustainability counts: The impact of corporate social sustainability culture on financial success**. Sustainable Production and Consumption. 2019 Jan 1;17:1-10. <https://doi.org/10.1016/j.spc.2018.08.008>

Ruoko T-P, Hiltunen A, Iivonen T, Ulkuniemi R, Lahtonen K, Ali-Löytty H et al. **Charge carrier dynamics in tantalum oxide overlayers and tantalum doped hematite photoanodes**. Journal of Materials Chemistry A. 2019 Jan;7(7):3206-3215. <https://doi.org/10.1039/C8TA09501A>

Aho T, Tukiainen A, Elsehrawy F, Ranta S, Raappana M, Aho A et al. **Back Reflector with Diffractive Gratings for Light-Trapping in Thin-Film III-V Solar Cells**. In 2019 European Space Power Conference (ESPC). IEEE. 2019 <https://doi.org/10.1109/ESPC47532.2019.9049262>

El-Qelish M, Chatterjee P, Dessì P, Kokko M, El-Gohary F, Abo-Aly M et al. **Bio-hydrogen Production from Sewage Sludge: Screening for Pretreatments and Semi-continuous Reactor Operation.** Waste and Biomass Valorization. 2019. <https://doi.org/10.1007/s12649-019-00743-5>

Gonçalves LPL, Wang J, Vinati S, Barborini E, Wei XK, Heggen M et al. **Combined experimental and theoretical study of acetylene semi-hydrogenation over Pd/Al<sub>2</sub>O<sub>3</sub>.** International Journal of Hydrogen Energy. 2019. <https://doi.org/10.1016/j.ijhydene.2019.04.086>

Sankelo P, Jokisalo J, Nyman J, Vinha J, Sirén K. **Cost-optimal energy performance measures in a new daycare building in cold climate.** International Journal of Sustainable Energy. 2019;38(2):104-122. <https://doi.org/10.1080/14786451.2018.1448398>

Hirvonen J, Jokisalo J, Heljo J, Kosonen R. **Effect of apartment building energy renovation on hourly power demand.** International Journal of Sustainable Energy. 2019. <https://doi.org/10.1080/14786451.2019.1613992>

Johnson B, Chang L, Afridi K, Ali MH, Von Appen J, Chen YM et al. **Guest editorial joint special section on power conversion & control in photovoltaic power plants.** IEEE Transactions on Energy Conversion. 2019;34(1):159-160. <https://doi.org/10.1109/TEC.2019.2895778>

Luhtala R, Messo T, Roinila T, Alenius H, Jong ED, Burstein A et al. **Identification of three-phase grid impedance in the presence of parallel converters.** Energies. 2019;12(14). 2674. <https://doi.org/10.3390/en12142674>

Isoaho R, Aho A, Tukiainen A, Aho T, Raappana M, Salminen T et al. **Narrow Bandgap Dilute Nitride Materials for 6-junction Space Solar Cells.** In 2019 European Space Power Conference (ESPC). IEEE. 2019 <https://doi.org/10.1109/ESPC47532.2019.9049263>

Suntio T, Messo T. **Power electronics in renewable energy systems.** Energies. 2019;12(10). en12101852. <https://doi.org/10.3390/en12101852>

Alanen J, Ruiz Morales E, Muhammad A, Saarinen H, Minkkinen J. **Remote diagnostics application software for remote handling equipment.** Fusion Engineering and Design. 2019. <https://doi.org/10.1016/j.fusengdes.2019.01.125>

Vakkilainen E, Konttinen J, Orasuo V, Aalto P. **Sustainability of bioenergy in finland and globally – fact check.** In 27th European Biomass Conference and Exhibition, EUBCE 2019. ETA-Florence Renewable Energies. 2019. p. 1634-1635. (European Biomass Conference and Exhibition Proceedings).

Mämmelä J, Juuti T, Julkunen P. **Technology valuation method for supporting knowledge management in technology decisions to gain sustainability.** Sustainability (Switzerland). 2019;11(12). 3410. <https://doi.org/10.3390/su11123410>

Hirvonen J, Jokisalo J, Heljo J, Kosonen R. **Towards the EU emissions targets of 2050: optimal energy renovation measures of Finnish apartment buildings.** International Journal of Sustainable Energy. 2019;38(7). <https://doi.org/10.1080/14786451.2018.1559164>

Rasa K, Heikkinen J, Hannula M, Arstila K, Kulju S, Hyväluoma J. **How and why does willow biochar increase a clay soil water retention capacity?** Biomass and Bioenergy. 2018 Dec 1;119:346-353. <https://doi.org/10.1016/j.biombioe.2018.10.004>

Moisio M, Kaasalainen T, Lehtinen T, Hedman M. **Energiatehokkaan arkkitehtisuunnittelun ohjekortisto.** Tampereen teknillinen yliopisto. Arkkitehtuurin laboratorio, 2018. 142 p. (Tampereen teknillinen yliopisto. Arkkitehtuurin laboratorio. Asuntosuunnittelu. Julkaisu).

Lehtinen T, Papinsaari A-K, Kaasalainen T, Moisio M, Hedman M. **Peruskoulut ja energiatehokkuus: Tilallisista ja toiminnallisista suunnitteluperiaatteista.** Tampereen teknillinen yliopisto. Arkkitehtuurin laboratorio, 2018. 86 p. (Tampereen teknillinen yliopisto. Arkkitehtuurin laboratorio. Asuntosuunnittelu. Julkaisu).

Ranta V, Aarikka-Stenroos L, Mäkinen SJ. **Creating value in the circular economy: A structured multiple-case analysis of business models.** Journal of Cleaner Production. 2018 Nov 10;201:988-1000. <https://doi.org/10.1016/j.jclepro.2018.08.072>

Far MF, Mustafa B, Martin F, Rasilo P, Belahcen A. **Flux-Weakening Control for IPMSM Employing Model Order Reduction.** In 2018 23rd International Conference on Electrical Machines, ICEM 2018. IEEE. 2018. p. 1510-1516 <https://doi.org/10.1109/ICELMACH.2018.8506693>

Far MF, Mukherjee V, Martin F, Rasilo P, Belahcen A. **Model Order Reduction of Bearingless Reluctance Motor Including Eccentricity.** In 2018 23rd International Conference on Electrical Machines, ICEM 2018. IEEE. 2018. p. 2243-2249 <https://doi.org/10.1109/ICELMACH.2018.8506758>

Taylor J, Haines A, Milner J, Davies M, Wilkinson P, Sehgal M et al. **A comparative analysis of global datasets and initiatives for urban health and sustainability.** Sustainability (Switzerland). 2018 Oct 11;10(10). 3636. <https://doi.org/10.3390/su10103636>

Heijne AT, Liu D, Sulonen M, Sleutels T, Fabregat-Santiago F. **Quantification of bio-anode capacitance in bioelectrochemical systems using Electrochemical Impedance Spectroscopy.** Journal of Power Sources. 2018 Oct 1;400:533-538. <https://doi.org/10.1016/j.jpowsour.2018.08.003>

Järvelä M, Lappalainen K, Valkealahti S. **Cloud Enhancement Phenomenon and its Effect on PV Generators.** In 35th European Photovoltaic Solar Energy Conference and Exhibition (35th EU PVSEC), 24–28 September, 2018, Brussels, Belgium. 2018. p. 1964-1968 <https://doi.org/10.4229/35thEUPVSEC20182018-6CV.2.30>

Repo S, Pylvänäinen J, Kauppinen M, Repo S, Järventausta P. **Automatic Meter Infrastructure (AMI) as a part of flexibility market.** In 15th International Conference on the European Energy Market, EEM 2018. Vol. 2018-June. IEEE COMPUTER SOCIETY PRESS. 2018. 8469765. (International Conference on the European Energy Market). <https://doi.org/10.1109/EEM.2018.8469765>

Valta J, Mäkinen S, Kotilainen K, Rautiainen A, Järventausta P. **Comparison of innovation policies for electric vehicle business ecosystems.** In 15th International Conference on the European Energy Market, EEM 2018. Vol. 2018-June. IEEE COMPUTER SOCIETY PRESS. 2018. 8469785. (International Conference on the European Energy Market). <https://doi.org/10.1109/EEM.2018.8469785>

Haakana J, Haapaniemi J, Lassila J, Partanen J, Niska H, Rautiainen A. **Effects of electric vehicles and heat pumps on long-term electricity consumption scenarios for rural areas in the nordic environment.** In 15th International Conference on the European Energy Market, EEM 2018. Vol. 2018-June. IEEE COMPUTER SOCIETY PRESS. 2018. 8469937. (International Conference on the European Energy Market). <https://doi.org/10.1109/EEM.2018.8469937>

