

Special Issue

Advancing Human Gait Monitoring with Wearable Sensors

Message from the Guest Editor

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 walking;
- Gait analysis in movement disorders.

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 Editor

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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

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