

Supporting Information

Manganese (II) chelate functionalized copper
sulfide nanoparticles for efficient magnetic
resonance/photoacoustic dual-modal imaging
guided photothermal therapy

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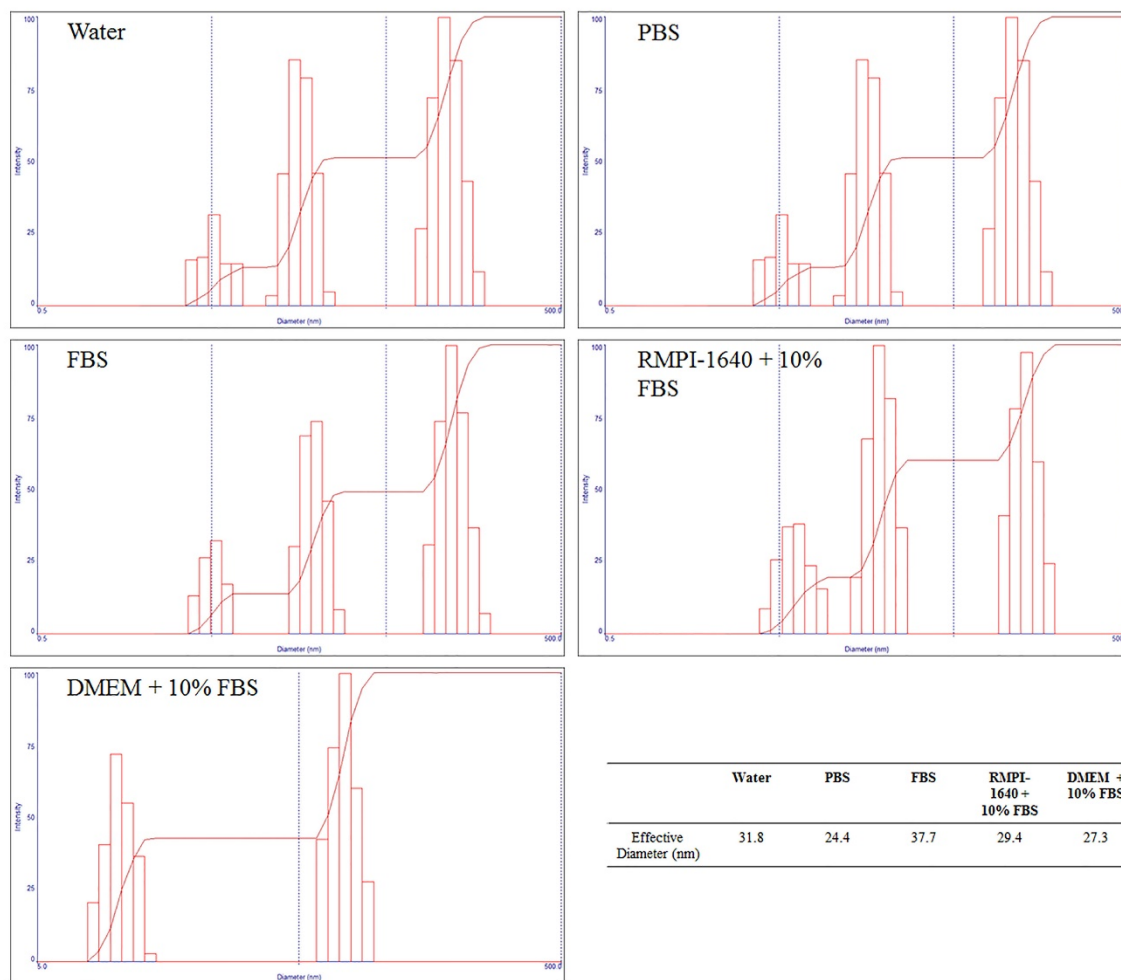


Figure S1. Size distribution and effective diameter of CuS@MPG NPs dispersed in water, PBS, fetal bovine serum (FBS), RMPI-1640 culture media containing 10% FBS and DMEM culture media containing 10% FBS determined by DLS tests.

