

Electronic Supplementary Information

Small Functionalized Iron Oxide Nanoparticles for Dual Brain Magnetic Resonance Imaging and Fluorescence Imaging

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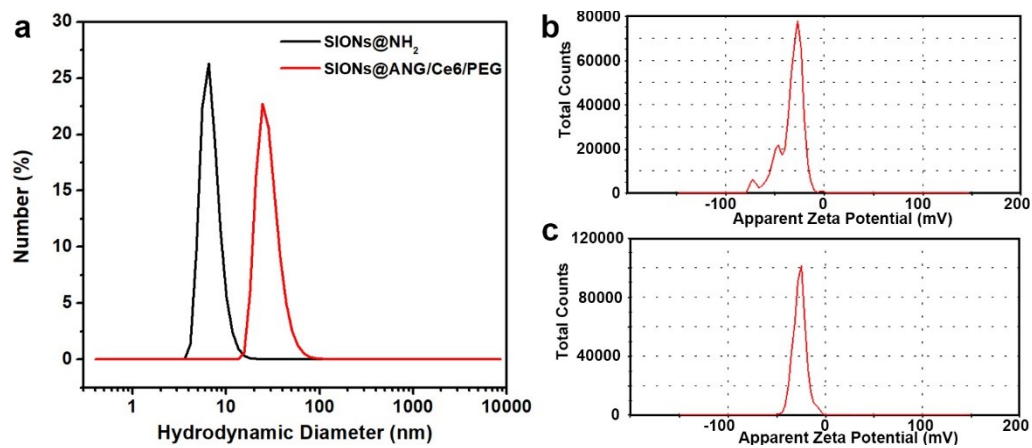


Figure S1 (a) Hydrodynamic diameter of SIONs@NH₂ and SIONs@ANG/Ce6/PEG. Zeta potential in PBS (1×, pH 7.4) of (b) SIONs@NH₂ and (c) SIONs@ANG/Ce6/PEG.

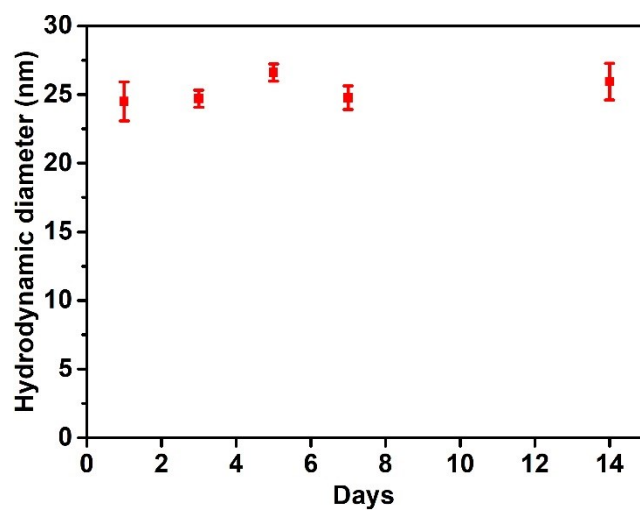


Figure S2 Hydrodynamic diameter of SIONs@ANG/Ce6/PEG in 10% (v/v) fetal bovine serum (FBS) solution at different time points.

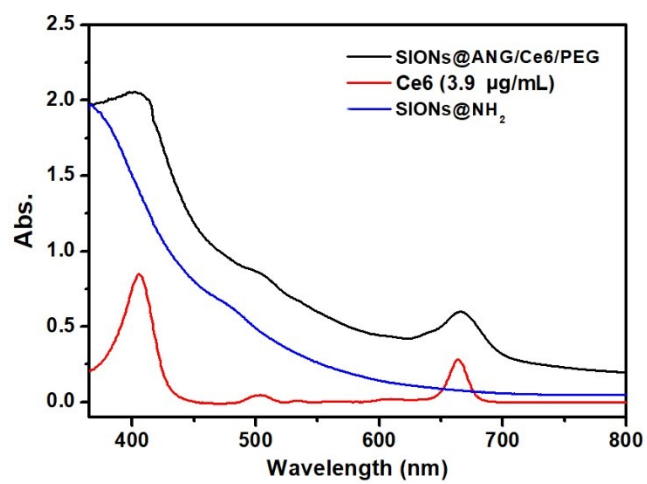


Figure S3 UV-vis spectra of SIONs@ANG/Ce6/PEG, Ce6, and SIONs@NH₂.

