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Electronic Supplementary Information

Efficient degradation of organic pollutants by peroxymonosulfate activated with MgCuFe-layered double hydroxide

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Table S1 Comparison between MgCuFe-LDH and the previously reported CuFe-oxide catalysts in catalytic performance.

Catalyst dosage (g/L)	PMS dosage	Pollutant	Removal efficiency	Initial solution pH	Temperature (°C)	References
$CuFe_2O_4$ magnetic nanoparticles (0.1)	0.2 mM	Tetrabromobisphenol A (10 mg/L)	99% (30 min)	8.2	25	1
$CuFeO_2$ rhombohedral crystals (0.1)	33 μM	Sulfadiazine (8 μmol/L)	~100% (24 min)	6.8	25 ± 2	2
Microscaled $CuFeO_2$ particles (0.5)	0.2 mM	Carbamazepine (20 μmol/L)	100% (30 min)	7.0	25	3
Magnetic Cu^0/Fe_3O_4 submicron composites (0.1)	0.5 mM	Rhodamine B (20 μmol/L)	100% (15 min)	7.0	No data	4
		Methylene blue (20 μmol/L)	100% (5 min)			
		Orange II (20 μmol/L)	100% (10 min)			
		Phenol (0.1 mmol/L)	100% (30 min)			
		4-Chlorophenol (0.1 mmol/L)	100% (15 min)			
Cu_2O/α-Fe_2O_3 (0.4)	40 mg/L	Sulfamethoxazole (1.6 mg/L)	~100% (180 min)	6.8	23 ± 2	5
$CuFe_2O_4$/multi-walled carbon nanotubes (0.2)	0.6 mM	Trimethoprim (0.02 mmo/L)	~90% (24 min)	7.0	27	6
$CuFe_2O_4$ nanoparticles (0.1)	0.2 mM	2,4,4'-Trichlorobiphenyl (0.5 mg/L)	89% (8 h)	7.0	25	7
MgCuFe-LDH (0.3)	0.5 mM	Acetaminophen (5 mg/L)	~93.0% (20 min)	6.0	25	This work
		Rhodamine B (5 mg/L)	99.5% (45 min)	5.2	25	

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