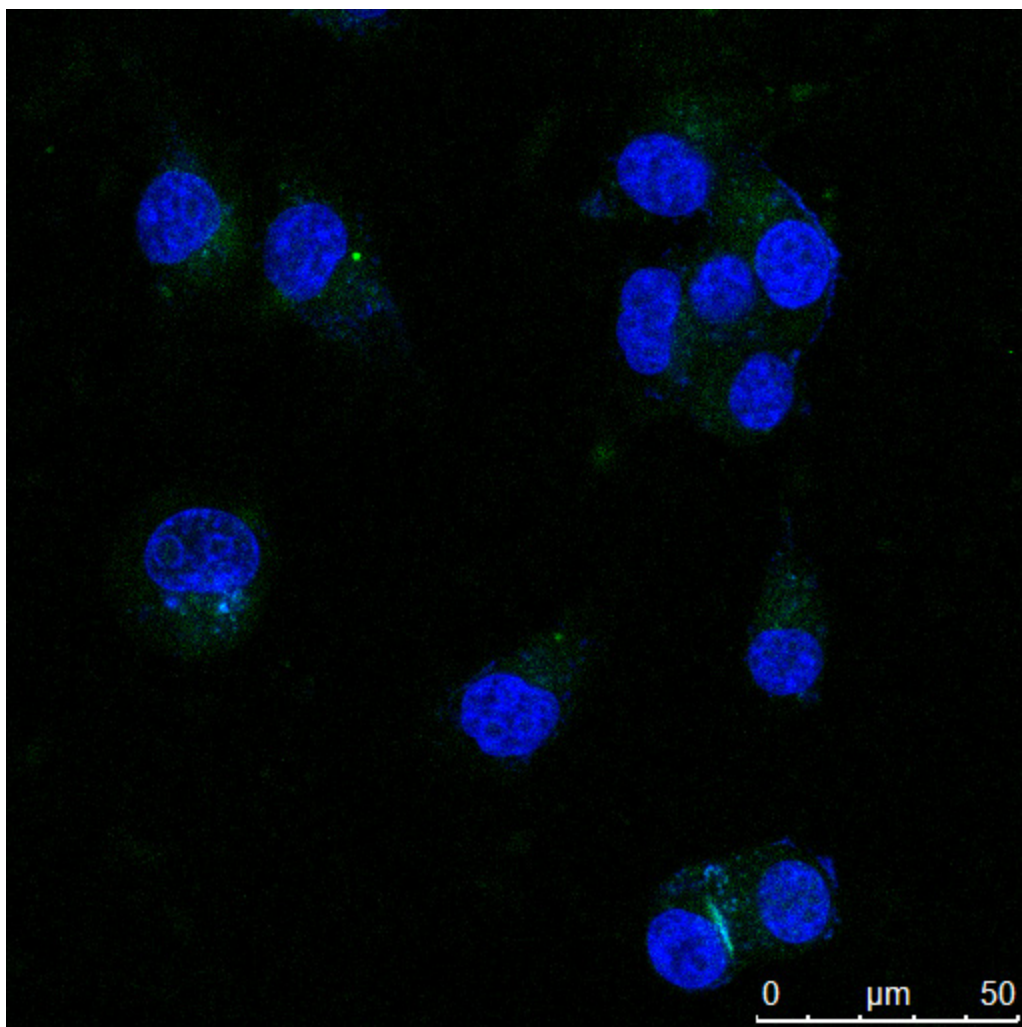


Figure S2. Cellular internalization of CuS@MPG NPs labeled with FITC after incubation for 4 h observed with confocal laser scanning microscope (Blue: DAPI; Green: FITC).

