Hyper-reflective cholesteric liquid crystal polymer network with double layers †

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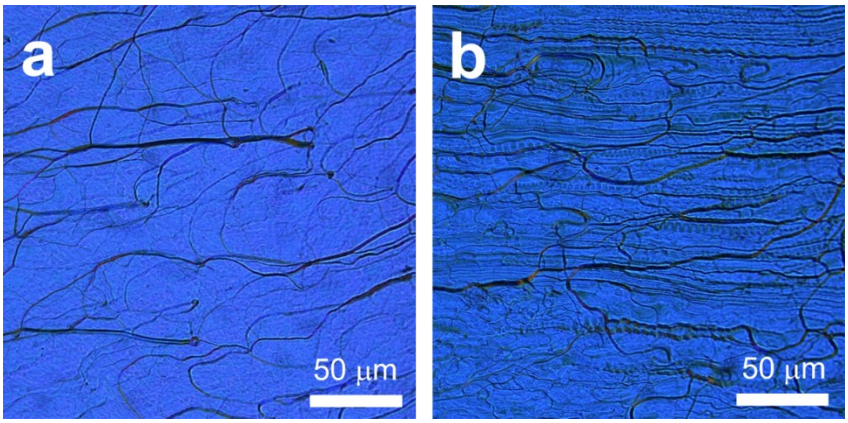

Fig. S1 POM images of (a) the LC242/*S*5011/907 (w/w/w, 94.5/2.5/3) mixture and (b) the LC242/CA-iso/907 (92.17/4.83/3) mixture taken at 80 °C during the cooling process.

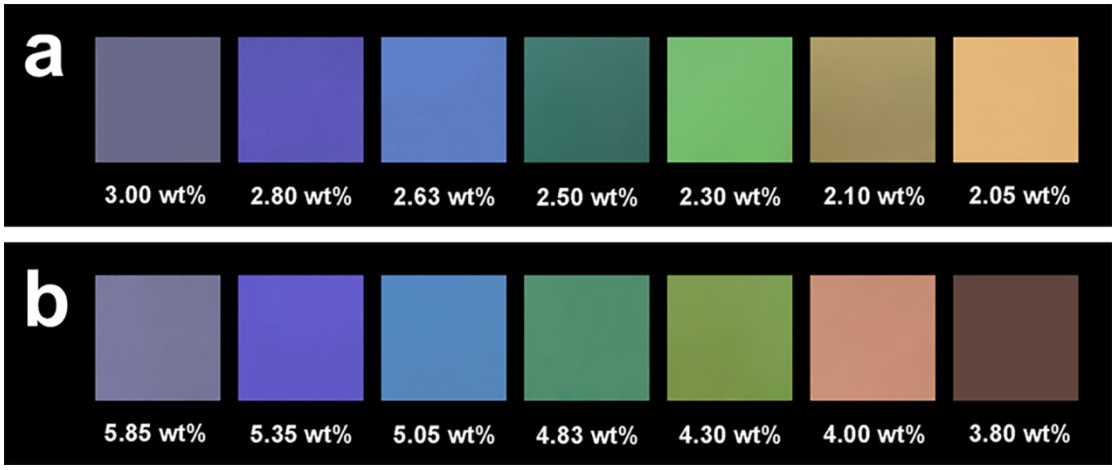

Fig. S2 Photographs of the single-layered CLCN films prepared under different concentrations of (a) *S*5011 and (b) CA-iso.

