Special Issue

Latest Advances in Nanobiosensors: Novel Materials and Applications

Message from the Guest Editors

This Special Issue focuses on the advancement and development of biosensors based on nanostructured materials contributing to innovative biosensing platforms. The applications portfolio includes clinical diagnostics, veterinary diagnostics, environmental monitoring, food analysis, and other biochemical and biological analysis.

- Nanostructured materials
- Nanoporous materials
- Metamaterials
- Photonic and plasmonic nanocrystals
- Electrochemical biosensors
- Optical biosensors
- Nanomechanical biosensors
- Piezoelectric biosensors
- Nanoplasmonic biosensors
- Surface-enhanced Raman spectroscopy biosensors
- Nano-interferometer and nano-resonator based biosensors
- Nanoparticle-based biosensors
- Lateral flow biosensors
- Fluorescence-based biosensor
- Multiplexed/multi-analyte detection
- Lab-on-a-chip
- Point-of-care
- Organ-on-chip
- Organoids
- Environmental monitoring
- Food analysis
- Gas analysis
- Healthcare
- Tissue engineering

Guest Editors

Dr. Gerardo Arturo López Muñoz

Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology, 08028 Barcelona, Spain

Prof. Dr. Javier Ramón Azcón

1. Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology, Baldiri I Reixac, 10-12, 08003 Barcelona, Spain

2. ICREA-Institució Catalana de Recerca i Estudis Avancats. 08010



Chemosensors

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 7.3



mdpi.com/si/69717

Chemosensors
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
chemosensors@mdpi.com

mdpi.com/journal/chemosensors





Chemosensors

an Open Access Journal by MDPI

Impact Factor 3.7 CiteScore 7.3



About the Journal

Message from the Editorial Board

Chemosensors continues to grow as a forum for all manners of sensing that encompass chemistry.

Chemosensors is published in open access format – all articles and content are released on the internet immediately following acceptance, thus allowing unlimited access to the content as soon as it is published. We would be happy to have you join our growing list of authors.

Editors-in-Chief

Prof. Dr. Jin-Ming Lin

Beijing Key Laboratory of Microanalytical Methods and Instrumentation, Department of Chemistry, Tsinghua University, Beijing 100084, China

Prof. Dr. Nicole Jaffrezic-Renault

Institute of UTINAM, University of Franche-Comté, UMR-CNRS 6213, 16 Gray Road, 25030 Besançon, France

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Engineering Village and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Physical and Theoretical Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.5 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

