Special Issue

Micro-Machined Thin-Film Piezoelectric Sensors

Message from the Guest Editor

Historically, piezoelectricity has always been one of the preferred transduction mechanisms in electromechanical sensors at a macro-scale, because of the possibility of achieving significantly higher coupling efficiency in piezoelectric transducers compared to alternatives such as capacitive transducers. However, with the emergence of micro-machined sensors, capacitive transduction became the main mechanism of choice, as the integration of a suitable piezoelectric material into the microfabrication foundries turned out to be extremely complicated, and in many instances impossible. This trend started to change in the early 21st century, once a reliable deposition of high-quality piezoelectric AlN on silicon substrates was demonstrated through the sputtering process. Since then, other thin-film piezoelectric materials have been explored, and the commercial application of piezoelectric transduction for sensing has increased significantly, and this trend is expected to continue. In this Special Issue, we focus on the recent advances in the field of thin-film piezoelectric sensors.

Guest Editor

Dr. Reza Abdolvand

Harris Corp. Engineering Center (HEC), University of Central Florida, 4000 Central Florida Blvd. Orlando, FL 32816, USA

Deadline for manuscript submissions

closed (31 January 2020)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/29434

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)