Nitrogen-doped graphene-activated metallic nanoparticles-incorporated ordered mesoporous carbon nanocomposites for hydrogenation of nitroarenes

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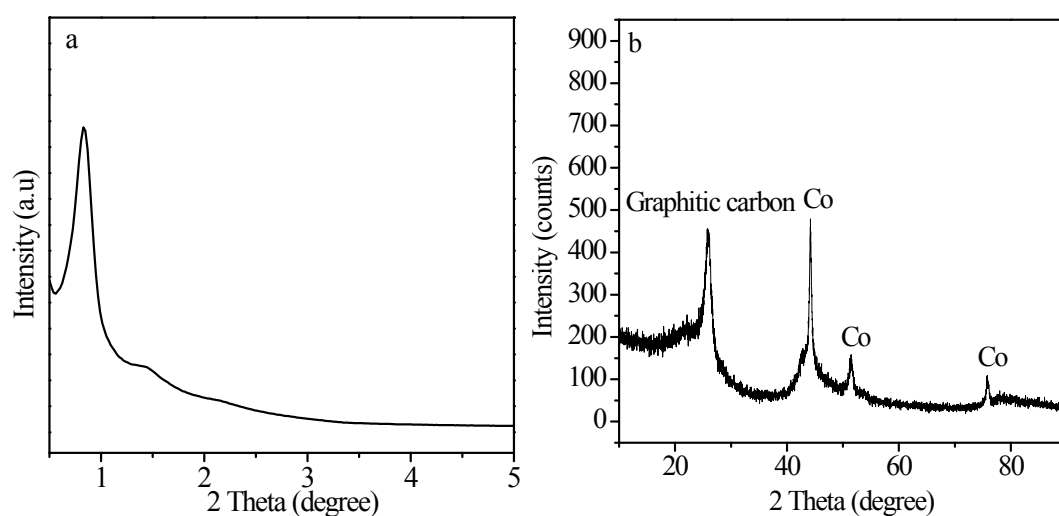

Fig. S1 (a) Low-angle XRD patterns, and (b) Wide-angle XRD pattern of the Co/NGr@OMC−800 catalyst.
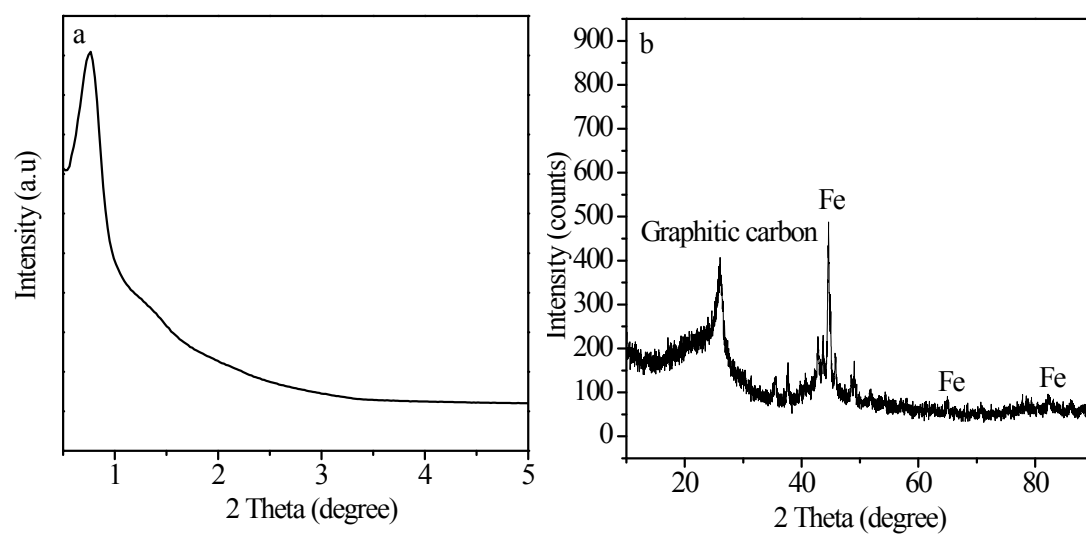

Fig. S2 (a) Low-angle XRD patterns, and (b) Wide-angle XRD pattern of the Fe/NGr@OMC−800 catalyst.
