

## Special Issue

# Recent Innovations in Plasma Sensing and Diagnosis Technology

### Message from the Guest Editor

Plasma-based techniques have become essential in the manufacturing of advanced, high-performance semiconductor devices that consume less power. Additionally, sensing and diagnosis technology plays a critical role in ensuring the quality and reliability of semiconductor products by detecting defects, contamination, and process variations. The aim of this issue is to bring together original research and reviews covering plasma synthesis, deposition, and etching, with a focus on enhancing the development of semiconductor devices, enabling the fabrication of more complex and functional structures, and improving the manufacturing process yield. Furthermore, the application of plasma sensing and diagnosis technology has the potential to drive the development of new technologies and applications, such as flexible electronics, the Internet of Things (IoT), and artificial intelligence (AI). Furthermore, by analyzing the collected data and extracting relevant features, machine learning algorithms can predict whether the plasma process is normal or abnormal, leading to more accurate diagnoses than traditional methods can provide.

### Guest Editor

Dr. Hyeong-U Kim

Department of Plasma Engineering, Korea Institute of Machinery and Materials (KIMM), Daejeon 34103, Republic of Korea

### Deadline for manuscript submissions

closed (29 May 2025)



## Sensors

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.5**  
**CiteScore 8.2**  
**Indexed in PubMed**



[mdpi.com/si/170389](https://mdpi.com/si/170389)

*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)