Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Electronic Supplementary Information

J-aggregates of Zinc Tetraphenylporphyrin: a New Pathway to Excellent Electrochemiluminescence Emitter

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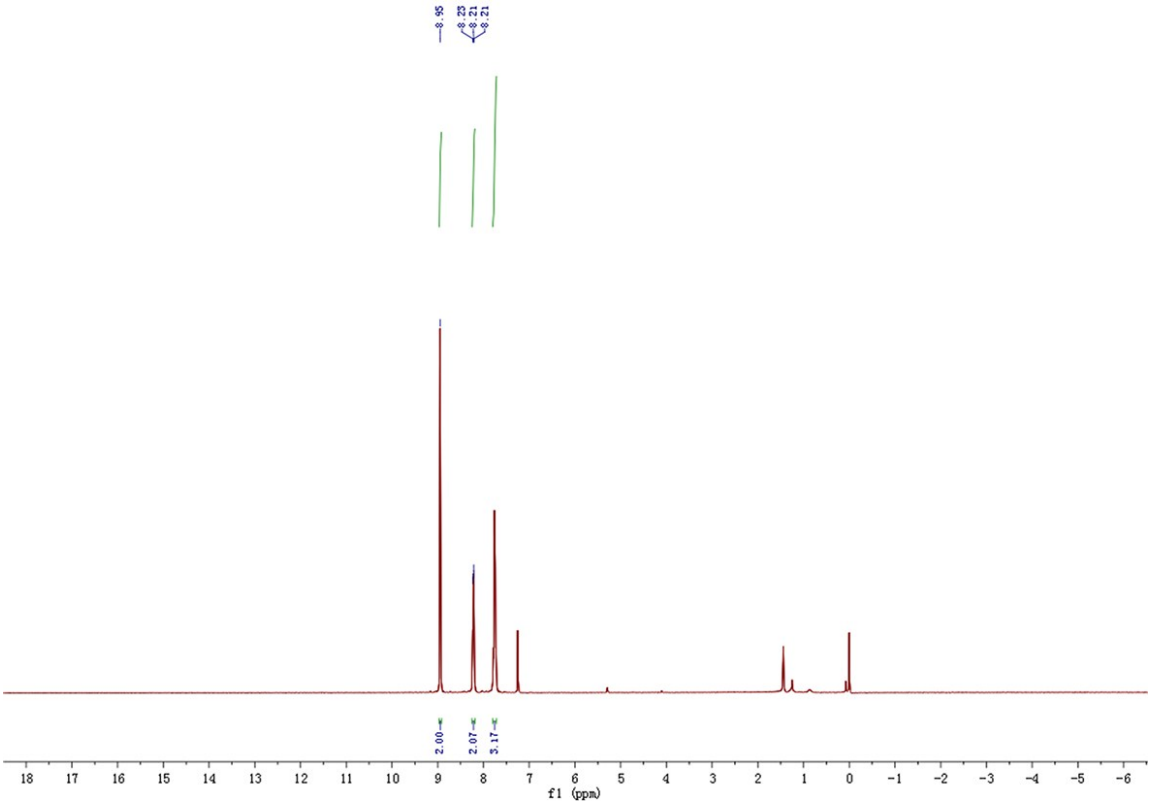

Figure S1. Nuclear magnetic resonance spectroscopy (^{1}H NMR) of zinc tetraphenylporphyrin (ZnTPP).

