Special Issue

Physicochemical Properties and Applications of Nanomaterials in Biology and Medicine

Message from the Guest Editor

Nanoparticles, nanomaterials, nanorods, core-shell nanoparticles, and hybrid nanoparticles have been extensively studied for their use in various biomedical applications, including as contrast agents in magnetic resonance imaging (MRI) and X-ray computed tomography (CT), as well as in drug delivery, fluorescent imaging, biolabeling, biosensing, etc. Many reports have detailed their synthesis, physicochemical properties, and biomedical applications. The aim of this Special Issue is to showcase a variety of nanoparticles and nanomaterials that can be applied in biomedicine, nanomedicine, and nanobiology, with a focus on their physicochemical properties and biomedical applications. The key topics addressed in this Issue will include the synthesis of nanoparticles and nanomaterials, the characterization of their physicochemical properties using various techniques, surface modification processes, and in vitro and in vivo biomedical applications. The surface modification of nanoparticles and nanomaterials with hydrophilic and biocompatible ligands is essential for their use in biomedical applications.

Guest Editor

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Message from the Editor-in-Chief

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