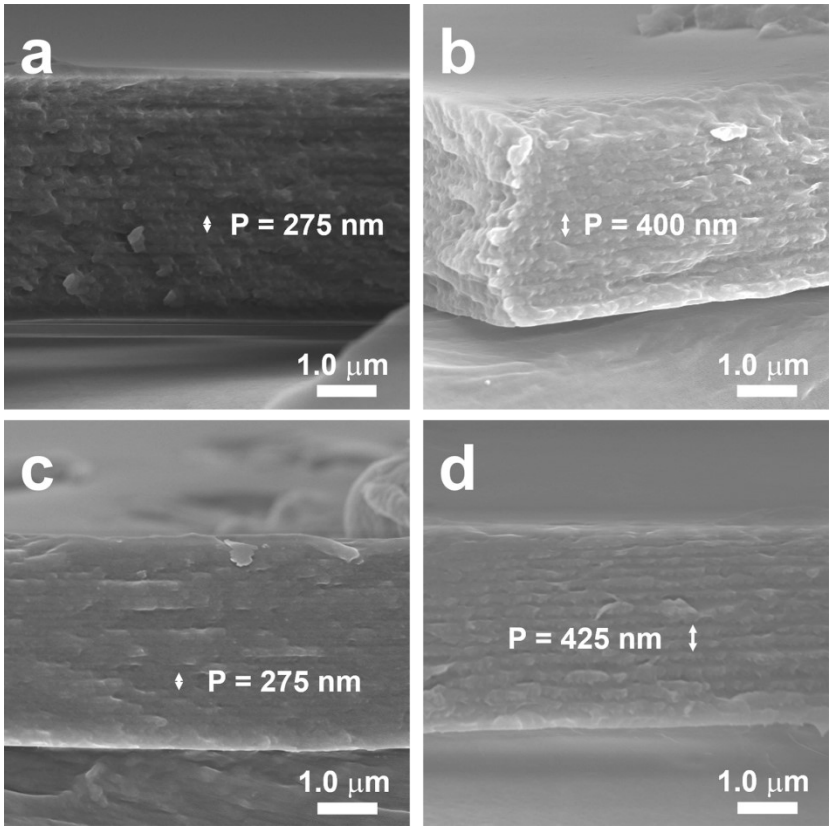

Fig. S3 Cross-sectional FESEM images of the single-layered CLCN films prepared using (a) 3.00 wt% of *S*5011, (b) 2.05 wt% of *S*5011, (c) 5.85 wt% of CA-iso and (d) 3.80 wt% of CA-iso, respectively.

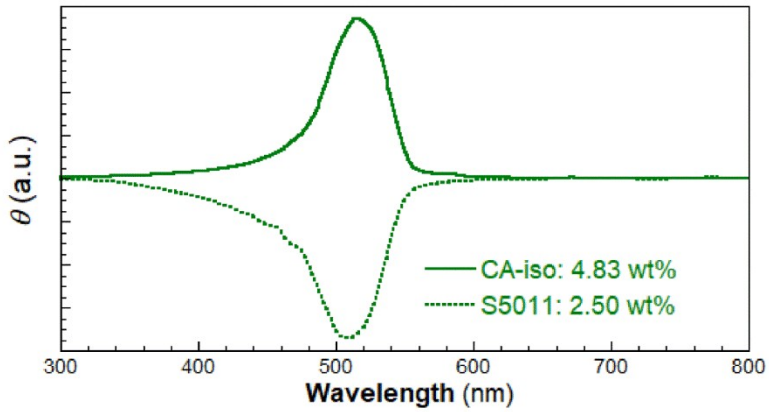

Fig. S4 DRCD spectra of the single-layered CLCN films prepared using *S*5011 and CA-iso, respectively.

