

Supporting Information for:

The polymer nanoparticle based on CDs with photoreversible dual-colour fluorescent modulation

Mengyu Deng^{a,b}, Daiyi Zhangyang^{a,b}, Yufei Wang^{a,b}, Shimei Jiang^{a,b}*

^aEngineering Research Center of Organic and Polymer Optoelectronic Materials,
Ministry of Education, College of Chemistry, Jilin University, Changchun, 130012, P.
R. China. E-mail: smjiang@jlu.edu.cn

^bState Key Laboratory of Supramolecular Structure and Materials, College of
Chemistry, Jilin University, Changchun 130012, P. R. China. E-mail:
smjiang@jlu.edu.cn

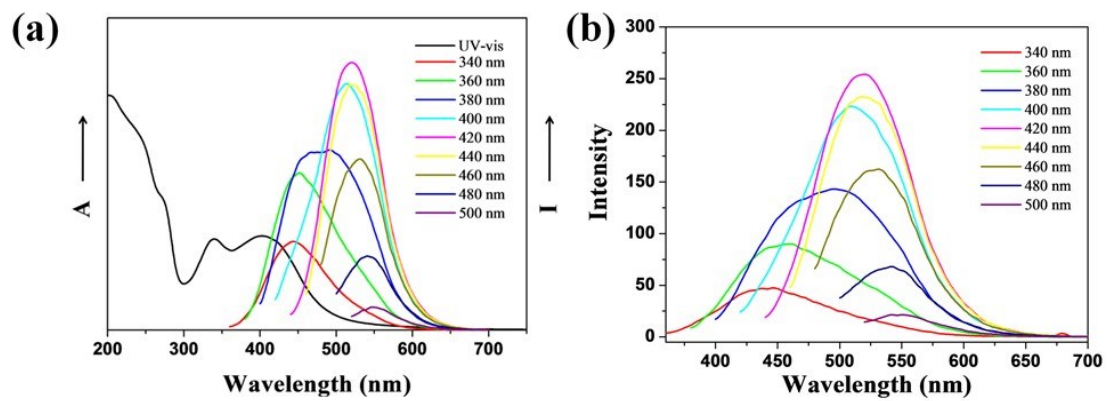


Figure S1. Absorption and fluorescent spectra at different excitation wavelengths. (a) CDs (0.01 mg/mL) in aqueous solution. (b) PCDs (0.01 mg/mL) in aqueous solution.

