

## Special Issue

# Advancements in Sensing Technologies and Control Mechanisms for Assistive Robotics: Enhancing Human–Robot Interaction and Assistance

### Message from the Guest Editor

Assistive robotics has gained significant traction in recent years, offering invaluable support to humans across a wide spectrum of activities, from everyday tasks to intricate procedures. However, the current state of technology and tools utilized in these systems presents certain limitations, resulting in restricted functionality and limited human–robot interaction. To unlock the full potential of assistive robotics, there is a pressing need for innovative advancements in sensing technologies and control mechanisms. These breakthroughs will enable seamless communication and interaction between humans and robots, fostering a more efficient, effective, and safe approach to task execution. This Special Issue aims to explore the latest developments in sensing technologies and control mechanisms for assistive robotics, foster interdisciplinary research, and showcase cutting-edge solutions that empower humans and revolutionize the field of assistive robotics.

### Guest Editor

Dr. Brahim Brahmi

1. Electrical Engineering Department, College Ahuntsic, Montreal, QC H2M 1Y8, Canada

2. Department of Electrical Engineering, Center for Interdisciplinary Research Center for Intelligent Manufacturing & Robotics (IRC-IMR), King Fahd University of Petroleum & Minerals, Dhahran 31261, Eastern Province, Saudi Arabia

### Deadline for manuscript submissions

closed (30 November 2024)



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/174301](https://mdpi.com/si/174301)

*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 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)