Special Issue

Micro- and Nano-Technologies for Sensing: From Device Fabrication to Applications

Message from the Guest Editor

In a wide range of applications, sensors involve micro- and nanofabrication technologies, material/structure characterization methods, and interactions between functional structures and detected targets. The rapid miniaturization and multifunctionality of sensors have triggered research in both “top-down” fabrication techniques and “bottom-up” approaches, including diverse lithographic methods, pattern transfer, molecule assembly, functional film growth, and surface modification. To achieve specific functionalities and applications, these commonly used technologies need to be aligned and integrated with others. This ultimately leads to the emergence of new processes and novel sensors, accelerating the pace of the sensor-related industrial revolution. The aim of this Special Issue is to highlight the latest developments in device fabrication, sensing principles, and sensor applications in diverse engineering and scientific fields. It brings together original research articles and reviews that cover a wide range of topics related to micro- and nanotechnologies for sensing. We sincerely invite you to submit original unpublished work.

Guest Editor

Dr. Xiaoli Zhu

Waterloo Institute for Nanotechnology, University of Waterloo, Waterloo, ON N2L 3G1, Canada

Deadline for manuscript submissions

closed (20 April 2025)

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/195002

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
Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 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)