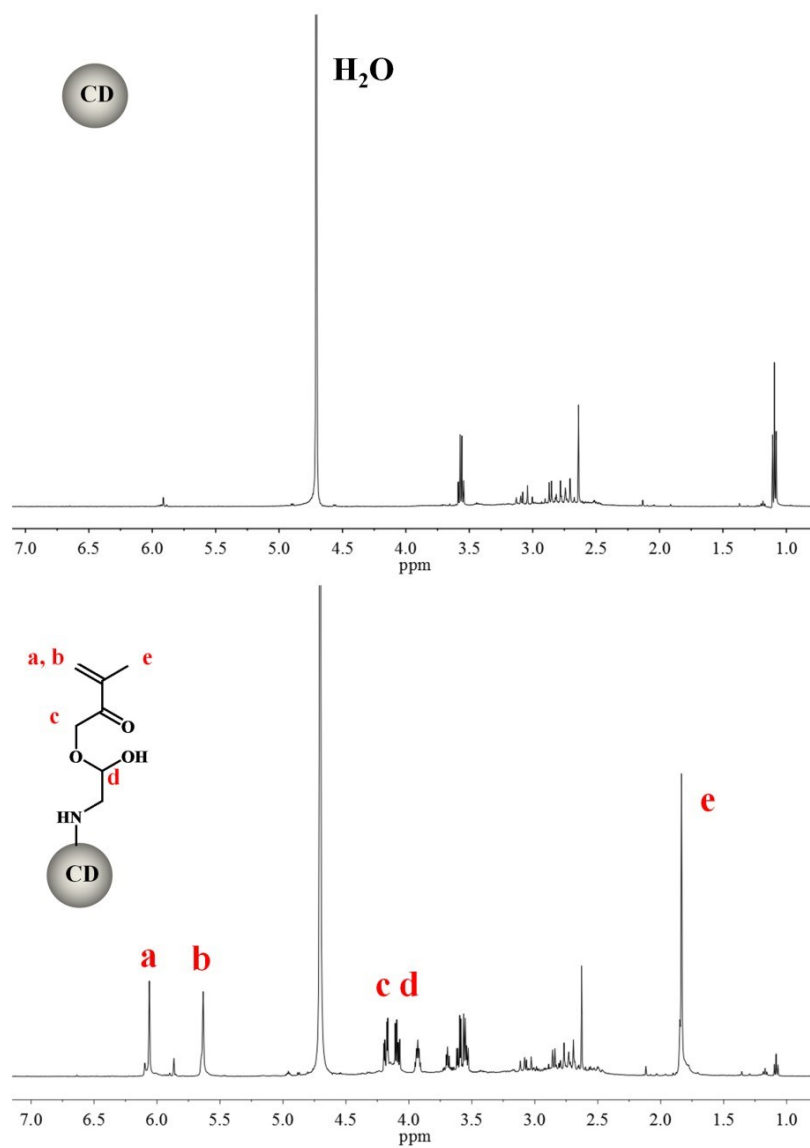


Figure S2. ^1H NMR spectra of CDs and PCDs in D_2O .

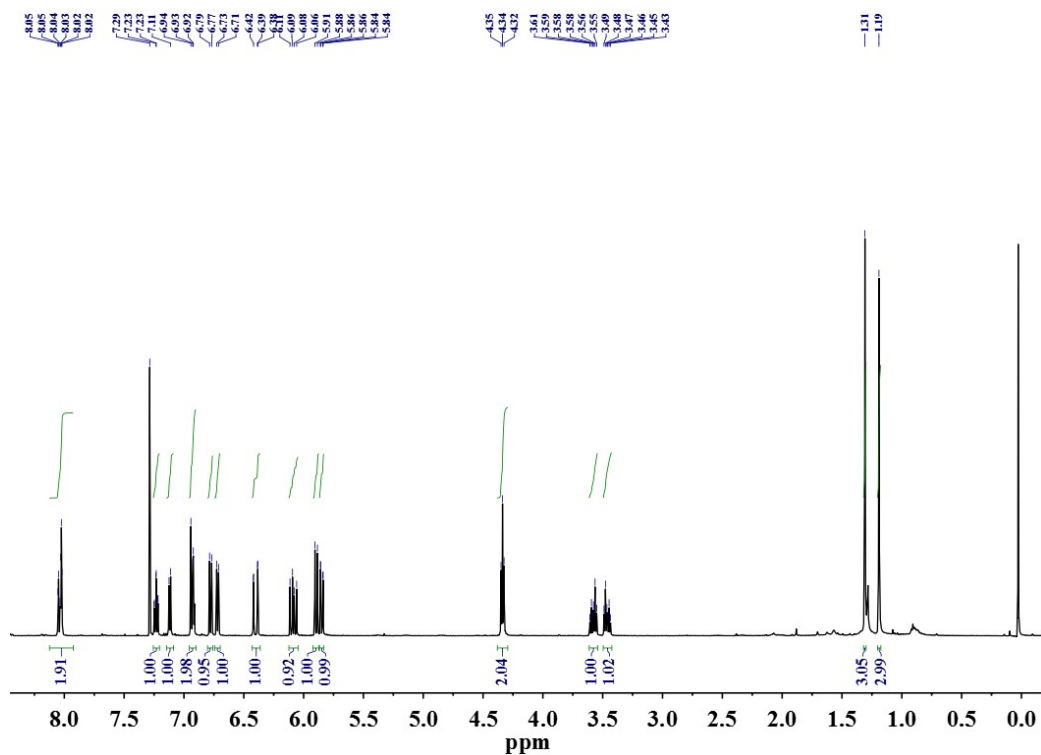


Figure S3. ^1H NMR spectrum of SPEA in CDCl_3 .

