Special Issue

Acoustic and Ultrasonic Sensors for Non-Destructive Testing and Structural Health Monitoring

Message from the Guest Editors

Elastic wave- and ultrasonic-based non-destructive inspection techniques are widely used both for laboratory and in situ applications. Technological advances in acoustic and ultrasonic sensor technologies are revolutionizing the fields of non-destructive testing and structural health monitoring by providing higher sensitivity, a higher signal-to-noise ratio, and wider applicability, particularly regarding the introduction of non-contact sensors, embedded sensors, durable sensors under harsh environments, etc. This Special Issue aims to highlight developments of acoustic/ultrasonic sensors and/or innovative applications for the evaluation and monitoring of structures across various industries. Key topics include, but are not limited to, the following:

- Innovative sensor design;
- Contactless sensors;
- Signal processing techniques;
- Elastic-wave applications in scattering and layered media;
- Ultrasonics in heterogeneous/biological systems;
- Emerging techniques;
- The applicability of sensors under harsh environments;
- The combined use of ultrasonics with optical/electromagnetic techniques;
- The durability of sensors;

Energy harvesting for powering NDT systems.

Guest Editors

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Dr. Gerlinde Lefever

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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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