Special Issue

High-Performance Power Converters and Inverters

Message from the Guest Editors

Power converters are key elements in the current energy scenario. New power converter topologies, control strategies and modulation techniques are in continuous development by both academia and industry. In addition, silicon carbide and gallium nitride power device technologies are called upon to substitute the traditional silicon power devices in a future not so far away. In this sense, high performance and high reliability are key characteristics in power converter design. Topics of interest include, but are not limited to, the following:

- Converter topologies for high-performance power converters;
- Converters for renewable energy applications;
- Converters for grid-connected applications such as active front-end, active filter, STATCOM, FACTS, smart transformers, etc.;
- Converters for high-voltage DC transmission systems;
- New modulation and control strategies for high-performance power converters;
- Fault tolerant capability of high-performance power converters;
- Active lifespan management methods for high-performance power converters;
- Artificial Intelligence techniques to improve power converters' performance

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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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