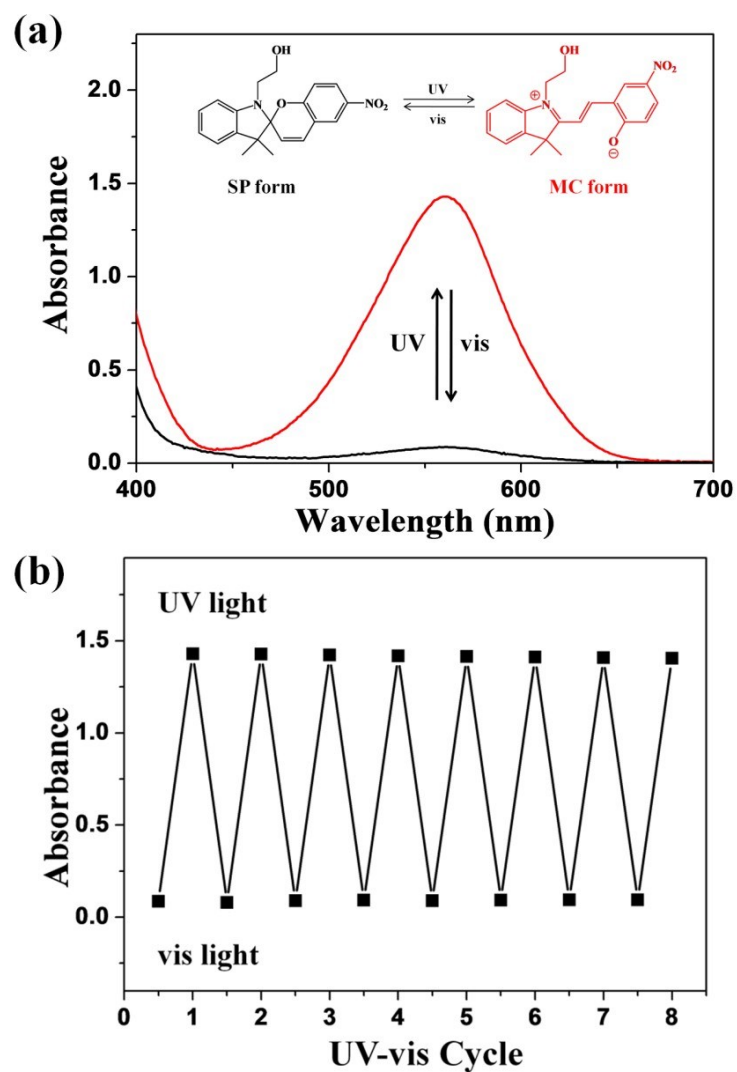


Figure S4. (a) Absorbance spectra of the spiropyran in MeCN after UV and visible light irradiation. (b) The changes of absorbance at 560 nm of the spiropyran after UV and visible light irradiation cycles.

