

Fabrication of water dispersible and biocompatible AIE-active fluorescent polymeric nanoparticles through a “one-pot” Mannich reaction

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Results

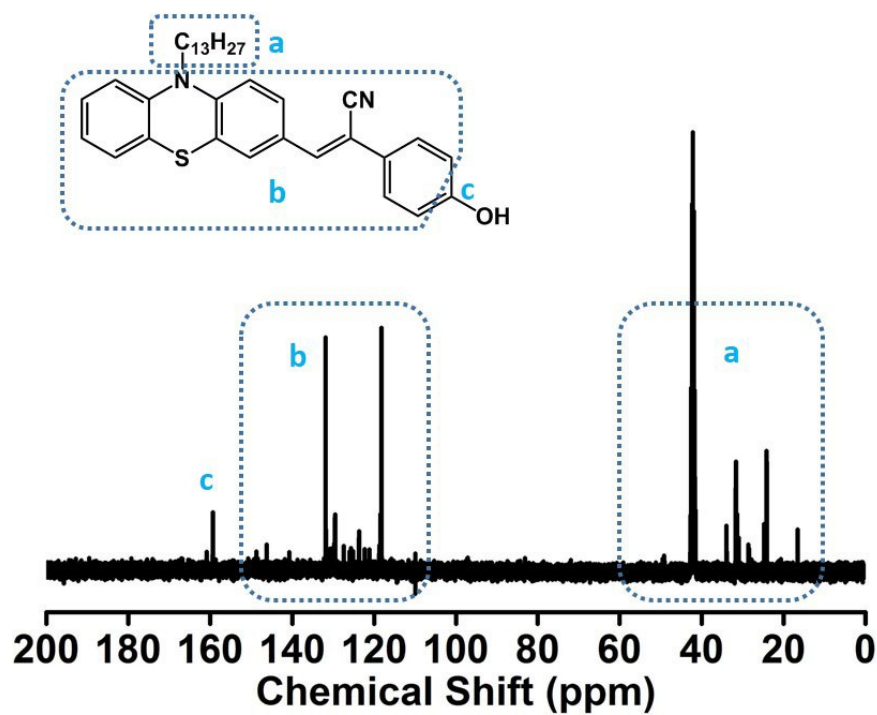


Fig. S1 ^{13}C NMR spectra of PhE-OH in DMSO- d_6 .

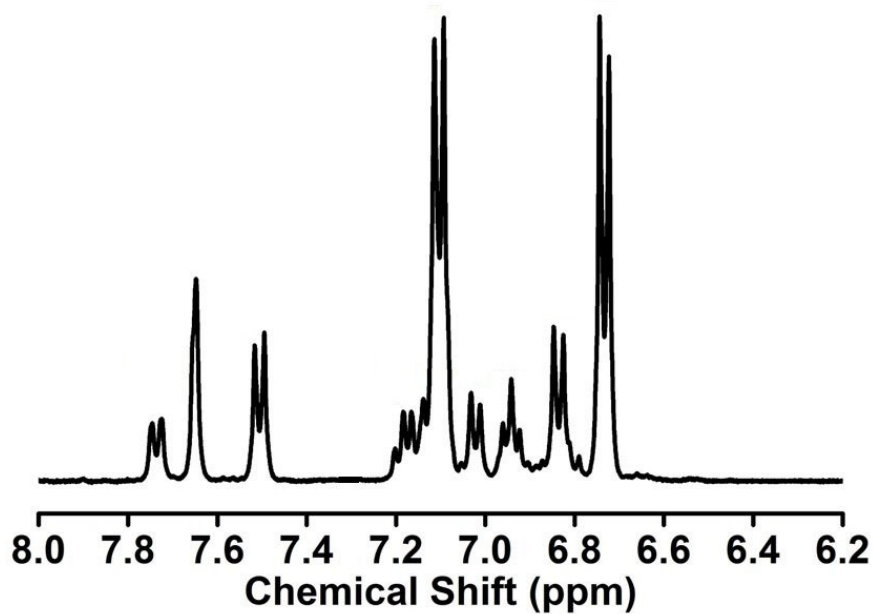


Fig. S2 ^1H NMR spectra of PhE-OH in DMSO- d_6 between 6.2-8.0 ppm.

