

Supporting Information

One-step green synthesis of silver nanobelts assisted by sodium carboxymethylcellulose with high catalytic activity for the reduction of 4-nitrophenol

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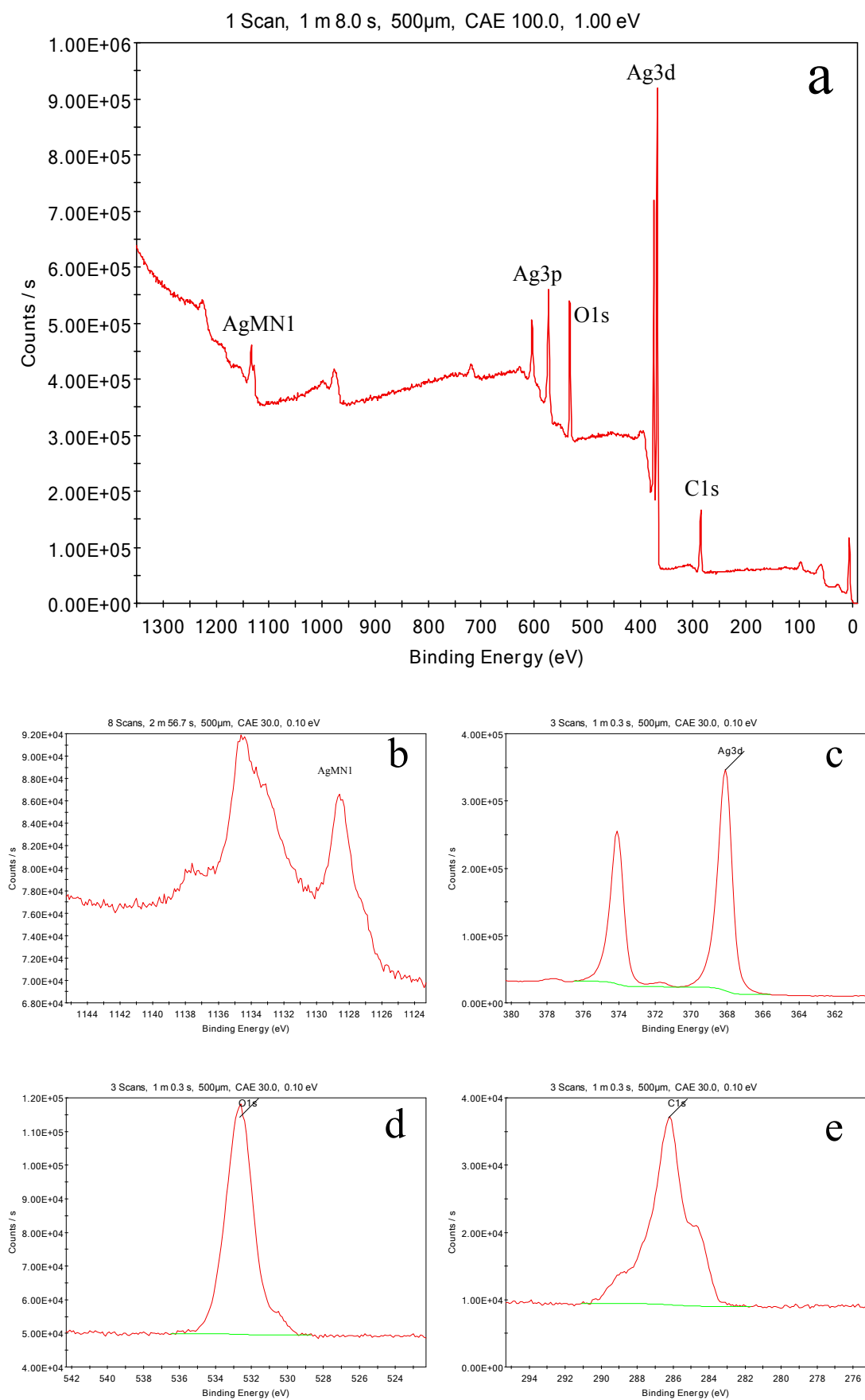


Figure S1. XPS spectrum of the AgNBs under optimal conditions.

