

Active and reactive power control of DFIG using optimized fractional order-PI controller

Javed, Umar; Arshad, Muhammad Asad; **Shabbir, Noman; Kütt, Lauri; Rassõlkin, Anton** 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 398-404 <https://doi.org/10.1109/PEMC48073.2021.9432608>

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

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

"AK.Nädal" uuris, kuidas häirivad tuulepargid julgeolekut

Põlendik, Kadri; Aaspõllu, Huko err.ee 2024 ["AK.Nädal" uuris, kuidas häirivad tuulepargid julgeolekut](#)

Analyses of supply voltage quality, power consumption and losses affected by shunt capacitors for power factor correction

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut; Kütt, Lauri PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia 2010 / p. 53-60 : ill

Analysis of common mode and rapidly varying voltage profile on stator current harmonics of an inverter-fed induction motor

Sardar, Muhammad Usman; Vaimann, Toomas; Kütt, Lauri; Kallaste, Ants; Asad, Bilal; Kudelina, Karolina; Akbar, Siddique 2023 IEEE 64th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCon), Riga, Latvia, October 9-10, 2023 : conference proceedings 2023 / 6 p. : ill <https://doi.org/10.1109/RTUCon60080.2023.10413067>

Analysis of harmonic current stability and summation of LED lamps

Jarkovoi, Marek; Iqbal, Muhammad Naveed; 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 / 8 p. : ill <https://doi.org/10.1109/PQ.2019.8818237>

Analysis of power consumption and losses in relation to supply voltage levels

Vinnal, Toomas; Kütt, Lauri; Kalda, Heljut 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 23-28 : ill

Analysis on faulty phase grounding in medium-voltage networks with isolated neutral

Kütt, Lauri; Järvi, Jaan 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 281-284 : 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

Battery size optimization with customer PV installations and domestic load profile

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Jawad, Muhammad; Allik, Alo; **Husev, Oleksandr** IEEE Access 2022 / p. 13012-13025 : ill <https://doi.org/10.1109/ACCESS.2022.3147977> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Bivariate stochastic model of current harmonic analysis in the low voltage distribution grid

Iqbal, Muhammad Naveed; Kütt, Lauri; Daniel, Kamran; Jarkovoi, Marek; Asad, Bilal; Shabbir, Noman Proceedings of the Estonian Academy of Sciences 2021 / p. 190-206 : ill <https://doi.org/10.3176/proc.2021.2.08> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Buck-boost unfolded inverter as a novel solution for single-phase PV systems

Husev, Oleksandr; Matiushkin, Oleksandr; Vinnikov, Dmitri; Roncero, Carlos; Romero-Cadaval, Enrique; **Kütt, Lauri** IECON 2018 - 44th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2018 / p. 6116-6121 : ill <https://doi.org/10.1109/IECON.2018.8592899>

Case study of non-linear PV inverter devices attached to the LV distribution network

Vinnal, Toomas; Puusepp, Hardi; Shabbir, Noman; Kütt, Lauri; Iqbal, Muhammad Naveed Agronomy research 2020 / p. 2639-2652 : ill <https://doi.org/10.15159/AR.20.233> <https://dspace.emu.ee/xmlui/handle/10492/5955> [Journal metrics at Scopus](#) [Article at Scopus](#)

Characteristic pulse pattern features of different types of partial discharge sources in power cables

Kiitam, Ivar; Shafiq, Muhammad; Taklaja, Paul; Parker, Martin; Palu, Ivo; Kütt, Lauri IEEE Power Engineering Society Conference and Exposition in Africa, PowerAfrica, IEEE PES/IAS PowerAfrica, Nairobi, Kenya, 23-27 Aug 2021 : proceedings 2021 / 5 p. : ill <https://doi.org/10.1109/PowerAfrica52236.2021.9543366>

Characterization of corona and internal partial discharge under increasing electrical stress using time domain analysis

Shafiq, Muhammad; Kiitam, Ivar; Taklaja, Paul; Hussain, Amjad; Kütt, Lauri; Kauhaniemi, Kimmo 2020 IEEE Electrical Insulation Conference : EIC 2020 2020 / vol. 217–220 <https://doi.org/10.1109/EIC47619.2020.9158701>

Characterization of high-frequency impedance-based models for transient terminal overvoltage estimation in cable-fed motor drive systems

Sardar, Muhammad Usman; Vaimann, Toomas; Kütt, Lauri; Asad, Bilal; Kallaste, Ants; Kudelina, Karolina 2024 International Conference on Electrical Machines (ICEM) 2024 / 7 p <https://doi.org/10.1109/ICEM60801.2024.10700495>

Community battery sizing for distribution level RES hosting capacity improvement

Peterson, Kristjan; Shabbir, Noman; Astapov, Victor; Kütt, Lauri; Kamran, Daniel 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p <https://doi.org/10.1109/RTUCON62997.2024.10830871>

