Special Issue

Design and Control of Electrical Machines in Electric Vehicles, 2nd Edition

Message from the Guest Editors

The electrical machine and its drives are the energy core of electric vehicles. The optimized design method and advanced control technology affect the performances of electric vehicles, including the recharge mileage, noise level, safety, manufacturing costs, maintenance costs, and operating life. In order to improve the operating performance, it is necessary to explore and research around electrical machines' designs and the control strategies for electric vehicles. In terms of motor ontology, the rapid optimization of electromagnetic analyses, multiphase motors, and permanent magnet motors is worthy of attention. In terms of power converters of electric vehicles, the DC–DC converter, fault-tolerant converter, impedance source converter, and SiC drives are research hotspots. In terms of motor control algorithms, it is necessary to further study the sensorless control method, fault monitoring technology, high-performance torque control strategy, braking control, and energy recovery technology to increase the speed, range, and high-efficiency operating area of electric vehicle motors.

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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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