Special Issue

Advances in Wearable Inertial and EMG Sensors for Movement Quality Analysis in Sports Science and Rehabilitation

Message from the Guest Editors

This Special Issue invites contributions that explore the use of wearable IMU technology—alone or integrated with EMG—for improving movement quality and health outcomes. We aim to cover a wide range of potential topics, including, but not limited to, the following:

- Motion control and biofeedback in sports performance.
- Wearable sensor applications in injury prevention and rehabilitation.
- Biofeedback systems for managing lower back pain and other spinal or musculoskeletal disorders.
- Innovations in sensor technology and integrative approaches combining IMUs and EMG for comprehensive motion analysis.
- IMU-based interventions to enhance quality of life in different populations.
- wearable sensors
- inertial measurement units (IMUs)
- electromyography (EMG)
- motion analysis
- biofeedback
- rehabilitation
- injury prevention
- sports science
- spinal health

Guest Editors

Dr. Miguel García-Jaén
Department of General and Specific Didactics, Universitat d'Alacant, Alicante, Spain

Dr. Gema Sanchis-Soler
Department of General and Specific Didactics, Universitat d'Alacant, Alicante, Spain

Deadline for manuscript submissions

20 December 2026

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/232832

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
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)