

Supplementary data

D-penicillamine and bovine serum albumin co-stabilized copper nanoclusters with remarkably enhanced fluorescence intensity and photostability for ultrasensitive detection of Ag⁺

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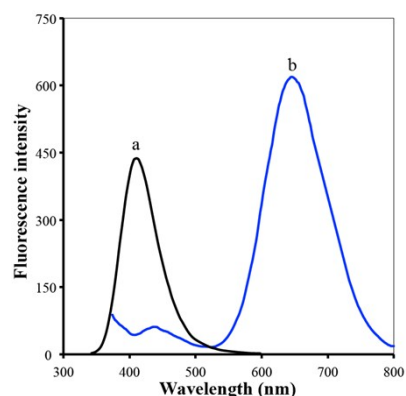


Fig.S1 The fluorescence spectra of BSA-CuNCs (a) and DPA-CuNCs (b)

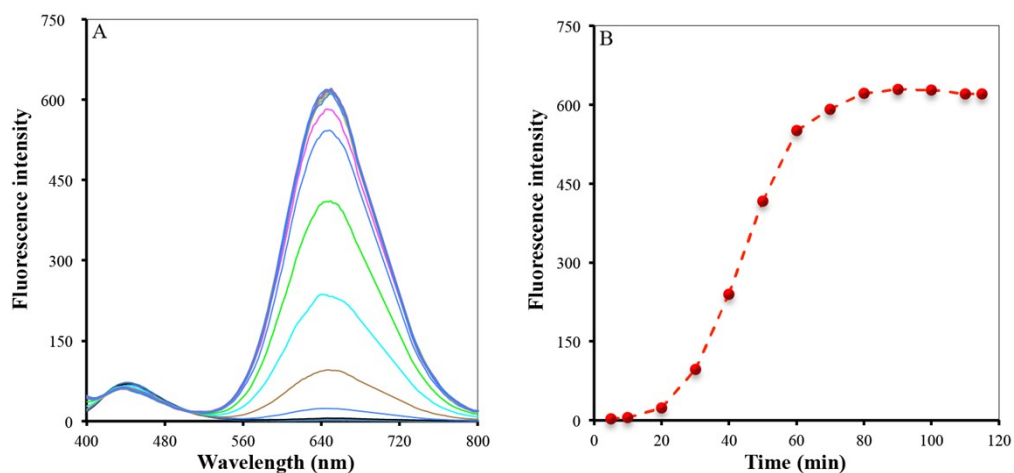


Fig.s2A: Fluorescence spectra of the Cu²⁺-DPA solution at 5, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110 and 115 minute (from bottom to top). B: The relationship curve of peak fluorescence intensity with reaction time

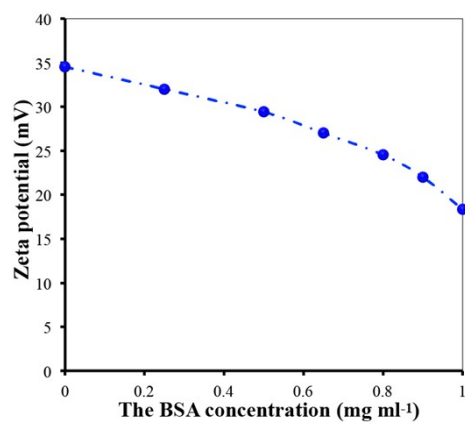


Fig.s3 The effect of BSA concentration on the zeta potential of BSA/DPA-CuNCs

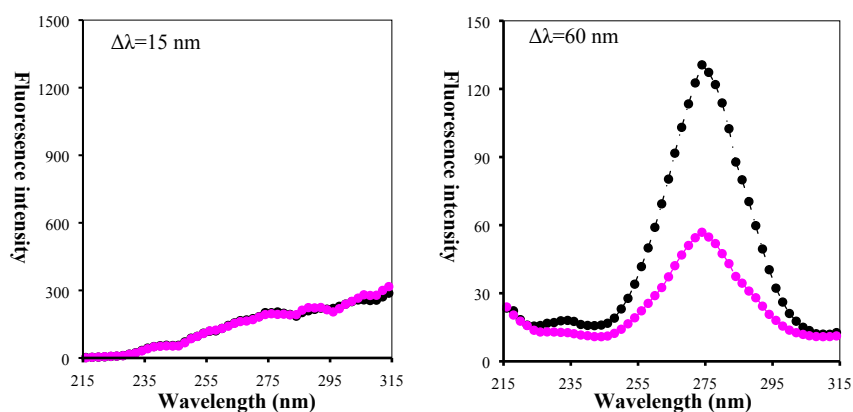


Fig.s4 Synchronous fluorescence spectra at (a) $\Delta\lambda=15$ and (b) $\Delta\lambda=60$ of BSA (0.02 mg ml⁻¹) in the presence (up) and in the absence (down) of the BSA/DPA-CuNCs

Table s1 The secondary structures of BSA in the absence and presence of DPA-CuNCs

The system	The secondary structures of BSA (%)			
	α -helix	β -sheet	β -turn	unordered
BSA (1.0 mg ml ⁻¹)	0.707	0.218	0.011	0.094
DPA-CuNCs + BSA (1.0 mg ml ⁻¹)	0.798	0.008	0.067	0.162
DPA-CuNCs + BSA (0.1 mg ml ⁻¹)	0.798	0.04	0.057	0.160
DPA-CuNCs + BSA (0.02 mg ml ⁻¹)	0.796	0.01	0.067	0.164