Supporting Information

Formation of Spherulitic J-Aggregates from the Co-Assembly of Lithocholic Acid and Cyanine Dye

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Supporting Figures:

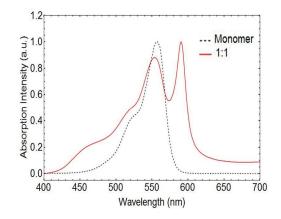


Figure S1: Adsorption spectrum of LCA/DiSC₂(3) solution with the mixed molar ratio of 1:1 after 24 hour incubation at room temperature, together with the adsorption spectrum of 0.5 mM $DiSC_2(3)$ in 1% w/w ammonia solution. The concentration of LCA is 1 mM.

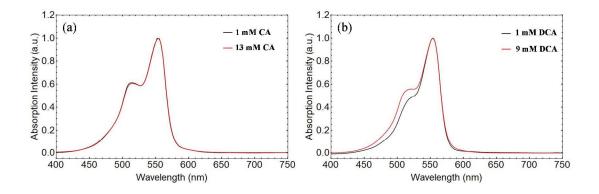


Figure S2: Adsorption spectra of CA/DiSC₂(3) (a) and DCA/DiSC₂(3) (b) solution with the mixed molar ratio of 5:1 after 24 hour incubation at room temperature. The concentration of CA is 1 mM and 13 mM, respectively. The concentration of DCA is 1 mM and 9 mM, respectively. The critical micelle concentration is 13 mM for CA and 9 mM for DCA (ref. 41).

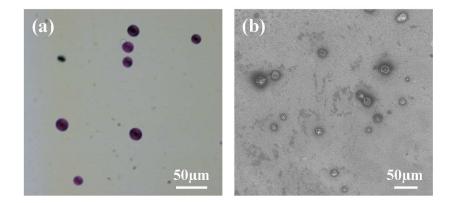


Figure S3: Low-resolution optical microscopy (a) and SEM (b) images of spherulitic J-aggregates formed in $LCA/DiSC_2(3)$ solution with the mixed ratio of 2:1 after 24 hour incubation. The concentration of LCA is 1 mM.

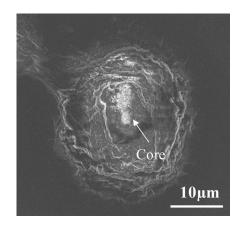


Figure S4: SEM image of a collapsed spherulitic J-aggregate

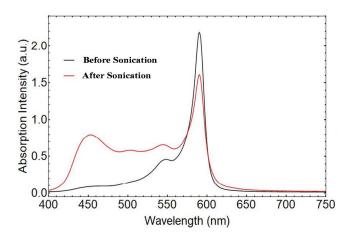


Figure S5: Adsorption spectra of J-aggregate spherulite solution before and after 10 min sonication.

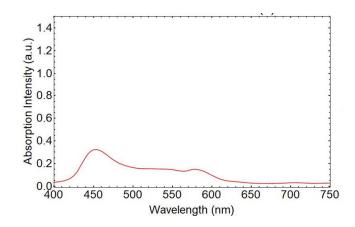


Figure S6: Adsorption spectrum of LCA/DiSC₂(3) solution with the mixed molar ratio of 5:1 after 24 hour incubation at room temperature. The concentration of LCA is 0.5 mM.