

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

**Kütt, Lauri; Järvi, 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](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; Järvi, 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; Järvi, 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

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

**Kütt, Lauri; Järvi, Jaan; Kilter, Jako;** Shafiq, Muhammad; Lehtonen, Matti Electrical and control technologies : proceedings of the 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](https://www.researchgate.net/publication/262703688_Directional_Calibration_of_Rogowski_Coil_for_Localization_of_Partial_Discharges_in_Smart_Distribution_Networks)

### **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; Järvi, 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](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 2013 / p. 246-251 : ill

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

**Kütt, Lauri**; Millar, John; Lehtonen, Matti; Märss, Mairo 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>

### **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

### **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

### **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](#)