Supporting Information

Ultra-small Iron-Gallic Acid Coordination Polymer Nanoparticles for Chelator-free Labeling of ^{64}Cu and Multimodal Imaging-guided Photothermal Therapy

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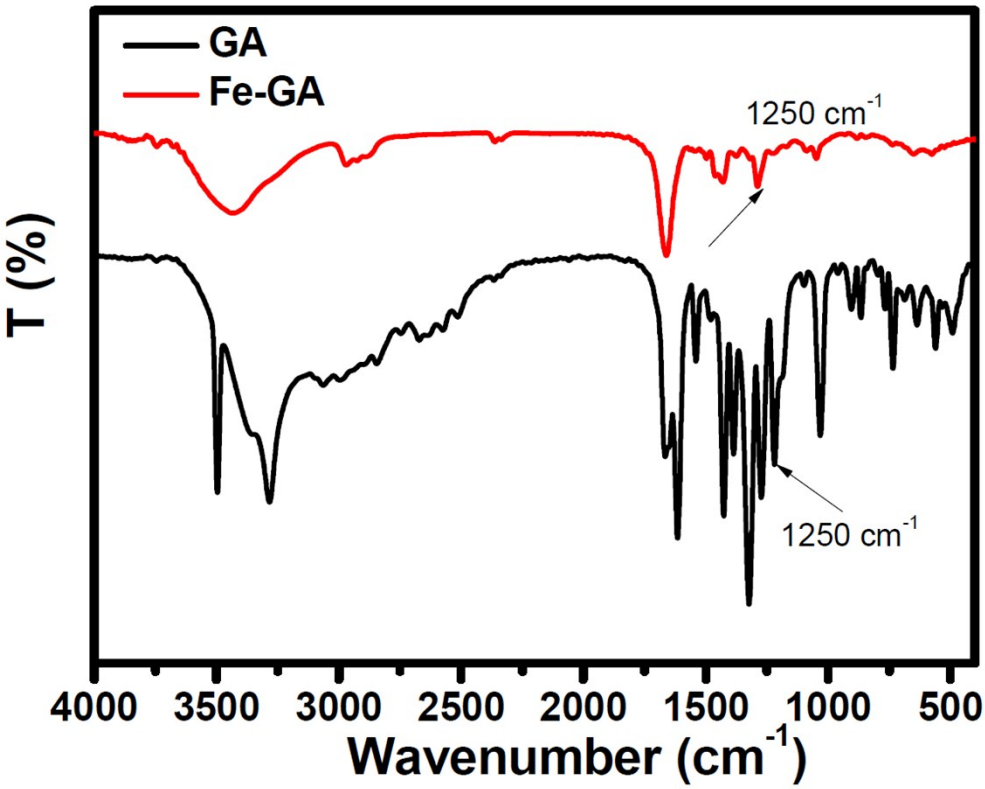
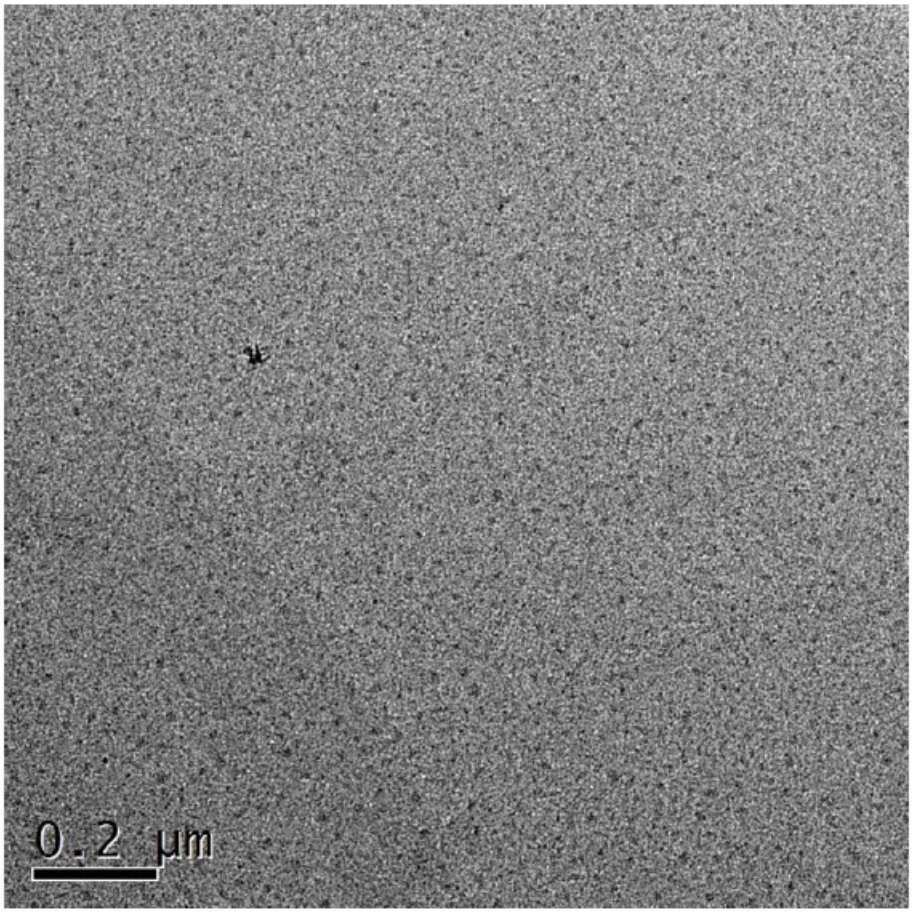
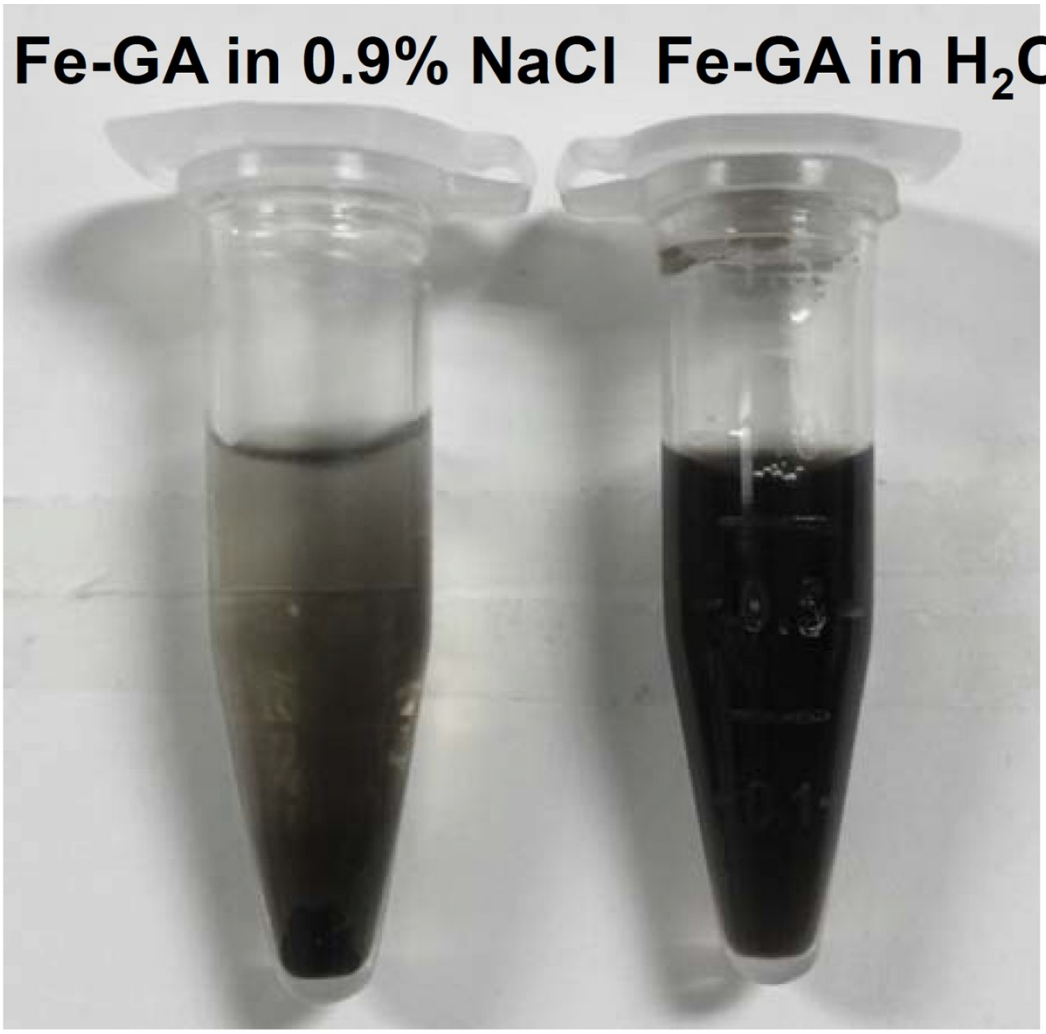