Lummi K, Rautiainen A, Peltonen L, Repo S, Järventausta P, Rintala J. **Microgrids as part of electrical energy system - Pricing scheme for network tariff of DSO.** In 15th International Conference on the European Energy Market, EEM 2018. Vol. 2018-June. IEEE COMPUTER SOCIETY PRESS. 2018. 8469965. (International Conference on the European Energy Market). <https://doi.org/10.1109/EEM.2018.8469965>

Mashlakov A, Tikka V, Honkapuro S, Partanen J, Repo S, Järventausta P et al. **Use case description of real-time control of microgrid flexibility.** In 15th International Conference on the European Energy Market, EEM 2018. Vol. 2018-June. IEEE COMPUTER SOCIETY PRESS. 2018. 8469218. (International Conference on the European Energy Market). <https://doi.org/10.1109/EEM.2018.8469218>

Lummi K, Rautiainen A, Järventausta P, Heine P, Lehtinen J, Hyvarinen M et al. **Alternative Power-Based Pricing Schemes for Distribution Network Tariff of Small Customers.** In International Conference on Innovative Smart Grid Technologies, ISGT Asia 2018. Institute of Electrical and Electronics Engineers Inc. 2018. p. 581-586 <https://doi.org/10.1109/ISGT-Asia.2018.8467793>

Ortombina L, Liegmann E, Karamanakos P, Tinazzi F, Zigliotto M, Kennel R. **Constrained Long-Horizon Direct Model Predictive Control for Synchronous Reluctance Motor Drives**. In 2018 IEEE 19th Workshop on Control and Modeling for Power Electronics, COMPEL 2018. IEEE. 2018. 8460173 <https://doi.org/10.1109/COMPEL.2018.8460173>

Eregowda T, Matanhike L, Rene ER, Lens PNL. **Performance of a biotrickling filter for the anaerobic utilization of gas-phase methanol coupled to thiosulphate reduction and resource recovery through volatile fatty acids production**. Bioresource Technology. 2018 Sep 1;263:591-600. <https://doi.org/10.1016/j.biortech.2018.04.095>

Angioni A, Lu S, Hooshyar H, Cairo I, Repo S, Ponci F et al. **A distributed automation architecture for distribution networks, from design to implementation**. Sustainable Energy, Grids and Networks. 2018 Sep;15:3-13. <https://doi.org/10.1016/j.segan.2017.04.001>

Aho A, Isoaho R, Tukiainen A, Gori G, Campesato R, Guina M. **Dilute nitride triple junction solar cells for space applications: Progress towards highest AM0 efficiency**. Progress in Photovoltaics: Research and Applications. 2018 Sep;26(19):740-744. <https://doi.org/10.1002/pip.3011>

Barbato A, Dedè A, Della Giustina D, Massa G, Angioni A, Lipari G et al. **Lessons learnt from real-time monitoring of the low voltage distribution network**. Sustainable Energy, Grids and Networks. 2018 Sep;15:76-85. <https://doi.org/10.1016/j.segan.2017.05.002>

Lehtinen T, Virtanen H, Santala S, Santala V. **Production of alkanes from CO<sub>2</sub> by engineered bacteria**. Biotechnology for Biofuels. 2018 Aug 21;11. 228. <https://doi.org/10.1186/s13068-018-1229-2>

Ruusala A, Laukkarinen A, Vinha J. **Energy consumption of Finnish schools and daycare centers and the correlation to regulatory building permit values**. Energy Policy. 2018 Aug 1;119:183-195. <https://doi.org/10.1016/j.enpol.2018.04.029>

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

Hiltunen A, Ruoko T-P, Iivonen T, Lahtonen K, Ali-Löytty H, Sarlin E et al. **Design aspects of all atomic layer deposited TiO<sub>2</sub>-Fe<sub>2</sub>O<sub>3</sub> scaffold-absorber photoanodes for water splitting**. Sustainable Energy & Fuels. 2018 Jul 31;2(9):2124-2130. <https://doi.org/10.1039/C8SE00252E>

Castro LM, Acha E, Rodriguez-Rodriguez JR. **Efficient method for the real-time contingency analysis of meshed HVDC power grids fed by VSC stations**. IET Generation, Transmission and Distribution. 2018 Jul 31;12(13):3158-3166. <https://doi.org/10.1049/iet-gtd.2017.1104>

Zhao J, Prioli M, Stenvall A, Salmi T, Gao Y, Caiffi B et al. **Mechanical stress analysis during a quench in CLIQ protected 16 T dipole magnets designed for the future circular collider**. Physica C: Superconductivity and its Applications. 2018 Jul 15;550:27-34. <https://doi.org/10.1016/j.physc.2018.04.003>

Salmela M, Lehtinen T, Efimova E, Santala S, Mangayil R. **Metabolic pairing of aerobic and anaerobic production in a one-pot batch cultivation**. Biotechnology for Biofuels. 2018 Jul 3;11(1). 187. <https://doi.org/10.1186/s13068-018-1186-9>

Panula-Ontto J, Luukkanen J, Kaivo-oja J, O'Mahony T, Vehmas J, Valkealahti S et al. **Cross-impact analysis of Finnish electricity system with increased renewables: Long-run energy policy challenges in balancing supply and consumption**. Energy Policy. 2018 Jul 1;118:504-513. <https://doi.org/10.1016/j.enpol.2018.04.009>

Koponen P, Hanninen S, Mutanen A, Koskela J, Rautiainen A, Järventausta P et al. **Improved modelling of electric loads for enabling demand response by applying physical and data-driven models: Project Response**. In 2018 IEEE International Energy Conference, ENERGYCON 2018. IEEE. 2018. p. 1-6 <https://doi.org/10.1109/ENERGYCON.2018.8398794>

Sitbon M, Lineykin S, Schacham S, Suntio T, Kuperman A. **Online dynamic conductance estimation based maximum power point tracking of photovoltaic generators.** Energy Conversion and Management. 2018 Jun 15;166:687-696. <https://doi.org/10.1016/j.enconman.2018.04.053>

Kotilainen K, Mäkinen SJ, Valta J. **Sustainable electric vehicle - Prosumer framework and policy mix.** In 2017 IEEE Innovative Smart Grid Technologies - Asia: Smart Grid for Smart Community, ISGT-Asia 2017. IEEE. 2018. p. 1-6 <https://doi.org/10.1109/ISGT-Asia.2017.8378406>

Kokko M, Epple S, Gescher J, Kerzenmacher S. **Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems.** Bioresource Technology. 2018 Jun 1;258:376-389. <https://doi.org/10.1016/j.biortech.2018.01.090>

Saari J, Ali-Löytty H, Valden M. **Role of Oxide Defects in ALD grown TiO<sub>2</sub> Coatings on Performance as Photoanode Protection Layer.** 2018. Paper presented at Optics & Photonics Days 2018, Jyväskylä, Finland.

Dessi P, Porca E, Frunzo L, Lakaniemi A-M, Collins G, Esposito G et al. **Inoculum pretreatment differentially affects the active microbial community performing mesophilic and thermophilic dark fermentation of xylose.** International Journal of Hydrogen Energy. 2018 May 10;43(19):9233-9245. <https://doi.org/10.1016/j.ijhydene.2018.03.117>

Oluoti K, Doddapaneni TRKC, Richards T. **Investigating the kinetics and biofuel properties of *Alstonia congensis* and *Ceiba pentandra* via torrefaction.** Energy. 2018 May 1;150:134-141. <https://doi.org/10.1016/j.energy.2018.02.086>

Supponen A, Repo S, Kulmala A. **Coordinated voltage control as a replacement for passive network reinforcements-A case study.** In 2017 IEEE International Conference on Smart Grid Communications, SmartGridComm 2017. IEEE. 2018. p. 326-331 <https://doi.org/10.1109/SmartGridComm.2017.8340714>

Kotilainen K, Saari UA. **Policy Influence on Consumers' Evolution into Prosumers—Empirical Findings from an Exploratory Survey in Europe.** Sustainability. 2018 Jan 13;2018(10). 186. <https://doi.org/10.3390/su10010186>

Castro LM, Acha E. **A new method to assess the contribution of VSC-HVDC connected wind farms to the primary frequency control of power networks.** Electric Power Systems Research. 2018;154:48-58. <https://doi.org/10.1016/j.epsr.2017.08.011>

Attar M, Homaei O, Falaghi H, Siano P. **A novel strategy for optimal placement of locally controlled voltage regulators in traditional distribution systems.** International Journal of Electrical Power and Energy Systems. 2018;96:11-22. <https://doi.org/10.1016/j.ijepes.2017.09.028>

Suntio T. **Dynamic modeling and analysis of PCM-controlled DCM-operating buck converters-A reexamination.** Energies. 2018;11(5):1-18. en11051267. <https://doi.org/10.3390/en11051267>

