Supplementary information for

A one-pot green method for one-dimensional assembly of gold nanoparticles with a novel chitosan-ninhydrin bioconjugate at physiological temperature

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Figures

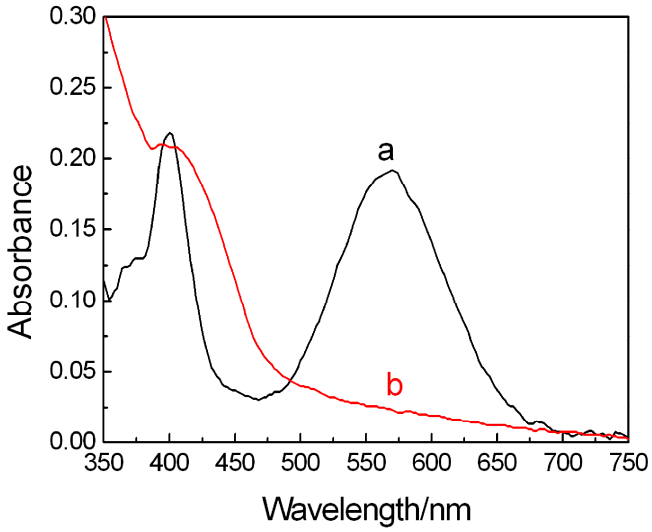

Figure S1. The progress of species removal in the dialysis process was monitored by UV-vis spectrophotometry. (a) The absorption spectra of solution before dialysis process, (b) The absorption spectra of solution after dialysis process.

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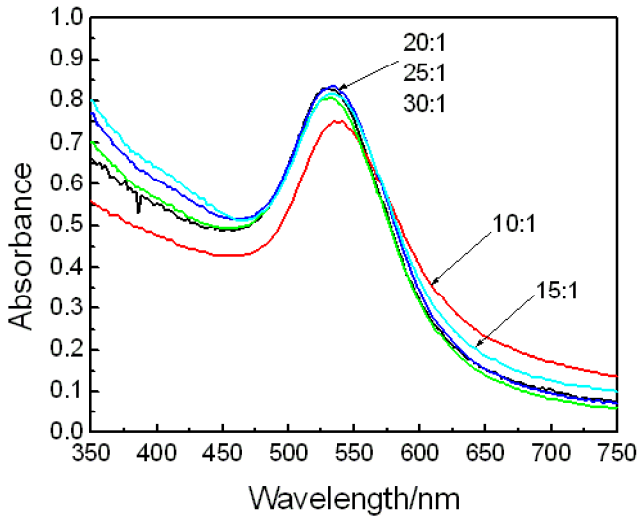

Figure S2. The UV-vis absorption spectra of samples prepared by various CHIT-NH repeat unit to $HAuCl_4$ molar ratios.

