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

Shahid, Arqum; Plaum, Freddy; Korõtko, Tarmo; Rosin, Argo IEEE Access 2024 / p. 109984-110001

https://doi.org/10.1109/ACCESS.2024.3440067

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

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