

Supporting Information

Effect of TiO₂ Shell on Optical and Thermal Properties of Silver Nanowires†

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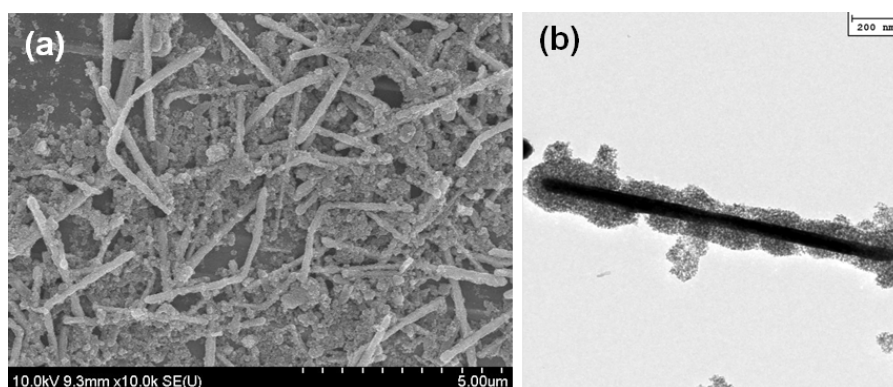


Fig. S1 (a) SEM and (b) TEM images of Ag@TiO₂ core-shell nanowires synthesized from 7.0 μM of TBT.

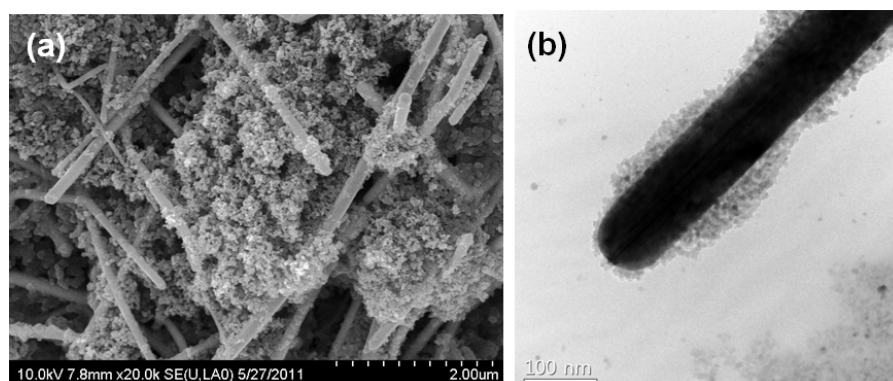


Fig. S2 (a) SEM and (b) TEM images of Ag@TiO₂ core-shell nanowires synthesized in the absence of

functionalized monolayers.

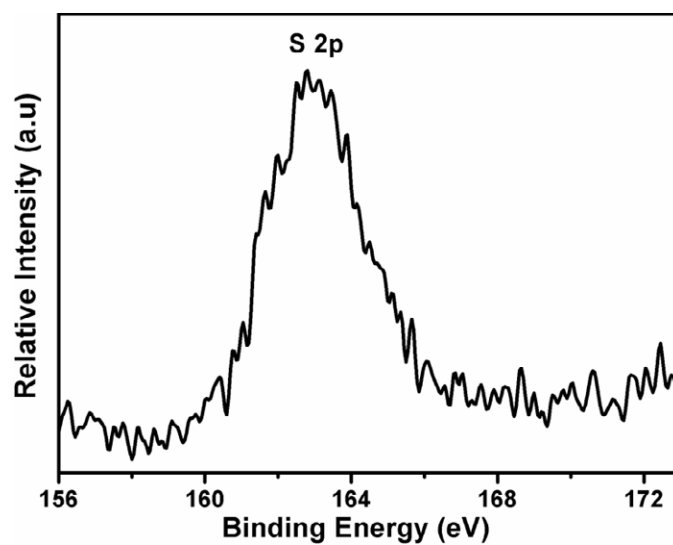


Fig. S3 XPS spectra of S 2p.