Compact fluorescent lamp harmonic disruption effect of transformer losses

Mölder, Heigo; Lellsaar, Mikk; Kütt, Lauri 8th International Symposium "Topical Problems in the Field of Electrical and Power Engineering" : Doctoral School of Energy and Geotechnology. II : [Pärnu, January 11-16, 2010 : proceedings] 2010 / p. 277-280 : ill

Comparative analysis of zigbee based wireless sensor networks (WSNs)

Shabbir, Noman; Hassan, Syed Rizwan; Iqbal, Muhammad Naveed; Kütt, Lauri; Unbreen, Arooj International journal of recent technology and engineering 2019 / p. 980-984 : ill <https://www.ijrte.org/wp-content/uploads/papers/v7i6s/F04000376S19.pdf> [Journal metrics at Scopus](#) [Article at Scopus](#)

Comparative analysis of ZigBee based Wireless Sensor Networks (WSNs)

Shabbir, Noman; Hassan, Syed Rizwan; Iqbal, Muhammad Naveed; Kütt, Lauri; Unbreen, Arooj International journal of recent technology and engineering 2019 / p. 980-984 : ill <https://www.ijrte.org/wp-content/uploads/papers/v7i6s/F04000376S19.pdf>

Comparative Analysis of ZigBee Based Wireless Sensor Networks (WSNs)

Shabbir, Noman; Hassan, Syed Rizwan; Iqbal, Muhammad Naveed; Kütt, Lauri Proceeding of the 4th International Conference on Recent Trends in Computer Science and Electronics 2019 2019 / p. 115 http://www.rtcse.org/RTCSE_2019.pdf

A comparison of a discrete-time PI and an indirect MPC current controllers for a single-phase grid-connected inverter operating with distorted grid and significant computation feedback delay

Pimentel, Sergio Pires; Husev, Oleksandr; Vinnikov, Dmitri; Stepenko, Serhii; Kütt, Lauri; Rodriguez, Jose 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC) 2019 / 6 p.: ill <https://doi.org/10.1109/COBEP/SPEC44138.2019.9065396>

Comparison of current harmonic emission by different lighting technologies

Iqbal, Muhammad Naveed; Kütt, Lauri; Shabbir, Noman; Asad, Bilal 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 / 6 p <http://toc.proceedings.com/52742webtoc.pdf>

Comparison of machine learning based methods for residential load forecasting

Shabbir, Noman; Ahmadihangar, Roya; Kütt, Lauri; Rosin, Argo 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 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818267>

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>

Complexities associated with modeling of residential electricity consumption

Iqbal, Muhammad Naveed; Kütt, Lauri; Rosin, Argo 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659812>

Conducted EMI emission evaluation considerations for test site and in-situ evaluation of DC microgrid supplied power converters

Kütt, Lauri; Daniel, Kamran; Sharma, Hetal; Parker, Martin; Chub, Andrii 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 5 p <http://doi.org/10.1109/ICDCM63994.2025.11144729>

Congestion control strategies for increased renewable penetration of photovoltaic in LV distribution networks

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Husev, Oleksandr; Ahmadiyahangar, Roya; Wen, Fushuan; Kull, Karl Energy reports 2022 / p. 217-223 <https://doi.org/10.1016/j.egyr.2022.10.184> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Consequences of distributed generation on power quality

Niitsoo, Jaan; Kütt, Lauri; Taklaja, Paul 14th International Scientific Conference on Electric Power Engineering 2013 : Kouty nad Desnou, Czech Republic, 28 – 30 May 2013 : proceedings 2013 / p. 163-167

Current harmonic aggregation cases for contemporary loads

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman Energies 2022 / art. 437 <https://doi.org/10.3390/en15020437> [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>

Description of practical load harmonic current emission due to voltage harmonic variation

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Jarkovoi, Marek 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2021 / p. 1–6 <https://doi.org/10.1109/RTUCON53541.2021.9711594>

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 7th international conference on electrical and control technologies ECT-2012 2012 / p. 212-216 : ill <https://research.aalto.fi/publications/design-of-high-frequency-transient-current-sensor-for-powerline-o>

Design of LCL-filter for grid-connected buck-boost inverter based on unfolding circuit

Matiushkin, Oleksandr; Husev, Oleksandr; Vinnikov, Dmitri; 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 / 4 p. : ill <https://doi.org/10.1109/PQ.2019.8818248>

A DFT-based approach for condition monitoring of switch-mode power converters

Kütt, Lauri; Tiivel, Tuuli; Parker, Martin; Valgur, Laur; Jarkovoi, Marek; Chub, Andrii 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p <https://doi.org/10.1109/RTUCON62997.2024.10830915>

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

Distorted grid and significant computation feedback delay

Pimentel, Sergio Pires; Husev, Oleksandr; Vinnikov, Dmitri; Stepenko, Serhii; Kütt, Lauri; Rodriguez, Jose 2019 IEEE 15th Brazilian Power Electronics Conference and 5th IEEE Southern Power Electronics Conference (COBEP/SPEC 2019) Santos, Brazil, 1-4 December 2019 2019 / p. 1481-1486 <http://toc.proceedings.com/52923webtoc.pdf>

Economic analysis and impact on national grid by domestic photovoltaic system installations in Pakistan

Shabbir, Noman; Usman, Muhammad; Jawad, Muhammad; Zafar, Muhammad H.; Iqbal, Muhammad Naveed; Kütt, Lauri Renewable energy 2020 / p. 509-521 : ill <https://doi.org/10.1016/j.renene.2020.01.114> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

Elektromagnetmüra mõõtmisel tehakse palju vigu

Kütt, Lauri Elektriala 2024 / lk. 28-31 : fot., ill., portr https://www.ester.ee/record=b1240496*est

Elektromagnetmüra võib arvesti näidud sassi ajada ja teha muud kurja

Elektromagnetväljad: masinate mäss või terviseoht?

