Special Issue

Advanced Grid Integration with Power Electronics: 2nd Edition

Message from the Guest Editors

In this Special Issue, we invite novel high-quality research paper submissions covering a wide range of topics and that provide new insights for the microgrid and power electronics technologies. Topics of interest include but are not limited to

- Advanced power electronic converters and emerging technologies;
- Grid-forming and grid-following inverter strategies;
- Power quality improvement using power electronics;
- Protection and fault management for converter-based systems;
- Design, planning, and operation of microgrids;
- Renewable energy integration and utilization in microgrids;
- Stability, resilience, and black start operation of microgrids;
- Decentralized and adaptive control for microgrid synchronization;
- AI-enhanced control: deep learning, reinforcement learning, and system identification;
- Predictive control and time-delay mitigation in power systems;
- Optimization and management of distributed energy resources (DERs);
- Modeling, simulation, and data-driven approaches for control and stability.

We welcome original research articles and comprehensive reviews that provide new insights and advance the understanding of microgrids as a key modality for next-generation electric grids.

Guest Editors

Dr. King Man Siu

Department of Electrical Engineering, University of North Texas, Denton, TX, USA

Dr. Yusheng Wei

Department of Electrical Engineering, University of North Texas, Denton, TX, USA

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Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

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About the Journal

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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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