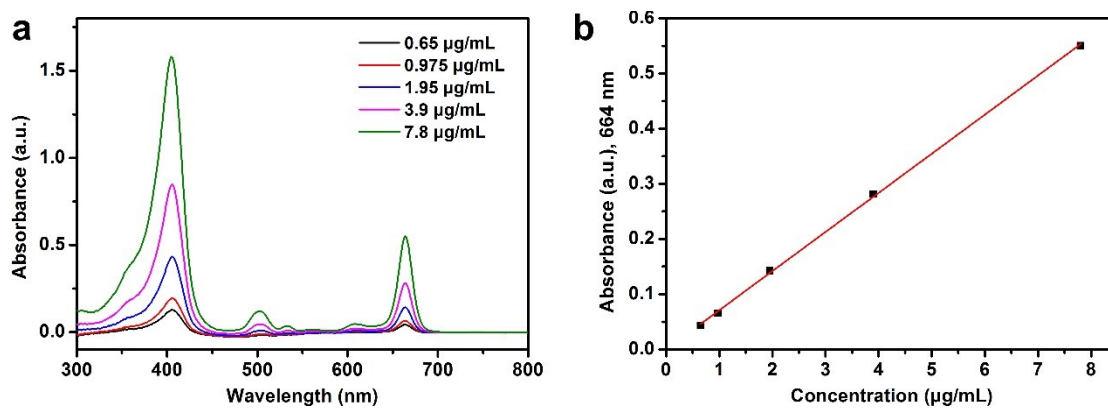


Figure S4 (a) UV-Vis spectra of Ce6 at different concentrations. (b) Calibration curve of Ce6 based on (a).

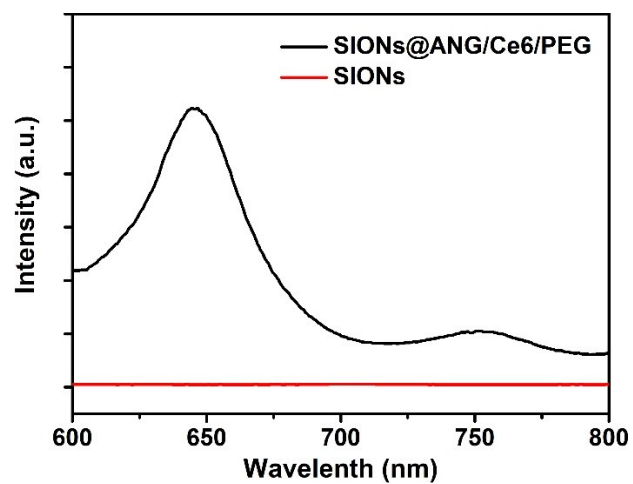


Figure S5 Fluorescence spectrum of SIONs and SIONs@ANG/Ce6/PEG with excitation at 590 nm.

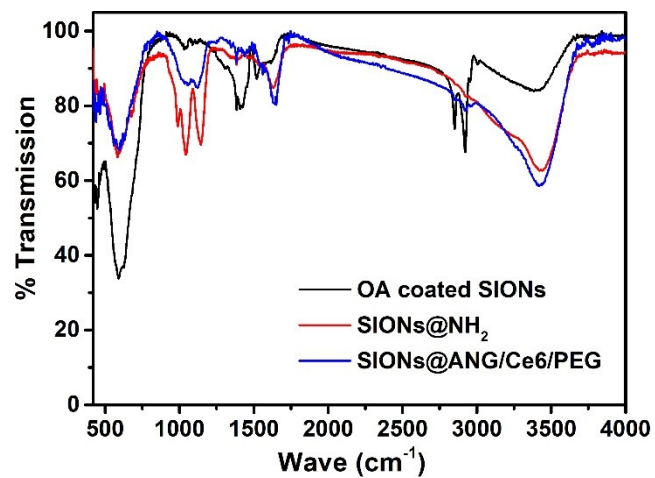


Figure S6 Fourier transform infrared (FT-IR) spectra of OA coated SIONs, SIONs@NH₂, and SIONs@ANG/Ce6/PEG.

