

عنوان مقاله:

Photocatalytic degradation of reactive blue ۱۹ using magnetic MnO_۲/ZIF-۸

محل انتشار:

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نویسنده:

Yasser Vasseghian - Department of Chemistry, Soongsil University, Seoul, ۰۶۹۷۸, South Korea

خلاصه مقاله:

The present study offers a novel magnetic MnO_۲/ZIF-۸ heterojunction photocatalyst for the degradation of reactive blue ۱۹ (RB۱۹) under visible light irradiation. Morphology and structure characterization of the prepared photocatalyst indicated that polyhedral ZIF-۸ (ca. ۵۰۰ nm) was coated by MnO_۲/Fe_۳O_۴ nanorods. The synergy effect of magnetic MnO_۲/ZIF-۸ nanocomposite exhibited an excellent photocatalytic activity toward RB۱۹ degradation of ۹۹.۵% after ۶۰ min of irradiation due to high surface area and heterojunction formation. Besides, Fe_۳O_۴/MnO_۲/ZIF-۸ showed a high .removal efficiency of ۹۱.۳% even after ten repeated cycles

کلمات کلیدی:

Photocatalytic degradation, ZIF-۸, magnetic MnO_۲, Nanocomposite, Reactive blue ۱۹

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