Electronic Supplementary Information (ESI)

Novel MgO/Hollow Carbon Sphere Composites for CO_2 Adsorption

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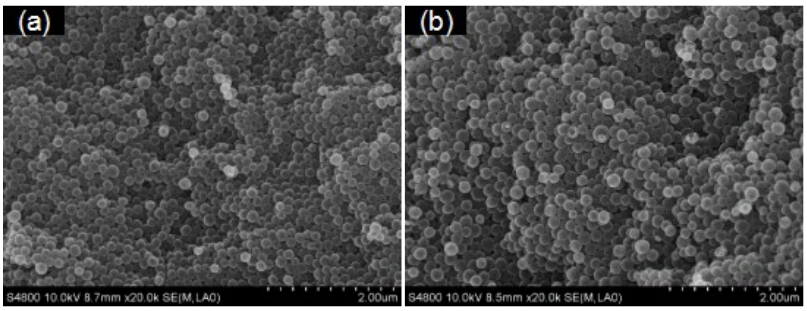

Fig. S1 SEM image: (a) MgO/HCS-8.6, and (b) MgO/HCS-8.6.

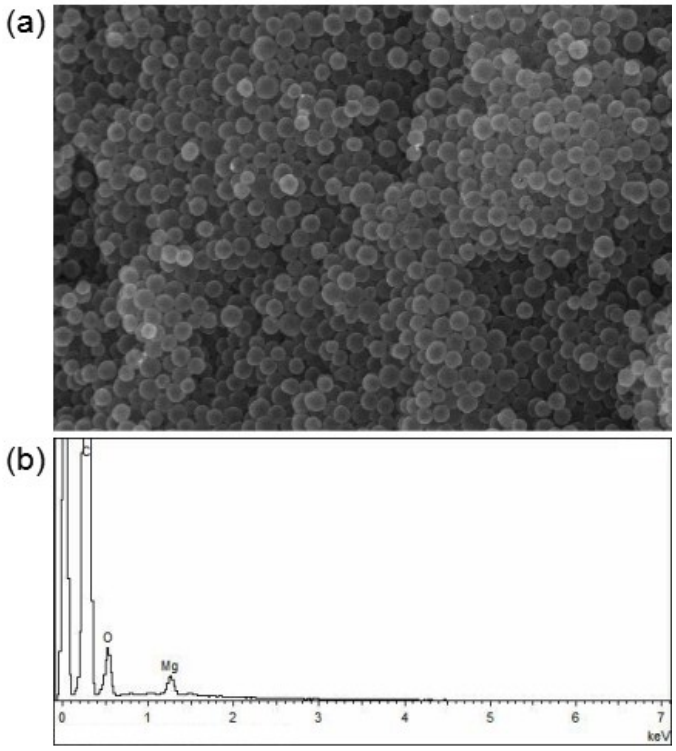

Fig. S2 (a) SEM image and (b) EDX spectrum of MgO/HCS-8.6.