^1H NMR (400 MHz, DMSO- d_6) δ (ppm): 0.81 (t, 3H), 1.10-1.28 (m, 18H), 1.28-1.40 (m, 2H), 1.60-1.71 (quint, 2H), 3.84 (t, 2H), 6.74 (d, 2H), 6.85 (d, 1H), 6.94 (t, 1H), 7.04 (d, 1H), 7.08-7.11 (d, 2H), 7.18 (t, 1H), 7.31 (s, 1H), 7.38-7.51 (d, 1H), 7.64 (s, 1H), 7.75(d, 1H), 9.46 (s, 1H).

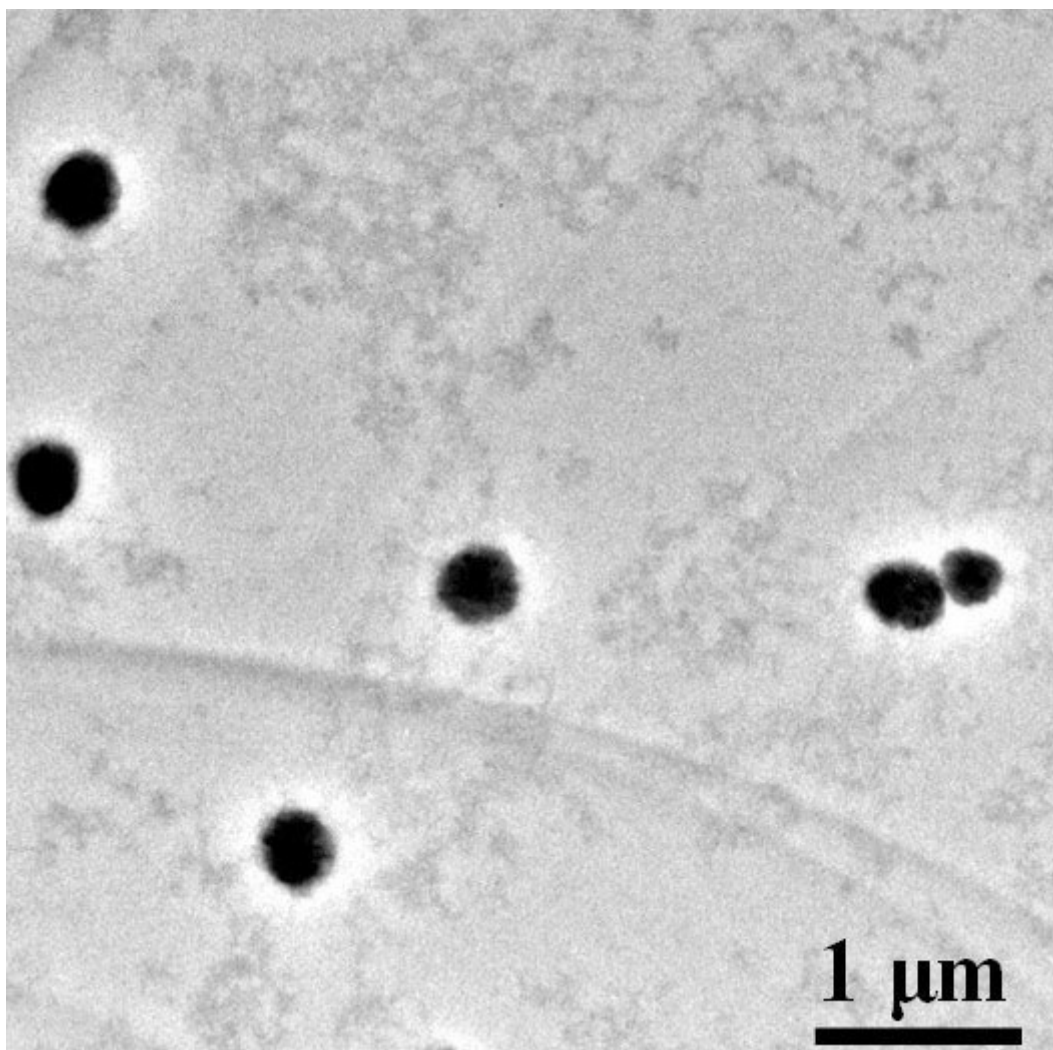


Fig. S3 TEM image of PEG-PhE FPNs. The scale bar = 1 μm.

