



sensors



an Open Access Journal by MDPI

Innovative Devices and MEMS for Sensing Applications

Guest Editors:

Prof. Dr. Slawomir Wiak

Institute of Mechatronics and
Information Systems, Lodz
University of Technology, 90-924
Lodz, Poland

Prof. Dr. Paolo Di Barba

Department of Electrical,
Computer and Biomedical
Engineering, University of Pavia,
27100 Pavia, Italy

Prof. Dr. Lukasz Szymanski

Institute of Mechatronics and
Information Systems, Lodz
University of Technology, 90-924
Lodz, Poland

Deadline for manuscript
submissions:

10 October 2024

Message from the Guest Editors

Dear Colleagues,

The Special Issue presents a broad overview of methods of both the analysis and design of sensors and actuators, mainly addressed to scientists as well as research students in the area of Electrical, Electronic and Computer Engineering, as well as Artificial Intelligence and Mechatronics; special attention is focused on innovative MEMS devices.

In general, the following remarks can be put forward. Progress in the technology of devices for sensing and actuation is boosted by several factors, for instance, the availability of smart materials like magnetic composites, size miniaturization, the impact of power electronics for supply.

In particular, miniaturization techniques make it possible to integrate different physical domains within the same device, the behavior of which is characterized by the interaction of coupled fields. This in turn has an impact on the mathematical and numerical modeling level, because tools for analysis and design more likely than not are supposed to offer facilities for multi-physics non-linear analysis. Correspondingly, sophisticated techniques of measurement are needed for the assessment and testing of prototypes.



mdpi.com/si/159472

Special Issue



sensors



an Open Access Journal by MDPI

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

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.

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 & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

Contact Us

Sensors Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sensors
sensors@mdpi.com
[X@Sensors_MDPI](#)