

عنوان مقاله:

Highly efficient degradation of MTBE by γ -Al₂O₃/NiO/TiO₂ core-shell nanocomposite under visible light irradiation

محل انتشار:

دومین کنگره ملی شیمی و نانو شیمی از پژوهش تا فناوری (سال: 1398)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

γ -Al₂O₃/ NiO/ TiO₂ as a novel photocatalyst that is active in visible light was synthesized by a simple sol-gel method. The prepared samples were characterized by XRD, DRS-UV/Vis, and TEM analysis. The photocatalytic effect of synthesized samples was examined on methyl tert-butyl ether (as a model hazardous contaminant) degradation. Experimental condition including pH, irradiation time, and photocatalyst mass were optimized. Overall, the UV/Vis spectrophotometry results indicated that the synthesized nanoparticles have an extraordinary photocatalytic activity for the degradation of methyl tert-butyl ether under visible light

کلمات کلیدی:

photodegradation, nanocomposite, core-shell, titanium dioxide

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