



an Open Access Journal by MDPI

## Nanomaterials for Catalysis and Energy Storage: Design, Synthesis, and Molecular Applications

Guest Editors:

**Dr. Anderson Gabriel Marques Da Silva**

Departamento de Engenharia Química e de Materiais, Pontifícia Universidade Católica, Rio de Janeiro 22451-900, Brazil

**Dr. Robert Wojcieszak**

University Lille, CNRS, Centrale Lille, University Artois, UMR 8181-UCCS-Unité de Catalyse et Chimie du Solide, F-59000 Lille, France

**Prof. Dr. Bojan A. Marinković**

Departamento de Engenharia Química e de Materiais, Pontifícia Universidade Católica, Rio de Janeiro 22451-900, Brazil

Deadline for manuscript submissions:

**closed (31 July 2023)**

### Message from the Guest Editors

This Special Issue will highlight recent advances in nanomaterials for applications in all topics of heterogeneous catalysis (electrocatalysis, photocatalysis, biocatalysis, etc.) and energy storage (batteries and supercapacitors). We welcome researchers to submit original research, review, mini review, and perspective articles on themes including, but not limited to:

- Synthesis of novel nanostructured noble-metal-based catalysts;
- Synthesis of novel nanostructured non-noble catalysts;
- Advanced shape-, size- and composition-controlled nanomaterials;
- Computation-assisted nanocatalyst development;
- Advanced characterizations of nanomaterials;
- Nanomaterials for electrocatalysis;
- Nanomaterials for photocatalysis;
- Nanomaterials for biocatalysis;
- Nanomaterials for biomass conversion;
- Nanomaterials to tackle pollution (air, water, surfaces);
- Nanomaterials for CO<sub>2</sub> reduction;
- Nanomaterials for petrochemistry;
- Nanomaterials for supercapacitors;
- Nanomaterials for batteries.



[mdpi.com/si/135227](https://mdpi.com/si/135227)

**Special** Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maurizio Battino

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Inorganic Chemistry)

## Contact Us

---

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI