

Electronic Supplementary Material (ESI) for New Journal of Chemistry.

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Electronic Supplementary Information (ESI)

For

Investigations on the Synthesis, SERS Performance and Application in Glucose Sensing of Hierarchical 3D Silver Nanostructures

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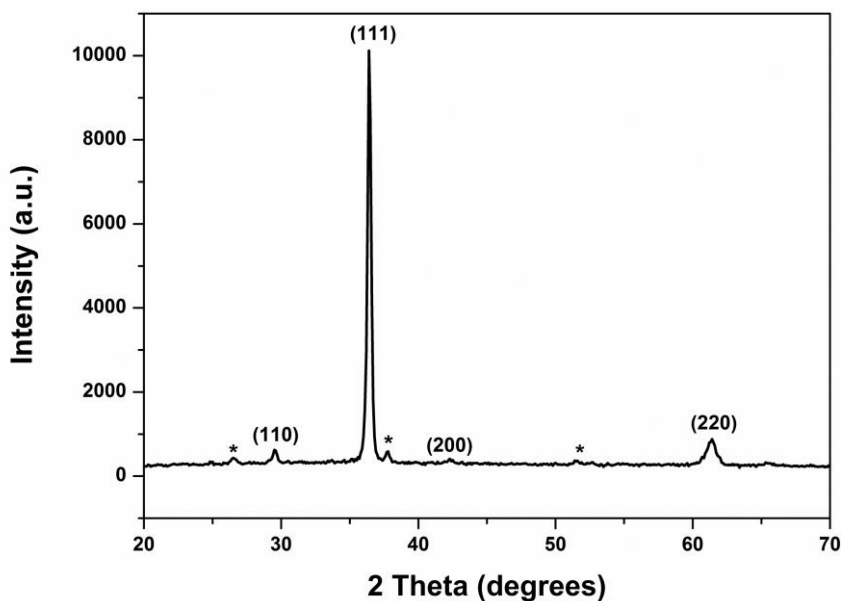


Fig. S1 XRD pattern of the pre-deposited Cu₂O membrane.

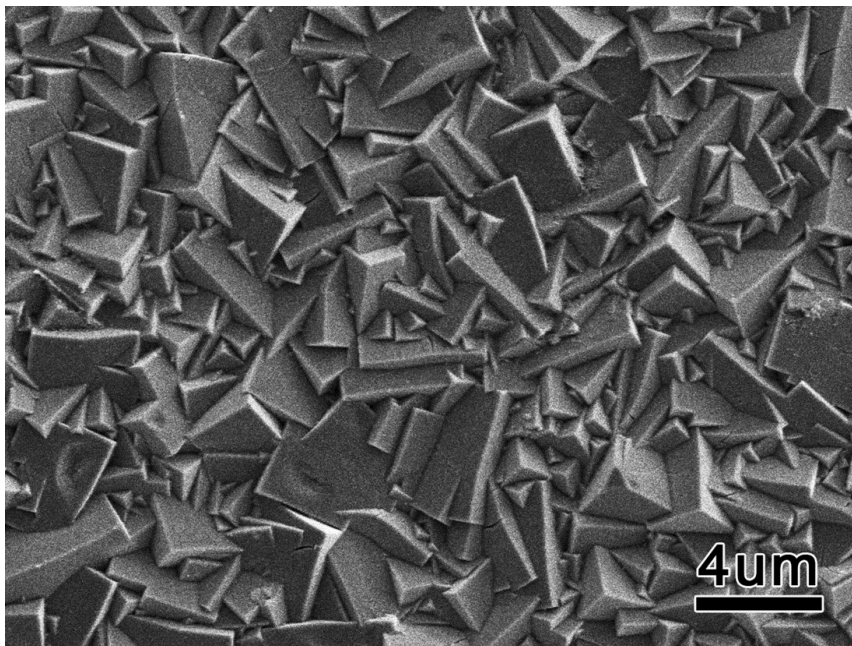


Fig. S2 FESEM image of the pre-deposited Cu₂O membrane.

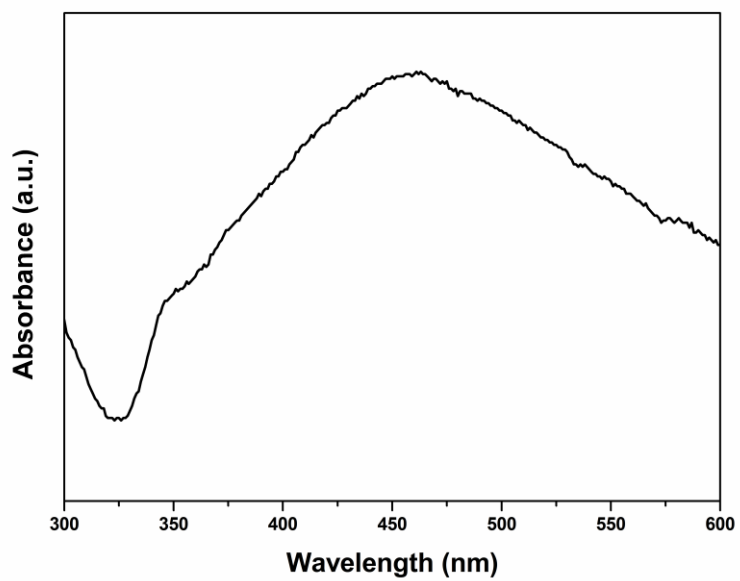


Fig. S3 The UV-vis spectrum of the Ag nanorod film.

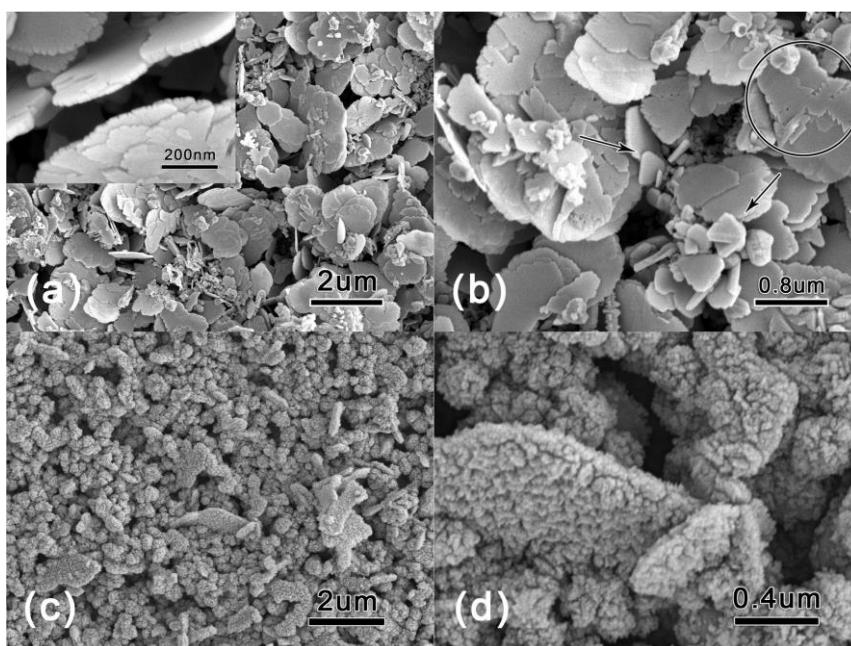


Fig. S4 FESEM images of Ag products synthesized with different concentrations of AgNO_3 : (a) and (b) 4 mM; (c) and (d) 100 mM. The amount of TSC was kept constant at 3 g/L. The reaction was carried out at room temperature for 30min.

