Supplementary Material (ESI) for Journal of Materials Chemistry

Endosomal pH-activatable magnetic nanoparticles-capped mesoporous silica for intracellular controlled release

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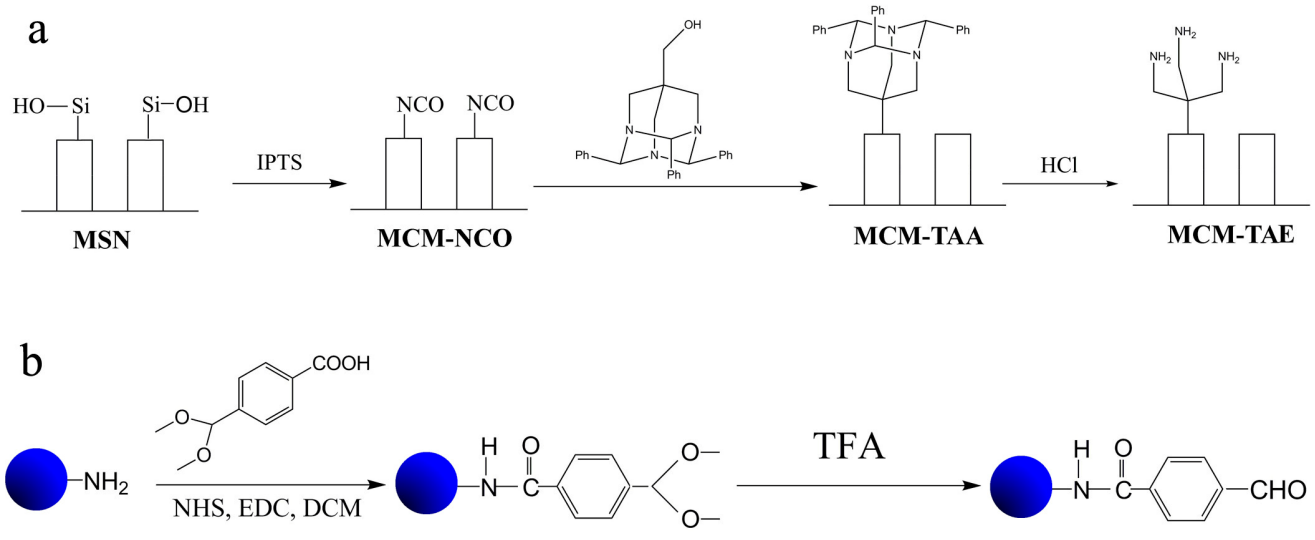
SUPPORTING INFORMATION



Scheme S1. Schematic synthesis outline of MCM-TAE (a) and Fe_3O_4-CBA (b).

