

## Special Issue

# AI-Powered Vision Sensing for Autonomous Driving

### Message from the Guest Editors

This Special Issue seeks original research and comprehensive review articles that advance the state of the art in artificial intelligence (AI)- and vision-based sensing for autonomous vehicles. We invite contributions that push forward sensor architecting, multimodal data fusion, scene understanding, object detection and tracking, 3D reconstruction, end-to-end autonomous driving, trustworthy sensing, and reliable perception under challenging driving conditions. We particularly welcome groundbreaking work on how autonomous driving systems have been facilitated by deep learning, generative AI, and AI-agent-assisted manufacturing. Applications spanning passenger vehicles, freight transport, mobile robotics, advanced driver-assistance systems (ADASs), and infrastructure-vehicle cooperation (V2X) are within the scope of this issue. Inter-platform studies integrating vision sensing with other types of sensors, roadside perception, and cloud-based traffic information are also encouraged. Keywords: vision sensing; autonomous driving; artificial intelligence; data fusion; end-to-end system

### Guest Editors

Dr. Joshua H. Meng

California Partners for Advanced Transportation Technology (PATH),  
University of California, Berkeley, CA 94720, USA

Dr. Dachuan Li

Research Institute of Trustworthy Autonomous Systems, Southern  
University of Science and Technology, Shenzhen 518055, China

### Deadline for manuscript submissions

20 July 2026



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.0  
CiteScore 9.4  
Indexed in PubMed



[mdpi.com/si/259870](https://mdpi.com/si/259870)

*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 4.0  
CiteScore 9.4  
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)