

Electronic Supplementary Information

Topological defects and geometric memory across the nematic-smectic A liquid crystal phase transition

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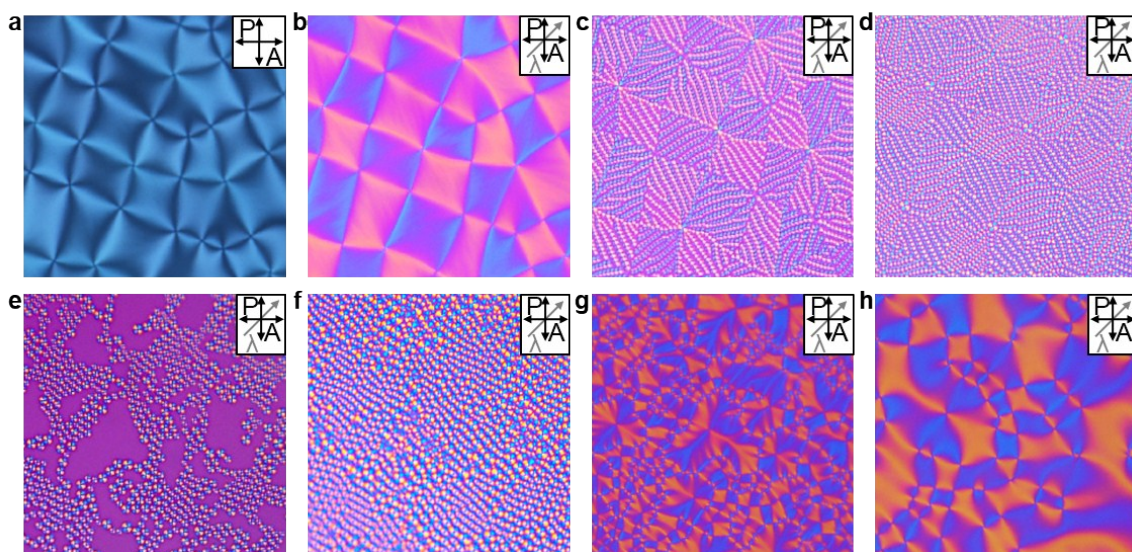


Fig. S1 Optical microscopic observation of hysteresis of boojums during thermal process. (a)-(e) Cooling process. (e)-(h) Heating process. Gray arrow indicates the slow axis of the inserted retardation plate, wherein cyan blue or yellow colours are shown when LC molecular long axis is parallel or perpendicular to the slow axis of the retardation plate, respectively. When the molecules orient parallel, perpendicular or vertical to polarisers, magenta is observed. Defects lose their position and configuration when they cooled to TFCs at SmA phase.

Movie S1 Thermal reversibility investigation of the defects.

Movie S2 Hysteresis of boojums during thermal process.