

Special Issue

Innovative Nanotechnology for Drug Delivery Systems

Message from the Guest Editor

Nanotechnology has become a tool that is extensively utilized for the successful delivery of therapeutics, from small-molecule drugs to biologics. The recent development of smart biomaterials has contributed significantly to broadening the current repertoire of nanoparticles. However, the pre-clinical validation of such nanotechnology is yet to translate into clinical success for many medical conditions. There remains an unmet, immediate and long-term need for advanced systems with specific functionalities that are able to overcome physicochemical and biological barriers to successful drug delivery; these include tissue specificity, tissue penetration/diffusion, cellular uptake, endosomal escape, controlled release, etc. This Special Issue will present original research papers and comprehensive reviews that describe truly innovative and orthogonal strategies for the development of nanotechnology and that can overcome any of the aforementioned barriers. The submission of research that involves personalization or machine learning in the development of nanotechnology is strongly encouraged.

Guest Editor

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