Elsehrawy F, Aho T, Niemi T, Guina M, Cappelluti F. **Improved Light Trapping in Quantum Dot Solar Cells Using Double-sided Nanostructuring.** In Optics and Photonics for Energy and the Environment 2018. OSA - The Optical Society. 2018 <https://doi.org/10.1364/EE.2018.JM4A.5>

Cappelluti F, Kim D, van Eerden M, Cédola AP, Aho T, Bissels G et al. **Light-trapping enhanced thin-film III-V quantum dot solar cells fabricated by epitaxial lift-off.** Solar Energy Materials and Solar Cells. 2018;181:83-92. <https://doi.org/10.1016/j.solmat.2017.12.014>

Doddapaneni TRKC, Praveenkumar R, Tolvanen H, Rintala J, Konttinen J. **Techno-economic evaluation of integrating torrefaction with anaerobic digestion.** Applied Energy. 2018;213:272-284. <https://doi.org/10.1016/j.apenergy.2018.01.045>



Dessi P, Porca E, Waters NR, Lakaniemi A-M, Collins G, Lens PNL. **Thermophilic versus mesophilic dark fermentation in xylose-fed fluidised bed reactors: Biohydrogen production and active microbial community.** International Journal of Hydrogen Energy. 2018;43(11):5473-5485. <https://doi.org/10.1016/j.ijhydene.2018.01.158>

Sippola RJ, Hadipour A, Kastinen T, Vivo P, Hukka TI, Aernouts T et al. **Carbazole-based small molecule electron donors: Syntheses, characterization, and material properties.** Dyes and Pigments. 2017 Nov 8;150:79-88. [j.dyepig.2017.11.014](https://doi.org/10.1016/j.dyepig.2017.11.014). <https://doi.org/10.1016/j.dyepig.2017.11.014>

Haavisto JM, Kokko ME, Lay C-H, Puhakka JA. **Effect of hydraulic retention time on continuous electricity production from xylose in up-flow microbial fuel cell.** International Journal of Hydrogen Energy. 2017 Nov 1;42:27494-27502. <https://doi.org/10.1016/j.ijhydene.2017.05.068>

Ruusala A, Vinha J. **Koulujen ja päiväkotien laskettu ja toteutunut energiankulutus.** In Vinha J, Kivioja H, editors, Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere. Vol. 1. Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka. 2017. p. 267-274. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.)

Jokisalo J, Sankelo P, Sirén K, Vinha J. **Kustannusoptimaaliset energiakorjaus- ja uusiutuvan energian tuotannon ratkaisut kunnallisissa palvelurakennuksissa.** In Vinha J, Kivioja H, editors, Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere. Vol. 1. Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka. 2017. p. 287-292

Tampio E, Lehtonen E, Kinnunen V, Mönkäre T, Ervasti S, Kettunen R et al. **A demand-based nutrient utilization approach to urban biogas plant investment based on regional crop fertilization.** Journal of Cleaner Production. 2017 Oct 15;164:19-29. <https://doi.org/10.1016/j.jclepro.2017.06.172>

Saari J. **Atomikerroskasvatusmenetelmällä kasvatetun titaanidioksidikalvon ominaisuudet valosähkökemiallisessa veden hajottamisessa.** 2017. 74 p.

Tuominen V, Reponen H, Kulmala A, Lu S, Repo S. **Real-time hardware- and software-in-the-loop simulation of decentralised distribution network control architecture.** IET Generation, Transmission and Distribution. 2017 Aug 24;11(12):3057-3064. <https://doi.org/10.1049/iet-gtd.2016.1570>

Pirjola L, Rönkkö T, Saukko E, Parviainen H, Malinen A, Alanen J et al. **Exhaust emissions of non-road mobile machine: Real-world and laboratory studies with diesel and HVO fuels.** Fuel. 2017 Aug 15;202:154-164. <https://doi.org/10.1016/j.fuel.2017.04.029>

Suominen M, Lehtimäki S, Yewale R, Damlin P, Tuukkanen S, Kvarnström C. **Electropolymerized polyazulene as active material in flexible supercapacitors.** Journal of Power Sources. 2017 Jul 15;356:181-190. <https://doi.org/10.1016/j.jpowsour.2017.04.082>

Lummi K, Rautiainen A, Järventausta P, Huhta K, Talus K, Kojo M. **Aspects of advancement of distribution tariffs for small consumers in Finland.** In 2017 14th International Conference on the European Energy Market, EEM 2017. IEEE. 2017 <https://doi.org/10.1109/EEM.2017.7981937>

Rautiainen A, Koskela J, Vilppo O, Supponen A, Kojo M, Toivanen P et al. **Attractiveness of demand response in the Nordic electricity market - Present state and future prospects.** In 2017 14th International Conference on the European Energy Market, EEM 2017. IEEE. 2017 <https://doi.org/10.1109/EEM.2017.7981925>

Honkapuro S, Haapaniemi J, Haakana J, Lassila J, Belonogova N, Partanen J et al. **Development options for distribution tariff structures in Finland.** In 2017 14th International Conference on the European Energy Market, EEM 2017. IEEE. 2017 <https://doi.org/10.1109/EEM.2017.7981930>

Kotilainen K, Valta J, Mäkinen SJ, Järventausta P. **Understanding consumers' renewable energy behaviour beyond 'homo economicus': An exploratory survey in four European countries.** In 2017 14th International Conference on the European Energy Market, EEM 2017. IEEE. 2017 <https://doi.org/10.1109/EEM.2017.7981932>

Kotilainen M, Krumpolec R, Franta D, Souček P, Homola T, Cameron DC et al. **Hafnium oxide thin films as a barrier against copper diffusion in solar absorbers.** *Solar Energy Materials and Solar Cells.* 2017 Jul 1;166:140-146. <https://doi.org/10.1016/j.solmat.2017.02.033>

Baek J, Umeyama T, Stranius K, Yamada H, Tkachenko NV, Imahori H. **Long-Range Observation of Exciplex Formation and Decay Mediated by One-Dimensional Bridges.** *Journal of Physical Chemistry C.* 2017 Jun 29;121(25):13952-13961. <https://doi.org/10.1021/acs.jpcc.7b04483>

Niemelä NP, Tolvanen H, Saarinen T, Leppänen A, Joronen T. **CFD based reactivity parameter determination for biomass particles of multiple size ranges in high heating rate devolatilization.** *Energy.* 2017 Jun 1;128:676-687. <https://doi.org/10.1016/j.energy.2017.04.023>

Ma L, Laasonen K, Akola J. **Catalytic Activity of AuCu Clusters on MgO(100): Effect of Alloy Composition for CO Oxidation.** *Journal of Physical Chemistry C.* 2017 May 25;121(20):10876-10886. <https://doi.org/10.1021/acs.jpcc.6b12054>

Goh J-Q, Akola J, Ferrando R. **Geometric Structure and Chemical Ordering of Large AuCu Clusters: A Computational Study.** *Journal of Physical Chemistry C.* 2017 May 25;121(20):10809-10816. <https://doi.org/10.1021/acs.jpcc.6b11958>

Kramb J, Gómez-Barea A, DeMartini N, Romar H, Doddapaneni TRKC, Konttinen J. **The effects of calcium and potassium on CO<sub>2</sub> gasification of birch wood in a fluidized bed.** *Fuel.* 2017 May 15;196:398-407. <https://doi.org/10.1016/j.fuel.2017.01.101>

Virkki K, Hakola H, Urbani M, Tejerina L, Ince M, Martínez-Díaz MV et al. **Photoinduced Electron Injection from Zinc Phthalocyanines into Zinc Oxide Nanorods: Aggregation Effects.** *Journal of Physical Chemistry C.* 2017 May 4;121(17):9594-9605. <https://doi.org/10.1021/acs.jpcc.7b01562>

Repo S, Ponci F, Della Giustina D, Alvarez A, Corchero Garcia C, Al-Jassim Z et al. **The IDE4L Project: Defining, Designing, and Demonstrating the Ideal Grid for All.** *IEEE POWER AND ENERGY MAGAZINE.* 2017 May 1;15(3):41-51. <https://doi.org/10.1109/MPE.2017.2662329>

Garcia N, Acha E. **On the Efficient Calculation of the Periodic Steady-State Response of Grid-Connected Wind Parks - Part I.** *IEEE Transactions on Sustainable Energy.* 2017 Apr 1;8(2):458-467. <https://doi.org/10.1109/TSTE.2016.2606352>

Rostedt A, Ntziachristos LD, Simonen P, Rönkkö T, Samaras ZC, Hillamo R et al. **A New Miniaturized Sensor for Ultra-Fast On-Board Soot Concentration Measurements.** *SAE International Journal of Engines.* 2017 Mar 28;10(4). <https://doi.org/10.4271/2017-01-1008>

