

Electronic Supplementary Information

Fabrication of cefotaxime sodium functionalized gold nanoclusters for detection of copper ions in Chinese herbal medicine

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Table S1 Analytical results of Cu²⁺ in CHMs by the proposed method and by FAAS method ^a.

Samples	Cu ²⁺ found by the proposed method (µg g ⁻¹)	RSD (%)	Cu ²⁺ found by FAAS method (µg g ⁻¹)	Relative error (%)
Licorice	11.89	1.8	10.95	8.6
Alisma	22.32	2.0	23.90	-6.6
Salvia	29.05	1.9	30.25	-4.0
Poria	19.03	2.7	20.55	-7.4

^aAverage of five determinations.

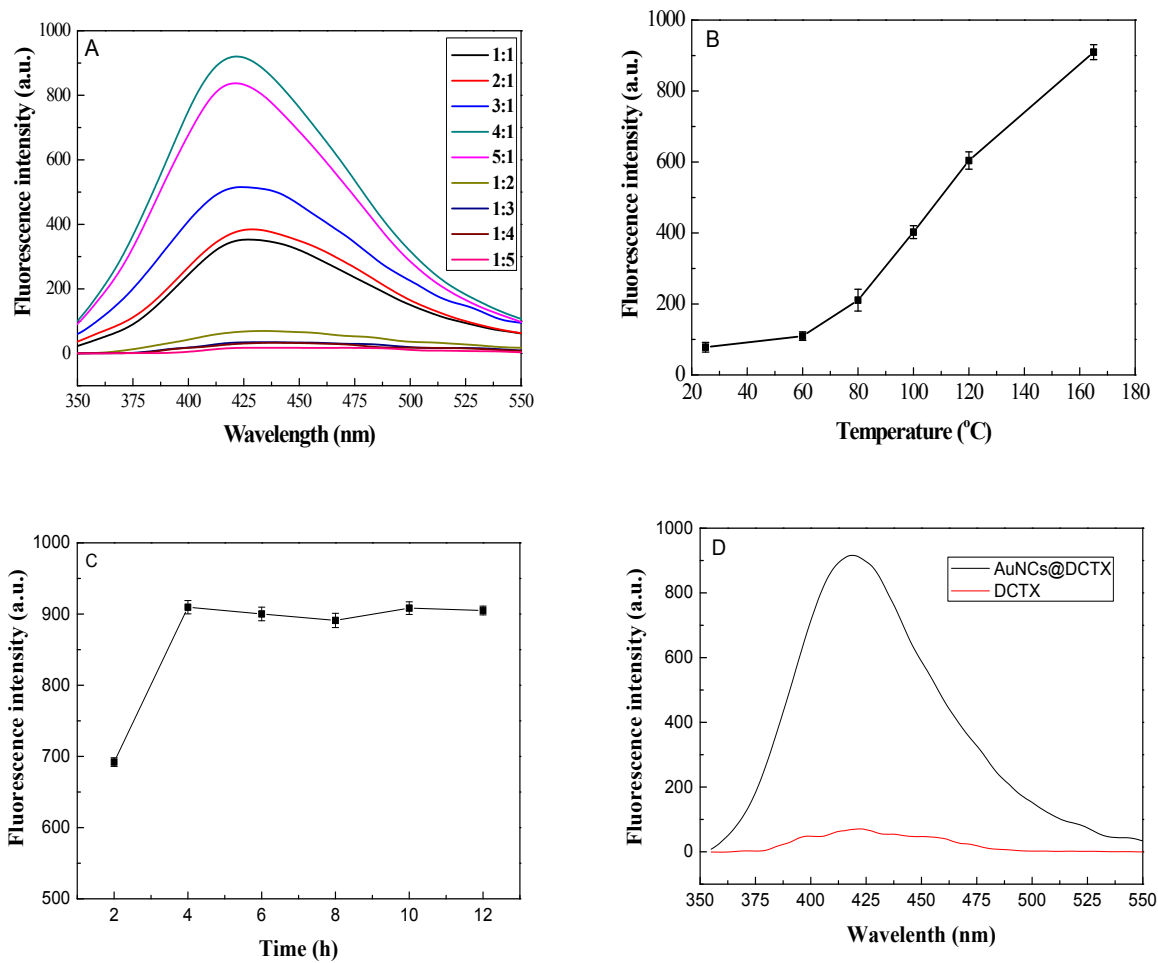


Fig. S1. Effects of the molar ratio of HAuCl_4 to DCTX (A), reaction time (B) and reaction time (C) on the fluorescence intensity of the AuNCs@DCTX, respectively; The emission spectra of the prepared AuNCs@DCTX and DCTX (D).

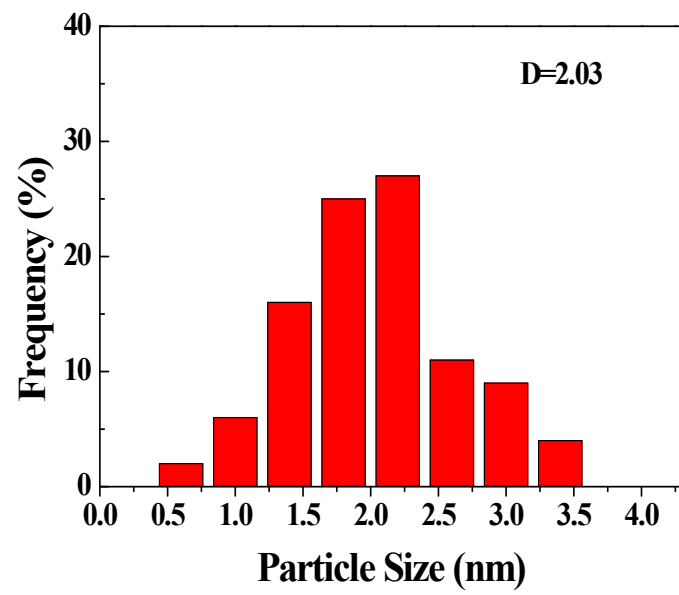


Fig. S2. Histogram of size distribution of AuNCs@DCTX.

