Special Issue

Emerging Techniques for High-Efficiency and High-Power Density Power Conversions

Message from the Guest Editors

The focus of this Special Issue is on pioneering research and development in power conversion methods that enhance the efficiency and power density of electric vehicle (EV) applications. We are particularly interested in manuscripts that explore innovative designs, materials, and technologies that push the boundaries of what is possible in power electronics for EVs. The scope of this Special Issue encompasses, but is not limited to, the following areas:

- Advanced design methodologies for power converters that increase power density without compromising efficiency.
- Cutting-edge materials and components that raise the efficiency bar for EV power conversion systems.
- Novel cooling techniques that enable higher power density in power electronic converters.
- Integration strategies for power conversion systems to optimize performance and reduce losses in EV applications.
- Breakthroughs in control algorithms that enhance the operation of high-efficiency, high-power density converters.

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Deadline for manuscript submissions

closed (30 April 2025)



World Electric Vehicle Journal

an Open Access Journal Published by MDPI

Impact Factor 2.6 CiteScore 5.0



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About the Journal

Message from the Editor-in-Chief

The World Electric Vehicle Journal is the official journal of the World Electric Vehicle Association (WEVA) and its members the European Association for Electromobility (AVERE), the Electric Drive Transportation Association (EDTA), and the Electric Vehicle Association of Asia Pacific (EVAAP). Since its foundation in 2007, the journal has aimed to provide a publishing platform for the academic and industrial world to share the latest developments and knowledge about electric vehicles. If you are developing Electric, Plug-in Hybrid, Hybrid Electric, or Fuel Cell Vehicles, we cordially invite you to consider us as the place for you to publish your latest results and innovations.

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