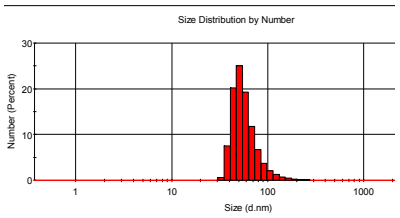
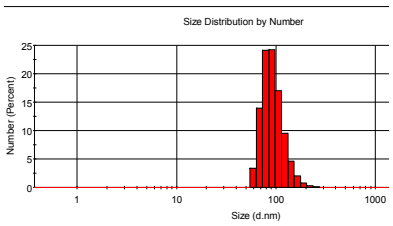
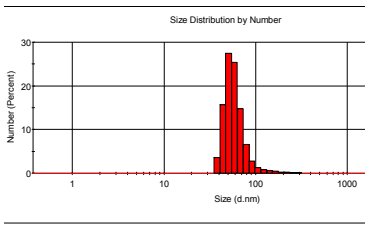
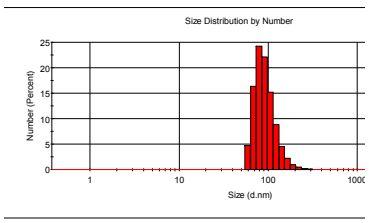
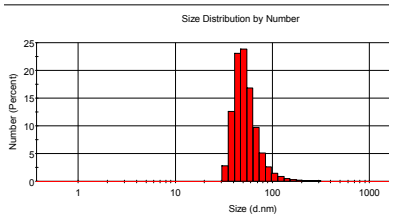
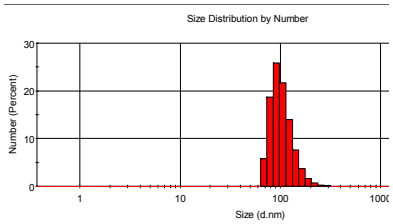
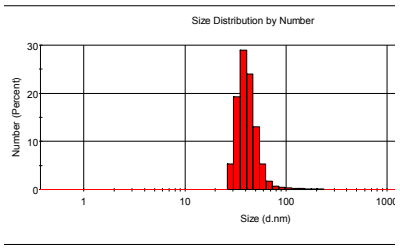
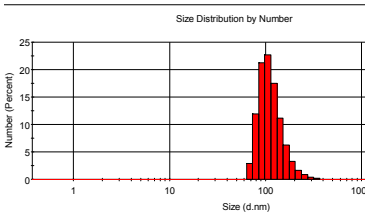
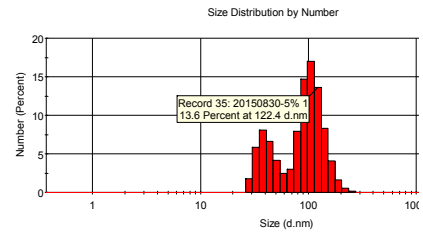
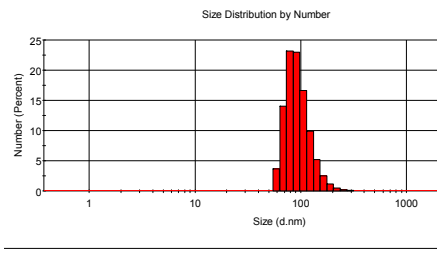
Supporting Information on:

Synthesis and optimization of ZnPc-loaded biocompatible nanoparticles for efficient photodynamic therapy

Jian-tao Ping, Hong-shang Peng, Wu-biao Duan, Fang-tian You, Min Song, Yi-quan Wang

