pharmaceutics

Supplementary Materials: Poisonous Caterpillar-Inspired Chitosan Nanofiber Enabling Dual Photothermal and Photodynamic Tumor Ablation

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Table S1. Degree of deacetylation and amine concentration of chitosan nanofiber (CNf) obtained by Fourier transform infrared spectroscopy and titration (n = 3, mean ± standard deviation).

	Degree of deacetylation (%)	
	FT-IR	Titration
CNf	44.0	26.9 ± 3.3

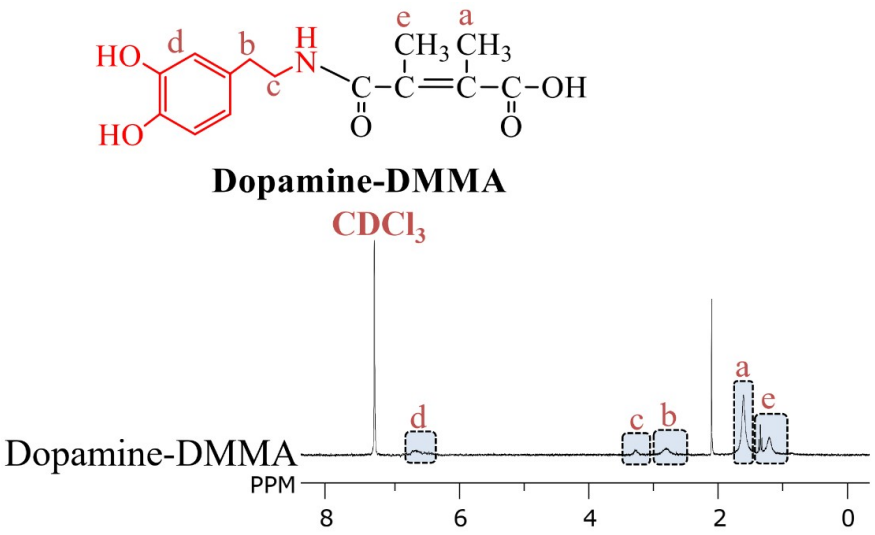


Figure S1. ^{1}H-NMR spectrum of dopamine-DMMA (300 MHz, $CDCl_3$).

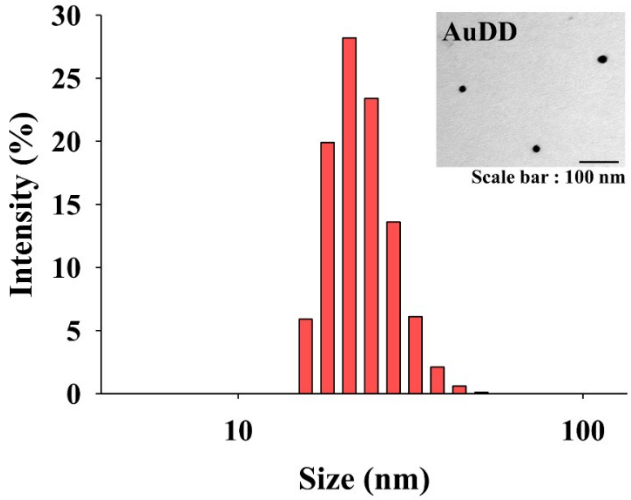


Figure S2. Particle size distribution and TEM image of AuDD.