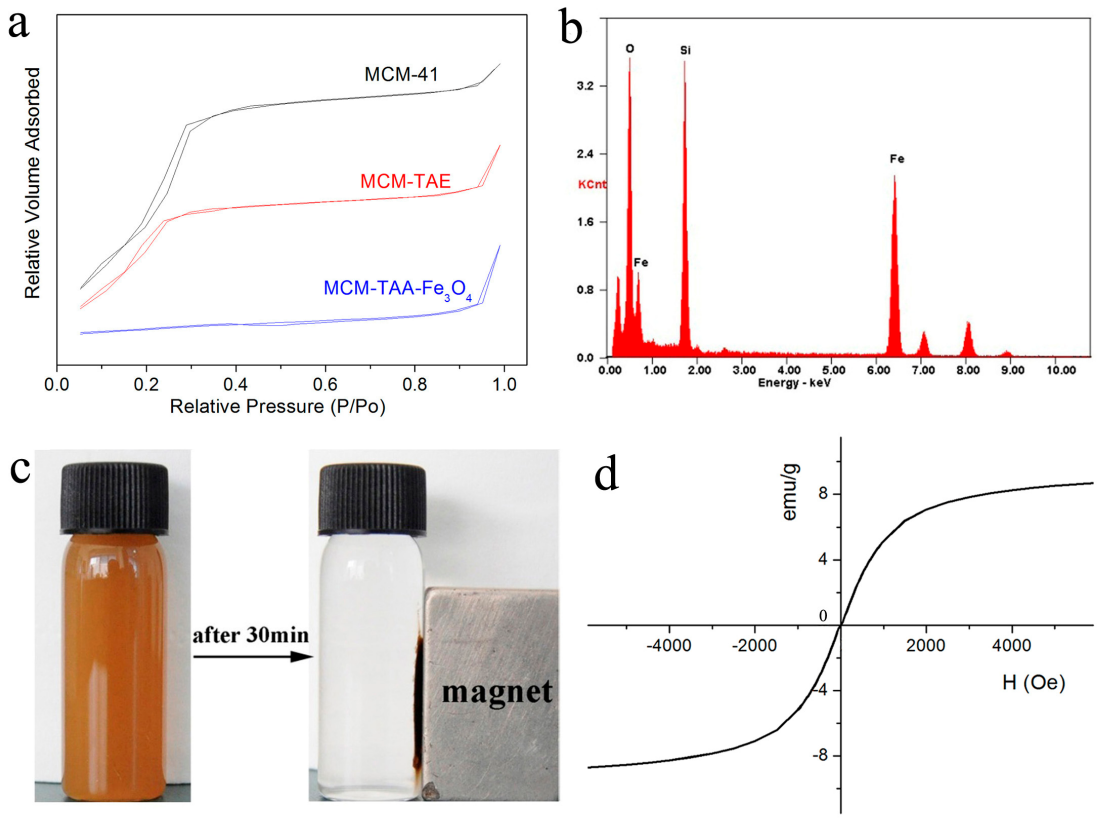


Fig. S1 (a) N_2 adsorption/desorption isotherms of MCM-41 as-synthesized, tri(aminomethyl)ethane-functionalized MCM-41 (MCM-TAE), and the solid MCM-TAA-Fe_3O_4, (b) EDS spectra of the solid MCM-TAA-Fe_3O_4, (c) photographs show the homogeneous aqueous solution, and the MCM-TAA-Fe_3O_4 after magnetic separation from the solution under an external magnetic field, and (d) field-dependent magnetization at 300K of MCM-TAA-Fe_3O_4.

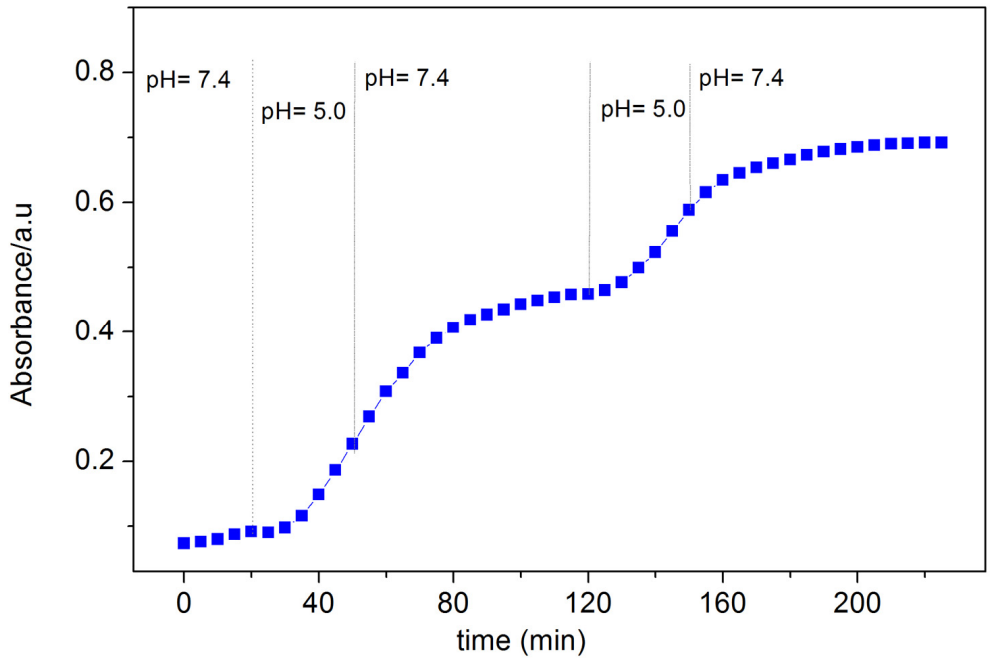


Fig. S2 The dexamethasone released profile from MCM-TAA-Fe_3O_4 with two pH stimuli**.**

