

Special Issue

Sensors and Signal Processing Techniques for Non-Invasive Health Monitoring

Message from the Guest Editors

The rapid advancement in non-invasive biomedical diagnostics and monitoring holds the potential to transform healthcare by offering portable and unobtrusive devices that provide real-time, continuous monitoring of human physiological conditions. Robust monitoring requires joint development of sensing technology and signal processing algorithms for extracting, analyzing, and interpreting complex biological signals, including but not limited to electrocardiograms, electroencephalograms, and other physiological data. **This Special Issue aims to highlight cutting-edge research and encourage innovation in the field of non-invasive biomedical diagnostics and monitoring, by covering a wide spectrum of technological and methodological advances.** Topics of interest include, but are not limited to:

- The development of novel sensor technologies;
- Integration of machine learning models for diagnostic and monitoring applications;
- Strategies for minimizing power consumption;
- Algorithms for real-time processing in wearable and portable devices;
- Methods for ensuring signal integrity across diverse clinical and home environments;

Guest Editors

Dr. Elisabetta Peri

Dr. Alessandra Galli

Dr. Sarah Tonello

Dr. Ana Neacșu

Dr. Maria G. Signorini

Deadline for manuscript submissions

25 March 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/216889

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)