



## Biological Effects of Low-Dose and Low-Dose-Rate Ionizing Radiation Exposure

Guest Editors:

**Prof. Dr. Andreyan N. Osipov**

State Research Center-  
Burnasyan Federal Medical  
Biophysical Center of Federal  
Medical Biological Agency (SRC-  
FMBC), 123098 Moscow, Russia

**Dr. Dmitry Klokov**

1. Institut de Radioprotection et  
de Sûreté Nucléaire (IRSN), 92260  
Fontenay-aux-Roses, France  
2. Department of Biochemistry,  
Microbiology and Immunology,  
University of Ottawa, Ottawa, ON  
K1N 6N5, Canada

Deadline for manuscript  
submissions:

**closed (30 November 2021)**

### Message from the Guest Editors

Dear Colleagues,

Evaluation of the health risks associated with exposures of humans to low-dose and low-dose-rate ionizing radiation is prone to uncertainties due to the lack of knowledge of molecular mechanisms that underlie long-term health effects. This Special Issue will highlight the latest research on cellular and molecular effects of low-dose and low-dose-rate ionizing radiation exposures, such as DNA damage and repair, signal transduction, translation regulation, epigenetic rearrangement, and how they convert to cancer and non-cancer disease. We therefore invite research articles presenting novel results, reviews, and/or perspectives addressing or systematizing pertaining knowledge in this area.

We look forward to your valuable contributions.





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