

Special Issue

Smart Wearable Health Monitoring Systems: Materials, Sensors, Nanogenerators and Self-Powered Applications

Message from the Guest Editors

Recent insights have resulted in a rapid development of various wearable devices monitoring different healthcare physiological indexes and biomarkers that can be found either in body fluids or in skin odor and breath. Wearable devices are potential game-changers and can empower the individual and the healthcare system to achieve better personalized healthcare outcomes. Along with the development of wearable sensors for health applications, the demand for sustainable and independent operation, lightweight and flexibility have increased significantly. Fulfilling this demand shall involve several parameters but most important is the replacement of the bulky and rigid batteries by alternative thin, flexible and/or stretchable powers sources. The focus of this Special Issue is on reporting recent advancements in smart wearable health monitoring systems. Both original research articles and review articles are welcome. Preferred subtopics include but are not limited to:

- smart materials
- wearable sensors
- chemical/bio-sensors
- volatile organic compounds detection
- health monitoring devices
- nanogenerators
- self-powered systems

Guest Editors

Dr. Youbin Zheng

Dr. Wanfeng Xie

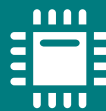
Dr. Miaomiao Yuan

Dr. Li Cheng

Dr. Xiangyi Zhu

Deadline for manuscript submissions

25 May 2025



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 7.3
Indexed in PubMed



mdpi.com/si/128068

Sensors
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 3.4
CiteScore 7.3
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 (Chemistry, Analytical) / CiteScore - Q1 (Instrumentation)