

Catalytic transfer hydrogenation of furfural to furfuryl alcohol over magnetic Fe₃O₄@C catalyst

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Table S1 Textural characteristics of Fe₃O₄@C with different calcination conditions.

Temperature (K)	Time (h)	BET (m ² /g)	Pore volume (cm ³ /g)	Pore diameter (nm)
573	3	17.8	0.062	13.9
673	3	40.8	0.203	22.6
773	3	15.6	0.060	15.2
873	3	7.8	0.023	11.6
673	1	21.0	0.075	14.3
673	2	22.0	0.101	18.3
673	4	20.5	0.095	18.5
673	5	20.2	0.069	13.7

Table S2 The reduction potentials of various alcohols.^{1,2}

Hydrogen donor	Reduction potential (kJ/mol)
methanol	130.1
ethanol	85.4
isopropanol	70.0
isobutanol	69.3
<i>n</i> -propanol	87.3
<i>n</i> -butanol	79.7

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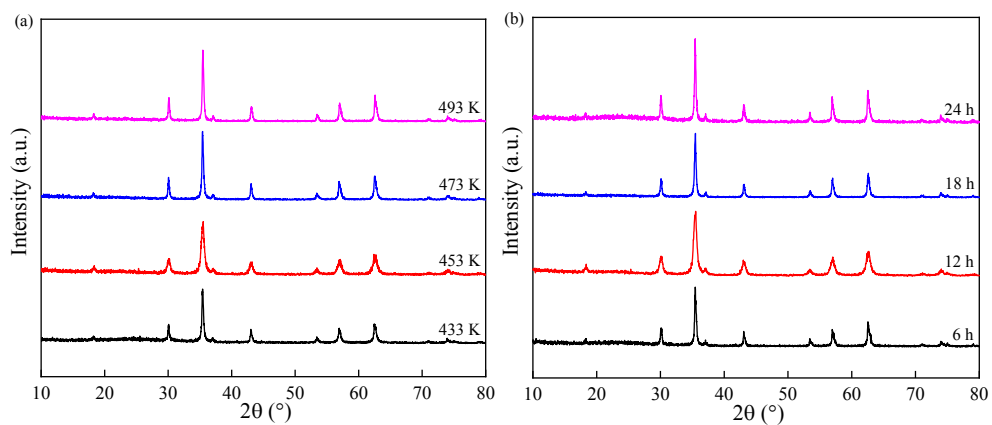


Fig. S1 XRD patterns of Fe₃O₄@C with different solvothermal conditions (a) temperature and (b) time.

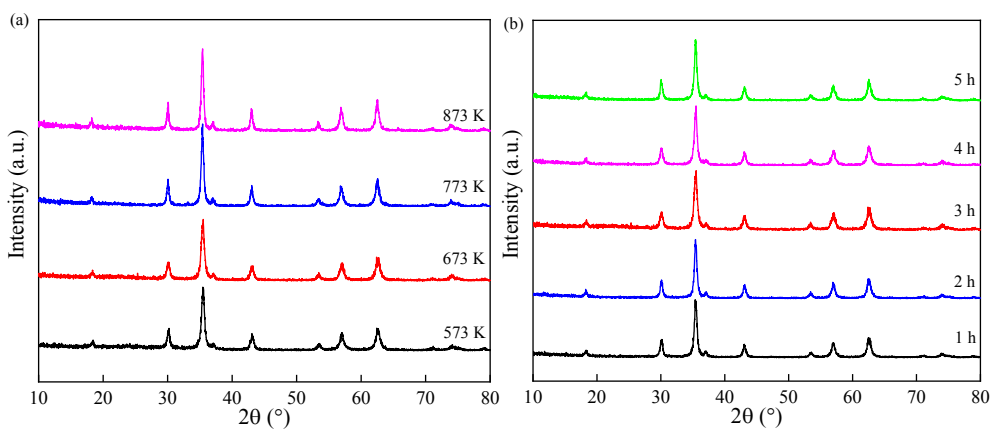


Fig. S2 XRD patterns of Fe₃O₄@C with different calcination conditions (a) temperature and (b) time.

References

- [1] J. C. van der Waal, P. J. Kunkeler, K. Tan and H. van Bekkum, *J. Catal.*, 1998, **173**, 74-83.
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