

Special Issue

Biological and Biomedical Applications of Graphene-Based Materials

Message from the Guest Editor

Graphene, a single layer of carbon atoms in a closely packed honeycomb two-dimensional structure, is a new kind of carbon nanostructure material that was first produced in 2004. It has been widely utilized in various applications, with a rapidly growing presence in the biomedical field. Recent years have seen a significant increase in graphene-based biomedical research, owing to their captivating physical and chemical properties. The remarkable versatility of graphene-based nanomaterials, allowing conjugation with a variety of active compounds and biological entities, makes them highly desirable for advanced biotechnological applications. Graphene derivatives are designed for drug and gene delivery and antibacterial scaffolds for human stem cell growth. Moreover, graphene's capability to confine light enables the development of ultrasensitive biosensors and can be utilized for therapeutic and imaging purposes. Given its versatility across biomedical disciplines, this Special Issue aims to showcase promising areas and identify future challenges.

Guest Editor

Dr. Massimiliano Papi

Fondazione Policlinico Universitario Agostino Gemelli, IRCCS,
Università Cattolica del Sacro Cuore, 00162 Rome, Italy

Deadline for manuscript submissions

closed (30 September 2024)



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



mdpi.com/si/186429

Bioengineering
Editorial Office
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 3.7
CiteScore 5.3
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 16.4 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second 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.