Special Issue

Advances in Acoustic Sensor and Imaging Technology

Message from the Guest Editor

Acoustic sensor and imaging technologies have been developed for more than one hundred years and have four main applications: in underwater scenarios, airborne scenarios, and in solid and biological tissues. In all of these cases, the performance of acoustic imaging depends on two cascaded signal processing steps: (1) acoustic sensing, including acoustic capturing, acoustic–electric transition, and real-time signal conditioning, which is accomplished by an acoustic sensor; (2) signal processing, which is accomplished by acoustic imaging algorithms. We would like to see acoustic imaging technology driven by advances in acoustic sensors. Our Special Issue's potential topics include, but are not limited to, the following:

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

Guest Editor

Dr. Xinjing Huang
Modern Acoustic Detection Technology Laboratory, Tianjin University, Tianjin 300072, China

Deadline for manuscript submissions

20 January 2026

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/si/223198

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

mdpi.com/journal/applsci

Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 5.5

mdpi.com/journal/applsci

MDPI

About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

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

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)