

Facile phase transfer of hydrophobic $\text{Fe}_3\text{O}_4@\text{Cu}_{2-x}\text{S}$ nanoparticles by red blood cell membrane for MRI and phototherapy in the second near-infrared window

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Results

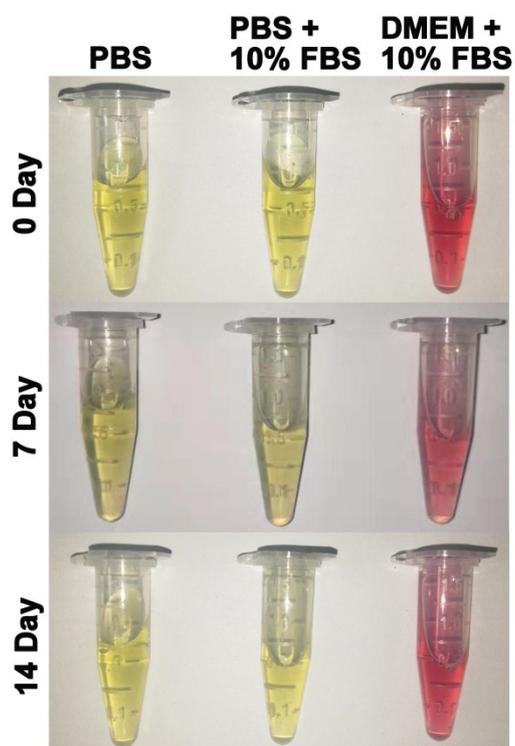


Fig. S1 Photograph of SCS@RBCM stored in PBS, PBS with 10% FBS and DMEM with 10% FBS, for 0-14 days.

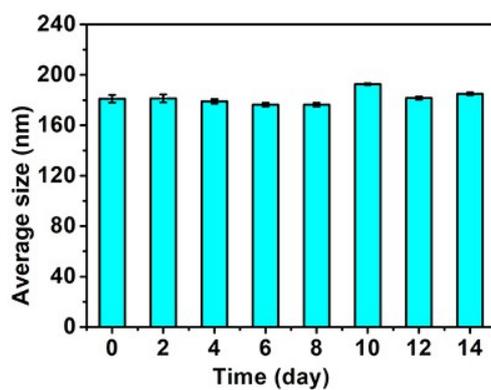


Fig. S2 Colloidal stability of SCS@RBCM in PBS with 10% FBS over a span of 14 days, as determined by DLS.

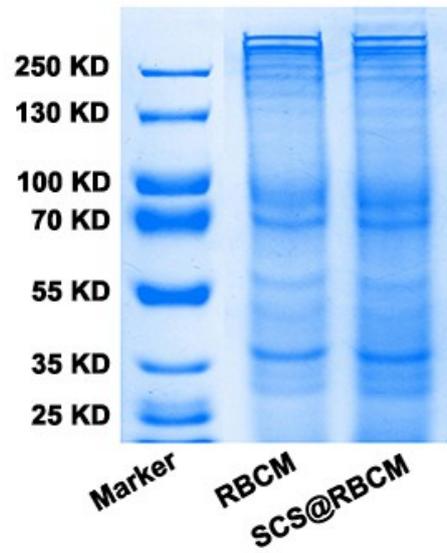


Fig. S3 SDS-PAGE electrophoresis patterns of RBCM and SCS@RBCM.

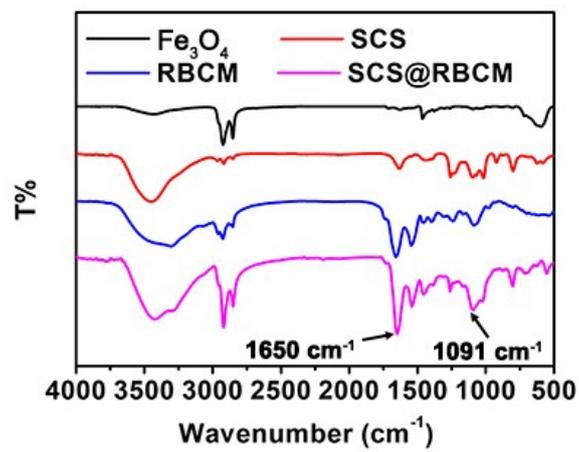


Fig. S4 FT-IR spectra of Fe_3O_4 , SCS, RBCM and SCS@RBCM.

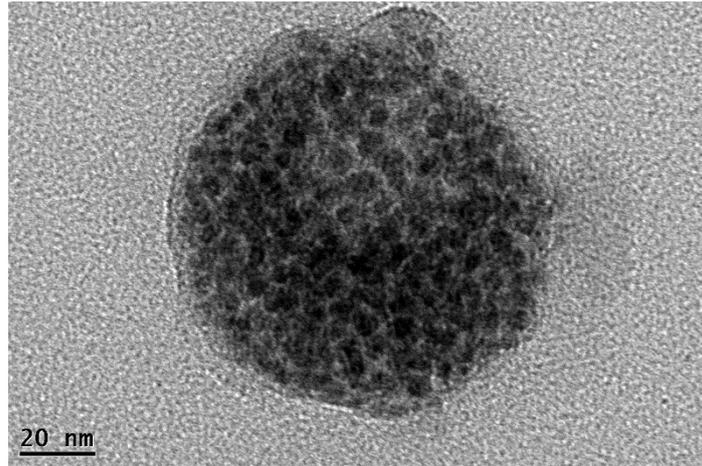


Fig. S5 The corresponding enlarged TEM images of single SCS@RBCM, showing the RBCM shell with a thickness about 5-10 nm.

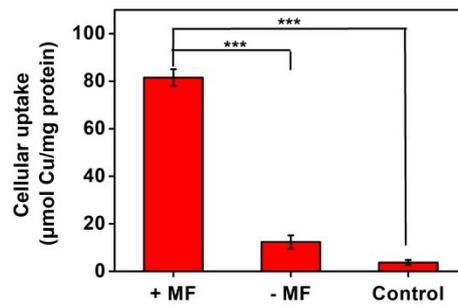


Fig. S6 Quantification of Cu concentration in HeLa cells after 6 h of treatment with SCS@RBCM with or without applying a magnetic field; blank control: non-treated cells (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$; $n = 3$ per group).

