

Supporting Information

High intrinsic thermally conductive side-chain liquid crystalline polysiloxane films graft with pendent difunctional mesogenic group

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Fig. S1. $^1\text{H-NMR}$ spectra of (a) mesogenic monomer M and (b) S-CL.

Fig. S2. POM images ($\times 20$) of SCLCP2 (a) 45 °C, (a') 114 °C, (a'') 123 °C, and (a''') 162°C and SCLCP5 (b) 73 °C, (b') 108 °C, (b'') 133 °C, and (b''') 201 °C upon heating.

Fig. S3. 1D WAXD peaks of (a) SCLCP2, (b) SCLCP3, (c) SCLCP4 and (d) SCLCP5 during heating from 30 °C to 160 °C.

Fig. S4. Fig. S4. (a) Schematic of transmission geometry used in WAXD and the vertical direction of shearing; (b) 2D WAXD pattern taken with the X-ray beam perpendicular to the film plane of SCLCP3 and (c) the scanning data are shown for the 2θ angle diffraction of SCLCP3.

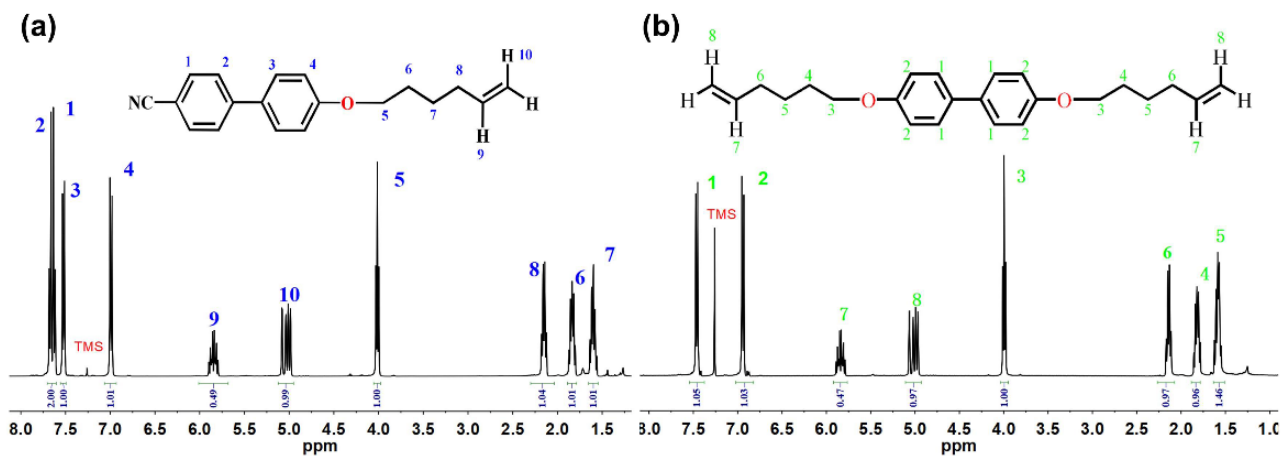


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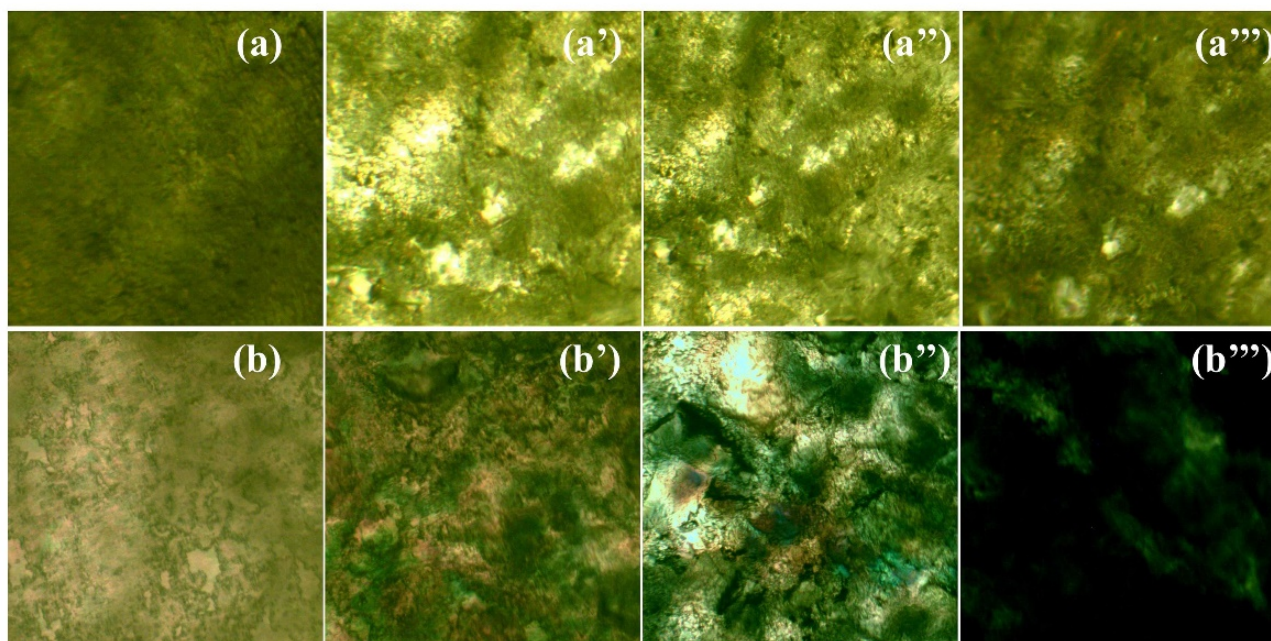


