Special Issue

Smart Lithium-Ion Battery Systems: Advanced Modeling, State Estimation, and Control

Message from the Guest Editors

Lithium-ion batteries are deployed in a wide variety of applications, such as portable electronics, electric vehicles, and stationary power storage systems, by virtue of their high energy and power densities and long lifetime. With emerging techniques such as artificial intelligence and blockchain, smart battery systems, incorporating state-of-the-art battery hardware with advanced battery management processes, are moving rapidly from a research field towards a requirement for technology functionality. Advanced modeling, state estimation, and control compose the key technologies of smart battery systems, which contribute to extending battery lifetime and enhancing battery safety. This Special Issue is a dedicated outlet for up-to-date research on all aspects of advanced modeling, state estimation, and control for smart lithium-ion battery systems. Manuscripts from cross-disciplinary fields, such as artificial intelligence, blockchain, electrochemistry, power electronics, and thermal and mechanical technologies are strongly encouraged.

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Deadline for manuscript submissions

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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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