

Special Issue

Structural Health and Condition Monitoring with Acoustic Emission and Guided Ultrasonic Waves: Sensors and Transducers

Message from the Guest Editors

The Special Issue aims to highlight the recent progress and trends in sensors and transducer technologies that enable structural health and condition monitoring (SHCM) with acoustic emission (AE) and guided ultrasonic waves (GUWs). In recent years, significant development has been made in SHCM based on AE and GUWs, which is now widely utilized in various fields, including aerospace, civil engineering, transportation, etc. Sensors play a critical role in structural health monitoring systems. With the development of technologies such as advanced manufacturing, artificial intelligence, big data, 5G and the Internet of Things, sensing techniques are developing rapidly in the direction of intelligence, integration, multi-functionality and networking. Potential topics include, but are not limited to, the following:

- Sensor design and advanced manufacturing;
- Smart materials and novel sensing techniques;
- Sensor network design, data transmission, wired and wireless communication;
- Sensors for extreme environmental conditions;
- Instruments and instrumentation for sensing applications;
- Wave analysis in acoustic emission and guided ultrasonic waves.

Guest Editors

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Deadline for manuscript submissions

closed (25 June 2024)



Sensors

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Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



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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

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