



## Materials and Processing for Lithium-Ion Batteries and Beyond

Guest Editors:

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### Message from the Guest Editors

This Special Issue aims to provide a platform for the publication of the latest research on materials and processing for lithium-ion batteries. As such, we are inviting the submission of high-quality papers, including original research articles and reviews. Topics include, but are not limited to:

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

- High-capacity and high-voltage cathode materials, such as Li-rich/Ni-rich layered oxides;
- High-capacity alloy-based anode materials, such as Si and Sn;
- Nonflammable and high-voltage electrolytes;
- Solid-state electrolytes with high ionic conductivity and great stability and interfacial compatibility with electrode materials, such as sulfides, oxides, and polymers;
- Design of lithium-ion batteries, such as Li–O<sub>2</sub>/ Li–S/ Li–Se/ Li–CO<sub>2</sub> batteries;
- Advanced and in situ/operando characterizations of battery materials, such as in situ TEM and in operando XRD;
- Multiscale modeling of battery materials, such as density-functional theory (DFT) calculations, molecular dynamics (MD) simulations, and finite element modeling;
- Low-cost and green processing and manufacturing for lithium-ion batteries;
- Recycling of spent battery materials.





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## Message from the Editor-in-Chief

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