Special Issue

Novel Applications of Power Converters for Energy Storage and Grid Integration

Message from the Guest Editors

This Special Issue seeks to address the challenges and potential solutions related to novel applications of power converters in modern power systems with a high level of penetration of energy storage, renewables, and full-electric road vehicles. The topics of interest for publication include, but are not limited to the following:

- The modeling, design, control, stability analysis, and reliability of power electronic converters;
- Energy storage systems (batteries, fuel cells, supercap, etc.);
- Novel power converter topologies for grid integration with renewables and storage systems;
- The control and modulation of conventional and multilevel power converter topologies for renewable energy production and flexible transmission systems;
- Advanced control techniques and grid-supporting functionalities of power converters;
- The control and stability of power-converter-dominated microgrids;
- The grid integration of electric vehicles.

Guest Editors

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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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