Special Issue

Advanced Materials Applied in Lithium-Ion Batteries

Message from the Guest Editors

This Special Issue aims to explore cutting-edge research and advancements in materials science for lithium-ion batteries. By focusing on novel materials, innovative synthesis techniques, and detailed characterization methods, this Special Issue seeks to provide insights into how advanced materials can address current limitations and pave the way for future applications of LIBs. The insights gained through this research will contribute to the design of next-generation lithium-ion batteries with superior efficiency and reliability. The topics of interest for publication include, but are not limited to:

- The development and optimization of cathode materials for higher energy density;
- Innovations in anode materials to enhance capacity and cycle life;
- Advanced electrolyte formulations to improve stability and safety;
- Functional coatings and separators tailored for LIB performance;
- Recycling and sustainable material strategies specific to lithium-ion battery components.

We invite researchers and practitioners to contribute their groundbreaking work, facilitating progress in lithium-ion battery technology and addressing the energy storage needs of the future.

Guest Editors

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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