

Special Issue

Surface-Functionalized Nanoparticles as Drug Carriers

Message from the Guest Editors

Over the decades, nanocarriers have been extensively investigated for improved pharmacokinetics and biodistribution, increased stability, reduced toxicities, controlled release, and site-specific delivery of therapeutics. However, the efficacy of nanocarrier-based drug delivery systems is largely dependent on their controlled interactions with biomolecules.

Therefore, nanoparticles have often been surface-functionalized with a variety of ligands, not only to impart site specificity and increase cell penetration, but also to provide stealth properties and improve payload capacity. For example, the surface functionalization of nanoparticles has made remarkable advances in tumor-targeted delivery and drug delivery across the blood-brain barrier. This Special Issue will focus on recent progress in nanotechnology in the areas of basic and applied research, as well as clinical medicine. Topics of interest include, but are not limited to, cutting-edge research on the preparation of surface-functionalized nanoparticles and their in vitro and in vivo evaluation. Further, the interaction between nanoparticles and bio-interfaces will also be included.

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