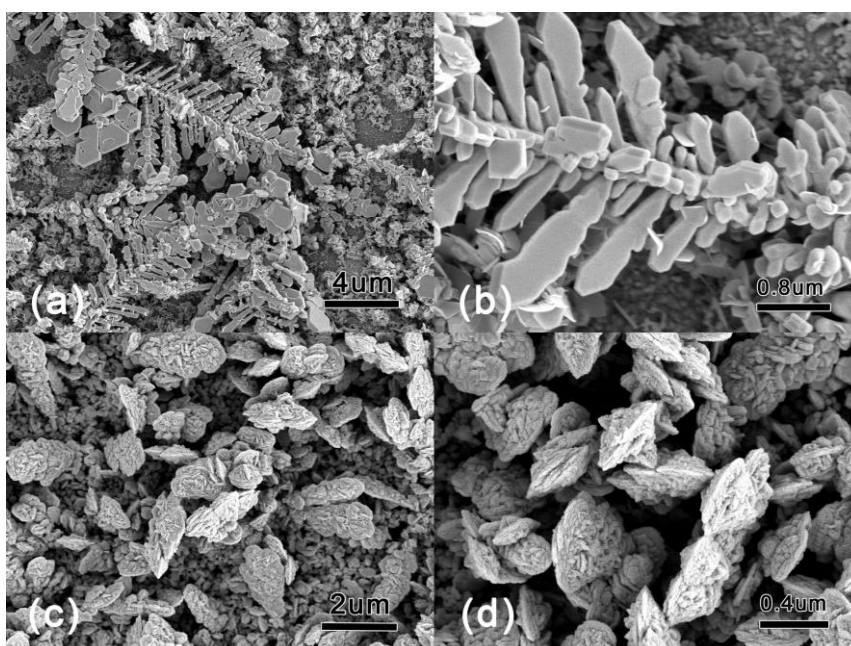


Fig. S5 FESEM images of Ag products with different amount of TSC: (a) and (b) 0 g/L; (c) and (d) 6 g/L. The concentration of AgNO_3 was kept constant at 20 mM. The reaction was carried out at room temperature for 30min.

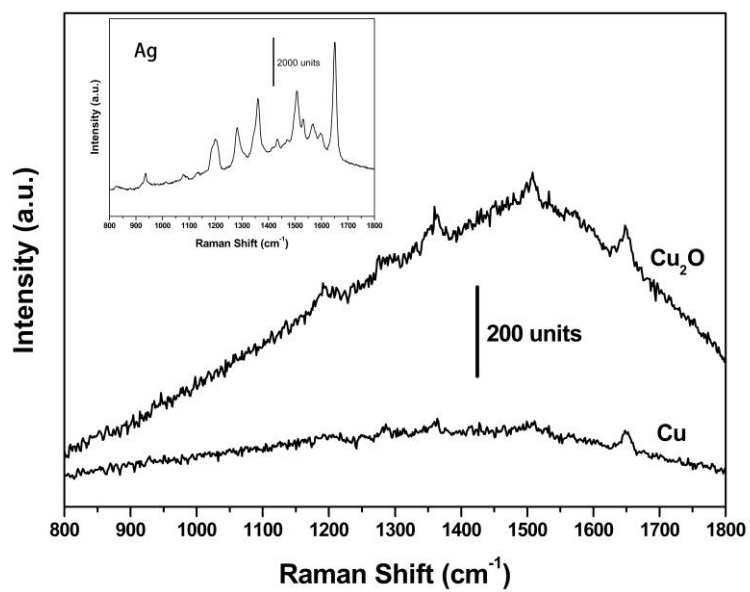


Fig. S6 SERS spectra of 10^{-8} M R6G from three kinds of as-obtained substrates (Cu_2O , Cu and Ag). The exposure time of each measurement was 1s with a laser power (532nm) of 0.27 mW.

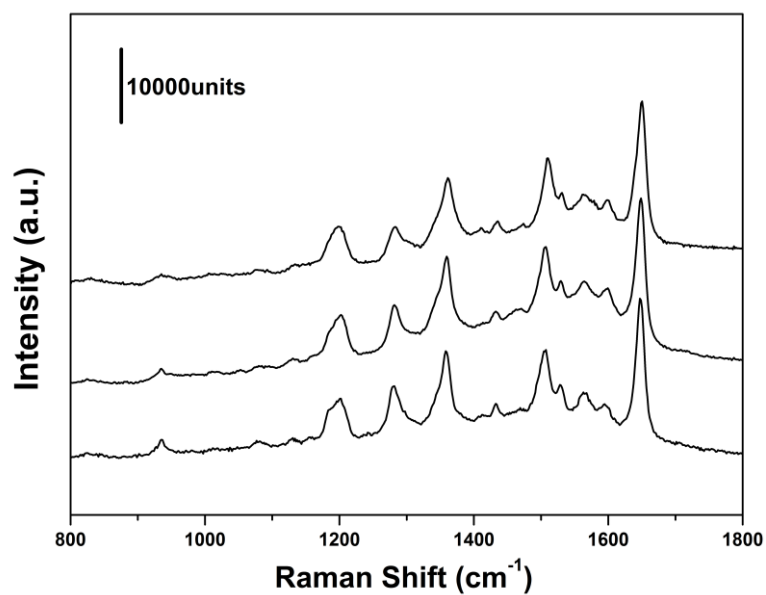


Fig. S7 SERS spectra of 10^{-6} M R6G from three different AgNSs substrates produced by the same method. The exposure time of each measurement was 1s with a laser power (532nm) of 0.27 mW.

