عنوان مقاله:

Synthesis of platinum nanoparticles and removal of heavy metals from aqueous solution using platinum nanopartcles/Zeolite-4A

محل انتشار:

چهاردهمین کنگره ملی مهندسی شیمی ایران (سال: 1391)

تعداد صفحات اصل مقاله: 11

نویسندگان:

sofia mehdizadeh - *M.Sc, Department of Energy Engineering, Sharif University of Technology, Azadi Ave. P.O.Box۱۱۳۶۵۸۶۳۹*

sodeh sadjadi - *Ph.D, Nuclear fuel cycle school, Nuclear Science and Technology Research Institute, End of North Karegar*

Seyed Javad Ahmadi - *Ph.D, Department of Energy Engineering, Sharif University of Technology, Azadi Ave. P.O.Box۱۱۳۶۵۸۶۳۹*

Mohammad Outokesh

خلاصه مقاله:

The effects of varying operating conditions on metals removal from aqueous solution using a novel platinum nanopartcles/Zeolite-4A adsorbent are reported in this paper. Characterization ofthe adsorbent showed successful production of platinum nanopartcles on Zeolite-4A using 3 Wt% platinum. The effects of operation conditions on metals removal using this adsorbent wereinvestigated. Experimental conditions resulting in optimal metals adsorption were observed at pH 7, 0.1 g/10mL dosage and 30 min contact time. Sorption data have been interpreted in terms ofLangmuir and Freundlich isotherms

کلمات کلیدی:

Platinum nanopartcles, Zeolite-4A, Heavy metals, Adsorption

لینک ثابت مقاله در پایگاه سیویلیکا: