Supporting Information

Synthesis of $Ag@SiO_2$ Hybrid Nanoparticles Templated by a Triton X-100)/1-hexanol/cyclohexane/H_2O Water-in-Oil Microemulsion

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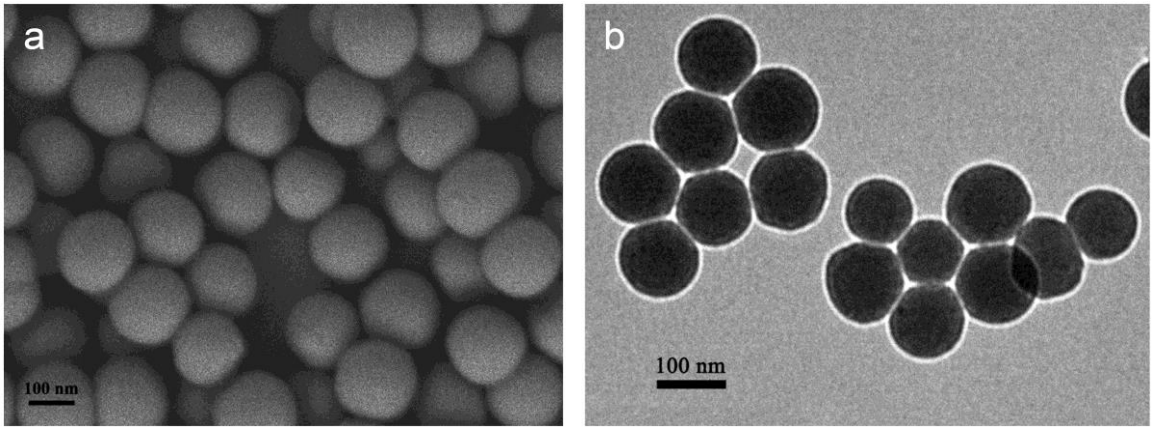

Figure S1. SEM (a) and TEM (c) images of SiO_2 nanoparticles synthesized at the absence of Ag^+.

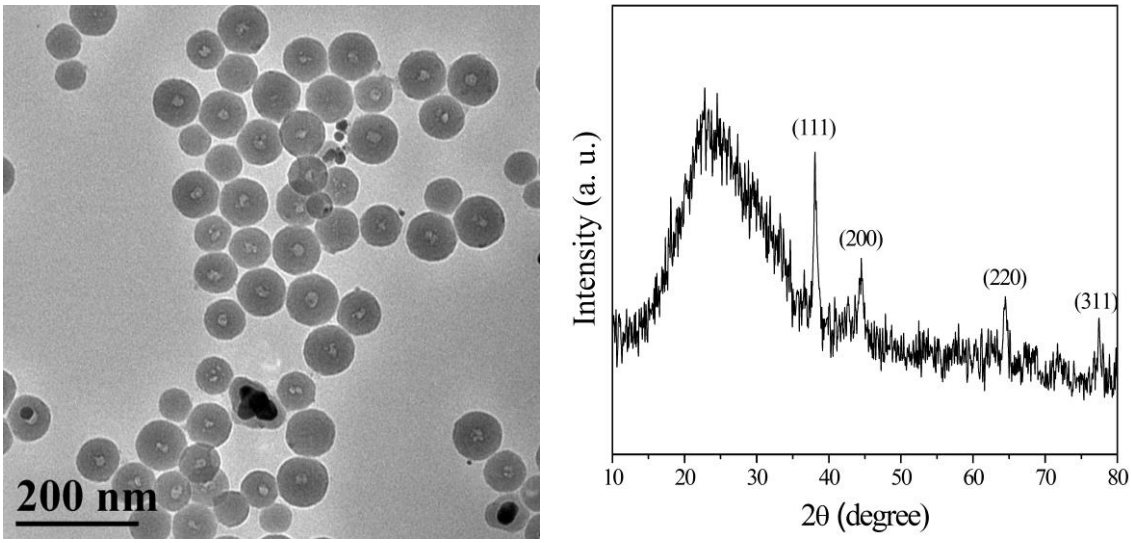

Figure S2. TEM image and wide-angle XRD pattern of $Ag@SiO_2$ nanoparticles synthesized at $n(AgNO_3/NaBH_4) = 1$ and $V(AgNO_3(aq)/TEOS) = 2$.

