



## Power Electronics Applications in Microgrid and Renewable Energy Systems

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Deadline for manuscript  
submissions:

**closed (19 April 2024)**

### Message from the Guest Editors

Dear Colleagues,

The topics of interest for this Special Issue are as follows. We invite contributions on a wide range of topics related to the application of power electronics in microgrids and renewable energy systems, including, but not limited to:

**Advanced Inverters and Converters:** Novel designs, control algorithms, and topologies for grid-tied and off-grid inverters and converters.

**Energy Storage Systems:** Integration of energy storage technologies (e.g., batteries, supercapacitors, hydrogen) with power electronics in microgrid systems.

**Grid Integration:** Strategies and technologies for the seamless integration of renewable energy sources into the grid, including grid-forming inverters.

**Microgrid Control and Management:** Advanced control methods, optimization techniques, and real-time management of microgrid systems.

**Harmonics and Power Quality:** Mitigation of harmonics and improvement in power quality in microgrids and renewable energy systems.

We look forward to receiving your valuable contributions and advancing the field of power electronics in microgrid and renewable energy systems.

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Dr. Shuhan Zhou  
Guest Editors



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Special Issue



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## Message from the Editor-in-Chief

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