

## Special Issue

# Nanostructured Sensors

### Message from the Guest Editor

Sensors are instrumental analytical devices for the selective detection of different analytes. A sensor contains a selective layer that can react with a target molecule and a transducer that can transform this interaction into a physical signal (optical, chemical, electrical, thermal, etc.). Sensor technology has made much progress through the development of nanomaterials. The surface effects in nanostructures caused by the high surface-to-volume ratio are the major factors that have enhanced sensor performance. This Special Issue will attempt to cover recent advances in nanostructured sensors. Indeed, the nanomaterial's composition (oxide, metal, etc.) and characteristics such as structure, morphology, crystallinity (together with roughness, porosity, grain size, etc.) and their influence on the sensor performance, including sensor i) sensitivity, ii) selectivity, iii) the time interval required for the measurements, and finally iv) the stability, will be investigated.

---

### Guest Editor

Dr. Mikhael Bechelany

European Institute of Membranes (IEM), University of Montpellier,  
34090 Montpellier, France

---

### Deadline for manuscript submissions

closed (15 July 2020)



## Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/si/28716](https://mdpi.com/si/28716)

*Nanomaterials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)

[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)





# Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 9.2  
Indexed in PubMed



[mdpi.com/journal/  
nanomaterials](https://mdpi.com/journal/nanomaterials)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

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

---

### 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, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

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