Special Issue

Functional Nanomaterials in Pharmaceutical and Biomedical Applications

Message from the Guest Editors

Nanoscale materials' natural abundance makes them ideal models for implementation in bioinspired technologies in biomedical sciences and pharmaceutics. In this context, advanced nanomaterials (one-dimensional fibers, tubes, and wires; twodimensional plates and sheets; and nanoparticles and nanospheres) are widely applied in the fields of drug delivery, bioimaging, tissue engineering, and gene transfection. Moreover, they are used for hyperthermic, photodynamic, and photoacoustic therapies. Moreover, they serve as potent antimicrobials and biosensors, and are ideal building blocks for 3D scaffolds and implant bioprinting. Additionally, their resemblance to proteins has led to the exploitation of their biomimetic pathways. This Special Issue aims to present original and innovative research articles and reviews on the recent trends, developments, implementations, and perspectives in this field. Particular emphasis is placed on nanomaterial functionalization methods and their physicochemical characterization. Above all, the main focus of this Special Issue is on analytical explanations of the multitude of nanomaterial applications.

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Editor-in-Chief

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