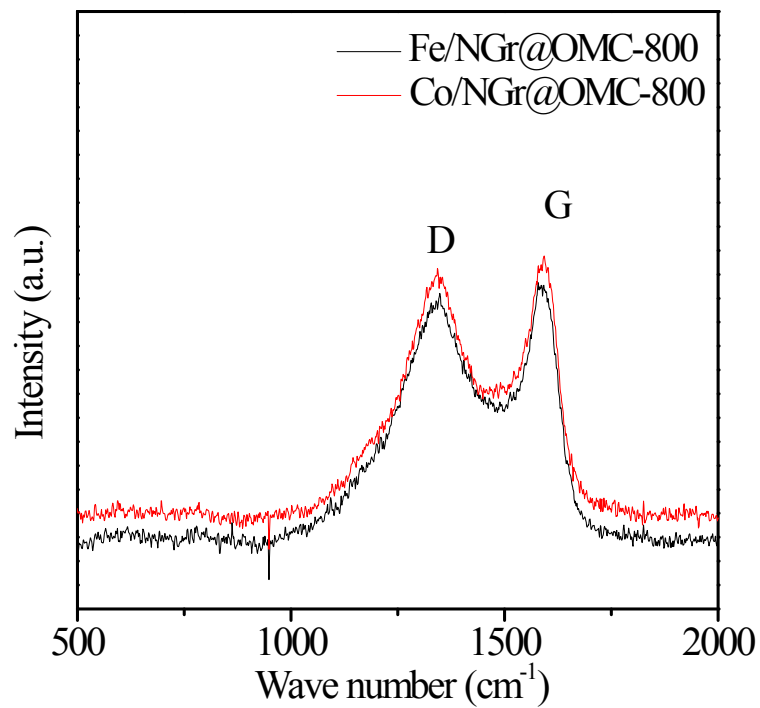
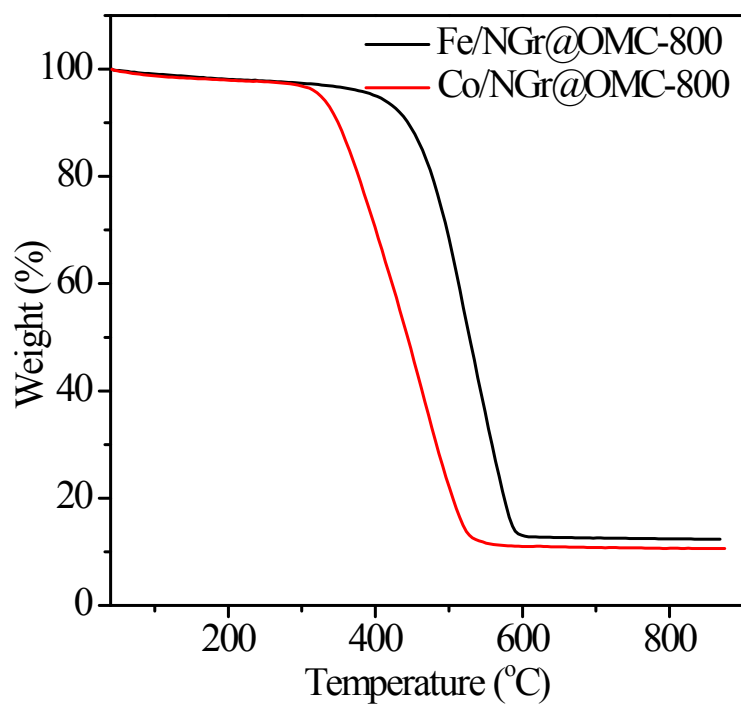**Fig. S3** Raman spectrum of the Co/NGr@OMC–800 and Fe/NGr@OMC–800 catalysts.

Fig. S4 TGA curve of the Co/NGr@OMC–800 and Fe/NGr@OMC–800 catalysts.
