

Active power electronic transformer as a power conditioner for nonlinear loads [Electronic resource]

Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao; **Jalakas, Tanel** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 63-68 : ill [CD-ROM]

Active power electronic transformer based on modular building blocks

Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5922-5927 : ill
<https://doi.org/10.1109/IECON.2013.6700106> Conference Proceedings at Scopus Article at Scopus

A control strategy for a grid-connected PV system with unbalanced loads compensation

Fernao Pires, Vitor; **Husev, Oleksandr**; **Vinnikov, Dmitri**; Martins, Joao 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 154-159 : ill <https://doi.org/10.1109/CPE.2015.7231065>

Controlling a battery energy storage system to support residential photovoltaic installations

Fernao Pires, Vitor; Martins, Joao; Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr** 2017 IEEE International Symposium on Industrial Electronics (ISIE) : Edinburgh International Conference Centre, Edinburgh, Scotland, United Kingdom, 19-21 June, 2017 : proceedings 2017 / p. 1769-1774 : ill <https://doi.org/10.1109/ISIE.2017.8001516>

Cyber-physical microgrids : toward flexible energy districts

Rosin, Argo; **Ahamadihangar, Roya**; Martins, Joao; Sahoo, Subham; Blaabjerg, Frede Cyber Security for Microgrids 2022 / p. 161-178 : ill https://doi.org/10.1049/PBPO196E_ch8

Development of realtime co-simulation platform harnessing consumer energy flexibility through an aggregator to provide grid support

Shabbir, Noman; **Ahamadihangar, R**; **Rosin, Argo**; **Kilter, Jako**; Martins, Joao IEEE Transactions on Consumer Electronics 2024 <https://doi.org/10.1109/TCE.2024.3470241>

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

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>

Hybrid Attention-Based LSTM and XGBoost Model for Short-Term Residential Load Forecasting

Shabbir, Noman; **Shahid, Arqum**; **Daniel, Kamran**; Jawad, M.; **Rosin, Argo**; Martins, Joao 2025 IEEE the 13th International Conference on Smart Energy Grid Engineering (SEGE 2025) 2025

Hybrid low-power Wind Generation and PV grid-connected system with HPC, PC and MPPT control

Rosa, Carlos; **Vinnikov, Dmitri**; Romero-Cadaval, Enrique; Pires, Vitor; Martins, Joao Proceedings : 2014 IEEE 23rd International Symposium on Industrial Electronics (ISIE) : Grand Cevahir Hotel and Convention Center, Istanbul, Turkey, 01-04 June, 2014 2014 / p. 2024-2029 : ill

Integrating Attention-Based LSTM with XGBoost for Improved Residential DC Load Forecasting

Shabbir, Noman; **Shahid, Arqum**; **Daniel, Kamran**; **Rosin, Argo**; **Kilter, Jako**; Martins, Joao 2025 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2025

Low-power home PV systems with MPPT and PC control modes [Electronic resource]

Rosa, Carlos; **Vinnikov, Dmitri**; Romero-Cadaval, Enrique; Pires, Vitor; Martins, Joao CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 58-62 : ill [CD-ROM]

Low-power Wind Generation grid-connected system with MPPT and PC control

Rosa, Carlos; **Vinnikov, Dmitri**; Romero-Cadaval, Enrique; Pires, Vitor; Martins, Joao Proceedings : IECON 2013 - 39th Annual Conference of the IEEE Industrial Electronics Society : Austria Center Vienna, Vienna, Austria, 10-14 November, 2013 2013 / p. 5991-5996 : ill <https://doi.org/10.1109/IECON.2013.6700118> Conference Proceedings at Scopus Article at Scopus

New operation strategy for a grid-connected three-phase three-level NPC qZS inverter based on power losses

Roncero-Clemente, Carlos; Romero-Cadaval, Enrique; **Husev, Oleksandr**; Martins, Joao Elektronika ir elektrotehnika = Electronics and electrical engineering 2016 / p. 60 - 65 <https://doi.org/10.5755/j01.eie.22.3.15316> Journal metrics at Scopus Article at Scopus
Journal metrics at WOS Article at WOS

Optimization and implementation of the proportional-resonant controller for grid-connected inverter with significant computation delay

Husev, Oleksandr; Roncero-Clemente, Carlos; **Makovenko, Elena**; Pires Pimentel, Sergio; Vinnikov, Dmitri; Martins, Joao IEEE transactions on industrial electronics 2020 / p. 1201 –1211 <https://doi.org/10.1109/TIE.2019.2898616> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Performance and feasibility analysis of electricity price based control models for thermal storages in households

