

Supporting Information

Photo-Responsive Camptothecin-based Polymeric Prodrug Coated Silver Nanoparticles for Drug Release Behavior Tracking via Nanomaterial Surface Energy Transfer (NSET) Effect

Jiao-Yang Li[†], Liang Qiu[‡], Xiao-Fei Xu[†], Cai-Yuan Pan[†], Chun-Yan Hong^{*†}, Wen-Jian Zhang^{*†}

[†]CAS Key Laboratory of Soft Matter Chemistry, Department of Polymer Science and Engineering, University of Science and Technology of China, Hefei 230026, Anhui, China.

[‡]Institute of Biophysics, Hebei University of Technology, Tianjin 300401, China.

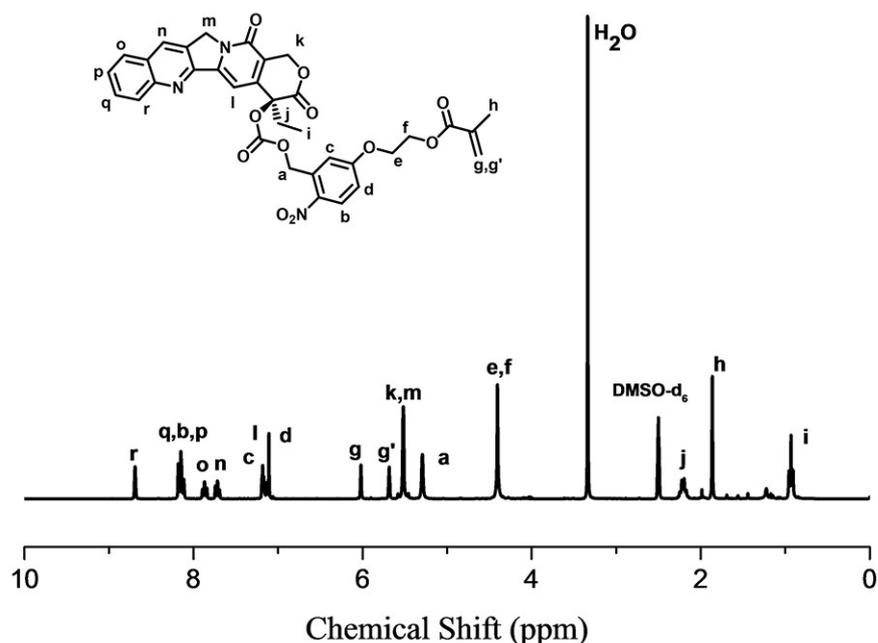


Figure S1. ¹H NMR spectrum of CPTMA in DMSO-d₆.

