

## Special Issue

# Artificial Intelligence (AI) and Sensors in Sports Safety and NextGen Rehabilitation: 2nd Edition

### Message from the Guest Editors

Sensors, sensing networks, AI and other new tech drive fast changes in sport performances. Sensors offer real-time data to predict and prevent athlete injuries, finding risks and enabling preventive steps. With AI-based models, they control fatigue, identify injury risks, track recovery and adjust training to lower injury risk.

AI is a more disruptive tech in sports safety, physiotherapy, injury prevention, fatigue and recovery control. It gives sports staff (coaches, trainers, medical staff) tools to monitor athletes in real time, spot potential injury risks and develop personalized plans for sports safety.

For this Special Issue, we seek articles on workload monitoring, movement pattern detection, muscle imbalance identification, recovery tracking, next-gen physiotherapy, sensor use and concussions from wearables or remote solutions.

Potential topics include but are not limited to:

- predictive modeling
- injury diagnosis
- fatigue management
- biomechanical sensors
- virtual rehabilitation
- wearable sensors
- radar sensors
- concussion detection
- smart insoles
- EMG sensors
- movement sensors
- explainable AI (XAI) in sports diagnostics
- neuromusculoskeletal (NMS) modeling
- digital twin of athlete

---

### Guest Editors

Dr. Attila Biró

Dr. Sándor Miklós Szilágyi



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/249317](https://mdpi.com/si/249317)

*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  
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)