

Special Issue

Nanocomposites Based on Biodegradable Polymers for Tissue Engineering Applications

Message from the Guest Editors

In the last two decades, attempts have been made to develop tissue-specific biomaterials. The idea is to create a biomaterial that mimics the tissue architecture and serves as an active stimulator of the tissue-specific differentiation of stem cells. In this regard, nanocomposites based on biodegradable polymers due to their tunable properties (mechanical, conductive, thermal, surface modification, etc.) have been widely explored. This Special Issue aims to cover the following broad range of subjects:

- Stem cell-biomaterial interaction and tissue engineering;
- The design, fabrication, and characterization of nanocomposites based on biodegradable polymers for biomedical applications;
- Nanocomposites based on biodegradable polymers in the tissue engineering of bone, nerve, heart, and other regenerative medicine applications;
- Nanocomposites based on biodegradable polymers in drug delivery systems for biomedical applications.

We invite authors to contribute original articles or comprehensive reviews.

Guest Editors

Prof. Dr. Sabata Martino

Department of Chemistry, Biology and Biotechnology, Biochemistry and Molecular Biology Unit, University of Perugia, Via del Giochetto, 06126 Perugia, Italy

Dr. Ilaria Armentano

Department of Economics, Engineering, Society and Business Organization (DEIM), University of Tuscia, 01100 Viterbo, Italy

Deadline for manuscript submissions

closed (25 August 2020)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/23254

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 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. 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)