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Advances in Lithium Ion Batteries

Guest Editor:

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Deadline for manuscript submissions: closed (28 February 2023)

Message from the Guest Editor

In this Special Issue, we are looking for contributions helping to:

- Understand the nature and mechanisms associated with the formation of the interphase through in situ and ex situ post-mortem analysis;
- Develop in situ techniques for interphase characterization;
- Understand the interphase composition at the nanoscale;
- Tune the interphase through electrolyte formulations, functional additives, and an artificial interphase approach;
- Determine the impact of the interphase composition and structural properties on the lithium battery's overall performance.

The topics of interest include but are not limited to:

- The analysis of the interphase composition, thickness, and morphology;
- A nanoscale approach to interphase investigation;
- Innovative electrolyte-based approaches to interphase tuning;
- The effects of different electrode materials and electrochemical parameters on the interphase;
- The battery cell design's effect on the interphase;
- Interphase modeling and simulation.









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Editor-in-Chief

Message from the Editor-in-Chief

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