Lappalainen K, Valkealahti S. **Output power variation of different PV array configurations during irradiance transitions caused by moving clouds.** *Applied Energy.* 2017 Mar 15;190:902-910. <https://doi.org/10.1016/j.apenergy.2017.01.013>

Lappalainen K, Valkealahti S. **Effects of PV array layout, electrical configuration and geographic orientation on mismatch losses caused by moving clouds.** *Solar Energy.* 2017 Mar 1;144:548-555. <https://doi.org/10.1016/j.solener.2017.01.066>

Kivimäki J, Sitbon M, Kolesnik S, Kuperman A, Suntio T. **Determining maximum MPP-tracking sampling frequency for input-voltage-controlled PV-interfacing converter.** In 8th Annual IEEE Energy Conversion Congress & Exposition (ECCE 2016). IEEE. 2017 <https://doi.org/10.1109/ECCE.2016.7855036>

Matikainen V, Rubio S, Ojala N, Koivuluoto H, Schubert J, Houdková S et al. **Cavitation erosion, slurry erosion and solid particle erosion performance of metal matrix composite (MMC) coatings sprayed with modern high velocity thermal spray processes.** In Materials Science and Technology Conference and Exhibition 2017, MS and T 2017: October 8-12, 2017, Pittsburgh, Pennsylvania USA. Vol. 2. Association for Iron and Steel Technology, AISTECH. 2017. p. 1161-1163

- Järvinen A, Karjalainen P, Bloss M, Potila O, Simonen P, Kuuluvainen H et al. **Chasing measurements for real-world emissions of city buses**. 2017. Paper presented at European Aerosol Conference 2017, Zürich, Switzerland.
- Lehtoranta K, Murtonen T, Vesala H, Koponen P, Alanen J, Kuittinen N et al. **Controlling emissions of natural gas engines**. In Proceedings of the Air and Waste Management Association's Annual Conference and Exhibition, AWMA2017. Air and Waste Management Association. 2017
- Tao R, Lakaniemi A-M, Rintala JA. **Cultivation of *Scenedesmus acuminatus* in different liquid digestates from anaerobic digestion of pulp and paper industry biosludge**. Bioresource Technology. 2017;245(A):706-713. <https://doi.org/10.1016/j.biortech.2017.08.218>
- Kordmahaleh AA, Naghashzadegan M, Javaherdeh K, Khoshgoftar M. **Design of a 25 MWe Solar Thermal Power Plant in Iran with Using Parabolic Trough Collectors and a Two-Tank Molten Salt Storage System**. International Journal of Photoenergy. 2017;2017. 4210184. <https://doi.org/10.1155/2017/4210184>
- Sekki P, Karvinen T. **Numerical simulation and measurements of drying of Finnish concrete grades**. Energy Procedia. 2017;132(October):729-734. <https://doi.org/10.1016/j.egypro.2017.10.015>
- Baek J, Umeyama T, Mizuno S, Tkachenko NV, Imahori H. **Photophysical properties of porphyrin dimer-single-walled carbon nanotube linked systems**. Journal of Physical Chemistry C. 2017;121(39). <https://doi.org/10.1021/acs.jpcc.7b08594>
- Vinha J, (ed.), Kivioja H, (ed.). **Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere. Seminaarijulkaisu 5 - Osa 1**. Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, 2017. 370 p.
- Vinha J, (ed.), Kivioja H, (ed.). **Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere. Seminaarijulkaisu 5 - Osa 2**. Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, 2017. 256 p.
- Vinha J. **Rakennusten rakennusfysikaalisen suunnittelun ja toteutuksen periaatteet**. In Koskenvesa A, Lyytinen J, Laine S, editors, Rakentajain kalenteri 2018. Rakennustieto Oy. 2017. p. 117-176. (Rakentajain kalenteri).
- Wang L, Moilanen A, Lehtinen J, Konttinen J, Matas BG. **Release of Potassium during Devolatilization of Spruce Bark**. Energy Procedia. 2017;105:1295-1301. <https://doi.org/10.1016/j.egypro.2017.03.463>
- Ntziachristos L, Saukko E, Lehtoranta K, Rönkkö T, Timonen H, Simonen P et al. **Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions**. Fuel. 2016 Dec 15;186:456-465. <https://doi.org/10.1016/j.fuel.2016.08.091>
- Hannula MK, Lahtonen KT, Isotalo TJ, Saari JS, Valden MO. **Thermal Modification of ALD Grown Titanium Oxide Ultra Thin Film for Photoanode Applications**. 2016. Paper presented at Symposium on Future Prospects for Photonics, Tampere, Finland.
- Lindstedt M, Karvinen R. **Optimal control of pump rotational speed in filling and emptying a reservoir: minimum energy consumption with fixed time**. Energy Efficiency. 2016 Dec;9(6):1461-1474. <https://doi.org/10.1007/s12053-016-9434-y>
- Lappalainen K, Valkealahti S. **Apparent velocity of shadow edges caused by moving clouds**. Solar Energy. 2016 Nov 15;138:47-52. <https://doi.org/10.1016/j.solener.2016.09.008>
- Carfora D, Gironimo GD, Esposito G, Huhtala K, Määttä T, Mäkinen H et al. **Multicriteria selection in concept design of a divertor remote maintenance port in the EU DEMO reactor using an AHP participative approach**. Fusion Engineering and Design. 2016 Nov 15;112:324-331. <https://doi.org/10.1016/j.fusengdes.2016.08.023>

Castro LM, Acha E. **A Unified Modeling Approach of Multi-Terminal VSC-HVDC Links for Dynamic Simulations of Large-Scale Power Systems**. IEEE Transactions on Power Systems. 2016 Nov 1;31(6):5051-5060. <https://doi.org/10.1109/TPWRS.2016.2527498>

Lappalainen K, Valkealahti S. **Analysis of shading periods caused by moving clouds**. Solar Energy. 2016 Oct 1;135:188-196. <https://doi.org/10.1016/j.solener.2016.05.050>

Kramb J, Konttinen J, Backman R, Salo K, Roberts M. **Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood**. Fuel. 2016 Oct 1;181:319-324. <https://doi.org/10.1016/j.fuel.2016.04.109>

Laitinen S, Laitinen J, Fagnäs L, Korpijärvi K, Korpinen L, Ojanen K et al. **Exposure to biological and chemical agents at biomass power plants**. Biomass & Bioenergy. 2016 Oct 1;93:78-86. <https://doi.org/10.1016/j.biombioe.2016.06.025>

Acha E, Rubbrecht T, Castro LM. **Power flow solutions of AC/DC micro-grid structures**. In 19th Power Systems Computation Conference, PSCC 2016. IEEE. 2016 <https://doi.org/10.1109/PSCC.2016.7540815>

Kolesnik S, Sitbon M, Agranovich G, Kuperman A, Suntio T. **Comparison of photovoltaic and wind generators as dynamic input sources to power processing interfaces**. In 2016 2nd International Conference on Intelligent Energy and Power Systems, IEPS 2016 - Conference Proceedings. IEEE. 2016 <https://doi.org/10.1109/IEPS.2016.7521859>

Lummi K, Rautiainen A, Järventausta P, Heine P, Lehtinen J, Hyvärinen M. **Cost-causation based approach in forming power-based distribution network tariff for small customers**. In 2016 13th International Conference on the European Energy Market, EEM 2016. IEEE COMPUTER SOCIETY PRESS. 2016 <https://doi.org/10.1109/EEM.2016.7521251>

Supponen A, Rautiainen A, Lummi K, Järventausta P, Repo S. **Network impacts of distribution power tariff schemes with active customers**. In 2016 13th International Conference on the European Energy Market, EEM 2016. IEEE COMPUTER SOCIETY PRESS. 2016 <https://doi.org/10.1109/EEM.2016.7521237>

Kotilainen K, Mäkinen SJ, Järventausta P, Rautiainen A, Markkula J. **The role of residential prosumers initiating the energy innovation ecosystem to future flexible energy system**. In 2016 13th International Conference on the European Energy Market, EEM 2016. IEEE COMPUTER SOCIETY PRESS. 2016 <https://doi.org/10.1109/EEM.2016.7521325>

Acha E, Castro LM. **A generalized frame of reference for the incorporation of, multi-terminal VSC-HVDC systems in power flow solutions**. Electric Power Systems Research. 2016 Jul 1;136:415-424. <https://doi.org/10.1016/j.epr.2016.03.009>

Kramb J, DeMartini N, Perander M, Moilanen A, Konttinen J. **Modeling of the catalytic effects of potassium and calcium on spruce wood gasification in CO<sub>2</sub>**. Fuel Processing Technology. 2016 Jul 1;148:50-59. <https://doi.org/10.1016/j.fuproc.2016.01.031>