Doping ratio (%)	Si-NPs	PLL-NPs
1		
2		
3		
4		
5		

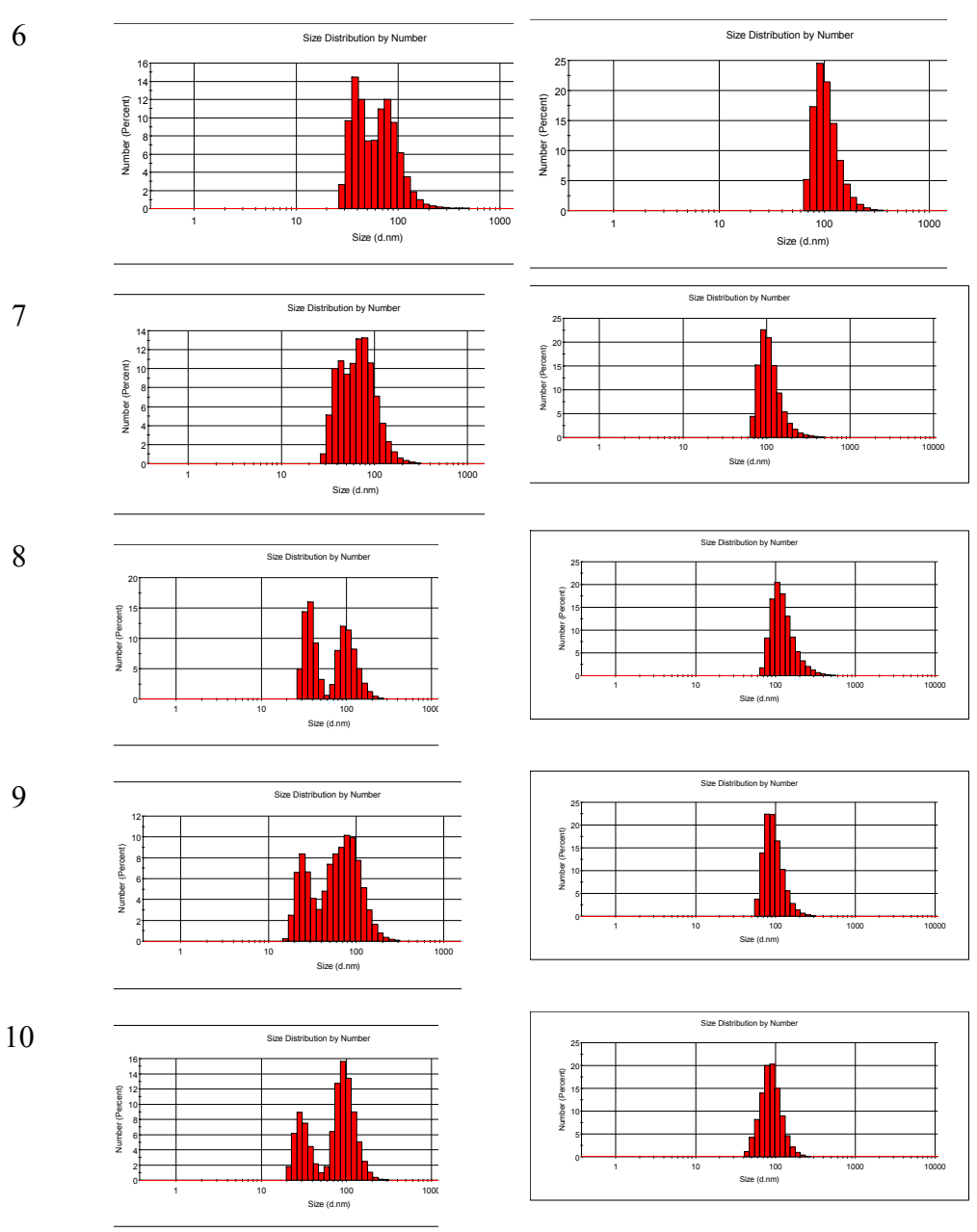


Figure S1. Dynamic light scattering (DLS) of ZnPc-dependent polymeric NPs prepared with (PLL-NPs) and without PLL coating (Si-NPs). The doping ratio of ZnPc ranges from 1% to 10%.

