

## Special Issue

# Piezoelectric Nanogenerators and Sensors

### Message from the Guest Editors

Significant recent progress in the field of nanotechnology has made it possible to effectively convert various types of energy into electrical output. One of many physical phenomena that can be used is piezoelectricity, where the deformation of the crystal structure leads to the accumulation of electrical energy. Piezoelectric nanogenerators and sensors are important components used in many technologies. Moreover, piezoelectric nanogenerators based on various advanced materials may generate electrical energy by harvesting human motion energy and may thus support or even replace the traditional battery charging of mobiles. Piezoelectric materials are also widely used in sensing technology. They are used to measure pressure, strain, and many other physical quantities based on charge generation via material deformation. The current Special Issue invites the submission of research that investigates the presentations of new nanomaterials and nanocomposites, new fabrication methods, and applications of piezoelectrics. Furthermore, the Special Issue addresses the innovative design, fabrication, and end-of-use application of piezoelectric nanogenerators and sensors.

### Guest Editors

Dr. Bartłomiej Toroń

Institute of Physics – Center for Science and Education, Silesian University of Technology, Krasińskiego 8 Street, 40-019 Katowice, Poland

Dr. Piotr Szperlich

Institute of Physics – Center for Science and Education, Silesian University of Technology, Krasińskiego 8 Street, 40-019 Katowice, Poland

### Deadline for manuscript submissions

closed (20 May 2024)



## Sensors

an Open Access Journal  
by MDPI

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/153309](https://mdpi.com/si/153309)

*Sensors*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sensors@mdpi.com](mailto:sensors@mdpi.com)

[mdpi.com/journal/  
sensors](https://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](https://mdpi.com/journal/sensors)



## 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)