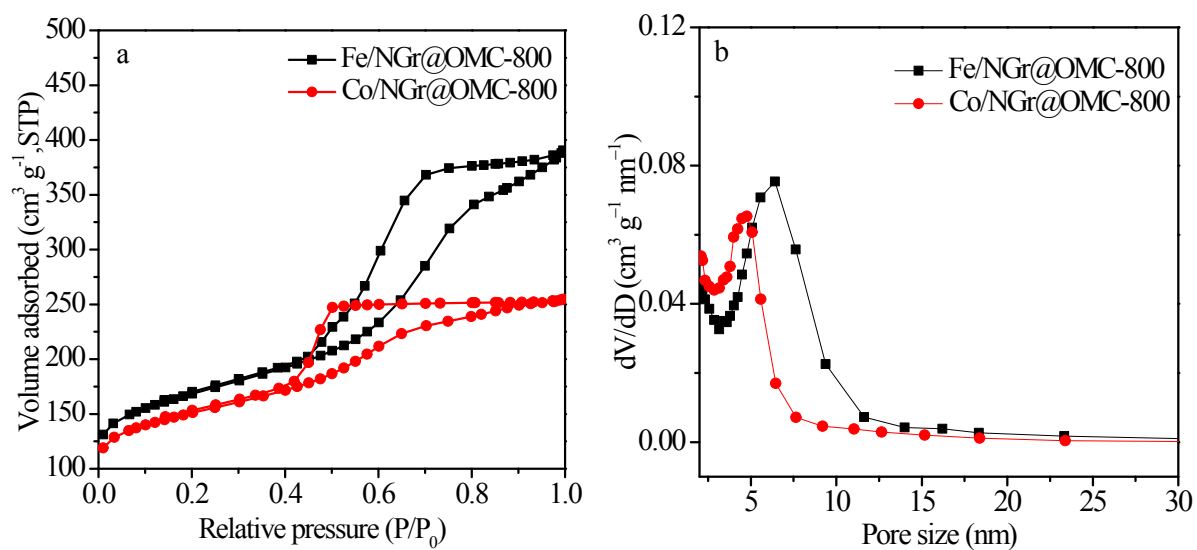
Fig. S5 (a) N_2 sorption isotherms, and (b) BJH pore size distributions of the Co/NGr@OMC–800 and Fe/NGr@OMC–800 catalysts.
