

## Special Issue

# Micro and Nano Technology in Gas Sensing

### Message from the Guest Editors

The Special Issue "Micro and Nano Technology in Gas Sensing" aims to present the latest topical research in the field of the development of promising gas-sensitive nanomaterials, selection of a method for measuring and processing of a sensor signal, as well as improving the design of sensors, miniaturization of their components, and optimization of energy consumption. All types of submissions are welcome.

- The synthesis and characterization of gas sensing materials based on nanocrystalline metal oxides, composites, perovskites, sulfides, graphene-based materials, quantum dots, surface modification, and functionalization.
- Evaluation of surface reactivity of gas sensing materials, adsorption and desorption of gases, investigations of gas-sensing mechanisms.
- Semiconductor gas sensing materials for gas detection under UV or visible photoactivation, the use of photoactivation to reduce the energy consumption of sensors.
- Approaches to the miniaturization and integration of gas sensors, reducing the size of sensitive, heating, or light-emitting elements.
- Manufacturing of sensors on flexible or transparent substrates, printed and patterned gas sensors.

---

### Guest Editors

Dr. Artem Chizhov

Chemistry Department, Moscow State University, Moscow 119991, Russia

Prof. Dr. Alexey Shaposhnik

Department of Chemistry, Voronezh State Agrarian University, Voronezh 394000, Russia

---

### Deadline for manuscript submissions

closed (25 December 2023)



## Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/162578](https://mdpi.com/si/162578)

*Micromachines*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[micromachines@mdpi.com](mailto:micromachines@mdpi.com)

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





# Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
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 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).