Special Issue

Novel Biosensors Based on Nanomaterials

Message from the Guest Editors

Nanomaterials have revolutionized the field of biosensing, offering unparalleled sensitivity, selectivity, and functionality. This Special Issue, entitled *Novel Biosensors Based on Nanomaterials*, explores the development and application of biosensors that leverage these advanced materials to detect and quantify biological or chemical substances across diverse fields. These innovative biosensors integrate nanomaterials such as carbon-based materials (e.g., graphene, nanotubes), metal nanoparticles, quantum dots, and polymer nanocomposites, which exhibit unique electronic, optical, and mechanical properties.

Keywords

- nanomaterials
- biosensors
- nanotechnology
- point-of-care diagnostics
- molecular recognition
- electrochemical sensors
- optical sensors

Guest Editors

Dr. Xiaojia Jin

Polymers and Complex Fluids Group, National Institute of Technology, 100 Bureau Dr., Gaithersburg, MD 20899, USA

Dr. Zitang Wei

Department of Chemical Engineering, Massachusetts Institute of Technology, 25 Ames St, Cambridge, MA, 02139, USA

Deadline for manuscript submissions

15 November 2025

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/225264

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)