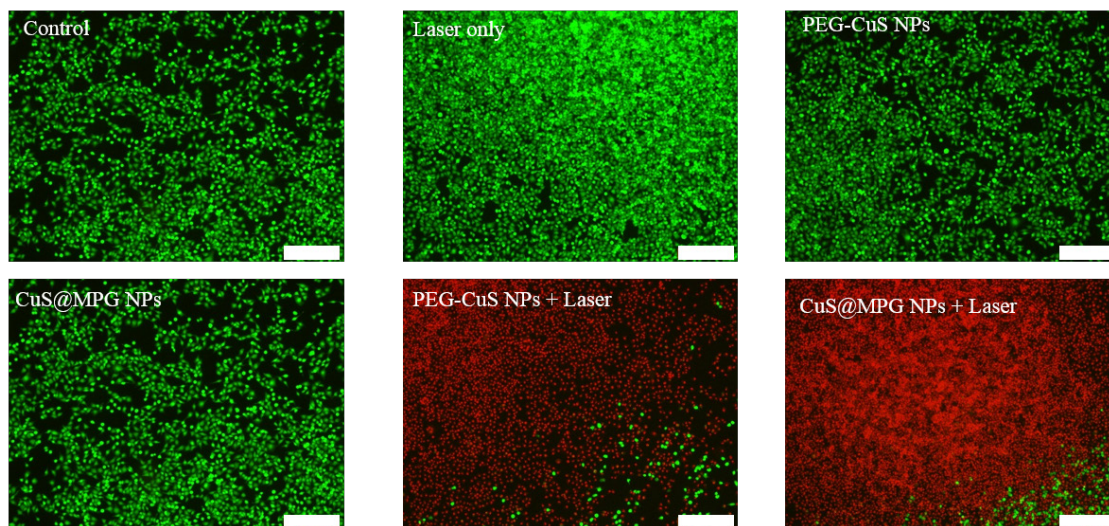


Figure S3. Fluorescence images of Calcein AM/PI co-stained MDA-MB-231 cells with different treatments: control, NIR laser treatment only, PEG-CuS NPs only, CuS@MPG NPs only, PEG-CuS NPs plus NIR laser irradiation and CuS@MPG NPs plus NIR laser irradiation. Scale bar = 200 μm .

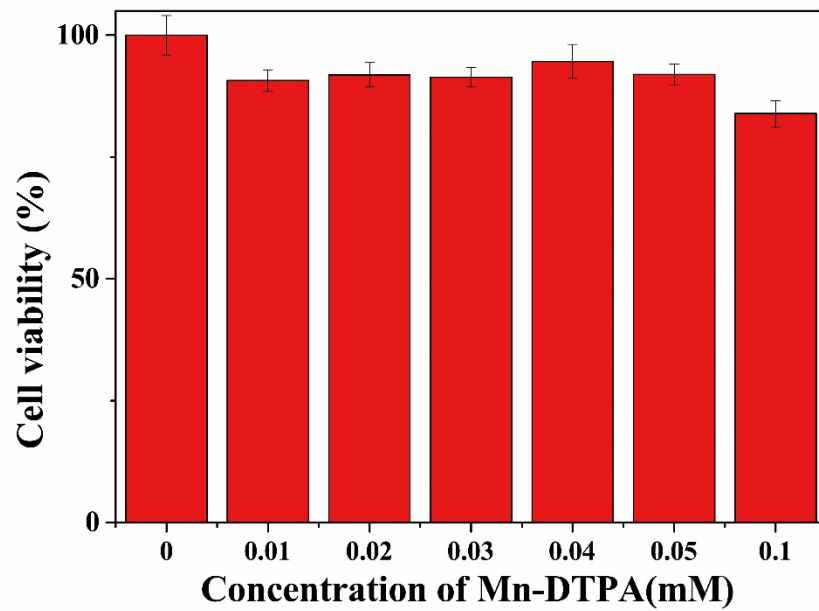


Figure S4. Cytotoxicity of Mn(II)-DTPA at different concentrations to MDA-MB-231 cells determined by MTT assay.

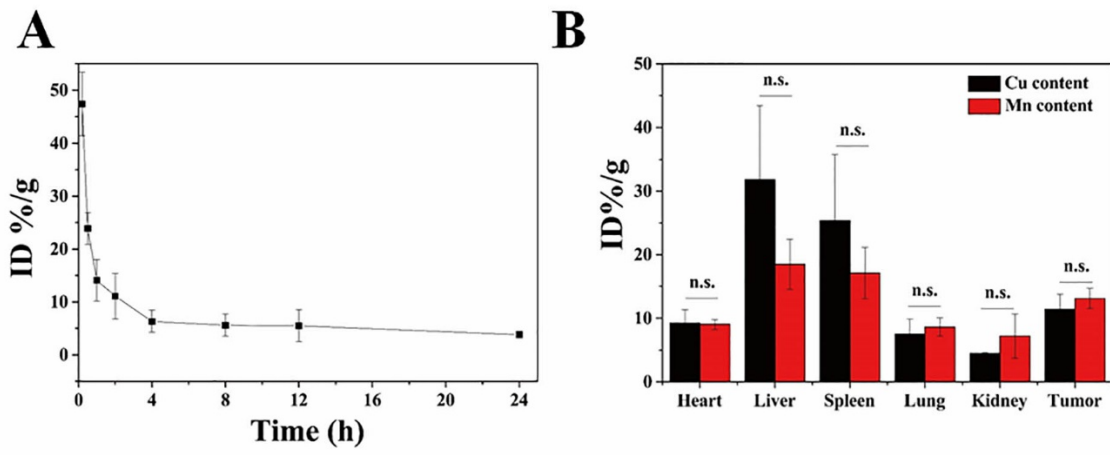


Figure S5. (A) Pharmacokinetic profile of CuS@MPG NPs following intravenous administration. (B) Biodistribution of CuS@MPG NPs at 24 h after intravenous injection in mice. Data represent means \pm standard deviations. n.s., no significant difference as defined by $P > 0.05$.