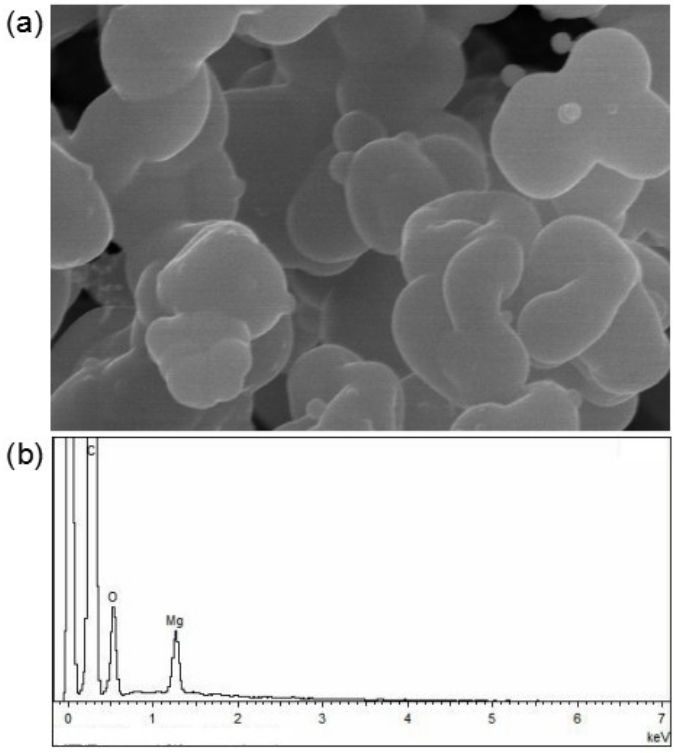

Fig. S3 (a) SEM image and (b) EDX spectrum of MgO/HCS-70.8.

Table S1. Parameters of the porous structures of MgO/HCS-0, MgO/HCS-8.6 and MgO/HCS-70.8.

Sample	BET surface area (m^2 g^{-1})	Total pore volume (cm^3 g^{-1})	Micropore volume (cm^3 g^{-1})	Mesopore volume (cm^3 g^{-1})
MgO/HCS-0	649	1.3	0.2	1.1
MgO/HCS-8.6	573	0.8	0.2	0.6
MgO/HCS-70.8	340	0.5	0.1	0.4

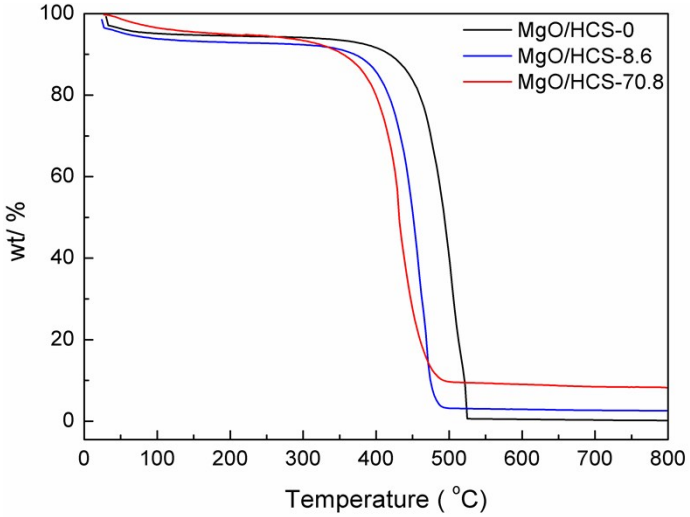

Fig. S4 Thermogravimetric analysis (TGA) curves of MgO/HCS-0, MgO/HCS-8.6 and MgO/HCS-70.8.

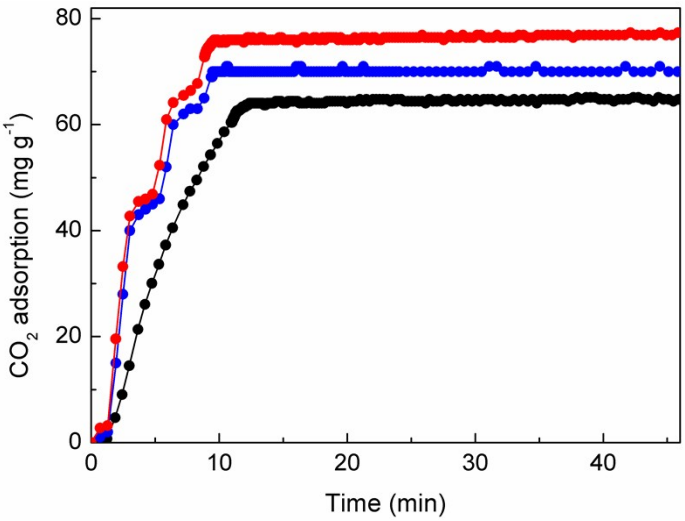

Fig. S5 CO_2 adsorption (75 °C) profiles of MgO/HCS-0 (black), MgO/HCS-8.6 (blue) and MgO/HCS-70.8 (red).