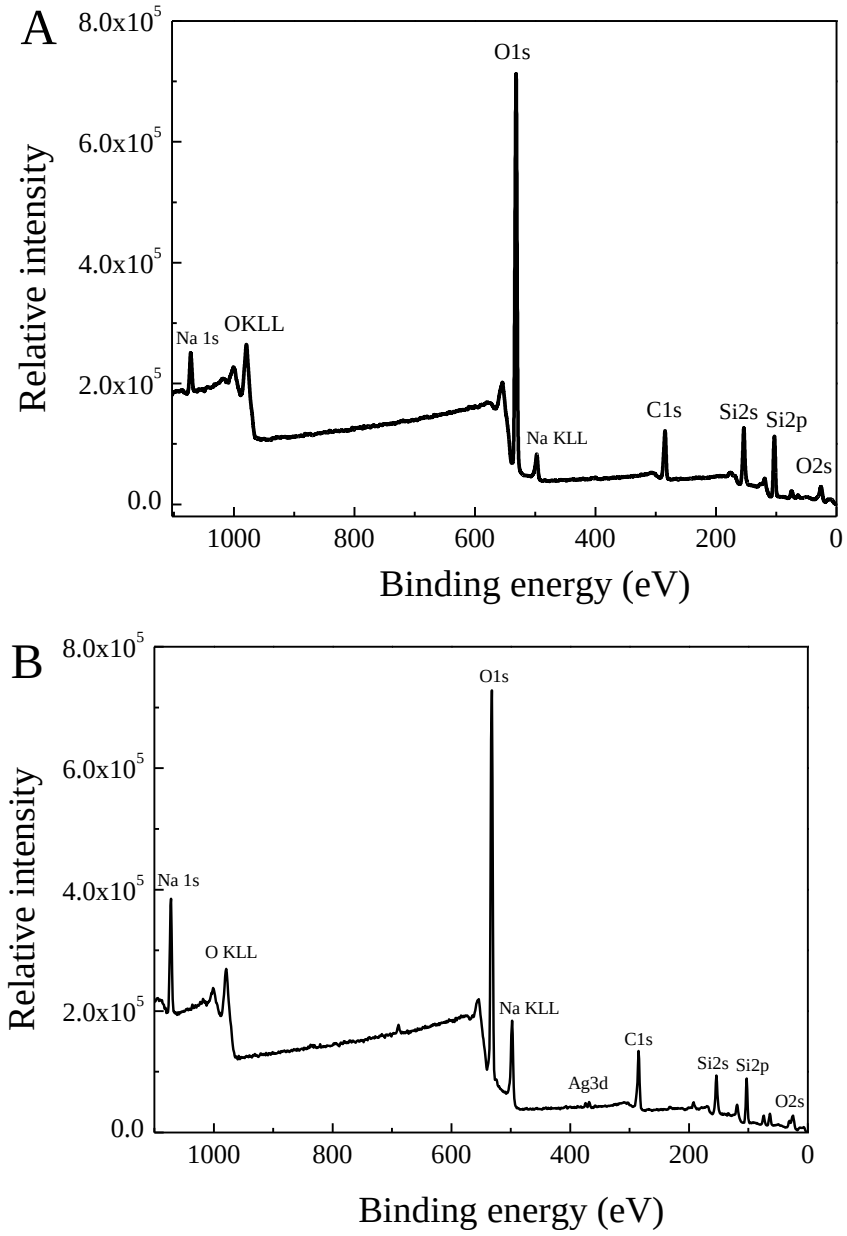

Figure S3. The XPS survey spectrum of A) pure SiO_2 nanoparticles and B) Ag@SiO_2 hybrid nanoparticles synthesized at $n(AgNO_3/NaBH_4) = 0.5$ and $V(AgNO_3(aq)/TEOS) = 2$.

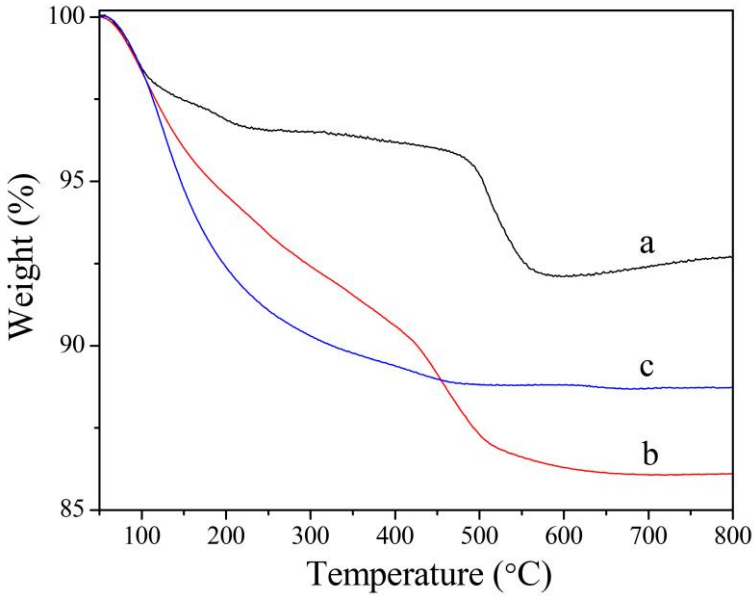

Figure S4. TGA curves of pure SiO_2 nanoparticles (a) and different structures of $Ag@SiO_2$ nanoparticles (b).