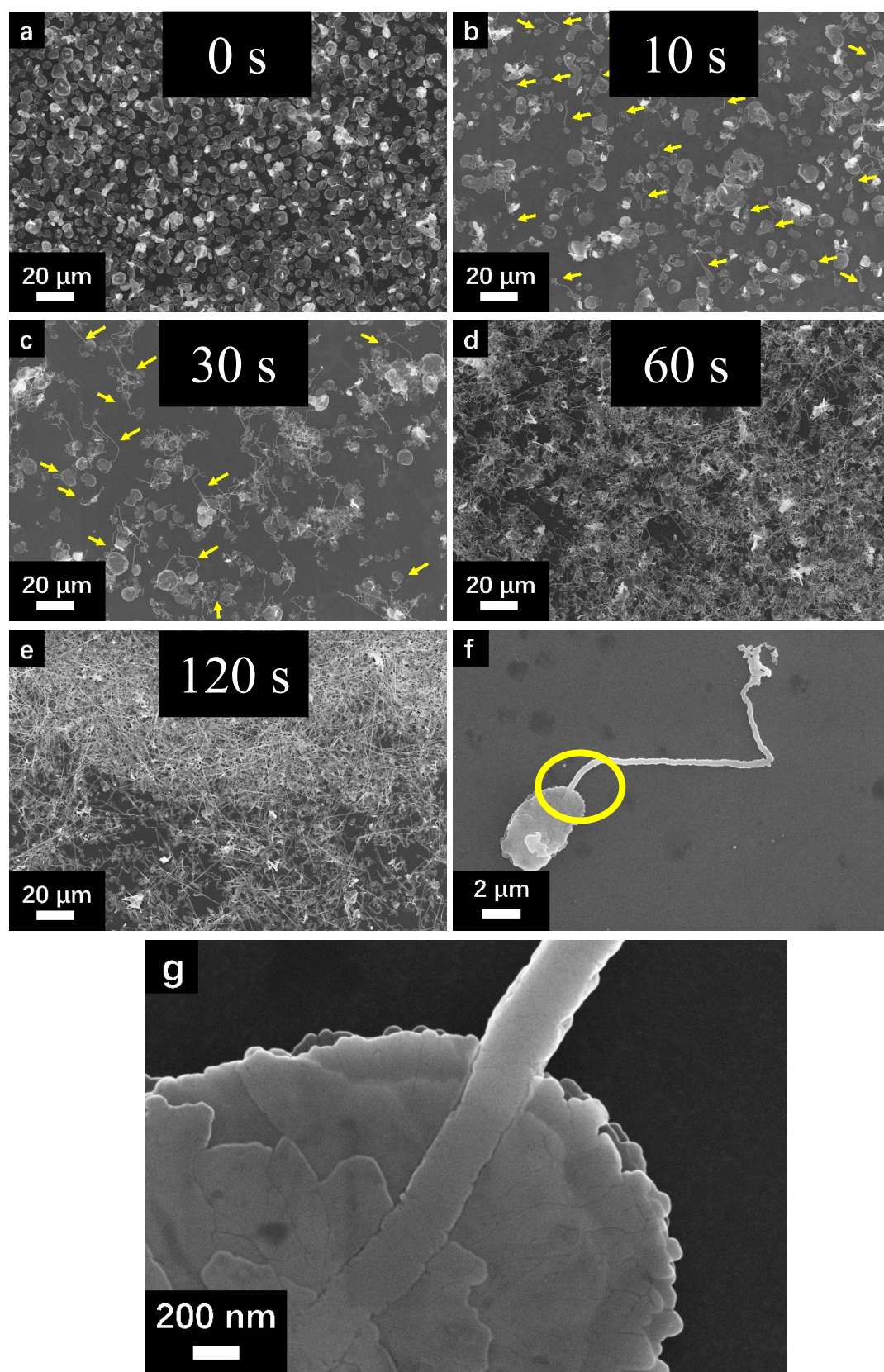


Figure S2. Time-dependent intermediate products of the AgNBs (a-e) and high magnification SEM images of the nanobelt-nanoplate junctions (f and g). Scale bar: 20 μm (a-e), 2 μm (f) and 200 nm (g).

