Special Issue

Intelligent Sensors for Condition Monitoring, Diagnosis, and Prognostics

Message from the Guest Editors

This Special Issue focuses on the advancements and applications of intelligent sensors for condition monitoring, diagnosis, and prognostics. We seek original research papers that showcase the latest sensor technologies and intelligent algorithms aimed at enhancing real-time monitoring, precise diagnostics, and accurate prognosis of machine health. Contributions should focus on the exploration on the integration of advanced analytics, including AI and ML, with intelligent sensors to improve the accuracy and speed of data processing and decision-making. We are particularly interested in papers that demonstrate how intelligent sensors enable real-time decision-making and improve operational policies. Research addressing both electro-mechanical systems (e.g., rotational machinery) and emerging systems (e.g., renewable energy) is encouraged. Moreover, papers that showcase the application of intelligent sensors in diverse industries and contexts, including but not limited to manufacturing, transportation, healthcare, and environmental monitoring, are also encouraged.

Guest Editors

Dr. Tianyu Gao Dr. Yinsheng Chen Dr. Jianyu Wang Dr. Xiaoli Zhao

Deadline for manuscript submissions

closed (30 June 2025)



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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.

Editor-in-Chief

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