Rosin, Argo; Link, Siim; Lehtla, Madis; Martins, Joao; Drovtar, Imre; Roasto, Indrek Sustainable cities and society 2017 / p. 366-374 : ill <https://doi.org/10.1016/j.scs.2017.04.008> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Power converter interfaces for electrochemical energy storage systems - a review

Fernao Pires, Vitor; Romero-Cadaval, Enrique; **Vinnikov, Dmitri**; **Roasto, Indrek**; Martins, Joao Energy conversion and management 2014 / p. 453–475 : ill <https://doi.org/10.1016/j.enconman.2014.05.003> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Power Electronic Systems for Efficient and Sustainable Energy Supply

2019 https://www.mdpi.com/journal/energies/special_issues/power_electronic_systems_for_eses

Residential DC load forecasting using long short-term memory network (LSTM)

Shabbir, Noman; Ahmadiahangar, Roya; Rosin, Argo; Husev, Oleksandr; Jalakas, Tanel; Martins, Joao 2023 IEEE 11th International Conference on Smart Energy Grid Engineering (SEGE) 2023 / p. 131-136 <https://doi.org/10.1109/SEGE59172.2023.10274596>

Residential energy flexibility characterization using non-intrusive load monitoring

Azizi, Elnaz; Ahmadiahangar, Roya; Rosin, Argo; Martins, Joao; Lopes, Rui Amaral; Beheshti, M. TH.; Bolouki, Sadegh Sustainable cities and society 2021 / art. 103321, 12 p. : ill <https://doi.org/10.1016/j.scs.2021.103321> Journal metrics at Scopus Article at Scopus Journal metrics at WOS Article at WOS

Residential load forecasting for flexibility prediction using machine learning-based regression model

Ahmadihangar, Roya; Häring, Tobias; Rosin, Argo; Korõtko, Tarmo; Martins, Joao 2019 IEEE International Conference on Environment and Electrical Engineering and 2019 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe) 2019 / 4 p. : ill <https://doi.org/10.1109/EEEIC.2019.8783634>

Short-term residential DC load forecasting using extreme gradient boost (XgBoost) algorithm

Shabbir, Noman; Husev, Oleksandr; Daniel, Kamran; Jawad, Muhammad; **Rosin, Argo**; Martins, Joao 2024 IEEE 18th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2024 / 6 p <https://doi.org/10.1109/CPE-POWERENG60842.2024.10604392>

A standard-based software infrastructure to support weather forecasting in distributed energy systems [Electronic resource]

Oliviera-Lima, Jose A.; Delgado-Gomes, Vasco; Martins, Joao; Lima, Celson; Romero-Cadaval, Enrique; **Vinnikov, Dmitri** CPE 2013 : 2013 International Conference on Compatibility and Power Electronics (CPE) : June 5-7, 2013, Ljubljana, Slovenia : conference proceedings 2013 / p. 36-39 : ill [CD-ROM]

State of the art of active power electronic transformers for smart grids

Roasto, Indrek; Romero-Cadaval, Enrique; Martins, Joao; Smolenski, Robert IECON 2012 : 38th Annual Conference of the IEEE Industrial Electronics Society : Industrial Electronics for Sustainable Development 2012 / p. 5241-5246 : ill <https://ieeexplore.ieee.org/document/6389543>

The magmatic system beneath Torfajökull volcano, Iceland : a combination of radar and seismic interferometric analysis

Martins, Joao; Hooper, A.J.; Draganov, Deyan; Ruigrok, Elmer; Hanssen, R.F.; White, Robert S.; **Soosalu, Heidi Elisabet** American Geophysical Union, Fall Meeting 09.-13.12.2013 2013 / V51E-2727 <https://repository.tudelft.nl/record/uuid:ae38d8e5-667c-4a4c-ace2-5ba6ea1aeb6>

Three-phase three-level neutral-point-clamped qZ source inverter with active filtering capabilities

Roncero-Clemente, Carlos; **Husev, Oleksandr**; Romero-Cadaval, Enrique; Martins, Joao; **Vinnikov, Dmitri**; Milanes-Montero, Maria Isabel 2015 9th International Conference on Compatibility and Power Electronics (CPE) : proceedings : Faculty of Science and Technology (FCT), Caparica, Lisbon, Portugal, 24-26 June, 2015 2015 / p. 216-220 : ill <http://dx.doi.org/10.1109/CPE.2015.7231075>

XgBoost based short-term electrical load forecasting considering trends & periodicity in historical data

Shabbir, Noman; Ahmadiahangar, Roya; Rosin, Argo; Jawad, Muhammad; **Kilter, Jako**; Martins, Joao 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 6 p <https://doi.org/10.1109/ETFG55873.2023.10407926>