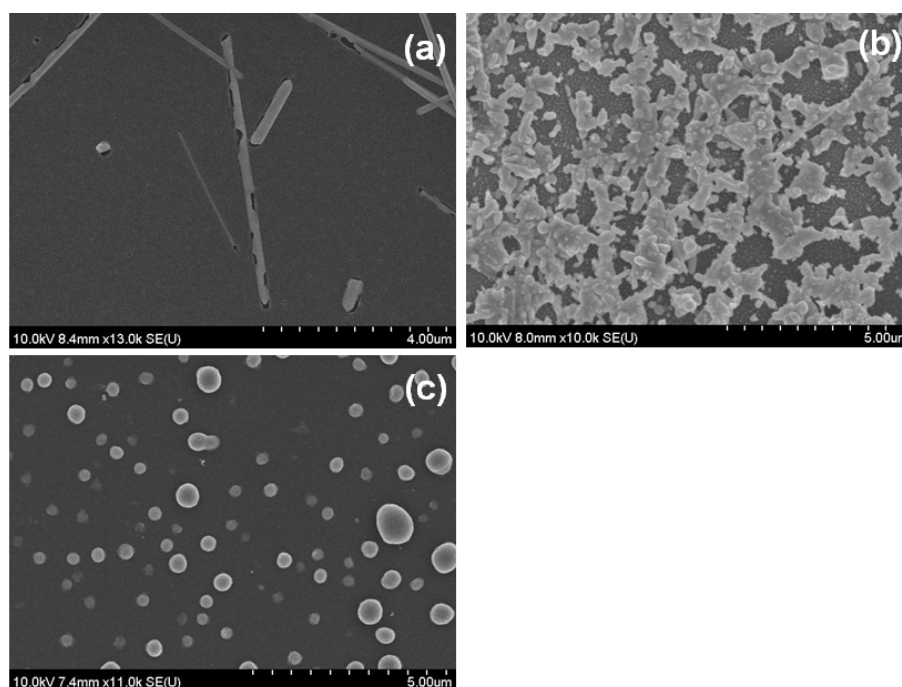


Fig. S4 SEM images of silver nanowires annealed at (a) 400 °C (b) 450 °C and (c) 500 °C for 15 min.

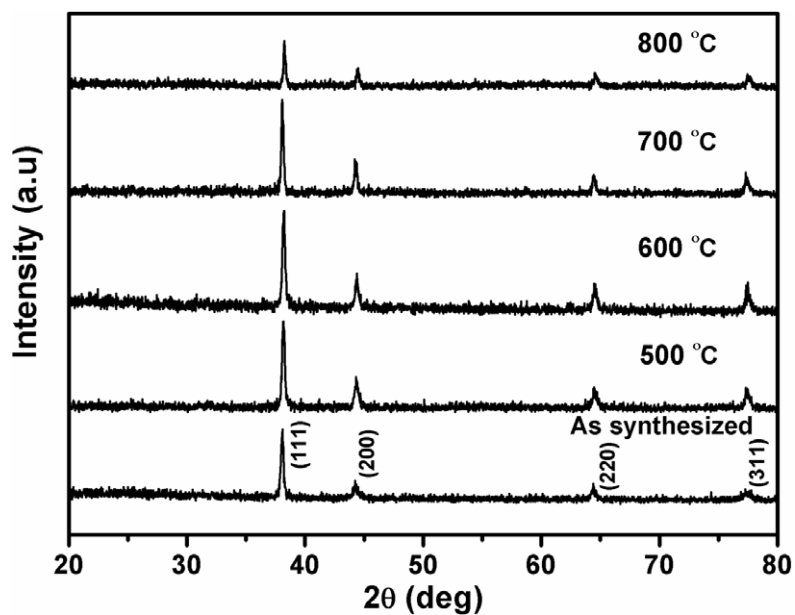


Fig. S5 XRD pattern of Ag@TiO₂ core-shell nanowires (shell thickness of 10 nm) annealed at a series of temperatures for 2h. In the case of annealed samples also we could not observe TiO₂ peaks in the XRD spectrum. This may be because the signals from the TiO₂ shells were relatively weak and overlapped with the background signals from glass substrates.

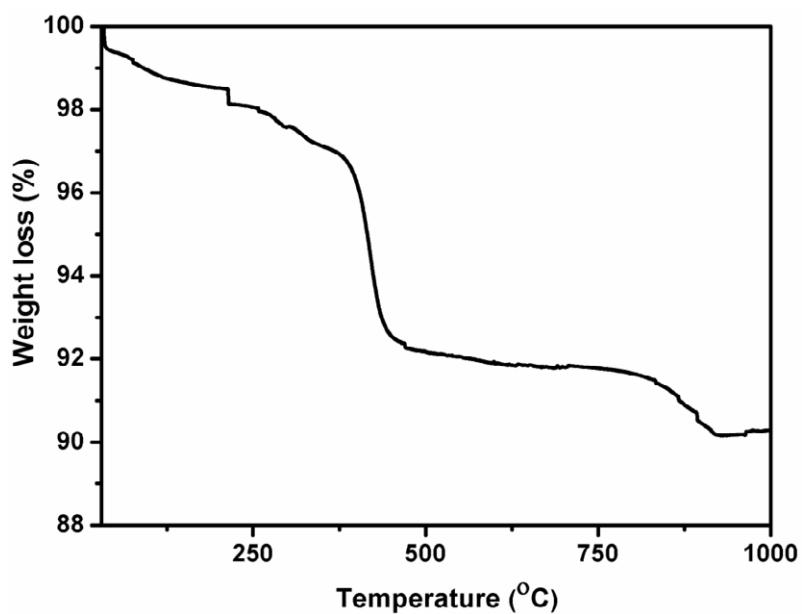


Fig. S6 Thermogram of the silver nanowires. The observed weight loss around 380 °C is mainly due to the decomposition of the organic PVP stabilizer.