



## Nanomaterials for Energy Conversion and Catalytic Applications

Guest Editor:

**Prof. Dr. Jung Woo Lee**

Department of Materials Science  
and Engineering, Pusan National  
University, Busan 48513,  
Republic of Korea

Deadline for manuscript  
submissions:

**closed (28 February 2023)**

### Message from the Guest Editor

Dear Colleagues,

Currently, there is a growing demand for clean and renewable energy resources, due to their high efficiency, promising large-scale applications, and almost zero emissions, to replace fossil fuels as society develops rapidly. To meet the requirement of high performance of energy conversion and catalytic activity, various types of substances including organic, inorganic or hybrid materials have been extensively reported. Moreover, if the materials are realized in the nano-sized dimension, performances could be accelerated.

This Special Issue is open to contributions of nanomaterials for various energy conversion and catalytic applications including batteries, supercapacitors, solarcells, fuel cells, thermoelectrics, piezoelectrics, triboelectrics, and many other areas.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## 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.

## 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 (*Chemistry, Multidisciplinary*) / 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](http://www.mdpi.com)

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](https://twitter.com/nano_mdpi)