Kütt, Lauri EhitusEST 2023 / lk. 24-27 : fot https://www.ester.ee/record=b4442657*est

End-user electricity consumption modelling for power quality analysis in residential building

Iqbal, Muhammad Naveed; Kütt, Lauri 2018 19th International Scientific Conference on Electric Power Engineering (EPE 2018) : Brno, Czech Republic, 16-18 May, 2018 2018 / 6 p. : ill <https://doi.org/10.1109/EPE.2018.8396030>

End-user electricity consumption modelling for power quality analysis of residential buildings

Iqbal, Muhammad Naveed; Kütt, Lauri 17th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral school of energy and geotechnology. III : Kuressaare, Estonia, January 15-20, 2018 2018 / p. 59-62 : ill http://ise.elnet.ee/record=b2950015~S2*est

Enhancing PV hosting capacity and mitigating congestion in distribution networks with deep learning based PV forecasting and battery management

Shabbir, Noman; Kütt, Lauri; Astapov, Victor; Daniel, Kamran; Jawad, Muhammad; Husev, Oleksandr; Rosin, Argo; Martins, Joao Applied energy 2024 / art. 123770 <https://doi.org/10.1016/j.apenergy.2024.123770>

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

Estimation of harmonic emission of electric vehicles and their impact on low voltage residential network

Iqbal, Muhammad Naveed; Kütt, Lauri; Daniel, Kamran; Asad, Bilal; Ghahfarokhi, Payam Shams Sustainability 2021 / art. 8551 <https://doi.org/10.3390/su13158551> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Estimation of peak voltage value and its occurrence timing upon non-sinusoidal supply voltage

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Jarkovoi, Marek 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / p. 1-6 <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604412>

Experiments with travelling wave transients for verification of suitability of sensor

Kütt, Lauri; Järvi, Jaan 11th International Symposium "Topical Problems in the Field of Electrical and Power Engineering." Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 16-21, 2012 2012 / p. 149-152 : ill

Exploratory data analysis based short-term electrical load forecasting : a comprehensive analysis

Javed, Umar; Ijaz, Khalid; Shabbir, Noman; Kütt, Lauri; Husev, Oleksandr Energies 2021 / art. 5510 <https://doi.org/10.3390/en14175510> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Feasibility investigation for residential battery sizing considering EV charging demand

Shabbir, Noman; Kütt, Lauri; Daniel, Kamran; Astapov, Victor; Raja, Hadi Ashraf; Iqbal, Muhammad Naveed; Husev, Oleksandr Sustainability 2022 / art. 1079 <https://doi.org/10.3390/su14031079> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

5th International Conference : Electric Power Quality and Supply Reliability : August 23-26, 2006, Viimsi, Estonia : conference proceedings

2006 http://www.ester.ee/record=b2184858*est

Forecasting of energy consumption and production using recurrent neural networks

Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; Iqbal, Muhammad Naveed; Ghahfarokhi, Payam Shams Advances in electrical and electronic engineering 2020 / p. 190-197 <https://doi.org/10.15598/aece.v18i3.3597> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Forecasting short term wind energy generation using machine learning

Shabbir, Noman; Ahmadiahangar, Roya; Kütt, Lauri; Iqbal, Muhammad Naveed; Rosin, Argo 2019 IEEE 60th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), 7-9 October 2019 : conference proceedings 2019 / 4 p <https://doi.org/10.1109/RTUCON48111.2019.8982365>

Fotoelektrilised toitevõimsuse genereerimissüsteemid : toitemuunduruseadmete elektromagnetilise ühilduvuse nõuded ja katsetusmeetodid = Photovoltaic power generating systems EMC requirements and test methods for power conversion equipment (IEC 62920:2017+IEC 62920:2017/A1:2021)

2023 https://www.ester.ee/record=b5561301*est

Harmonic current summation using probabilistic bivariate modelling = Vooluharmoonikute summeerimine rakendades

kahe muutujaga tõenäosuslikku modelleerimist

Jarkovoi, Marek 2019 <https://digikogu.taltech.ee/et/Item/35d500c0-f295-4dd5-b8a5-8feb6a184d32>

Harmonic currents and voltages in industrial LV networks - case studies

Vinnal, Toomas; Kütt, Lauri; Jarkovoi, Marek 2018 International Symposium on Power Electronics, Electrical Drives, Automation and Motion (SPEEDAM 2018) : Amalfi, Italy, 20-22 June 2018 2018 / p. 177-182 : ill <https://doi.org/10.1109/SPEEDAM.2018.8445234>

