

Special Issue

Neuromorphic and Bioinspired Computing: Bridging Biology and Technology

Message from the Guest Editors

This Special Issue aims to explore and showcase cutting-edge research and developments in neuromorphic and bioinspired computing. This issue will focus on the latest advancements, challenges, and future directions in these rapidly evolving areas. We welcome original research articles, comprehensive reviews, and short communications that address various aspects of neuromorphic and bioinspired computing, including but not limited to:

- Neuromorphic Hardware Design and Implementation
- Spiking Neural Networks and Their Applications
- Bioinspired Algorithms and Optimization Techniques
- Neuromorphic Computing for Machine Learning and Artificial Intelligence
- Brain-Inspired Robotics and Sensorimotor Systems
- Neuromorphic Computing for Neuromorphic Engineering and Cognitive Science
- Emerging Technologies and Future Directions

We encourage submissions that present theoretical advancements and demonstrate practical applications and real-world impact. Interdisciplinary approaches combining insights from neuroscience, computer science, engineering, and related fields are welcome.

Guest Editors

Dr. Arash Ahmadi

Department of Electronics, Carleton University, Ottawa, ON K1S 5B6, Canada

Dr. Amirali Amirsoleimani

Department of Electrical Engineering & Computer Science, York University, Toronto, ON M3J 1P3, Canada

Deadline for manuscript submissions

25 September 2025



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



mdpi.com/si/210596

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 19.2 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).

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.