Special Issue

Electrode Materials for Rechargeable Lithium Batteries

Message from the Guest Editor

With the development of high-efficiency electrochemical energy storage devices, lithium-ion batteries have been widely applied in various industrial and civil fields. However, traditional electrode materials cannot meet the expected demands of energy and power densities in future energy storage systems due to their limited specific capacities, short lifetime and poor safety. As a result, seeking alternative high-performance electrode materials is a primary challenge for next-generation rechargeable lithium batteries (RLBs). This Special Issue "Electrode Materials for Rechargeable Lithium Batteries" focuses on the various novel high-performance electrode materials for RLBs, including aspects ranging from material design to fabrication technology, scientific understanding and potential/engineering applications.

- Advanced Li-ion/Li-S/lithium-metal/lithium-oxygen/air batteries;
- High-performance electrode material;
- Fabrication and synthesis;
- Lithium dendrite growth and inhibition;
- Polysulfides transformation;
- Novel electrode structure design;
- Electrode material failure;
- Lithium storage mechanism;
- Electrochemical performance optimization.

Guest Editor

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Deadline for manuscript submissions

closed (30 April 2023)

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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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