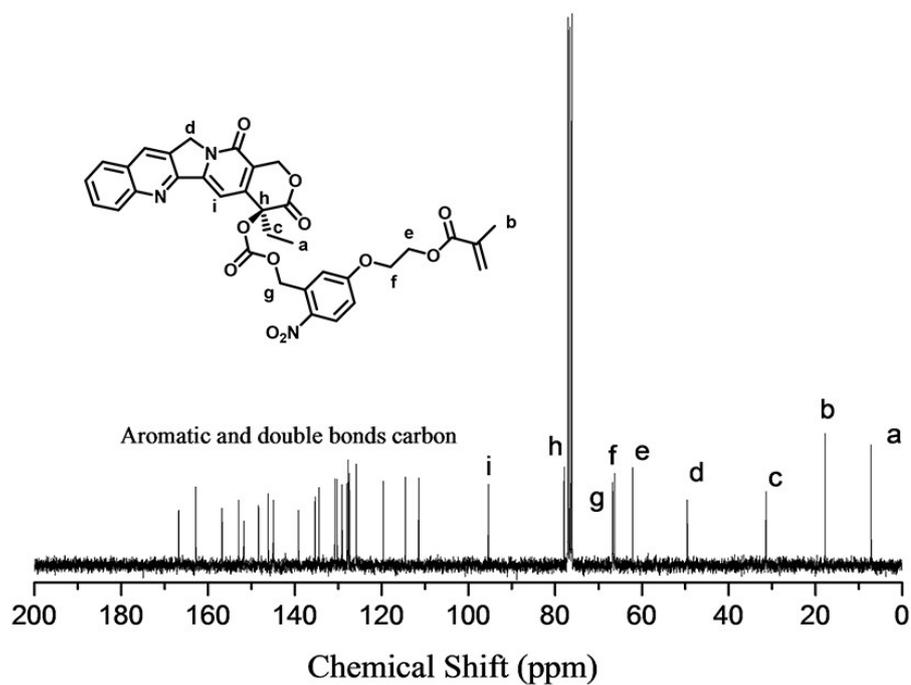


Figure S2. ^{13}C NMR spectrum of CPTMA in CDCl_3

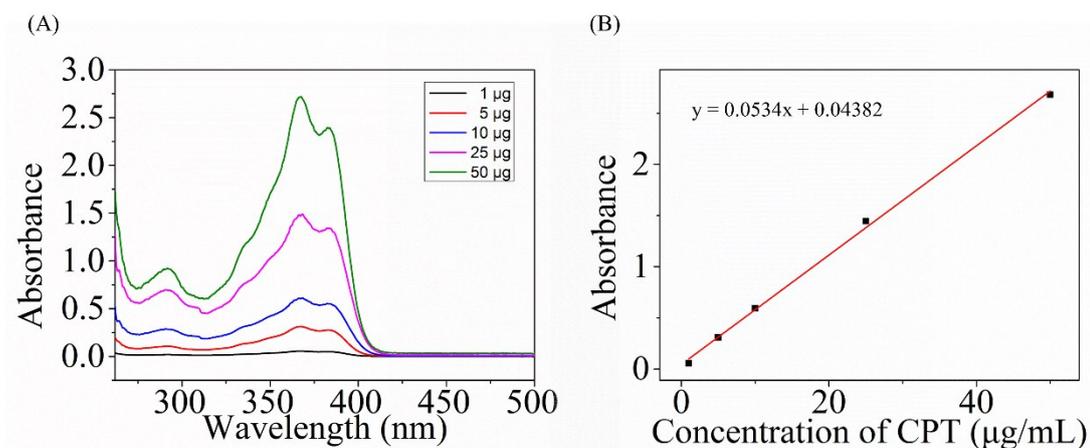


Figure S3. (A) The UV-Vis spectra of CPT at different concentration and (B) the standard curve between absorbance and concentration of CPT based on absorbance at 365 nm.

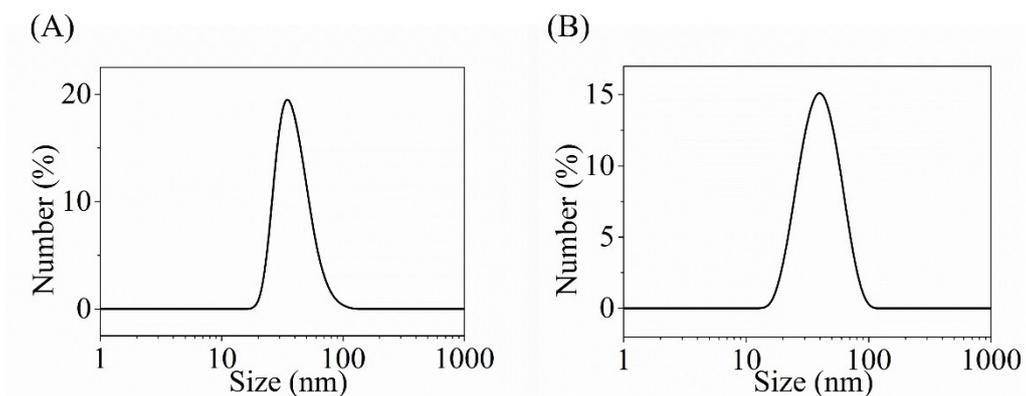


Figure S4. DLS curves of BP-3@AgNPs in acidic conditions (A) pH = 5.4 and (B) pH = 4.6.

