Electronic Supplementary Material (ESI) for Photochemical & Photobiological Sciences.

Supporting Information

Fabrication of multicolored patterns based on dye-doped cholesteric liquid crystals

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1. Reflection wavelength of cholesteric liquid crystals

Table S1 The specific formula ratio of the CLC.

C6M (wt%)	HCM-021 (wt%)	HCM-020 (wt%)	R1011 (wt%)	Darocur 784 (wt%)	Wavelength (nm)
68.5	10	10	11.5	2	415
69.0	10	10	11.0	2	425
69.5	10	10	10.5	2	450
70.0	10	10	10.0	2	485
70.5	10	10	9.5	2	505
71.0	10	10	9.0	2	520
71.5	10	10	8.5	2	530
72.0	10	10	8.0	2	550
72.2	10	10	7.8	2	580
72.5	10	10	7.5	2	630
73.0	10	10	7.0	2	660

2. Characterization of fluorescent dyes

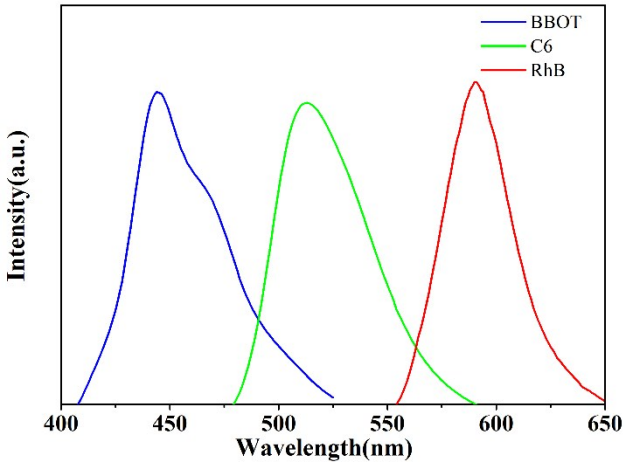

Fig. S1 Emission spectra of fluorescent dyes for BBOT, C6 and RhB.

3. Characterization of blank control film

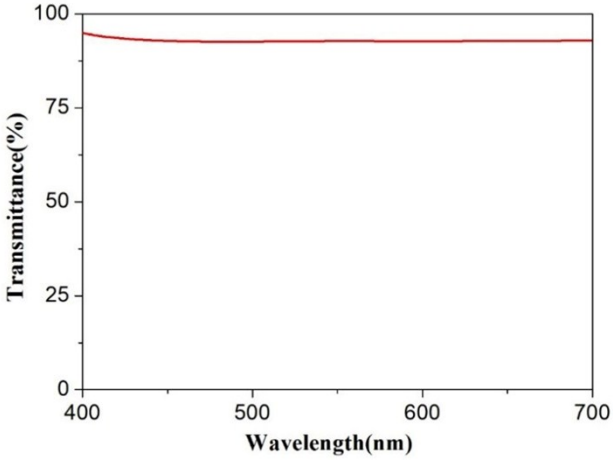

Fig. S2 The transmittance of blank control film.

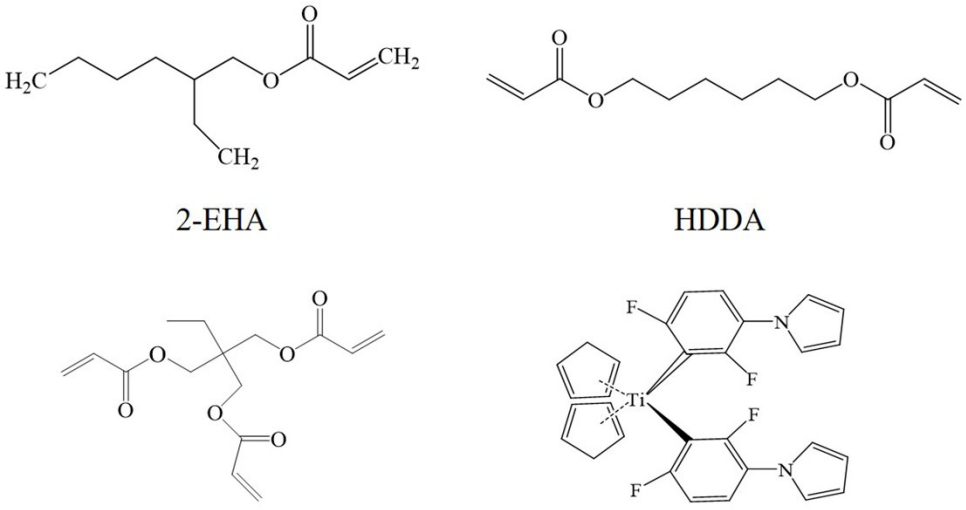

Fig. S3 The components of blank control film.

