

Supplementary Materials for

**Polydopamine-Encapsulated Perfluorocarbon for Ultrasound Contrast Imaging
and Photothermal Therapy**

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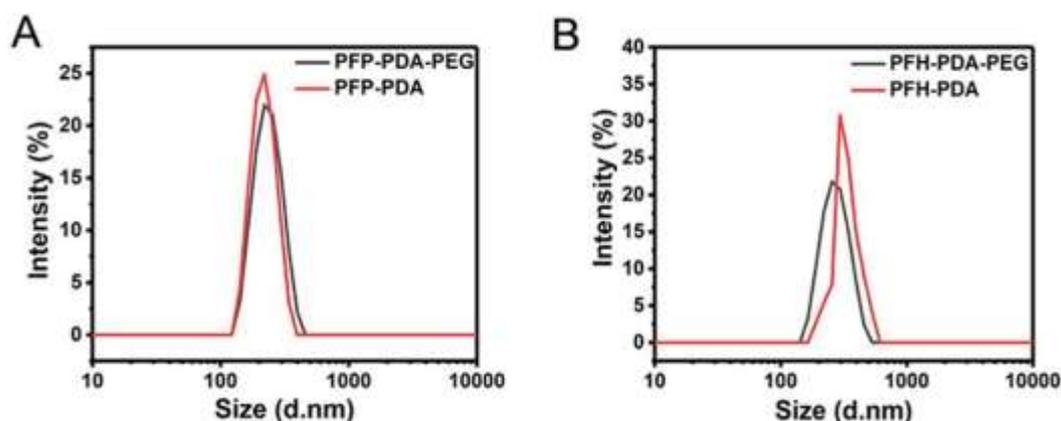


Figure S1. Size distributions of (A) PFP-PDA and (B) PFH-PDA before and after PEGylation in water measured with DLS.

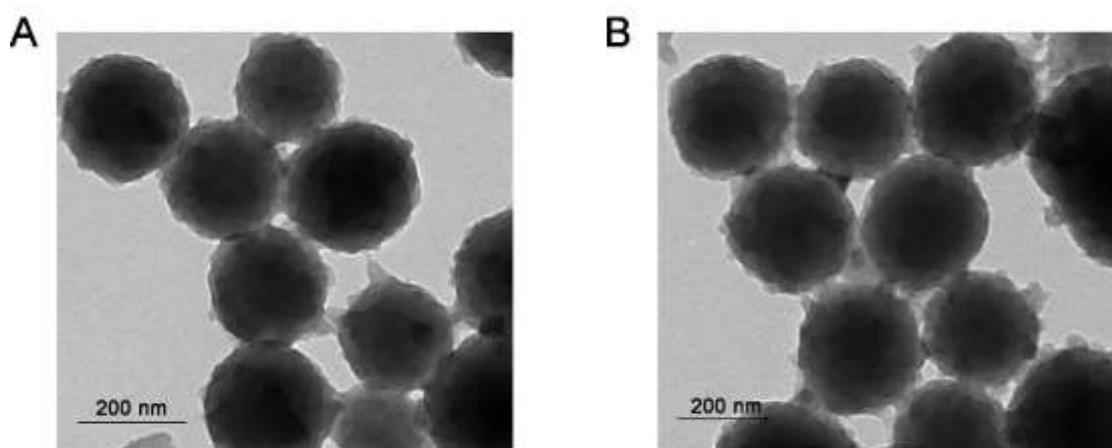


Figure S2. TEM images of (A) PFP-PDA-PEG and (B) PFH-PDA-PEG after laser irradiation ($2\text{W}/\text{cm}^2$, 10 min).

