# **Special Issue**

# Advances in Semiconductor Sensor Applications

## Message from the Guest Editor

In today's IoT-driven society, sensors occupy a vital spot in all sectors of activity, ensuring the effective assessment of critical operational characteristics. The focus of this Special Issue is on concrete sensor applications, such as the following: industrial (vital parameter monitoring for process control), environmental (greenhouse gas emissions and air quality monitoring), educational (semiconductor sensor platforms and test benches for sustainable STEM education), and automotive (energy monitoring for efficient power conversion). Papers detailing a wide array of sensor types, specific to these applications, are encouraged. Points of special interest include widebandgap semiconductor sensors, materials and coatings for electrochemical sensors, innovative sensing element structures (porous Si/SiC and Si/SiC nanowires), read-out circuits and sensor signal processing techniques. Articles pertaining to analytical/numeric device modeling and sensing mechanism analysis are also welcome. Investigations and predictions on operation limits, characterization and cutting-edge computer-aided modeling for such innovative sensor applications are strongly encouraged.

### **Guest Editor**

Dr. Razvan Pascu

National Institute for Research and Development in Microtechnologies —IMT Bucharest, 077190 Bucharest, Romania

#### Deadline for manuscript submissions

31 December 2025



## **Sensors**

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/221026

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



## **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)

