Facile synthesis of fluorescent porous zinc sulfide nanospheres and their application for potential drug delivery and live cell imaging

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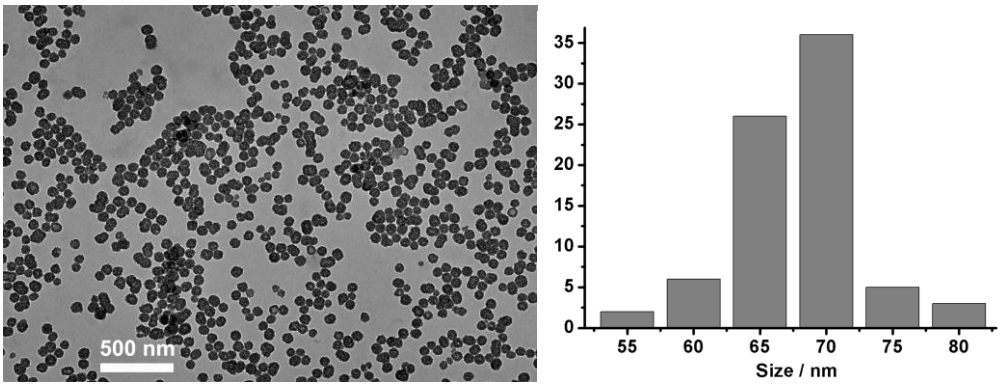

Fig. S1. Typical TEM image (left) and its size distribution based on statistical analysis (right) of ZnS FPNSs.

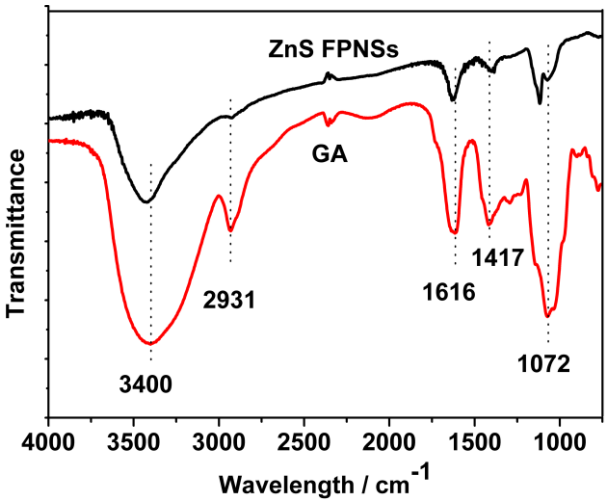

Fig. S2 FT-IR spectra of ZnS FPNSs and GA.

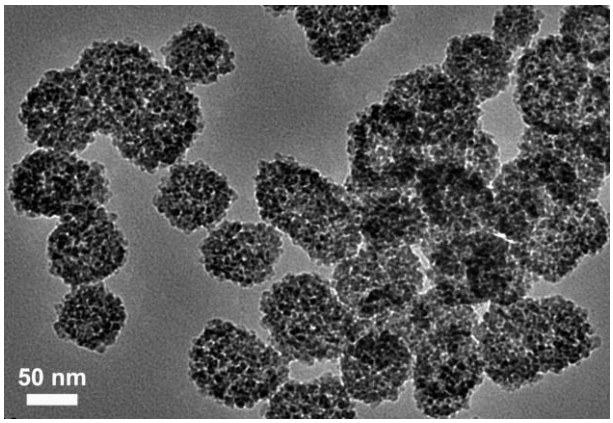

Fig. S3 Typical TEM image of ZnS FPNSs prepared for 24 h.

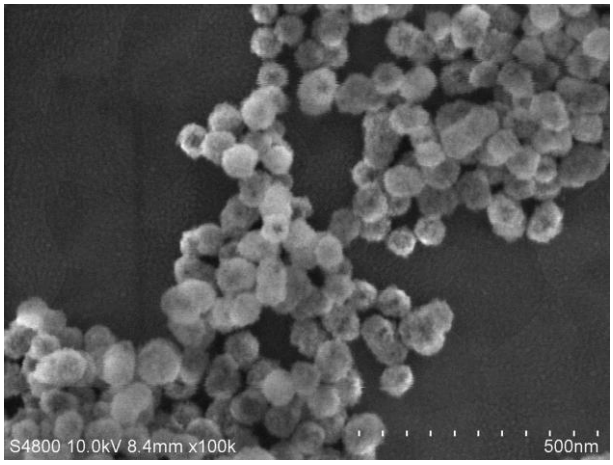

Fig. S4. Typical SEM image of ZnS FPNSs prepared at 140 °C.

