Special Issue

Advancing Human Gait Monitoring with Wearable Sensors

Message from the Guest Editors

This Special Issue of Sensors aims to explore the latest innovations in

- Wearable devices;
- Data acquisition;
- Signal processing;
- Machine learning techniques for gait assessment.

Contributions may include, but are not limited to,

- Inertial measurement units;
- Pressure insoles;
- Smart textiles;
- Multi-sensor integration approaches that capture spatiotemporal, kinematic, and physiological parameters of human movement;
- Gait analysis in movement disorders and other clinical conditions.

The Special Issue seeks to highlight research that bridges laboratory-based analyses and monitoring of daily life, with applications in clinical assessment, rehabilitation, fall-risk prediction, sports science, and occupational health. Emphasis is placed on studies that address sensor placement, data reliability, algorithm development, personalization, and the translation of sensor outputs into actionable insights for clinicians, therapists, and individuals.

The Special Issue provides a platform for disseminating novel methodologies, practical applications, and challenges in human gait monitoring, fostering the adoption of wearable sensor solutions in healthcare and beyond.

Guest Editors

Dr. M. Encarna Micó-Amigo

Institute of Mechanical, Process and Energy Engineering, School of Engineering and Physical Sciences, Heriot-Watt University, Edinburgh EH14 4AS, UK

Dr. Sauvik Das Gupta

Personalized and Standardized Intervention Based Operation Research Group (PSIBORG), Research Institute on Human and Societal Augmentation (RIHSA) & Behavior Optimization Research Team (BORT), Self-Care Technology (SCT) Integrated Research Center, Department of Information Technology and Human Factors (ITH), National Institute of Advanced Industrial Science and Technology, Kashiwa 277-0882, Japan

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/255679

Sensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sensors@mdpi.com

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

MDPI

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)