

Special Issue

Advanced Materials for Energy Harvesting, Storage and Conversion

Message from the Guest Editors

With the ever-increasing energy consumption, energy crisis would sweep across the globe and seriously hinder the economy development if necessary steps were not taken. For this reason, intensive attention has been paid to make efficient use of various energy sources such as wind, geothermal, biomass, hydropower, and to produce clean and renewable energies such as hydrogen via chemical fuels via photocatalytic water splitting, solar cells, etc. Currently, most functional materials suffer from common drawbacks like low efficiency, low reliability, and high cost, which hinder their practical device applications. In this context, we launch this special issue to push advancement in this direction by collecting articles, letters, reviews, progress and perspectives about material fabrication, performance, fundamental mechanisms, novel structural and engineering strategies, etc. Focusing on energy harvesting, storage and conversion, the materials and applications may range from dielectrics, ferroelectrics, piezoelectrics, thermoelectrics, photocatalysis, photovoltaics, fuel cells, batteries to supercapacitors and so on.

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Deadline for manuscript submissions

closed (31 July 2024)



Energies

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Impact Factor 3.2
CiteScore 7.3



mdpi.com/si/128520

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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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