Special Issue

Radiation Detectors and Sensing Technologies for Biomedical Applications

Message from the Guest Editor

The medical sensors market is expected to grow another 10% in the next few years due to the increasing demand for novel technologies that provide more accurate medical healthcare information and improve patients' quality of life. Various detectors and sensing technologies has been used so far to convert different types of radiation (X-ray, light), flow, magnetic fields, pressure, temperature, humidity, etc. into biomedical signals. Every specific biomedical modality has distinct requirements for the sensor's properties, such as detection efficiency, long term stability, flexibility, transparency, biocompatibility, etc. The aim of this Special Issue is to highlight state-of-the-art research in radiation detectors and sensing technologies, as well as the existing challenges and future developments in biomedical applications.

Guest Editor

Dr. Christos M. Michail

Department of Biomedical Engineering, Radiation Physics, Materials Technology and Biomedical Imaging Laboratory, University of West Attica, Athens, Greece

Deadline for manuscript submissions

30 November 2025

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/113689

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

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

MDPI

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)