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Key Materials in Lithium-Ion Batteries

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Message from the Guest Editors

Dear Colleagues,

Great strides have been made over the past century in our ability to store energy sources with various batteries, leading to profound transformations—both good and bad -in society. Looking at the battery systems of today, it is clear that meeting the energy needs of the world now and in the years to come requires the concerted efforts of many different actors across a range of technologies and approaches. This Special Issue aims to share advances in various battery systems. The issues faced are diverse and multifaceted, covering fields including Li-ion battery, lithium metal battery, Na-ion batteries, fuel cells, metal-air battery, flow cells, photovoltaic cells, solid-state battery, supercapacitors, surface/interface chemistry, battery recycling, flexible battery, as well as new related concepts and devices. However, a common theme emerges in that changes to adapt and improve our battery system are greatly needed. By improving our mutual understanding of the issues faced by each area of battery research, these changes can happen more smoothly, efficiently, and rapidly.



Specialsue





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Message from the Editor-in-Chief

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