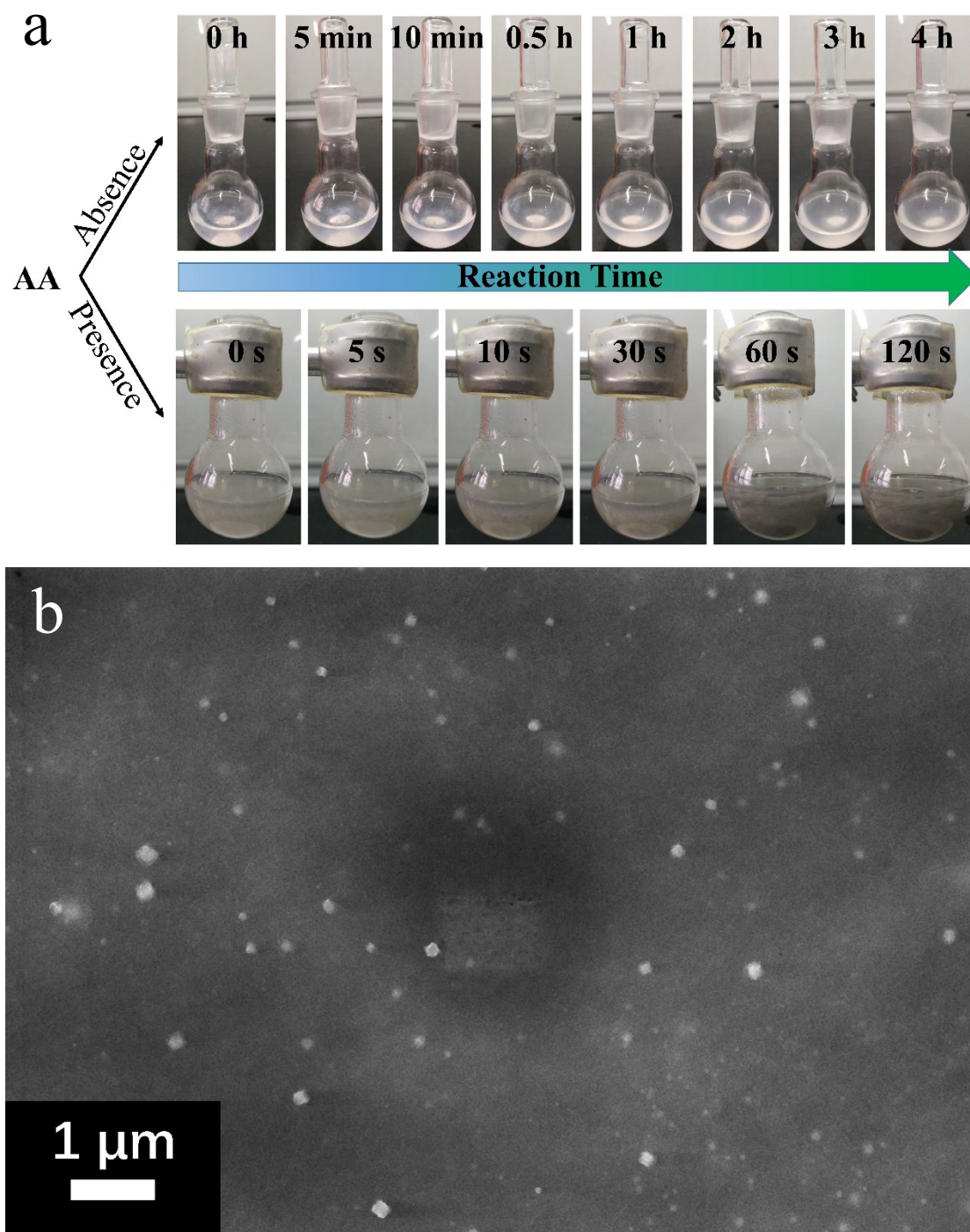


Figure S3. The photograph of the reaction system at different times in the absence or presence of AA (a) and SEM image of the product after reaction for 4 h when AA was absent (b).

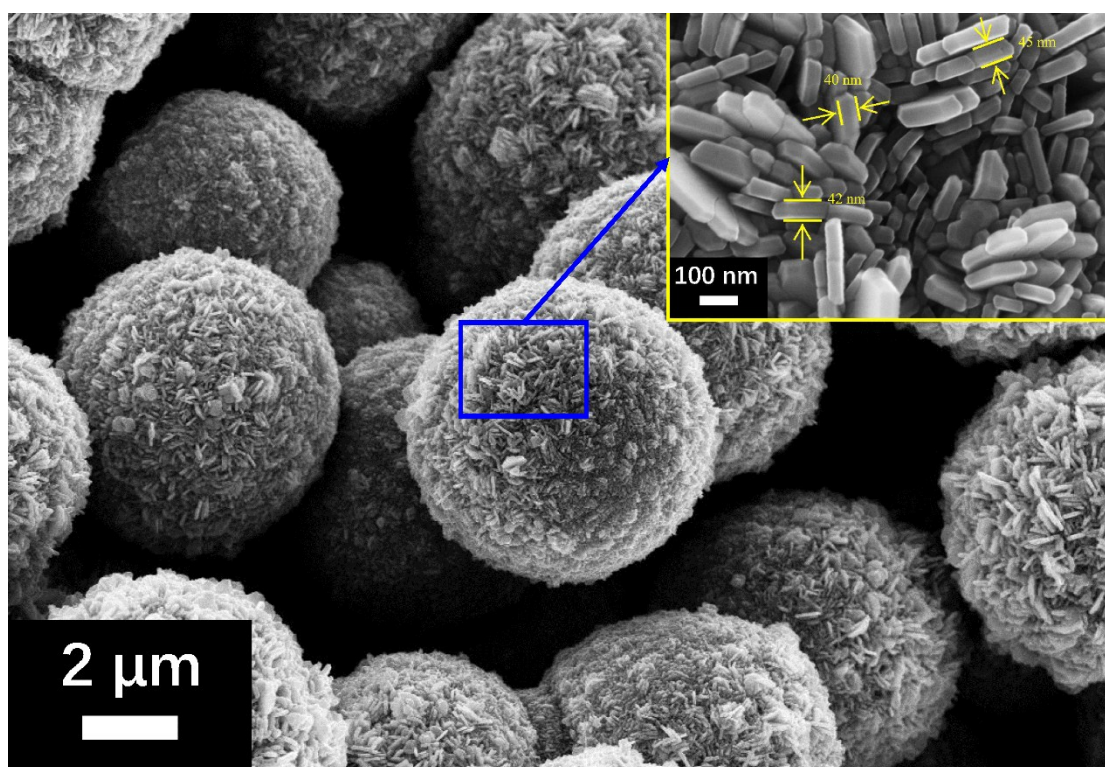


Figure S4. Low- and high-magnification SEM images of the HAMs obtained with a AgNO_3/AA ratio of 1. Scale bar: 2 μm (Inset scale bar: 100 nm).

