Synthesis, Characterization and Antibacterial Activity of Ciprofloxacin Loaded Polymer Nanoparticles for Parenteral Application

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Different polymerization techniques as particle formation processes for ciprofloxacin-loaded poly (butyl cyanoacrylate) nanoparticles (CfH-PBCN) were evaluated to choose the most appropriate in terms of the resulting nanoparticles characteristics suitable for parenteral administration. ...

Synthesis of Nanocomposition of Poly Acrylic Acid/Chitosan Coated-Magnetite Nanoparticles to Investigation of Interaction with BSA and IGG Proteins

Published On: March 06, 2017 | Pages: 027 - 033

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Among the nanomaterial being applied for treatment and diagnosis field, magnetic NPs especially magnetite phase of iron oxide have been significantly interested due to their natural magnetic properties. ...

Prediction of Enhanced Dimerization inside Dilute Alloy Nanoparticles

Published On: January 31, 2017 | Pages: 023 - 026

Author(s): Micha Polak* and Leonid Rubinovich

According to a unique nano-confinement effect of entropic origin, predicted by us several years ago for the equilibrium
Two Faces of Curcumin; A Molecular Nutrition and an Anti-Cancer Agent

Curcumin, a useful herbal medicine with anti-inflammatory and anti-cancer properties is insoluble in water which restricts its therapeutic properties;

Monodisperse Water-Stable SiO2- Coated Fluoride Upconversion Nanoparticles with Tunable Shell Thickness

Monodisperse water-stable silica functionalization of upconversion nanoparticles are important for their applications in bio-imaging and bio-sensing.

Highly Monodisperse Chitosan Nanoparticles Prepared by a Combined Triple-Method for Potential Use as Drug Carriers

Chitosan (CS) as a biodegradable polymer with unique bio-attachment properties that makes it favorable to be used in biomedical applications. Insolubility in water is the problem with use of CS.
Reduced Graphene Oxide and Its Natural Counterpart Shungite Carbon

Published On: January 11, 2017 | Pages: 007 - 014

Author(s): Elena F Sheka*

Large variety of structure and chemical-composition of reduced graphene oxide (RGO) is explained from a quantum-chemical standpoint. ...