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Supporting information

Biocompatible composite nanoparticles with large longitudinal relaxivity for targeted imaging and early diagnosis of cancer

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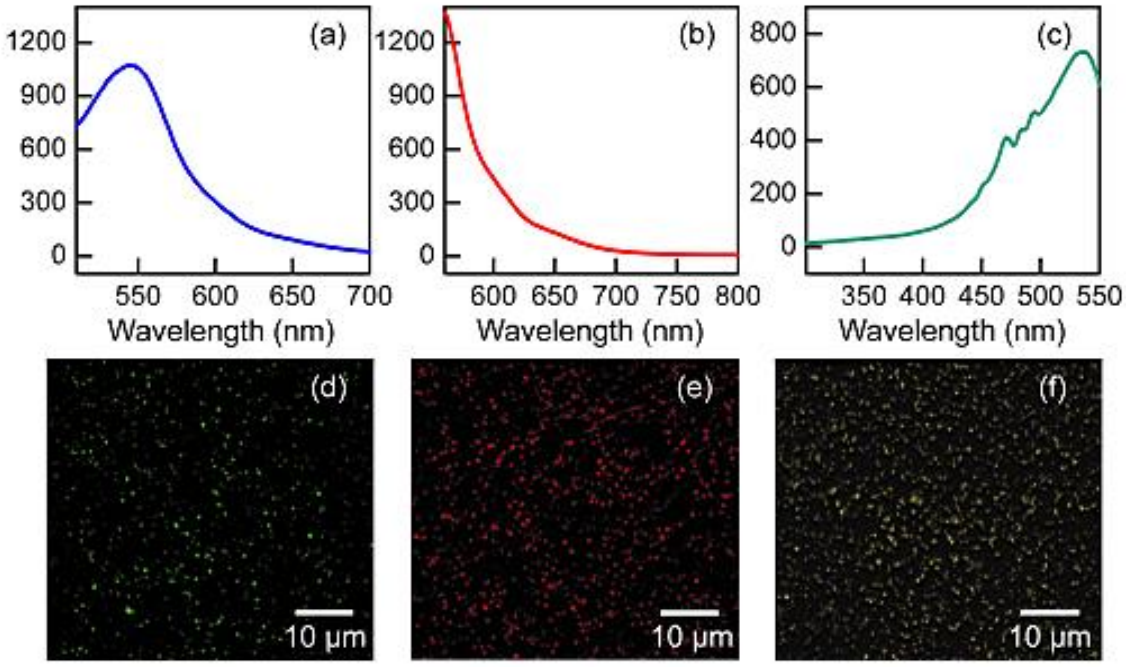

Figure S1. Fluorescence emission spectra of AN excited at 488 nm (a) or 540 nm (b). Fluorescence excitation spectrum of AN (EM 580 nm) (c). The concentration of AN was 1.0 mg/mL. Laser scanning confocal microscope (LSCM) images of AN observed at different emission wavelengths: (d) 500-540 nm (EX 488 nm), (e) 600-660 nm (EX 540 nm), (f) overlay.

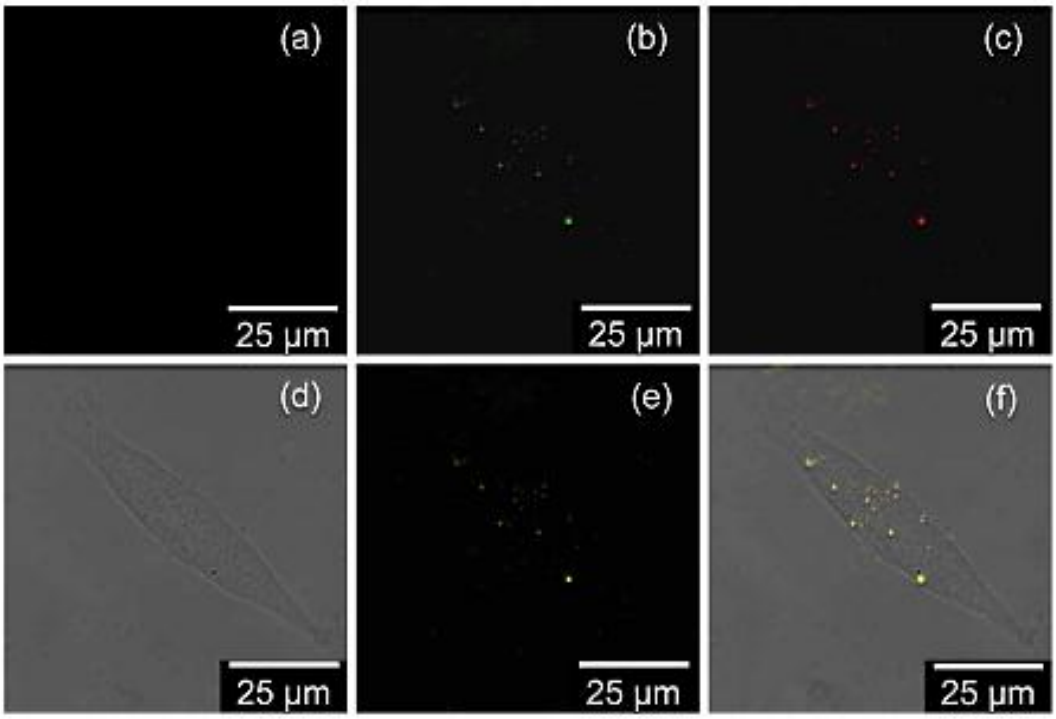

Figure S2. LSCM images of GON-AN2-FA-treated MCF-7 cells without staining of Hoechst and Rhodamine Palloidine. The images were observed at different emission wavelengths: (a) 420-480 nm (EX 350 nm), (b) 500-540 nm (EX 488 nm), (c) 600-660 nm (EX 540 nm), (e) overlay of (a), (b) and (c). (d) Image under normal light. (f) overlay of (a), (b), (c) and (d). The GON-AN2-FA concentration in the cultured medium was 200 μg/mL.

