

Electronic Supplementary Information

Synthesis of Thermal Stable Ag@TiO₂ Core-Shell Nanoprisms and Plasmon-Enhanced Optical Properties for P3HT Thin Film

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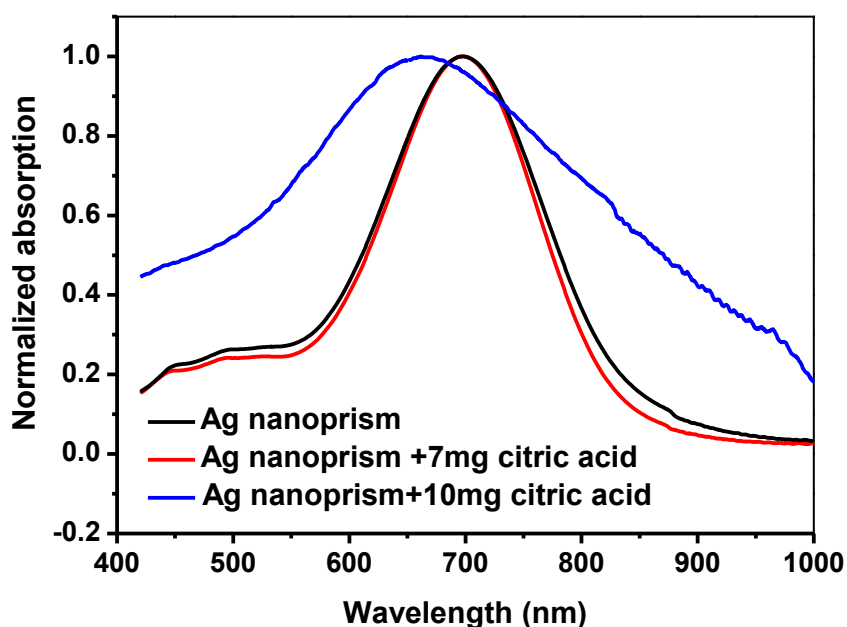


Fig. S1 Normalized absorption spectra of 1ml of Ag NPs ethanol solution with different amount of citric acid.