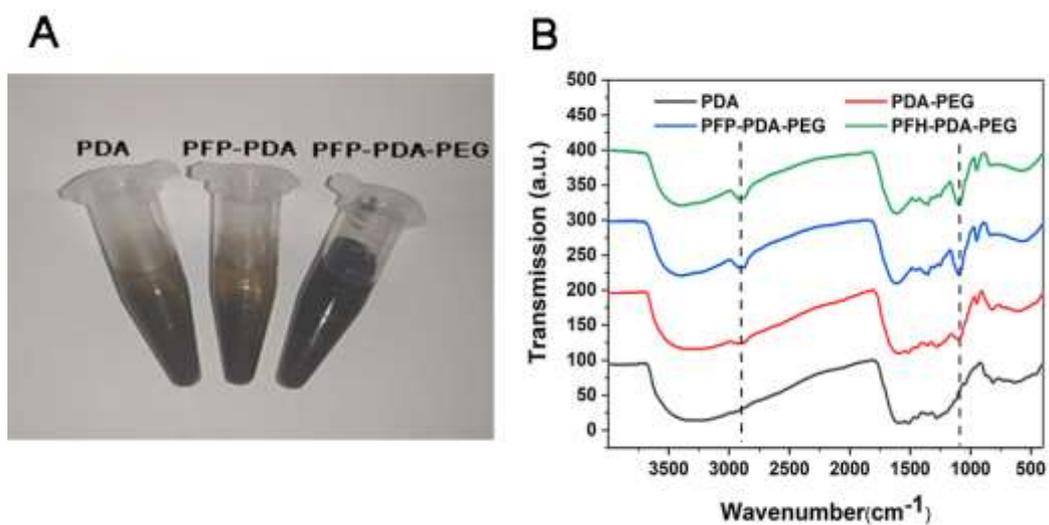


Figure S3. (A) The photo of PDA, PFP-PDA, PFP-PDA-PEG dispersed in PBS buffer after 3h. (B) The FTIR spectra of PDA, PDA-PEG, PFP-PDA-PEG, PFH-PDA-PEG.

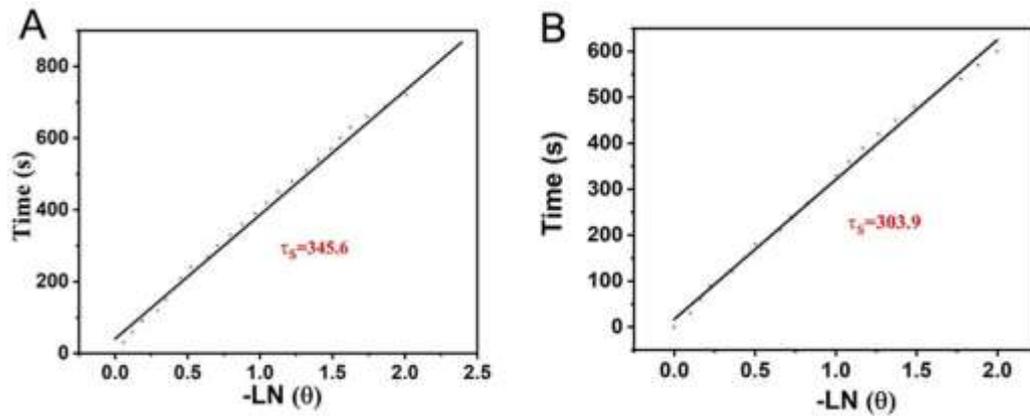


Figure S4. The τ_s values of (A) PFP-PDA-PEG and (B) PFH-PDA-PEG.

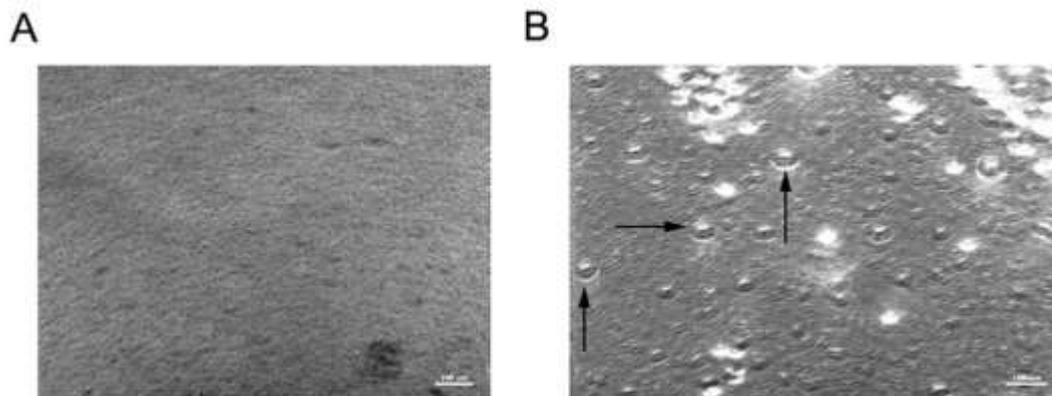


Figure S5. Photographs of PFP-PDA-PEG bubbles generation under (A) 38 °C and (B) 39 °C.

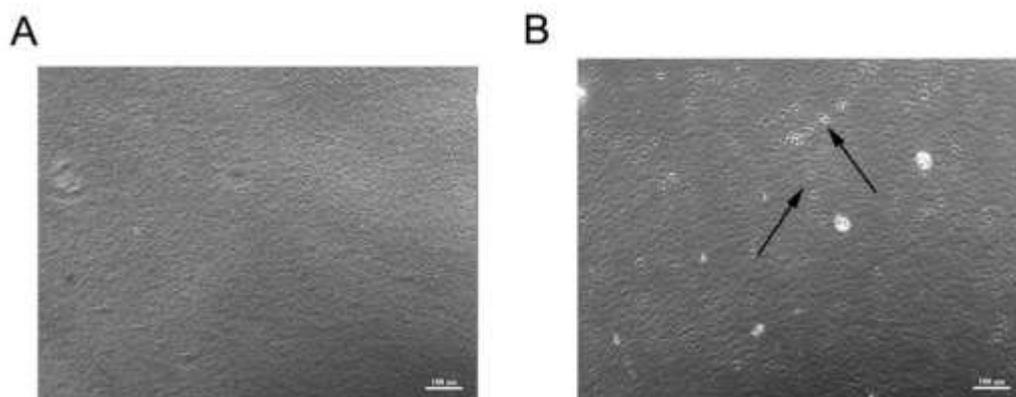


Figure S6. Photographs of PFH-PDA-PEG bubbles generation under (A) 64 °C and (B) 65 °C.