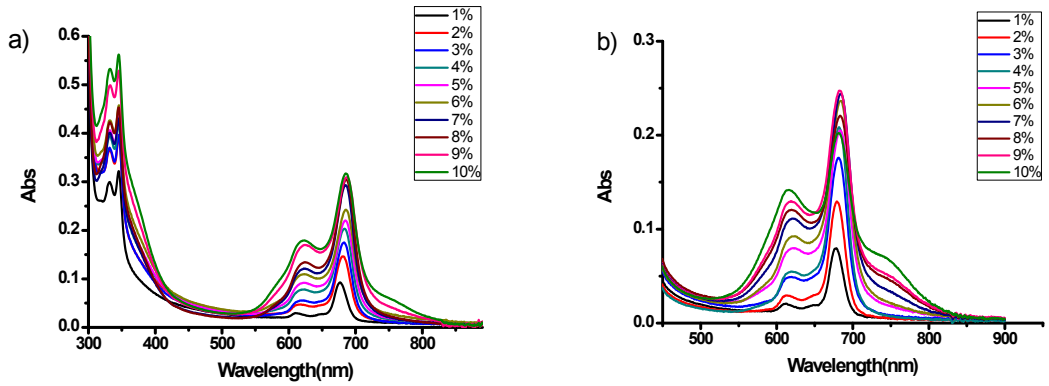


Figure S2. UV/Vis absorption spectra of (a) PVK- and (b) PFO-based PLL-NPs with different loading capacity of ZnPc (1-10%).

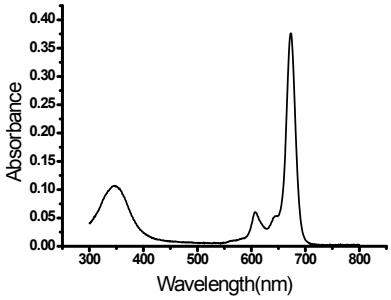


Figure S3. UV/Vis absorption of ZnPc in DMSO solution. Concentration of ZnPc is diluted down to 1 ppm to ensure that ZnPc molecules are in monomeric state.

(a) (b)

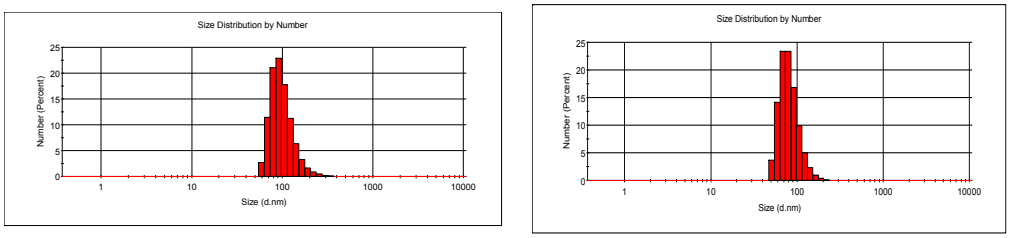


Figure S4. DLS of (a) PVk- and (b) PFO-based PLL-NPs doped with 10% ZnPc.

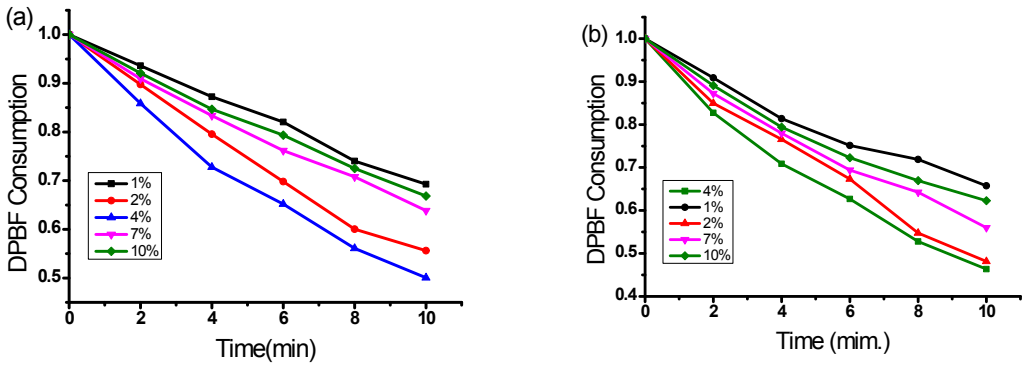


Figure S5. Consumption of DPBF for (a) PVK- and (b) PFO-based PLL-NPs loaded with different percentages of ZnPc over 10 minutes.