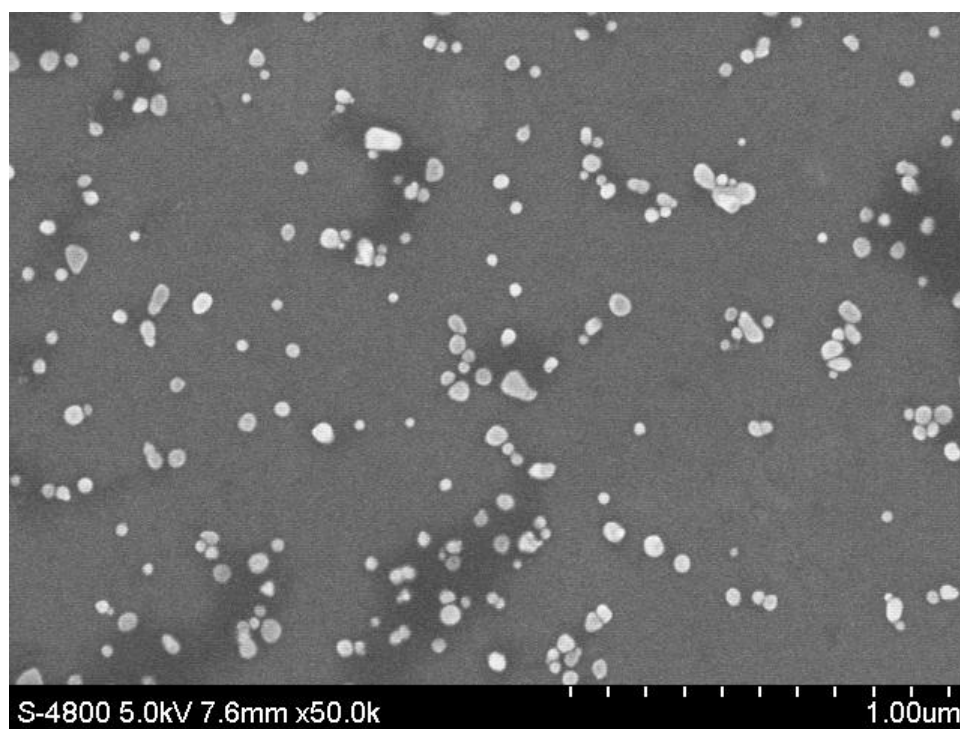


Fig. S2 SEM image of 1ml of Ag NPs in ethanol with addition of 10 mg citric acid

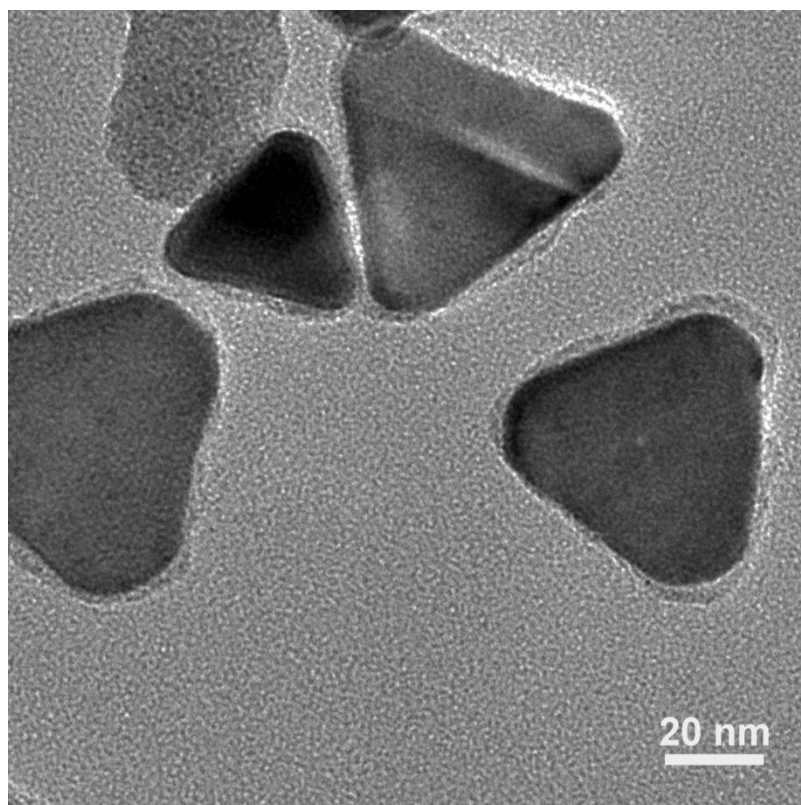


Fig. S3 TEM image of Ag@TiO₂ core-shell NPs obtained from 10uL TiO₂ sol-gel precursor for 15min.

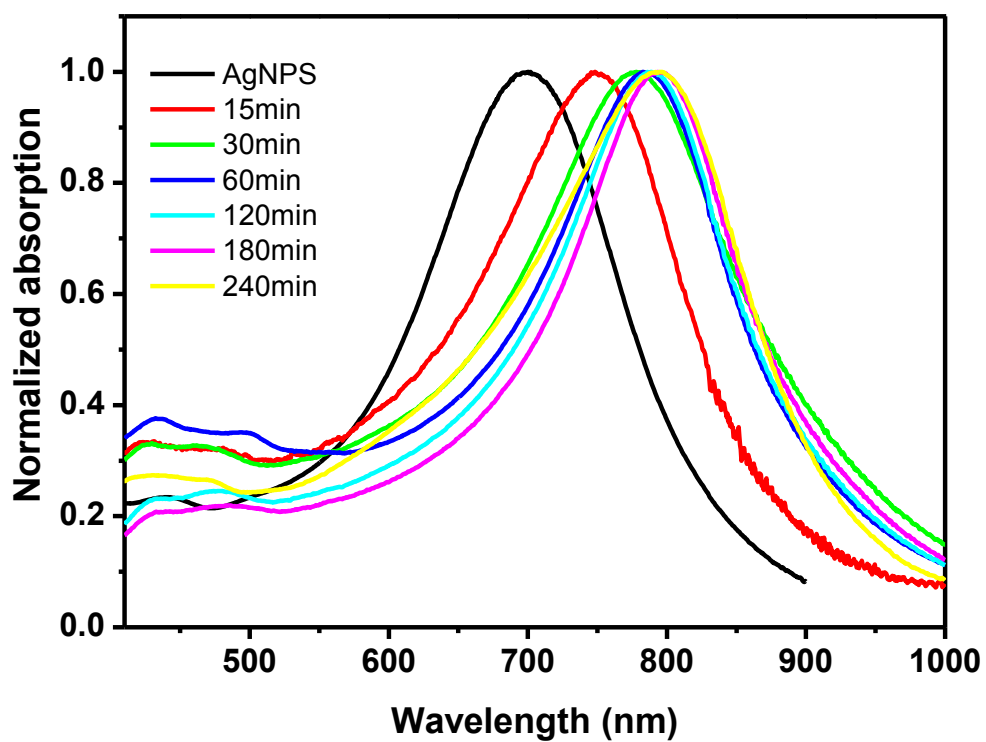


Fig. S4 Normalized absorption spectra of Ag NPs coated with TiO₂ shell obtained from 10uL TiO₂ sol-gel precursor for different reaction time.