Tampio E, Marttinen S, Rintala J. **Liquid fertilizer products from anaerobic digestion of food waste: Mass, nutrient and energy balance of four digestate liquid treatment systems**. Journal of Cleaner Production. 2016 Jul;125:22-32. <https://doi.org/10.1016/j.jclepro.2016.03.127>

Sand J, Nicholl A, Hrncsek E, Toivonen H, Toivonen J, Peräjvi K. **Stand-Off Radioluminescence Mapping of Alpha Emitters under Bright Lighting**. IEEE Transactions on Nuclear Science. 2016 Jun 1;63(3):1777-1783. <https://doi.org/10.1109/TNS.2016.2562359>

Terva J, Valtonen K, Siitonen P, Kuokkala V-T. **Correlation of wear and work in dual pivoted jaw crusher tests**. In The 17th Nordic Symposium on Tribology - NORDTRIB 2016. 2016

Supponen A, Rautiainen A, Markkula J, Mäkinen A, Järventausta P, Repo S. **Power quality in distribution networks with electric vehicle charging - A research methodology based on field tests and real data**. In 2016 11th International Conference on Ecological Vehicles and Renewable Energies, EVER 2016. IEEE. 2016

<https://doi.org/10.1109/EVER.2016.7476376>

Polojärvi V, Aho A, Tukiainen A, Raappana M, Aho T, Schramm A et al. **Influence of As/group-III flux ratio on defects formation and photovoltaic performance of GaInNAs solar cells.** *Solar Energy Materials and Solar Cells*. 2016 May 1;149:213-220. <https://doi.org/10.1016/j.solmat.2016.01.024>

Hakola H, Sariola-Leikas E, Efimov A, Tkachenko NV. **Effect of Hole Transporting Material on Charge Transfer Processes in Zinc Phthalocyanine Sensitized ZnO Nanorods.** *Journal of Physical Chemistry C*. 2016 Apr 21;120(13):7044-7051. <https://doi.org/10.1021/acs.jpcc.6b01583>

Suleimanov SK, Berger P, Dyskin VG, Dzhanklich MU, Bugakov AG, Dudko OA et al. **Antireflection composite coatings for organic solar cells.** *Applied Solar Energy (English translation of Geliotekhnika)*. 2016 Apr 1;52(2):157-158. <https://doi.org/10.3103/S0003701X1602016X>

Ali-Löyty H, Louie MW, Singh MR, Li L, Sanchez Casalongue HG, Ogasawara H et al. **Ambient-Pressure XPS Study of a Ni-Fe Electrocatalyst for the Oxygen Evolution Reaction.** *Journal of Physical Chemistry C*. 2016 Feb 4;120(4):2247-2253. <https://doi.org/10.1021/acs.jpcc.5b10931>

Laasasenaho K, Lensu A, Rintala J. **Planning land use for biogas energy crop production: The potential of cutaway peat production lands.** *Biomass & Bioenergy*. 2016 Feb 1;85:355-362. <https://doi.org/10.1016/j.biombioe.2015.12.030>

Butti SK, Velvizhi G, Sulonen MLK, Haavisto JM, Oguz Koroglu E, Yusuf Cetinkaya A et al. **Microbial electrochemical technologies with the perspective of harnessing bioenergy: Maneuvering towards upscaling.** *Renewable and Sustainable Energy Reviews*. 2016 Jan;53:462-476. <https://doi.org/10.1016/j.rser.2015.08.058>

Tukiainen A, Aho A, Polojärvi V, Ahorinta R, Guina M. **High efficiency dilute nitride solar cells: Simulations meet experiments.** *Journal of Green Engineering*. 2016;5(3-4):113-132. 8. <https://doi.org/10.13052/jge1904-4720.5348>

Kotilainen M, Honkanen M, Mizohata K, Vuoristo P. **Influence of temperature-induced copper diffusion on degradation of selective chromium oxy-nitride solar absorber coatings.** *Solar Energy Materials and Solar Cells*. 2016;145:323-332. <https://doi.org/10.1016/j.solmat.2015.10.034>

Saarinen JJ, Valtakari D, Bollström R, Stepien M, Haapanen J, Mäkelä JM et al. **Roll-to-roll application of photocatalytic TiO<sub>2</sub> nanoparticles for printed functionality.** In *Advanced Manufacturing, Electronics and Microsystems: TechConnect Briefs 2016*. Vol. 4. TechConnect. 2016. p. 47-50

Alanen J, Saukko E, Lehtoranta K, Murtonen T, Timonen H, Hillamo R et al. **The formation and physical properties of the particle emissions from a natural gas engine.** *Fuel*. 2015 Dec 15;162:155-161. <https://doi.org/10.1016/j.fuel.2015.09.003>

Kannisto MS, Mangayil RK, Shrivastava-Bhattacharya A, Pletschke BI, Karp MT, Santala VP. **Metabolic engineering of *Acinetobacter baylyi* ADP1 for removal of *Clostridium butyricum* growth inhibitors produced from lignocellulosic hydrolysates.** *Biotechnology for Biofuels*. 2015 Dec 1;8(1). 198. <https://doi.org/10.1186/s13068-015-0389-6>

Gadelovits S, Sitbon M, Suntio T, Kuperman A. **Single-source multibattery solar charger: Case study and implementation issues.** *Progress in Photovoltaics: Research and Applications*. 2015 Nov 25;23(12):1916-1928. <https://doi.org/10.1002/pip.2591>

Lay C-H, Kokko ME, Puhakka JA. **Power generation in fed-batch and continuous up-flow microbial fuel cell from synthetic wastewater.** *Energy*. 2015 Nov 1;91:235-241. <https://doi.org/10.1016/j.energy.2015.08.029>

Karamanakos P, Geyer T, Kennel R. **Suboptimal search strategies with bounded computational complexity to solve long-horizon direct model predictive control problems.** In *2015 IEEE Energy Conversion Congress and Exposition, ECCE 2015*. Institute of Electrical and Electronics Engineers Inc. 2015. p. 334-341 <https://doi.org/10.1109/ECCE.2015.7309707>

Bhagavatheswaran ES, Parsekar M, Das A, Le HH, Wiessner S, Stöckelhuber KW et al. **Construction of an Interconnected Nanostructured Carbon Black Network: Development of Highly Stretchable and Robust Elastomeric Conductors**. Journal of Physical Chemistry C. 2015 Sep 17;119(37):21723-21731. <https://doi.org/10.1021/acs.jpcc.5b06629>

Schnabel J, Valkealahti S. **Compensation of PV generator output power fluctuations with energy storage systems**. In 31st European Photovoltaic Solar Energy Conference and Exhibition (31st EU PVSEC), 14– 18 September, 2015, Hamburg, Germany. 2015. p. 2177-2181 <https://doi.org/10.4229/EUPVSEC20152015-5BV.2.6>

Lappalainen K, Valkealahti S. **Recognition of shading events caused by moving clouds and determination of shadow velocity from solar radiation measurements**. In 31st European Photovoltaic Solar Energy Conference and Exhibition (31st EU PVSEC), 14– 18 September, 2015, Hamburg, Germany. 2015. p. 1568-1573 <https://doi.org/10.4229/EUPVSEC20152015-5AO.7.5>

Goh JQ, Akola J. **Superatom Model for Ag-S Nanocluster with Delocalized Electrons**. Journal of Physical Chemistry C. 2015 Sep 10;119(36):21165-21172. <https://doi.org/10.1021/acs.jpcc.5b05824>

Bajamundi CJE, Vainikka P, Hedman M, Silvennoinen J, Heinanen T, Taipale R et al. **Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel**. Fuel. 2015 Sep 1;155:25-36. <https://doi.org/10.1016/j.fuel.2015.03.087>

Lepcha A, Maccato C, Mettenböcker A, Andreu T, Mayrhofer L, Walter M et al. **Electrospun Black Titania Nanofibers: Influence of Hydrogen Plasma-Induced Disorder on the Electronic Structure and Photoelectrochemical Performance**. Journal of Physical Chemistry C. 2015 Aug 20;119(33):18835-18842. <https://doi.org/10.1021/acs.jpcc.5b02767>

Filanovsky IM, Järvenhaara JK, Tchamov NT. **Cascoded Power Stage With Automatic Dead Time Generation**. In IEEE 58th International Midwest Symposium on Circuits and Systems (MWSCAS), Fort Collins, CO, U.S.A, Aug. 2-5, 2015. IEEE. 2015 <https://doi.org/10.1109/MWSCAS.2015.7282019>

Hakala T, Lähdeaho T, Järventausta P. **Low-Voltage DC Distribution-Utilization Potential in a Large Distribution Network Company**. IEEE Transactions on Power Delivery. 2015 Aug 1;30(4):1694-1701. <https://doi.org/10.1109/TPWRD.2015.2398199>

