Special Issue

Nanotechnology for Energy Applications

Message from the Guest Editor

Over the last 40 years, nanotechnology has enabled many important scientific discoveries as materials at the nanoscale present fascinating properties compared to their bulk counterparts. Nanotechnology has been instrumental in achieving higher efficiency in energy systems, allowing better utilization of incident power with tunable optical, electrical, mechanical, and magnetic properties. These nanomaterials and nanostructures have been fabricated with various techniques, from bottom-up approaches such as chemical synthesis to top-down approaches such as lithography. Developments in spectroscopy and theoretical modeling techniques have further pushed the boundaries of nanomaterial exploration. This Special Issue aims to present and disseminate the most recent advancements in material development, design, experimentation, theory, and modeling of energy systems based on nanotechnological research and development. Topics of interest for publication include but are not limited to:

- Fuel cells;
- Solar cells;
- Batteries;
- Steam generation;
- Waste heat recovery;
- High-efficiency lighting;
- Hydrogen generation;
- Heating and cooling buildings;
- Energy storage;
- Piezoelectricity.

Guest Editor

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Deadline for manuscript submissions

closed (25 January 2024)

Energies

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 7.3

mdpi.com/si/152842

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About the Journal

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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