

Air-core inductive current sensor for fast transients measurements in distribution networks

Kütt, Lauri; Järvik, Jaan; Kilter, Jako; Shafiq, Muhammad; Lehtonen, Matti PQ2012 : 8th International Conference : 2012 Electric Power Quality and Supply Reliability : June 11-13, 2012, Tartu, Estonia : conference proceedings 2012 / p. 249-252 : ill
https://www.researchgate.net/publication/261507011_Air-core_inductive_current_sensor_for_fast_transients_measurements_in_distribution_networks

Air-core sensors operation modes for partial discharge detection and on-line diagnostics in medium voltage networks

Kütt, Lauri; Shafiq, Muhammad; **Mölder, Heigo; Järvik, Jaan;** Lehtonen, Matti Scientific Journal of Riga Technical University. Electrical, control and communication engineering 2013 / p. 5-12 : ill

Automotive waste heat harvesting for electricity generation using thermoelectric systems - an overview

Kütt, Lauri; Lehtonen, Matti 2015 IEEE 5th International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : proceedings : May 11-13, 2015, Riga, Latvia 2015 / p. 55-62 : ill

Comparison of operating modes of air-core inductive sensors for partial discharge on-line diagnostics in medium voltage networks

Kütt, Lauri; Shafiq, Muhammad; Lehtonen, Matti; **Mölder, Heigo; Järvik, Jaan** Digest book and electronic proceedings : 54th International Scientific Conference of Riga Technical University : Section of Power and Electrical Engineering 2013 / p. 29.1-29.6 : ill
<https://research.aalto.fi/en/publications/comparison-of-operating-modes-of-air-core-inductive-sensors-for-p>

Cost-optimal renovation solutions for detached rural houses in Severe cold regions of China

Hu, Xinyi; **Jokisalo, Juha; Kosonen, Risto;** Lehtonen, Matti; Shao, Teng Buildings 2023 / art. 771, 19 p. : ill
<https://doi.org/10.3390/buildings13030771> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Coupling of the electricity and district heat generation sectors with building stock energy retrofits as a measure to reduce carbon emissions

Jokinen, Ilkka; Lund, Andreas; Hirvonen, Janne; **Jokisalo, Juha; Kosonen, Risto;** Lehtonen, Matti Energy conversion and management 2022 / art. 115961, 17 p. : ill <https://doi.org/10.1016/j.enconman.2022.115961> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Current harmonics of EV chargers and effects of diversity to charging load current distortions in distribution networks

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Niitsoo, Jaan** 2013 International Conference on Connected Vehicles and Expo (ICCVE) : proceedings : Las Vegas, Nevada, USA, 2-6 December 2013 2013 / p. 726-731 : ill
<https://ieeexplore.ieee.org/document/6799884>

Design of high-frequency transient current sensor for powerline on-line measurement

Kütt, Lauri; Järvik, Jaan; Kilter, Jako; Shafiq, Muhammad; Lehtonen, Matti Electrical and control technologies : proceedings of the 7th international conference on electrical and control technologies ECT-2012 2012 / p. 212-216 : ill
<https://research.aalto.fi/en/publications/design-of-high-frequency-transient-current-sensor-for-powerline-o>

Directional calibration of rogowski coil for localization of partial discharges in smart distribution networks

Shafiq, Muhammad; **Kütt, Lauri;** Isa, M.; Hashmi, M.; Lehtonen, Matti International review of electrical engineering 2012 / p. 5881-5890
https://www.researchgate.net/publication/262703688_Directional_Calibration_of_Rogowski_Coil_for_Localization_of_Partial_Discharges_in_Smart_Distribution_Networks

Effect of Bulk Capacitor on Harmonics of Energy-Efficient Devices

Daniel, Kamran; Kütt, Lauri; Lehtonen, Matti; **Shabbir, Noman; Iqbal, Muhammad Naveed;** Martins, Joao; Simson, Päivo IEEE Access 2025

Electric vehicle charger load current harmonics variations due to supply voltage level differences - case examples

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Niitsoo, Jaan** 2014 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM) : 18-20 June, 2014, Ischia, Italy : proceedings 2014 / p. 917-922 : ill

Estimating the harmonic distortions in a distribution network supplying EV charging load using practical source data - case example

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Niitsoo, Jaan** 2014 IEEE Power and Energy Society General Meeting : National Harbor, MD, USA, 27-31 July 2014 2014 / [5] p. : ill

Harmonic load of residential distribution network - case study monitoring results

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo; Vinnal, Toomas** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 93-98 : ill

High-frequency current sensor for power network on-line measurements

Kütt, Lauri; Järvik, Jaan; Vaimann, Toomas; Shafiq, Muhammad; Lehtonen, Matti; **Kilter, Jako** Proceedings of the 13th International Scientific Conference Electric Power Engineering 2012 : EPE 2012 : Brno. Vol. 1 2012 / p. 367-371 : ill
https://www.researchgate.net/publication/262674502_High-Frequency_Current_Sensor_for_Power_Network_On-line_Measurements