Harmonic currents and voltages in LV networks of Estonia : measurement results, case studies

Vinnal, Toomas; Jarkovoi, Marek; Kütt, Lauri 59th Annual International Scientific Conference on Power and Electrical Engineering : November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 7 p. : ill <https://doi.org/10.1109/RTUCON.2018.8659875>

Harmonic levels of domestic and electrical vehicle loads in residential distribution networks

Niitsoo, Jaan; Kilter, Jako; Palu, Ivo; Taklaja, Paul; Kütt, Lauri Proceedings of IEEE AFRICON 2013 Conference : 9-12 September 2013, Mauritius 2013 / p. 184-188 <https://doi.org/10.1109/AFRICON.2013.6757800> [Conference Proceedings at Scopus](#) [Article at Scopus](#)

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 mea[s]urements

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

Identification and location of PD defects in medium voltage underground power cables using high frequency current transformer

Shafiq, Muhammad; Kiitam, Ivar; Taklaja, Paul; Kütt, Lauri; Kauhaniemi, Kimmo; Palu, Ivo IEEE Access 2019 / art. 8771171, p. 103608 - 103618 : ill <https://doi.org/10.1109/ACCESS.2019.2930704> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Impact of cable impedance on the harmonic emission of LED lamps

Iqbal, Muhammad Naveed; Kütt, Lauri; Asad, Bilal; Shabbir, Noman 2020 21st International Scientific Conference on Electric Power Engineering (EPE), October 19-21, 2020, Prague, Czech Republic 2020 / 5 p <https://doi.org/10.1109/EPE51172.2020.9269271>

Impact of LED thermal stability to household lighting harmonic load current modeling

Iqbal, Muhammad Naveed; Jarkovoi, Marek; Kütt, Lauri; Shabbir, Noman 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 / 6 p. : ill <https://doi.org/10.1109/PQ.2019.8818226>

Implementing chatbot to assist costumer service of consumer protection and technical regulatory authority

Kütt, Lauri AI IN BUSINESS : proceedings of the scientific workshop on business implications of artificial intelligence, June 7, 2022 2022 / p. 65-66 : ill https://www.ester.ee/record=b5506022*est <https://digikogu.taltech.ee/et/Item/2096bada-661d-4928-99a7-bfbce51825d8>

Improved quantification of partial discharges for reliable diagnostics of multipath connections in MV substations

Shafiq, Muhammad; Kiitam, Ivar; Isa, Muzamir; Taklaja, Paul; Palu, Ivo; Kütt, Lauri 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2021 / 6 p <https://doi.org/10.1109/RTUCON53541.2021.9711585>

Improvement of voltage transformers overvoltage problems in MV networks

Janson, Kuno; Järvik, Jaan; Kütt, Lauri; Soosalu, Ain 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 247-250 : ill

Inaccuracies and uncertainties for harmonic estimation in distribution networks

Iqbal, Muhammad Naveed; Kütt, Lauri; Daniel, Kamran; Shabbir, Noman; Amjad, Anas; Awan, Abdul Waheed; Ali, Majid Sustainability 2024 / art. 6523 <https://doi.org/10.3390/su16156523> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at Scopus](#)

Indirect model predictive control for inverter connected to distorted grid with significant computation delay

Husev, Oleksandr; Pimentel, Sergio Pires; Vinnikov, Dmitri; Kütt, Lauri; Rodriguez, Jose IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society : proceedings 2019 / p. 6483-6488 : ill <https://doi.org/10.1109/IECON.2019.8927279>

Inrush current measurement and modeling practical cases and primary methods

Tinno, Jan Markus; Kütt, Lauri; Parker, Martin; Kulikov, Jan; Jaanus, Martin 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 5 p <https://doi.org/10.1109/RTUCON62997.2024.10830806>

Load current harmonic model complexity reduction through empirical pattern analysis

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Jarkovoi, Marek; Parker, Martin 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / p. 1-6
<https://doi.org/10.1109/CPE-POWERENG58103.2023.10227474>

Load current harmonic sensitivity of AC/DC power converters of energy efficient devices = Energiatõhusate seadmete vahelduv-alalisvoolumuundurite koormusvoolu harmoonikute tundlikkus

Daniel, Kamran 2024 <https://doi.org/10.23658/taltech.35/2024> <https://digikogu.taltech.ee/et/Item/6401470b-5c33-473d-b82c-5793dfb1c543>

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

Machine learning and deep learning techniques for residential load forecasting : a comparative analysis

Shabbir, Noman; Kütt, Lauri; Raja, Hadi Ashraf; Ahmadiyahangar, Roya; Rosin, Argo; Husev, Oleksandr 2021 IEEE 62nd International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2021 / p. 1-5 <https://doi.org/10.1109/RTUCON53541.2021.9711741>

Magnetic current sensor stray components in high frequency operation and their effects

