



## Applications of Nanomaterials and Nanotechnology in Food Detection

Guest Editor:

**Prof. Dr. Heyou Han**

College of Science, National Key  
Laboratory of Agricultural  
Microbiology, Huazhong  
Agricultural University, Wuhan  
430070, China

Deadline for manuscript  
submissions:

**closed (31 October 2022)**

### Message from the Guest Editor

Food safety is related to human health and has become a global public health concern. Numerous contaminants in food seriously threaten human health, such as pathogenic microorganisms, pesticides, veterinary drug residues, illegal additives, toxins and other harmful substances produced during food processing. Therefore, the development of rapid, simple and reliable analytical methods for effective monitoring of food contaminants is of great significance for food safety and human health. In recent years, nanomaterials and nanotechnology have been widely used in food detection, such as nanosensors, nanoprobe, molecular imprinting technology, surface-enhanced Raman spectroscopy, etc. In addition, some nanomaterials can also be used for food sample pretreatment to remove matrix effects and improve the sensitivity and accuracy of food detection.

We invite authors to contribute original research articles or comprehensive review articles covering the most recent progress and new developments in the applications of nanomaterials and nanotechnologies in food detection.

We look forward to receiving your contributions.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## 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.

## 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](#), [CAPus / SciFinder](#), [Inspecc](#), and [other databases](#).

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

## Contact Us

*Nanomaterials* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](#)