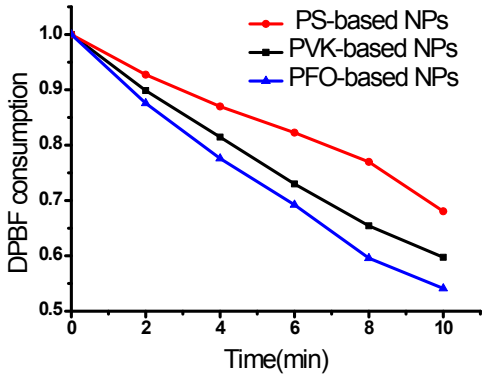


Figure S6. Comparison of consumption rate of DPBF between PS-, PVK- and PFO-based PLL-NPs doped with 8% ZnPc. The difference in singlet oxygen generation rate is obviously, and PFO-based nanophotsensitizers have the highest generation rate.

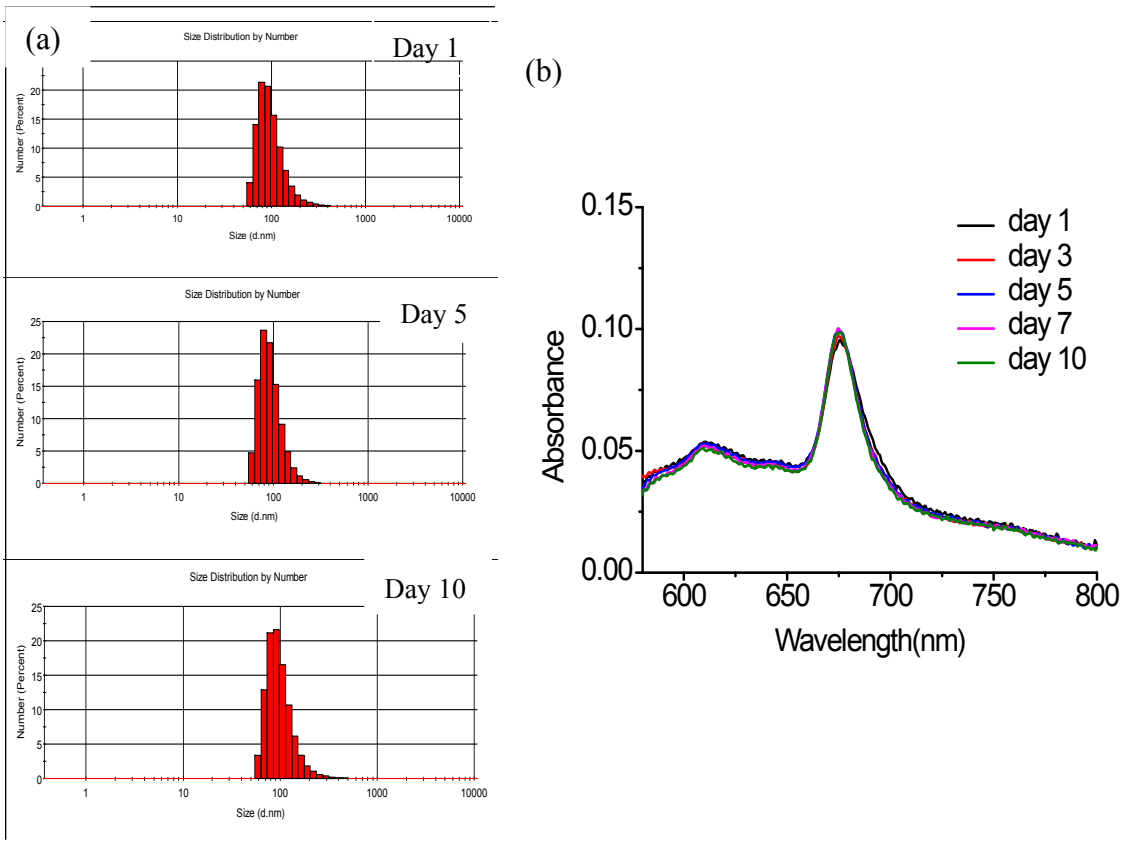


Figure S7. Stability of ZnPc-loaded PLL-NPs dispersed in DMEM supplemented with 10% FBS: (a) DLS recorded at day 1, 5 and 10; (b) UV/Vis absorption spectra measured at day 1, 3, 5, 7 and 10 days respectively.