

***In situ* Thermosensitive H₂O₂/NO Self-sufficient Hydrogel for Photothermal Ferroptosis of Triple Negative Breast Cancer**

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SUPPORTING INFORMATION

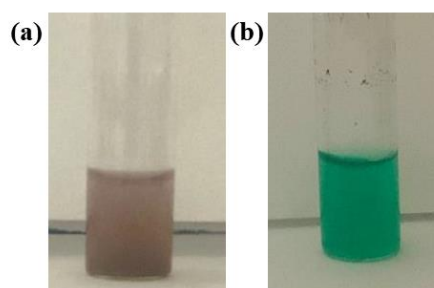


Figure S1: (a) IR806 dye directly added to CP NPs and (b) IR806 dye encapsulated through modified liposomes

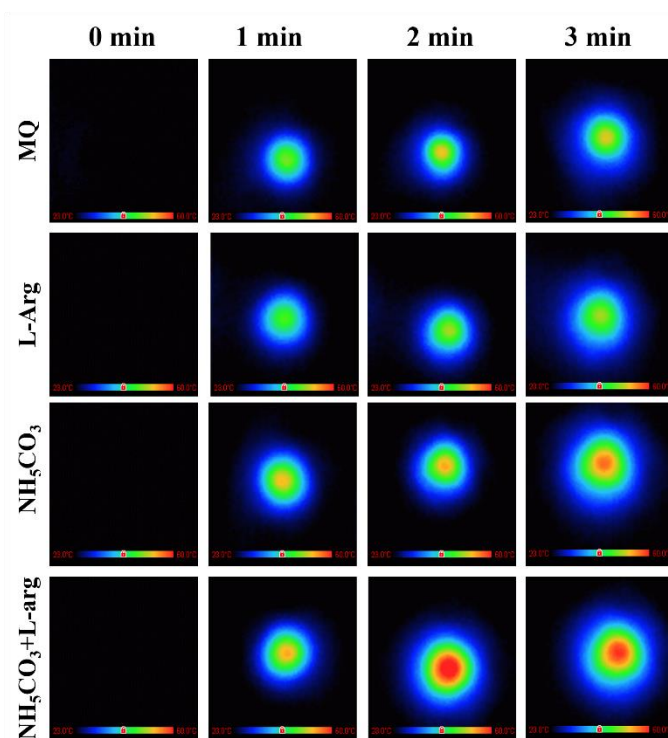


Figure S2: Representative thermal images of CPIR NPs synthesized in various hydration media

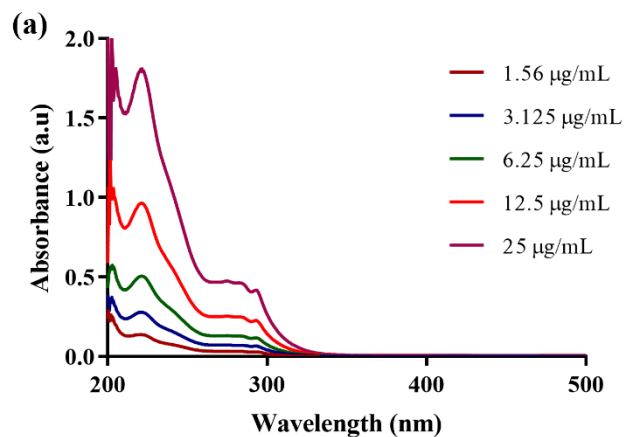


Figure S3: Standard curve for RSL-3

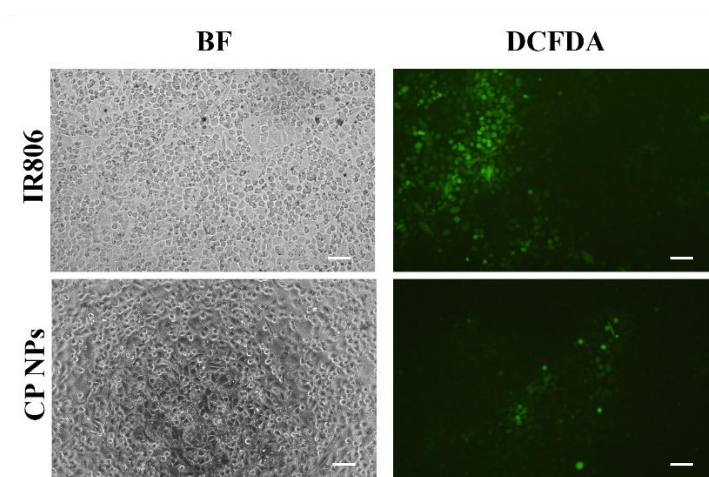


Figure S4: ROS generation in 4T1 cells treated with only IR806 and CP NPs upon NIR laser irradiation under normoxic conditions (Scale bar represents 100µm).

