



Highly Efficient Energy Harvesting Based on Nanomaterials

Guest Editor:

Prof. Dr. Seok Woo Lee

School of Electrical and
Electronic Engineering, Nanyang
Technological University, 50
Nanyang avenue Singapore
639798, Singapore

Deadline for manuscript
submissions:

closed (30 November 2021)

Message from the Guest Editor

Energy harvesting systems have received a large amount of attention for various scales of application, from mega-watt grid systems using renewable energy to micro-watt power supply for the Internet of Things (IoTs). These systems generate electricity or produce fuels from many kinds of energy, which is floating around the environment or wasted from various systems. Nanomaterials and nanostructures have contributed to the large improvement of harvesting efficiency and power output, as well as enabled new principles of energy harvesting. This Special Issue welcomes contributions from researchers working on various energy harvesting systems using nanomaterials, as well as on suggesting new principles of energy harvesting, high power output, high efficiency of energy conversion, and new applications. In addition to energy harvesting, studies of highly efficient systems to reduce energy consumption and create efficient energy storage systems are also encouraged for this issue. However, the Special Issue will not be limited to the aforementioned topics and welcomes original research papers as well as review papers.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science,
University of Birmingham,
Birmingham B15 2TT, UK

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)