

Special Issue

Ultrasound Technology in Industry and Medicine

Message from the Guest Editor

At present, the number of ultrasound applications is constantly growing in the form of new, innovative methods and devices. Ultrasonic waves are used to detect and characterize the elastic properties of objects in any type of medium (except vacuum). They have relatively low speed and effectively propagate both in the human body and in metal objects (unlike electromagnetic waves), which is a very useful feature in measurements and imaging. Additionally, important applications for ultrasound include micro-mechanical systems, ultrasonic motors and sensors, as well as signal processing systems on surface waves. Ultrasonic waves can also transmit significant mechanical energy, which is used for material processing (cleaning, soldering, welding, drilling, spraying, creating emulsions, accelerating chemical reactions) and in surgery and medical therapy (cavitation cutting of tissues, drilling of bones and teeth, tartar removal, breaking down fat cells and kidney stones, thermal destruction of cancer, phonophoresis, aerosol therapy).

Topics of interest to be covered by this Special Issue include new and innovative methods and applications of ultrasound technology in industry and medicine.

Guest Editor

Prof. Dr. Krzysztof Opieliński

Department of Acoustics and Multimedia, Faculty of Electronics,
Wrocław University of Science and Technology, 50-370 Wrocław,
Poland

Deadline for manuscript submissions

closed (10 August 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 6.1



mdpi.com/si/72573

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

mdpi.com/journal/

[applsci](https://mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 6.1



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



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, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (Fluid Flow and Transfer Processes)