Special Issue

Recent Advances in Electrode Materials for Alkali-Metal Ion Batteries

Message from the Guest Editor

Dear colleague, The sustainable development of high-performance, environmentally friendly and cost-effective electrochemical energy storage systems has been recognized as an important avenue towards the minimization of the dependence on fossil fuels, the successful usage of energy harvested from intermittent renewable sources. Among the advanced electrochemical energy storage systems, the Li-ion battery has been at the forefront, and is now considered to be a fairly matured technology. Nevertheless, in order to meet the ever-increasing demand and to ensure adequate safety, further progress with the Li-ion battery system is needed. Moving forward, in terms of sustainability, the upcoming Na-ion/K-ion/Mg-ion battery system has certain advantages over its Li-ion counterpart due to the widespread availability of Na/K/Mg-precursors.

The potential topics of this Special Issue include, but are not limited to, the following:

- Alkali metal-ion/Solid-state battery systems
- Electrode materials;
- Material–electrochemical interactions;
- Air/water stability of electrode materials;
- Cell fabrication and optimization;
- Recycling materials/components

Guest Editor

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Message from the Editor-in-Chief

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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