



an Open Access Journal by MDPI

## Applications of Advanced Nanomaterials in Sensor Devices (2nd Edition)

Guest Editor:

**Dr. Huacheng Zhang**

School of Chemical Engineering  
and Technology, Xi'an Jiaotong  
University, Xi'an 710049, China

Deadline for manuscript  
submissions:

**20 October 2024**

### Message from the Guest Editor

Dear Colleagues,

Nanomaterials could be classified into diverse categories according to their physical and chemical properties, dimensionality, production procedures, compositions, and homogeneity. Particularly, processing, morphological control, and the physiochemical properties of nanomaterials always affected each other's performances. Due to their nanoscale dimension and high surface-to-volume ratio, advanced nanomaterials have the capacity to show a series of exceptional properties, such as chemical, mechanical, optical, and magnetic ones. Very recently, researchers began to pay a lot of attention to the design and synthesis of diverse nanomaterials, such as organic, inorganic, and organic–inorganic hybrid ones with controllable geometry, morphology, and topology, and aimed to explore various academic and industrial applications such as sensing devices. Interestingly, during this research and development, scientists now focus a lot on the mechanisms of thus obtained sensor devices, like “details behind the scene”, as announced often in a lot of sounded mysterious or scientific fiction.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

## 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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)