Special Issue

Advancements in Power Electronics for Power System Applications

Message from the Guest Editor

Power electronics technology has become a core technology in modern power systems, fundamentally transforming the way in which electrical energy is converted, controlled, and distributed. Recent technological breakthroughs in semiconductor devices, control architectures, system integration, energy management, fault diagnosis, and fault-tolerant control provide novel opportunities for the application of power electronics in power systems. This Special Issue aims to showcase and disseminate recent advances and technological innovations in power electronics for power system applications. The scope of this Special Issue includes, but is not limited to, the following topics:

- Modeling, simulation, and analysis of power electronic systems;
- Reliability design and assessment of power electronic systems;
- Fault diagnosis of power electronic systems;
- Online monitoring and health management of power electronic systems;
- Artificial intelligence-based fault detection and diagnosis methods;
- Reliability design and assessment of power electronic systems;
- Coordinated control of hybrid energy systems;
- Artificial intelligence-based energy management.

Guest Editor

Prof. Dr. Weibo Li
School of Automation, Wuhan University of Technology, Wuhan 430070, China

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Energies
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

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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

Prof. Dr. Enrico Sciubba
Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, Italy

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