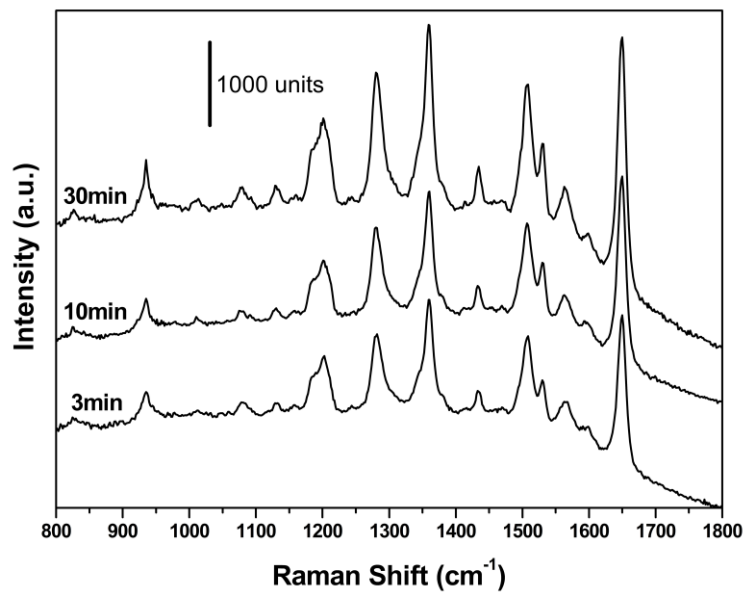


Fig. S8 SERS spectra of 10^{-8} M R6G from time-dependent AgNSs substrates (3 min, 10 min and 30 min). The exposure time of each measurement was 1s with a laser power (532nm) of 0.27 mW.

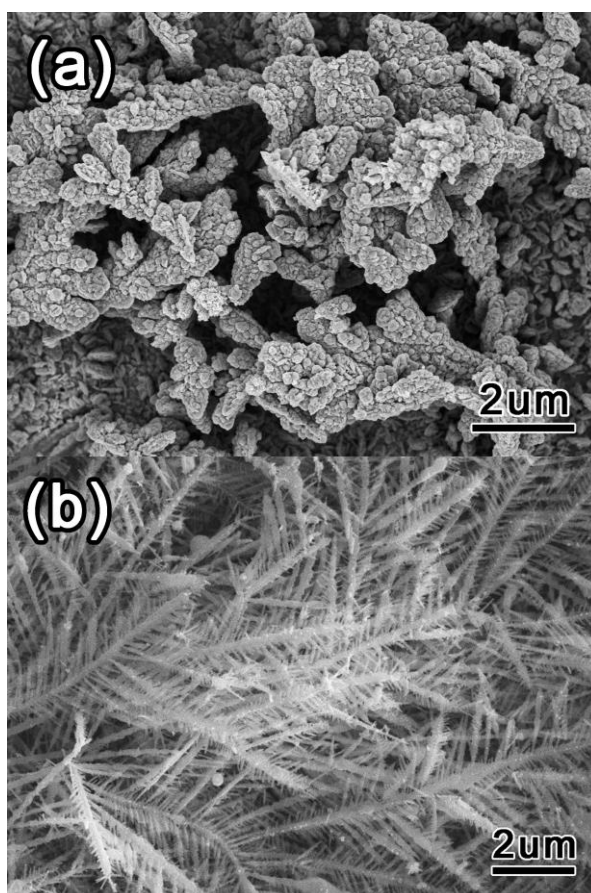


Fig. S9 FESEM images of Ag products with different morphologies: (a) Ag aggregates of AgNPs prepared directly on a Cu foil via galvanic reaction and (b) Ag dendrites deposited on a Si substrate via an electrochemical method.