Special Issue

Recent Progress in All-Solid-State Lithium Batteries

Message from the Guest Editors

The present Special Issue in the *Batteries* journal is dedicated to the development of future solid-state batteries. New studies about solid electrolytes (SEs) and their properties are welcome, especially in relation to:

- Ceramic SEs: synthesis, electrochemical properties, chemical stability, new functional groups;
- Polymer and gel polymer SEs: synthesis, mechanism of polymerization, lithium-ion diffusion mechanism, the role of plasticizers;
- Hybrid ceramic polymer SE composites: the role of ceramic filler, lithium diffusion mechanisms;
- The mechanism and formation of lithium metal–solid electrolyte and cathode–solid electrolyte interfaces: side reactions, lithium dendrite formation, degassing;
- Safety: moisture stability, hazardous gases control, thermo-stability;
- SE processing: scalability, industrial production, battery pack design.

We would like to invite interested authors to submit their original experimental, theoretical, and review papers focusing on the subject for inclusion in this Special issue. We look forward to receiving your valuable research output on this research topic.

Guest Editors

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Deadline for manuscript submissions

closed (30 November 2023)

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Message from the Editor-in-Chief

Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

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