

Special Issue

Sensor Networks and Communication with AI

Message from the Guest Editors

With the growing development of artificial intelligence, its application in solving practical problems in sensor networks and communication has become a popular topic. Using AI technologies may offer new opportunities to improve the accuracy, efficiency, and usability of sensing, communication, networking, etc., with sensors. This Special Issue therefore aims to collect original research and review articles on the recent advances, technologies, solutions, and applications, as well as new challenges, in the field of sensor networks and communication with AI. Potential topics include, but are not limited to, the following:

- Applications of machine learning to mobile/wireless research;
- Large language models (LLMs) and generative AI for mobile and wireless systems;
- Mobile web, video, virtual reality, augmented reality and other applications;
- Novel applications of wireless signals;
- Vehicular, robotic and drone-based networking;
- Ubiquitous computing and mobile human–computer interaction;
- Underwater networking and sensing;
- Wireless localization and tracking;
- Reducing the carbon footprint of wireless networks and mobile devices.

Guest Editors

Dr. Ge Wang

Department of Computer Science and Technology, Xi'an Jiaotong University, Xi'an 710049, China

Dr. Fei Wang

School of Software Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Deadline for manuscript submissions

30 December 2025



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/226563

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)