Special Issue

Lithium-Ion Battery Management Systems: Design, Development, Analysis and Implementation

Message from the Guest Editors

This Special Issue aims to collect high-quality review and research articles related to the topic of battery management systems for lithium-ion battery research and applications for BMS development and implementation. Topics of interest include, but are not limited to:

- State-of-the-art technologies and new developments for BMS applications;
- Review articles for Li-ion BMS research and applications;
- The design, verification, and implementation of enhanced algorithms for battery control and monitoring, including: state-of-charge (SOH), state-of-power (SOP), state-of-health (SOH), and state-of-function (SOF);
- Battery diagnostic and prognostic functions;
- Battery system thermal management;
- Smart Li-ion BMS development;
- Small-scale and large-scale Li-ion BMS integration;
- Control development and optimisation for BMS functionalities;
- Active battery balancing control features, topologies, and integration;
- The role of the BMS in extending battery pack functionality and service life;
- Functional safety within the context of BMS design and verification;
- Security and privacy in BMS development.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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