

Special Issue

Hybrid Nanomaterials Applied to Photocatalysis

Message from the Guest Editor

The design and development of hybrid nanostructured photocatalysts have recently been receiving substantial attention, due to their high potential in enhancing the photocatalytic efficiency of semiconductor nanomaterials. These hybrid nanostructured materials include combination with polymers, carbon nanomaterials and other novel 2-dimensional nanosheet materials. Significant advances have been made when nanomaterials are combined with molecular structures, namely improvement of light harvesting, prolonging charge separation state lifetime, and increase in catalytic activity and selectivity. This Special Issue welcomes contributions devoted to the design, characterization, and application of the abovementioned (but not limited) novel nanostructured photocatalysts. Manuscripts on the structural aspects of nanophotocatalysts, nanostructure formation process, parameters affecting photocatalytic activity, photocatalytic mechanisms, and photocatalytic applications for the efficient degradation of pollutants in water/air are welcome. Furthermore, current research trends and future prospects of high-performance hybrid photocatalytic materials, are also welcome.

Guest Editor

Prof. Dr. Jianqiang Yu

College of Chemistry and Chemical Engineering, Qingdao University,
Qingdao 266071, Shandong, China

Deadline for manuscript submissions

closed (20 November 2022)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/97923

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)