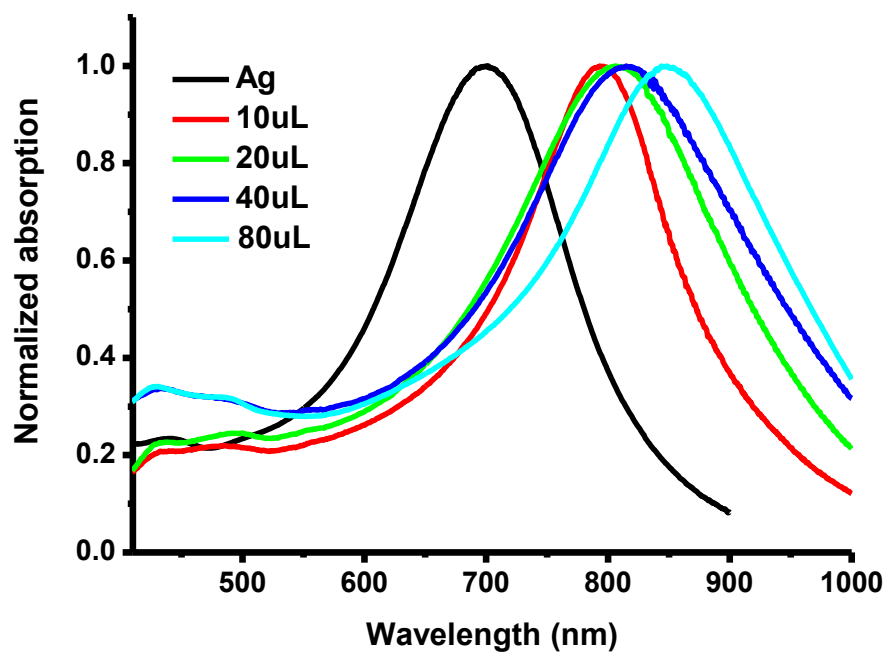


Fig. S5 Normalized absorption spectra of Ag NPs coated with TiO₂ shell obtained from different amount of TiO₂ sol-gel precursor for 180 min reaction time.

