Special Issue

Design and Application of SAW Sensors

Message from the Guest Editors

Today, SAW sensors, intrinsically capable of wireless and passive operation and highly sensitive due to their functionalization with sensitive layers, hold an uncontested place in emerging ecosystems such as IoT. environmental monitoring, healthcare, robotics, and mobility. Despite their relative technological maturity. their application is limited by their high manufacturing costs, durability, selectivity, and resistance to environmental factors. Precise calibration and the optimization of sensitivity optimization are two additional topics related to biochemical sensing and skin-like electronics. Thus, further collaborative research is essential in order to provide reliable, low-power, and cost-effective SAW sensors that meet the demands of modern applications. This Special Issue enables experts actively engaged in the development of SAW sensor technology-including conceptual design and applications in chemical and physical sensing—to share their research via original papers or reviews.

Guest Editors

Dr. Nikolay Smagin

IEMN (Institut d'Électronique de Microélectronique et de Nanotechnologie), Polytechnic University of Hauts-de-France, Valenciennes, France

Dr. Etienne Herth

Centre de Nanosciences et de Nanotechnologies, Université Paris-Saclay, Palaiseau, France

Deadline for manuscript submissions

20 October 2025



Sensors

an Open Access Journal by MDPI

Impact Factor 3.5 CiteScore 8.2 Indexed in PubMed



mdpi.com/si/226551

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)

