Special Issue

Power Electronics Converters for On-Board Electric Power Systems

Message from the Guest Editors

The purpose of this Special Issue is to discuss the future of on-board electric power systems (EPSs) in the context of more electric aircraft (MEA), electrical vehicles (EV), and ships. The power densities of power electronics converters and electrical machines are expected to increase dramatically. Challenges related to power generation, conversion, and distribution are expected to be overcome with a focus on new high-performance, wideband gap (WBG) switching elements with high breakdown voltage, as well as special topologies of power electronics converters for high voltages and high currents. **Keywords**

- aviation
- aerospace electronics
- DC–DC power converters
- hybrid converters
- electric power supply systems
- energy storage
- matrix converters
- microgrids
- more electric aircraft
- multilevel converter
- power semiconductor devices
- power management
- silicon carbide
- wideband gap semiconductors

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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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