عنوان مقاله:

Synthesis, preparation and characterization of magnetic coreshell Fe3O4-Ag nanoparticles for drug delivery

محل انتشار:

سومین کنگره ملی شیمی و نانوشیمی از پژوهش تا فناوری (سال: 1399)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Green synthesized of nanoparticles eliminate the need for a stabilizing and capping agent and show shape and size dependent biological activities. Biomolecules in the plant extract are involved in reduction of metal ions to nanoparticle in a one-step and eco-friendly synthesis process. Natural plant extracts contain wide range of metabolites including carbohydrates, alkaloids, phenolic compounds, and enzymes. The combination of Fe3O4 NPs and Ag NPs for drug delivery applications. Fe3O4-AgNPs can be synthesized through a green route using natural reagents, as both reducing and capping agent, minimizing the nanomaterial toxicity. Successful characterization of synthesized nanoparticles wasdone by XRD, FE-SEM and FT-IR analyses. The cytotoxicity of Fe3O4-Ag NPs was verified against PC12 cells lines

کلمات کلیدی:

green synthesis, Saponins tri pterpenoid extract, magnetic core-shell, Ag nanoparticles, Fe3O4 nanoparticles, drug delivery, MTT assay