

Special Issue

Synthesis and Characterization of Biopolymeric Nanoparticles for Drug Delivery Applications

Message from the Guest Editor

Biopolymeric nanoparticles are mainly developed for drug delivery applications as an alternative to liposome technology, in order to overcome the problems related to the stability or toxicity of these drugs in biological systems. Recently, novel approaches in nanoparticle technology have been introduced producing an improvement in the efficacy and in vivo stability of many drugs. The nanoparticles offer a lot of advantages of drug targeting by modified body distribution as well as the enhancement of cellular uptake reducing the toxic side effects of the free drugs. They can be prepared from a variety of materials such as protein, polysaccharides, and synthetic polymers. The choice of materials depends on several factors including: (i) size and morphology; (ii) surface charge and permeability; (iii) degree of biodegradability, biocompatibility, and cytotoxicity; (iv) drug loading and desired release profile.

- drug delivery
- polymeric nanoparticles
- natural polymers
- synthetic polymers
- nanoparticles synthesis

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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