Special Issue

Surface Acoustic Wave and Bulk Acoustic Wave Sensors

Message from the Guest Editors

It has been known for almost four decades that surface acoustic wave (SAW) and, more recently, bulk acoustic wave (BAW) devices can be used as sensors for a multitude of measurements. Physical, chemical, or biological sensors, based on microacoustics, show some distinct advantages compared to other technologies: They are mainly based on oxide ceramics and metals and, thus, can withstand higher temperatures than silicon. Their output signals such as frequency and phase lend themselves well to digital measurement; and they are typically operated at frequencies also used in mobile communications and can be interrogated wirelessly. However, there do not exist many commercial systems based on SAW or BAW sensors. This Special Issue serves to explore the state-of-the-art of the technology and to identify possible routes for further work that might help to overcome innovation hurdles.

- SAW/BAW sensors
- SAW/BAW sensor modeling and signal processing
- signal conditioning
- design and fabrication
- novel applications

Guest Editors

Dr. Amelie Hagelauer

Prof. Dr.-Ing. Gerhard Fischerauer

Prof. Dr. Robert Weigel

Deadline for manuscript submissions

closed (30 November 2017)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/8788

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

mdpi.com/journal/sensors

MDPI

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)