

Special Issue

Advances in Optical Sensing, Instrumentation and Systems

Message from the Guest Editors

The goal of this Special Issue is to introduce recent advances among optical sensing, instrumentation and systems. This involves medical imaging, virtual reality, 3D reconstruction, automatic driving devices, optical system optimization, internet of things, security facilities, navigation systems, computer vision devices, optical materials, optical battery, and so on. Topics of interest include, but not limited to:

- Optical coherence tomography in biometrics and diagnosis;
- The implementation of deep learning in optical systems;
- The optimization of optical systems using nature-inspired optimization methods;
- 3D reconstruction of uncalibrated visual system in arbitrary scene;
- Image and signal processing in optical sensing, instrumentation and systems;
- Advance laser technology and optical navigation;
- Nano-optics technology;
- Optical sensing, measurement and diagnosis;
- Endoscopic microscopy;
- Visual sensing, Computer vision;
- AI applications in optical sensing;
- Spectrum detection and analysis;
- Fiber sensors;
- Surface plasmon resonance technology.

Guest Editors

Prof. Dr. Xin Zhu

Department of AI Technology Development, M&D Data Science Center,
Institute of Integrated Research, Institute of Science Tokyo, Tokyo,
Japan

Prof. Dr. Zhenhe Ma

School of Control Engineering, Northeastern University at
Qinhuangdao, Qinhuangdao 066004, China

Deadline for manuscript submissions

closed (25 March 2024)



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/113709

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

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)