

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](#)

A cost-effective electric vehicle intelligent charge scheduling method for commercial smart parking lots using a simplified convex relaxation technique

Jawad, Muhammad; Qureshi, Muhammad Bilal; Ali, Sahibzada Muhammad; **Shabbir, Noman;** Khan, Muhammad Usman; Aloraini, Afnan; Nawaz, Raheel Sensors 2020 / p. 1-19 <https://doi.org/10.3390/s20174842> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A detailed testing procedure of numerical differential protection relay for EHV auto transformer

Ehsan, Umer; Jawad, Muhammad; Javed, Umar; Zaidi, Khurram Shabih; Rehman, Ateeq Ur; **Rassölkin, Anton;** Althobaiti, Maha M.; Hamam, Habib; **Shafiq, Muhammad** Energies 2021 / art. 8447 <https://doi.org/10.3390/en14248447> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

Distributed average integral control based energy management model

Shaukat, Neelofar; Khan, Bilal; Qureshi, Muhammad Bilal; Jawad, Muhammad; **Shabbir, Noman; Daniel, Kamran** 2023 IEEE International Conference on Energy Technologies for Future Grids (ETFG) 2023 / 5 p <https://doi.org/10.1109/ETFG55873.2023.10407358>

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](#)

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](#)

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](#)

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

Shabbir, Noman; Husev, Oleksandr; Hokmabad, Hossein Nourollahi; Daniel, Kamran; Jawad, Muhammad; Martins, Joao 2025 IEEE Seventh International Conference on DC Microgrids (ICDCM) 2025 / 6 p <https://doi.org/10.1109/ICDCM63994.2025.11144710>

Non-intrusive load monitoring based smart energy management system for smart buildings

Jawad, Muhammad; **Shabbir, Noman; Ahmadiahangar, Roya; Rosin, Argo;** Khaleel, T.; Tahir, W. 2024 7th International Conference on Information and Computer Technologies (ICICT) : proceedings 2024 / p. 46-50 <https://doi.org/10.1109/ICICT62343.2024.00014>

A novel renewable powered stand-alone electric vehicle parking-lot model

Jawad, Muhammad; Asghar, Hira; Arshad, Jehangir; Javed, Abbas; Qureshi, Muhammad Bilal; Ali, Sahibzada Muhammad; **Shabbir, Noman; Rassölkin, Anton** Sustainable energy, grids and networks 2023 / art. 100992, 14 p. : ill <https://doi.org/10.1016/j.segan.2022.100992> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

A novel short receptive field based dilated causal convolutional network integrated with Bidirectional LSTM for short-term load forecasting

Javed, Umar; Ijaz, Khalid; Jawad, Muhammad; Khosa, Ikramullah; Ansari, Ejaz Ahmad; Zaidi, Khurram Shabih; Rafiq, Muhammad Nadeem; **Shabbir, Noman** Expert systems with applications 2022 / art. 117689 <https://doi.org/10.1016/j.eswa.2022.117689> [Journal metrics at Scopus](#) [Article at Scopus](#) [Journal metrics at WOS](#) [Article at WOS](#)

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>

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](#)

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](#)

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](#)

Wind energy forecasting using recurrent neural networks

Shabbir, Noman; Kütt, Lauri; Jawad, Muhammad; **Ahmadihangar, 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>

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

Shabbir, Noman; Ahmadihangar, 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>