Special Issue

Advanced Power Electronic Converters for Electric Vehicles, Renewable Energy Systems, and Energy Storage Systems

Message from the Guest Editor

This Special Issue is focused on developing new and efficient circuit configurations, modulation schemes and control strategies of advanced power electronic converters which can contribute to the future of renewable energy systems, as well as EVs. Specific topics of interest include, but are not limited to, the following:

- Modular converters for EVs, PV, or wind energy systems;
- High-power density converters for EVs and/or renewable energy systems;
- Design of high-frequency transformers in DC/DC and DC/AC power electronic converters;
- Novel control strategies for advanced power converters in the context of EVs and/or renewable energy systems;
- High-power converters for EV chargers;
- Accurate modelling of electrical systems comprising EVs, renewable energy systems, and the AC grid;
- Advanced power converters employed in EV/PV/grid integration;
- Bidirectional converters for EV chargers and/or renewable energy generators with energy storage systems;
- Improving the power quality of EV grid-connected chargers;
- Control strategies for grid-connected renewable energy generators integrated with energy storage; systems:

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Guest Editor

Dr. Ahmed Darwish

School of Engineering, Lancaster University, Lancaster LA1 4WY, UK

Deadline for manuscript submissions

closed (18 September 2024)



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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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