

Supporting Information

Gold Nanostar-Based Sensitive Catechol Plasmonic Colorimetric Sensing Platform with Ultra-Wide Detection Range

Huafeng Wang ¹, Ting Fang ¹, Hua Liu ¹, Tianxiang Wei ^{2,*} and Zhihui Dai ^{1,3,*}

¹ Jiangsu Collaborative Innovation Center of Biomedical Functional Materials and Jiangsu Key Laboratory of Biofunctional Materials, School of Chemistry and Materials Science, Nanjing Normal University, Nanjing 210023, China

² School of Environment, Nanjing Normal University, Nanjing 210023, China

³ School of Chemistry and Molecular Engineering, Nanjing Tech University, Nanjing 211816, China

* Correspondence: weitian_xiang@126.com (T. Wei); daizhihui@njnu.edu.cn (Z. Dai)

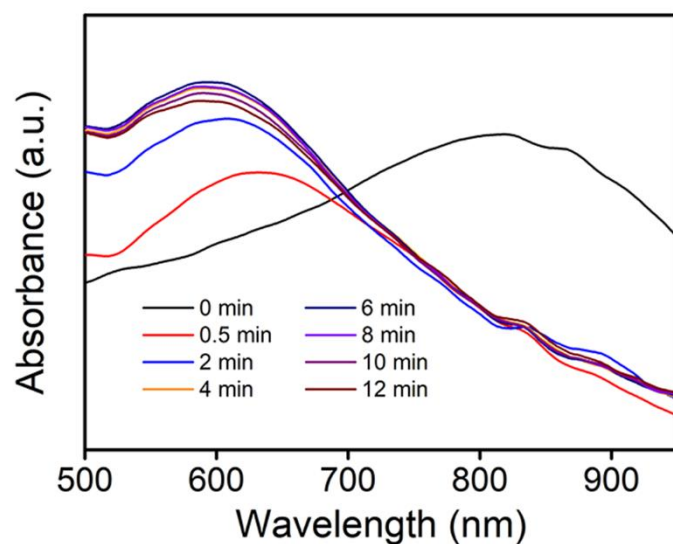


Figure S1. UV-vis spectra of 65.0 μM CC-mediated reduction of Ag^+ on the Au NSs at different reaction times.

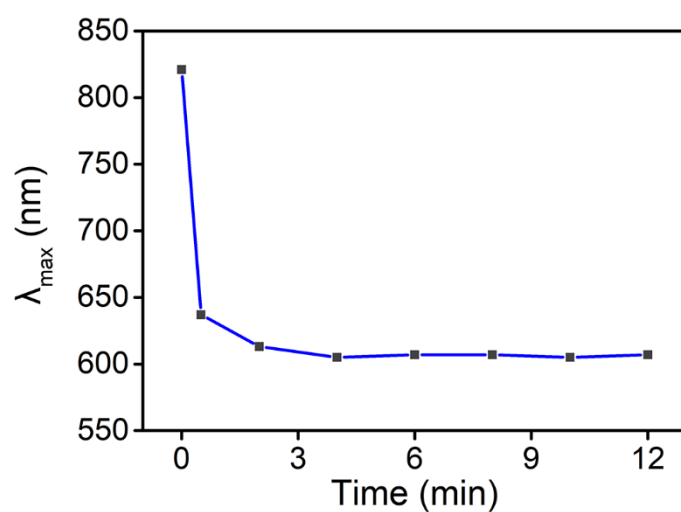


Figure S2. The absorption maximum (λ_{max}) of 65.0 μM CC-mediated reduction of Ag^+ on the Au NSs at different reaction times.

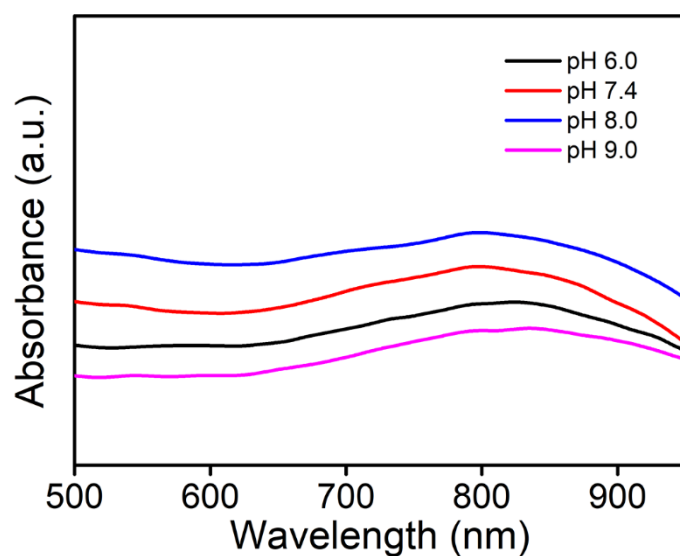


Figure S3. UV-vis spectra of the Au NSs-based plasmonic colorimetric sensing platform under various pH.

