

## Special Issue

# Electromagnetic Sensors for Biomedical Applications

### Message from the Guest Editors

Electromagnetic sensors for biomedical applications are receiving increasing attention both in scientific and industrial communities. Substituting existing bulky and expensive instrumentation with smart sensors having a reduced size and lower cost such as micro total analysis systems ( $\mu$ TAS), lab-on-a-chip, or wearable devices is a challenge from the perspective of telemedicine, point of care analyses, and personalized pharmacological treatment. Topics are including, but are not limited, to:

Modeling, characterization and fabrication of electromagnetic biosensors;  
Electrical impedance spectroscopy (EIT);  
Electrical impedance tomography (MIT);  
Magnetic induction tomography;  
 $\mu$ TAS;  
Lab-on-a-chip devices;  
Electromagnetic sensors for blood analysis;  
Sensors and methods for cells and living tissue electromagnetic characterization;  
Electroencephalography (EEG) and magnetoencephalography (MEG);  
Hardware and biosignal processing for electrocardiography (ECG);  
Sensors and biosignal processing for stress detection;  
Wearable and flexible sensors;  
Sensors for well-being in ageing populations (ambient assisted living)

---

### Guest Editors

Dr. Ruben Specogna

Polytechnic Department of Engineering and Architecture, Università degli Studi di Udine, 33100 Udine, Italy

Prof. Dr. Antonio Affanni

Polytechnic Department of Engineering and Architecture, University of Udine, Via Delle Scienze 206, 33100 Udine, Italy

---

### Deadline for manuscript submissions

closed (31 July 2022)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/25139](https://mdpi.com/si/25139)

*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)