



Application of MEMS/NEMS-Based Sensing Technology

Guest Editors:

Prof. Dr. Pavel Fiala

Department of Theoretical and
Experimental Electrical
Engineering, Brno University of
Technology, 616 00 Brno, Czech
Republic

Dr. Petr Drexler

Department of Theoretical and
Experimental Electrical
Engineering, Brno University of
Technology, 616 00 Brno, Czech
Republic

Dr. Miloslav Steinbauer

Department of Theoretical and
Experimental Electrical
Engineering, Brno University of
Technology, 616 00 Brno, Czech
Republic

Deadline for manuscript
submissions:

20 October 2024

Message from the Guest Editors

Dear Colleagues,

This Special Issue of the magazine aims to highlight:

- (a) The theoretical foundations of harvesting (electromagnetic field) as a form of energy conversion to electrical energy with broader applications, to focus on some applications (technological and implementation issues) in MEMS and NEMS sensors, to address the issue of choice of principles and processing of harvesting technical solution (efficiency, yield, limiting factors of operation) for the chosen shape and size of the sensor.
- (b) The sensor as a non-trivial device has very different energy requirements for specific purposes, and therefore it is important to address in a targeted manner the possibilities of energy generation, conversion, utilization and storage for both energy and data/information purposes.

- transformation
- MEMS
- NEMS
- sensors
- harvesting





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](#)