

## Special Issue

# Advanced Nanomaterials for Photocatalysis and Environmental Remediation

### Message from the Guest Editors

Due to its universality, affordability, and sustainability, solar energy has recently acquired an extensive interest in fighting the global energy crisis and environmental pressure. Excited by global energy, photocatalysis can impel chemical reactions, thus being regarded as an ideal green chemical technology. In the field of environmental remediation, photocatalysis is also widely developed and successfully applied for various reactions, such as degradation of organic pollution, reduction of Cr(VI), NO<sub>x</sub> removal, and VOC combustion. This Special Issue of *Nanomaterials* is aimed at presenting the current photocatalytic materials for environmental applications, including nanocrystal, nanocarbon, and nanocomposite. Compared with the traditional particles, nanosized catalysts would exhibit unique physical, photoelectronic, and chemical properties. Therefore, nanocatalysts are also expected to have superior photocatalytic performance in various chemical reactions. In the present Special Issue, we have invited contributions from leading groups to publish their latest research results on advanced nanomaterials for photocatalysis in the field of environmental remediation.

### Guest Editors

Dr. Peng Zhang

Dr. Xiaoyan Yang

Dr. Yuwei Wang

### Deadline for manuscript submissions

19 September 2025



## Nanomaterials

an Open Access Journal  
by MDPI

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/210543](https://mdpi.com/si/210543)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)





# Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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

---

### 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, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

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