



Advanced Materials for Rechargeable Lithium Batteries

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Message from the Guest Editor

Dear Colleagues,

Electrical energy storage has become an important theme in our lives in the 21st century. Among the various energy storage systems, rechargeable lithium-ion batteries have been the most dominant power sources for mobile electronic devices for two decades due to their high-energy density and long cycle life. Recently, new applications, such as electric vehicles and energy storage systems, are gradually emerging in the market.

The main scientific and technical challenges of rechargeable lithium batteries today are developing and securing the advanced battery materials. This Special Issue aims to provide and share recent research and developments on advanced battery materials for rechargeable lithium batteries. Researches on interfacial reactions and phenomena between electrolytes and electrodes will also be welcomed.

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Keywords: Lithium-ion battery; Lithium-sulfur battery; Lithium-air battery; All-solid-state lithium battery; Battery materials (anode, cathode, electrolyte, separator); Interfacial phenomena; Battery design, performance and safety





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