Supporting Information for:

A highly selective fluorescence probe for sulfide ions based on aggregation of Cu nanoclusters induced emission enhancement

By Zenghe Li, Song Guo and Chao Lu*

State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, China. Fax/Tel: 86 010 64411957

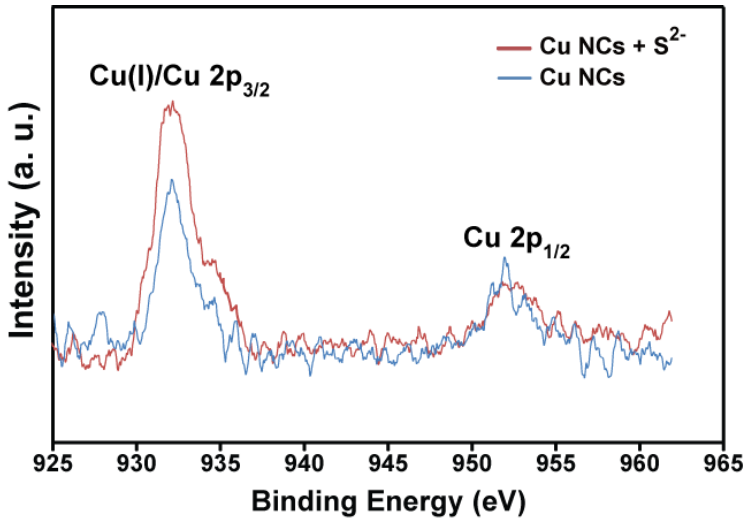

Fig. S1 XPS spectra of the as–prepared Cu NCs before and after the addition of 50 μM S^{2-}.

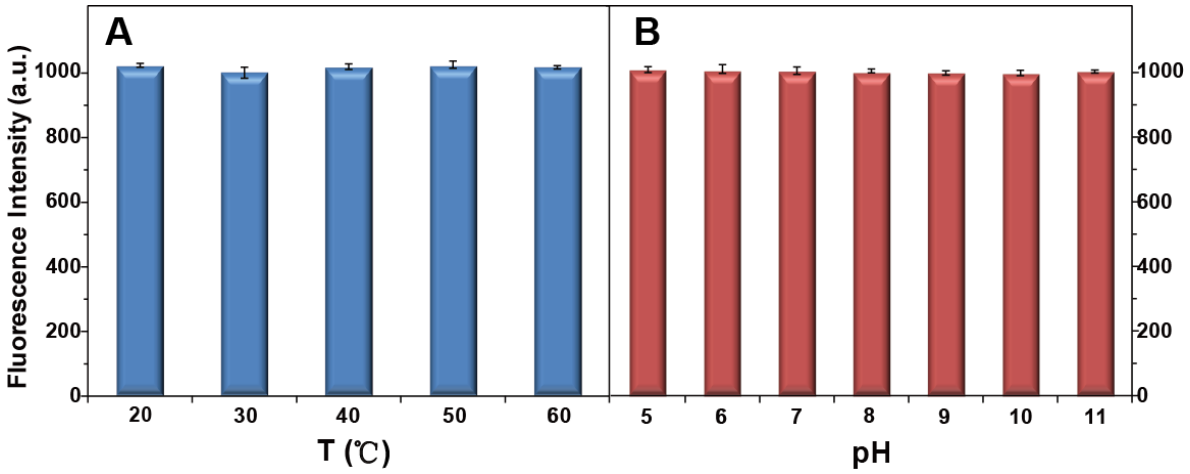

Fig. S2 (A) Effect of temperature on fluorescence emission intensity at 460 nm of the as–prepared Cu NCs in the absence of H_2S. (B) Effect of pH on fluorescence emission intensity at 460 nm of the as–prepared Cu NCs in the absence of H_2S. Error bars were estimated from three independent measurements.

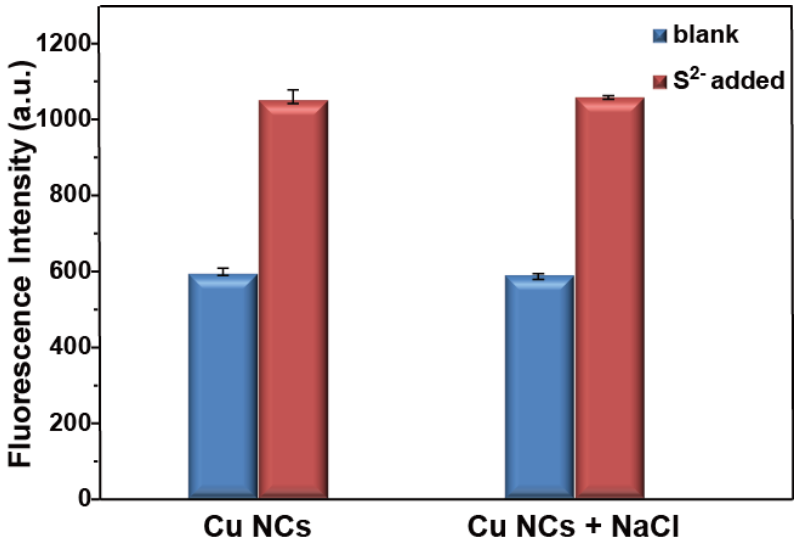

Fig. S3 Effect of salt with a concentration of 50 μM on the fluorescent properties of the as–prepared Cu NCs in the absence and presence of 50 μM S^{2-}. All experiments were carried out at 30 ˚C for 5 min at pH 7.00. Error bars were estimated from three independent measurements.

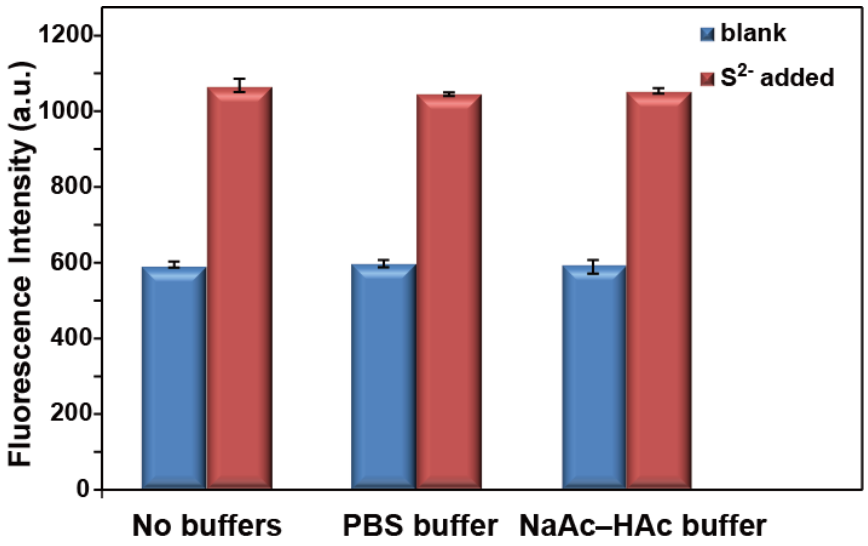

Fig. S4 Effect of buffer solutions on the fluorescence of the as–prepared Cu NCs in the absence and presence of 50 μM S^{2-} at pH 7.00. The experiments were taken at 30 ˚C for 5 min. Error bars were estimated from three independent measurements.