Kütt, Lauri; Järvi, Jaan; Mölder, Heigo; Kilter, Jako; Shafiq, Muhammad Conference proceedings : 2012 11th International Conference on Environment and Electrical Engineering : Venice, Italy, 18-25 May 2012 / p. 617-620 : ill
<https://ieeexplore.ieee.org/abstract/document/6221451>

Magnetic field sensor coil in fast transient measurement application

Kütt, Lauri; Järvi, Jaan 10th International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology II : Pärnu, Estonia, January 10-15, 2011 / p. 117-121 : ill

Magnetic sensor coil shape geometry and bandwidth assessment

Kütt, Lauri; Shafiq, Muhammad 7th International Conference-workshop Compatibility and Power Electronics : CPE 2011 : Tallinn, Estonia, June 3, 2011 : student forum 2011 / p. 58-61 : ill

Mathematical model for assessment of voltage disturbing sources in networks with distributed power generation

Sayenko, Yuri; Kalyuzhnyi, Dmitry; Bolgov, Viktor; Kütt, Lauri Przegląd elektrotechniczny = Electrical review 2019 / p. 49-53 : ill
<https://doi.org/10.15199/48.2019.03.12> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Measurement based approach for residential customer stochastic current harmonic modelling = Mõõtmispõhine lähenemine olmetarbijate vooluharmoonikute juhusliku esinemise modelleerimiseks

Iqbal, Muhammad Naveed 2021 https://www.ester.ee/record=b5454042*est <https://digikogu.taltech.ee/et/Item/cc2248c5-5530-44fb-8150-51de0e7832ad> <https://doi.org/10.23658/taltech.43/2021>

MechMate õppematerjalid : [õpikute kogumik]

Kütt, Lauri; Pettai, Elmo; Müür, Margus; Maask, Vahur; Lehtla, Tõnu 2018 <https://digi.lib.ttu.ee/i/?12126>

MechMate õppematerjalid [Võrguteavik]

Kütt, Lauri; Pettai, Elmo; Müür, Margus; Maask, Vahur; Lehtla, Tõnu 2019 https://www.ester.ee/record=b5227431*est <https://digi.lib.ttu.ee/i/?12126>

Modeling of lighting load in residential buildings

Iqbal, Muhammad Naveed; Kütt, Lauri; Shabbir, Noman International journal of engineering and advanced technology 2018 / p. 233–236 <https://www.scopus.com/record/display.uri?eid=2-s2.0-85064435587&origin=resultlist>

Modeling of lighting load in residential buildings

Iqbal, Muhammad Naveed; Kütt, Lauri; Shabbir, Noman Proceeding of the 4th International Conference on Recent Trends in Computer Science and Electronics 2019 / p. 111 http://www rtcse.org/RTCSE_2019.pdf

New practical approach to input current shaping in AC-DC power converters

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : abstracts 2008 / p. 8
https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

New practical approach to input current shaping in AC-DC power converters [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo EPE-PEMC 2008 : 2008 13th International Power Electronics and Motion Control Conference : 1-3 September 2008, Poznan, Poland : proceedings 2008 / p. 154-158 : ill. [CD-ROM]
https://www.researchgate.net/publication/241155011_New_Practical_Approach_to_Input_Current_Shaping_in_AC-DC_Power_Converters

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
<https://ieeexplore.ieee.org/abstract/document/6635614>

Optimal fractional order PI controller for field oriented current control of switched reluctance motor

Mughees, Neelam; Ashfaq, Hira; **Shabbir, Noman; Rassölkin, Anton; Kütt, Lauri** 2021 IEEE 19th International Power Electronics and Motion Control Conference, The Silesian University of Technology Gliwice, Poland, 25 - 29 April, 2021 (PEMC) : proceedings 2021 / p. 479-485 <https://doi.org/10.1109/PEMC48073.2021.9432616>

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

An overview of measurement standards for power quality

Shabbir, Noman; Kütt, Lauri; Jarkovoi, Marek; Iqbal, Muhammad Naveed; Rassölkin, Anton; Daniel, Kamran Agronomy research 2021 / p. 944-960 <https://doi.org/10.15159/ar.21.074> [Journal metrics at Scopus](#) [Article at Scopus](#)

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](#)

Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : 31st August to 3rd September 2008, Malta : conference guide 2008 / p. 37
<https://ieeexplore.ieee.org/document/4674795>

Passive shaping of line current waveform by converter with alternating of parallel and series resonance in AC-DC switch mode power supplies [Electronic resource]

Janson, Kuno; Bolgov, Viktor; Kütt, Lauri; Kallaste, Ants; Mölder, Heigo ICECS 2008 : The 15th IEEE International Conference on Electronics, Circuits and Systems : August 31 - September 3, 2008, Malta : [proceedings] 2008 / p. 77-80 : ill. [CD-ROM]
<https://doi.org/10.1109/ICECS.2008.4674795> <https://ieeexplore.ieee.org/document/4674795>

Performance comparison of PD data acquisition techniques for condition monitoring of medium voltage cables

