

Special Issue

Surface-Functionalized Nanoparticles: Preparations, Characterizations, and Applications

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 dependent mainly on their controlled interactions with biomolecules. Therefore, nanoparticles have often been surface-functionalized with various 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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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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