Special Issue

Symmetry and Asymmetry in High-Performance Lithium-Ion, Post-Lithium-Ion Batteries, and Supercapacitors

Message from the Guest Editors

The Special Issue focuses on recent advancements in energy storage technologies to meet the growing global demand for efficient, reliable, and sustainable energy solutions.

The interplay of symmetry and asymmetry is fundamental to the design and performance optimization of advanced energy storage systems, including lithium-ion batteries, post-lithium-ion batteries, and supercapacitors. Symmetry in electrode materials, electrolyte configurations, and device architectures facilitates uniform charge distribution, efficient ion transport, and enhanced thermal stability, which is critical for achieving high energy density, power output, and long-term cycling performance.

This issue aims to explore cutting-edge research and development symmetry and asymmetry within the journal's scope in materials, designs, and architectures.

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

Editor-in-Chief

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