Electronic Supplementary Material (ESI) for Nanoscale.

Using Copper Sulfide Nanoparticles as a Cross-linker of Tumor microenvironment Responsive Polymer Micelles for Cancer Synergistic Photo-chemotherapy

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Supporting information

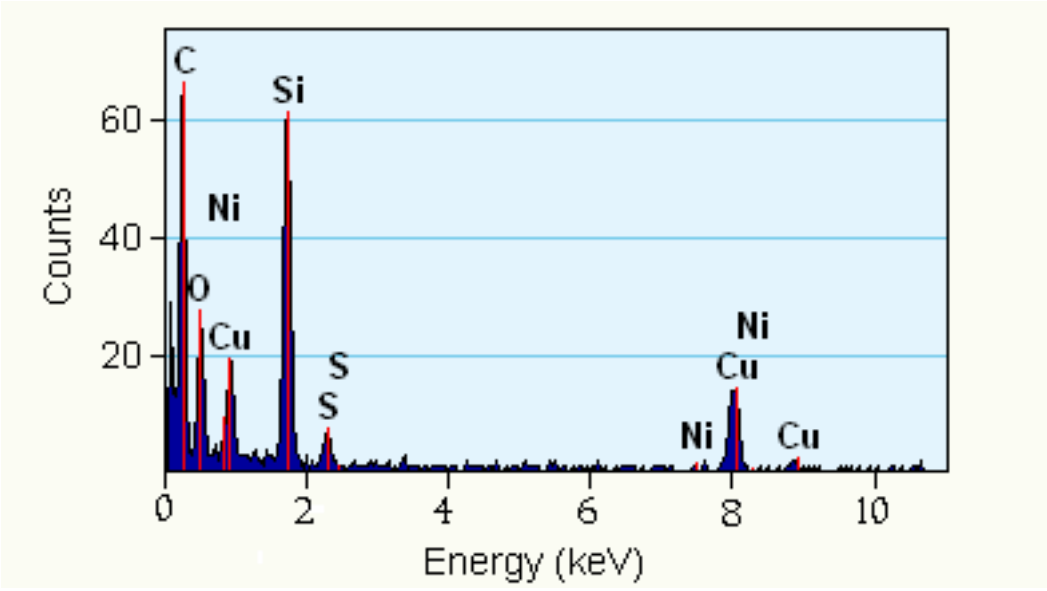

Figure S1. Energy-dispersive X-ray spectrum (EDS) of CuS NPs.

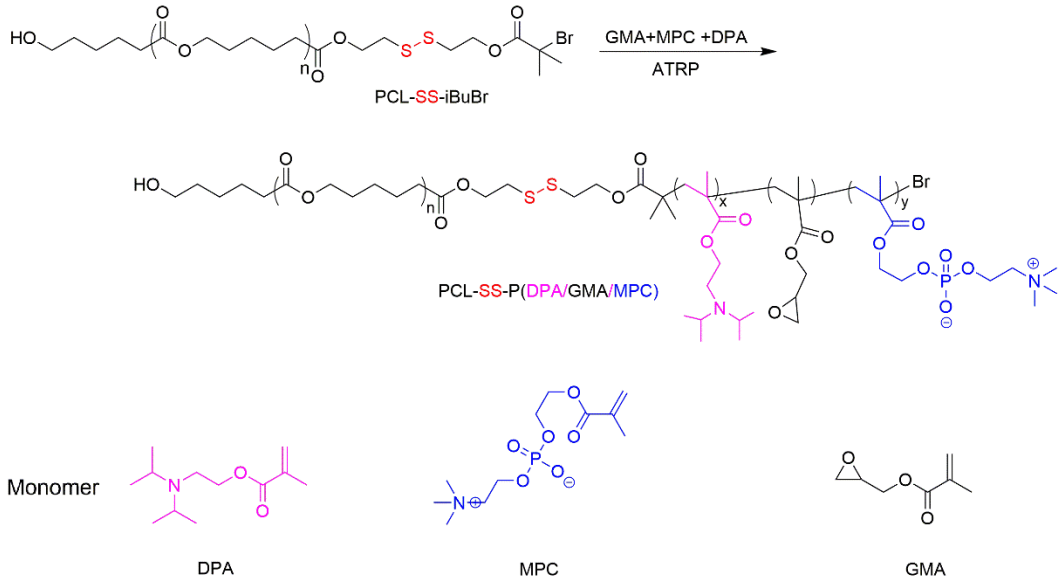

Figure S2. The synthesis route of pH/reductive dual responsive amphiphilic polymer PCL-SS-P(DPA/GMA/MPC).

