

Electronic Supplementary Information (ESI)

Circularly polarized luminescence from oriented polymer films doped with a tetraphenylethylene-based conjugated oligomer

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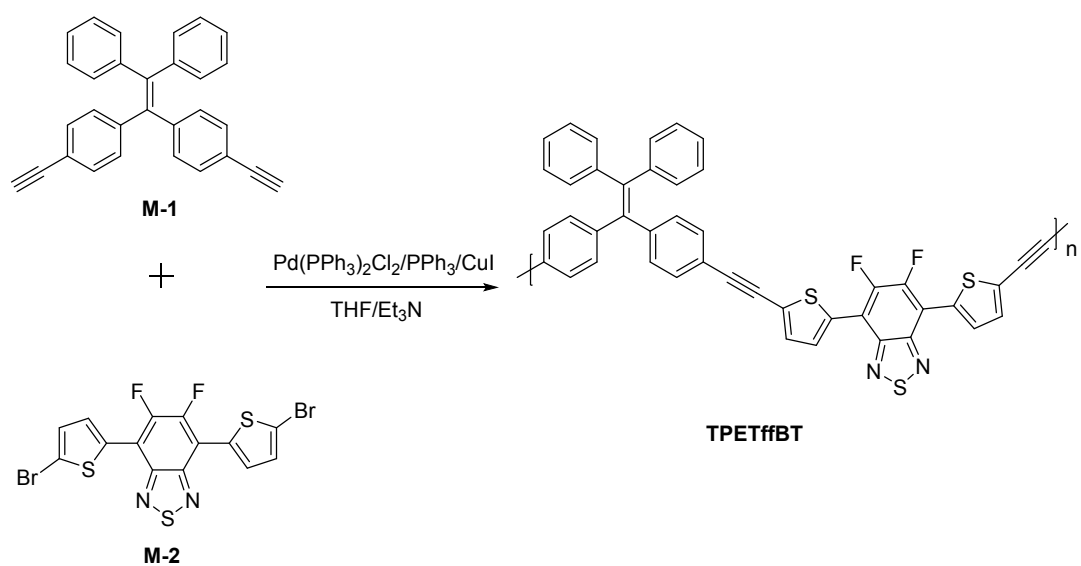
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Scheme S1. Synthetic route to TPETffBT.

Table S1. The mass percentages of compounds in the prepolymerized mixtures.

Sample Compound	<i>R-/S-0.1%-T-CLC</i>	<i>R-/S-0.5%-T-CLC</i>	<i>R-/S-1%-T-CLC</i>	<i>R-/S-2%-T-CLC</i>
C6M	77.52	77.12	76.62	75.62
R-/S-5011	1.38	1.38	1.38	1.38
RM105	20.00	20.00	20.00	20.00
TPETffBT	0.10	0.50	1.00	2.00
BDK	1.00	1.00	1.00	1.00

