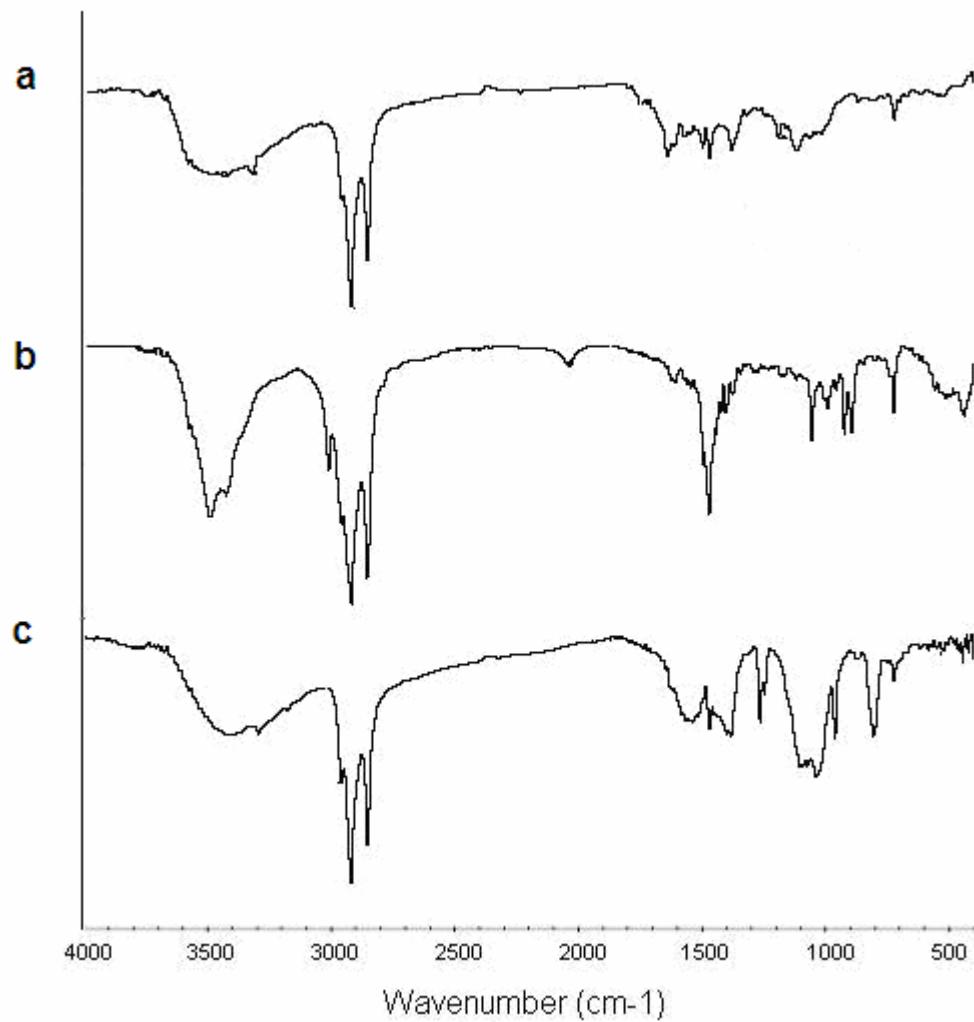


Tuning fluorescence response of surface modified CdSe quantum dots between Tyrosine and Cysteine by addition of *p*-sulfonatocalix[4]arene

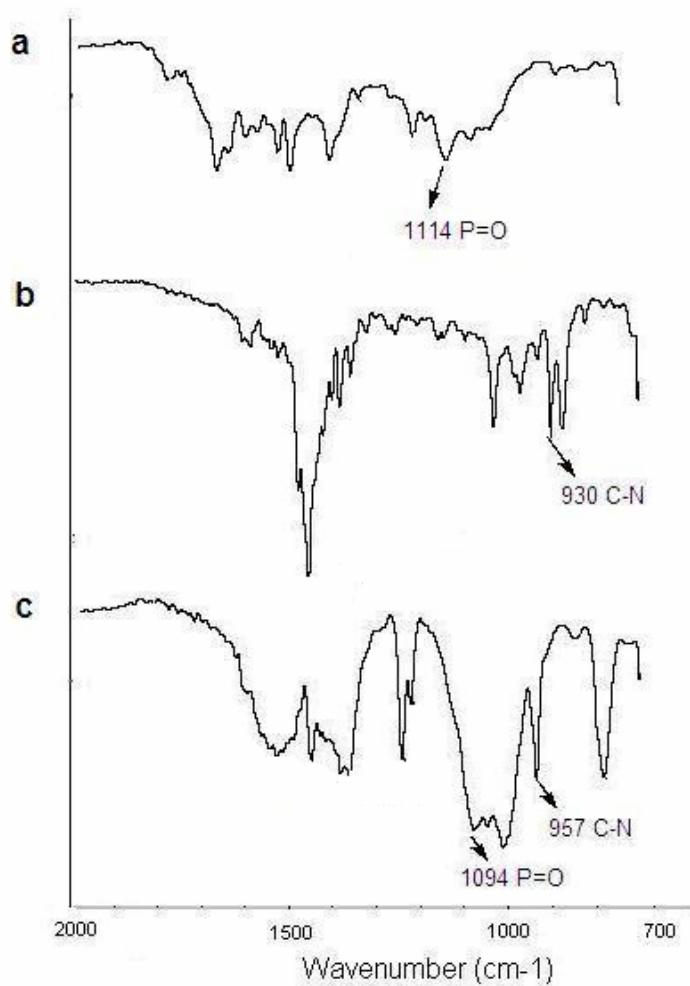
Haibing Li\* and Xiaoqiong Wang

Electronic Supplementary Information (ESI)



