Special Issue

Design and Control Strategies for Wide Input Range DC-DC Converters

Message from the Guest Editors

Dear Colleauges, Energy transition requires widespread use of power conditioning system capable of managing renewable energy sources, energy storage systems, fuel cells, electrolysis, electric vehicle charging stations and AC or DC microgrids. Devices with DC input/output that can vary their electrical quantities require implementation of DC/DC power conditioning system to enhance efficiency, performance, dynamic response, reliability, robustness, and resilience. This topic gains interest in scientific community due to its relevance in energy scenarios. This Special Issue aims to present and disseminate the most recent advances related to the theory, design, modelling, application and control of DC-DC Converter. Topics of interest for publication are the following:

- Wide input range DC-DC converter
- New topology of DC-DC converter
- Multi-active bridge
- Dual active bridge
- DC-DC partial power converter
- Design of DC-DC converter
- Control strategy for current and power management of DC-DC Converter
- Special applications of DC-DC Converter
- DC/DC Converter for renewable energy source
- DC/DC Converter for supplying electrolyzer

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Deadline for manuscript submissions

closed (24 October 2025)



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About the Journal

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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