Special Issue

Recent Advances in Imaging Sensors: Integration with Machine Learning and Artificial Intelligence

Message from the Guest Editors

Recently, there has been arowing interest in the field of imaging sensors, particularly regarding its integration of machine learning and artificial intelligence. An image sensor is a device that can convert optical images into electronic signals, possessing the advantages of high resolution, low noise, a large dynamic range and an extensive potential for integration. Recent advances in this field have made various applications available, including effective intelligent sensors for industrial machine vision, medical imaging, intelligent transportation and so on. This Special Issue therefore aims to garner original research and review articles on recent advances, technologies, solutions, applications, and new challenges in the field of image sensors. Potential topics include, but are not limited to, the following:

- Intelligent sensors;
- Industrial machine vision;
- Anomaly detection;
- Medical imaging;
- Object detection for intelligent transportation;
- Deep learning for image processing;
- Visual large models.

Guest Editors Dr. Ning Chen

Dr. Hang Zhang

Prof. Dr. Jian Liu

Deadline for manuscript submissions

15 December 2025



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/221380

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



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)