Special Issue

Advances in Vital Signal Sensing and Processing Technologies for Health Monitoring

Message from the Guest Editor

With the advancement of wearable sensor technology and intelligent signal processing methods, vital sign monitoring is entering an era of greater precision, continuity, and intelligence. In recent years, innovations in high-performance sensors and advanced signal processing algorithms have enabled real-time, noninvasive, and continuous monitoring of key indicators such as blood pressure, respiration, electromyographic (EMG) activity, and blood oxygen saturation. This Special Issue aims to showcase cutting-edge research and innovative applications in the field of vital sign sensing and signal processing, with a focus on solutions that enable accurate health status assessments, early disease warning, and remote monitoring. We welcome original research articles, reviews, and application cases covering sensor design, continuous blood pressure monitoring, EMG signal processing, multimodal data fusion, intelligent algorithm analysis, and system integration—especially technical achievements that can be implemented in clinical practice, rehabilitation training, and daily health management.

Guest Editor

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Deadline for manuscript submissions

15 June 2026



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



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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.

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