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High-Energy Materials for Next-Generation Lithium-Ion Batteries

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Message from the Guest Editors

Dear Colleagues,

Lithium-ion batteries (LIBs) have become a crucial part of everyday life. However, existing battery systems cannot fully meet the requirements of electric vehicles, electrochemical energy storage and other fields in terms of safety and energy density. The purpose of this Special Issue is to draw attention to the latest progress in the field of next-generation lithium-based batteries, also integrating research progress in related fields. Researchers are warmly invited to submit their original research papers or review papers to this Special Issue. Topics of interest for this Special Issue include, but are not limited to, the following: Cathode materials: Ni-rich cathodes, disordered cathodes and high-entropy cathodes; Anode materials: Lithium metal, protected lithium metal anodes, silicon-graphite composites, alloys and high-entropy alloys; Electrolytes and additives: new salt solvents and additives that enable enhanced safety or higher-energy-density electrodes and high-voltage electrolytes; Solid-state electrolytes: Inorganics (oxide ceramics and halides) and polymers (electrolytes, gel, ionomers).



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Special Issue



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Message from the Editor-in-Chief

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