Special Issue

Recent Progress of Electrochemical Performance and Interface Analysis of Batteries

Message from the Guest Editors

Lithium-ion batteries are currently the most advanced electrochemical energy storage technology due to a favorable balance of performance and cost properties. However, as traditional Li-ion chemistry is approaching its physicochemical limit, what can we do to further reduce the cost of batteries while increasing their energy density, life and safety? This Special Issue on the recent progress of the electrochemical performance and interface analysis of batteries will focus on how to improve the performance of conventional lithium-ion batteries and post-lithium-ion batteries. This Special Issue will present the recent upgradation of conventional lithium-ion batteries and the development of next-generation electrochemical energy storage technologies. The perspectives and design ideas about materials, interfaces, configurations and characterizations toward better performance of batteries will be discussed. Potential topics include, but are not limited to, the following:

- Li-ion batteries
- post-lithium-ion batteries
- electrochemical performance
- interface analysis
- mechanism studies
- energy storage materials
- material design
- process optimization

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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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