



*sensors*



an Open Access Journal by MDPI

## Neuromorphic Sensors for Artificial Sense and Next-Generation Robotics

Guest Editors:

**Dr. Dashan Shang**

Key Laboratory of  
Microelectronics Device &  
Integrated Technology, Institute  
of Microelectronics of Chinese  
Academy of Sciences, Beijing  
100029, China

**Dr. Changjin Wan**

School of Electronic Science &  
Engineering, Nanjing University,  
Nanjing 210023, China

Deadline for manuscript  
submissions:  
**closed (10 October 2023)**

### Message from the Guest Editors

Neuromorphic sensors are inspired by the working principles of biological sensory neurons and would play an important role in the Internet of Things in telemedicine, health surveillance, security monitoring, automatic driving, intelligent robots, and so on. The incorporation of advanced sensing technologies that were developed using neuromorphic engineering can endow sensors with biological elements of intelligence such as perception, recognition, and decision making, thus making them suitable for compact, real-time, adaptable, and ultra-low power bio-inspired perceptual systems and robotics. As ideal building blocks, neuromorphic sensors will lead to innovative solutions concerning materials, devices, algorithms, circuitry, and system architectures for Internet of Things application in the future. This Special Issue plans to cover a wide range of topics, including materials, the fabrication process, working principle of sensors, perception and learning algorithms, intelligent sensing systems, and their application for robotics and artificial sense systems.



[mdpi.com/si/114789](https://mdpi.com/si/114789)

**Special** Issue



*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Department of Electrical and  
Information Engineering,  
Politecnico di Bari, Via Orabona  
4, 70126 Bari, Italy

## 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.

## 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)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)