

Special Issue

Recent Developments in Biomaterials at the Nanoscale: Synthesis, Characterization and Applications

Message from the Guest Editors

Biomaterials (natural or synthetic) at the nanoscale refer to materials that are designed and engineered to interact with biological systems at the nanometer scale.

The nanoscale dimension of these materials enables them to interact with biological molecules, cells, and tissues in unique ways, often leading to enhanced performance and capabilities compared to bulk materials. These materials are specifically tailored to have properties and functionalities that make them suitable for various applications in medicine, biology, biophysics, chemistry and materials science. Significant applications are associated with the synthesis and characterization of biomaterials for biomedical purposes, drug delivery and tissue engineering. This Special Issue welcomes contributions in the form of full articles, short communications, or review articles on new results related to the following:

- Characterization and imaging of biological systems and biomaterials at the nanoscale using advanced techniques such as atomic force microscopy, transmission electron microscopy, and scanning probe microscopy;
- Disease diagnosis and innovative therapies;
- Drug delivery;
- Tissue engineering.

Guest Editors

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