Supplementary Material for PCCP

Supporting Informations:

Understanding the Aggregation Induced Emission Enhancement for a Compound with Excited State Intramolecular Proton Transfer Character

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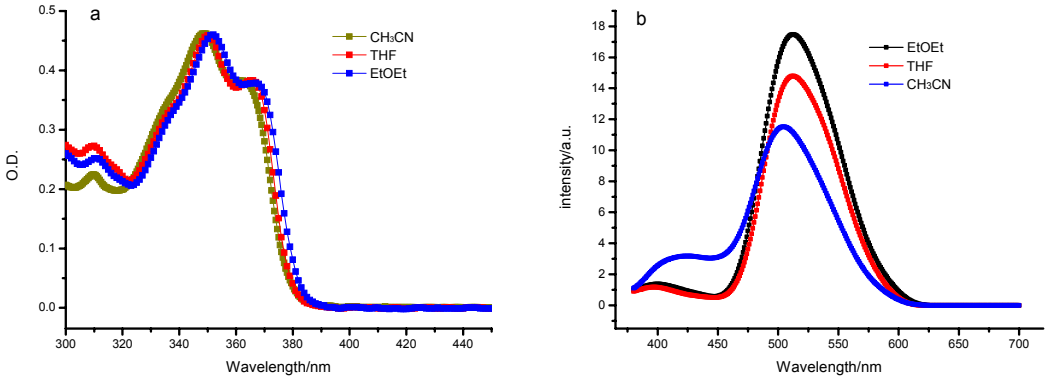

Figure S1. Absorption (a) and fluorescence (b) spectra of BTHPB in CH_3CN, THF, EtOEt, respectively. concentration: 1.0×10^{-5} M; excitation at 360 nm

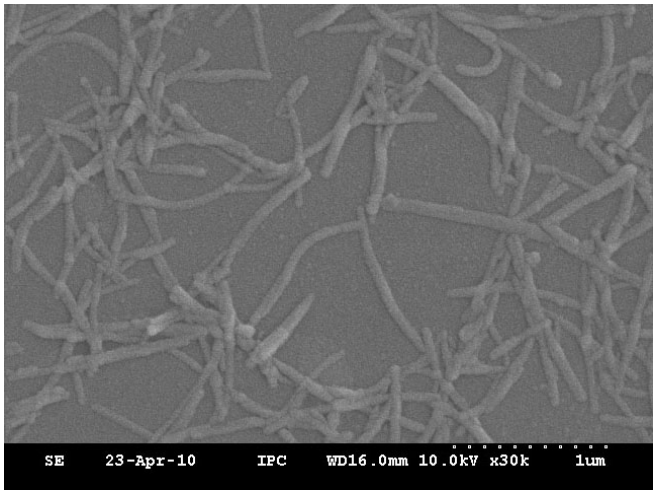

Figure S2. Image of BTHPB aggregates.

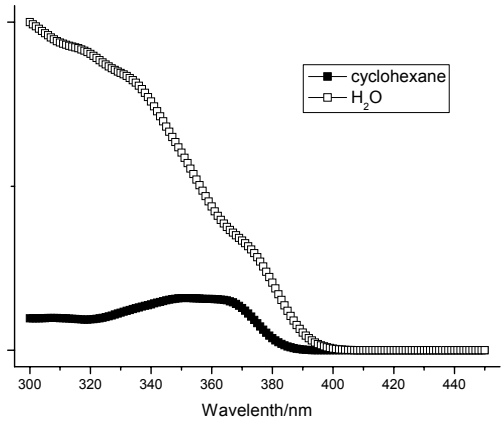

Figure S3. Excitation spectrum of BTHPB in cyclohexane（■) and water（□). Concentration: 1.0×10^{-5} M. λ_{em} =509 nm.

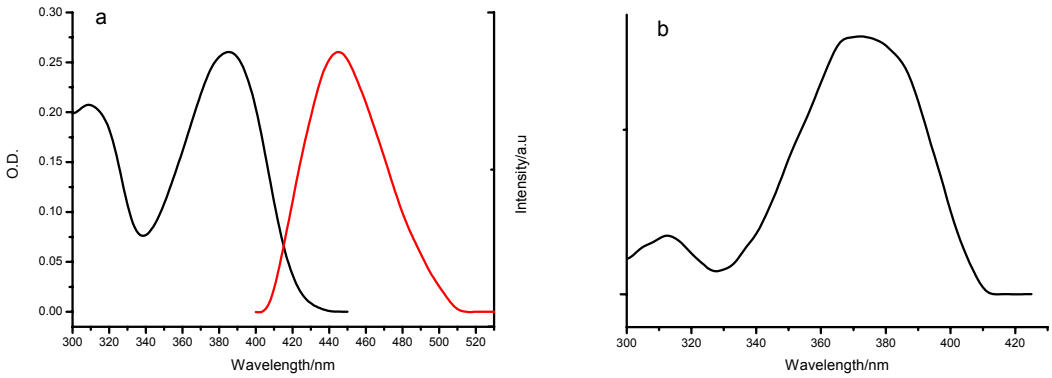

Figure S4. a) Absorptio and fluorescence spectra of BTHPB in basic water (PH = 11); b) excitation spectrum of BTHPB in basic water (PH = 11), excitation at 385 nm. concentration: 1.0×10^{-5} M

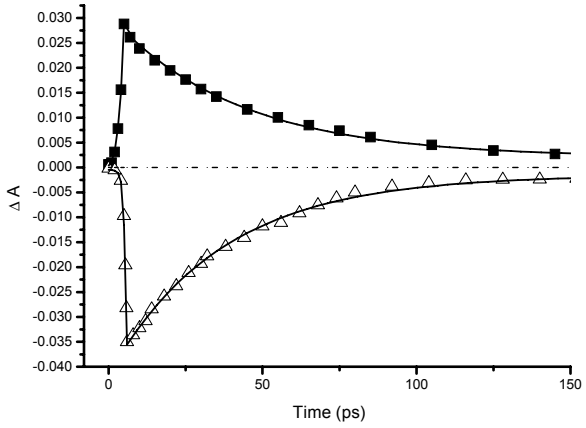

Figure S5. Kinetic traces of the transient absorption signals for BTHPB in THF, and the fits for the detection wavelengths 530 nm（△) and 660 nm（■).

Table S1 Calculated dipole moments and transition nature for BTHPB

	Dipole moment (debye)			electronic transitions & oscillator strengths
Ground state of enol tautomer	X=0.7992	4.54 Y=4.4564	Z=0.3262	HOMO-LUMO 3.54 eV (0.878)
Lowest excited state of keto tautomer	X=0.7313	4.96 Y=4.9068	Z=0.2495	HOMO-LUMO 2.53 eV (0.135)