

Special Issue

Integrated Optical, Electrochemical, and Electrical Biomicrofluidics

Message from the Guest Editors

A biosensor can detect the presence of analytes in a sample and consists of a receptor system, a transducer, and a readout system. In recent years, with the rapid development of micro/nano fabrication and microfluidics technologies, biosensors for assessing health, including POC technologies, have made great progress. With functions like optical, electrochemical, and electrical characterization and with manipulation or/and detection abilities combined with microfluidics or other biosensing platforms, one can achieve fast, accurate, real-time, in situ, and multiplexed detections. This Special Issue will provide an opportunity for researchers to publish their original achievements related to integrated optical, electrochemical, and electrical biomicrofluidics, including but not limited to:

- On-chip sensor fabrication, integration (optical, electrical, etc.) and packaging;
- Processing and fabrication of micro- and nano-devices;
- Modification of biosensing interfaces;
- Micro/nano biosensors/actuators;
- Microfluidic chips and systems integration;
- Silicon photonics;
- Electrochemical microfluidics;
- Bioimpedance microfluidics.

Guest Editors

Dr. Lihua Wang

Dr. Shilun Feng

Prof. Xiuli Gao

Deadline for manuscript submissions

31 October 2025



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.2
Indexed in PubMed



mdpi.com/si/224867

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

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





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.2
Indexed in PubMed



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



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 16.2 days after submission; acceptance to publication is undertaken in 1.8 days (median values for papers published in this journal in the second half of 2024).