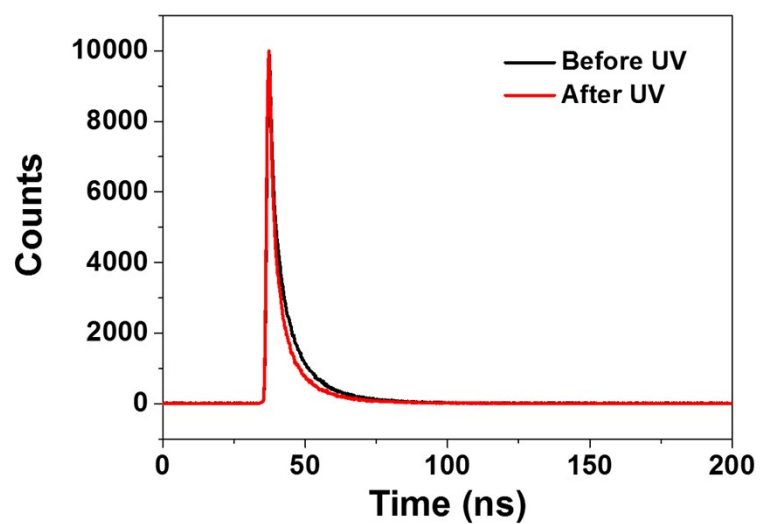


Figure S5. The time-resolve fluorescence spectra of the nanoparticles before and after UV irradiation (The excitation is 420 nm; the emission is 500 nm).

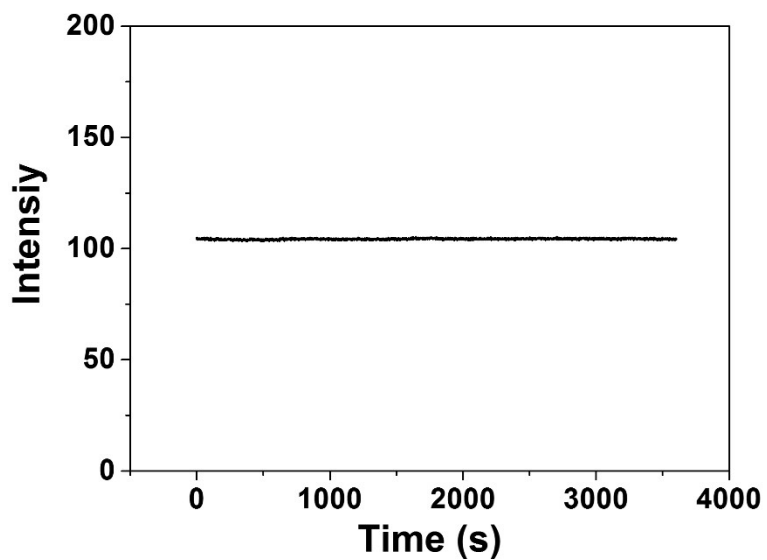


Figure S6. The photostability of the nanoparticles in cell culture medium. (The excitation is 420 nm; the emission is 500 nm).

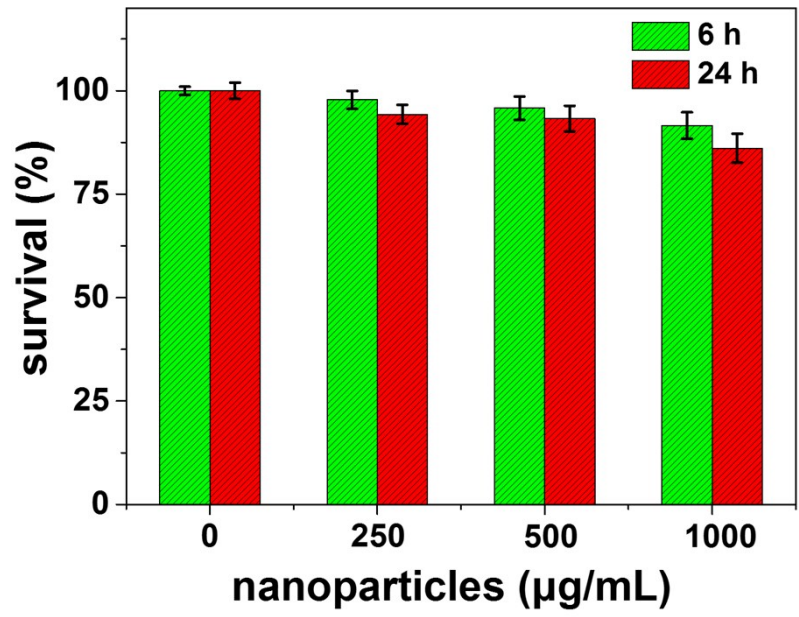


Figure S7. HeLa cells viabilities at different concentrations of nanoparticles and different times determined by MTT assay.