

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 long-term 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

Dr. Rajesh Pathak

Applied Materials Division, Argonne National Laboratory, Lemont, IL 60439, USA

Deadline for manuscript submissions

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Sustainability
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario
Institute of Technology, Oshawa, ON L1G 0C5, Canada

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