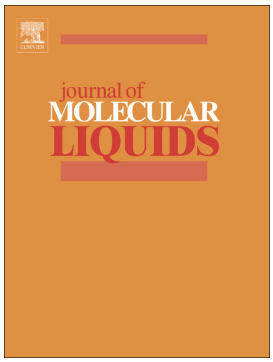

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The performance study on ultrasonic/Fe_3O_4/H_2O_2 for degradation of azo dye and real textile wastewater treatment

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Abstract

In this study, the removal of azo dye Reactive Orange 107 (RO107) was investigated by sono-Fenton like degradation process using magnetite nanoparticles (MNPs) (Fe_3O_4). The effective operating parameters (solution pH, H_2O_2 concentration, MNPs dosage, ultrasonic power and initial dye concentration) were studied on decolorization of RO107. Complete removal of azo dye was obtained at 0.8 g/L MPNs, pH=5, 10 mM H_2O_2 concentration, 300 W/L ultrasonic power and 25 min reaction time. Moreover, the results

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