

## Special Issue

# Materials and Processing for Lithium-Ion Batteries and Beyond

### 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:

- 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.

### Guest Editors

Dr. Xiahui Zhang

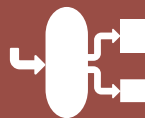
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Prof. Dr. Junchao Zheng

Dr. Shi-Xi Zhao

### Deadline for manuscript submissions

closed (31 December 2022)



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## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

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