



Multifunctional Polymer-Based Nanocomposite Materials

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Message from the Guest Editor

Recent advances in polymer-based nanocomposites have contributed to the development of new multifunctional materials with many potential applications. The properties and functionality of these polymer-based materials can be modified by selectively introducing particles with certain properties for a desired application. In addition, when the size of such particles is reduced, the aspect ratio can play a fundamental role in enhancing the interfacial properties in the overall nanocomposite material. The scope of this Special Issue is to address the recent developments and applications of polymer-based multifunctional nanocomposite materials. Special emphasis will be placed on the following: i) materials for biomedical applications, related to tissue engineering (TE); ii) materials for food packaging and the agro-alimentary industry; iii) flexible materials for smart sensors and actuators; and iv) nanocomposites for energy harvesting.





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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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