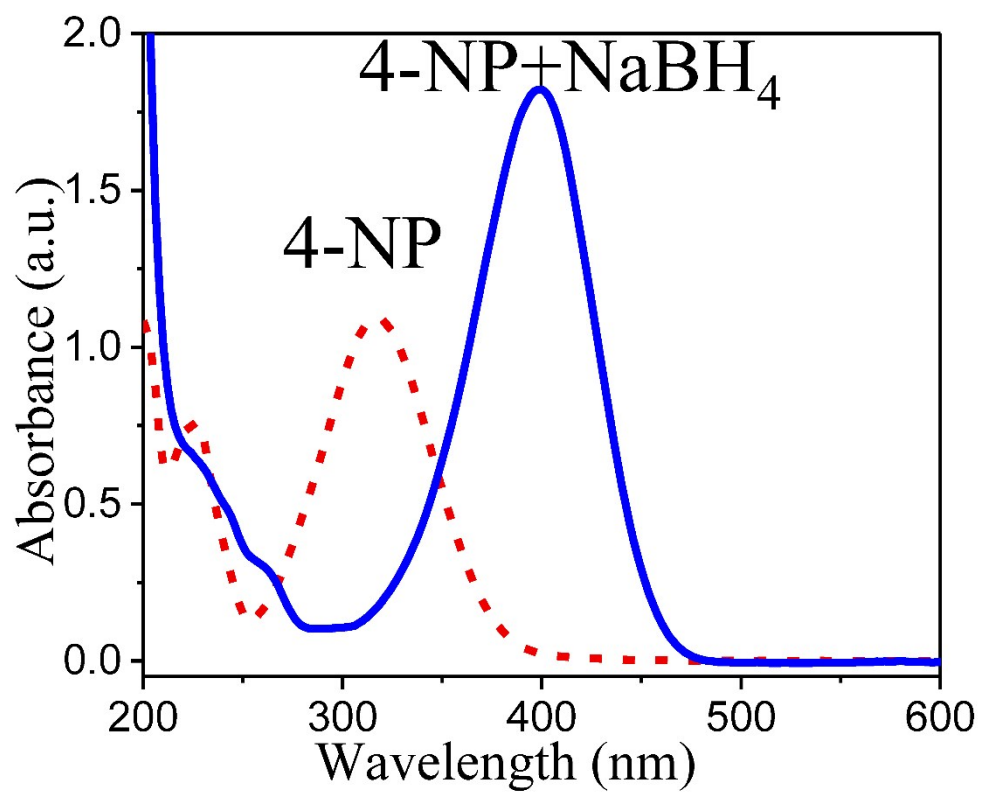


Figure S5. UV-vis spectra of 4-NP before and after adding the NaBH₄ solution.

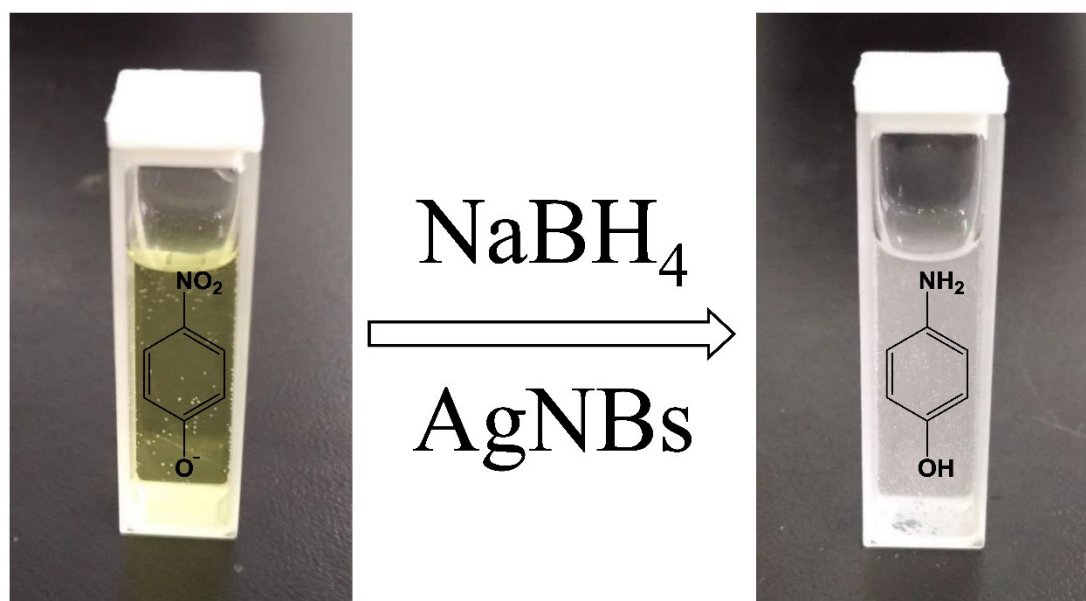


Figure S6. Photographs showing the reduction of 4-NP to 4-AP in the presence of the AgNBs with a colour change from pale yellow to colourless.