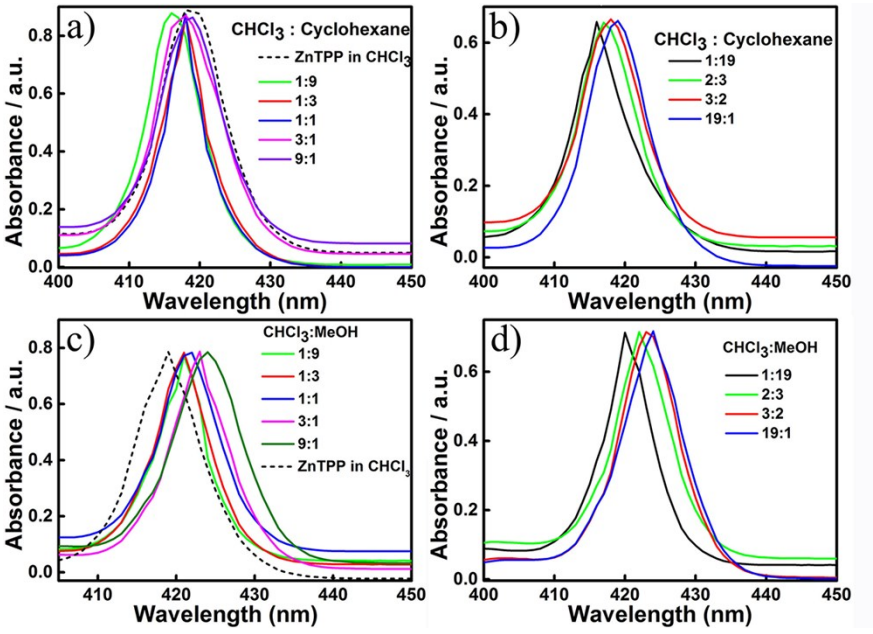

Figure S2. Absorption spectra of H- (a, b) and J-aggregates (c, d) with concentration of 7.5×10^{-7} M in a series of mixed solvents (solvent content as indicated; dash line, colorful lines spectra correspond to monomer, aggregates, respectively).

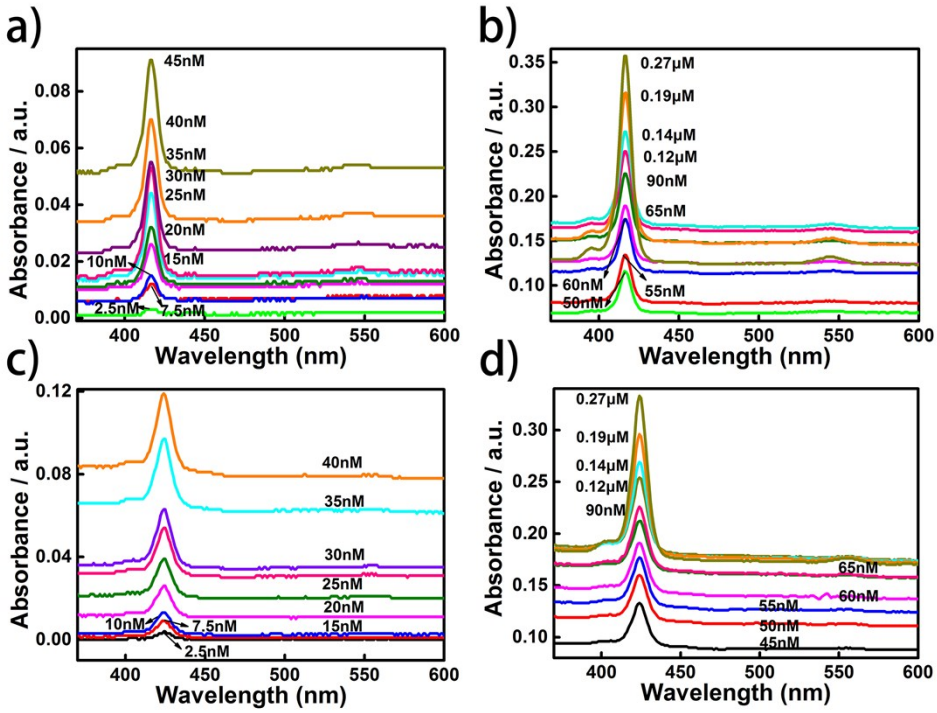

Figure S3. Concentration-dependent absorption spectra of aggregates in binary solvent of trichloromethane /cyclohexane (1:19, v/v) (a, b) and trichloromethane / methanol (19:1, v/v) (c, d) at room temperature.