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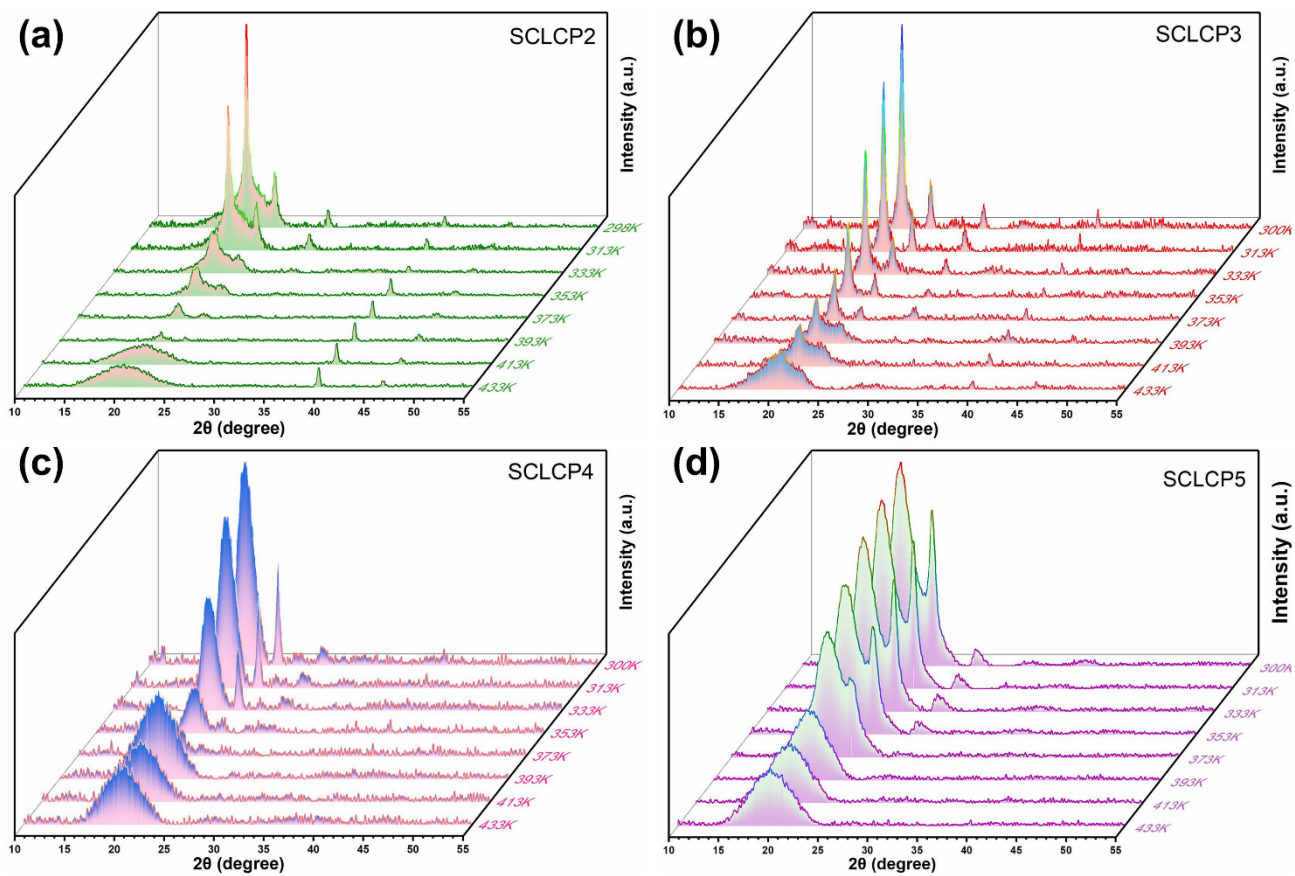


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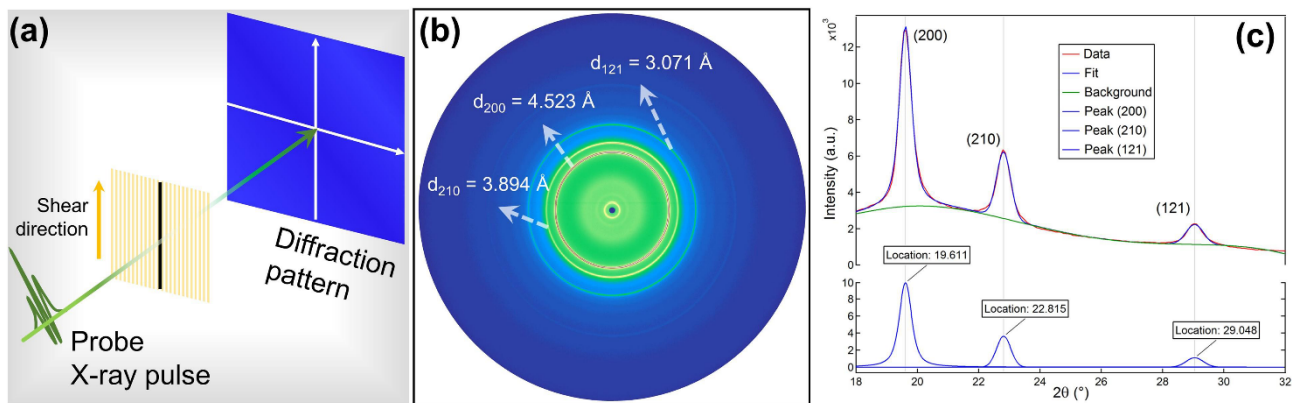


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