

Special Issue

Assistive and Rehabilitation Technologies Based on Intelligent Sensors

Message from the Guest Editors

The increase in the elderly population and rising prevalence of chronic conditions require advancements in assistive and rehabilitation technologies. Intelligent sensors play a pivotal role in the development of such technologies as they allow the patient to be monitored while offering the possibility of implementing smart control strategies for more fluent human–device interaction. This Special Issue aims to explore how intelligent sensors are being leveraged to create smarter assistive and rehabilitation devices. The Special Issue welcomes contributions from the academic community in the following areas:

- Sensor-based technologies for balance maintenance, gait and physical activity assessment.
- Intelligent prosthetics and active orthotics.
- Embedded systems for rehabilitation monitoring.
- Human–computer interfaces and interactions for assistive technologies.
- Physical-based and data-driven solutions for assistive device prototyping

Guest Editors

Dr. Andrea Tigrini

Dr. Alessandro Mengarelli

Dr. Federica Verdini

Dr. Ali Al-Timemy

Dr. Simone Ranaldi

Deadline for manuscript submissions

30 June 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/200672

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
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)