

## Special Issue

# Recent Advances in Smart Gas Sensing Technologies

### Message from the Guest Editors

Nowadays, there is an increasing demand for cheap, rapid and reliable analysis of gas molecules and volatile organic compounds (VOCs) in various fields. To date, the gold standard for gas analysis has been spectroscopy-based techniques. Nevertheless, sensor-based gas sensing technologies have emerged as promising alternatives, in particular for on-site analysis and in situ monitoring, thanks to their reduced cost and better portability. This Special Issue aims to highlight recent methodological and technological advances in the development of sensor-based gas sensing technologies and their applications in diverse fields (environment, food, cosmetic, medical, etc.). It will cover topics including, but not limited to, the development of novel gas sensors (olfactory biosensors, electronic nose, chemical sensors, nanosensors, optoelectronic and photonic sensors, optomechanical sensors, remote sensors, etc.); the design and synthesis of new materials for the improvement of sensor performance; the input of artificial intelligence for data treatment; the application of the developed gas sensors in diverse fields. Both original research papers and review articles are welcome.

---

### Guest Editors

Dr. Yanxia Hou

IRIG-SYMMES, University Grenoble Alpes, CEA, CNRS, 38000  
Grenoble, France

Prof. Dr. Michael Schmuker

Biocomputation Group, University of Hertfordshire, Hatfield, UK

---

### Deadline for manuscript submissions

closed (31 December 2023)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 9.4  
Indexed in PubMed



[mdpi.com/si/129223](https://mdpi.com/si/129223)

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

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





# Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 9.4  
Indexed in PubMed



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



## About the Journal

### Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

---

### Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro  
Department of Electrical and Information Engineering, Politecnico di  
Bari, Via Orabona 4, 70126 Bari, Italy

---

### 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, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

#### Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)