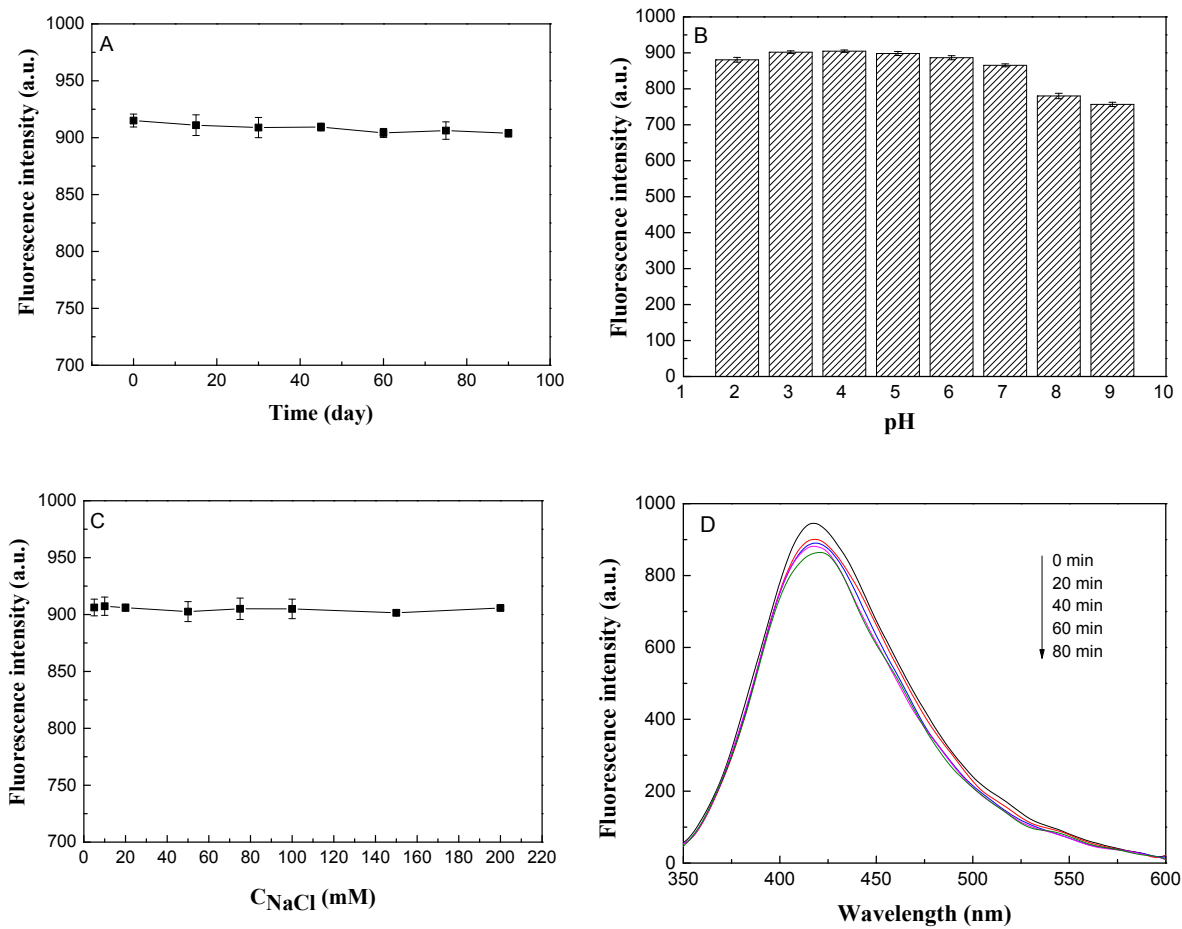


Fig. S3. Effects of storage time (A), solution pH (B), ionic strength (C) and light exposure time on the fluorescence intensity of AuNCs@DCTX.

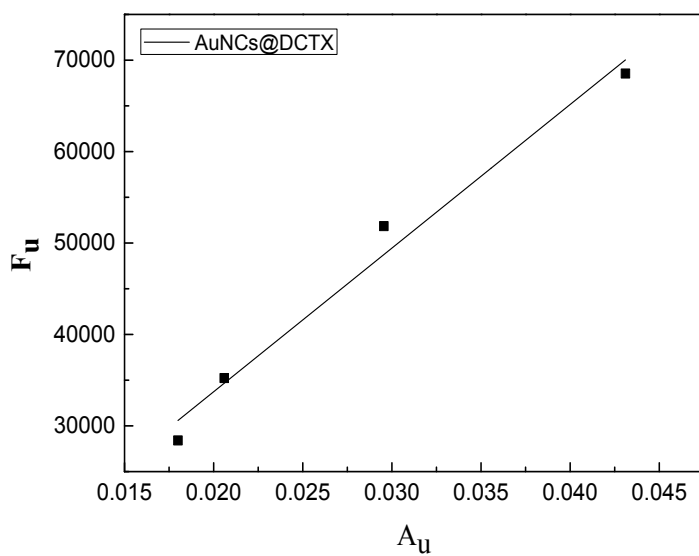


Fig. S4. Relationship between the integrated fluorescence intensities of the AuNCs@DCTX under 321 nm excitation and its corresponding absorbance.