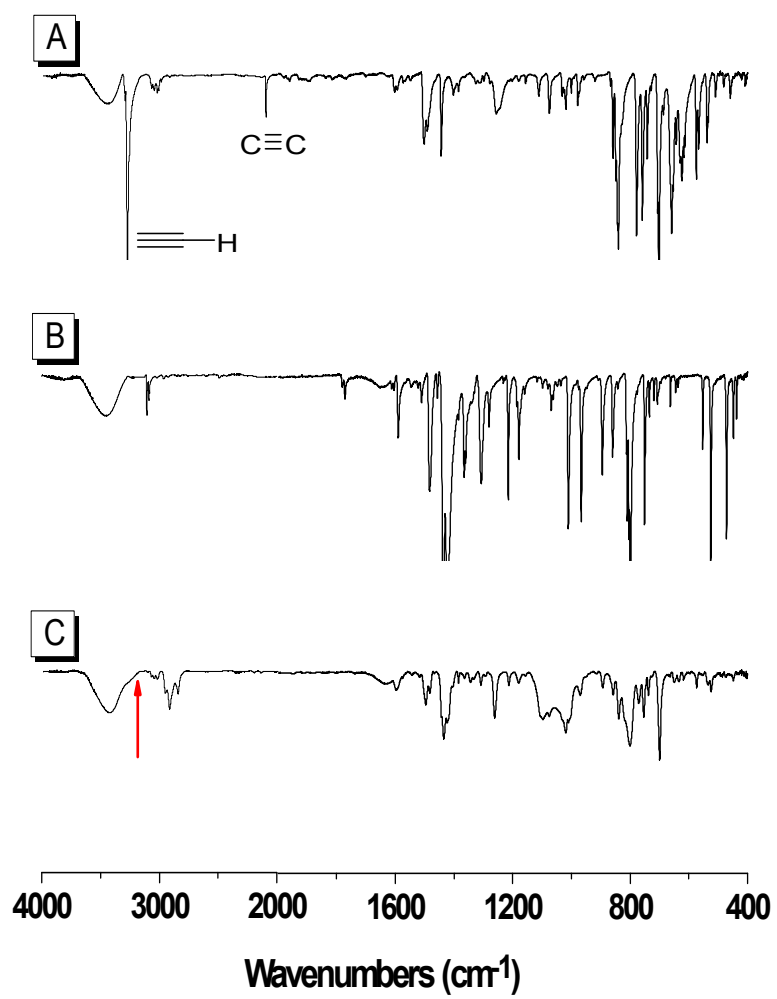


Fig. S1 FTIR spectra of M-1 (A), M-2 (B) and TPETffBT (C).

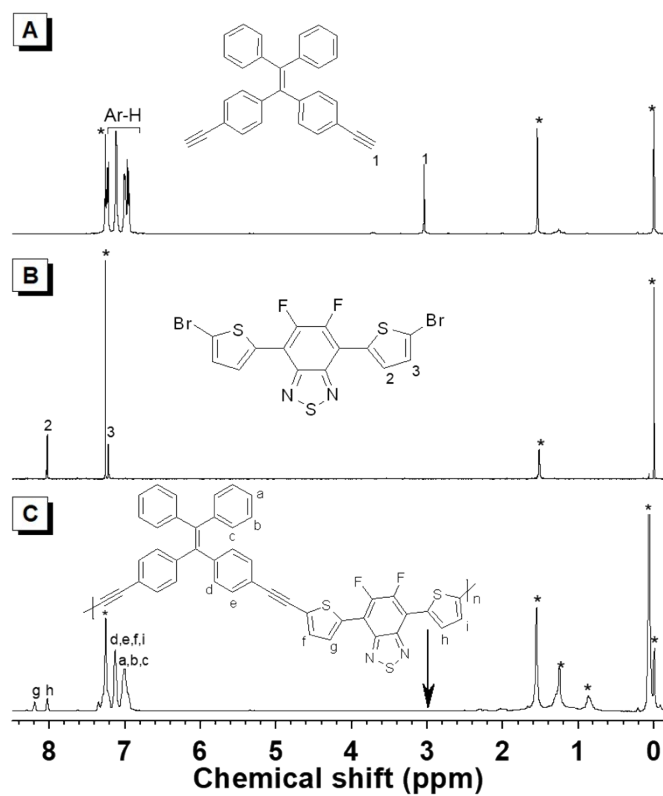


Fig. S2 ^1H NMR spectra of M-1 (A), M-2 (B) and TPETffBT (C) in CDCl_3 . The solvents and water peaks are marked with asterisks.