4. In-situ fluorescence regulation of CLC/BBOT

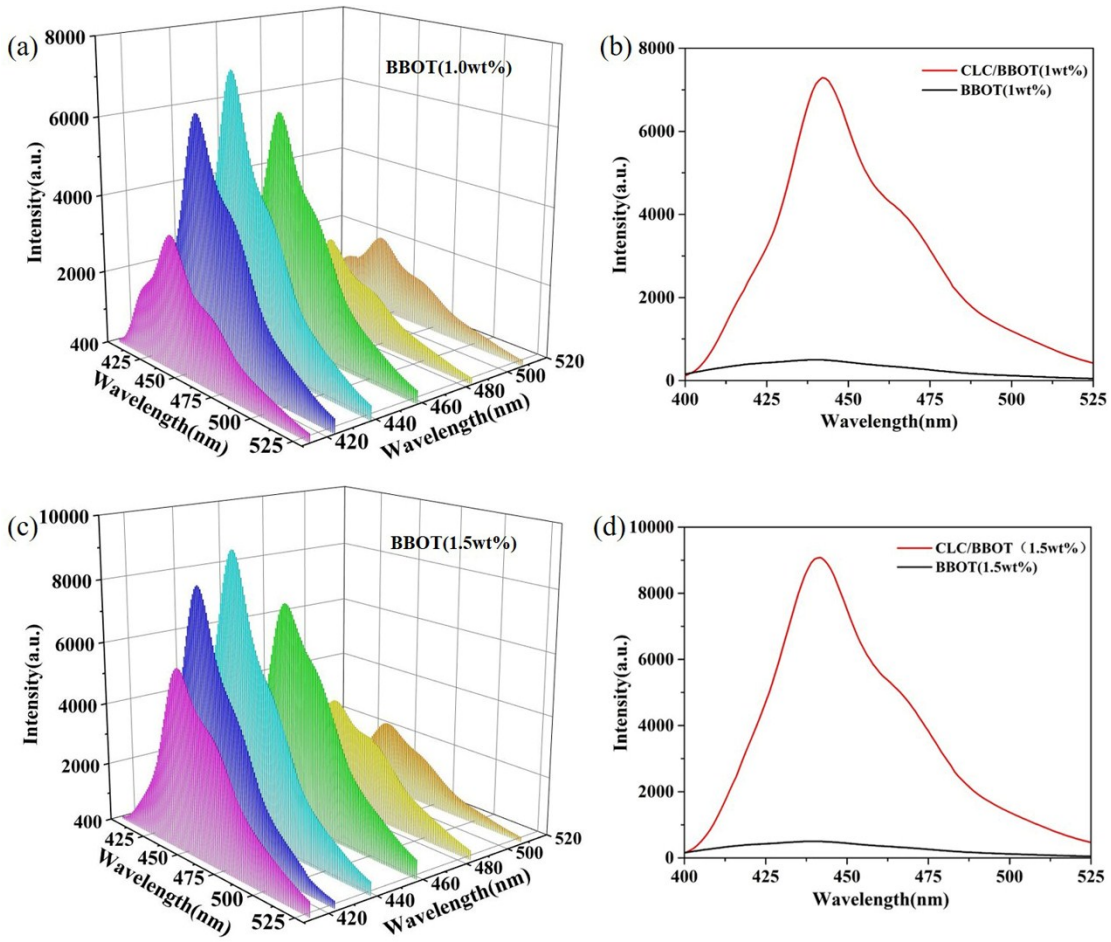

Fig. S4 (a) CLC/BBOT (1.0 wt%) fluorescence enhancement curve controlled by wavelength of CLC. (b) The maximum fluorescence curves of CLC/ BBOT and pure BBOT (1.0 wt%). (c) CLC/BBOT (1.5 wt%) fluorescence enhancement curve controlled by wavelength of CLC. (d) The maximum fluorescence curves of CLC/ BBOT and pure BBOT (1.5 wt%).