

## Special Issue

# Bionanocomposite Packaging: Towards the Improvement of Food Safety

### Message from the Guest Editors

Reducing food loss and ensuring food safety for consumption, free from chemical and microbial contamination, is an emerging societal challenge for policymakers and companies. Food packaging has a crucial role in this matter and polymer nanocomposites, especially biopolymers incorporating organic or inorganic nanofillers, have attracted great attention due to their promising potential to improve packaging properties. This Special Issue aims to cover a broad range of subjects, from biomaterials engineering and nanomaterials synthesis to the design and characterization of biodegradable packaging and technologies with nanomaterial integration. Potential topics include, but are not limited to:

- Eco-efficiency low impact processes and materials
- Novel processing technologies and fabrication methods
- Surface modification
- Innovative nano-hybrid active fillers
- Structure–property relationships in biopolymer nanocomposites
- Novel packaging functionalities (sterilization)
- Nanomaterials-based biosensors
- Toxicological risks and shelf life studies
- Up-Scaling challenges

---

### Guest Editors

Dr. Oscar Ramos

Centre of Biological Engineering, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal

Prof. António Vicente

Centre of Biological Engineering, University of Minho, Campus de Gualtar, 4710-057 Braga, Portugal

---

### Deadline for manuscript submissions

closed (31 January 2019)



## Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 10.3  
Indexed in PubMed



[mdpi.com/si/14483](https://mdpi.com/si/14483)

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

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





# Nanomaterials

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.3  
CiteScore 10.3  
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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

---

### 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)