

Supporting Information

Scavenging the peroxidase mimetic activity of erythrocyte-like Cu_{1.8}S nanoparticles for colorimetric detection of glutathione

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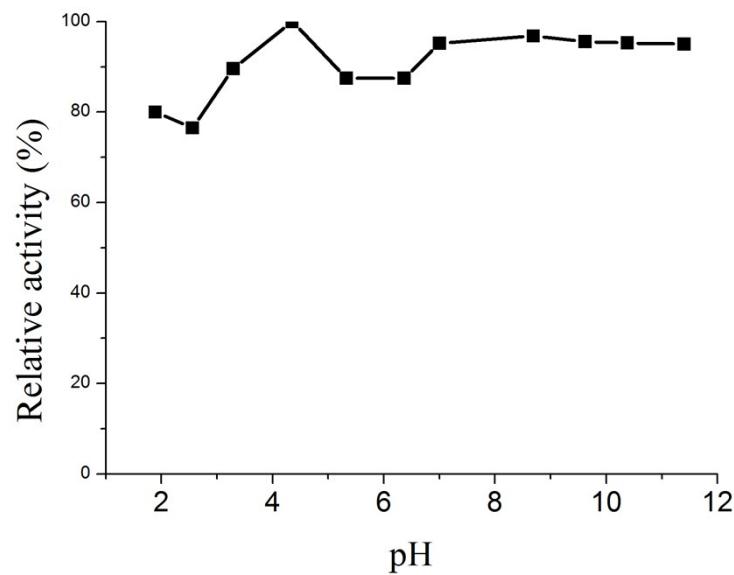


Figure S1. pH-dependent peroxidase-like activity study for Cu_{1.8}S NPs

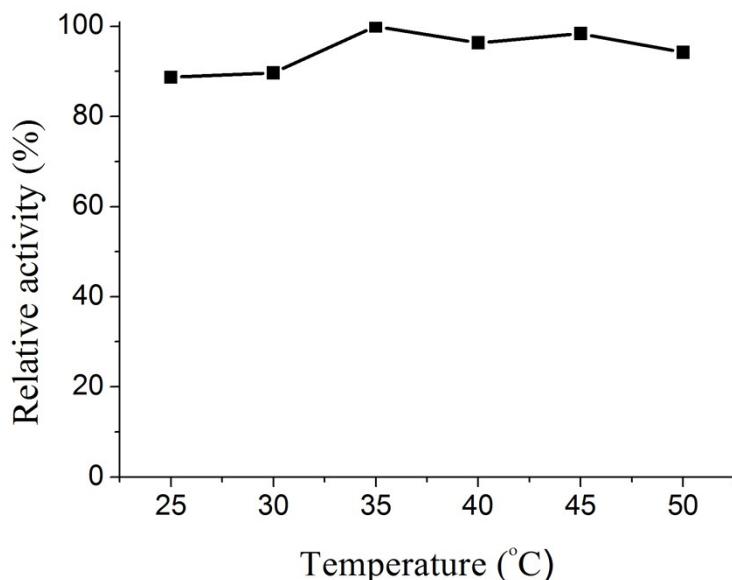


Figure S2. Temperature dependent peroxidase-like activity study for Cu_{1.8}S NPs

Table S1 Comparison of the linear range and the detect limit for GSH using different analytical methods

Sensing system	Methods	Linear range (μM)	Detect limit (μM)	Reference
MoS ₂ /polyaniline	Fluorescence	60–700	25	1
Ag NPs-N-GQDs-TMB-H ₂ O ₂	Colorimetry	0.10–157.6	0.031	2
MPA-Mn:ZnS QDs-KMnO ₄	Phosphorimetry	0.30–280	0.097	3
Mesoporous carbon	Electrochemistry	0–5000	0.09	4
g-C ₃ N ₄ nanosheet–MnO ₂	Fluorescence	0–2000	0.2	5
CBT–Cys (SEt)	UV spectra	0–87	1.0	6
erythrocyte-like Cu _{1.8} S	Colorimetry	500–10000	60	This work

1. N. Zhang, W. G. Ma, D. X. Han, L. G. Wang, T. S. Wu and L. Niu, *Talanta*, 2015, **144**, 551–558.
2. J. Ju, R. Z. Zhang and W. Chen, *Sens. Actuators, B*, 2016, **228**, 66–73.
3. Q. Jin, Y. Li, J. Z. Huo and X. J. Zhao, *Sens. Actuators, B*, 2016, **227**, 108–116
4. J. C. Ndamanisha, J. Bai, B. Qi and L. Guo, *Anal. Biochem.*, 2009, **386**, 79–84.
5. X. L. Zhang, C. Zheng, S. S. Guo, J. Li, H. H. Yang, G. N. Chen, *Anal. Chem.* 2014, **86**, 3426–3434.
6. Y. Yuan, J. Zhang, M.J. Wang, B. Mei, Y.F. Guan, G.L. Liang, *Anal. Chem.* 2013, **85**, 1280–1284.