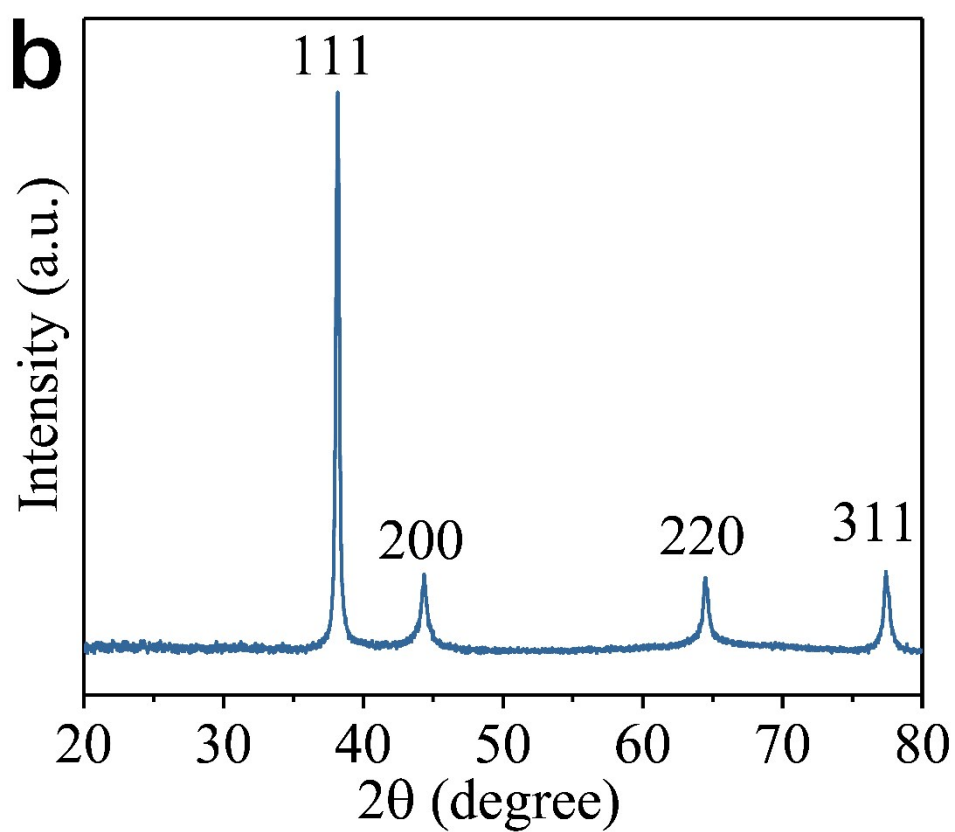
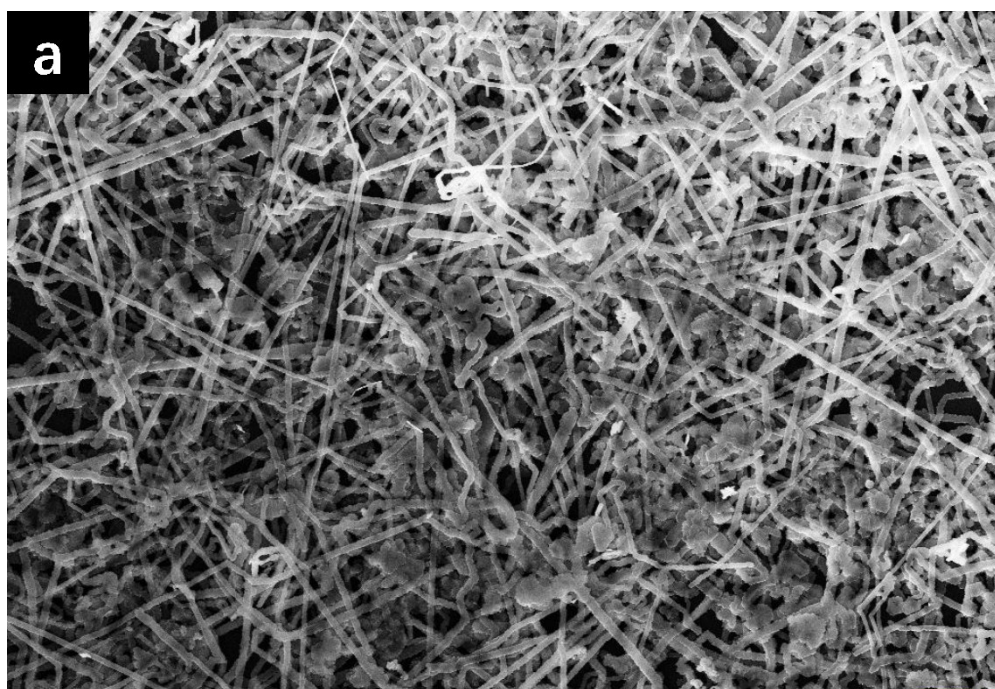


Figure S7. SEM (a) and XRD patterns (b) of the recycled AgNBs after three rounds of catalysis.