

Special Issue

New Advances in Nanochemistry for Heterogeneous Catalysis Research

Message from the Guest Editors

Heterogeneous catalysis has played an important role in the development of more sustainable chemistry for many research areas, as well as for the chemical industry, where many processes involve catalysts. The unique synergy between surface chemistry and nanostructure has led to many exciting developments in the field of heterogeneous catalysis, gradually becoming the hotspot of materials science and promising to revolutionize chemical manufacturing. The aim of this Special Issue is to cover promising recent research and novel trends in heterogeneous catalysis by employing various nanostructured materials for extensive applications in the fields of thermal catalysis, photocatalysis, electrocatalysis, photoelectrocatalysis, biocatalysis, etc., in research areas ranging from environmental remediation to organic transformations and renewable energy. Submissions are welcome in the form of original research manuscripts or critical review papers that represent the scientific field.

Guest Editors

Dr. Fátima Mirante

REQUIMTE, Chemistry Department, Universidade do Porto, Porto, Portugal

Dr. Pedro Leo

Chemical and Environmental Engineering Group, ESCET, Universidad Rey Juan Carlos, Madrid, Spain



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3

CiteScore 9.2

Indexed in PubMed



mdpi.com/si/253312

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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

Deadline for manuscript submissions

20 March 2026





Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



[mdpi.com/journal/
nanomaterials](http://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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

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

