

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

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Cyber-physical microgrids : toward flexible energy districts

Rosin, Argo; Ahmadihangar, 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; Ahmadihangar, R; Rosin, Argo; Kilter, Jako; Martins, Joao IEEE Transactions on Consumer Electronics 2024 / p. 6641-6652 <https://doi.org/10.1109/TCE.2024.3470241> [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

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> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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

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

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

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

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Multi-step ahead short-term residential DC load forecasting : A comparative study of NGBoost-based algorithms

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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 elektrotechnika = 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

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

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

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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]

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

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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

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