

Special Issue

New Trends in Power Electronics for Microgrids, 2nd Edition

Message from the Guest Editor

This Special Issue focuses on topics related to new trends in power electronics for microgrids, smart grids, hybrid power systems with high renewable energy penetration, wind and solar power plant modeling and control, practical experience within high-renewable-energy-penetration systems, energy storage systems, market design, and operation, power electronic topologies, control systems and monitoring algorithms. Topics of interest for this Special Issue include, but are not limited to, the following topics in the field of power electronics for microgrids:

- Power electronic systems—converters and emerging technologies;
- Architecture and hardware design;
- New power electronics topologies;
- Performance analysis and optimization;
- Advanced power electronics;
- Design for reliability, resilience, and robustness;
- Storage technology;
- DC-powered PHEV/EV charging;
- Real-time monitoring and control;
- Distributed energy generation and integration;
- Artificial intelligence techniques in power electronics systems;
- Integration of renewable energy resources;
- Innovative hybrid energy storage devices;
- Energy management systems;
- Control and power-sharing between converters.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

Editor-in-Chief

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