Supporting Information for

A sensitive label-free FRET probe for glutathione based on CdSe/ZnS quantum dots and MnO_2 nanosheets

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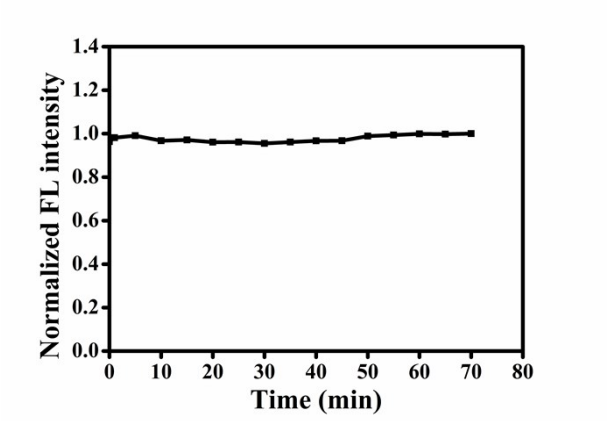

Fig.S1 The fluorescence intensity change of QDs@SiO_2 nanobeads at 527 nm under continuous irradiation of 388 nm.

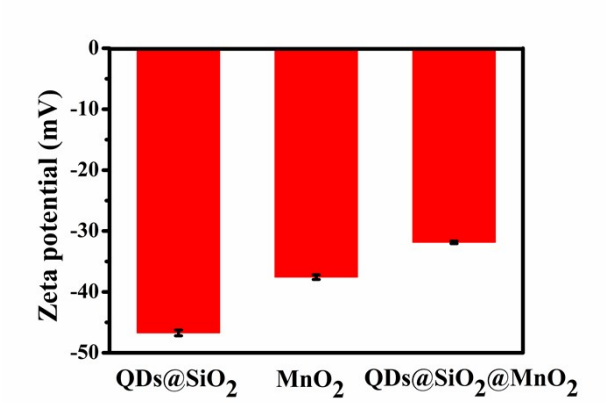

Fig.S2 Zeta potential of QDs@SiO_2 nanobeads, MnO_2 nanosheets and QDs@SiO_2@MnO_2 nanocomposites.

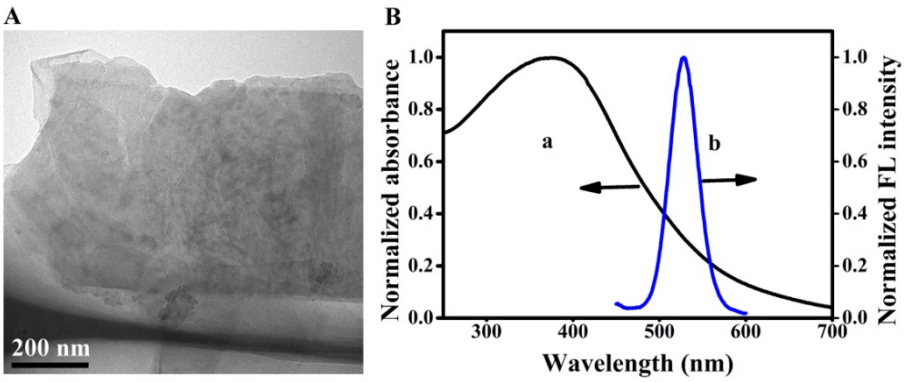

Fig. S3 (A) TEM image of the as-prepared MnO_2 nanosheets. (B) UV–Vis absorption spectrum of MnO_2 nanosheets (a) and fluorescence emission spectrum of QDs@SiO_2 nanobeads (b).

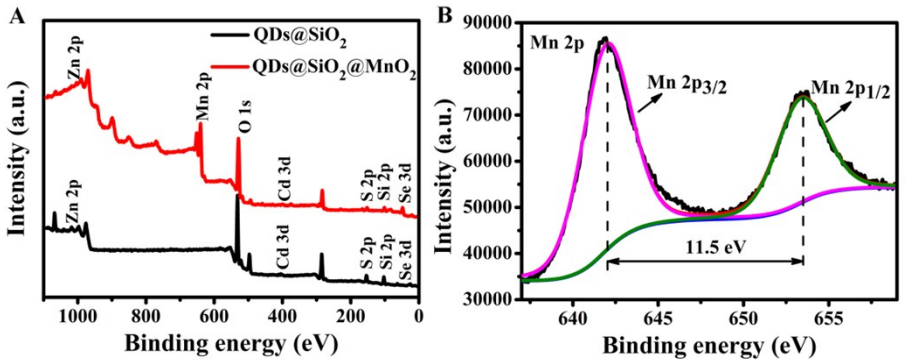

Fig.S4 (A) XPS spectra of QDs@SiO_2 nanobeads and QDs@SiO_2@MnO_2 nanocomposites. (B) High-resolution spectrum of Mn 2p.

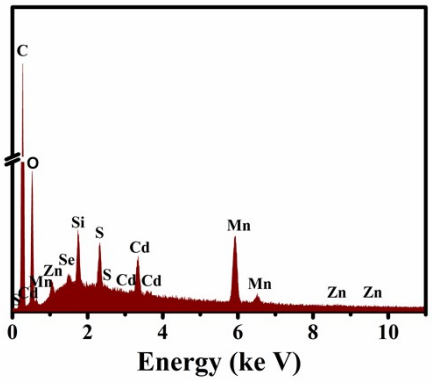

Fig.S5 EDS spectrum of QDs@SiO_2@MnO_2 nanocomposites.

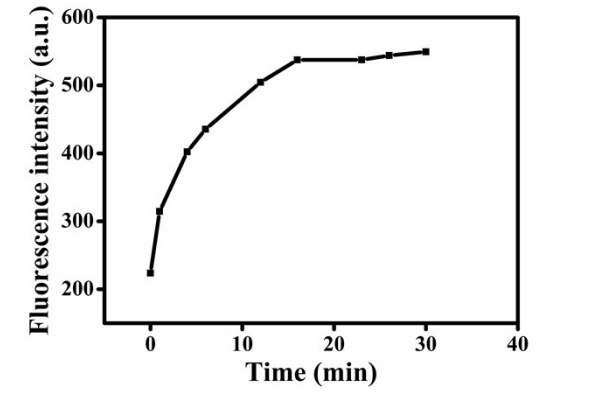

Fig. S6 The effect of incubation time on the response of QDs@SiO_2@MnO_2 nanocomposites to 0.48 mM GSH.