

Special Issue

Computer Vision and Pattern Recognition Based on Sensing Technology

Message from the Guest Editor

With the advancement of computing hardware and sensor technologies such as imaging technologies, applications of artificial intelligence like computer vision (CV) and pattern recognition (PR) are being increasingly applied in fields such as object inspection and identification, information security monitoring, and analysis prediction. Data analysis based on sensors and images has enhanced the precision and efficiency of intelligent monitoring, detection, prediction, and identification. However, challenges remain in terms of adaptability to complex environments, data utilization, and model generalization capabilities. This Special Issue explores innovative solutions that use advanced artificial intelligence and computer vision technologies to address challenges in real-world applications. Topics of interest include, but are not limited to, the following: Object detection and identification; Image classification and analysis; Computer vision; Intelligent sensors and data analysis; Image classification and detection technologies; Fiber optic sensors; Image sensors.

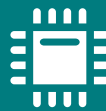
Guest Editor

Dr. Xiao Yu

School of Electrical Engineering and Automation, Tianjin University of Technology, Tianjin 300387, China

Deadline for manuscript submissions

31 July 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/236458

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)