

Special Issue

Effects of Ionizing Radiation on Biomolecular Systems

Message from the Guest Editor

Critical factors to the cellular response to ionizing radiation include alterations in protein expression and metabolomic, lipidomic, and epigenetic factors. In addition, the development of high-throughput “omics” has, in recent decades, revolutionized the study and the understanding of the effects of ionizing radiation (IR) on biological systems. This Special Issue focuses mainly on recent advancements in the “omics” field, on understanding the effects of IR on living systems, and on identifying “omics”-based molecular features or biomarkers of IR exposure and response. Particularly welcome are studies involving the identification of radiation signatures in bodily fluids for the identification of biomarkers of radiation and dose exposure.

Guest Editor

Dr. Antonella Bertucci

Nuclear Response & Analysis, Canadian Nuclear Laboratories, Chalk River, ON K0J 1J0, Canada

Deadline for manuscript submissions

28 February 2026



Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



mdpi.com/si/231845

Biology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biology@mdpi.com

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





Biology

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 7.4
Indexed in PubMed



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



About the Journal

Message from the Editorial Board

A major strength of biological science is the diversity of approaches that biological scientists apply to their research problems. *Biology* reflects this diversity and brings together studies employing the varied experimental and theoretical approaches that are fueling biological discovery. *Biology*, the journal, is a fully peer-reviewed publication with a rapid and economical route to open access publication and is listed on PubMed. All articles are peer-reviewed and the editorial focus is on determining that the work is scientifically sound rather than trying to predict its future impact.

Editors-in-Chief

Prof. Dr. Jukka Finne

Research Programme in Molecular and Integrative Biosciences, Faculty of Biological and Environmental Sciences, University of Helsinki, P.O. Box 56, FI-00014 Helsinki, Finland

Prof. Dr. Andrés Moya

Integrative Systems Biology Institute, University of Valencia and CSIC, 46980 Valencia, Spain

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biology) / CiteScore - Q1 (General Agricultural and Biological Sciences)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.4 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).