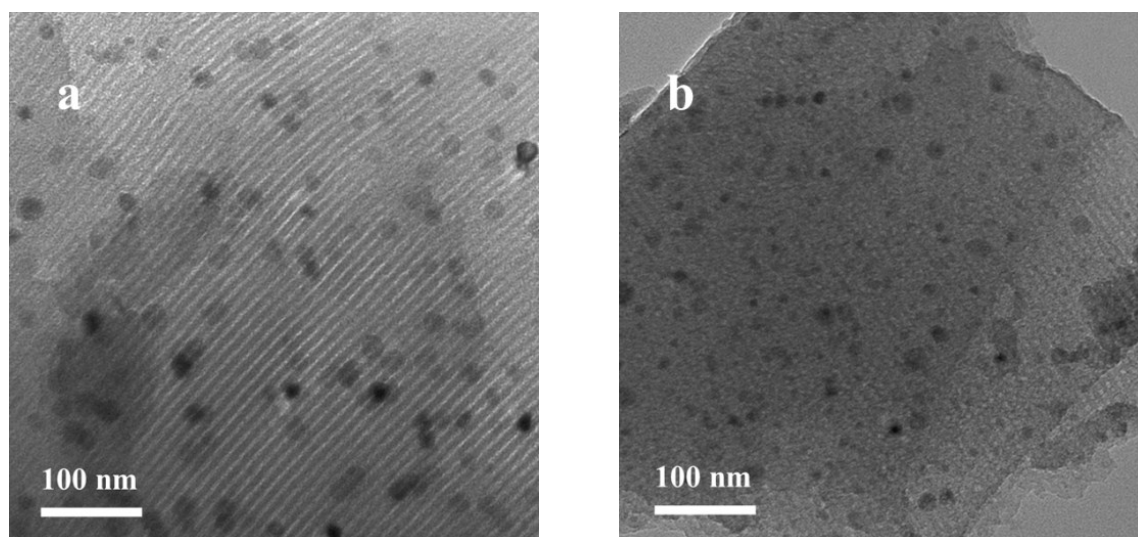

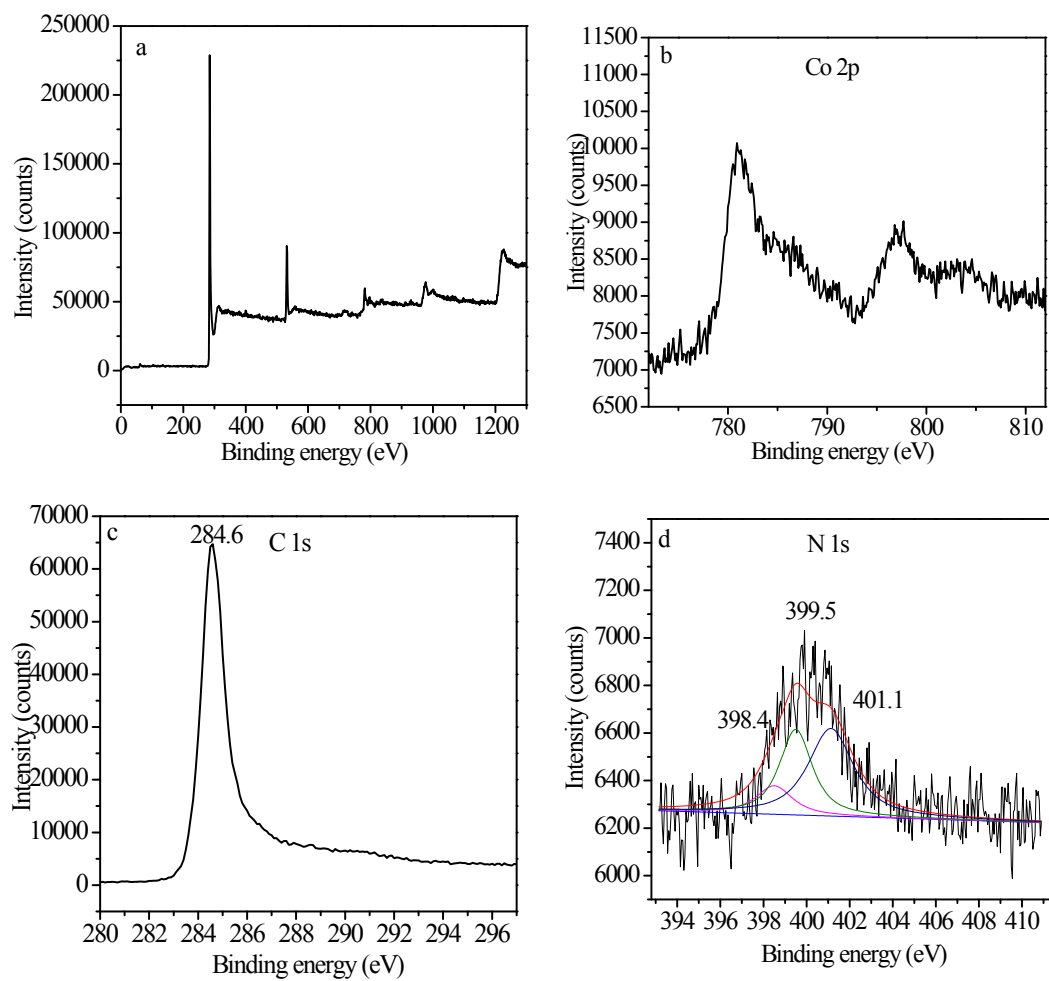**Fig. S6** TEM images of the (a) Co/NGr@OMC–800, and (b) Fe/NGr@OMC–800 catalysts.

