

## عنوان مقاله:

Highly efficient degradation of MTBE by  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>/NiO/TiO<sub>2</sub> core-shell nanocomposite under visible light irradiation

## محل انتشار:

فصلنامه شیمی نوین، دوره 8، شماره 2 (سال: 1400)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

$\gamma$ -Al<sub>2</sub>O<sub>3</sub>/NiO/TiO<sub>2</sub> 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, methyl tert-butyl ether

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1250187>

