

Table 3. Comparison of Fe₃O₄/FDU-12 with some other catalyst for oxidation of PhCH₂OH.

Entry	Reagent	Conditions	Time (h)	Conversion (%)	Yield (%) ^a	Ref.
1	Iron Chloride Hexahydrate/TEMPO (4 mol%)	O ₂ , Toluene, 80 °C	7	100	98	[30]
2	Au ₂₄ Clusters (Pd)/(CNT) ^d (50 mg)	O ₂ , 30 °C	6	74	24:53 ^b :23 ^c	[31]
3	Immobilized Pd, KNO ₃ (4 mol%)	O ₂ , TFT, reflux	1.5	100	98	[32]
4	Polyester based Pd(II) Macrocomplexes (4 mol%)	Toluene, 70 °C	18	59	-	[33]
5	Hemicryptophane-Ruthenium Complex (5 mol%)	CH ₃ CN:H ₂ O, r.t.	1	-	91:9 ^b	[34]
6	Liquid phase/Au NPpore (10 mol%)	O ₂ , MeOH, 60 °C	24		85	[35]
7	Triple-site phosphotungstate (5 mol%)	Toluene/H ₂ O ₂ , 90 °C	1		92	[36]
8	Fe ₃ O ₄ @FDU-12 (2 mol%)	CH ₃ CN, H ₂ O ₂ , reflux	1		98	This work

^aYield refers to the corresponding aldehyde.

^bYield refers to the corresponding acid.

^cYield refers to the benzoate.

^dCNT is carbon nanotube.

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