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Advanced Electrical Machine and Power Electronics for the Charging and Drive System of Electric Vehicles (EVs)

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Message from the Guest Editors

Dear Colleagues,

Electric vehicles (EVs) are rapidly transforming the automotive landscape, offering sustainable and energy-efficient transportation options. The effectiveness and efficiency of EVs hinge on the design and control of their drive systems, encompassing motors, power electronics, energy management, and integration with other vehicle components. In the realm of electric vehicles, electrical machines have evolved into sophisticated and highly efficient devices designed to meet the demands of modern transportation. These machines play a critical role in converting electrical energy into mechanical power, whether for propelling the vehicle or regenerating energy during deceleration. Power electronics, on the other hand, form the bridge that connects the vehicle to the charging infrastructure and ensures the safe, efficient conversion of electrical energy. They enable fast charging, bidirectional energy flow, and power management, revolutionizing how we charge our EVs and manage energy in the grid.



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Message from the Editor-in-Chief

The *World Electric Vehicle Journal* is the official journal of 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 aims 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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