



an Open Access Journal by MDPI

Advances in Ultrasonic Guided Wave Sensor Technologies for Structural Health Monitoring

Guest Editors:

Prof. Dr. Tat-Hean Gan

Brunel Innovation Centre, Brunel University London, Uxbridge, UK

Dr. Shehan Lowe

Nuclear Advanced Manufacturing Research Centre (Nuclear AMRC), S60 5WG Rotherham, UK

Prof. Dr. Wamadeva Balachandran

Centre for Electronic Systems Research, Electronic and Computer Engineering, CEDPS, Brunel University London, Kingston Lane, Uxbridge UB8 3PH, UK

Deadline for manuscript submissions:
closed (20 July 2020)

Message from the Guest Editors

Dear Colleagues,

Ultrasonic Guided Wave (UGW) testing has gained greater attention from the industry for its inherent capability of long-range inspection. This technology is widely used as a screening tool in many industries, e.g., oil and gas, renewable energy, naval, construction, and aerospace. Recent attempts have been made to improve the resolution and sensitivity of UGW sensors for quantitative measurements of structural health and also to inspect complex structures, e.g., glass laminate aluminium reinforced epoxy, and carbon fiber reinforced polymer. This Special Issue is aimed to the submission of both review and original research articles related to the advancement of UGW sensor development, signal processing, and applications of UGW for structural assessment. Topics include but are not limited to the following:

- Non-destructive testing and material characterisation
- The inspection of complex material and structures using UGW
- Flexible sensor development
- UGW imaging and visualisation
- Industrial applications
- The remote monitoring of structural health



mdpi.com/si/24171

Prof. Dr. Tat-Hean Gan

Dr. Shehan Lowe

Prof. Dr. Wamadeva Balachandran

Special Issue



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](#)