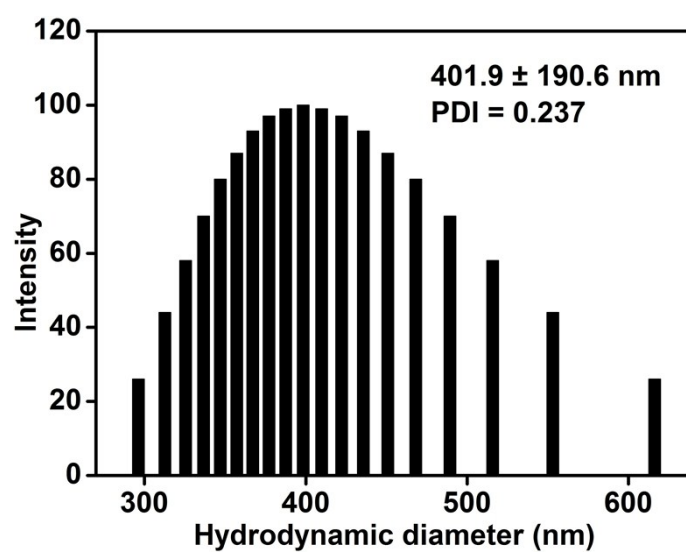


Fig. S4 Hydrodynamic size distribution of PEG-PhE FPNs in water based on DLS.

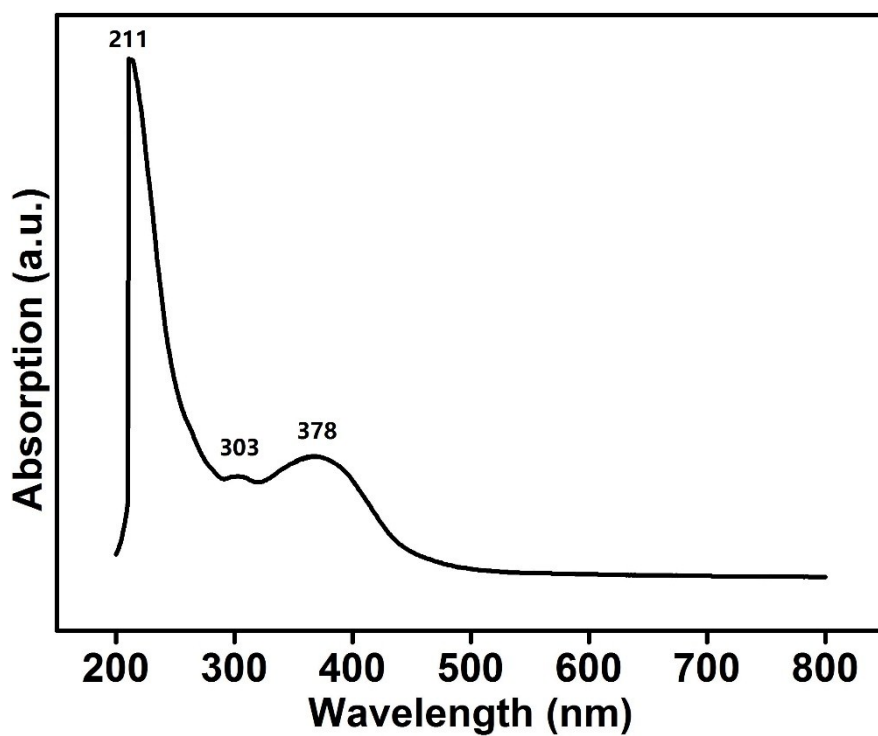


Fig. S5 The UV-Vis absorption spectrum of PEG-PhE dissolved in aqueous solution.

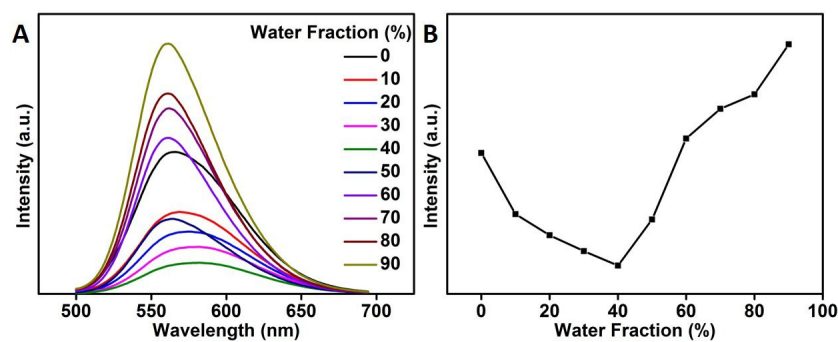


Fig. S6 The AIE properties of PhE-OH. (A) the fluorescent spectra of PhE-OH in the mixture solvents with different fractions of water, (B) the fluorescent intensities of PhE-OH as function with different fractions of water.

