Special Issue

Synthesis and Application of Nanoparticles in Novel Composites

Message from the Guest Editors

The utilization of nanoparticles/nanostructures to improve the properties of engineered materials is ubiquitous in many disciplines. Their incorporation in the bulk or at the surface of a composite material provides an opportunity to impart desired properties. This Special Issue will provide an assessment of the most current approaches for the synthesis, incorporation, and functionalization of nanoparticles / nanostructures into novel materials with relevant antimicrobial, biomimetic, and mineralizing functionalities. Submitted manuscripts should pay special attention to the preparation, modification, and characterization of the nanoparticles / nanostructures of any composition and morphology, as well as the characterization of novel materials and their potential field/clinical applications. Areas of interest include, but are not limited to, the following:

- Nanoparticle synthesis
- Nanoparticle surface modifications
- Dental and medical biomaterials
- Functionalized textiles
- Tissue engineering constructs
- Cements modified with nanoparticles
- Application of Janus nanoparticles in composites

Guest Editors

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Deadline for manuscript submissions

closed (31 March 2023)

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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.

Editor-in-Chief

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