

Special Issue

Gait Recognition and Digital Mobility Outcomes Based on Wearable Sensing Technology

Message from the Guest Editor

Wearable sensors can provide continuous and objective measurements of human motion, enabling gait recognition and its quantification with digital mobility outcomes in controlled and real-world settings.

Advances in wearable sensor technology and their increased public accessibility, in combination with advances in signal processing, sensor fusion, machine learning and AI, now allow us more than ever to extract meaningful metrics for gait and mobility activity, performance and quality. These metrics may inform various applications in sports, health care and activity monitoring.

This Special Issue of *Sensors* welcomes contributions focused on methodological innovations and data-driven approaches for detecting and analysing gait and mobility using wearable technologies. Topics include motor state detection, signal denoising, event detection, machine learning for mobility metrics, and validation of wearable-based mobility metrics with direct practical implications for use in applied settings. This Special Issue aims to advance quantitative methods that transform wearable sensor data of gait into actionable digital mobility outcomes for real-world use cases.

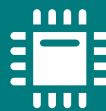
Guest Editor

Dr. Melvyn Roerdink

Department of Nutrition and Movement Sciences, MHeNs Institute of Mental Health and Neurosciences, Faculty of Health, Medicine and Life Sciences, Maastricht University, 6211 LK Maastricht, The Netherlands

Deadline for manuscript submissions

31 August 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/258606

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

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)