Special Issue

Application of Ultrasonic Waves and Sensing Technologies in Nondestructive Testing and Evaluation

Message from the Guest Editors

Recent advances have dramatically changed the ultrasonic wave analysis and testing methods and expanded applications of ultrasonic NDT to new and complex materials. Nonlinear ultrasonic wave and diffuse wave analysis demonstrate unprecedented sensitivity and capability to identify microdamage in complex media. This Special Issue will cover a wide range of research topics that are relevant to ultrasonic NDT, including, but not limited to, the following:

- Ultrasonic NDT for material characterization and damage evaluation;
- Ultrasonic guided wave;
- Nonlinear ultrasonic wave;
- Diffuse ultrasonic wave;
- Thermal effect on ultrasonic wave measurements and analysis;
- Laser ultrasonic testing;
- Air-coupled sensing;
- Analytical and numerical modeling of ultrasonic waves in complex media;
- New applications of ultrasonic NDT, such as NDT for additive manufacturing, batteries, metamaterials, etc.;
- Machine learning for ultrasonic data processing.

Guest Editors

Dr. Jinying Zhu

Dr. Fan Shi

Dr. Xin (Shin) Chen

Dr. Hongbin Sun

Deadline for manuscript submissions

closed (30 April 2023)



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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

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

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