Special Issue

New Circuit Configurations and Control in Power Electronics and Power Magnetics

Message from the Guest Editor

To meet the challenges posed by the next-generation power electronic converter, new topologies, new magnetic design, advanced thermal design solutions, and the corresponding controls should be further researched. The main objective of this Special Issue is to collect the latest developments in novel topologies of power electronic converters, modeling and control for power electronic converters, magnetic components optimization and design, and thermal solution for power electronics converters. Prospective authors are invited to submit original contributions for review and publication in this Special Issue. Topics of interest for publication include, but are not limited to:

- Innovative topologies: soft-switching topology, bidirectional DC/DC converter with a wide voltage gain, high-frequency converter, etc.
- New architectures: multiphase converters, multilevel converters, modular converters, partial converter, etc.
- Modeling of power electronics converter.
- Control strategies and parameter design.
- Magnetic design for power electronic converters.
- Thermal modeling, testing, and design.
- Soft switching techniques.

Guest Editor

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Deadline for manuscript submissions

closed (15 May 2025)

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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.

Editor-in-Chief

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