

A smart Copper-phthalocyanine framework nanoparticle for enhance hypoxic photodynamic therapy by weakening cell through ATP depletion

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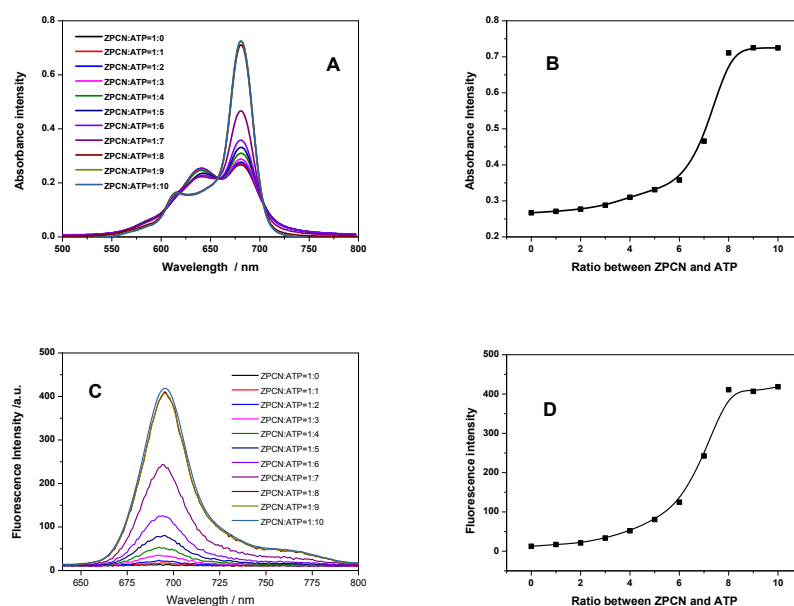


Fig. S1. (A) Monomer recovering of ZPCN in aqueous solution upon addition of ATP detecting by UV-Vis spectra. [ZPCN] = 10 μ M, [ATP] = 10, 20, 30, 40, 50, 60, 70, 80, 90 and 100 μ M; (B) Molar ratio plots for ZPCN-ATP obtained by plotting the absorbance intensity at 680 nm as a function of the molar ratio of ATP to ZPCN. (C) Fluorescence recovering of ZPCN in aqueous solution upon addition of ATP. [ZPCN] = 10 μ M, [ATP] = 10, 20, 30, 40, 50, 60, 70, 80, 90 and 100 μ M; (D) Molar ratio plots for ZPCN-ATP obtained by plotting the fluorescence intensity at 695 nm as a function of the molar ratio of ATP to ZPCN.

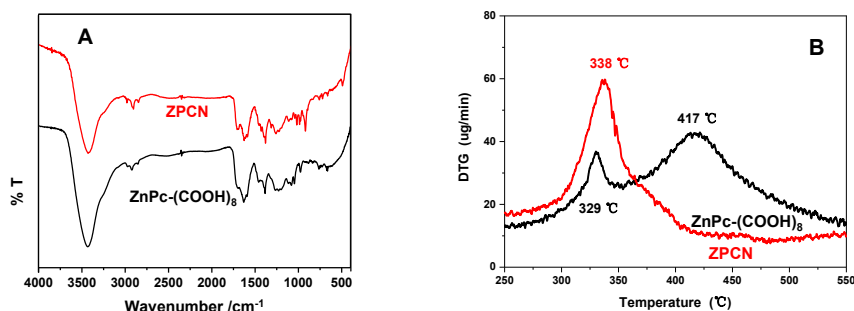


Fig. S2 IR (A) and TGA (B) curves of ZnPc-(COOH)₈ and ZPCN.

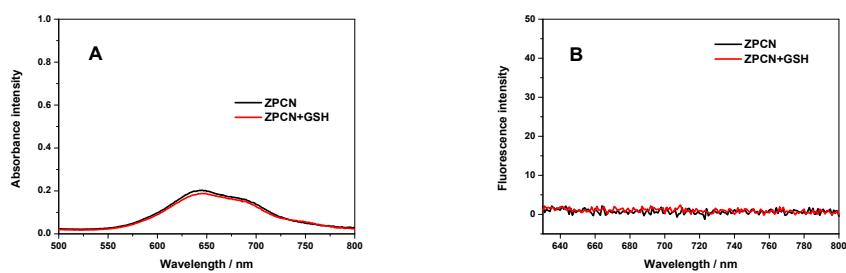


Fig. S3. (A) Absorbance and (B) fluorescence spectrum changes of ZPCN after adding GSH.

Table S1. Fluorescence lifetime and fluorescence quantum yield of $\text{ZnPc}-(\text{COOH})_8$, ZPCN and ZPCN+ATP.

	$\text{ZnPc}-(\text{COOH})_8$	ZPCN	ZPCN+ATP
Fluorescence lifetime (ns)	3.08	-	3.06
Fluorescence quantum yield (%)	25.92	3.65	17.83