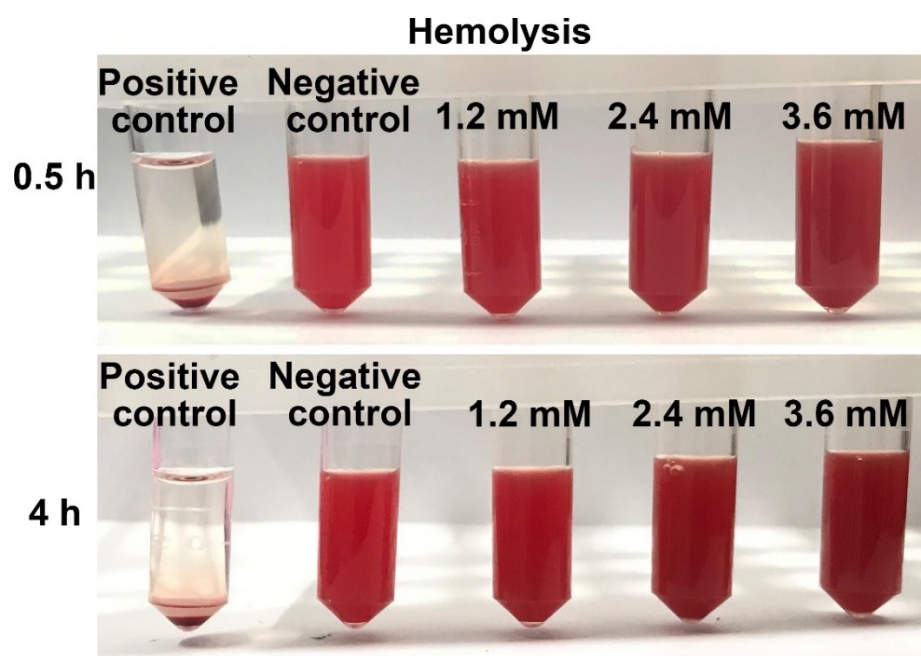


Figure S7 Hemolysis test of SIONs. The diluted red blood cells were exposed to SIONs at a concentration gradient and no significant hemolysis effect were observed at even 3.6 mM [Fe] till 4 h incubation.

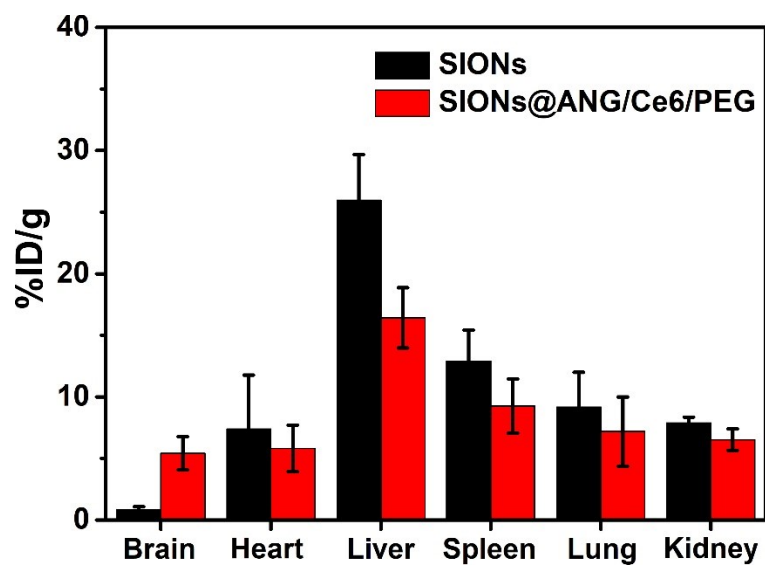


Figure S8 Biodistribution of SIONs and SIONs@ANG/Ce6/PEG in mice organs at 2 h after intravenous injection (20 mg Fe /kg body weight, $n = 3$ /group). The iron contents were measured by ICP-MS and the background was subtracted.