

## Special Issue

# Intelligent Sensors for Biomechanics, Exercise Physiology and Performance Analysis

### Message from the Guest Editor

Intelligent sensors are revolutionizing the fields of biomechanics and exercise performance by providing real-time evaluation of exercise physiology and motion-related parameters with high accuracy. Accelerometers, pressure sensors or electromyography can track and analyze (ab)normal movement patterns or evaluate postural alignment. Also, they help to tailor exercise programs in both rehabilitation and performance optimization. In this context, they may allow for continuous tracking of an athlete's performance, such as power, acceleration, and muscle activation. Sensors combined with computer algorithms can generate information to guide athletes and coaches in refining training techniques and preventing overtraining.

This topic is in the scope of *Sensors*, as it will highlight the benefits of this field research in creating highly personalized and adaptive programs; detecting early signs of overuse injuries or movement inefficiencies; optimizing techniques and ensuring safety during training sessions or remote monitoring of athletes' health remotely.

This Special Issue is addressed to sensor-based evaluation of biomechanics and exercise analysis.

### Guest Editor

Dr. Sofia Brandão

1. Escola Superior de Saúde do Vale do Ave, Cooperativa de Ensino Superior Politécnico e Universitário, Rua José António Vidal, 81, 4760-409 Vila Nova de Famalicão, Portugal
2. H2M—Health and Human Movement Unit, Polytechnic University of Health, Cooperativa de Ensino Superior Politécnico e Universitário, Cooperativa de Responsabilidade Limitada, 4760-409 Vila Nova de Famalicão, Portugal

### Deadline for manuscript submissions

15 April 2026



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/254399](https://mdpi.com/si/254399)

*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 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)