



Advances in Design and Control of Power Electronic Systems

Guest Editors:

Dr. Matthias Preindl

Department of Electrical
Engineering, Columbia University
in the City of New York, New York,
NY, USA

Dr. Liwei Zhou

Department of Electrical
Engineering, Columbia University
in the City of New York, New York,
NY, USA

Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editors

With the goal of Net Zero Emissions, the demands for electric vehicles and renewable energy resources have been increasing rapidly. Power electronics design and control techniques play a crucial role in electrified energy conversion systems. Advanced control and design technologies will enable high-performance power conversion to improve stability, efficiency, and power density. This Special Issue of *Energies*, “Advances in Design and Control of Power Electronic Systems”, is intended to disseminate advanced design and control methods to improve the performance of power electronics systems.

Topics of interest include but are not limited to the following:

- Model predictive control techniques for grid-connected power converters;
- Resonance damping solutions for grid-connected converters with high-order filters;
- Sensorless control techniques for motor drives and power electronics systems;
- Electric vehicle charger power conversion system design techniques;
- Modeling and control of renewable energy interfaced power converters;
- Optimal design for power converters to improve the efficiency and power density.





energies



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, RePEc, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: CiteScore - Q1 (Control and Optimization)

Contact Us

Energies Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/energies
energies@mdpi.com
[X@energies_mdpi](https://twitter.com/energies_mdpi)