Shafiq, Muhammad; **Kiitam, Ivar**; Kauhaniemi, Kimmo; Taklaja, Paul; **Kütt, Lauri; Palu, Ivo** Energies 2020 / art. 4272, 14 p. : ill
<https://doi.org/10.3390/en13164272> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Performance evaluation of additive manufacturing based test samples for studies of defects in electrical insulation

Shafiq, Muhammad; Taklaja, Paul; Kiitam, Ivar; Tiismus, Hans; Palu, Ivo; Kütt, Lauri 2021 International Conference on Electrical, Computer and Energy Technologies (ICECET) 2021 / 6 : <https://doi.org/10.1109/ICECET52533.2021.9698476>

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

Preface

Järvi, Jaan; Kütt, Lauri; Lellsaar, Mikk PQ2010 : 7th International Conference "2010 Electric Power Quality and Supply Reliability" : June 16-18, 2010, Kuressaare, Estonia : conference proceedings 2010 / p. 3

Preface

Järvi, Jaan; Kütt, Lauri; Šklovski, Jevgeni PQ2016 : the 10th International Conference 2016 Electric Power Quality and Supply Reliability Conference (PQ) : August 29-31, 2016, Tallinn, Estonia : proceedings 2016 / [3] p.

Preliminary study on voltage level influence on harmonic current of LED lamps

Jarkovoi, Marek; Kütt, Lauri 16th International Symposium "Topical Problems in the Field of Electrical and Power Engineering. Doctoral School of Energy and Geotechnology III" : Pärnu, Estonia, January 16-21, 2017 2017 / p. 116-120 : ill
http://www.eester.ee/record=b4650094*est

Probabilistic bivariate modeling of harmonic current

Jarkovoi, Marek; Kütt, Lauri; Iqbal, Muhammad Naveed 2020 19th International Conference on Harmonics and Quality of Power (ICHQP), 6-7 July 2020, Dubai, UAE 2020 / 6 p <https://doi.org/10.1109/ICHQP46026.2020.9177870>

Päikeselektri tulva aitaks leevendada kohalik salvestusvõimsus

Alvela, Ain novaator.err.ee 2023 [Päikeseelektri tulva aitaks leevendada kohalik salvestusvõimsus https://digikogu.taltech.ee/et/Item/2c178a6b-f918-4932-bd1b-48feb7fc7aa](https://digikogu.taltech.ee/et/Item/2c178a6b-f918-4932-bd1b-48feb7fc7aa)

qZS inverter as synchronverter in small-scale micro-grid

Zakis, Janis; **Makovenko, Elena**; Zeng, Hao; **Husev, Oleksandr**; **Kütt, Lauri** Elektronika ir elektrotehnika = Electronics and electrical engineering 2018 / p. 58-62 : ill <https://doi.org/10.5755/j01.eie.24.2.20636> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Rahvusvaheline elektritoite kvaliteedi ja varustuskindluse konverents PQ2012 möödus edukalt

Vaimann, Toomas; **Kütt, Lauri**; **Järvik, Jaan** Elektriala 2012 / lk. 10-11 : fot

Reactive power compensation for spot welding machine using thyristor switched capacitor

Kallaste, Ants; **Kütt, Lauri**; **Bolgov, Viktor**; **Janson, Kuno** 6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings 2008 / p. 241-245 : ill

Requirements to data acquisition and signal analysis for electrical grid condition monitoring

Anijärv, Toomas Erik; **Shabbir, Noman**; **Kütt, Lauri**; **Iqbal, Muhammad Naveed** 2020 IEEE 61st International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON), Riga, Latvia, Nov. 5-7, 2020 : conference proceedings 2020 <https://doi.org/10.1109/RTUCON51174.2020.9316487>

Residential energy management system to support increased renewable penetration = Taastuenergiaallikate kasutustihedust toetav energiahaldussüsteem

Shabbir, Noman 2022 <https://doi.org/10.23658/taltech.37/2022> <https://digikogu.taltech.ee/et/Item/2c178a6b-f918-4932-bd1b-48feb7fc7aa> https://www.ester.ee/record=b5503996*est

Residential load forecasting using recurrent neural networks

Shabbir, Noman; **Ahmadihangar, Roya**; **Raja, Hadi Ashraf**; **Kütt, Lauri**; **Rosin, Argo** 2020 IEEE 14th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) : proceedings 2020 / p. 478-481 : ill <https://doi.org/10.1109/CPE-POWERENG48600.2020.9161565>

A review of harmonic detection, suppression, aggregation and estimation techniques

Daniel, Kamran; **Kütt, Lauri**; **Iqbal, Muhammad Naveed**; **Shabbir, Noman**; **Raja, Hadi Ashraf**; **Sardar, Muhammad Usman** Applied sciences 2024 / art. 10966 <https://doi.org/10.3390/app142310966> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Review of technical solutions addressing voltage and operational challenges in a distribution grid with high penetration of intermittent RES

Astapov, Victor; **Shabbir, Noman**; **Rosin, Argo**; **Kütt, Lauri**; **Maask, Vahur**; **Tiismus, Hans** Energy reports 2025 / p. 1738-1760 <https://doi.org/10.1016/j.egy.2025.08.019>