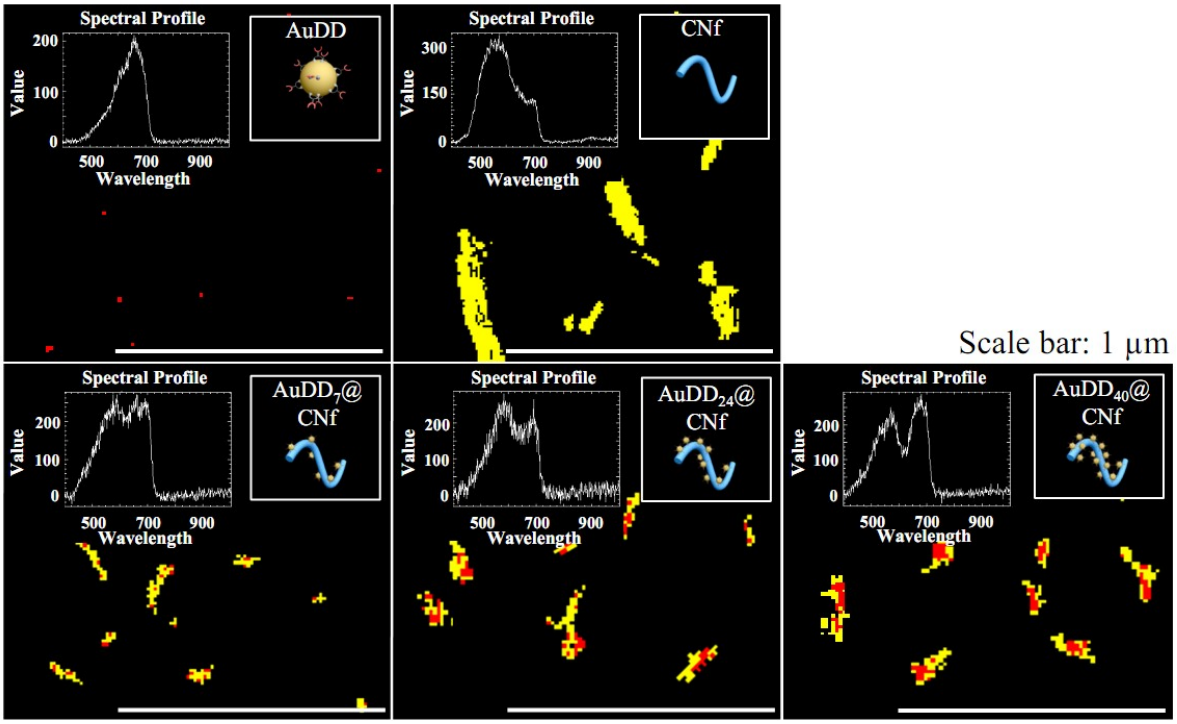


Figure S3. Hyperspectral images of AuDD, CNf, and the different types of AuDD@CNf. The linked amount (%) of each AuDD to CNf is 7% ($AuDD_7$@CNf), 24% ($AuDD_{24}$@CNf) and 40% ($AuDD_{40}$@CNf).

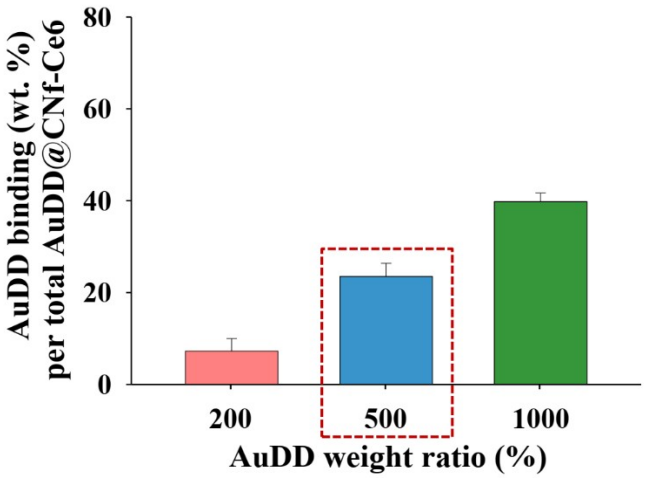
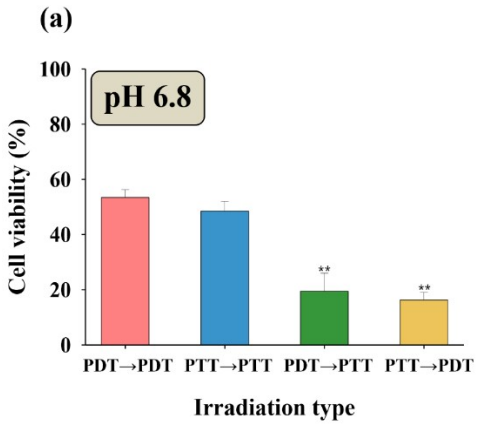


Figure S4. Binding efficiency of AuDD to CNf-Ce6 with different feeding amounts. The optimal feeding ratio of AuDD for AuDD@CNf-Ce6 is indicated by the dashed rectangle.



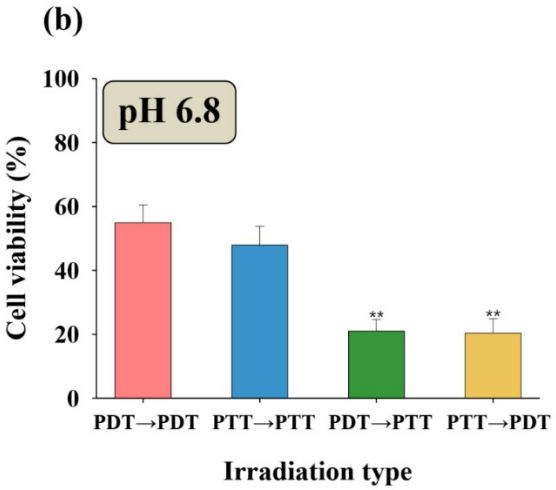


Figure S5. Cell viability determined by the CCK-8 assay of (**a**) MDA-MB-231 cells and (**b**) T98G cells incubated with AuDD/BSA@CNf-Ce6 (200 μg/mL, equivalent to Ce6 10 μg/mL) at pH 6.8 (mean ± SD, n = 8, ** $p < 0.01$ compared to dual-PDT irradiation). The cells were irradiated for 10 min at a light intensity of 5.2 mW/cm^2 using a 670-nm laser source for PDT and/or for 5 min at a light intensity of 2 W/cm^2 using an 808-nm laser source for PTT.