

Special Issue

Preparation, Physico-Chemical Properties and Biomedical Applications of Nanoparticles

Message from the Guest Editor

The capability to produce nanoparticles in the same size domain as proteins has led to a wide range of applications in the biomedical field. The various applications require precisely defined nanoparticle characteristics related to reaction conditions, particle morphology, chemical composition, and crystallinity, which can be tailored by fabrication strategy, either “top-down” or “bottom-up”. Special attention is paid to “green synthesis” techniques and eco-friendly protocols. This Special Issue invites articles in the form of research papers, communications, and reviews. Potential topics include, but are not limited to the following:

- Novel techniques for nanoparticles synthesis and characterization
- Nanoparticles functionalization for biomedical applications
- Nano-carriers for drug and gene controlled delivery
- Nanocomposites for orthopedic and dental applications
- Polymeric nanoparticles
- Magnetic nanoparticles
- Nanoparticles for contrast agents in Medical Imaging
- Antimicrobial agents
- Nanoparticles in endodontics
- Nanoparticles in cosmetics
- Other studies related to nanotechnology associated with biomedical applications.

Guest Editor

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About the Journal

Message from the Editorial Board

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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