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

Riiklike tehnikaprofessuuride ees seisab rida väljakutseid

Kers, Jaan TööstusEST 2023 / lk. 32-34 : ill https://www.ester.ee/record=b4481084*est

Riiklike tehnikaprofessuuride väljakutsed roheleppe, ringmajanduse ja digiteerimise valguses

Kers, Jaan Mente et Manu 2022 / lk. 26-27 https://www.ester.ee/record=b1242496*est

Rooma tänavale ilmunud pitsarobot pani itaallased nägu krimpsutama [Võrguväljaanne]

Voltri, Johannes novaator.err.ee 2021 / fot [Rooma tänavale ilmunud pitsarobot pani itaallased nägu krimpsutama](https://digikogu.taltech.ee/et/Item/2c178a6b-f918-4932-bd1b-48feb7fc7aa)

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

Kütt, Lauri; **Shafiq, Muhammad**; **Lehtonen, Matti**; **Mölder, Heigo**; **Järvik, 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

Short-circuit wave transient measurements in HV power network

Kütt, Lauri; **Kilter, Jako**; **Palu, Ivo** 9th International Symposium "Topical problems in the field of electrical and power engineering". Doctoral school of energy and geotechnology. II : Pärnu, Estonia, June 14-19, 2010 2010 / p. 37-41 : ill

Short-term wind energy forecasting using deep learning-based predictive analytics

Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; **Husev, Oleksandr** CMC-Computers, Materials & Continua 2022 / p. 1017-1033 <https://doi.org/10.32604/cmc.2022.024576> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Simulation of real time electricity price based energy management system [Online resource]

Lebedev, Denis; Rosin, Argo; Kütt, Lauri Proceedings of the IECON2016 - 42nd Annual Conference of the Industrial Electronics Society : Florence (Italy), October 24-27, 2016 2016 / p. 2106-2110 : ill <https://doi.org/10.1109/IECON.2016.7793991> [Conference Proceedings at Scopus](#) [Article at Scopus](#) [Article at WOS](#)

Spectrum analysis for condition monitoring and fault diagnosis of ventilation motor : a case study

Shabbir, Noman; Kütt, Lauri; Asad, Bilal; Jawad, Muhammad; **Iqbal, Muhammad Naveed; Daniel, Kamran** Energies 2021 / art. 2001 <https://doi.org/10.3390/en14072001> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Study of overvoltages upon single-phase ground fault initialisation and arcing processes on MV networks with isolated neutral

Kütt, Lauri; Järvi, Jaan; Sepping, Eino The 4th International Conference Electric Power Quality and Supply Reliability : August 29...31, 2004, Pedase, Estonia : proceedings 2004 / p. 139-143 : ill

Study of the behaviour of partial discharges for proactive diagnostics in medium voltage cables

Shafiq, Muhammad; Kiitam, Ivar; Taklaja, Paul; Parker, Martin; Palu, Ivo; Kütt, Lauri 2021 IEEE PES/IAS PowerAfrica, PowerAfrica 2021 2021 / p. 1-5 <https://doi.org/10.1109/PowerAfrica52236.2021.9543233>

Study of the effects of single phase ground faults to the voltage transformers in the 10 kV medium voltage power networks

Janson, Kuno; Järvi, Jaan; Külm, Evald; Kütt, Lauri; Šklovski, Jevgeni 48. Internationales Wissenschaftliches Kolloquium, 22.-25.09.2003, Technische Universität Ilmenau, Germany 2003 / p. 583-584 : ill

Study of the effects of single phase ground faults to the voltage transformers in the 10 kV medium voltage power networks [Electronic resource]

Janson, Kuno; Järvi, Jaan; Külm, Evald; Kütt, Lauri; Šklovski, Jevgeni 48. Internationales Wissenschaftliches Kolloquium, 22.-25.09.2003, Technische Universität Ilmenau, Germany : proceedings and our portrait 2003 / [10] p. : ill. [CD-ROM]

Supply voltage level optimisation in low voltage networks using shunt capacitors

Vinnal, Toomas; Janson, Kuno; Kalda, Heljut; Kütt, Lauri Electrical and control technologies : proceedings of the the 7th international conference on electrical and control technologies ECT-2012 2012 / p. 206-211 : ill https://www.researchgate.net/publication/289478542_Supply_voltage_level_optimisation_in_low_voltage_networks_using_shunt_capacitors

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

Püvi, Verner; Tukia, Toni; Lehtonen, Matti; Kütt, Lauri 2019 Electric Power Quality and Supply Reliability Conference (PQ) & 2019 Symposium on Electrical Engineering and Mechatronics (SEEM), Kärda, 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>

Techno-economic analysis and energy forecasting study of domestic and commercial photovoltaic system installations in Estonia

Shabbir, Noman; Kütt, Lauri; Raja, Hadi Ashraf; Jawad, Muhammad; **Allik, Alo; Husev, Oleksandr** Energy 2022 / art. 124156 <https://doi.org/10.1016/j.energy.2022.124156> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Tehnikahuvilised noored meisterdasid TalTechis jõulutulesid

toostusest.ee 2023 [Tehnikahuvilised noored meisterdasid TalTechis jõulutulesid](#)

