Special Issue

Artificial Intelligence Technologies Applied to Smart Grids

Message from the Guest Editors

This Special Issue aims to provide a comprehensive and up-to-date overview of the latest research and insights on the application of AI in smart grid systems, with the goal of advancing the field and promoting sustainable energy solutions. This includes design, optimization, management, case studies, experimental results, and new methodologies for applying AI to smart grids. Topics of interest for publication include, but are not limited to:

- All aspects of artificial intelligence, machine learning, and optimization integration related to power system components;
- Renewable energy integration and management and hybrid renewable energy systems (HRESs);
- Energy demand forecasting and optimization of the energy market;
- Energy management systems (EMSs) and energy storage systems (ESSs);
- Fault detection and diagnosis;
- Load balancing and optimization;
- Grid resiliency assessment and distributed energy resource management;
- Smart grid communication and controller optimization;
- Edge computing and data analytics for smart grids;
- Life-cycle assessment of energy and decarbonization roadmaps;
- Internet of things and cyber-physical energy systems.

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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