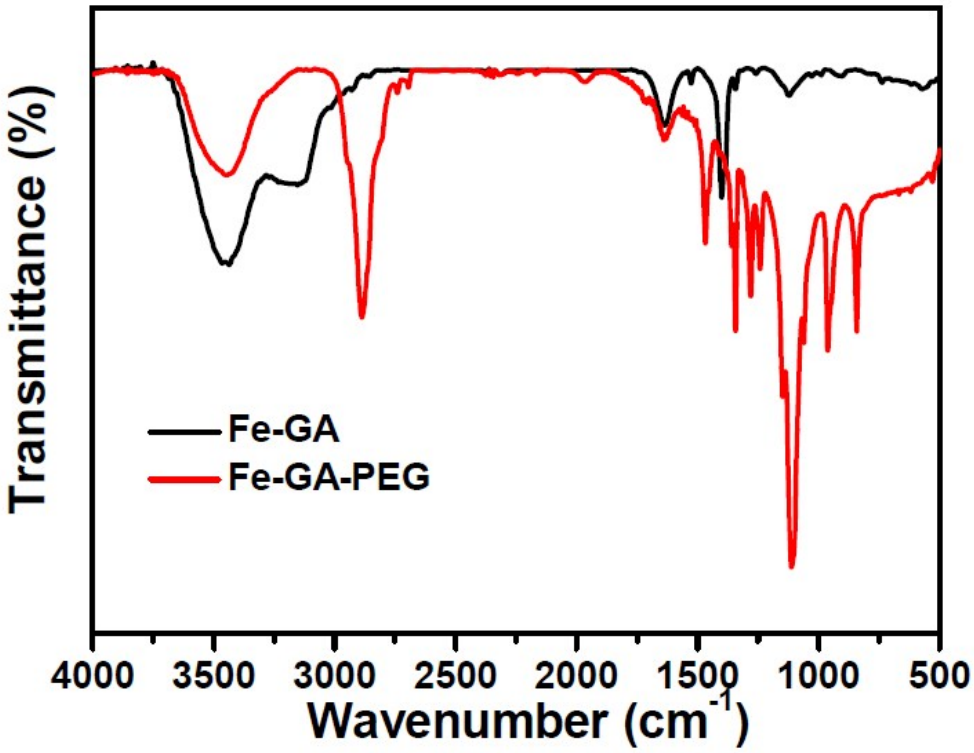
Supporting Figure S1. FTIR spectra of the as-prepared GA and Fe-GA CPNs. The infrared intensity of Fe-GA CPNs at 1250 cm^{-1} (the HO-C stretching band) was lower than that of GA, indicating that the HO-C phenolic hydroxyl group of GA coordinated with Fe^{3+}.



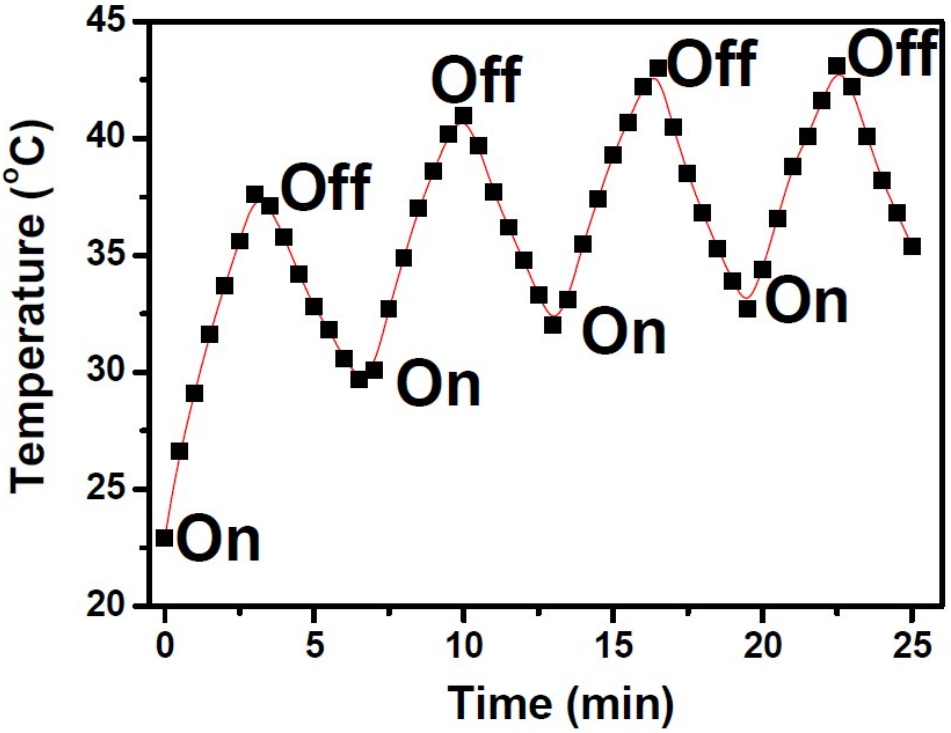
Supporting Figure S2. TEM images of the synthesized Fe-GA CPNs. From the TEM image, we can find the size is uniform with the diameter ~ 5 nm.



