



## Supporting Information

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Enhanced Fluorescence of Gold Nanoclusters Composed of H<sub>Au</sub>Cl<sub>4</sub> and Histidine by Glutathione: Glutathione Detection and Selective Cancer Cell Imaging

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## Supporting Information

### **Glutathione causes enhanced fluorescence and reduced cytotoxicity of gold nanoclusters composed of H<sub>2</sub>AuCl<sub>4</sub> and histidine: glutathione detection and cancer cell imaging**

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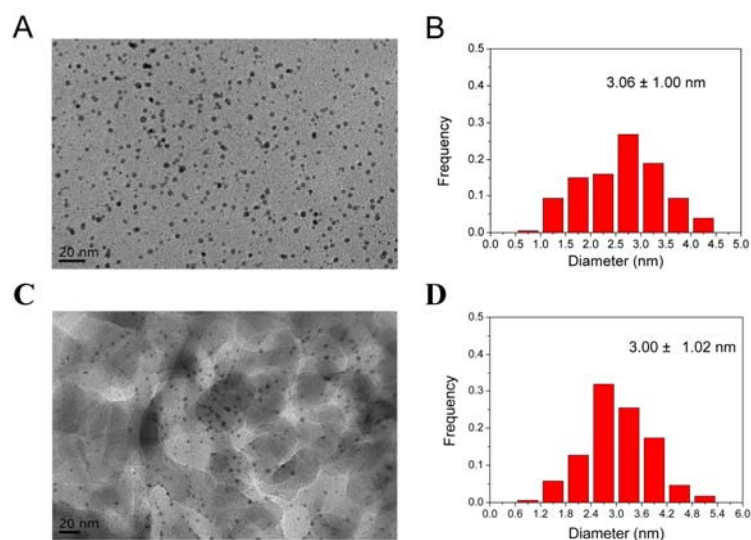
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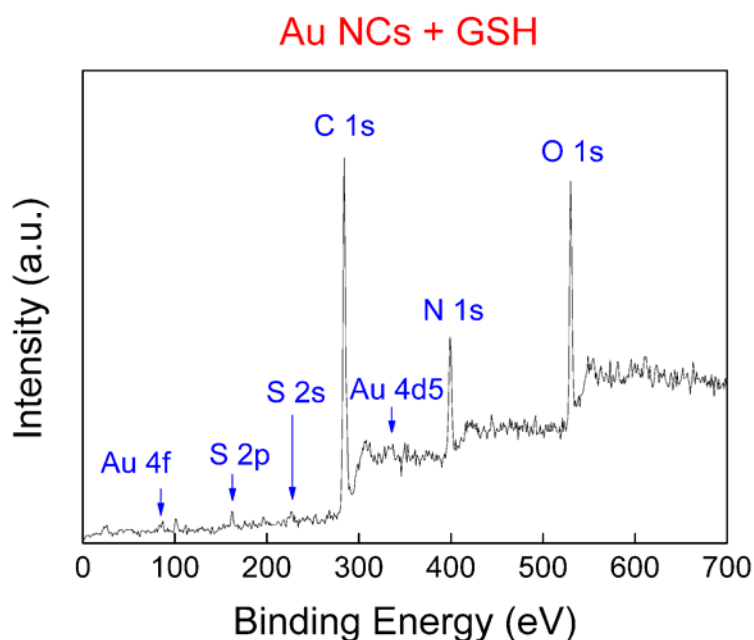
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Prof. P. D. Liu

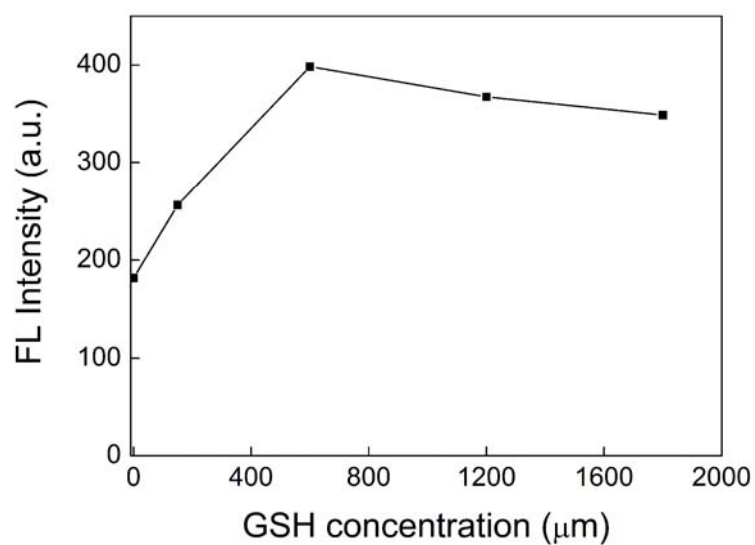
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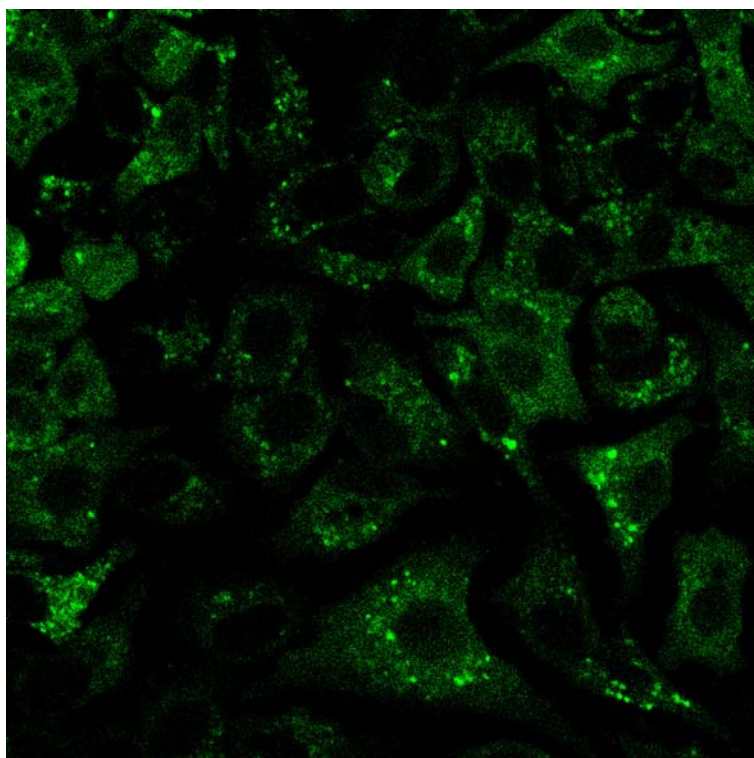
**Figure S1.** Typical TEM images and corresponding size distribution histograms of Au NCs prepared by mixing HAuCl<sub>4</sub> and histidine (A and B) and GSH-capped Au NCs prepared by adding GSH with the GSH/Au molar ratio of 12 : 1 (C and D). The gray patches come from the free GSH molecules of the sample.



**Figure S2.** XPS spectra of GSH-capped Au NCs.



**Figure S3.** GSH concentration-dependent fluorescence intensity of Au NCs prepared by mixing HAuCl<sub>4</sub> and BSA .



**Figure S4.** Confocal fluorescence images of A549 cells after incubation with 100 μM Au NCs for 24 h. Cell images were obtained using an excitation wavelength of 405 nm.