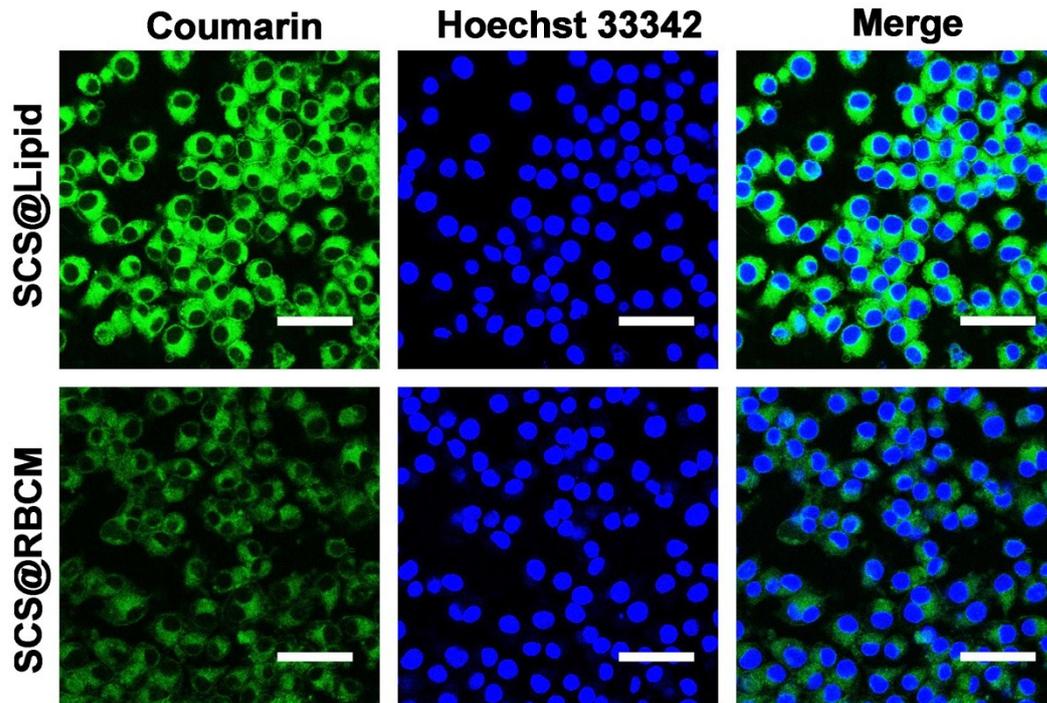


Fig. S7 CLSM images of Coumarin-loaded SCS@Lipid or SCS@RBCM phagocytosed by J774A.1 macrophage cells after 8 h of incubation (scale bar = 50 μ m).

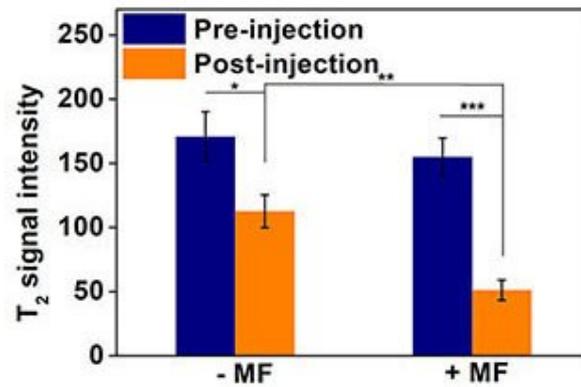


Fig. S8 The corresponding T₂-signal intensities in Fig. 6B.

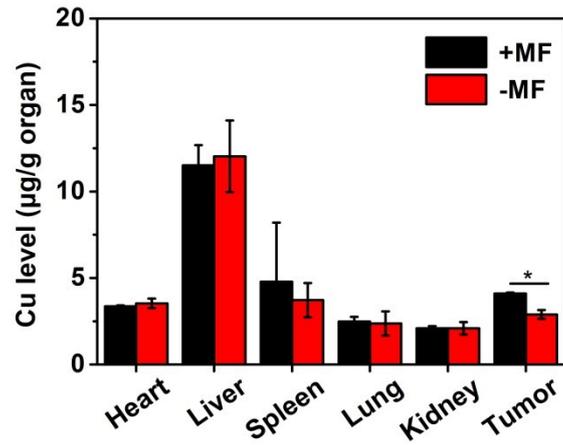


Fig. S9 Biodistribution of SCS@RBCM based on Cu at 24 h post *i.v.* injection (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$; $n = 3$ per group).

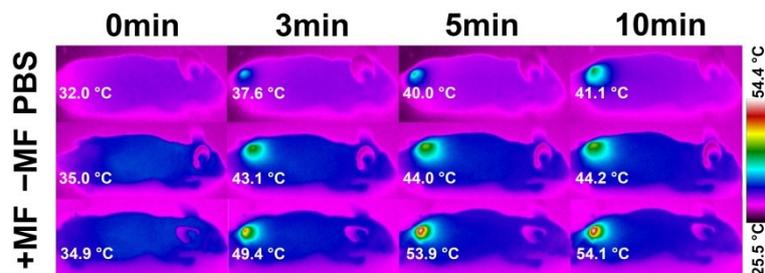


Fig. S10 IR thermal images of Hela-tumor-bearing mice under light irradiation after PBS or SCS@RBCM injection.