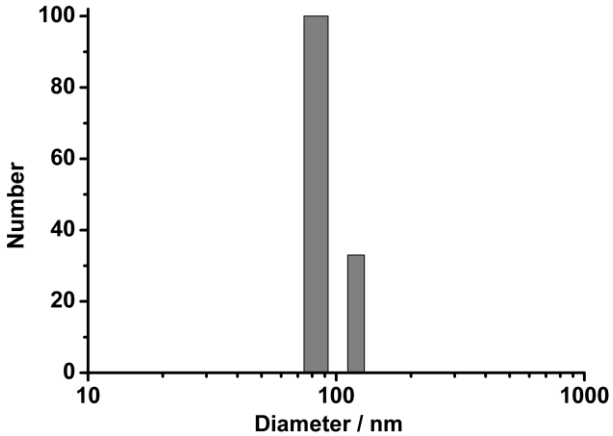

Fig. S5. The hydrodynamic diameter of ZnS FPNSs determined by DLS in water.

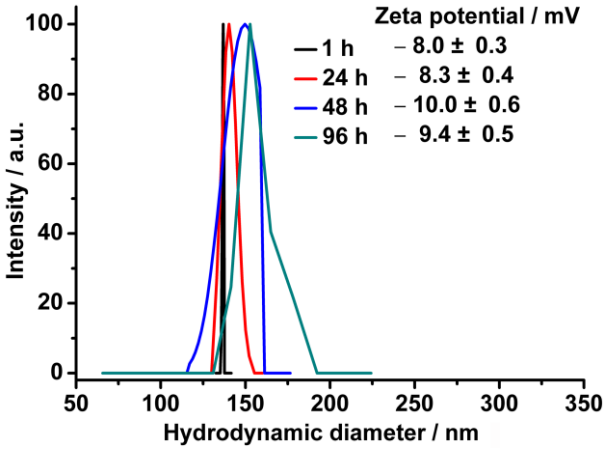

Fig. S6. The zeta potential and hydrodynamic diameter of ZnS FPNSs in DMEM+10%FBS.

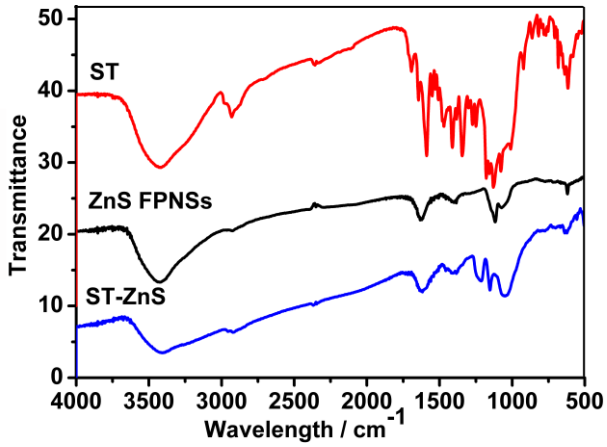

Fig. S7. FT-IR spectra of the ST-ZnS system, ZnS and ST.

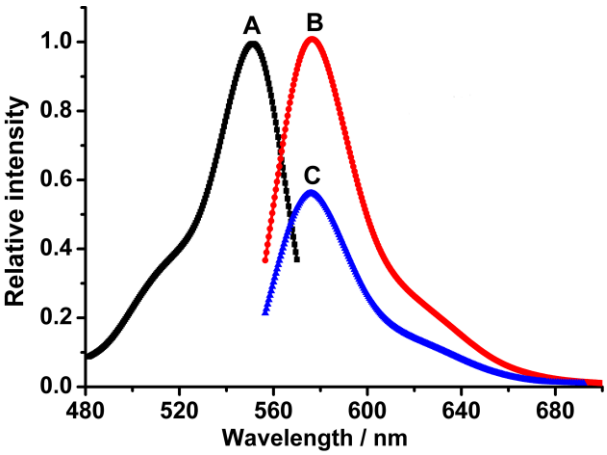

Fig. S8. The maximum excitation (A) and emission spectra before loading (B), and emission spectra after loading (C) of the diluted solution of fluorescent dye safranine-T (ST).

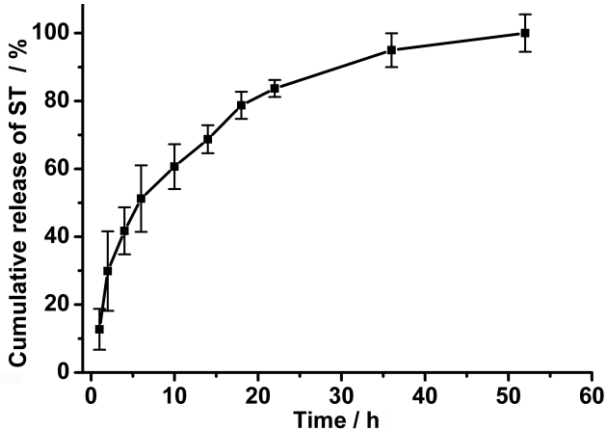

Fig. S9. The *in vitro* release kinetics of ST from the ST-ZnS system against PBS buffer (pH 7.4) at 37 °C.