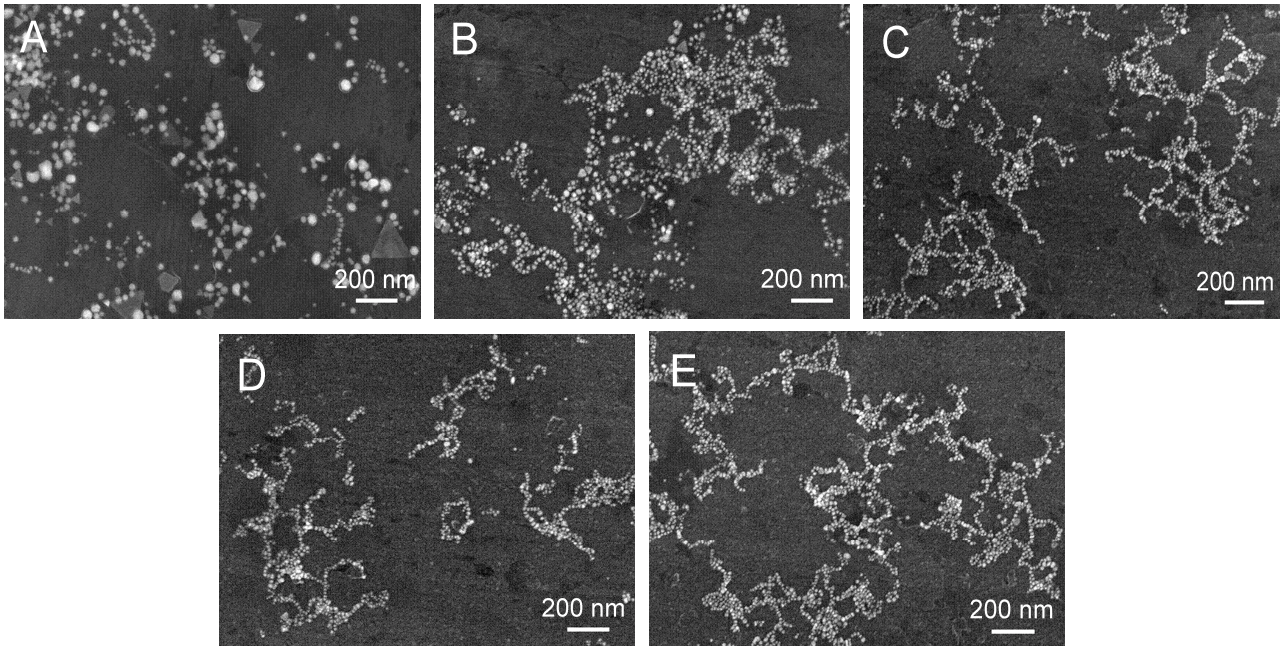

Figure S3. SEM micrographs of the CHIT-NH reacted with $HAuCl_4$ at 37 °C at various molar ratios. The molar ratios of CHIT-NH repeat unit to $HAuCl_4$ were (A) 10: 1, (B) 15: 1, (C) 20: 1, (D) 25: 1, and (E) 30: 1.

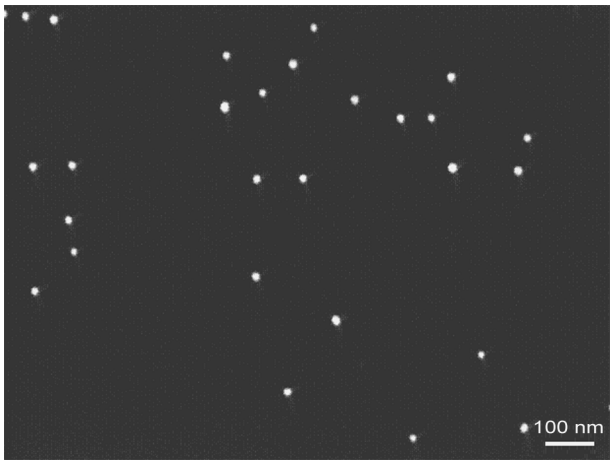

Figure S4. SEM micrograph of the gold NPs capped with citrate.

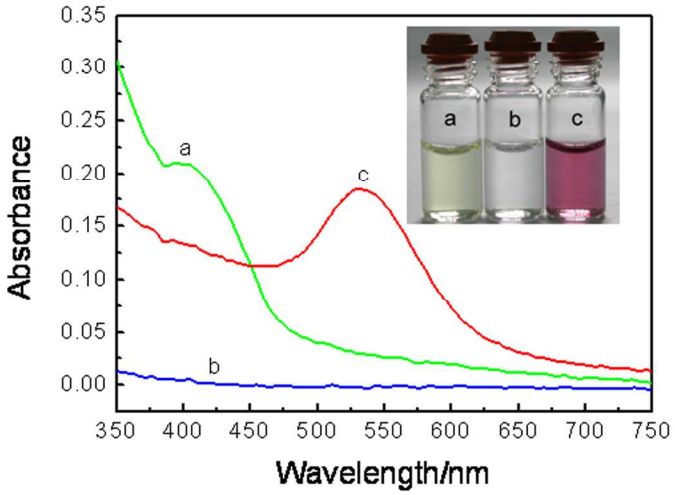

Figure S5. The contrast of UV-vis absorption spectra between CHIT-NH conjugate and chitosan reacted with $HAuCl_4$ at 37 °C, respectively. (a) CHIT-NH, (b) chitosan reacted with $HAuCl_4$ (20:1) for 24 h under magnetic stirring, (c) CHIT-NH conjugate reacted with $HAuCl_4$ (20:1) for 24 h under magnetic stirring. The insert picture is the photography of solution corresponding to the absorption spectra.