



Innovations in Biosensors, Gas Sensors and Supercapacitors

Guest Editor:

**Prof. Dr. Prashant Shivaji
Shewale**

Department of Electronic
Engineering, Sogang University,
Seoul 04107, Korea

Deadline for manuscript
submissions:

30 April 2025

Message from the Guest Editor

Dear Colleague,

This Special Issue aims to focus on the latest innovations in microsystem technologies that are transforming glucose monitoring, gas detection, and supercapacitor. It invites submissions that investigate novel nanomaterials and nanocomposites with enhanced electrochemical properties, improved surface area and porosity, and superior charge storage capabilities. Special emphasis is placed on advancements in gas sensor utilizing various sensing mechanism, electrochemical glucose sensor, and supercapacitor energy storage application. By showcasing interdisciplinary research and novel fabrication technique, we aim to provide comprehensive insight into the design and optimization of microsystem. The goal is to highlight their significant impact on healthcare, environmental monitoring, and renewable energy solution. Researchers are encouraged to submit their work on these advanced materials and technologies, contributing to advancement in electrochemical sensor and energy storage system. This Special Issue will underscore the potential of cutting-edge microsystem innovation to drive progress in critical field and foster the development of sustainable technology.





an Open Access Journal by MDPI

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

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

Contact Us

Micromachines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

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