

Bioinspired diphenylalanine with aggregation-induced emission in deep ultraviolet range

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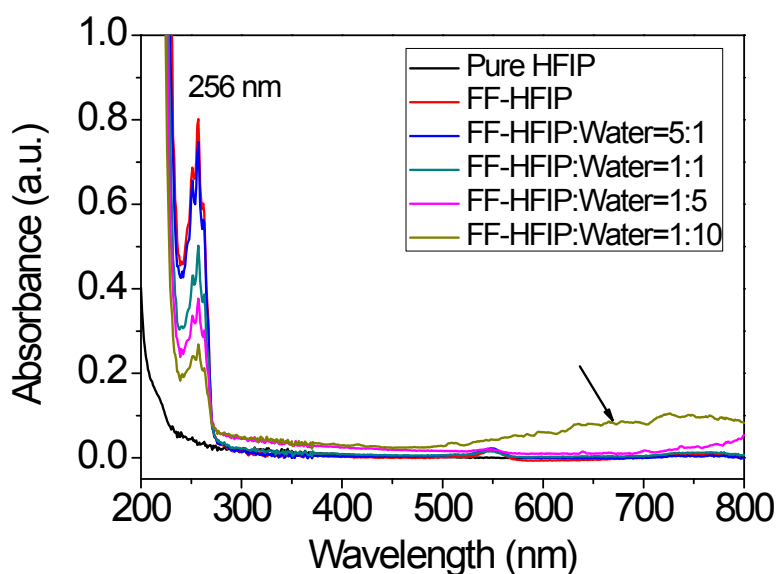


Figure S1. The UV-vis absorption spectra of pure HFIP (black line), FF-HFIP solution (red line) and FF dispersed in mixed solvents with water at different volumetric ratios. The band at 256 nm is caused by absorption of FF molecules. As volumetric fraction of water increases, FF molecules self-assemble to microwires and partially deposit on the bottom of the cuvette. Resultantly, the band at 256 nm

gradually decreases. Besides, the formation of solid aggregates in the solution leads to the scattering of the visible light as highlighted by the arrow. The absorption spectra show that there is no any extraordinary enhancement during aggregation of FF molecules, suggesting the increase of PL intensity in Fig. 1a cannot be ascribed to more absorption.

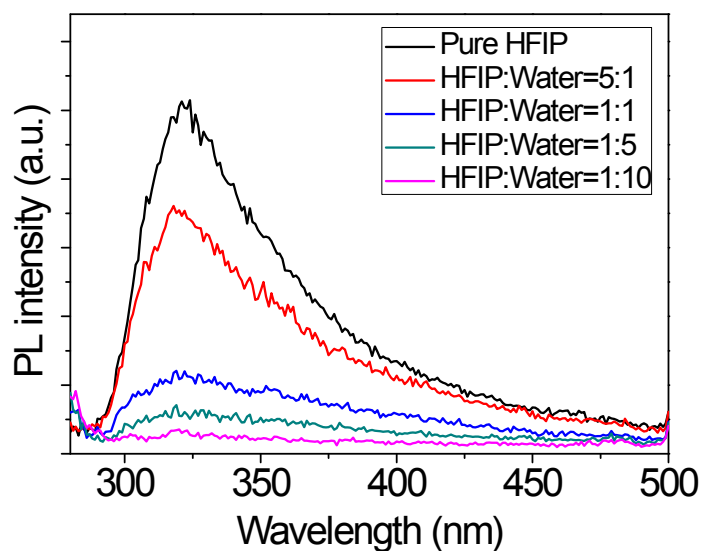


Figure S2. PL spectra of pure HFIP and HFIP mixed with water at different volumetric ratios. There is a peak at 325 nm, while no remarkable peak at 282 nm can be observed. As shown in Fig. 1a, the PL peak of FF locates at ca. 282 nm. And the PL peak at 325 nm is no longer conspicuous in Fig. 1a, meaning that the PL of FF is much stronger than the solvent. Moreover, the PL of HFIP normally decreases with the adding of water. Thence, the weak PL of the solvent scarcely affects the discussion on AIE of FF.