



## Nano-Biomaterials in Tissue Engineering: Fabrication and Application

Guest Editors:

**Dr. Ana Ferreira-Duarte**

School of Engineering, Newcastle  
University, Newcastle-upon-Tyne  
NE1 7RU, UK

**Dr. Piergiorgio Gentile**

School of Engineering, Newcastle  
University, Newcastle-upon-Tyne  
NE1 7RU, UK

Deadline for manuscript  
submissions:

**30 June 2024**

### Message from the Guest Editors

Tissue engineering is a rapidly developing interdisciplinary field dedicated to the development and construction of alternative tissues, and organs. Nano-biomaterials have a wide range of uses in tissue engineering, providing versatile tools for cell targeting, drug delivery, scaffold construction and imaging. The use of nano-biomaterials can greatly promote the development of this field and contribute to the creation of effective tissue regeneration techniques.

This Special Issue aims to collect the latest findings and progress in the field of nano-biomaterials for tissue engineering. We are pleased to invite authors to contribute original research articles, review articles, or short communications regarding (but not limited to) the following aspects:

1. Nano-biomaterial fabrication techniques for tissue engineering;
2. Mechanisms involved in interactions between nano-biomaterials and cells or tissues;
3. Applications of nano-biomaterials in tissue engineering and regenerative medicine.





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](#)