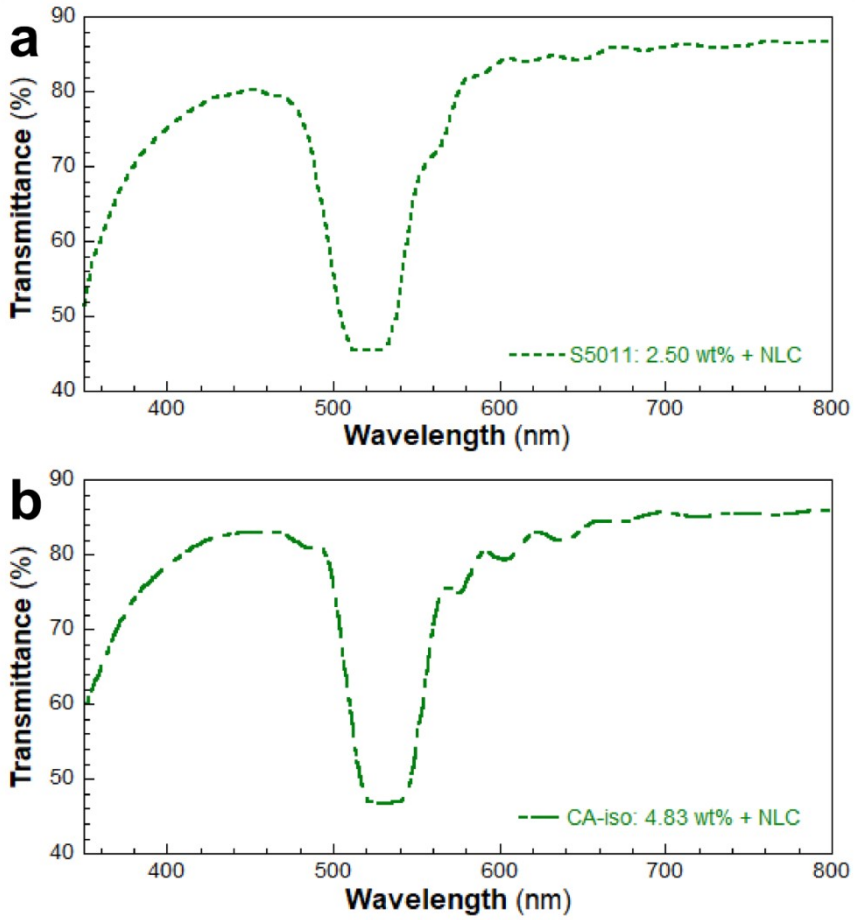

Fig. S5 UV-*vis* spectra of the double-layered CLCN films prepared using (a) a left-handed CLC mixture and the NLC one and (b) a right-handed CLC mixture and the NLC one.

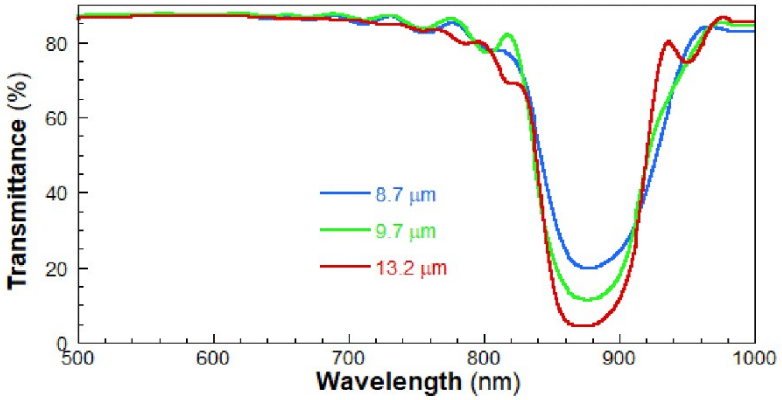

Fig. S6 UV-*vis* spectra of the double-layered CLCN films with different thicknesses.

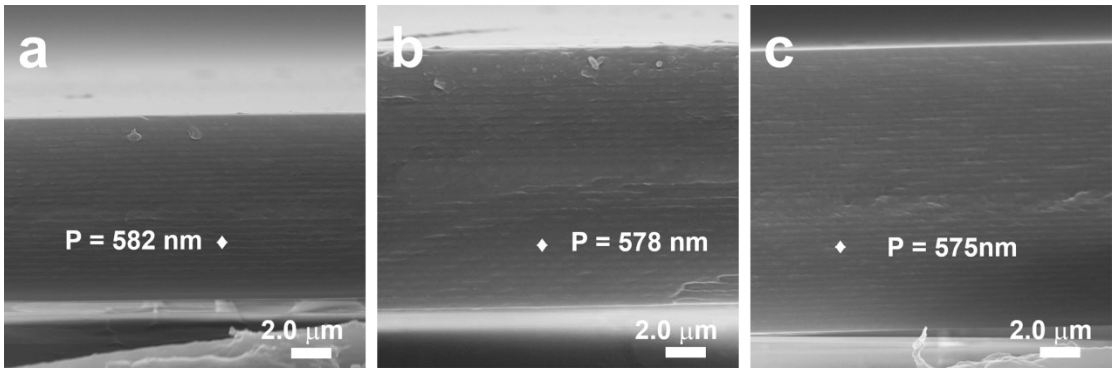

Fig. S7 Cross-sectional FESEM images of the double-layered CLCN films with different thicknesses. (a) 8.7 μm, (b) 9.7 μm and (c) 13.2 μm.

