Supporting information

Facile Strategy for the Synthesis of Silver Nanoparticles on Magnetic Fe_3O_4@C Core-shell Nanocomposites and Their Application in Catalytic Reduction

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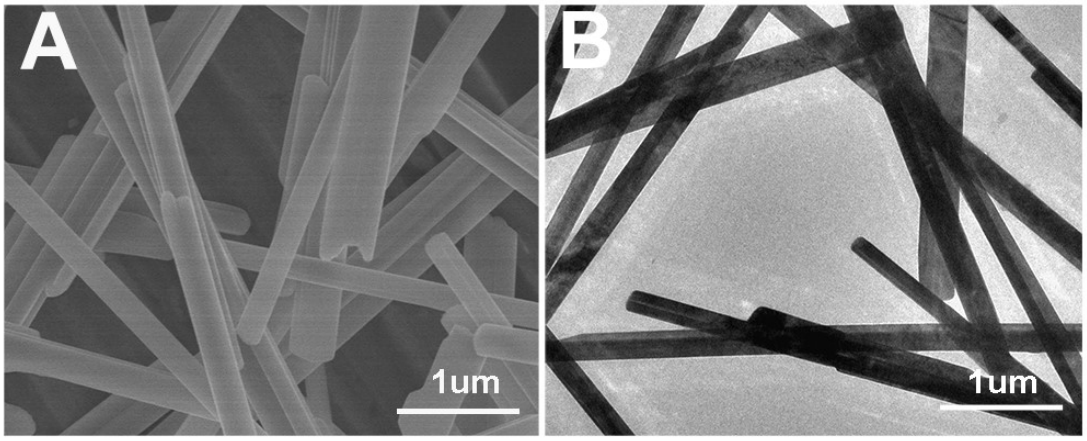

Fig.S1 SEM and TEM images of (A, B) MoO_3

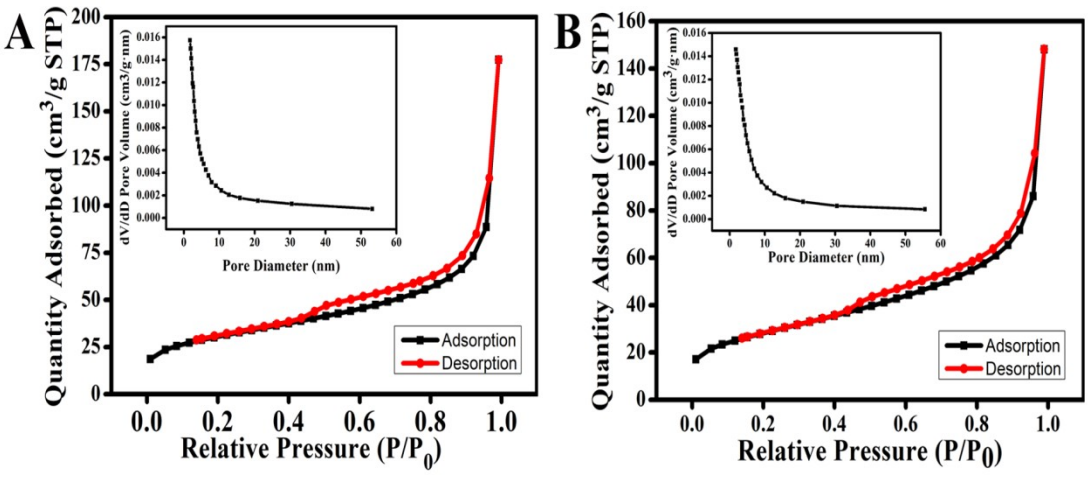

Fig.S2 Nitrogen adsorption-desorption isotherms of Fe_3O_4@C-Ag(A,1:1,B,1:3). Inset: pore size distribution.

