### **Special Issue**

# Biofunctionalization of Metals for Medical Application: Molecular Aspects

#### Message from the Guest Editors

The molecular aspects of the biofunctionalization of metals for medical applications are of notable interest due to the involvement of cutting-edge technologies. The aim of this Special Issue is to collect works that highlight how nanomaterials can be utilized to fight diseases, with a particular focus on nanofunctionalized materials, or new composites that work with new and extremely effective mechanisms, with reduced toxicity and efficacy at very low concentrations. We also seek to explore new molecular mechanisms that involve bacterial membranes with membrane polarity and quorum-sensing molecules. This new frontier will hopefully prove effective in overcoming bacterial resistance and triggering apoptotic processes. Dr. Xiaoming Zhang

#### **Guest Editors**

Dr. Luca Scotti

Istituto di Istruzione Superiore "E. Alessandrini", 65015 Teramo, Italy

#### Dr. Xiaoming Zhang

- 1. School of Science, Minzu University of China, Beijing 100081, China
- 2. Optoelectronics Research Centre, Minzu University of China, Beijing 100081, China

#### Deadline for manuscript submissions

20 January 2026



# International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/227141

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

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





#### 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)

