



Application of Nanomaterials in Drug Delivery System

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Message from the Guest Editors

The issue is targeted at publications in the area of nanomaterial application as delivery agents. One significant area of research in nanotechnology is the use of nanomaterials in drug delivery systems. Drug use can frequently cause side effects, and often, drugs they work well in vitro but cannot withstand the effect of the enzymes of the gastrointestinal (GI) tract and thus do not work well in vivo. Nanoparticles can be used to enhance drug delivery to tissue, help in improving drug stability in vivo, and sustain controlled release. Due to their small size and larger surface area, drug-encapsulated nanoparticles show increased solubility and thus enhanced bioavailability. This also enhances their ability to cross the blood-brain barrier (BBB). Nanoparticles made from natural and synthetic polymers (biodegradable and non-biodegradable) have received attention for customized targeted delivery of drugs with controlled release of drug and better bioavailability. Through manipulation of the size and surface of properties, nanomaterials are being used frequently for drug delivery.

Keywords: nanomaterial; drug delivery; bioavailability





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Message from the Editor-in-Chief

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