



## Cell-Biomaterial Interaction

Guest Editors:

**Prof. Dr. Sabata Martino**

Department of Chemistry,  
Biology and Biotechnology,  
Biochemistry and Molecular  
Biology Unit, University of  
Perugia, Via del Giochetto, 06126  
Perugia, Italy

**Dr. Silvia Panseri**

National Research Council,  
Institute of Science and  
Technology for Ceramics, Roma,  
Italy

**Dr. Monica Montesi**

National Research Council of  
Italy Institute of Science and  
Technology for Ceramics (ISTEC-  
CNR), Via Granarolo 64, I-48018  
Faenza, Italy

Deadline for manuscript  
submissions:

**closed (20 September 2018)**

### Message from the Guest Editors

Dear Colleagues,

Efforts have been made in designing advanced biofunctional systems by combining cells (e.g., stem cells, differentiated cells, induce pluripotent stem cells) and biomaterials. It is well-known that cells recognize and interact with biomaterials in different forms (e.g., nanoparticles, 3D scaffold, coating, film), through a plethora of plasma membrane proteins that activate a signal cascade, steering cells toward a selected behavior.

This Special Issue focuses on several aspects of the cell/biomaterial interaction, and we invite contributions of reviews and/or original papers reporting recent efforts in the field of biomaterials applications.

### Keywords:

- cell-material interaction
- biomaterials
- regenerative medicine
- stem cells
- cell therapy
- nanomedicine
- cell fate
- nanoparticles
- 3D scaffold
- biofunctionalization





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 & 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