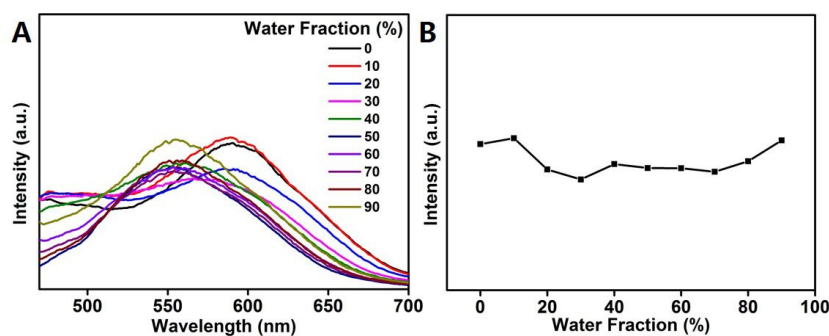


Fig. S7 The AIE properties of PEG-PhE FPNs. (A) the fluorescent spectra of PhE-OH in the mixture

solvents with different fractions of water, (B) the fluorescent intensities of PhE-OH as function with different fractions of water.

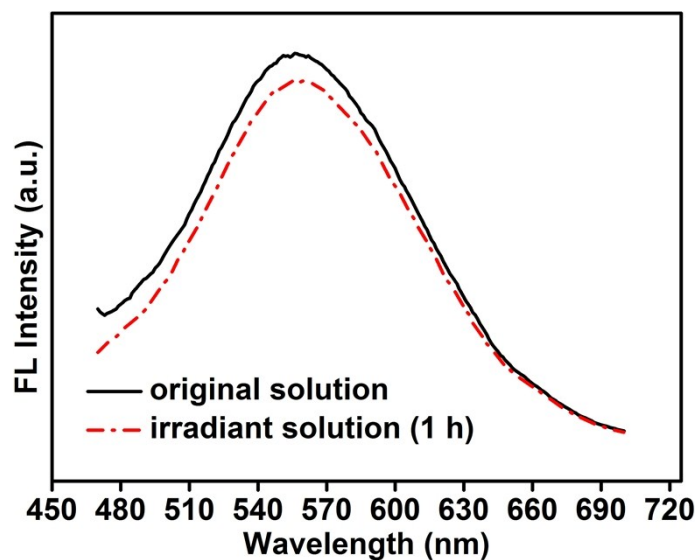


Fig. S8 Photostability evaluation of PEG-PhE FPNs investigated by fluorescent spectroscopy. The water suspension of PEG-PhE FPNs was irradiated by UV lamp at 365 nm for 1 h.

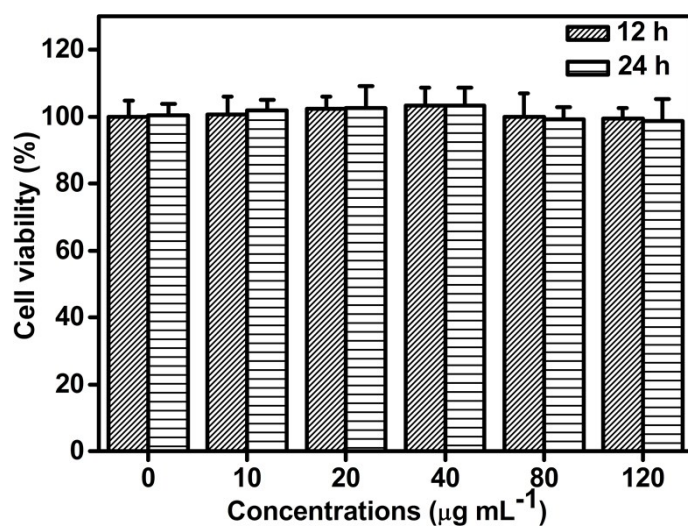


Fig. S9 Cell viability of PEG-PhE FPNs for 12 h and 24 h with different concentrations (0-120 $\mu\text{g mL}^{-1}$) for incubating.