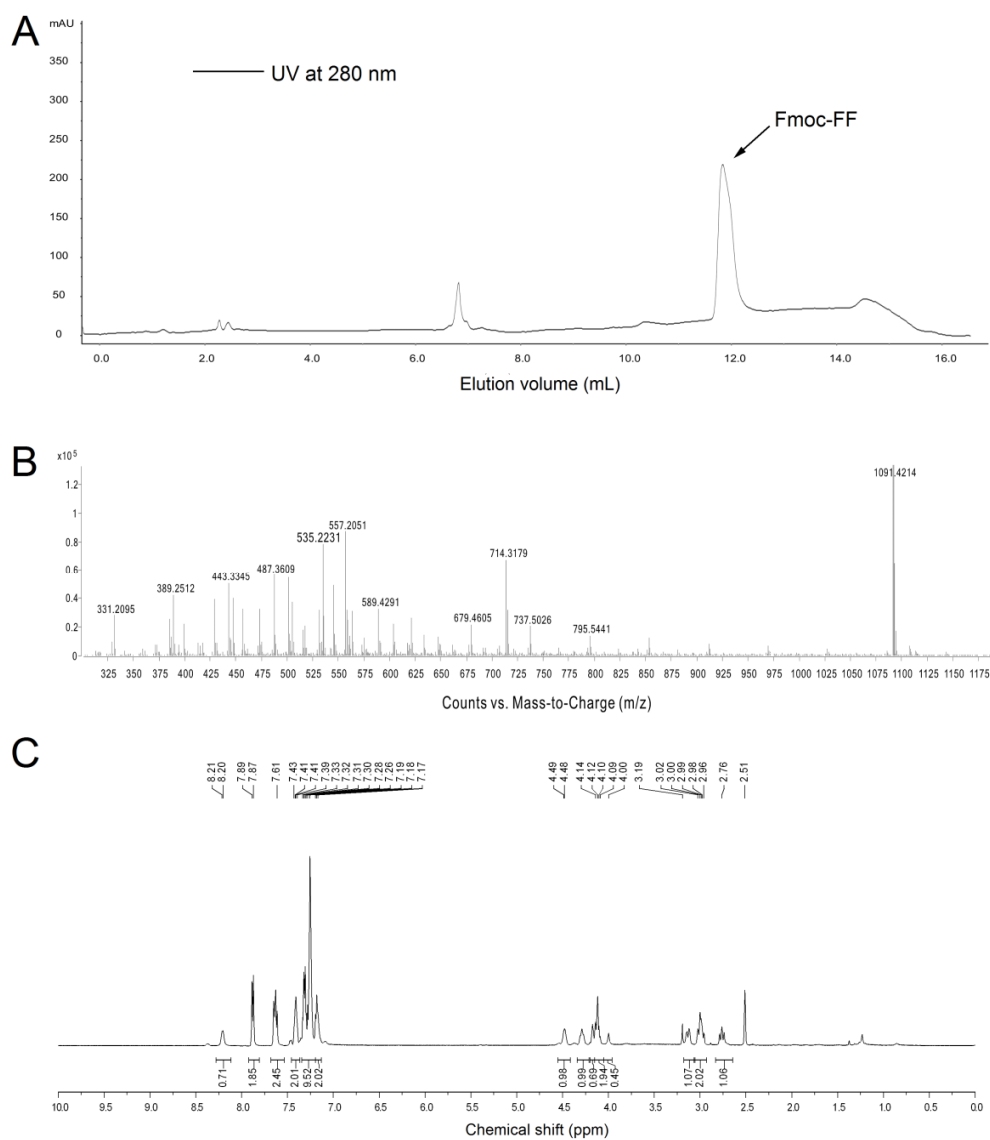
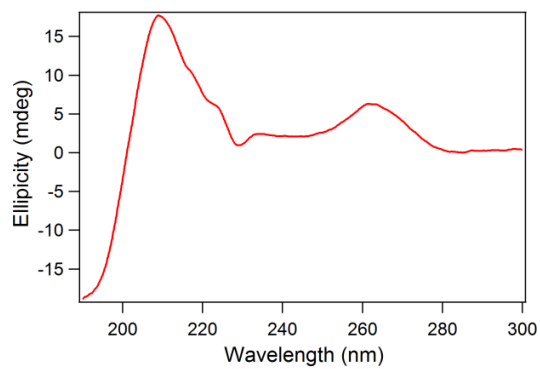


# Supporting Information

Supporting Figures:



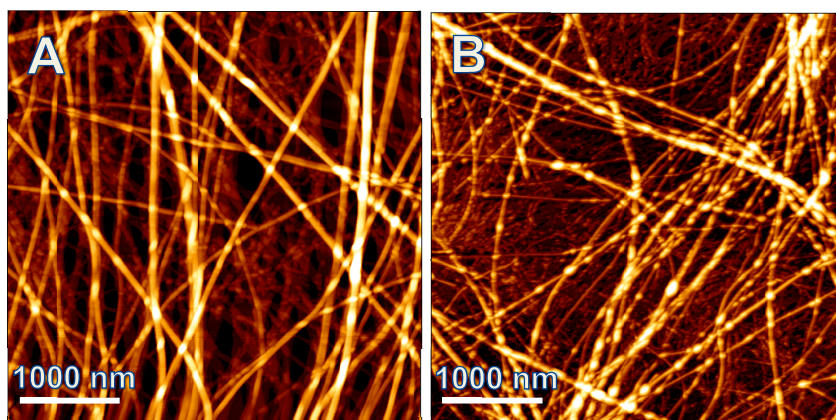
**Figure S1.** Characterization of Fmoc-FF. A) HPLC trace using a reverse-phase C18 column and a water:CH<sub>3</sub>CN gradient (with 0.1%TFA in both phase). B) ESI mass spectrum. C) <sup>1</sup>H NMR.



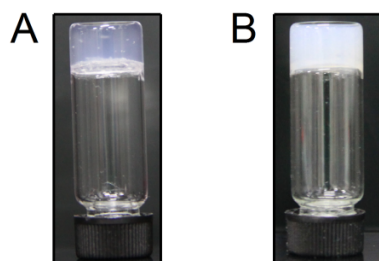
**Figure S2.** CD spectrum of Fmoc-FF colloid solution ( $5 \text{ mg mL}^{-1}$ ).



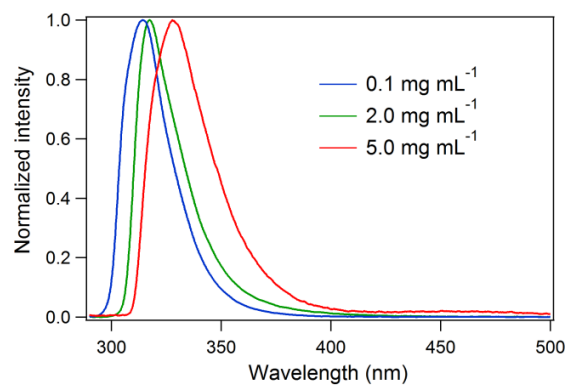
**Figure S3.** Photographs of Fmoc-FF hydrogel prepared by the colloid method using 3 equivalent  $\text{Na}_2\text{CO}_3$  with a pH paper on top of the hydrogel. (The pH of the hydrogel can be as high as 9.)



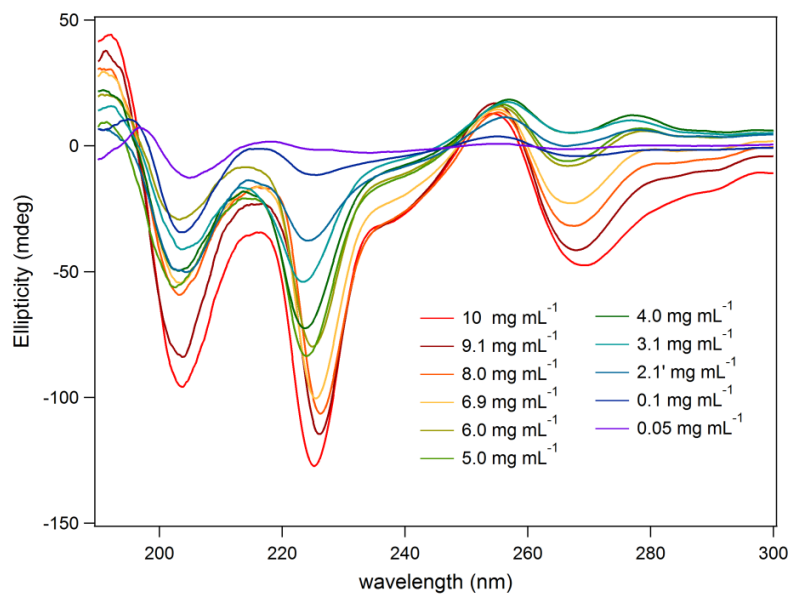
**Figure S4.** AFM images of Fmoc-FF hydrogel prepared using the  $K_2S_2O_8$  method at room temperature (A) and 90 °C (B).



**Figure S5.** Photographs of Fmoc-FF hydrogels prepared by the DMSO method (A) and the HCl method (B).



**Figure S6.** Fluorescence emission spectra of Fmoc-FF in diluted solution (0.1 mg mL<sup>-1</sup> and 2 mg mL<sup>-1</sup>) and in hydrogel (5 mg mL<sup>-1</sup>) prepared using the colloid method. (Excited at 280nm)



**Figure S7.** CD spectra of Fmoc-FF at different concentrations. The Fmoc-FF samples were first prepared using the colloid method to form a hydrogel (10 mg mL<sup>-1</sup>) and then diluted to the desired concentrations.