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Emerging Topics in Power Electronic Converters of Microgrids

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Deadline for manuscript
submissions:

closed (28 February 2023)

Message from the Guest Editors

This Special Issue aims to present and disseminate the most recent advances in power electronics for microgrids in aspects such as theory, modelling, control, new topologies, and algorithms to make the microgrid system work. The topics of interest for publication include, but are not limited to, the following:

- Power converter modelling for AC, DC, and AC–DC hybrid microgrids;
- Power converters control for AC, DC, and AC–DC hybrid microgrids;
- New topologies for power converters applied to microgrids;
- Grid integration through power electronics;
- Storage systems;
- Bidirectional DC/DC converters in DC microgrids;
- Renewable isolated microgrids;
- Power quality, reliability, and resilience;
- Trends in power converters;
- Predictive control for power converters in microgrids;
- Linear control for power converters in microgrids;
- Nonlinear control for power converters in microgrids;
- Green hydrogen systems;
- Trends in solar, wind, and marine energy power system;
- Electromobility and their impact on microgrids;
- Novel renewable energies and power topologies for microgrid applications.



mdpi.com/si/115614

Special Issue



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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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Journal Rank: CiteScore - Q1 (*Engineering (miscellaneous)*)

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