Special Issue

Towards a Smarter Battery Management System: 3rd Edition

Message from the Guest Editors

Lithium-ion batteries are widely used in electric vehicles (EVs) and the energy storage industry due to their high energy density and long cycle life. As their price decreases, lithium-ion batteries will continue to be used in the future. Battery management systems (BMSs) are the key component to ensure the stable and reliable operation of battery systems. They monitor battery operation data, estimate the battery state of charge (SOC) and state of health (SOH), conduct battery balance, manage thermal systems, and perform fault diagnosis. BMS-related hardware and algorithms have developed rapidly in recent years. Therefore, this Special Issue aims to demonstrate the latest BMS-related technologies, such as SOC and SOH estimation algorithms, balance systems, wireless BMSs, and second-life battery applications. Potential topics include, but are not limited to, the following:

- Battery management system hardware and algorithms;
- Battery modeling;
- Battery parameter identification;
- Battery state of charge (SOC) estimation;
- Battery state of health (SOH) estimation;
- Battery fault diagnostics;
- Battery balance or equalization topology and method;
- Battery thermal management.

Guest Editors

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Deadline for manuscript submissions

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Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

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