Tehnikahuvilised noored meisterdasid TalTechis jõulutulesid

TööstusEST 2023 / lk. 14-15 : fot https://www.ester.ee/record=b4481084*est

6th International Conference "2008 Power Quality and Supply Reliability" : August 27-29, 2008 : Pärnu, Estonia : conference proceedings

2008 https://www.ester.ee/record=b2549933*est

Thermoelectric applications for energy harvesting in domestic applications and micro-production units. Part I : thermoelectric concepts, domestic boilers and biomass stoves

Kütt, Lauri; Millar, John; Karttunen, Antti; Karppinen, Maarit Renewable and Sustainable Energy Reviews 2018 / p. 519-544 <https://doi.org/10.1016/j.rser.2017.03.051> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Three-port current fed push/pull partial power converter for integration of PV/battery systems in DC microgrids

Yadav, Neelesh; Chub, Andrii; Kütt, Lauri 2024 19th Biennial Baltic Electronics Conference (BEC) 2024 / 6 p

<https://doi.org/10.1109/BEC61458.2024.10737934> Conference proceedings at Scopus Article at Scopus Article at WOS

Time dependency of current harmonics for switch-mode power supplies

Iqbal, Muhammad Naveed; Kütt, Lauri; Asad, Bilal; Vaimann, Toomas; Rassõlkin, Anton; Demidova, Galina Applied sciences

2020 / art. 7806, 12 p. : ill <https://doi.org/10.3390/app10217806> Journal metrics at Scopus Article at Scopus Journal metrics at WOS

[Article at WOS](#)

Time-dependent variations in current harmonic emission by LED lamps in the low-voltage network

Iqbal, Muhammad Naveed; Kütt, Lauri; Asad, Bilal; Shabbir, Noman; Rasheed, Iftikhar Electrical Engineering 2021 / p. 1525-

1539 : ill <https://doi.org/10.1007/s00202-020-01175-4> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at

[WOS](#)

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](#)

Tuulikute raadiomüra hakkab reguleerima normdokument

Kütt, Lauri TööstusEST 2025 / lk. 56-58 : portr, fot https://www.ester.ee/record=b4481084*est

<https://toostusest.ee/uudis/2025/02/10/tuulikute-raadiomura-hakkab-reguleerima-normdokument/>

Waveform variation defined model for harmonic current emissions including cross-order supply voltage harmonics influence

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Jarkovoi, Marek; Parker, Martin IEEE Access 2023

/ p. 42276-42289 : ill <https://doi.org/10.1109/ACCESS.2023.3270805> Journal metrics at Scopus Article at Scopus Journal metrics at WOS

[Article at WOS](#)

Wideband frequency response analysis for sensitive condition estimation of machine's turn insulation degradation faults

Sardar, Muhammad Usman; Vaimann, Toomas; Kütt, Lauri; Asad, Bilal; Kallaste, Ants; Land, Raul 2025 IEEE Workshop on

Electrical Machines Design, Control and Diagnosis (WEMDCD) 2025 / 6 p <https://doi.org/10.1109/WEMDCD61816.2025.11014207>

Wind energy forecasting using recurrent neural networks

Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; Ahmadiyahangar, Roya; Iqbal, Muhammad Naveed; Rosin, Argo 2019 Big

Data, Knowledge and Control Systems Engineering (BdKCSE) 2019 / 5 p. : ill <https://doi.org/10.1109/BdKCSE48644.2019.9010593>

Vision towards 5G : comparison of radio propagation models for licensed and unlicensed indoor femtocell sensor networks

Shabbir, Noman; Kütt, Lauri; Alam, Muhammad Mahtab; Roosipuu, Priit Physical communication 2021 / art. 101371

<https://doi.org/10.1016/j.phycom.2021.101371> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Voltage dips and swells in low voltage networks of Estonia

Vinnal, Toomas; Jarkovoi, Marek; Kütt, Lauri 59th Annual International Scientific Conference on Power and Electrical Engineering

: November 12, 13, 2018, Riga Technical University (RTUCON) : conference proceedings 2018 / 6 p. : ill

<https://doi.org/10.1109/RTUCON.2018.8659899>

Voltage main harmonic level influence on harmonic current emission modeling

Daniel, Kamran; Kütt, Lauri; Iqbal, Muhammad Naveed; Shabbir, Noman; Jarkovoi, Marek; Parker, Martin 2023 International

Conference on Future Energy Solutions (FES) 2023 / p. 1-6 <https://doi.org/10.1109/FES57669.2023.10183302>

Volt-time characteristics of medium voltage overhead line porcelain pin insulators

Taklaja, Paul; Hyvönen, Petri; Niitsoo, Jaan; Palu, Ivo; Klüss, Joni; Kütt, Lauri 14th International Scientific Conference on Electric

Power Engineering 2013 : Kouty nad Desnou, Czech Republic, 28 – 30 May 2013 : proceedings 2013 / p. 423-427