Special Issue

Recent Advances in Lithium Metal Batteries and Beyond

Message from the Guest Editor

High-energy-density lithium metal batteries are promising for energy storage applications. However, the uncontrollable electrolyte degradation and notorious formation of dendrites can cause the failure batteries upon cycling. So far, rare reports have demonstrated the achievement of Li Coulombic efficiency (CE) above 99.9% over 1000 cycles. The important role of electrolytes, solid electrolyte interphases, Li morphology, and their interrelationships requires a deeper understanding. Therefore, it is necessary to have a clear overview of the development of current advances in lithium metal batteries. This Special Issue is intended to bring the latest updates and prospects of lithium metal batteries. Potential topics include but are not limited to:

- Electrolyte design for lithium metal batteries;
- Interfacial engineering for Li metal protection;
- Theoretical understanding of interfacial reactions;
- Advanced characterizations;
- New test protocol for Li metal.

Guest Editor

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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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