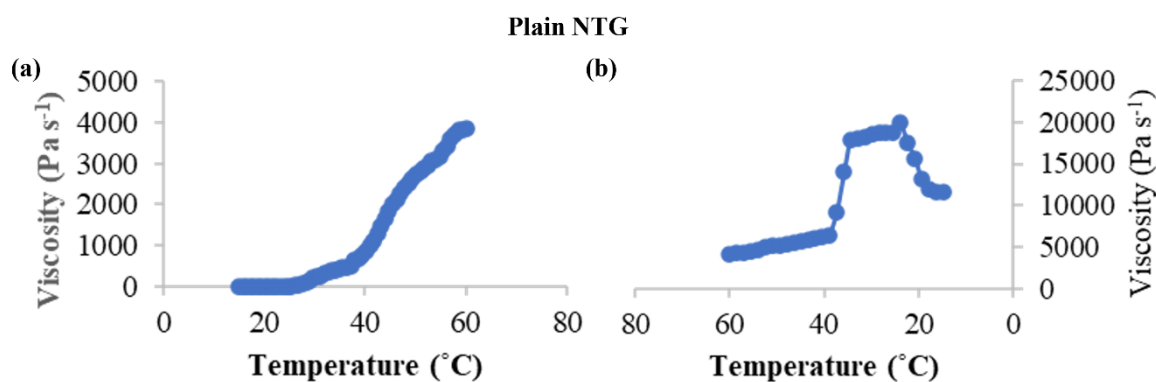


Figure S5: Rheological analysis of plain NTG without CP NPs. (a) Temperature-Viscosity graph and (b) Reverse sweep to confirm the irreversible cross-linking

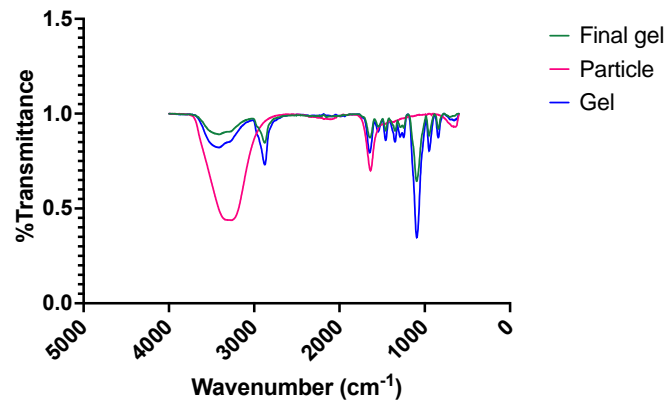


Figure S6: FTIR analysis of plain NTG and CPR-NTG

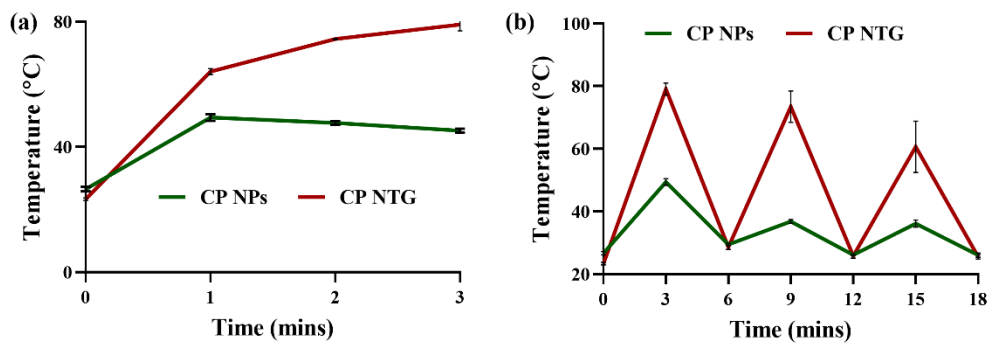


Figure S7: (a) Photothermal temperature rise and (b) Photothermal stability of CP NPs and CP NTG upon irradiation with 750nm laser.