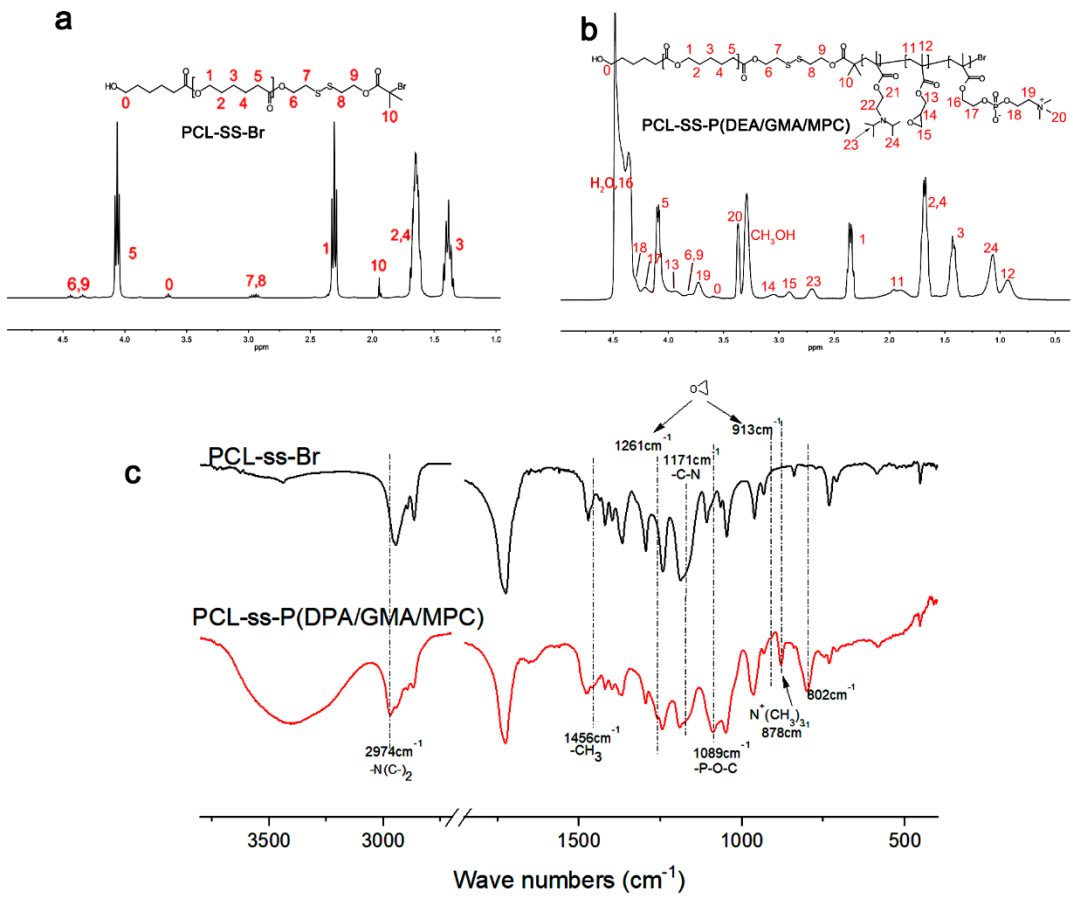

Figure S3. (a and b) Corresponding ^{1}H NMR spectra of PCL-SS-Br in CDCl3 (a) and PCL-SS-P(DEA/GMA/MPC) in mixture of $CDCl_3/CD_3OD$=1:1 (v/v). (c) FT-IR spectra of PCL-SS-Br and PCL-SS-P(DEA/GMA/MPC).