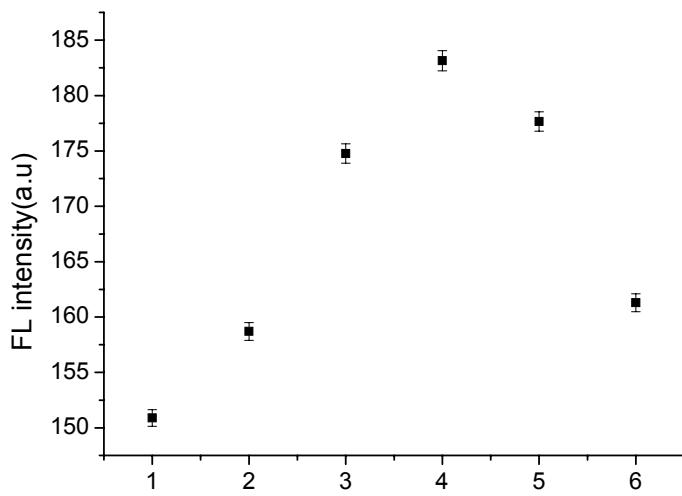
**Fig. S1(A)** IR spectra of (a) original TOPO-capped QDs. (b) pure gemini surfactant.

(c) GS-QDs.

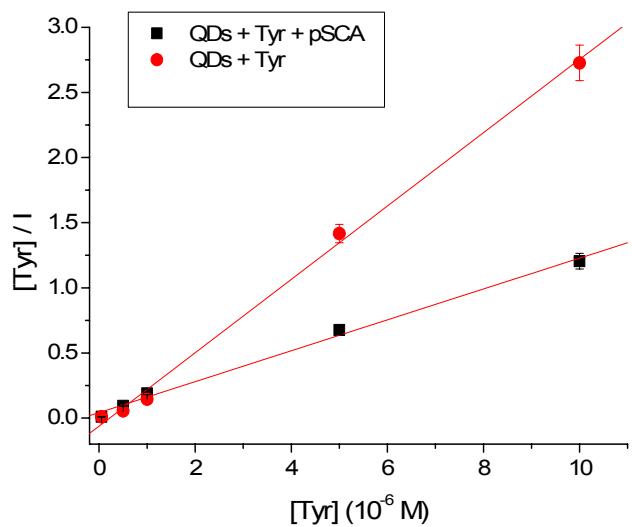


**Fig. S1(B)** IR spectra of (a) original TOPO-capped QDs. (b) pure gemini surfactant.

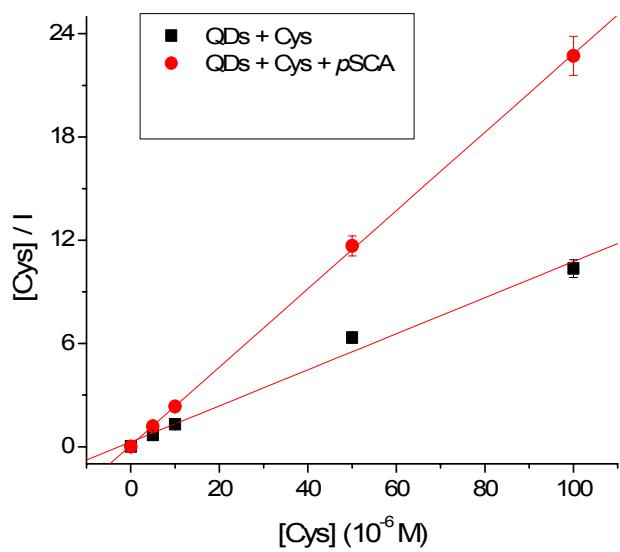
(c) GS-QDs. Noted: in the range of 2000–700 cm<sup>-1</sup>.



**Fig. S2** Effect of the concentration of *p*SCA on FL intensity of GS-QDs. (from 1 to 6:  $5 \times 10^{-6}$  M,  $10^{-5}$  M,  $10^{-4}$  M,  $5 \times 10^{-4}$  M,  $10^{-3}$  M,  $5 \times 10^{-3}$  M).



**Fig. S3** Langmuir binding isotherm description of the data that GS-QDs in water at pH 7.0 with/without *pSCA*, which showing a linear fit throughout the Tyr concentration rang. (Corresponding concentration: 0.05, 0.5, 1, 5, 10  $\mu\text{M}$ )



**Fig. S4** Langmuir binding isotherm description of the data that GS-QDs in water at pH 7.0 with/without *pSCA*, which showing a linear fit throughout the Cys concentration rang. (Corresponding concentration: 0.01, 5, 10, 50,100  $\mu M$ )