

## Special Issue

# 2D Materials-Based Sensors and Nanoscale Devices

### Message from the Guest Editor

Over the past decade, a series of two-dimensional (2D)-layered materials have been successfully synthesized with several intriguing electrical, physical and chemical properties and used those for multifunctional sensory applications (such as optical sensors, chemical sensors, gas sensors, mechanical sensors, biological sensors etc.). Owing to the continuous progress in the synthesis and engineering of 2D materials, a variety of novel functionalities can be achievable either by creating heterostructures with various nanomaterials or doping with foreign molecules, which can offer extra degree of tunability and selectivity in sensor's performances. Furthermore, the flexible and transparent nature of 2D materials makes them a strong contender for next-generation wearable bio-electronic devices. This Special Issue is focused on 2D materials-based nanoscale sensor devices. The Editorial Board of the journal *Sensors* and myself are very pleased to announce this Special Issue and are looking forward to your contribution. **Keywords**

- optical sensor
- chemical sensor
- gas sensor
- mechanical sensor
- biological sensor
- detector
- piezoelectric device
- molecular detector

### Guest Editor

Dr. Subhrajit Mukherjee

Nanoscale Electronic Materials and Devices Laboratory, Faculty of Materials Science and Engineering, Technion – Israel Institute of Technology, Haifa 3200003, Israel

### Deadline for manuscript submissions

closed (30 May 2023)



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/122579](https://mdpi.com/si/122579)

*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 8.2  
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

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)