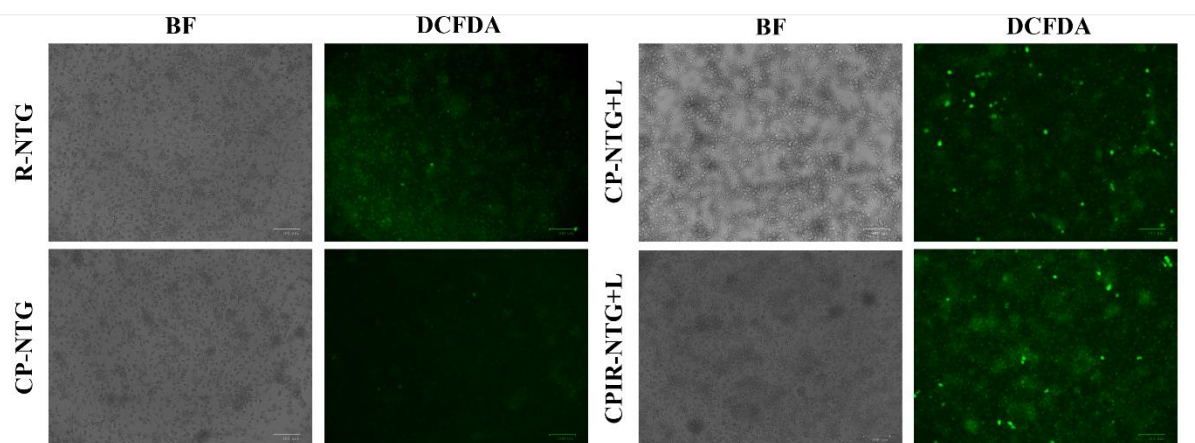


Figure S8: ROS generation in 4T1 cells treated R-NTG, CP NTG, CPNTG+L, CPIR NTG (Scale bar represents 100 μ m).

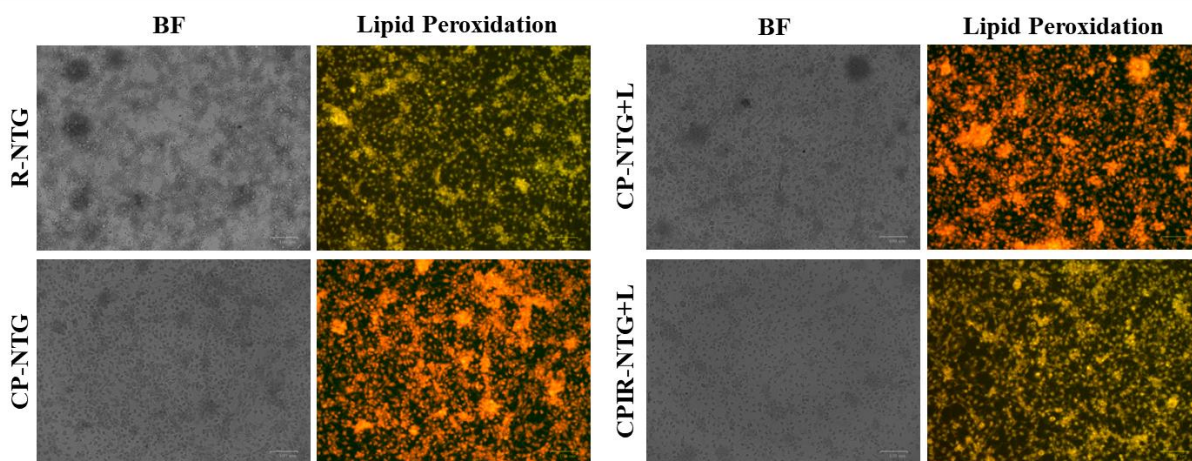


Figure S9: Lipid peroxidation in 4T1 cells treated R-NTG, CP NTG, CPNTG+L, CPIR NTG (Scale bar represents 100 μ m).

