Special Issue

Bioinspired Materials and Microdevices: Fabrications and Applications

Message from the Guest Editors

Engineered materials and microdevices inspired by Nature have played a crucial role in science and industry for decades. Bioinspired engineering always offers a simple and highly efficient scenario to overcome extreme environments that some of us encounter daily. For example, an ongoing study in water-harvesting mechanisms learned from Stenocara beetles living in the Namib Desert has evolved into bioinspired materials of patterned wettability, greatly improving the collection of limited water in arid regions. Another example mimicking chameleons has proved to be able to achieve more advanced and natural camouflage realization. Combined with active control systems and colorsensing units, the anonymity device can be further applied for military purposes, as an auxiliary military force. Accordingly, this Special Issue seeks to showcase research papers, short communications, and review articles that focus on (1) the novel design and fabrication of bioinspired materials and/or their derived microdevices; and (2) emerging applications for improving human life based on any kind of bioinspired materials and microdevices. We look forward to receiving your outstanding submissions.

Guest Editors

Dr. Ching-Te Kuo

Department of Mechanical and Electro-Mechanical Engineering, National Sun Yat-sen University, Kaohsiung 80424, Taiwan

Prof. Dr. Hsinyu Lee

Department of Life Science, National Taiwan University, Taipei 10617, Taiwan

Deadline for manuscript submissions

closed (28 February 2024)



Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 5.2 Indexed in PubMed



mdpi.com/si/108918

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

mdpi.com/journal/ micromachines





an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 5.2
Indexed in PubMed



About the Journal

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.

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

- 1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
- 2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 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 2024).

