



Recent Studies and Progresses in Bio-Microelectromechanical Systems (BioMEMS)

Guest Editor:

Dr. Shyam Aravamudhan

Joint School of Nanoscience and
Nanoengineering, North Carolina
A&T State University,
Greensboro, NC 27411, USA

Deadline for manuscript
submissions:

closed (20 October 2023)

Message from the Guest Editor

Dear Colleagues,

Bio-microelectromechanical systems (Bio-MEMS), a subcategory of microelectromechanical systems (MEMS), involve nano and/or microscale devices that integrate biological or biochemical elements fabricated using nano or microfabrication technologies. This Special Issue is intended to showcase the recent studies and progress made in the field of Bio-MEMS. The recent literature in Bio-MEMS has shown great potential for improving human health, biotechnology, and environmental systems. Continued advancements in materials, nano and microfabrication, electronics, and edge technologies are expected to drive the development of novel and field-deployable Bio-MEMS devices that have enhanced performance and precision. This Special Issue welcomes original research, reviews, and perspective articles on recent studies and progress in the field of bio-microelectromechanical systems. Potential topics for this Special Issue include but are not limited to:

- Implantable devices;
- Lab-on-a-chip (LOC) devices;
- Microfluidics;
- Biosensors and diagnostics;
- MEMS/NEMS for biomedical applications;
- Bioelectronics;
- Materials and packaging for Bio-MEMS;
- 3D printing for Bio-MEMS.





Editor-in-Chief

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the 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 free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

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, Ei Compendex, dblp, and other databases.

Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Micromachines Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
[X@micromach_mdpi](https://x.com/micromach_mdpi)