

## Special Issue

# Innovative IoT Devices in Biomedical Monitoring: From Design to Application

### Message from the Guest Editors

The convergence of Internet of Things (IoT) technologies and biomedical monitoring is revolutionizing healthcare through real-time, continuous, and personalized assessment. Advances in miniaturized sensors, wireless communication, and intelligent edge computing enable the development of next-generation wearable, implantable, and ambient devices for health tracking and diagnostics. This Special Issue will highlight innovative contributions spanning device design, AI-driven data processing, and clinical applications of biomedical IoT systems. Authors are invited to submit original research articles and reviews on topics including, but not limited to, the following:

- Design and fabrication of biomedical IoT devices and sensors;
- Wearable, implantable, and epidermal monitoring systems;
- Imaging-enabled IoT for health (smartphone/handheld; camera- and optics-based sensing);
- Wireless body area networks (WBANs) for healthcare;
- Edge, fog, and cloud computing in biomedical IoT systems;
- Artificial intelligence and machine learning for physiological signal and biomedical image analysis;
- Sensor fusion, calibration, and multimodal data integration;
- IoT-based telemedicine and remote patient monitoring.

---

### Guest Editors

Dr. Eduardo Cañete-Carmona

Departamento de Ingeniería Electrónica y de Computadores,  
Universidad de Córdoba, Edificio Leonardo Da Vinci, Campus de Rabanales, 14071 Córdoba, Spain

Dr. Aurora Sáez

Departamento de Ingeniería Electrónica y de Computadores,  
Universidad de Córdoba, Edificio Leonardo Da Vinci, Campus de Rabanales, 14071 Córdoba, Spain

---

**Deadline for manuscript submissions**



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/261278](https://mdpi.com/si/261278)

*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

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