



an Open Access Journal by MDPI

Gas Sensors: Progress, Perspectives and Challenges

Guest Editors:

Dr. Paulina Powroźnik

Institute of Physics CSE, Silesian University of Technology, Gliwice, Poland

Dr. Maciej Krzywiecki

Institute of Physics CSE, Silesian University of Technology, Gliwice, Poland

Deadline for manuscript submissions: **20 December 2024**

Message from the Guest Editors

The research on gas sensors has been of big interest for many decades due to the broad range of applications in many fields. such as environmental protection. combustion gas detection, medical diagnosis, civil safety, and food quality control. Yet, this area is still rapidly expanding. Thanks to the development of materials science and nanotechnology, new sensing materials are being constantly searched, as the modifications of wellknown sensing materials are applied to improve the sensitivity, selectivity, and response times and decrease sensor operating temperature. Also, the rapid improvement of experimental techniques combined with computational power increase allow us to understand better mechanisms of particular gas detection. Thus, more efficient devices can be designed. Both review articles and original research papers are solicited in, though not limited to, the following areas:

- New materials for gas sensors;
- New sensing techniques;
- Novel approaches for gas sensor design and testing;
- Models and computational simulations for the gassensing material interaction;
- Processes and fabrication technologies for gas sensors.





mdpi.com/si/190714





an Open Access Journal by MDPI

Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

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.

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 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

Contact Us

Sensors Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/sensors sensors@mdpi.com X@Sensors_MDPI