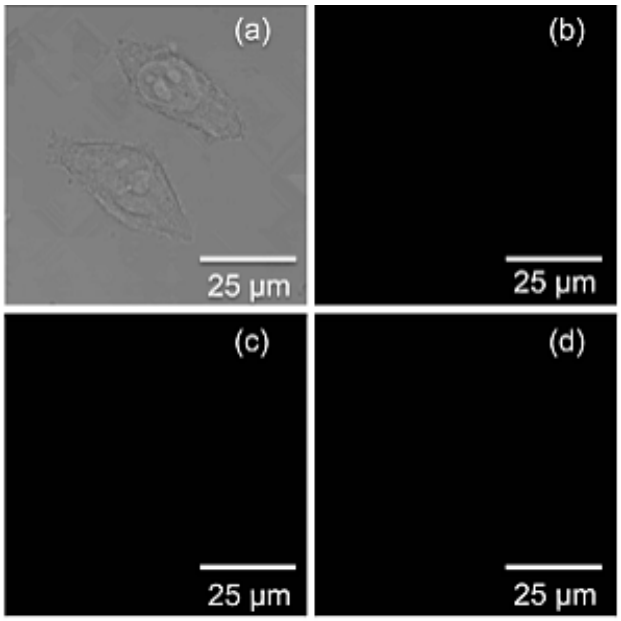

Figure S3. (a) Micrograph of MCF-7 cells untreated with nanoparticles under normal light. LSCM images of the untreated MCF-7 cells without staining of Hoechst and Rhodamine Palloidine observed at different emission wavelengths: (b) 420-480 nm (EX 350 nm), (c) 500-540 nm (EX 488 nm), (d) 600-660 nm (EX 540 nm).

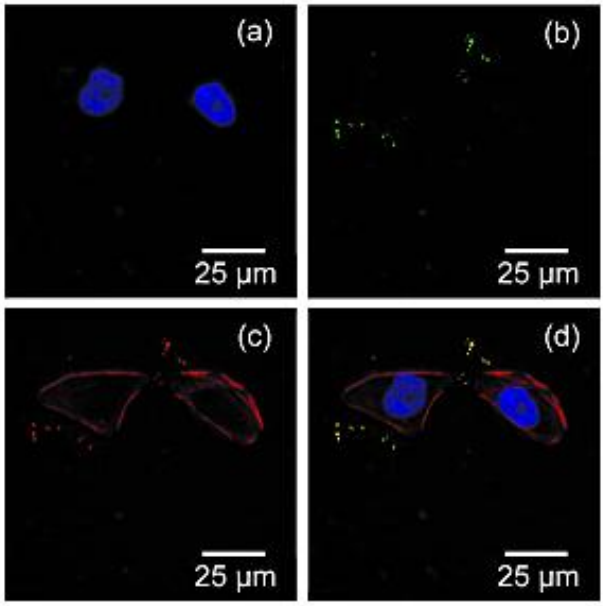

Figure S4. LSCM images of GON-AN2-FA-treated MCF-7 cells observed at different emission wavelengths: (a) 420-480 nm (EX 350 nm), (b) 500-540 nm (EX 488 nm), (c) 600-660 nm (EX 540 nm), (d) overlay of (a), (b) and (c). The MCF-7 cells were co-incubated with free folate (1.0 mM) and GON-AN2-FA (200 μg/mL). The cytoskeleton was stained with Rhodamine Phalloidin and the nucleus was stained with Hoechst.

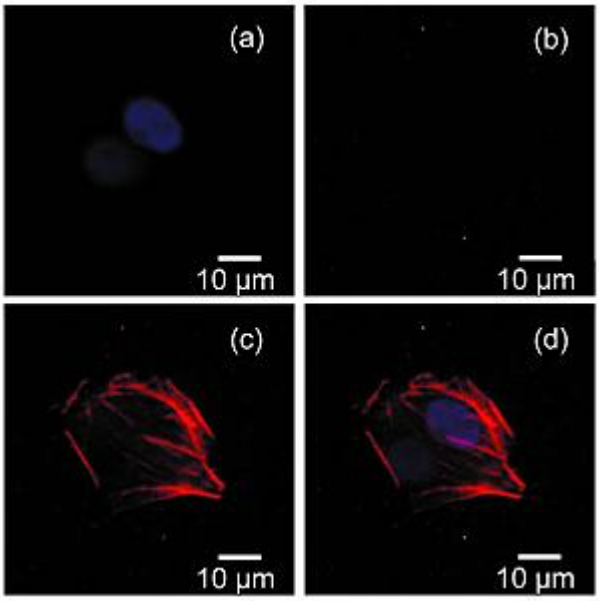

Figure S5. LSCM images of folate receptor alpha (FRα)-negative HpeG2 cells (treated with GON-AN2-FA) observed at different emission wavelengths: (a) 420-480 nm (EX 350 nm), (b) 500-540 nm (EX 488 nm), (c) 600-660 nm (EX 540 nm), (d) overlay of (a), (b) and (c). The GON-AN2-FA concentration in the cultured medium was 200 μg/mL. The cytoskeleton was stained with Rhodamine Phalloidin and the nucleus was stained with Hoechst.