# **Special Issue**

# Ultrasound Sensors and MEMS Devices for Biomedical Applications

## Message from the Guest Editors

Ultrasound (US) sensors and microelectromechanical systems (MEMS) have gained increasing interest in the scientific community, and their applications have grown in industry and healthcare. In the biomedical field, US sensors are traditionally used for medical imaging, and although almost a century has passed since the first application of ultrasound in diagnostics, this technology is constantly evolving. Their appeal in science and research has led to advancements in transducer technology and digital electronics, resulting in improved diagnostic information. On the other hand, biomedical MEMS devices have been promoted over the past 20 years as the latest generation of miniaturized instruments, and are mainly used for cell characterization and manipulation, drug delivery, microsurgery, microtherapy, diagnostics and prevention. Given this panorama, the synergy between MEMS and ultrasound technology is of great interest to the scientific community. This Special Issue aims to gather papers demonstrating the latest developments and advancements in ultrasound sensors and MEMS devices in the biomedical field.

### **Guest Editors**

Prof. Dr. Andrea Scorza

Department of Industrial, Electronic and Mechanical Engineering, University of Roma Tre, Via della Vasca Navale 79, 00146 Rome, Italy

Dr. Giorgia Fiori

Department of Industrial, Electronic and Mechanical Engineering, University of Roma Tre, Via della Vasca Navale 79, 00146 Rome, Italy

### Deadline for manuscript submissions

31 December 2025



# **Sensors**

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/230234

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

mdpi.com/journal/ sensors





# **Sensors**

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



# **About the Journal**

## 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.

#### 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

# **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 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)