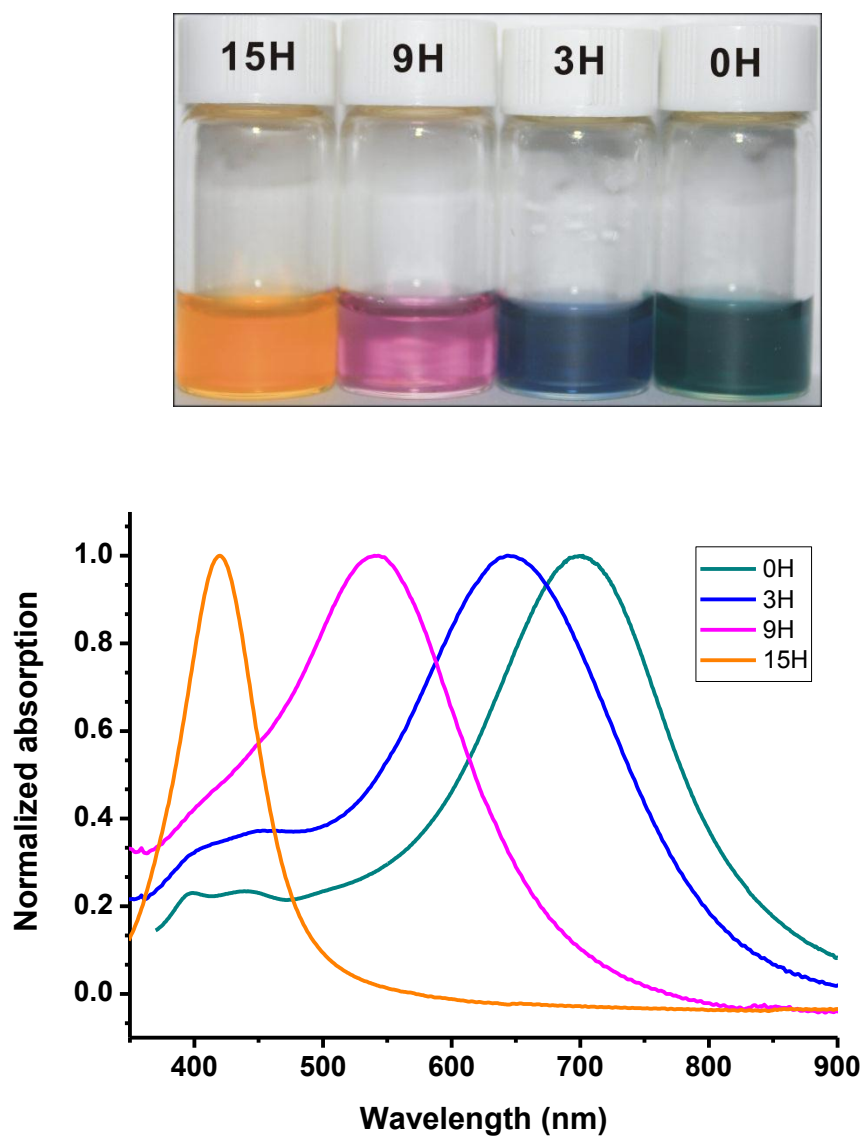


Fig. S6 (Top) Photograph of the samples after they had been subjected to aging at 70 °C in oven for different periods. (Bottom) UV-Vis absorption spectra taken from the corresponding samples shown in top.

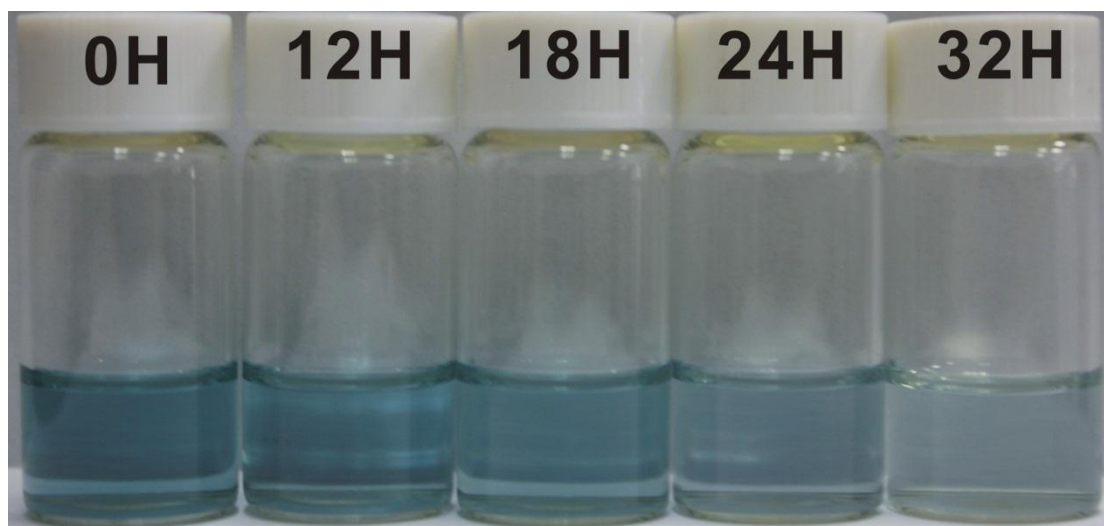


Fig. S7 Photograph of the Ag@TiO₂ samples after they had been subjected to aging at 70 °C in oven for different periods of time (marked on the image).

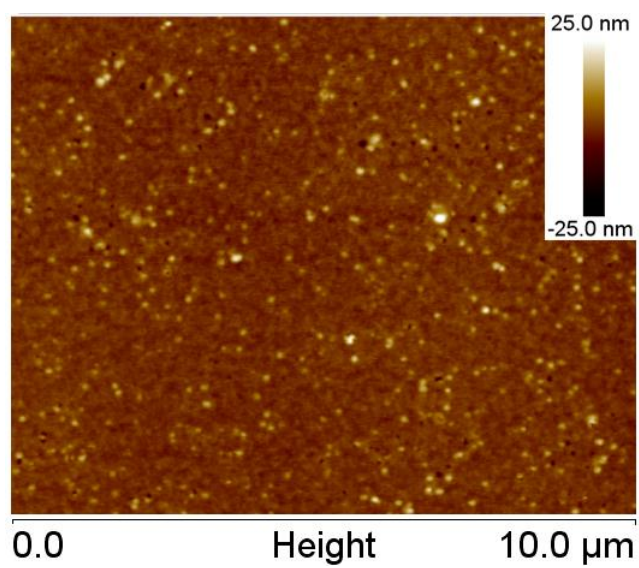


Fig. S8 AFM images of P3HT coated Ag @ TiO₂ NPs on the bare glass substrate.