

Support information

Preparation of transmittance-switchable composites from a coexistent system of polymer-dispersed and polymer-stabilized cholesteric liquid crystals

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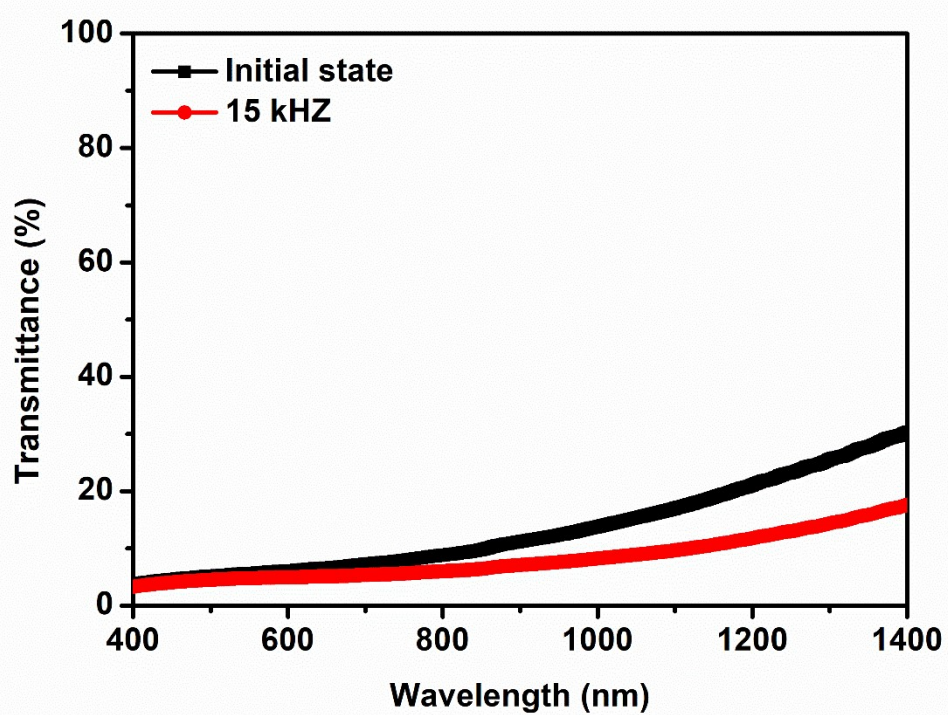


Figure S1. Transmission spectra of sample A6 at the initial state and under the high-frequency electric field (15 kHz, 100 V).

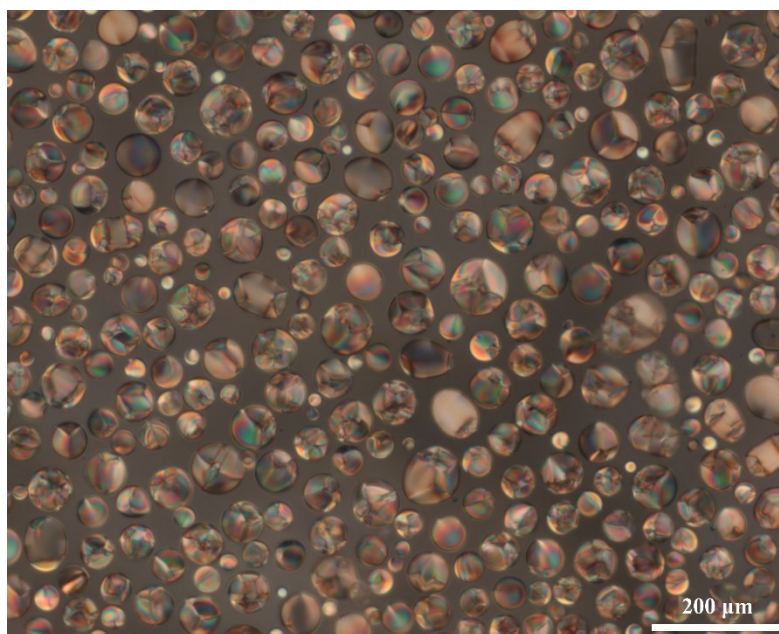


Figure S2. POM images of sample A3 before the polymerization.

