

## Special Issue

# Cutting-Edge Research of Nanoscience and Nanomaterials Use in Biosciences

### Message from the Guest Editors

Nanoscience and nanotechnology find applications in every sector of our daily life and aim to promote industrial competitiveness and ameliorate well-being and health. As examples, in the agri-food field, the production of nano-agrochemicals holds the promise to promote sustainability by reducing the massive exploitation of external inputs through targeted delivery, improved uptake and use efficiency. Nano-sensors allow automated monitoring of crops and resource management, while smart nano-packaging could grant an enhanced shelf life of food. Similarly, nano-enabled materials have increased relevance in biomedicine, especially regarding their noteworthy potentialities for active targeted drug delivery, improved drug loading and stability for either in vivo and/or in vitro 3D experimental set-ups. This Special Issue of the *International Journal of Molecular Sciences* is dedicated to articles investigating innovative or pioneering methods on the engineering and characterization of nanomaterials, their interaction with biological matter, and technology transfer to the agri-food, environment, biomedicine, and space biology sectors.

### Guest Editors

Dr. Livia Visai

1. Department of Molecular Medicine, University of Pavia, 27100 Pavia, Italy
2. Institute of Crystallography, National Research Council of Italy, Via Salaria Km. 29,300, 00015 Rome, Italy

Dr. Giuseppina Rea

Institute of Crystallography, National Research Council of Italy, Via Salaria Km. 29,300, 00015 Monterotondo, Rome, Italy

### Deadline for manuscript submissions

closed (30 September 2023)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/105797](https://mdpi.com/si/105797)

*International Journal of  
Molecular Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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





# International Journal of Molecular Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



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



## About the Journal

### 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.

---

### 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

---

### 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 (Organic Chemistry)