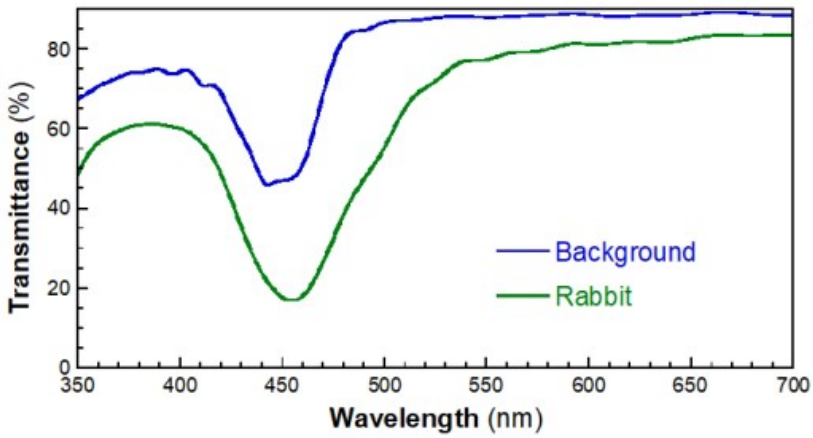

Fig. S8 UV-*vis* spectra of the rabbit area and the background.

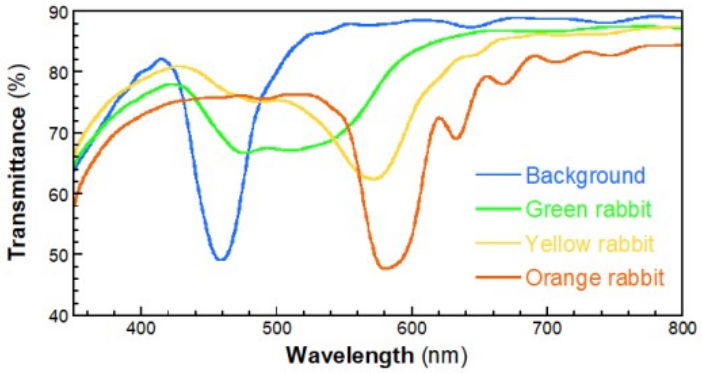

Fig. S9 UV-*vis* spectra of the rabbit areas and the background.

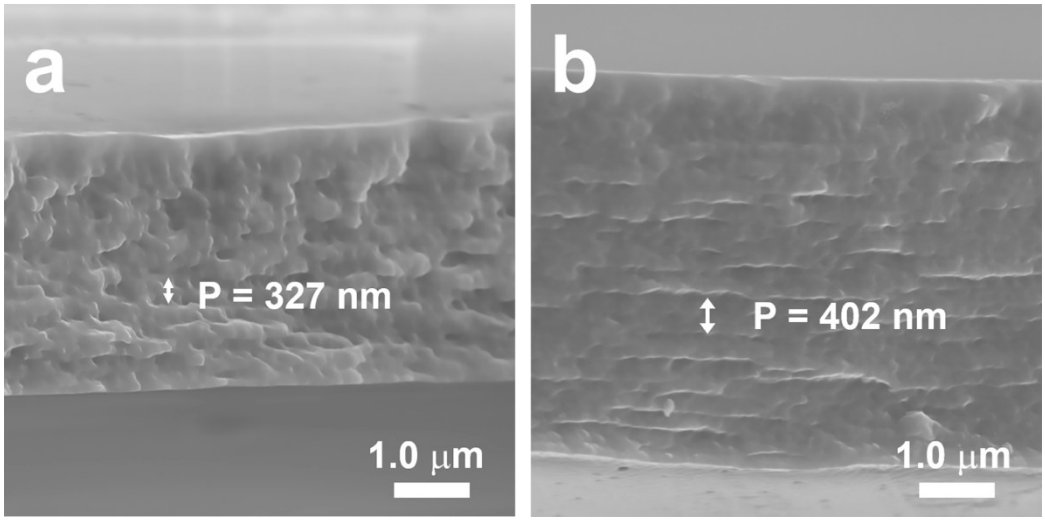

Fig. S10 Cross-sectional FESEM images of (a) the background and (b) the blue rabbit area.