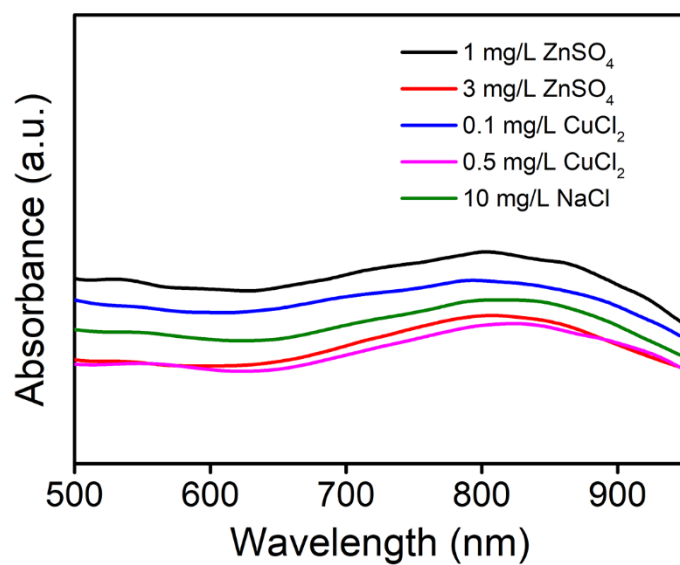


Figure S4. UV-vis spectra of the Au NSs-based plasmonic colorimetric sensing platform under various concentrations of metallic ions and ionic strength.

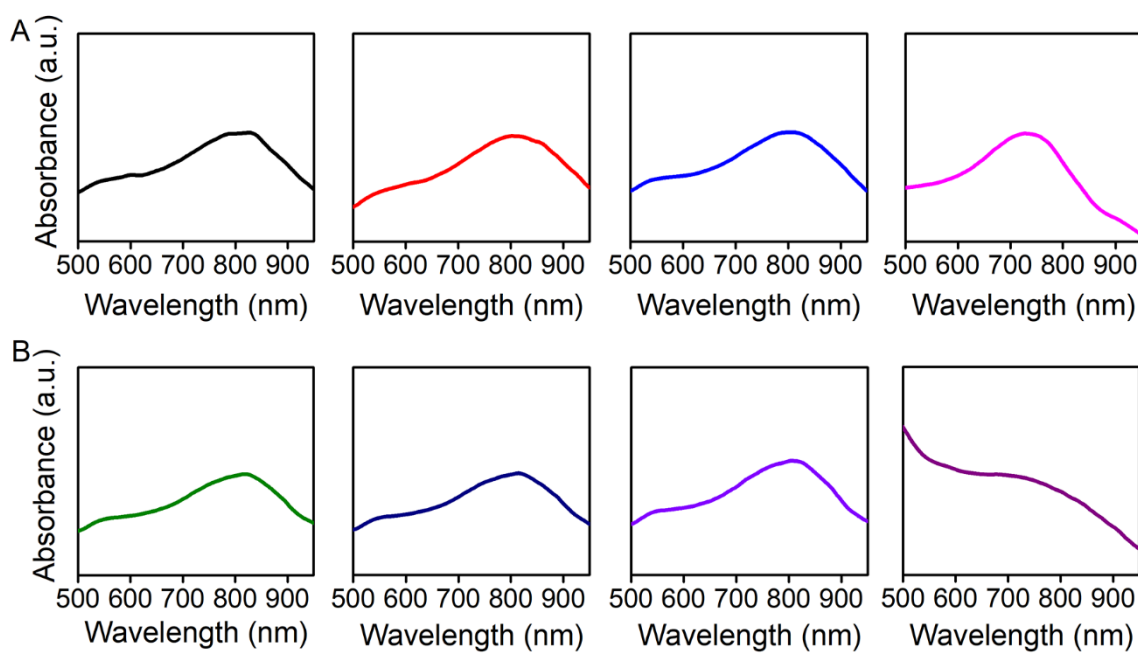


Figure S5. UV-vis spectra obtained by the proposed detection system of different spiked condition of 0, 0.0100 μM , 0.100 μM , and 10.0 μM CC (from left to right) in (A) tap water and (B) industrial wastewater.