Load shifting in the existing distribution network and perspectives for EV charging - case study

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Rosin, Argo**; **Mölder, Heigo** 2014 5th IEEE PES Innovative Smart Grid Technologies Europe (ISGT Europe) : October 12-15, Istanbul 2014 / p. 1-6 : ill

Online partial discharge diagnostics in medium voltage branched cable networks

Shafiq, Muhammad; Lehtonen, Matti; Isa, M.; **Kütt, Lauri** Proceedings of 2013 Fourth International Conference on Power Engineering, Energy and Electrical Drives (POWERENG) : Istanbul, Turkey, 13-17 May 2013 / p. 246-251 : ill
<https://ieeexplore.ieee.org/abstract/document/6635614>

Optimization of concentrated solar thermoelectric generator system for highest yearly electric output

Kütt, Lauri; Millar, John; Lehtonen, Matti; Märss, Maido 2015 56th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2015 / p. 139-144 : ill

Parameters identification and modeling of high-frequency current transducer for partial discharge measurements

Shafiq, Muhammad; **Kütt, Lauri**; Lehtonen, Matti; Nieminen, Tatu; Hashmi, Murtaza IEEE sensors journal 2013 / p. 1081-1091 : ill
<https://doi.org/10.1109/JSEN.2012.2227712>
https://www.academia.edu/101513170/Parameters_Identification_and_Modeling_of_High_Frequency_Current_Transducer_for_Partial_Discharge_Measurements Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Performance evaluation of PD monitoring technique integrated into medium voltage cable network for smart condition assessment

Shafiq, Muhammad; Lehtonen, Matti; Hussain, Ghulam A.; **Kütt, Lauri** PQ2014 : the 9th International 2014 Electric Power Quality and Supply Reliability Conference (PQ) : June 11-13, 2014, Rakvere, Estonia : proceedings 2014 / p. 351-357 : ill

Performance of an earth-air heat exchanger (EAHE) in a heat recovery ventilation for residential buildings in severe cold regions

Hu, Xinyi; **Jokisalo, Juha**; **Kosonen, Risto**; Lehtonen, Matti BuildSim Nordic 2024 : Espoo, Finland, June 9-11, 2024 / 12 p.
<https://doi.org/10.1051/e3sconf/202456205002> Conference proceedings at Scopus Article at Scopus Article at WOS

A review of the effects of electric vehicle charging on distribution network operation and power quality

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo**; **Niitsoo, Jaan** Electrical and Control Technologies : proceedings of the 8th International Conference on Electrical and Control Technologies : ECT-2013 2013 / p. 162-167

A review of the harmonic and unbalance effects in electrical distribution networks due to EV charging

Kütt, Lauri; Saarijärvi, Eero; Lehtonen, Matti; **Mölder, Heigo**; **Niitsoo, Jaan** 12th International Conference on Environment and Electrical Engineering (EEEIC) : 5-8 May 2013 2013 / [6] p

Sensor resonance and its influence on the measurement results of fast transients

Kütt, Lauri; Shafiq, Muhammad; Lehtonen, Matti; **Mölder, Heigo**; **Järvi, Jaan** Proceedings of the International Conference on Power Systems Transients (IPST2013) in Vancouver, Canada July 18-20, 2013 2013 / [7] p.: ill
https://www.ipstconf.org/papers/Proc_IPST2013/13IPST134.pdf

Survey of a power quality measurement campaign in low-voltage grids

Püvi, Verner; Tükia, Toni; Lehtonen, Matti; **Kütt, Lauri** 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärdla, Estonia, June 12-15, 2019 : proceedings 2019
<https://doi.org/10.1109/PQ.2019.8818232>

Survey of harmonic emission of electrical vehicle chargers in the European market

Collin, A. J.; Xu, Xiao; Djokic, S. Z.; Möller, F.; Meyer, Jan; **Kütt, Lauri**; Lehtonen, Matti SPEEDAM 2016 - proceedings : International Symposium on Power Electronics, Electrical Drives, Automation and Motion : Capri (Italy), 22nd-24th June 2016 2016 / p. 1208-1213 : ill
<https://doi.org/10.1109/SPEEDAM.2016.7526005>

Travel activity based stochastic modelling of load and charging state of electric vehicles

Iqbal, Muhammad Naveed; **Kütt, Lauri**; Lehtonen, Matti; Millar, Robert John; Püvi, Verner; **Rassõlkin, Anton**; **Demidova, Galina** Sustainability 2021 / art. 1550, 14 p. : ill
<https://doi.org/10.3390/su13031550> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Ultra-high step-up DC-DC converters based on center-tapped inductors

Tarzamni, Hadi; **Vosoughi Kurdkandi, Naser**; Gohari, Homayon Soltani; Lehtonen, Matti; **Husev, Oleksandr**; Blaabjerg, Frede IEEE Access 2021 / p. 136373-136383 : ill
<https://doi.org/10.1109/ACCESS.2021.3117856> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS