

## Special Issue

# Recent Progress in X-Ray Medical Imaging and Detectors

### Message from the Guest Editors

On the wave of major technological innovations, X-ray medical imaging devices are undergoing an epochal revolution that promises a consistent impact on clinical practice. The introduction of innovative detectors aiming at reducing noise and costs, at improving spatial resolution, and at discriminating the energy of the X-ray photons is unveiling new perspectives and possibilities in the analysis of the produced images. At the same time, innovative sources are feeding new ideas, opening a brand-new class of applications that potentially mitigate limitations of conventional apparatuses. This is framed by the introduction of innovative software methodologies, such as AI and in silico medicine, which are revolutionizing the acquisition, processing, analysis, and reporting of medical imaging, and by the development of innovative X-ray sources that may shape the characteristics of the new apparatuses. This Special Issue aims to bring together manuscripts on cutting-edge technologies and methodologies that are revolutionizing X-ray medical imaging.

### Guest Editors

Dr. Antonio Sarno

Department of Physics 'A Pontremoli', University of Milan & INFN Milan, 20133 Milan, Italy

Dr. Nikolay Tinkov Dukov

Department of Medical Equipment, Electronic and Information Technologies in Healthcare, Medical University, 9002 Varna, Bulgaria

### Deadline for manuscript submissions

30 April 2026



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/255286](https://mdpi.com/si/255286)

*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)