Special Issue

Low-Cost Environmental Gas Sensors

Message from the Guest Editors

The global burden of disease attributable to ambient air pollution is at a historical high, with over 6.6 million deaths per year. In order to fill the void in fine-scale air pollution data caused by the sparse locations of regulatory air quality monitors, low-cost environmental gas sensors are needed for sampling personal microenvironments using wearable or portable devices. The goal of this Special Issue is to provide an overview of the recent progress in the design, development, and application of miniaturized gas sensors for monitoring pollutants such as ozone in ambient air. The scientific areas of interest include, but are not limited to:

- Materials used, including metal oxides, carbon nanomaterials, and composite and hybrid materials;
- Models and computational approaches for the interaction between the analyte and sensor nanostructure;
- Sensor miniaturization, low-cost, and low-power consumption design;
- Novel measurement methods (e.g., impedance, resonance, etc., as opposed to common chemiresistive sensors);
- Sensor array design to measure multiple pollutants simultaneously;
- Applications such as wearable and smartphone-connected sensors.

Guest Editors

Dr. Krishna Naishadham

1. Wi-Sense LLC, Atlanta, GA, USA
2. Georgia Institute of Technology, Atlanta, GA, USA

Prof. Dr. Jean-Marc Tulliani

Department of Applied Science and Technology, Politecnico di Torino, 10129 Torino, Italy

Deadline for manuscript submissions

closed (22 September 2023)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/123070

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

mdpi.com/journal/sensors

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/sensors

MDPI

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
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 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)