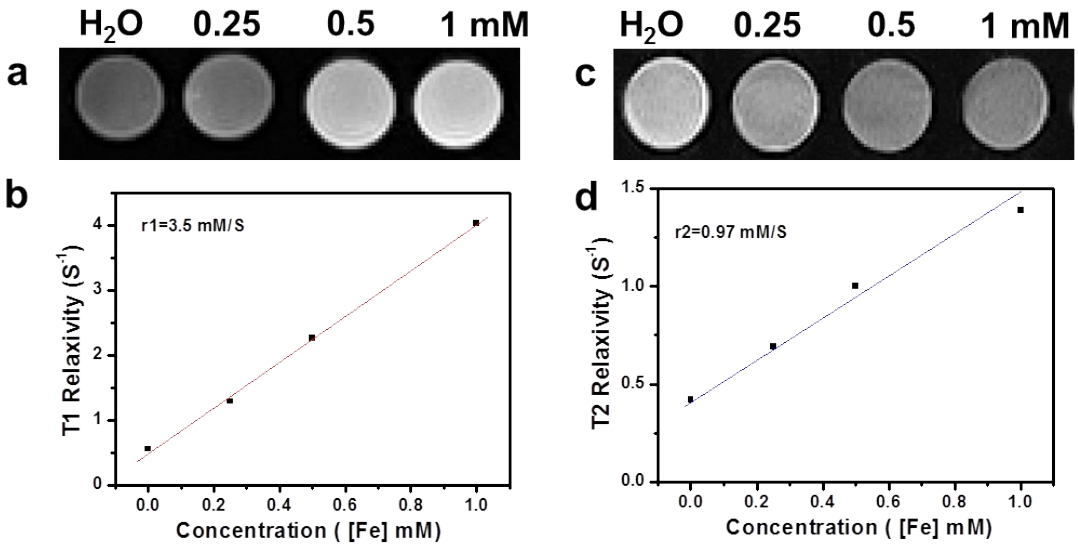
Supporting Figure S3. A photo of Fe-GA CPNs in 0.9 % NaCl salt solution and water for 24 h. Fe-GA CPNs without PEGylation would be aggregated in salt solution though the surface protected by PVP.



Supporting Figure S4. FTIR spectra of the as-prepared Fe-GA and Fe-GA-PEG CPNs. Various peaks of increased intensity from 1000 to 1400 cm^{-1} in the Fe-GA-PEG CPNs were likely due to stretching vibrations of the -C-O bond in PEG.



Supporting Figure S5. Temperature variations of Fe-GA-PEG CPNs (0.4 mg/mL) under the irradiation by the 808-nm laser at the power density of 0.8 W/cm^2 for 4 cycles (6 min of irradiation for each cycle).



Supporting Figure S6. MR contrasting ability of Fe-GA-PEG CPNs. **(a&c)** T_1 (**a**) and T_2 (**b**) weighted MR images of Fe-GA-PEG CPNs with various Fe^{3+}concentrations. **(b&d)** The Fe-GA concentration dependent T_1 relaxation rates (**b**) and T_2 relaxation rates (**d**) of Fe-GA-PEG CPNs. The longitudinal relaxivity (r_1) and transverse relaxivity (r_2) were determined to be 3.5 and 0.97 $mM^{-1}S^{-1}$, respectively.