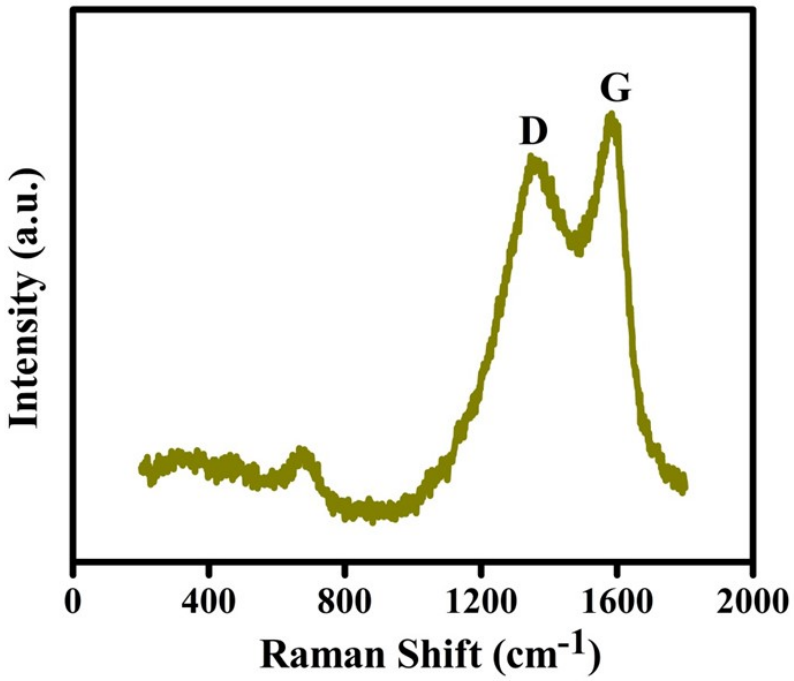

Fig. S3. Raman analysis curve of Fe_3O_4@C-Ag

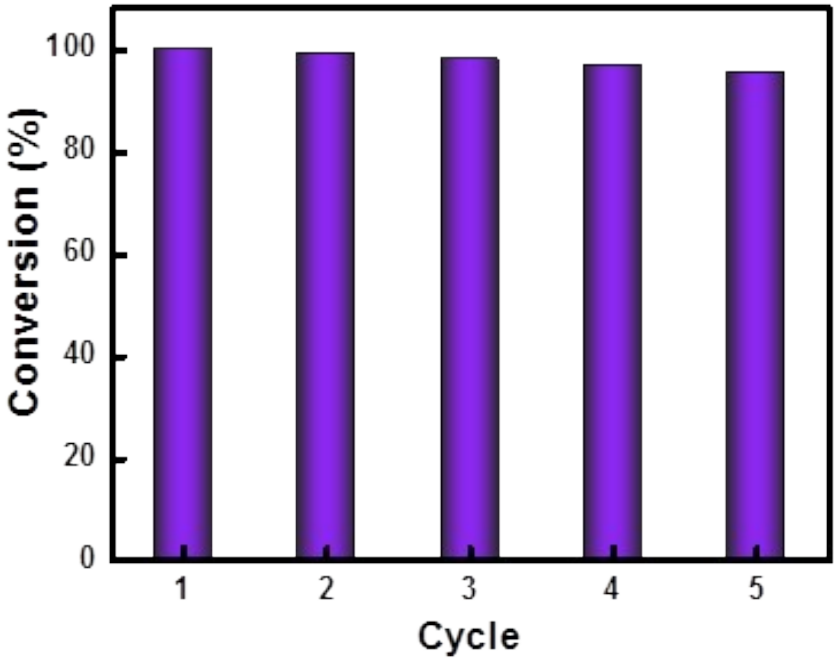

Fig. S4. Cycle test of the representative Fe_3O_4@C-Ag.

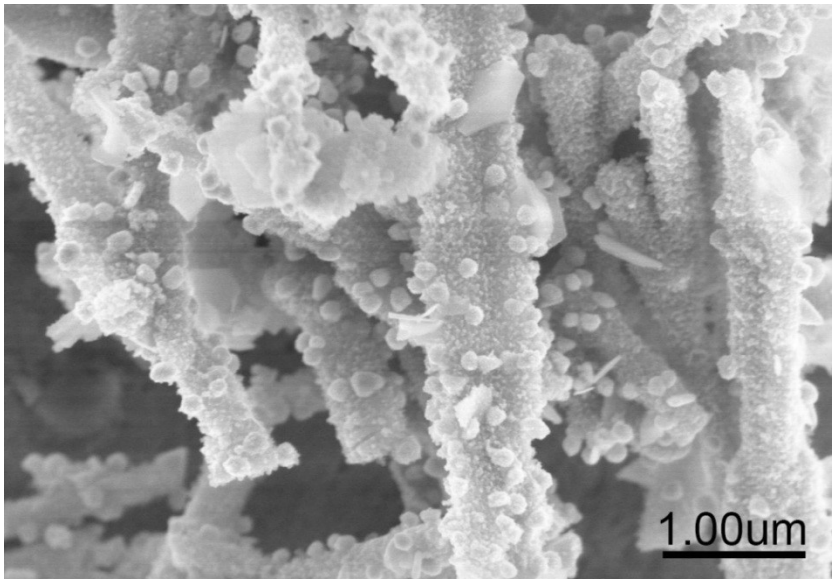

Fig. S5. SEM image of the Fe_3O_4@C-Ag Cycle test of the representative.

Table S1. ICP data of Fe_3O_4@C-Ag(1:1),(1:2) and (1:3).

Catalyst	Ag(μg/mg)
Fe_3O_4@C-Ag（1：1）	8.18
Fe_3O_4@C-Ag（1：2）	17.58
Fe_3O_4@C-Ag（1：3）	10.8

Table S2. The isotherms of Fe_3O_4@C-Ag(1:1),(1:2) and (1:3).

Catalyst	BET surface area($m^2 \cdot g^{-1}$)	average pore diameter(nm)	pore volume($cm^3 \cdot g^{-1}$)
Fe_3O_4@C-Ag（1：1）	106.21	4.4	0.2593
Fe_3O_4@C-Ag（1：2）	83.59	5.0	0.2093
Fe_3O_4@C-Ag（1：3）	99.24	4.6	0.2180