

AI technologies and their applications in small-scale electric power systems

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Data-driven quantification and aggregation of demand-side flexibility for symmetrical bidding in energy balancing markets

Shahid, Arqum; Ahmadiyahangar, Roya; Kilter, Jako; Rosin, Argo Electric Power Systems Research 2025 / art. 111823

<https://doi.org/10.1016/j.epsr.2025.111823>

Exploratory data analysis for demand-side flexibility quantification

Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Maask, Vahur; Martins, João F. 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227408>

Forecasting demand-side flexibility of a household with dynamic consumer behavior analysis

Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Korötko, Tarmo IEEE PES Innovative Smart Grid Technologies

Conference Europe (ISGT Europe 2024) : proceedings 2024 / 5 p <https://doi.org/10.1109/ISGTEUROPE62998.2024.10863005>

Harnessing appliance flexibility : a user-centric approach for energy management

Shahid, Arqum 22nd International Symposium "Topical Problems in the Field of Electrical and Power Engineering". Doctoral School of Energy and Geotechnology III : Pärnu, Estonia, August 23-26, 2023 2023 / p. 95-96 : ill https://www.ester.ee/record=b5570906*est

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

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

Leveraging the machine learning techniques for demand-side flexibility - a comprehensive review

Shahid, Arqum; Ahmadiyahangar, Roya; Rosin, Argo; Blinov, Andrei; Korötko, Tarmo; Vinnikov, Dmitri Electric power systems research 2025 / art. 111185 <https://doi.org/10.1016/j.epsr.2024.111185>