

عنوان مقاله:

Photocatalytic degradation study of Methyl Orange and Congo red using Mg-Co ferrite powder

محل انتشار:

مجله بین المللی فناوری نانو در آب و محیط زیست، دوره 7، شماره 2 (سال: 1401)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

The photocatalytic degradation of methyl orange and Congo red dye was performed under the illumination of visible light (Philips ۲۵۰Watt) as a source of photons. The complete distraction of the aromatic ring was ascertained by UV spectroscopic analysis. A decrease in dye concentration and an increase in the concentration of CO₂ indicate dye mineralization. The behavior of this reaction was pseudo-first-order and the maximum photodecolorization efficiency was ~۸۵.۱۶% for Methyl orange and ~ ۹۵.۴۰ for Congo red in ۱۲۰-۱۵۰ min. at ۳۰°C.

کلمات کلیدی:

Ferrite, X-ray Diffraction, Scanning electron microscopy, Transmission electron microscopy, Photodegradation of dye

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