

Supplementary information

Metal-organic gel templated synthesis of magnetic porous carbon for highly efficient removal of organic dyes

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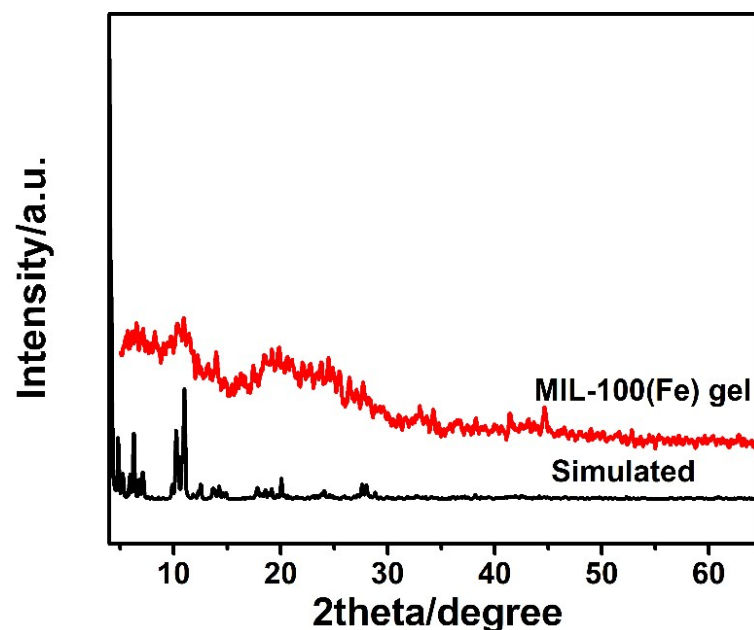


Fig. S1 PXR patterns of the as-synthesized MIL-100(Fe) gel by hydrothermal method and the XRD pattern simulated from crystal structure data of MIL-100(Fe).

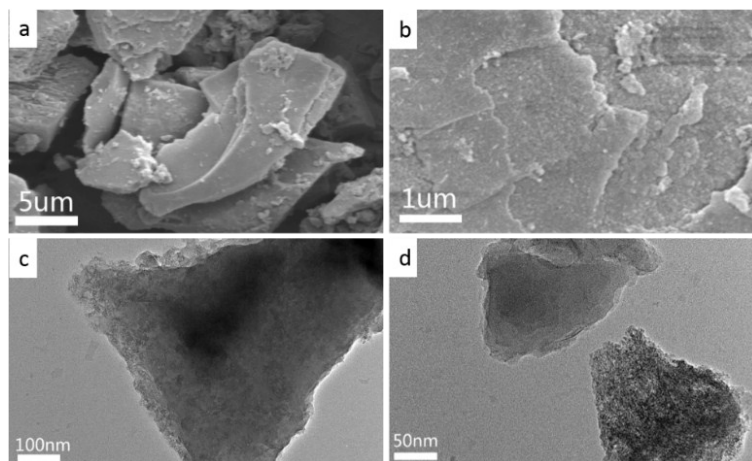


Fig. S2 (a,b) SEM ,(c,d) of TEM images of MIL-100(Fe) gel.

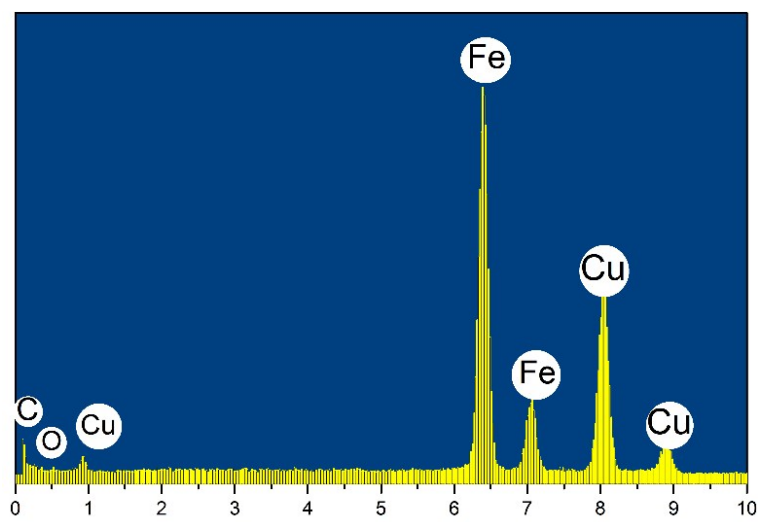


Fig. S3 EDX spectra of magnetic porous carbon.