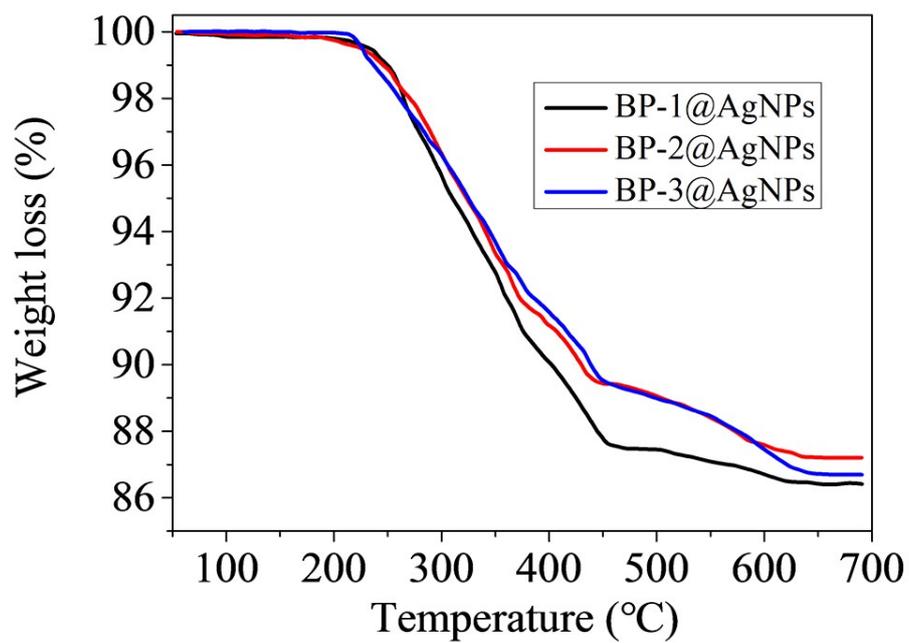


Figure S5. TGA curves of BP-1@AgNPs, BP-2@AgNPs and BP-3@AgNPs.

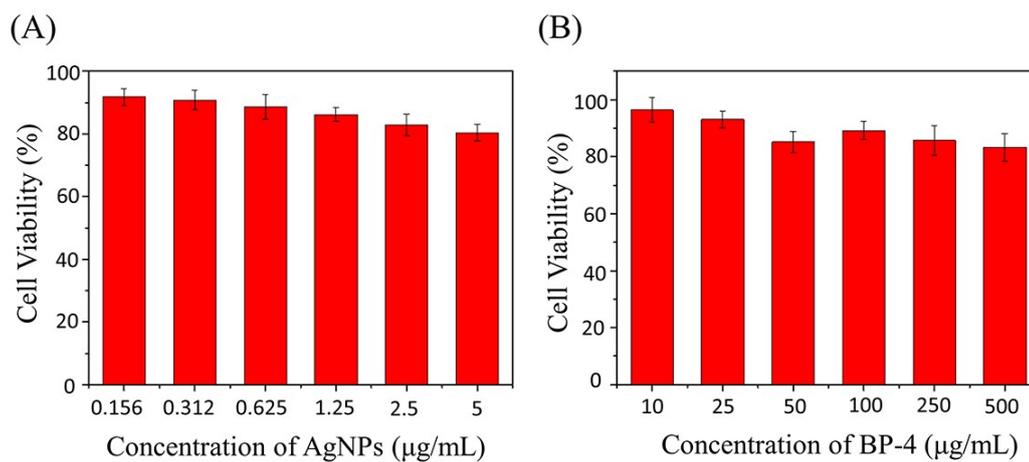


Figure S6. Cell viability of HeLa cells evaluated by MTT assay after incubation with (A) AgNPs and (B) BP-4. Data are presented as the average \pm standard deviation ($n=4$).

