Special Issue

Battery Management System in Electric and Hybrid Vehicles

Message from the Guest Editors

The rapid development of electric and hybrid vehicles has created a boom for lithium-ion batteries. However, lithium-ion batteries inherently have non-linear dynamic behaviours coupled with electrical, acoustic, and mechanical variations. Furthermore, their dynamic behaviors change with factors such as voltage, current, capacity, temperature, and vibration. These factors make it difficult to model and manage the lithium-ion batteries. Although remarkable progress has been made in recent years, to control and manage the lithium-ion batteries accurately during their whole lifespan and practical conditions still remain open issues. This Special Issue focuses on the advanced battery management technologies that could potentially be used in electric and hybrid vehicles. Topics of interest include, but are not limited to, the following:

- Battery state estimation and remaining useful life prediction;
- Battery thermal analysis and management;
- Battery charging strategy optimization;
- Battery pack balance control;
- Battery multi-physics field parameter monitoring.

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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.

Editor-in-Chief

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