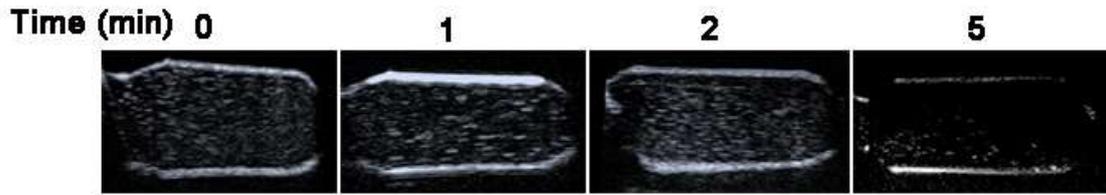


Figure S7. The ultrasound imaging images of SonoVue under the same ultrasonic parameters as PFC-PDA-PEG nanoparticles (3.5MHz, MI=0.08).

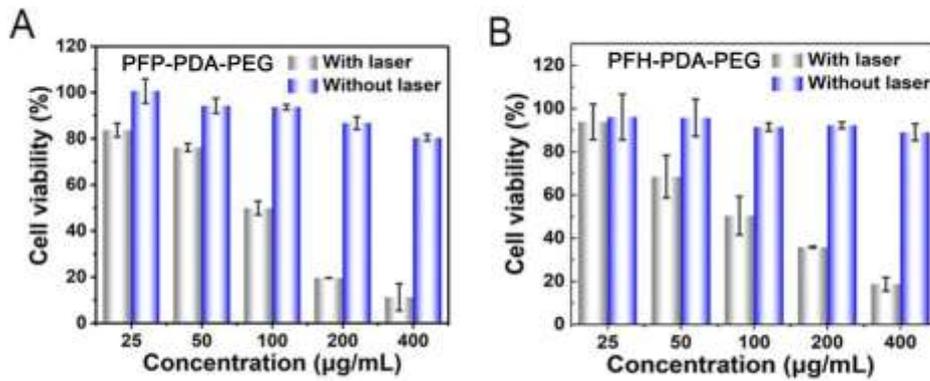


Figure S8. Cell viabilities of HCT-116 cells after incubation with (A) PFP-PDA-PEG and (B) PFH-PDA-PEG with or without laser irradiation (808 nm, 2 W/cm², 5 min) for 48 h. Data are given as means ± SD (n=3).

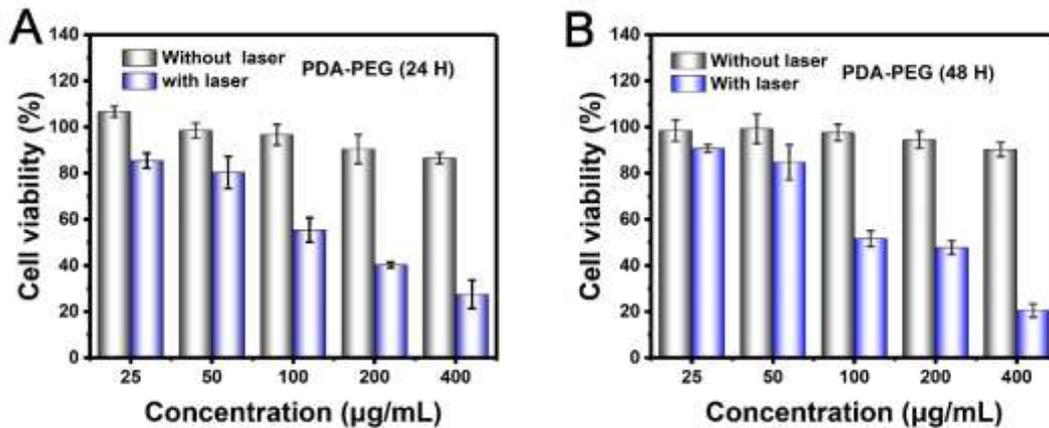


Figure S9. Cell viabilities of HCT-116 cells after incubation with PDA-PEG with or without laser irradiation (808 nm, 2 W/cm², 5 min) for 24h and 48 h. Data are given as means ± SD (n=3).