Special Issue

Development of Cutting-Edge Nanomaterials and Composite Materials for Sustainable Energy Application

Message from the Guest Editors

The pursuit of renewable energy sources is a critical response to the global energy crisis and the urgent need to counteract climate change. The application of advanced materials such as nanotechnology and composite materials in the energy sector is a pivotal research domain. These technologies are set to transform conventional energy systems, opening new avenues for energy generation, storage, and consumption.This Special Issue seeks submissions on topics include, but are not limited to, the following:

- The development of new materials such as polymeric, complex oxide, nanoionic, caloric, and porous materials, tailored for future energy applications like thermoelectrics, semiconductors, photovoltaics (PVs), fuel cells, and redox reaction battery energy storage.
- Innovations in energy harvesting technologies, including the utilization of piezoelectric and thermoelectric materials that convert mechanical stress and temperature gradients into electrical energy.
- Advancements in simulations, modelling, and characterization techniques for energy materials and devices.

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Deadline for manuscript submissions

31 July 2025

Processes

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mdpi.com/si/201474

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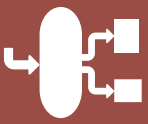

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