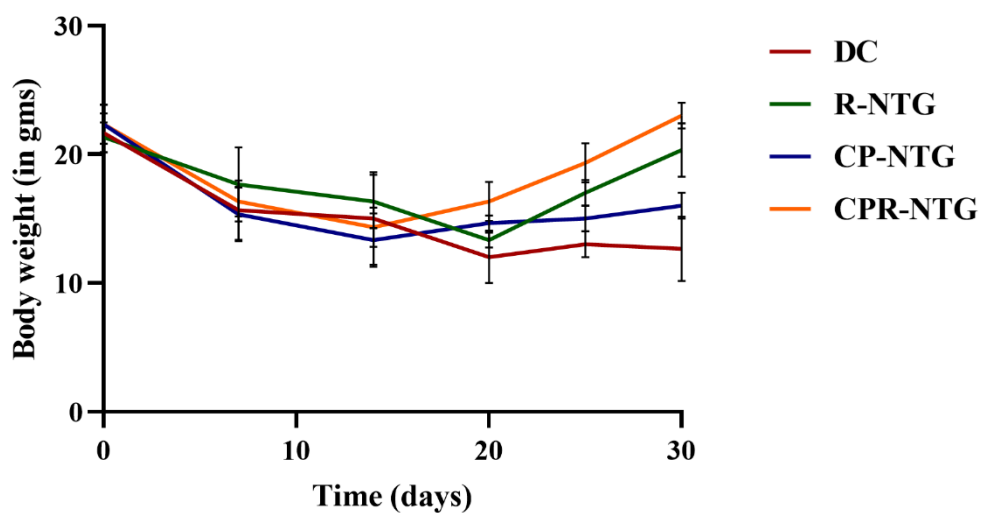


Figure S10: Changes in Body weight observed in mice during the treatment period.