Table S1 Elemental analysis of the magnetic porous carbon.

Element	Fe	C	H	N	O
Content (wt %)	52.54	42.13	0.44	0.24	4.65

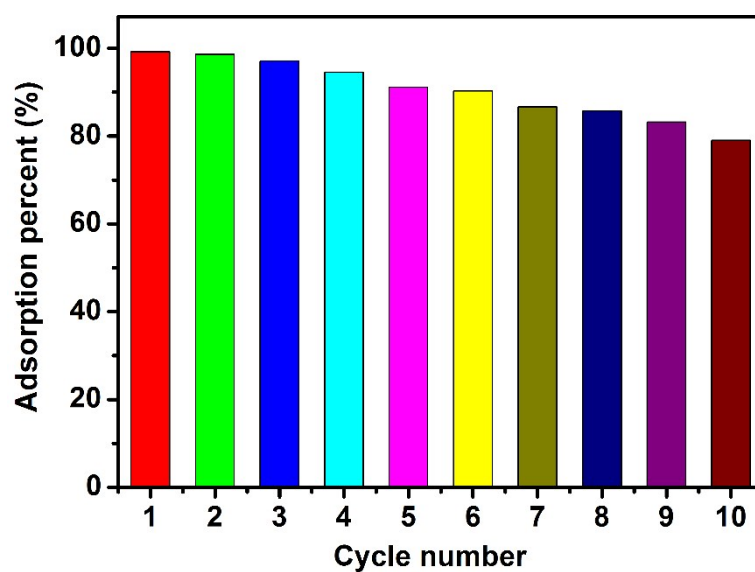


Fig. S4 Recyclability experiments for 10 cycles of the original and regenerated adsorbent magnetic porous carbon for the adsorption of MO (25ppm).

Table S2 Summary of adsorption capacity of magnetic porous carbons reported previously and investigated in the present work for adsorption of several organic dyes.

Sample	Dyes	Adsorption capacity (mg g ⁻¹)	References
Magnetic hierarchical porous carbon Fe ₃ O ₄ /C	Methyl orange	152	39
Magnetic beads containing magnetic nanoparticles and activated carbon	Methyl orange	0.65	40
Magnetic multi-walled carbon nanotubes	Methyl orange	81	41
Chitosan wrapping magnetic nanosized α-Fe ₂ O ₃ and multi-walled carbon nanotubes	Methyl orange	66	42
Magnetic alginate beads crosslinked with epichlorohydrin	Methyl orange	6.5	43
Cobalt nanosized particles	Methyl orange	170	44
Magnetic Ni-containing ordered mesoporous carbons (Ni/OMCs)	Methyl orange	107	45
Magnetic α-Fe ₂ O ₃ /crosslinked chitosan composites	Methyl orange	29.5	46
Activated carbon/ Fe ₃ O ₄ (modified by HNO ₃)nanoparticle composites	Methyl orange	182-242	47
Magnetic CoFe ₂ O ₄ -functionalized graphenesheets(CoFe ₂ O ₄ -FGS)	Methyl orange	71	48
α-Fe ₂ O ₃ /SiO ₂ /chitosan composite	Methyl orange	34.3	49
Magnetic cellulose beads entrapping activated carbon γ-Fe ₂ O ₃ /C	Methyl orange	2.1	50
Metal-organic gel derived magnetic particles embedded porous carbon (γ-Fe ₂ O ₃ /Fe ₃ C/α-Fe/C)materials	Methyl orange	182.8	This work