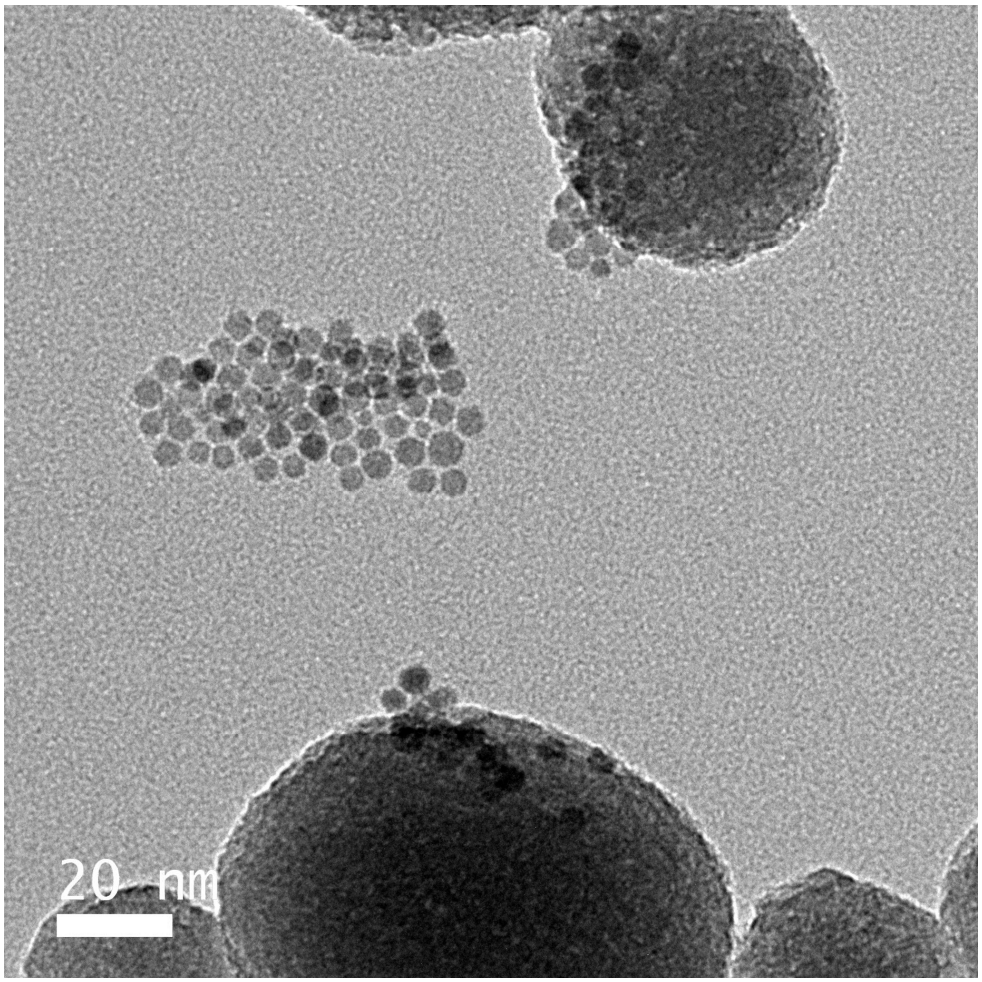


Fig. S3 TEM image of MCM-TAA-Fe_3O_4 nanopaticles at pH 5.0**.**

Table S1. Zeta-potentials of Fe_3O_4-CBA, MCM-TAE and MCM-TAA-Fe_3O_4 nanopaticles at pH 5.0 and 7.4.

Zeta-potentials (mV)	Fe_3O_4-CBA	MCM-TAE	MCM-TAA-Fe_3O_4
pH 5.0	+19.5	+19.1	-
pH 7.4	-14.3	-33.9	-22.8