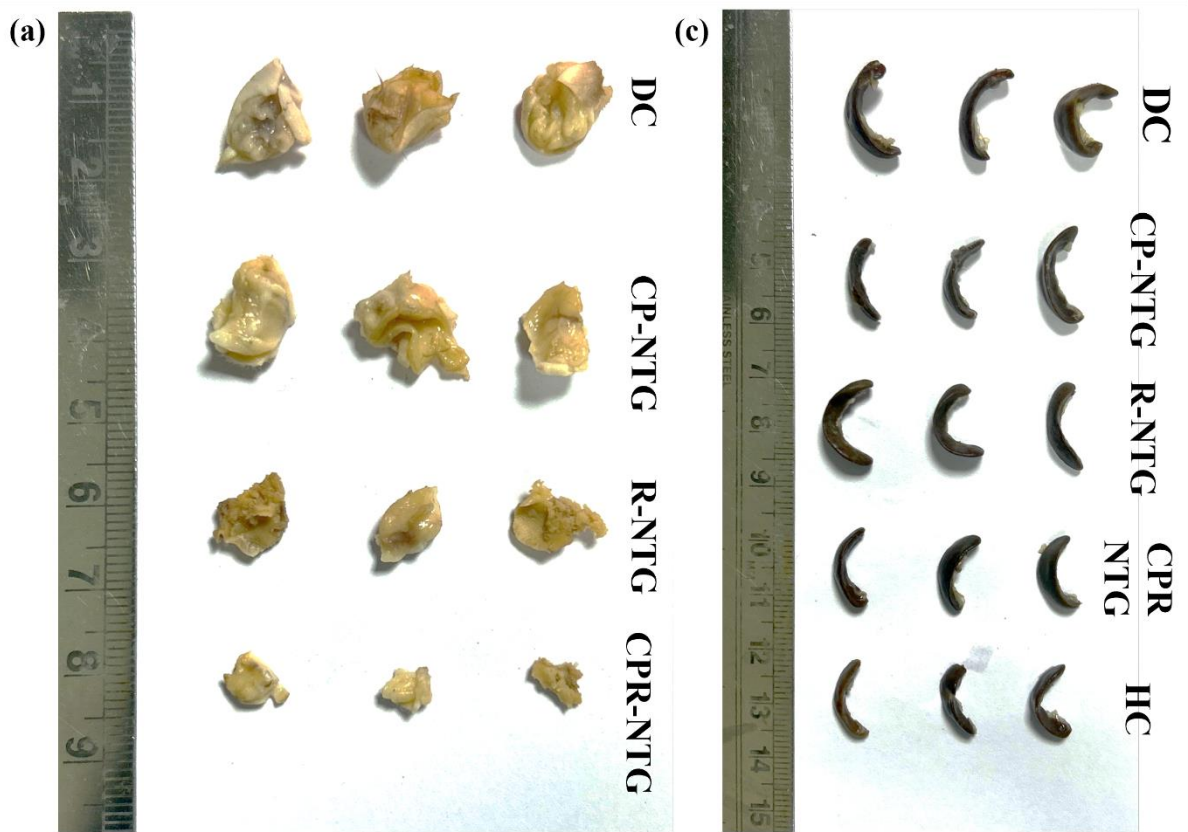


Figure S11: Excised (a) Tumors and (b) Spleen from mice treated with hydrogel sample and post-treatment period (n=3).

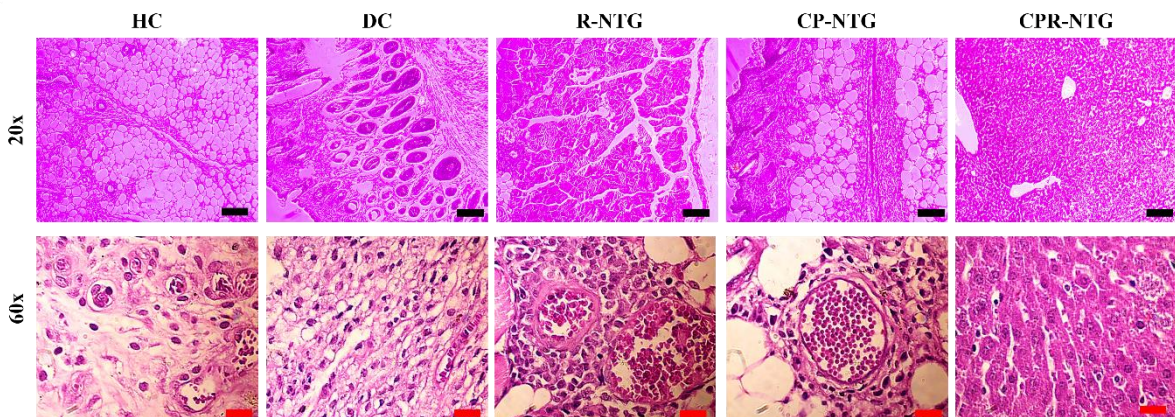


Figure S12: H&E staining of tumors excised from treated mice

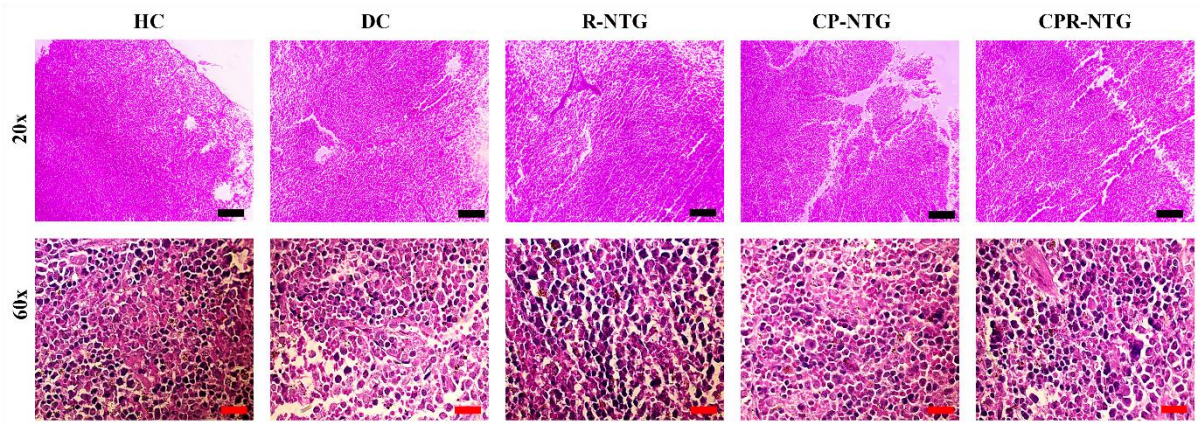


Figure S13: H&E staining of spleen excised from treated mice