

Supporting Information

Synthesis and characterization of magnetic elongated hollow mesoporous silica nanocapsules with silver nanoparticles

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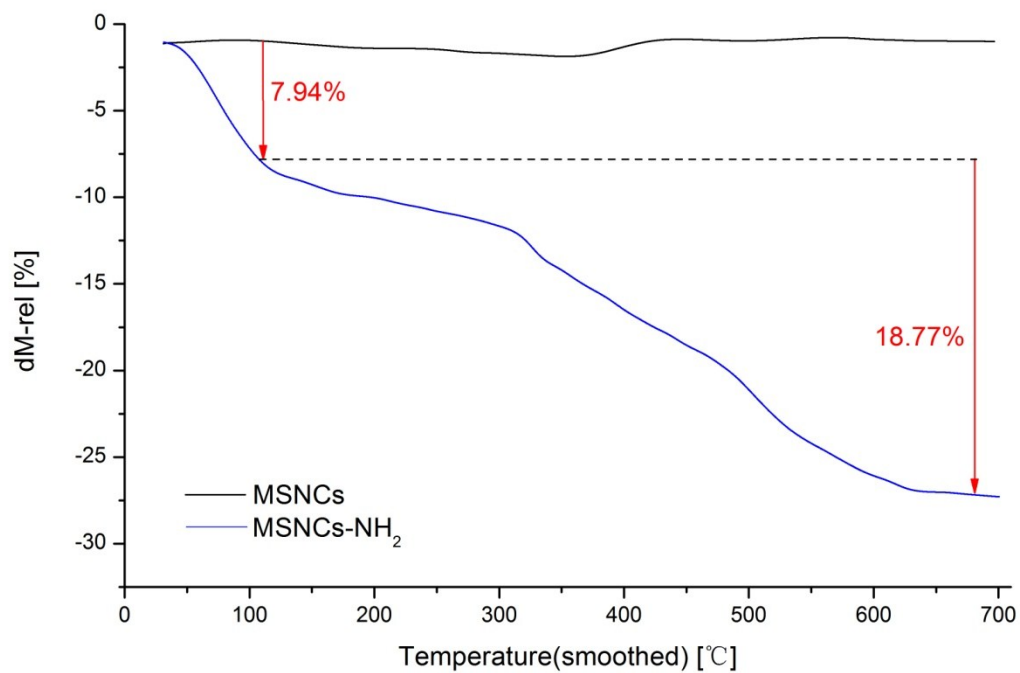


Figure S1. TGA curves of MSNCs and MSNCs-NH₂.