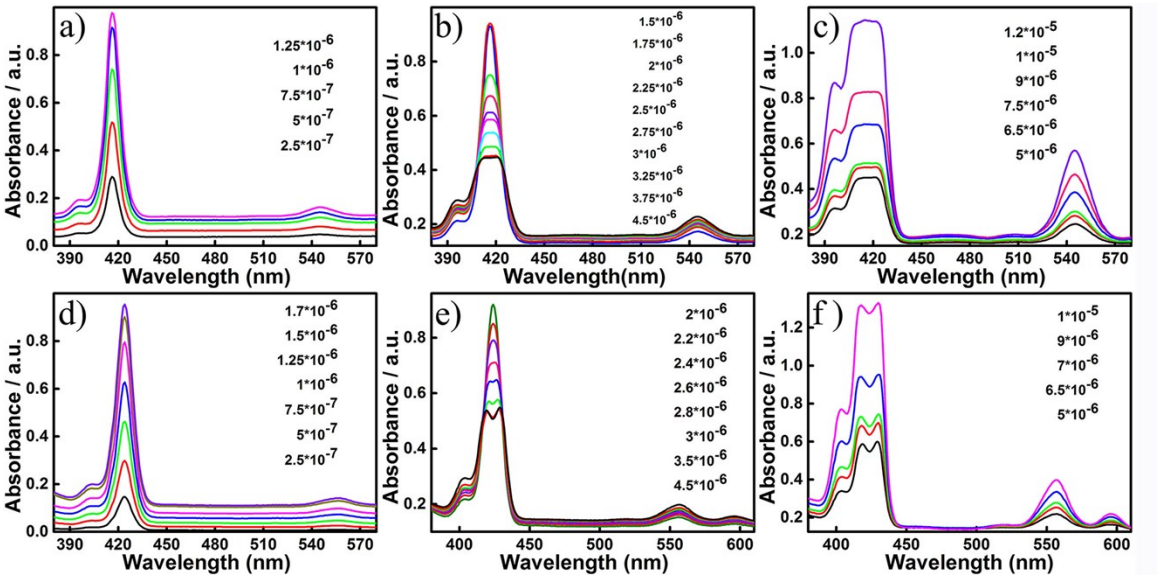

Figure S4. Concentration-dependent absorption spectra of aggregates in binary solvent of trichloromethane /cyclohexane (1:19, v/v) (a, b, c) and trichloromethane / methanol (19:1, v/v) (d, e, f) at room temperature.

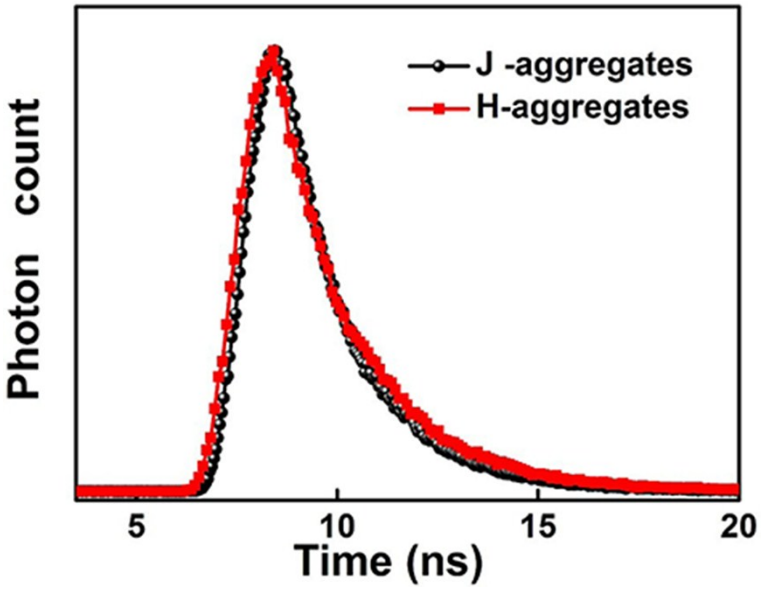

Figure S5. Fluorescence lifetime of H-aggregates (red line) and J-aggregates (black line), which were recorded at excitation wavelength of 420 nm.