Virkki K, Demir S, Lemmetyinen H, Tkachenko NV. **Photoinduced Electron Transfer in CdSe/ZnS Quantum Dot-Fullerene Hybrids**. Journal of Physical Chemistry C. 2015 Jul 23;119(31):17561-17572. <https://doi.org/10.1021/acs.jpcc.5b04251>

Carfora D, Di Gironimo G, Järvenpää J, Huhtala K, Määttä T, Siuko M. **Divertor remote handling for DEMO: Concept design and preliminary FMECA studies**. Fusion Engineering and Design. 2015 Jul 9;98-99:1437-1441. <https://doi.org/10.1016/j.fusengdes.2015.06.056>

Ahmed Z, George L, Hiltunen A, Lemmetyinen H, Hukka T, Efimov A. **Synthesis and study of electrochemical and optical properties of substituted perylenemonoimides in solutions and on solid surfaces**. Journal of Materials Chemistry A. 2015 Jul 7;3(25):13332-13339. <https://doi.org/10.1039/c5ta02241j>

Sitbon M, Schacham S, Suntio T, Kuperman A. **Improved adaptive input voltage control of a solar array interfacing current mode controlled boost power stage**. Energy Conversion and Management. 2015 Jul 1;98:369-375. <https://doi.org/10.1016/j.enconman.2015.03.100>

Bitto J, Jeong S, Tentzeris MM. **A real-time electrically controlled active matching circuit utilizing genetic algorithms for biomedical WPT applications**. In 2015 IEEE Wireless Power Transfer Conference, WPTC 2015. Institute of Electrical and Electronics Engineers Inc. 2015. 7140168 <https://doi.org/10.1109/WPT.2015.7140168>

- Perander M, DeMartini N, Brink A, Kramb J, Karlström O, Hemming J et al. **Catalytic effect of Ca and K on CO<sub>2</sub> gasification of spruce wood char.** Fuel. 2015 Jun 15;150:464-472. <https://doi.org/10.1016/j.fuel.2015.02.062>
- Rasilo P, Salem A, Abdalh A, De Belie F, Dupré L, Melkebeek JA. **Effect of Multilevel Inverter Supply on Core Losses in Magnetic Materials and Electrical Machines.** IEEE Transactions on Energy Conversion. 2015 Jun 1;30(2):736-744. 6980114. <https://doi.org/10.1109/TEC.2014.2372095>
- Castro LM, Acha E, Fuerte-Esquivel CR. **A novel VSC-HVDC link model for dynamic power system simulations.** Electric Power Systems Research. 2015 May 30;126:111-120. <https://doi.org/10.1016/j.epsr.2015.05.003>
- Tampio E, Ervasti S, Rintala J. **Characteristics and agronomic usability of digestates from laboratory digesters treating food waste and autoclaved food waste.** Journal of Cleaner Production. 2015 May 1;94:86-92. <https://doi.org/10.1016/j.jclepro.2015.01.086>
- Alaviitala T, Mattila TJ. **Engineered nanomaterials reduce but do not resolve life cycle environmental impacts of power capacitors.** Journal of Cleaner Production. 2015 Apr 15;93:347-353. <https://doi.org/10.1016/j.jclepro.2015.01.036>
- Carver SM, Nelson MC, Yu Z, Tuovinen OH. **Fermentative metabolism of an anaerobic, thermophilic consortium on plant polymers and commercial paper samples.** Biomass & Bioenergy. 2015 Apr 1;75:11-22. <https://doi.org/10.1016/j.biombioe.2015.02.005>
- Mangayil R, Aho T, Karp M, Santala V. **Improved bioconversion of crude glycerol to hydrogen by statistical optimization of media components.** Renewable Energy. 2015 Mar 1;75:583-589. <https://doi.org/10.1016/j.renene.2014.10.051>
- Goh J-Q, Malola S, Häkkinen H, Akola J. **Silver sulfide nanoclusters and the superatom model.** Journal of Physical Chemistry C. 2015 Jan 22;119(3):1583-1590. <https://doi.org/10.1021/jp511037x>
- Liu Z, Wu Q, Christensen L, Rautiainen A, Xue Y. **Driving pattern analysis of Nordic region based on National Travel Surveys for electric vehicle integration.** Journal of Modern Power Systems and Clean Energy. 2015 Jan 1;3(2):180-189. <https://doi.org/10.1007/s40565-015-0127-x>
- Alexandru R-C, Lohan E-S. **Comparison of Detection Techniques for Multipath Propagation of Pseudolite Signals Used in Dense Industrial Environments.** Procedia Engineering. 2015;100(C):1294-1300. <https://doi.org/10.1016/j.proeng.2015.01.496>
- Liimatainen H, Hovi IB, Arvidsson N, Nykänen L. **Driving forces of road freight CO<sub>2</sub> in 2030.** International Journal of Physical Distribution and Logistics Management. 2015;45(3):260-285. <https://doi.org/10.1108/IJPDLM-10-2013-0255>
- Karvountzis-Kontakiotis A, Ntziachristos L. **Enquête de la variabilité cycle-cycle du NO dans la combustion homogène.** OIL AND GAS SCIENCE AND TECHNOLOGY : REVUE DE L'INSTITUT FRANCAIS DU PETROLE. 2015;70(1):111-123. <https://doi.org/10.2516/ogst/2013199>
- Kolesnik S, Sitbon M, Gadelovits S, Suntio T, Kuperman A. **Interfacing renewable energy sources for maximum power transfer-Part II: Dynamics.** Renewable and Sustainable Energy Reviews. 2015;51:1771-1783. <https://doi.org/10.1016/j.rser.2015.04.043>
- Aho AJ, Polojärvi VV, Aho TA, Raappana MJS, Tukiainen AK, Guina MD. **MBE GROWN GaInNAsSb MULTIJUNCTION SOLAR CELLS: PATH TOWARDS 50% EFFICIENCY.** In 18th European Molecular Beam Epitaxy Workshop. Canazei, Italy. 2015
- Geyer T, Karamanakos P, Kennel R. **On the benefit of long-horizon direct model predictive control for drives with LC filters.** In 2014 IEEE Energy Conversion Congress and Exposition, ECCE 2014. Institute of Electrical and Electronics Engineers Inc. 2014. p. 3520-3527 <https://doi.org/10.1109/ECCE.2014.6953879>

Karamanakos P, Geyer T, Kennel R. **Reformulation of the long-horizon direct model predictive control problem to reduce the computational effort.** In 2014 IEEE Energy Conversion Congress and Exposition, ECCE 2014. Institute of Electrical and Electronics Engineers Inc. 2014. p. 3512-3519 <https://doi.org/10.1109/ECCE.2014.6953878>

Ball J, Parra FI, Barnes M, Dorland W, Hammett GW, Rodrigues P et al. **Intrinsic momentum transport in up-down asymmetric tokamaks.** PLASMA PHYSICS AND CONTROLLED FUSION. 2014 Sep 1;56(9). 095014. <https://doi.org/10.1088/0741-3335/56/9/095014>

Karamanakos P, Stolze P, Kennel RM, Manias S, Du Toit Mouton H. **Variable switching point predictive torque control of induction machines.** IEEE Journal of Emerging and Selected Topics in Power Electronics. 2014 Jun;2(2):285-295. <https://doi.org/10.1109/JESTPE.2013.2296794>

Raghuwanshi S, Deswal D, Karp M, Kuhad RC. **Bioprocessing of enhanced cellulase production from a mutant of Trichoderma asperellum RCK2011 and its application in hydrolysis of cellulose.** Fuel. 2014 May 15;124:183-189. <https://doi.org/10.1016/j.fuel.2014.01.107>

Aho A, Polojärvi V, Korpijärvi VM, Salmi J, Tukiainen A, Laukkanen P et al. **Composition dependent growth dynamics in molecular beam epitaxy of GaInNAs solar cells.** Solar Energy Materials and Solar Cells. 2014 May;124:150-158. <https://doi.org/10.1016/j.solmat.2014.01.044>

Ciranna A, Ferrari R, Santala V, Karp M. **Inhibitory effects of substrate and soluble end products on biohydrogen production of the alkalithermophile Caloramator celer: Kinetic, metabolic and transcription analyses.** International Journal of Hydrogen Energy. 2014 Apr 15;39(12):6391-6401. <https://doi.org/10.1016/j.ijhydene.2014.02.047>

Ntziachristos L, Mellios G, Tsokolis D, Keller M, Hausberger S, Ligterink NE et al. **In-use vs. type-approval fuel consumption of current passenger cars in Europe.** Energy Policy. 2014 Apr;67:403-411. <https://doi.org/10.1016/j.enpol.2013.12.013>

