



## Advanced Research in Intelligent Autonomous Mobile Robots System, Learning and Control

Guest Editors:

**Dr. Ankit A. Ravankar**

Department of Robotics, Tohoku University, Sendai 980-8577, Japan

**Dr. Jose Victorio Salazar Luces**

Department of Robotics, Tohoku University, Sendai 980-8577, Japan

**Dr. Abhijeet Ravankar**

School of Regional Innovation and Social Design Engineering, Faculty of Engineering, Kitami Institute of Technology, Kitami 090-0015, Japan

Deadline for manuscript submissions:  
**closed (30 November 2025)**

### Message from the Guest Editors

In recent years, progress in the fields of robotics and AI have accelerated the introduction of mobile robots into our lives. The application of autonomous mobile robots is rapidly expanding to different fields. In recent years, machine learning and computer vision methods have opened novel paradigms of artificial intelligence. However, most of these heterogeneous autonomous systems are increasingly employed in unstructured, cluttered, dynamic, and human-centric environments that are still challenging to handle.

In this Special Issue, we are aiming to collect high-quality articles concerning some recent advances in the field of autonomous mobile robot systems, with research areas including (but not limited to) the following:

- Mobile robotics, AI, and their applications in robotics;
- Mapping and localization or SLAM techniques;
- Path planning;
- Service robotics (including robots in healthcare and/or assistive devices);
- Haptics-, AR-, and VR-based systems;
- Advanced manipulation;
- Intelligent control;
- System integration and software architecture for autonomous systems;
- Multirobot systems, including heterogeneous robot systems.





*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Department of Electrical and  
Information Engineering,  
Politecnico di Bari, Via Orabona  
4, 70126 Bari, Italy

## 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.

## 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)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)