Fig. S7 XPS spectra of the Co/NGr@OMC–800 catalyst: (a) the survey scan, (b) Co 2p, (c) C 1s, and (d) N 1s.
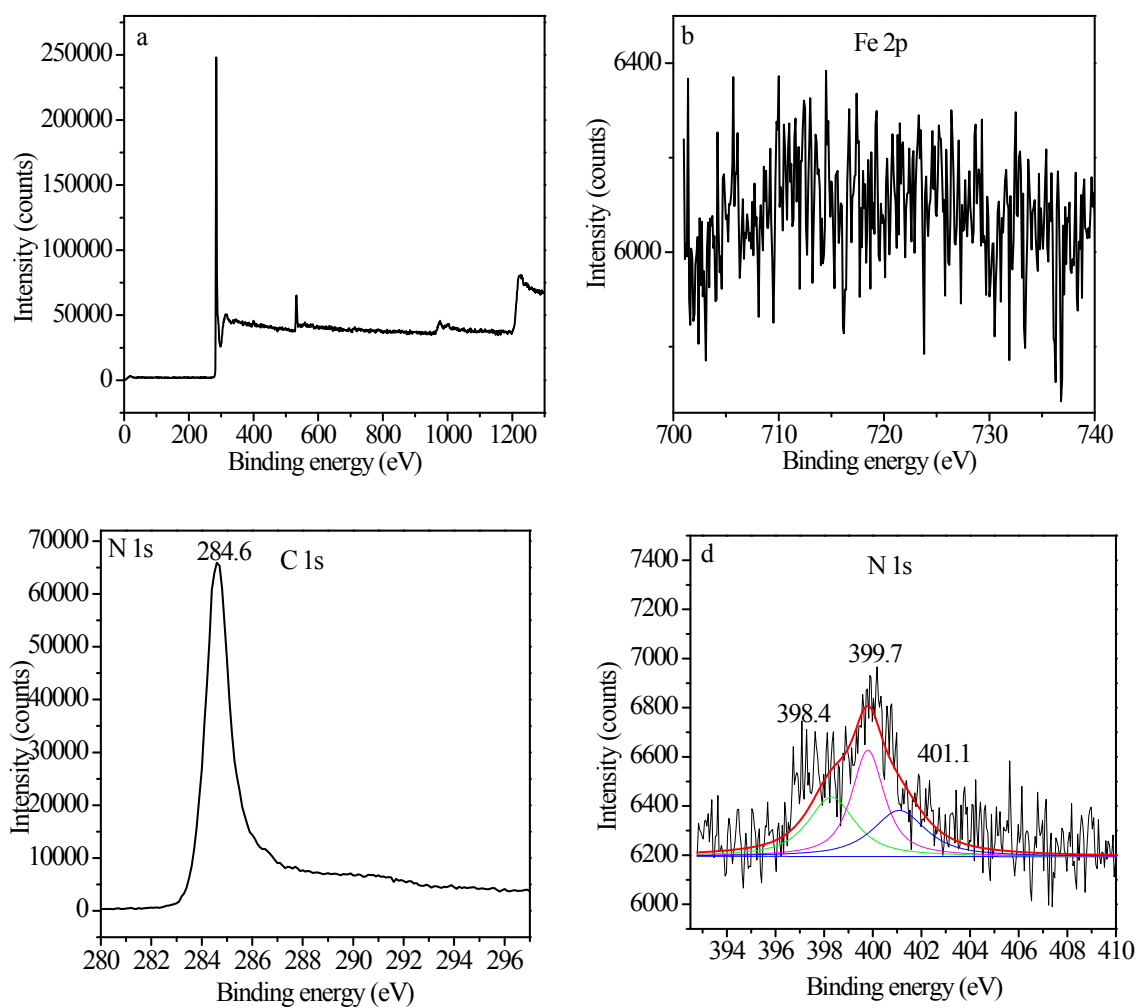
Fig.S8 XPS spectra of the Fe/NGr@OMC–800 catalyst: (a) the survey scan, (b) Fe 2p, (c) C 1s, and (d) N 1s.