Khan MN, Zharnikov M. **Fabrication of ssDNA/oligo(ethylene glycol) monolayers by promoted exchange reaction with thiol and disulfide substituents.** Journal of Physical Chemistry C. 2014 Feb 13;118(6):3093-3101. <https://doi.org/10.1021/jp411353f>

Rasilo P, Lemesle MA, Belahcen A, Arkkio A, Hinkkanen M. **Comparison of finite-element-based state-space models for PM synchronous machines.** IEEE Transactions on Energy Conversion. 2014;29(2):535-543. <https://doi.org/10.1109/TEC.2014.2307472>

Qvintus P, Kataja K, Heikkilä P, Salmela J, Lehmonen J, Ketoja J et al. **Design driven world of cellulose-from bulk to luxury?** In Fibre Value Chain Conference and Expo 2014: Pulp and Paper Bioenergy Bioproducts. Appita Inc. 2014. p. 67-74

Miettunen K, Vapaavuori J, Tiihonen A, Poskela A, Lahtinen P, Halme J et al. **Nanocellulose aerogel membranes for optimal electrolyte filling in dye solar cells.** NANO ENERGY. 2014;8:95-102. <https://doi.org/10.1016/j.nanoen.2014.05.013>

Oksa M, Auerkari P, Salonen J, Varis T. **Nickel-based HVOF coatings promoting high temperature corrosion resistance of biomass-fired power plant boilers.** Fuel Processing Technology. 2014;125:236-245. <https://doi.org/10.1016/j.fuproc.2014.04.006>

Gomes M, Leroy C, Lemaire S, Marmin C, Mordon S, Ernst O. **Scanner abdominal: Étude comparative de l'exposition patient en routine clinique sur des appareils avec et sans reconstruction itérative.** Radioprotection. 2014;49(1):35-41. <https://doi.org/10.1051/radiopro/2013078>

Nikhil , Puhakka JA, Visa A, Yli-Harja O. **Software design for simulating microbial bioprocesses in bioreactor.** In 6th International Conference on Environmental Informatics, ISEIS 2007. International Society for Environmental Information Sciences. 2014. 60700018



Karamanakos P, Geyer T, Manias S. **Direct model predictive current control strategy of dc-dc boost converters**. IEEE Journal of Emerging and Selected Topics in Power Electronics. 2013 Dec 1;1(4):337-346. <https://doi.org/10.1109/JESTPE.2013.2279855>

Khan MN, Zharnikov M. **Fabrication of ssDNA/Oligo(ethylene glycol) monolayers and patterns by exchange reaction promoted by ultraviolet light irradiation**. Journal of Physical Chemistry C. 2013 Nov 27;117(47):24883-24893. <https://doi.org/10.1021/jp408819k>

Kivistö A, Santala V, Karp M. **Non-sterile process for biohydrogen and 1,3-propanediol production from raw glycerol**. International Journal of Hydrogen Energy. 2013 Sep 10;38(27):11749-11755. <https://doi.org/10.1016/j.ijhydene.2013.06.119>

Seppälä JJ, Larjo A, Aho T, Yli-Harja O, Karp MT, Santala V. **Prospecting hydrogen production of Escherichia coli by metabolic network modeling**. International Journal of Hydrogen Energy. 2013 Sep 10;38(27):11780-11789. <https://doi.org/10.1016/j.ijhydene.2013.07.002>

Karamanakos P, Geyer T, Manias S. **Model predictive control of the interleaved dc-dc boost converter with coupled inductors**. In 2013 15th European Conference on Power Electronics and Applications, EPE 2013. 2013. 6632006 <https://doi.org/10.1109/EPE.2013.6632006>

Kantola M, Saari A. **Renewable vs. traditional energy management solutions - A Finnish hospital facility case**. Renewable Energy. 2013 Sep;57:539-545. <https://doi.org/10.1016/j.renene.2013.02.023>

Stolze P, Karamanakos P, Kennel R, Manias S, Mouton T. **Variable switching point predictive torque control for the three-level neutral point clamped inverter**. In 2013 15th European Conference on Power Electronics and Applications, EPE 2013. 2013. 6631894 <https://doi.org/10.1109/EPE.2013.6631894>

Khan MN, Zharnikov M. **Irradiation promoted exchange reaction with disulfide substituents**. Journal of Physical Chemistry C. 2013 Jul 18;117(28):14534-14543. <https://doi.org/10.1021/jp4006026>

Rasi S, Seppälä M, Rintala J. **Organic silicon compounds in biogases produced from grass silage, grass and maize in laboratory batch assays**. Energy. 2013 Apr 1;52:137-142. <https://doi.org/10.1016/j.energy.2013.01.015>

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

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

Valkila N, Saari A. **Attitude-behaviour gap in energy issues: Case study of three different Finnish residential areas**. ENERGY FOR SUSTAINABLE DEVELOPMENT. 2013 Feb;17(1):24-34. <https://doi.org/10.1016/j.esd.2012.10.001>

Lobera DT, Valkealahti S. **Mismatch losses in PV power generators caused by partial shading due to clouds**. In 2013 4th IEEE International Symposium on Power Electronics for Distributed Generation Systems, PEDG 2013 - Conference Proceedings. IEEE COMPUTER SOCIETY PRESS. 2013. 6785587 <https://doi.org/10.1109/PEDG.2013.6785587>

Jonah O, Georgakopoulos SV, Tentzeris MM. **Orientation insensitive power transfer by magnetic resonance for mobile devices**. In 2013 IEEE Wireless Power Transfer, WPT 2013. 2013. p. 5-8. 6556868 <https://doi.org/10.1109/WPT.2013.6556868>

Lahtinen K, Maydannik P, Kääriäinen T, Seppänen T, Cameron DC, Johansson P et al. **Roll-to-roll atomic layer deposition for flexible substrates**. In TAPPI International Conference on Nanotechnology 2013. TAPPI Press. 2013. p. 726-739

Stepien M, Chinga-Carrasco G, Saarinen JJ, Teisala H, Tuominen M, Aromaa M et al. **Wear resistance of nanoparticle coatings on paperboard.** In TAPPI International Conference on Nanotechnology 2013. TAPPI Press. 2013. p. 821-829

Seppälä M, Pyykkönen V, Laine A, Rintala J. **Methane production from maize in Finland - Screening for different maize varieties and plant parts.** Biomass & Bioenergy. 2012 Nov;46(November):282-290. <https://doi.org/10.1016/j.biombioe.2012.08.016>

Kieferndorf F, Karamanakos P, Bader P, Oikonomou N, Geyer T. **Model predictive control of the internal voltages of a five-level active neutral point clamped converter.** In 2012 IEEE Energy Conversion Congress and Exposition, ECCE 2012. 2012. p. 1676-1683 <https://doi.org/10.1109/ECCE.2012.6342611>

Oikonomou N, Gutscher C, Karamanakos P, Kieferndorf F, Geyer T. **Model predictive pulse pattern control for the five-level active neutral point clamped inverter.** In 2012 IEEE Energy Conversion Congress and Exposition, ECCE 2012. 2012. p. 129-136 <https://doi.org/10.1109/ECCE.2012.6342832>

Kousoulidou M, Ntziachristos L, Fontaras G, Martini G, Dilara P, Samaras Z. **Impact of biodiesel application at various blending ratios on passenger cars of different fueling technologies.** Fuel. 2012 Aug;98:88-94. <https://doi.org/10.1016/j.fuel.2012.03.038>

Valkila N, Saari A. **Consumer panel on the readiness of finns to behave in a more pro-environmental manner.** Sustainability. 2012 Jul;4(7):1561-1579. <https://doi.org/10.3390/su4071561>

Wang J, Ray AK. **A first principles study of water adsorption on  $\alpha$ -Pu (0 2 0) surface.** Journal of Nuclear Materials. 2012 May;424(1-3):138-145. <https://doi.org/10.1016/j.jnucmat.2012.02.016>

Praveenkumar R, Johny K, MubarakAli D, Vijayan D, Thajuddin N, Gunasekaran M. **Demonstration of increased lipid accumulation potential of stigeoclonium sp., Kütz. BUM11007 under nitrogen starved regime: A new source of lipids for biodiesel production.** Journal of Biobased Materials and Bioenergy. 2012 Apr;6(2):209-213. <https://doi.org/10.1166/jbmb.2012.1200>

Saari A, Kalamees T, Jokisalo J, Michelsson R, Alanne K, Kurnitski J. **Financial viability of energy-efficiency measures in a new detached house design in Finland.** Applied Energy. 2012 Apr;92:76-83. <https://doi.org/10.1016/j.apenergy.2011.10.029>

