

Special Issue

Sensor-Enhanced Medical Imaging: Machine Learning and Computer Vision for Multimodal Analysis

Message from the Guest Editor

This special issue highlights cutting-edge research on sensor-enhanced medical imaging, focusing on innovations that integrate novel sensing principles, instrumentation, or acquisition techniques to advance diagnostic and analytical capabilities. Specifically, we invite original research papers that explore novel sensor-based image acquisition techniques, advanced instrumentation for medical imaging, and their integration with computational methods. Within this context, submissions may address advanced image processing algorithms for noisy or incomplete sensor data, ML models optimized for real-time analysis of sensor streams, and AI-driven frameworks leveraging sensor-derived features. Contributions must emphasize sensor-enhanced methodologies to ensure differentiation from the journal's scope. Topics of interest include the following:

- AI-driven segmentation of medical sensor images
- ML-based disease prediction using sensor data
- Automated sensor-driven detection/monitoring systems
- Multi-sensor image alignment and fusion
- Sensor data quantification for biomarker discovery
- Real-time AI guidance in sensor-assisted robotics/surgery

Guest Editor

Dr. Vidas Raudonis

Faculty of Electrical and Electronics Engineering, Kaunas University of Technology, Kaunas, Lithuania

Deadline for manuscript submissions

31 August 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/234123

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
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)