

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

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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.

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