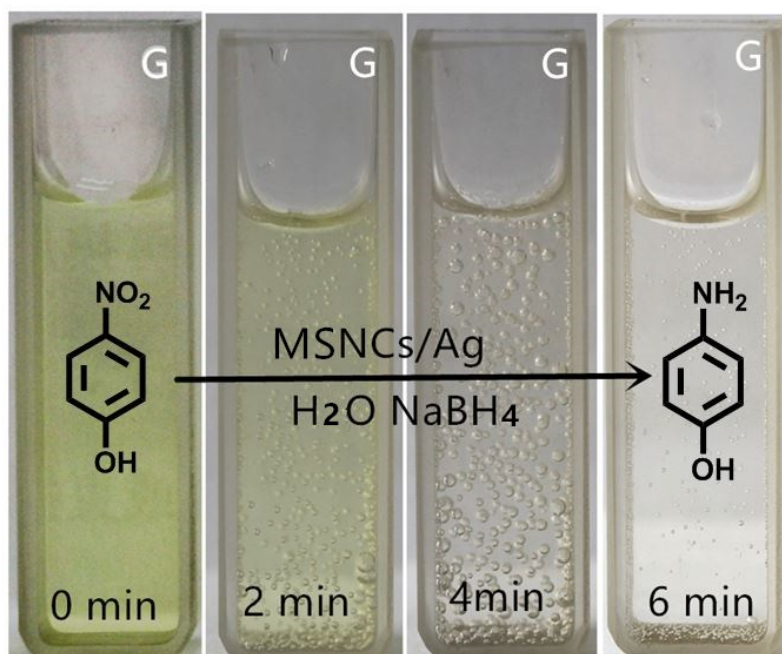


Figure S2. The color changes of the solution in the cuvette at different times

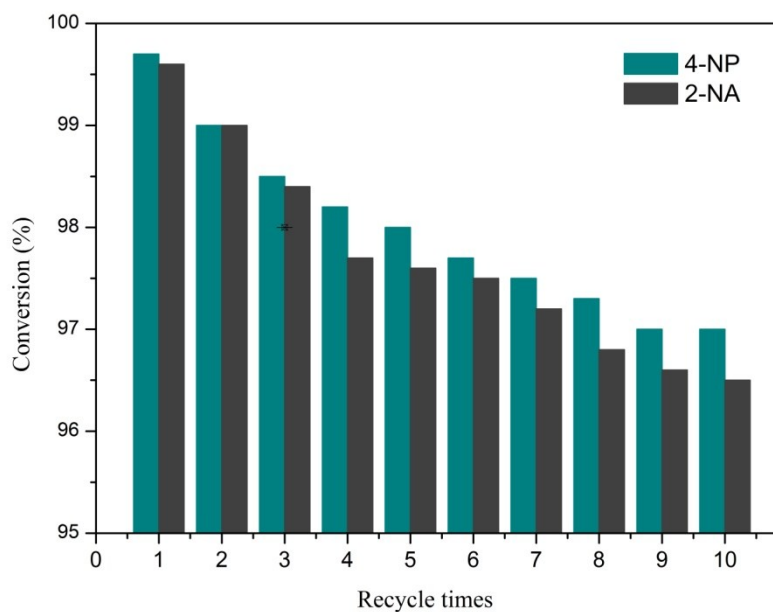
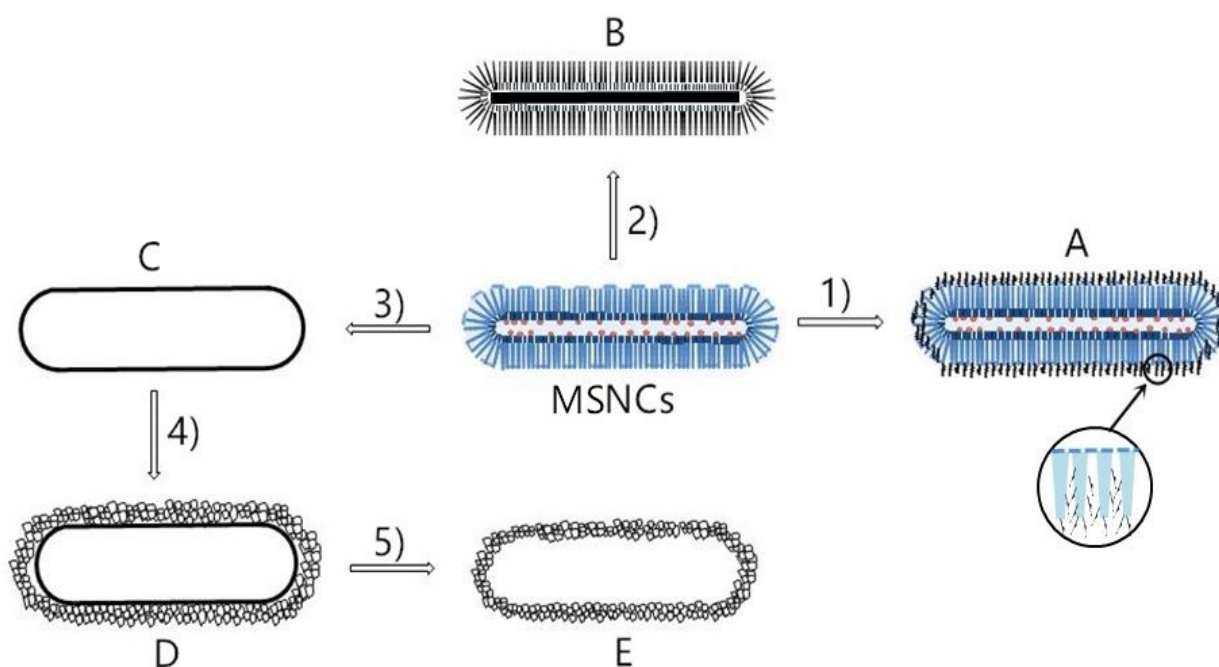


Figure S3. The reusability of MSNCs/Ag catalyst for the reduction of 4-NP and 2-NA with NaBH₄.

Table S1. Inductively coupled plasma (ICP) analysis of the content of Ag, surface areas and pore volume of MSNCs and MSNCs/Ag

Samples	Content of Ag (%)	Surface area (m ² /g)	Pore volume (cm ³ /g)	Pore width(nm)
MSNCs		850	1.60	8
MSNCs/Ag	15.43	336	0.67	7



Scheme S1. Illustration of the procedures used to synthesize a variety of materials derived from the MSNCs nanocapsules: (A) functionalized MSNCs capsules, (B) urchin-like nanoparticles with outward spines, (C) porous carbon capsules, (D) carbon capsules coated with an inorganic phase, (E) inorganic capsules. The basic synthesis procedures used were: (1) incorporation of functional groups, (2) nanocasting and silica etching, (3) carbonization and silica etching, (4) coating the carbon capsule with an inorganic phase (e. g. metallic oxides) and (5) calcination.