

## Special Issue

# Advances and Challenges in Biomolecular Radiation Research

### Message from the Guest Editor

Research focused on understanding the complex response of cells to radiation-induced damage processes of functional molecules requires a multi-disciplinary approach. In recent decades, studies of genetic and epigenetic effects in response to radiation exposure have significantly contributed, for instance to better understand the machinery of DNA repair, complex protein interaction pathways and immune-reactions. Nevertheless, understanding mechanisms behind (individual) radio-sensitivity and resistance is still a challenge for radiation research to progress, for instance in the areas of radiation protection and medical radiation treatment. This special issue will focus on experimental and theoretical advances in molecular sciences, and on technological challenges and solutions in modern biological radiation research as well as biomolecular approaches towards (individualized) medical diagnosis and treatment. As , I would like to invite scientists working in biomolecular radiation research to submit their recent results to this special issue in order to demonstrate the breadth and vitality of this field.

### Guest Editor

Prof. Dr. Michael Hausmann

Experimental Biophysics, Kirchhoff-Institute for Physics, University of Heidelberg, Im Neuenheimer Feld 227, 69120 Heidelberg, Germany

### Deadline for manuscript submissions

closed (30 June 2018)



## International Journal of Molecular Sciences

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.0  
Indexed in PubMed



[mdpi.com/si/10277](https://mdpi.com/si/10277)

*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)