



Modern Charging Techniques for Electrical Vehicles

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Message from the Guest Editors

Dear Colleagues,

Climate crisis, fossil fuel depletion, and energy security demands electric vehicles (EVs), and EVs require battery chargers.

The EVs are sensitive to the power density and power efficiency of the battery chargers; Vehicle-to-grid (V2G), can further support the grid and improve the power quality; vehicle-to-devices (V2D) can provide power/electricity to portable devices, such as portable refrigerator and cookers; vehicle-to-everything (V2X) enables the EV to use the batteries in EVs to charge other EVs, provide power to homes. Furthermore, inductive wireless charging, capacitive wireless charging, and laser EV charging expand our expectation on EV charging structure.

This special issue is devoted to discovering and exhibiting the recent development in the EV chargers. Technical papers and review papers are solicited on any subject pertaining to the scope of the EV chargers including, but not limited to, the following major topics:

1. Power electronic devices and advanced package techniques
2. Power conversion topologies, modeling, and control
3. Reliability modeling, fault protection and diagnostics
4. Wireless power transfer





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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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