



Advances in Quantitative Ultrasonic Sensing and Imaging

Guest Editors:

Dr. Patrice Masson

Dr. Madis Ratassepp

Dr. Jing Rao

Dr. Maria V. Felice

Deadline for manuscript
submissions:

closed (31 August 2022)

Message from the Guest Editors

Accurate and efficient techniques are required to characterize complex flaws (such as cracks, corrosion, impact damage) in advanced materials and structures (pipes, composites, additively manufactured materials) using bulk and guided waves. This Special Issue focuses on computational and experimental approaches for the acquisition of two-dimensional and three-dimensional images. It comprises topics such as the development of accurate and efficient sensor and array measurement systems, data processing algorithms and computational methods for ultrasonic imaging, analytical and numerical forward and inverse modeling techniques, and innovative aspects of ultrasound sensing and imaging.

Keywords

- ultrasonic imaging
- ultrasound tomography
- array
- forward modeling
- inverse problems
- defect sizing





sensors



an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

Contact Us

Sensors Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)