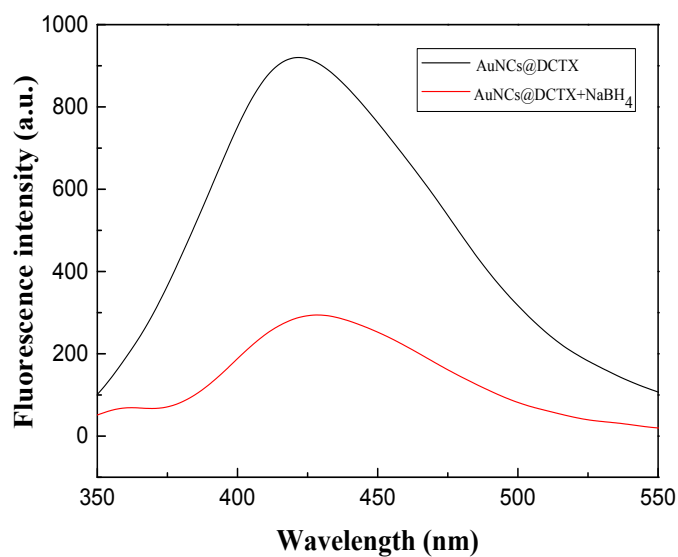


Fig. S5. The fluorescence spectra of the AuNCs@DCTX before and after adding 1 mM NaBH₄.

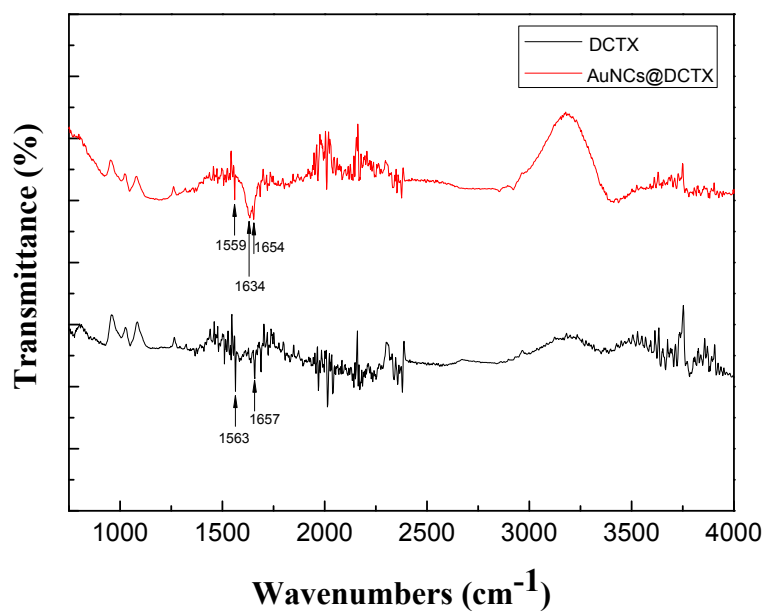


Fig. S6. Infrared spectra of DCTX and AuNCs@DCTX.

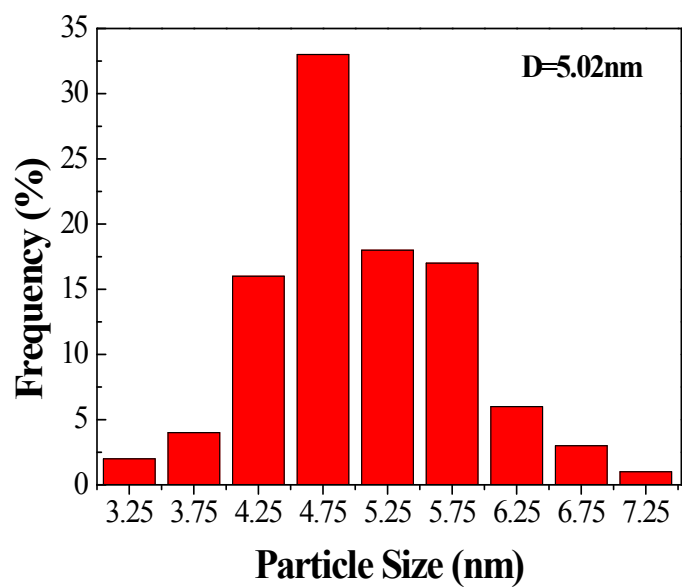


Fig. S7. Histogram of size distribution for AuNCs@DCTX after adding Cu^{2+} .