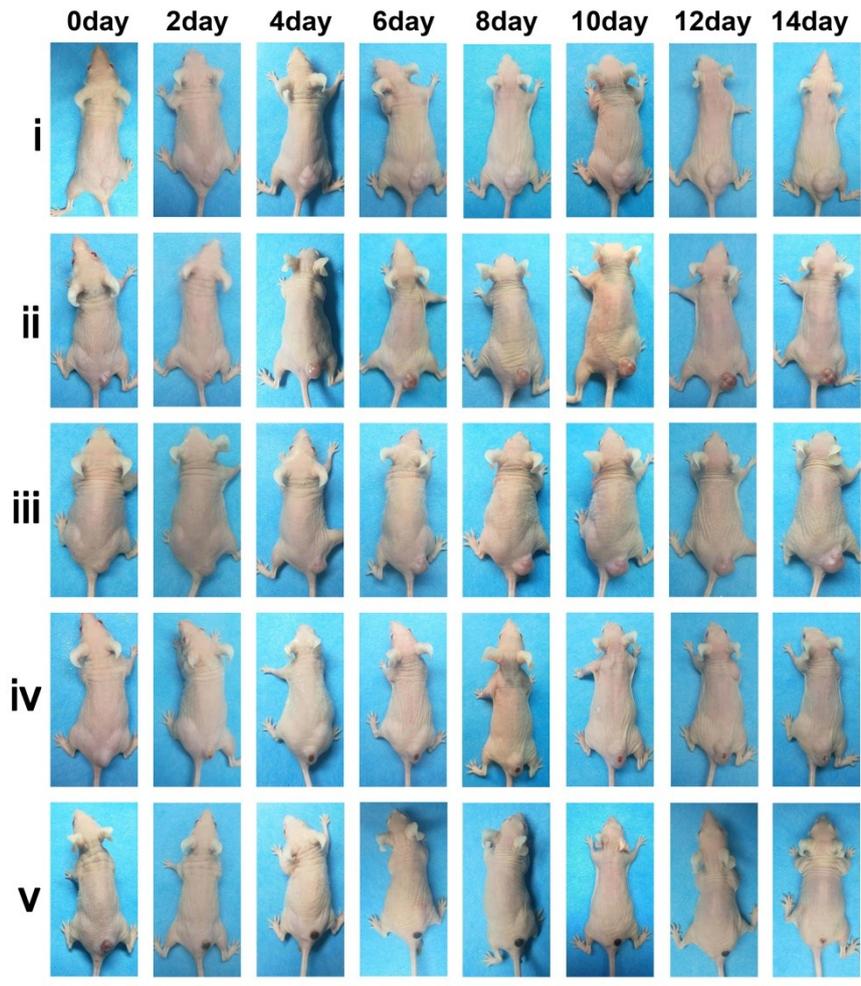


Fig. S11 Photographs of the mice taken before (0 day), and in 2, 4, 6, 8, 10, 1, 14 days of PTT.

