



Advances in Ultrasound Sensor and Ultrasound Imaging

Guest Editor:

Dr. Xinjing Huang

Modern Acoustic Detection
Technology Laboratory, Tianjin
University, Tianjin 300072, China

Deadline for manuscript
submissions:

20 November 2024

Message from the Guest Editor

Dear Colleagues,

Ultrasonic sensor and imaging technologies have been developed for more than one hundred years, and there are four main application scenarios: underwater scenarios, airborne scenarios, and in solid and biological tissues. Ultrasonic sensors can be based on disruptive concepts or can be an improvement of traditional devices, but they must be used for the purpose of imaging. These new alternatives could be equally efficient and less expensive, or equally cheap and higher performance, compared with existing sensors. We also welcome ultrasonic sensors and imaging technologies for some special applications. Potential topics include, but are not limited to, the following:

- New ultrasound sensors with advances in acoustic capturing, acoustic-electric transition, or real-time electrical signal conditioning;
- Acoustic metamaterial devices equipped with conventional or new ultrasonic sensors;
- New ultrasound imaging techniques driven by advances in ultrasound sensors;
- Theoretical and experimental investigations of the influences of ultrasound sensor performance on ultrasound imaging performance.

Dr. Xinjing Huang
Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)