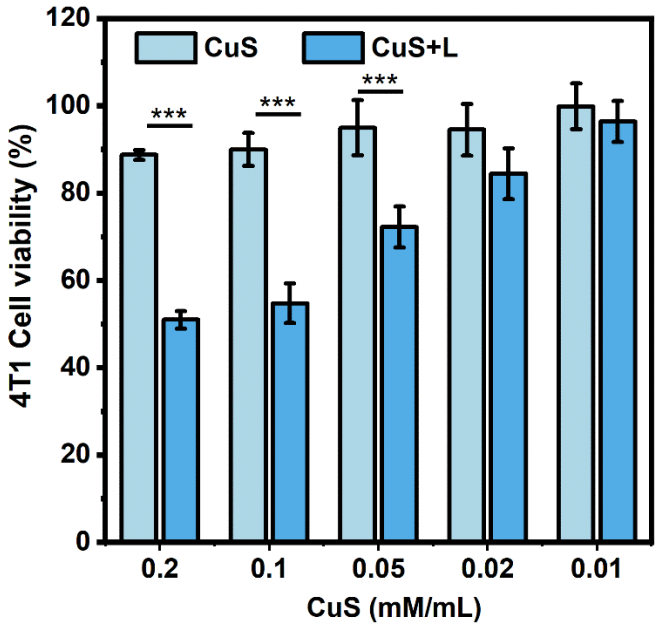

Figure S4. Relative viabilities 4T1 cells incubated with CuS NPs for 24 h. 4T1 cells were irradiated with laser for 5 min (808 nm, 2 W/cm^2) at 4 h post CuS NPs were added.

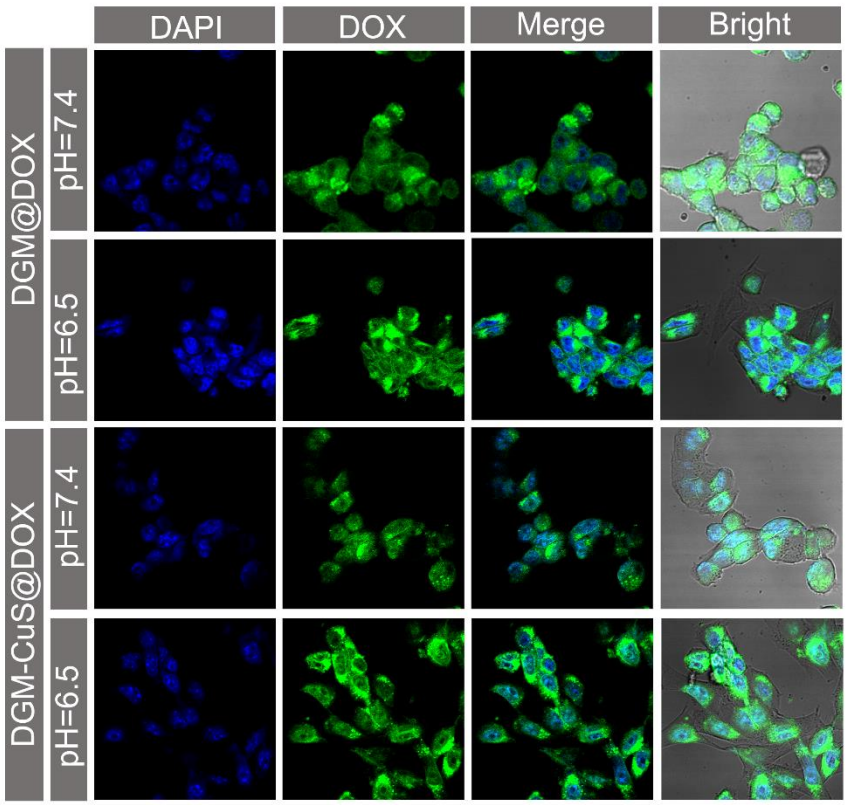

Figure S5. The cell cellular uptake of DGM@DOX and DGM-CuS@DOX after incubated with 4T1 cells for 2h at pH=6.5 and pH=7.4 culture medium respectively.

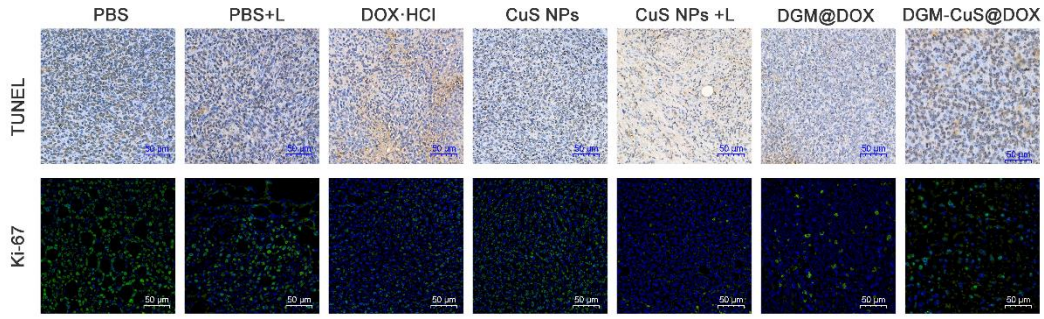

Figure S6. Pathological analysis of tumors tissues stained with TUNEL and Ki-67.