

Special Issue

Interactions of Nanoparticles with Biomolecules

Message from the Guest Editor

In recent years, there has been a steadily growing interest in the utilization of nanoparticles in various biomedical applications, including targeted drug and gene delivery, bioimaging, biosensing, cancer therapy through hyperthermia or photoablation, theranostics, and cell labeling.

However, most applications require additional organic or bioactive molecules for fulfilling the desired purposes, enhancing biocompatibility and avoiding immune responses from the organism, and inducing supplementary effects, such as antimicrobial, antioxidant, or anti-cancer. Therefore, nanoparticles mostly function as carriers for that will specifically target the desired area and release various biomolecules. In this manner, recent years have witnessed tremendous advancements in the development of efficient methods for encapsulating or attaching these biomolecules at the nanoparticle level.

Therefore, the aim of this Special Issue is to gather all the information and contributions from recent years concerning the precise interactions of nanoparticles with biomolecules in the process of developing complex systems.

Guest Editor

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