عنوان مقاله:

Photocatalytic Degradation of Organic Pollutant Using Ternary Cu2O/Fe2O3/GO Magnetic Nanocomposite

محل انتشار:

دومین کنفرانس بین المللی مطالعات میان رشته ای نانو فناوری (سال: 1399)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

In the present research, the magnetic nanocomposite of Cu2O/Fe2O3 on single layer graphene oxidewas synthesized via one-pot hydrothermal method. X-ray diffraction (XRD) analysis was utilized to identify thestructural and crystal characteristics of the sample. The XRD analysis confirmed the formation of Cu2O andFe2O3 in the sample structure. The photocatalytic degradation of an organic pollutant in a syntheticwastewater was measured by a spectrophotometer that shows the positive role of graphene presence in thenanocomposite for the pollutant degradation. The photocatalytic degradation efficiency of ternarynanocomposite (Cu2O/Fe2O3/GO) was around 10% higher than Cu2O/Fe2O3.

کلمات کلیدی:

Graphene Oxide, Magnetic Nanocomposite, Cu2O, Fe2O3, Photocatalytic Degradation

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