# Special Issue

# Solid-State Electrolytes: From Fundamental Understanding to Advanced Material Design

## Message from the Guest Editor

The rapidly growing need for electric vehicles and stationary energy storage places stringent demands on rechargeable batteries that show both high performance and high safety. Solid-state batteries (SSBs) are being considered as a game-changing approach, and they have become a global research focus in the past few years. However, SSBs still face several key challenges in both science and engineering, which include SSE fabrications, interface stability in both anodes and cathodes, scaling up, and recycling. Potential topics include but are not limited to the following:

- Reports of new solid-state electrolytes;
- New fabrication methods of solid-state electrolytes;
- Lithium transport mechanisms in solid electrolytes;
- Stability between solid-state electrolytes and cathodes;
- Interface stability between solid-state electrolytes and Li metal anodes;
- Silicon anodes in solid-state batteries;
- Assembly of solid electrolyte pouch cells;
- Recycling of solid-state batteries.

## Guest Editor

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## Deadline for manuscript submissions

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