

Special Issue

Electric, Magnetic, and Electromagnetic Fields in Biology and Medicine: From Mechanisms to Biomedical Applications: 2nd Edition

Message from the Guest Editors

Electric, magnetic, and electromagnetic fields (EMF) are widely used in everyday life and in specific occupational environments. Exposure to these fields raises concerns about the possible effects on human health, especially due to the diffusion of 5G networks, which are expected to have a major impact on exposure scenarios. On the other hand, biomedical applications of non-ionizing radiations are successfully employed for diagnosis and therapy (e.g., electroporation-based treatments, microwave hyperthermia, etc.). There is great interest in evaluating the associated interaction mechanisms, which are also relevant to foster the development of new biomedical applications or the optimization of the existing ones. This Special Issue is open to scientific studies addressing *in vitro*, *in vivo*, and epidemiological investigations on electric, magnetic, and electromagnetic exposure aimed at evaluating possible health effects, the beneficial potential of such fields for diagnosis and therapy, and studies focusing on interaction mechanisms. It includes work in any frequency range, and covers exposure assessment, dosimetry, risk assessment, communication, and management.

Guest Editors

Dr. Stefania Romeo

Institute for Electromagnetic Sensing of the Environment (IREA),
National Research Council, 80124 Napoli, Italy

Dr. Anna Sannino

Institute for Electromagnetic Sensing of the Environment (IREA),
National Research Council, 80124 Napoli, Italy

Deadline for manuscript submissions

10 January 2025



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.8
CiteScore 4.0
Indexed in PubMed



mdpi.com/si/174352

Bioengineering
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
bioengineering@mdpi.com

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





Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.8
CiteScore 4.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Biomedical) Rapid Publication: manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 3.1 days (median values for papers published in this journal in the first half of 2024).

Recognition of Reviewers:

reviewers who provide timely, thorough peer-review reports receive vouchers entitling them to a discount on the APC of their next publication in any MDPI journal, in appreciation of the work done.