Praveenkumar R, Shameera K, Mahalakshmi G, Akbarsha MA, Thajuddin N. **Influence of nutrient deprivations on lipid accumulation in a dominant indigenous microalga Chlorella sp., BUM11008: Evaluation for biodiesel production.** Biomass & Bioenergy. 2012 Feb;37:60-66. <https://doi.org/10.1016/j.biombioe.2011.12.035>

Koskela JE, Vapaavuori J, Hautala J, Priimagi A, Faul CFJ, Kaivola M et al. **Surface-relief gratings and stable birefringence inscribed using light of broad spectral range in supramolecular polymer-bisazobenzene complexes.** Journal of Physical Chemistry C. 2012 Jan 26;116(3):2363-2370. <https://doi.org/10.1021/jp210706n>

Puranen J, Laakso J, Hyvärinen L, Kylmälahti M, Vuoristo P. **High temperature oxidation behaviour of MnCO<sub>2</sub>O<sub>4</sub> coating on crofer 22 APU manufactured by a novel solution precursor plasma spray process (SPPS).** In ASME 2012 10th International Conference on Fuel Cell Science, Engineering and Technology Collocated with the ASME 2012 6th International Conference on Energy Sustainability, FUELCELL 2012. The American Society of Mechanical Engineers ASME. 2012. p. 213-218 <https://doi.org/10.1115/FuelCell2012-91385>

Pakarinen OM, Kaparaju PLN, Rintala JA. **Hydrogen and methane yields of untreated, water-extracted and acid (HCl) treated maize in one- and two-stage batch assays.** International Journal of Hydrogen Energy. 2011 Nov;36(22):14401-14407. <https://doi.org/10.1016/j.ijhydene.2011.08.028>

- Rasi S, Lantelä J, Rintala J. **Trace compounds affecting biogas energy utilisation - A review**. Energy Conversion and Management. 2011 Nov;52(12):3369-3375. <https://doi.org/10.1016/j.enconman.2011.07.005>
- Aree P, Acha E. **Power flow initialisation of dynamic studies with induction motor loads**. IET Generation Transmission and Distribution. 2011 Apr;5(4):417-424. <https://doi.org/10.1049/iet-gtd.2010.0442>
- Kaparaju P, Rintala J. **Mitigation of greenhouse gas emissions by adopting anaerobic digestion technology on dairy, sow and pig farms in Finland**. Renewable Energy. 2011 Jan;36(1):31-41. <https://doi.org/10.1016/j.renene.2010.05.016>
- Medyna G, Coatanea E, Millet D. **Environmental and economic evaluation of solar thermal panels using exergy and dimensional analysis**. In Globalized Solutions for Sustainability in Manufacturing - Proceedings of the 18th CIRP International Conference on Life Cycle Engineering. 2011. p. 647-651 [https://doi.org/10.1007/978-3-642-19692-8\\_112](https://doi.org/10.1007/978-3-642-19692-8_112)
- Puranen J, Hyvärinen L, Lagerbom J, Kylmälahti M, Koivuluoto H, Vuoristo P. **Manganese-cobalt spinel coatings for SOFC metallic interconnects manufactured by conventional plasma spraying (PS) and suspension plasma spraying (SPS)**. In ASME 2011 9th International Conference on Fuel Cell Science, Engineering and Technology. Collocated with ASME 2011 5th International Conference on Energy Sustainability, FUELCELL 2011. 2011. p. 237-244 <https://doi.org/10.1115/FuelCell2011-54750>
- Rasi S, Lehtinen J, Rintala J. **Determination of organic silicon compounds in biogas from wastewater treatments plants, landfills, and co-digestion plants**. Renewable Energy. 2010 Dec;35(12):2666-2673. <https://doi.org/10.1016/j.renene.2010.04.012>
- Rasilo P, Arkkio A. **Modeling the effect of inverter supply on eddy-current losses in synchronous machines**. In SPEEDAM 2010 - International Symposium on Power Electronics, Electrical Drives, Automation and Motion. 2010. p. 861-865 <https://doi.org/10.1109/SPEEDAM.2010.5544811>
- Pakarinen OM, Tähti HP, Rintala JA. **One-stage H<sub>2</sub> and CH<sub>4</sub> and two-stage H<sub>2</sub> + CH<sub>4</sub> production from grass silage and from solid and liquid fractions of NaOH pre-treated grass silage**. Biomass & Bioenergy. 2009 Oct;33(10):1419-1427. <https://doi.org/10.1016/j.biombioe.2009.06.006>
- Lehtomäki A, Viinikainen TA, Rintala JA. **Screening boreal energy crops and crop residues for methane biofuel production**. Biomass & Bioenergy. 2008 Jun;32(6):541-550. <https://doi.org/10.1016/j.biombioe.2007.11.013>
- Pakarinen O, Lehtomäki A, Rintala J. **Batch dark fermentative hydrogen production from grass silage: The effect of inoculum, pH, temperature and VS ratio**. International Journal of Hydrogen Energy. 2008 Jan;33(2):594-601. <https://doi.org/10.1016/j.ijhydene.2007.10.008>
- Lehtomäki A, Huttunen S, Rintala JA. **Laboratory investigations on co-digestion of energy crops and crop residues with cow manure for methane production: Effect of crop to manure ratio**. Resources Conservation and Recycling. 2007 Sep;51(3):591-609. <https://doi.org/10.1016/j.resconrec.2006.11.004>
- Rasi S, Veijanen A, Rintala J. **Trace compounds of biogas from different biogas production plants**. Energy. 2007 Aug;32(8):1375-1380. <https://doi.org/10.1016/j.energy.2006.10.018>
- Repo S, Laaksonen H, Järventausta P. **Statistical short-term network planning of distribution system and distributed generation**. 2005. Paper presented at 15th Power Systems Computation Conference, PSCC 2005, Liege, Belgium.
- Kaparaju P, Rintala J. **Anaerobic co-digestion of potato tuber and its industrial by-products with pig manure**. Resources Conservation and Recycling. 2005 Jan;43(2):175-188. <https://doi.org/10.1016/j.resconrec.2004.06.001>
- Suntio T. **Input Invariance as a Method to Reduce EMI Filter Interactions in Telecom DPS Systems**. INTELEC, International Telecommunications Energy Conference (Proceedings). 2003 Dec 1;592-597.

Waltari P, Suntio T, Tenno A, Tenno R. **The effects of intermittent charging on VRLA battery life expectancy in telecom applications.** INTELEC, International Telecommunications Energy Conference (Proceedings). 2002 Dec 1;121-127.

Suntio T, Gadoura I. **Use of unterminated two-port modeling technique in analysis of input filter interactions in telecom DPS systems.** INTELEC, International Telecommunications Energy Conference (Proceedings). 2002 Dec 1;560-565.

Grigore V, Hatonen J, Kyyra J, Suntio T. **Dynamics of a buck converter with a constant power load.** In PESC 1998 - 29th Annual IEEE Power Electronics Specialists Conference. Institute of Electrical and Electronics Engineers Inc. 1998. p. 72-78. 701881. (PESC Record - IEEE Annual Power Electronics Specialists Conference).  
<https://doi.org/10.1109/PESC.1998.701881>

Suntio T, Suur-Askola S. **DC UPS system's reliability performance: Facts and fiction.** In TELESICON 1997 - 2nd International Telecommunications Energy Special Conference. Institute of Electrical and Electronics Engineers Inc. 1997. p. 237-243. (TELESICON 1997 - 2nd International Telecommunications Energy Special Conference).  
<https://doi.org/10.1109/TELESC.1997.655721>

Suntio T, Waltari P, Rajamäki J. **Shape of battery capacity-life curve as a decisive decision-making parameter.** In TELESICON '94 - The First International Telecommunications Energy Special Conference. IEEE. 1994. p. 113-119  
<https://doi.org/10.1109/TELESC.1994.4794322>

Suntio T, Keränen T, Tulkki J. **Novel ways to improve rectifier performance from power systems' reliability viewpoint.** In Proceedings of Intelec 1993: 15th International Telecommunications Energy Conference. IEEE. 1993. p. 40-47. (INTELEC, International Telecommunications Energy Conference (Proceedings)).  
<https://doi.org/10.1109/INTLEC.1993.388471>

Suntio T, Uusitalo J, Jonsson L. **AC-UPS reliability and availability performance: Comparison of available solutions.** INTELEC, International Telecommunications Energy Conference (Proceedings). 1989 Dec 1.  
<https://doi.org/10.1109/INTLEC.1989.88298>

Valkealahti S, Welch DO. **Theoretical studies of structural properties of the high- $T_c$  superconductor  $Y_{1-x}Ba_xCu_3O_{7-x}$ .** Physica C: Superconductivity and its Applications. 1989 Jan 1;162-164(PART 1):540-541. [https://doi.org/10.1016/0921-4534\(89\)91145-3](https://doi.org/10.1016/0921-4534(89)91145-3)