

## Special Issue

# Integration of Advanced Sensors in Assistive Robotic Technology

### Message from the Guest Editors

Assistive robotic technology has been shown to help people living with disabilities and older adults, by facilitating the execution of daily living tasks and increasing user independence. This includes but is not limited to wheelchair-mounted assistive robotic arms, mobile servants, exoskeletons, prosthetics, orthotics, movement assistance, mobility aids and intelligent wheelchairs. Advanced sensors have the potential to improve the performance of assistive robotic technologies. In the field of control interfaces, innovations at sensor level help users to communicate their desires more efficiently to use the device to its full potential. In the field of system intelligence, innovations at sensor level help assistive robotic technologies to better understand their environment and facilitate user task, for instance, by autonomously avoiding an obstacle. For this Special Issue, innovation in advanced sensors is defined by the development of new sensors, of existing sensors that are augmented by artificial intelligence, and existing sensors that are newly applied to assistive robotic technologies.

---

### Guest Editors

Dr. Alexandre Campeau-Lecours

1. Department of Mechanical Engineering, Laval University, Quebec City, QC G1V 0A6, Canada
2. Centre for Interdisciplinary Research in Rehabilitation and Social Integration (Cirris), Quebec City, QC G1V 0A6, Canada

Prof. Dr. François Routhier

1. School of Rehabilitation Sciences, Université Laval, Quebec City, QC G1V 0A6, Canada
2. Center for Interdisciplinary Research in Rehabilitation and Social Integration, CIUSSS de la Capitale-Nationale, Quebec City, QC G1M 2S8, Canada

---

### Deadline for manuscript submissions

closed (20 April 2022)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 9.4  
Indexed in PubMed



[mdpi.com/si/81881](https://mdpi.com/si/81881)

*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 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)