

عنوان مقاله:

Preparation of Fe-doped mesoporous silica SBA-15 for adsorption of carbazole

محل انتشار:

اولین کنفرانس بین المللی تصفیه فاضلاب و بازیافت آب، فناوری ها و یافته های نو (سال: 1388)

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خلاصه مقاله:

In this study, Mesoporous SBA-15 was synthesized under acidic condition at 40 C with a non-ionic triblock copolymer (P123) as the template. The synthesis gel composition used was 1 SiO₂:0.017 P123:2.9 HCl: 202.6 H₂O. Functionalization of SBA-15 with Fe (NO₃)₃.9H₂O by post-synthesis method was performed under reflux for 1.5 h. The structural order and textural properties of the prepared materials were studied by XRD, FTIR, and nitrogen adsorption. Fe-doped mesoporous silica SBA-15 has been studied as an adsorbent for carbazole adsorbent from water-ethanol solutions at room temperature. Comparing with pure SBA-15, Fe-doped SBA-15 shows improved adsorption properties.

کلمات کلیدی:

Mesoporous SBA-15, Post-Synthesis, Carbazole, Fe-Doped SBA-15

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