## **Special Issue**

# Challenges and Future Trends of Lithium-Ion Battery

## Message from the Guest Editor

Energy is an indispensable key component of life. Rechargeable lithium-ion batteries (LIBs) have received a great deal of attention as they enable the development of versatile electronic devices, microgrids, and electric vehicles. This Sustainability Special Issue aims to highlight the collection of novel works on LIBs which significantly improve safety, sustainability, and longterm cycling stability with high energy density and low cost. It will bring an in-depth fundamental understanding of the cell design principle for the practical applications of LIBs and beyond. The facile and cost-effective material manufacturing and synthesis process, nanofabrication, and the surface functionalization of anode/cathode materials will be included. Additionally, the solid electrolyte formation mechanism, the degradation of battery components such as anode/cathode electrodes, electrolytes, separators during charge/discharge, and the corresponding advanced structural and electrochemical characterization tools, and modeling/simulation techniques to understand will be included...

#### **Guest Editor**

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## Deadline for manuscript submissions

closed (30 April 2022)



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### Editor-in-Chief

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