

عنوان مقاله:

Dithiocarbamate Modified SPION-Chitosan Nanobiocomposite, a Promising Adsorbent for Bovine Serum Albumin ((BSA

محل انتشار:

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خلاصه مقاله:

In the present paper, bovine serum albumin (BSA) was studied for extraction case from a buffer solution through a new version of modified magnetic chitosan nanocomposite. Post-modification of this magnetic chitosan led to conversion of amine groups to dithiocarbamate on the surface of chitosan which was wrapped to superparamagnetic iron oxide nanoparticles (SPION). Chitosan was converted to magnetic chitosan over co-precipitation of Fe²⁺ and Fe³⁺ under alkali conditions. Amines of chitosan were also converted to dithiocarbamate over the reaction of carbon disulfide. Study of the synthesized support in BSA extraction was achieved in further experiments

کلمات کلیدی:

BSA, SPION, Chitosan, Protein extraction, Magnetic Chitosan

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