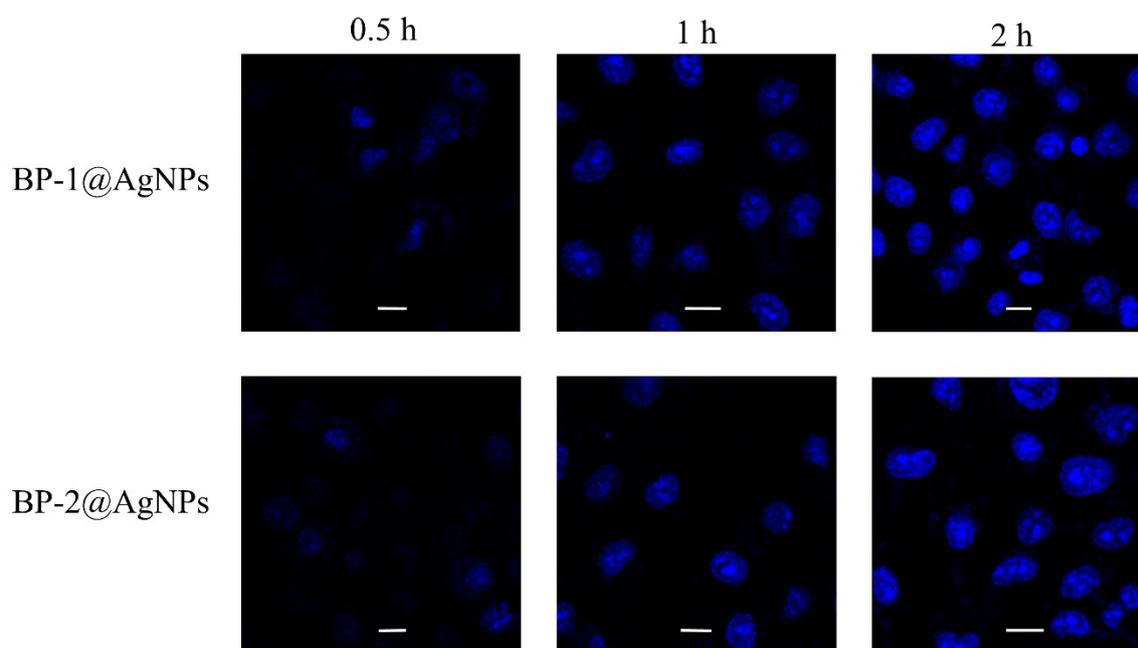


Figure S7. Confocal laser microscopic observation of HeLa cells incubated with BP-1@AgNPs and BP-2@AgNPs for different cultured time, respectively. The scale bars are 20 μm.

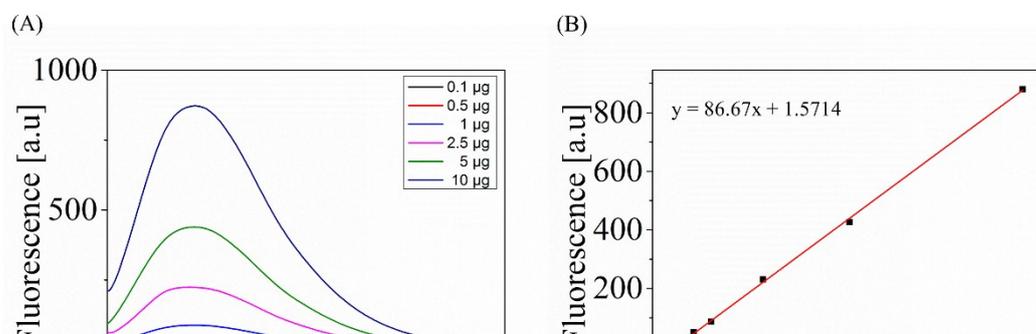


Figure S8. (A) The fluorescence spectra of CPT at different concentration and (B) the standard curve between Fluorescence intensity and concentration of CPT based on fluorescence intensity at 440 nm (excitation wavelength: 340 nm).