



an Open Access Journal by MDPI

Nanostructured Materials and Their Composites for Biosensing Applications (2nd Edition)

Guest Editor:

Dr. Furong Tian

1. School of Food Science
Environmental Health,
Technological University Dublin,
Dublin, Ireland
2. Nanolab Research Centre,
Technological University Dublin,
Dublin, Ireland

Deadline for manuscript
submissions:
closed (20 March 2025)

Message from the Guest Editor

Dear Colleagues,

Nanostructured materials and their composites, used for biosensing, have been used in industrial applications for decades. Sensing via biological moieties has outmoded conventional diagnosis vis-à-vis processing time, skilled manpower and detection accuracy. Nanomaterials have impelled biological sensing accuracy and robustness comprising lateral flow assays and tunable electrochemical and physics-mechanical responses due to their versatile shape- and size-dependent physical and chemical attributes. To date, the most widely used nanomaterials for biosensing include Au nanoparticles, graphene-based assemblies, carbon nanotubes and magnetic nanoparticles.

The second volume will keep focusing on research papers, communications and review articles showcasing the novel manufacturing process of nanostructured materials and their composites for biosensing applications.

See more information at <https://www.mdpi.com/si/199314>

Dr. Furong Tian
Guest Editor



[mdpi.com/si/199314](https://www.mdpi.com/si/199314)

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science,
University of Birmingham,
Birmingham B15 2TT, UK

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

Contact Us

Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](https://twitter.com/nano_mdpi)