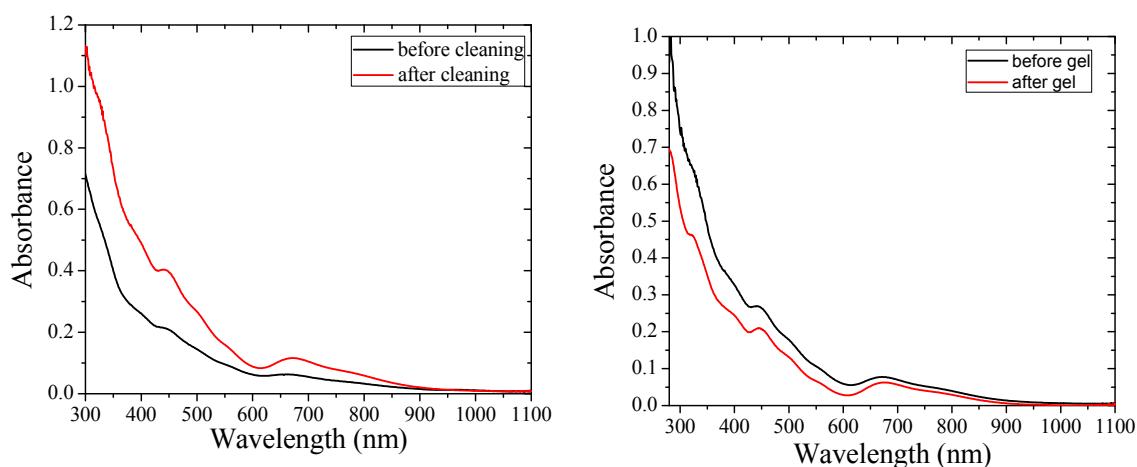


## Water-Soluble $\text{Au}_{25}(\text{Capt})_{18}$ Nanoclusters: Synthesis, Thermal Stability, and Optical Properties

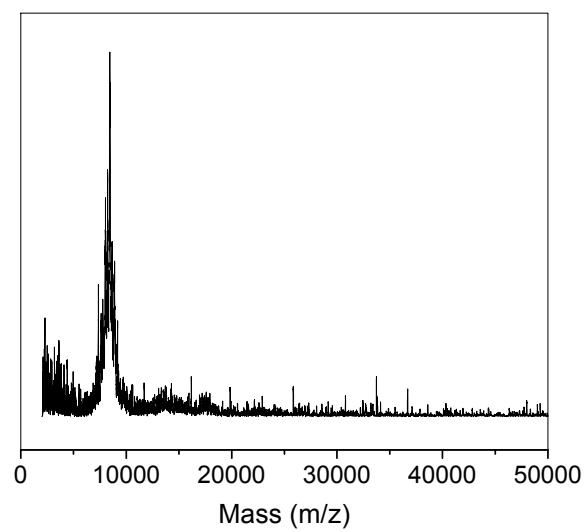
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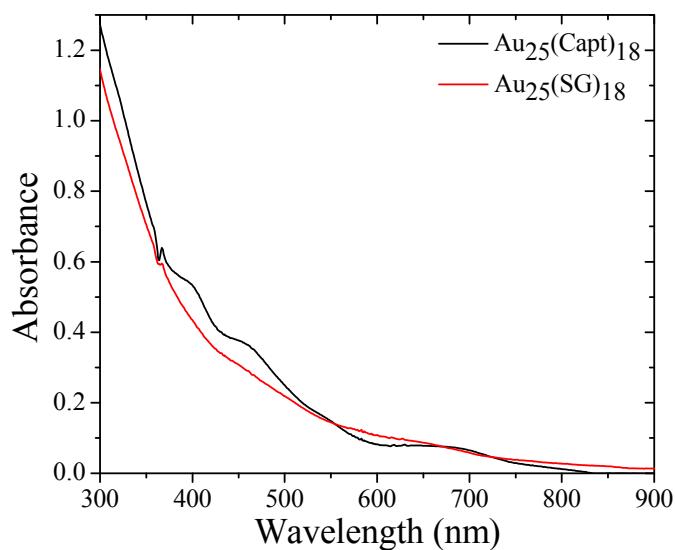
### 1. Supporting Figures:



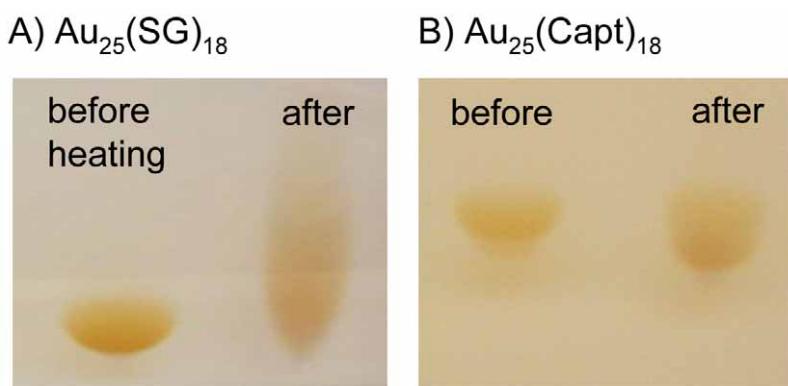
**Figure 1.** (A) UV-vis spectra of  $\text{Au}_{25}(\text{Capt})_{18}$  before and after cleaning (i.e. precipitation/redispersion); (B) UV-vis spectra of  $\text{Au}_{25}(\text{Capt})_{18}$  before and after PAGE gel purification.



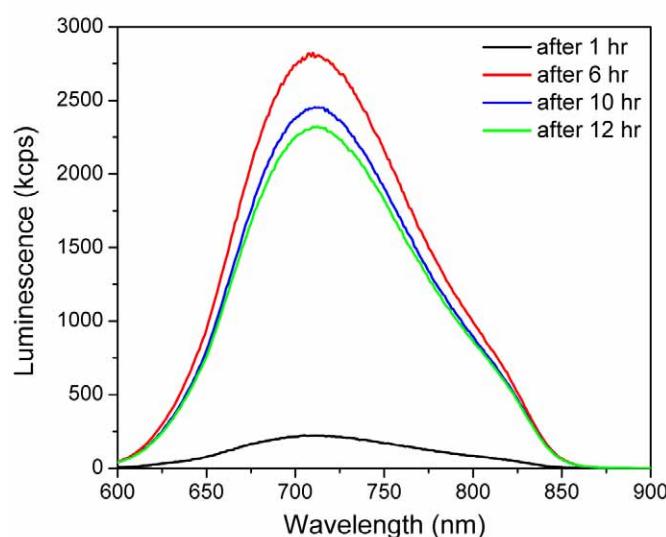
**Figure S2.** Wide range MALDI-MS analysis of the  $\text{Au}_{25}(\text{Capt})_{18}$  nanoclusters.



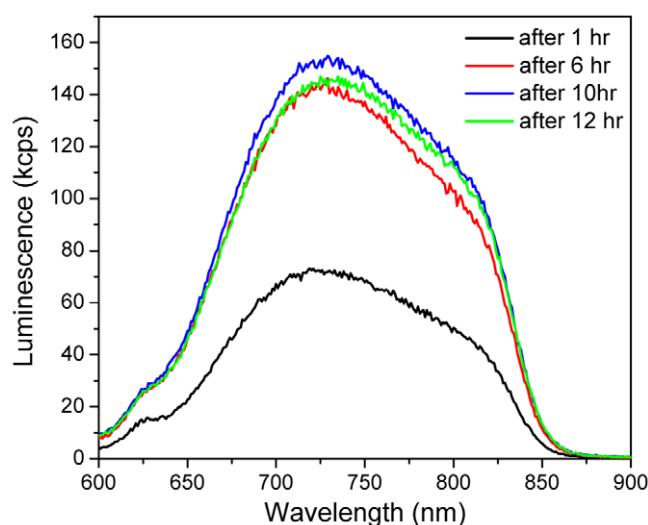
**Figure S3.** UV-Vis spectra of  $\text{Au}_{25}(\text{Capt})_{18}$  and  $\text{Au}_{25}(\text{SG})_{18}$  solutions after heating for 24 hr at 80 °C.



**Figure S4.** PAGE images of  $\text{Au}_{25}(\text{Capt})_{18}$  (panel A) and  $\text{Au}_{25}(\text{SG})_{18}$  (panel B) before/after heating for 12 hr at 80 °C.



**Figure S5.** Time dependence fluorescence of  $\text{Au}_{25}(\text{Capt})_{18}$  during the 12 hr heating process (note: the room temperature solution showed a fluorescence peak intensity of  $\sim 140$  kcps).



**Figure S6.** Time dependence fluorescence of  $\text{Au}_{25}(\text{Capt})_{18}$  during the 12 hr heating process (note: the room temperature solution showed a fluorescence peak intensity of  $\sim 72$  kcps).