

Special Issue

Developments in Nanocomposite Materials for Advancing High-Performance and Intelligent Energy Storage Systems

Message from the Guest Editors

With the rapid advancement of energy storage technologies, nanocomposite materials have emerged as a key component in next-generation energy storage devices. These materials, which integrate nanoscale building blocks with tailored functionalities, exhibit superior electrochemical performance, enhanced stability, and high energy density. Their applications span across lithium-ion batteries, supercapacitors, solid-state batteries, and emerging hybrid energy storage systems.

This Special Issue aims to explore recent advancements in nanocomposite materials for energy storage, emphasizing material synthesis, electrochemical performance, and application-driven innovations.

We welcome contributions that advance the understanding and application of nanocomposite materials in energy storage, fostering the development of next-generation, high-performance energy solutions.

Guest Editors

Dr. Shude Liu

College of Textiles, Donghua University, Shanghai 200051, China

Dr. Hui Li

Department of Chemical Engineering, Hanyang University, Seoul 04763, Republic of Korea

Deadline for manuscript submissions

15 October 2025



Energies

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 7.3



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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
energies@mdpi.com

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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.

Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University
Niccolò Cusano, 00166 Roma, Italy

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