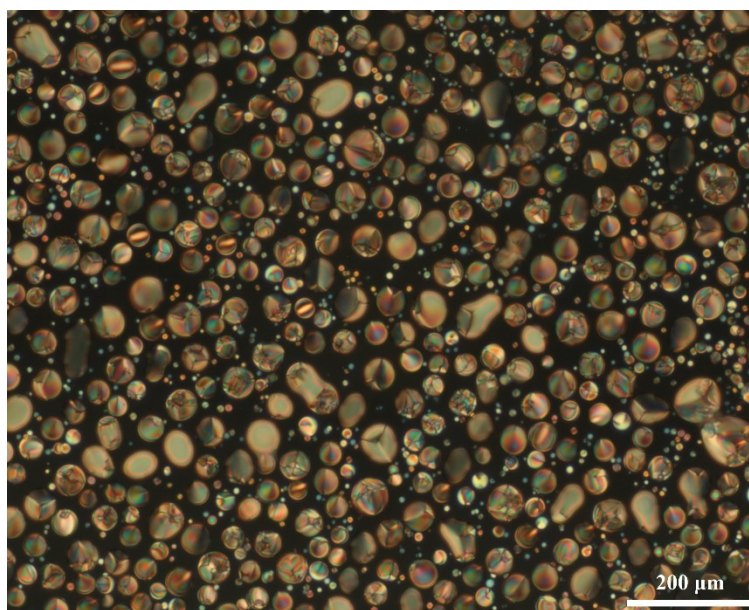


Figure S3. POM images of sample B before the polymerization.

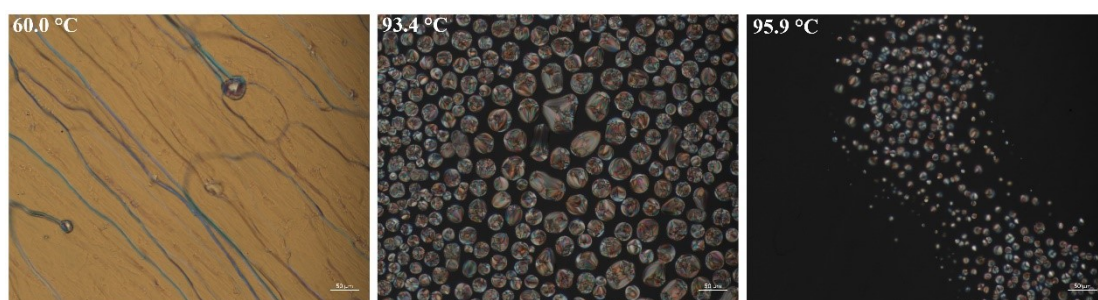


Figure S4. POM images of the pure CLCs at different temperatures.

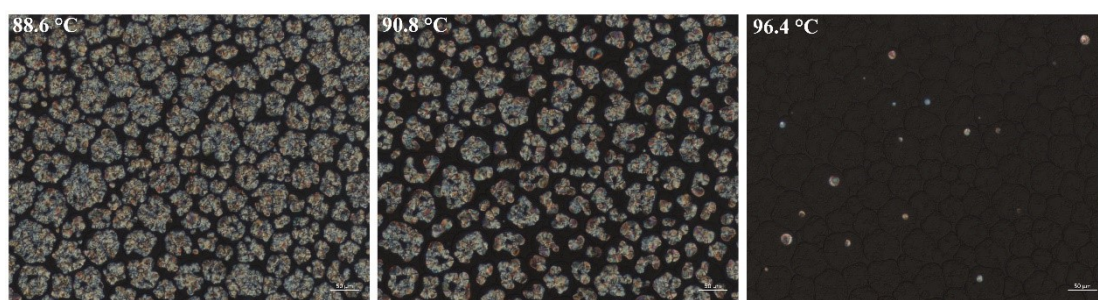


Figure S5. POM images of sample A3 at different temperatures.

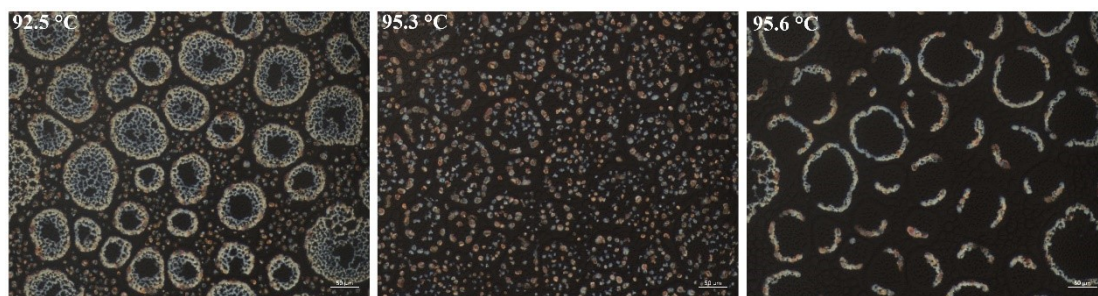


Figure S6. POM images of sample B2 at different temperatures.

The POM images of different samples at various temperatures are given in Figures S4-S6. It can be found that the planar texture of the pure CLCs is damaged when the temperature rises to 93.4 °C. Some regions in the POM images of sample A3 also change from a bright state to a dark state at 90.8 °C, suggesting that the temperature induces the phase transition from the anisotropic state to the isotropic state of the LCs in these regions. At 92.5 °C, the center of some LC droplets in sample B2 still presents a bright state. By comparison, it can be concluded that the mesogenic polymer network is conducive to stabilizing the arrangement of the LCs.