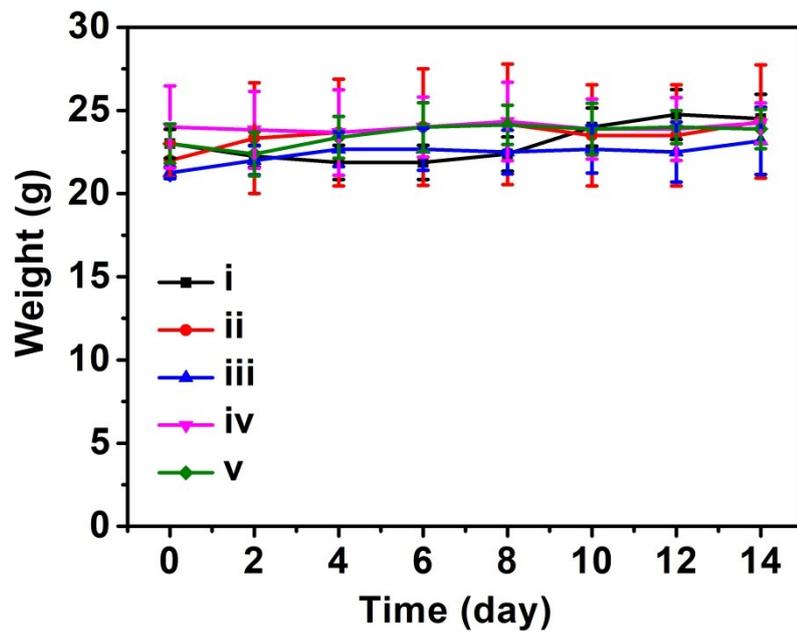


Fig. S12 Tumor weight variation during treatment.

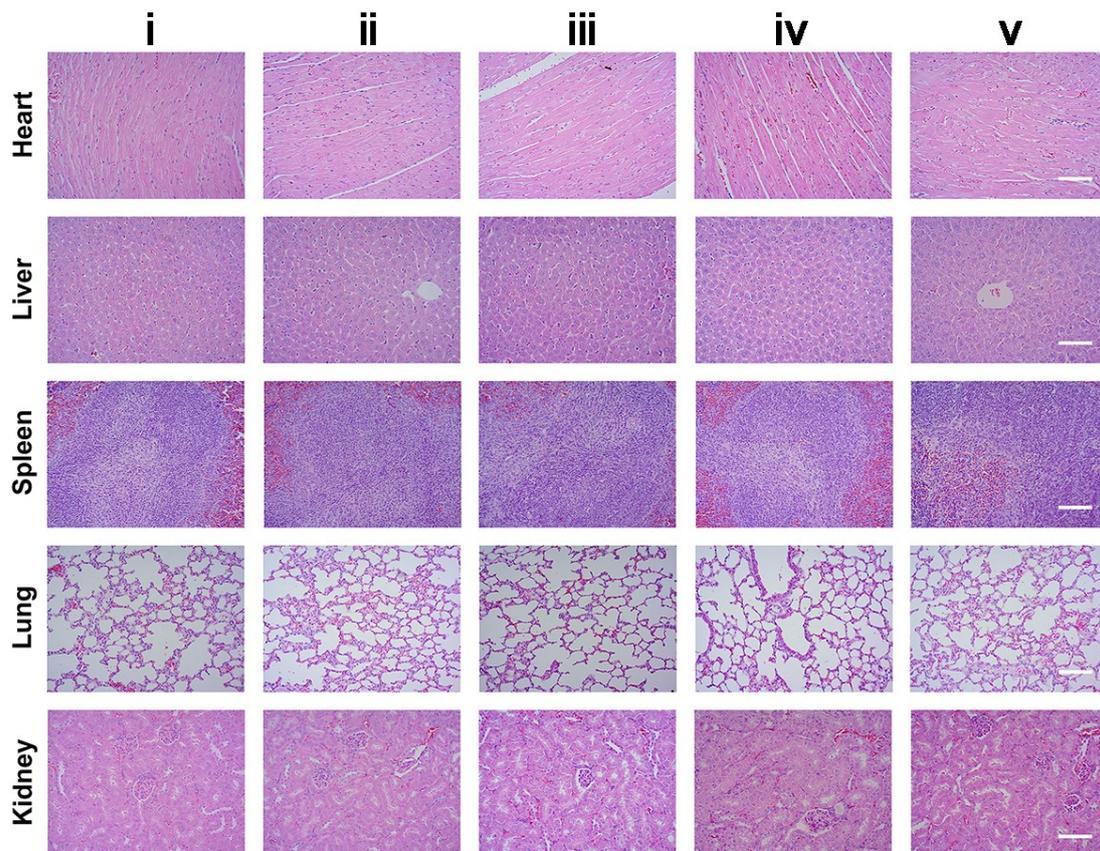


Fig. S13 H&E-stained major organs after therapy. Scale bars: 100 μ m.