Supplementary information

A novel glutathione-stabilized silver-gold nano-alloy/Cu^{2+} combination as a fluorescent switch probe for L-histidine

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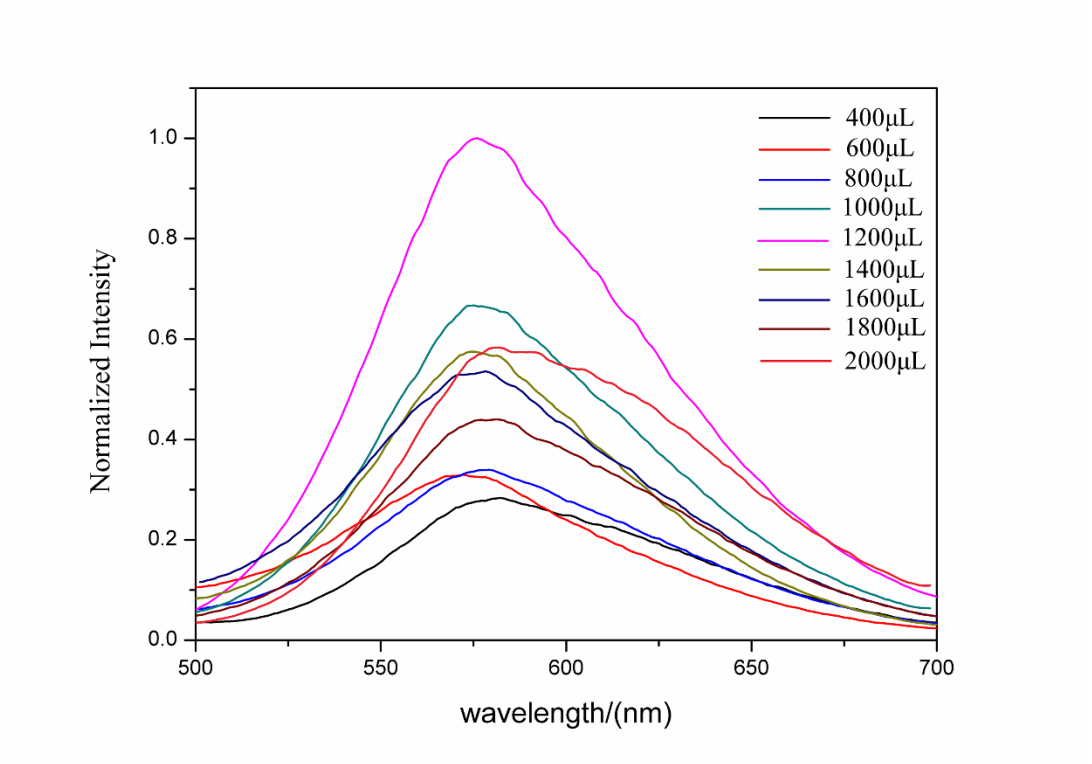

Fig. S1 Fluorescence response of GSH-AgAuNAs with different amount of $HAuCl_4$, showing the optimized addition amount (1.2 mL) of $HAuCl_4$.

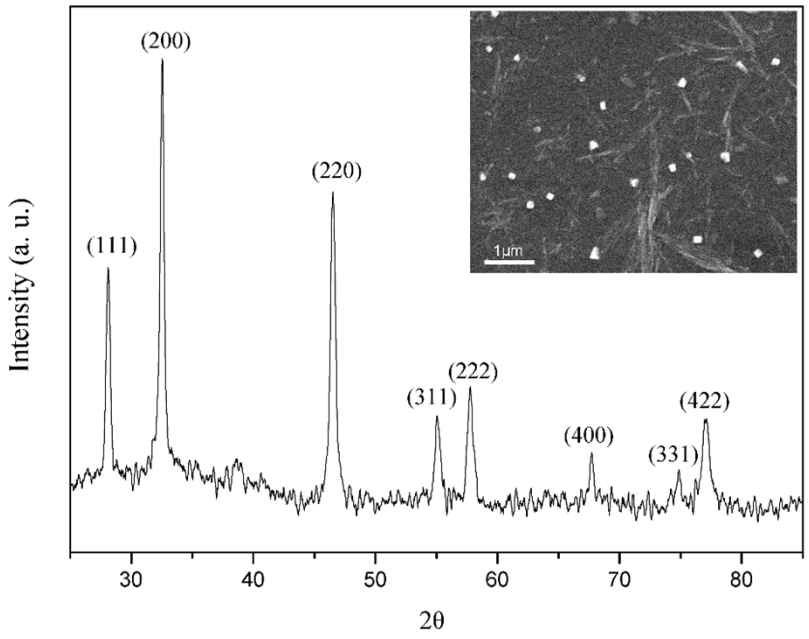

Fig. S2 XRD pattern and SEM image of AgCl.

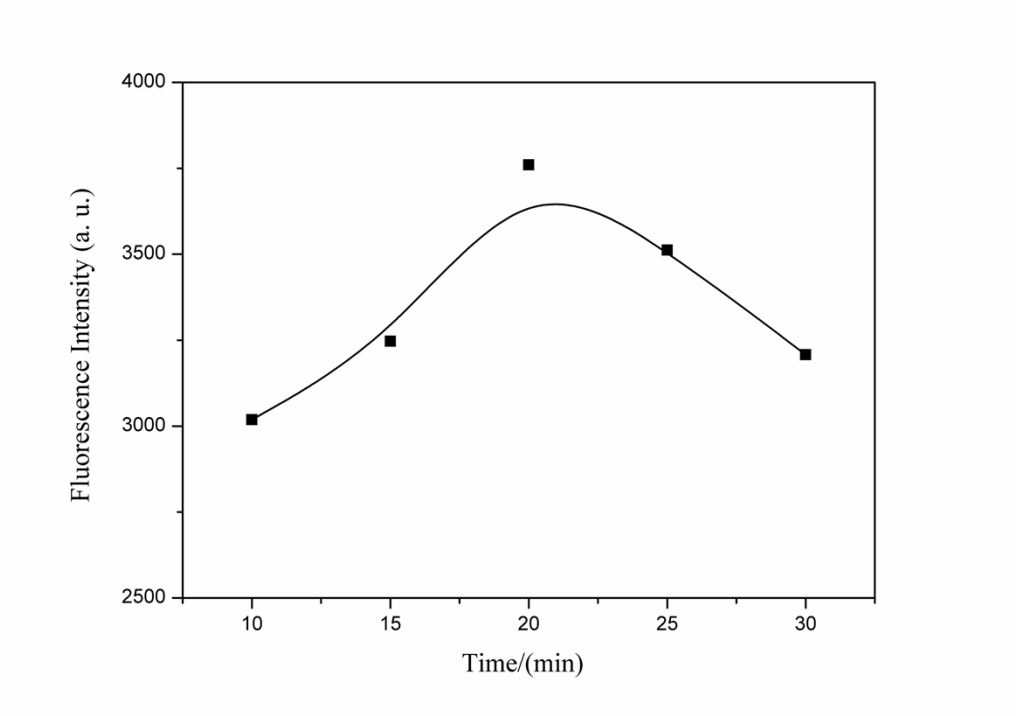

Fig. S3 Fluorescence response of different interaction time. The concentration of L-histidine and Cu^{2+} was 15 μM and 10μM respectively. All experiments were carried out under pH7.40 with PBS buffer (10 mM).

Table S1 Comparison of our proposed fluorescence probe with other assays for determination of L-histidine.

Method	Linear range (μM)	Detection limit (μM)	Ref.
Indicator-displacement assay	2-30	0.4	1
DNA/ligand/ion-based ensemble	0-4.4	0.01	2
Spectrophotometry	5-30	5.0	3
Fluorescence	5-30	5	4
GSH-AgAuNAs/Cu^{2+}	**2-40**	**1.19**	**This work**

References

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