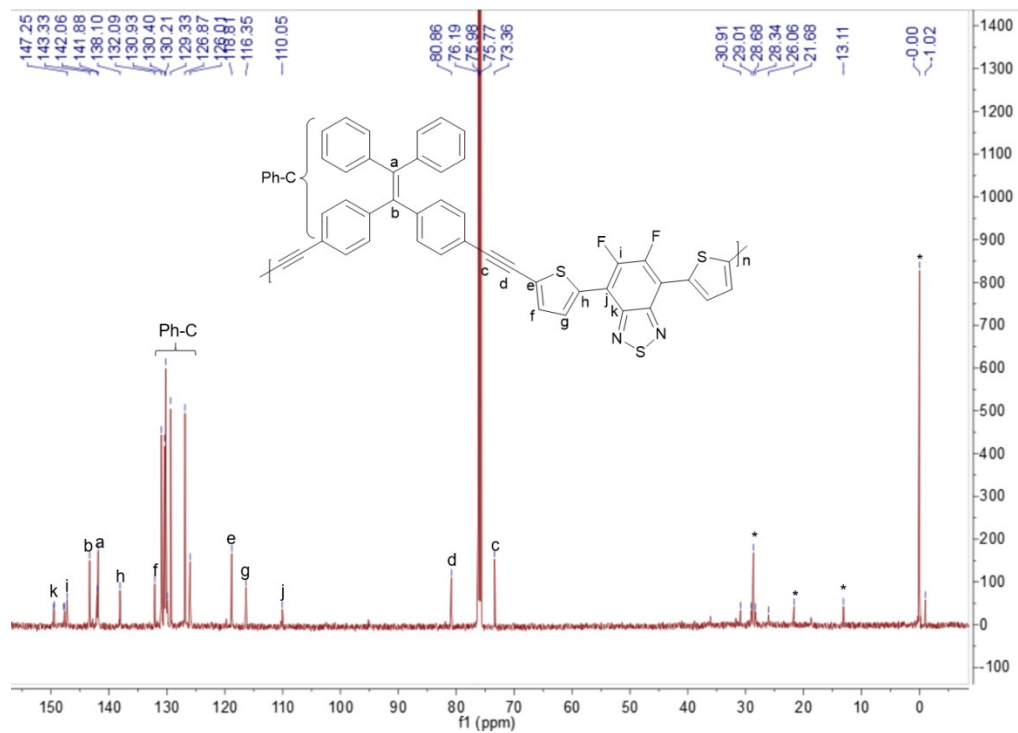


Fig. S3 ^{13}C NMR spectra of TPETffBT in CDCl_3 . The solvents are marked with asterisks.

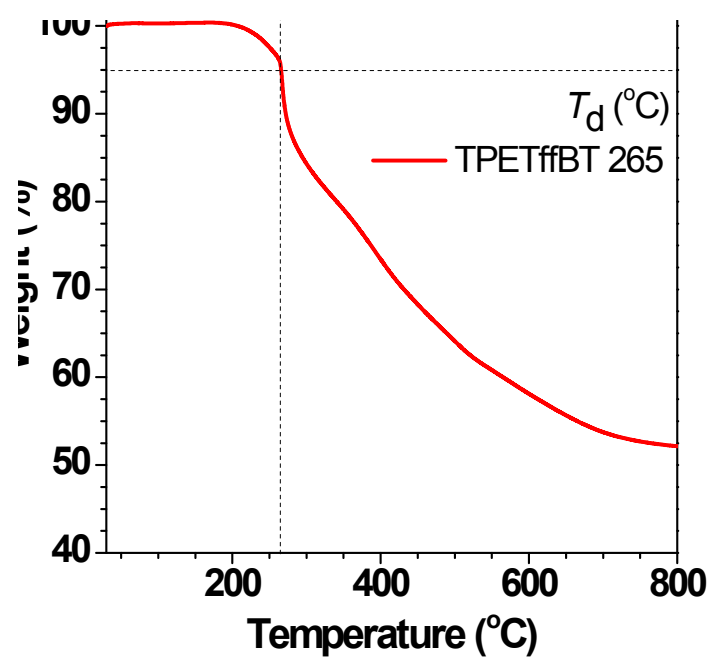


Fig. S4 TGA curve of TPETffBT recorded under at a heating rate of 10°C/min.

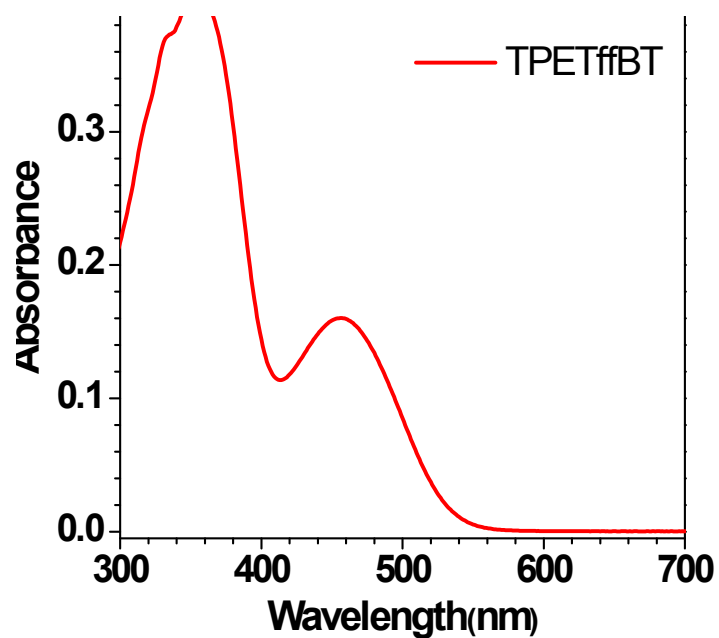


Fig. S5 UV-Vis spectra of TPETffBT in THF solution, concentration: 10 μ M.

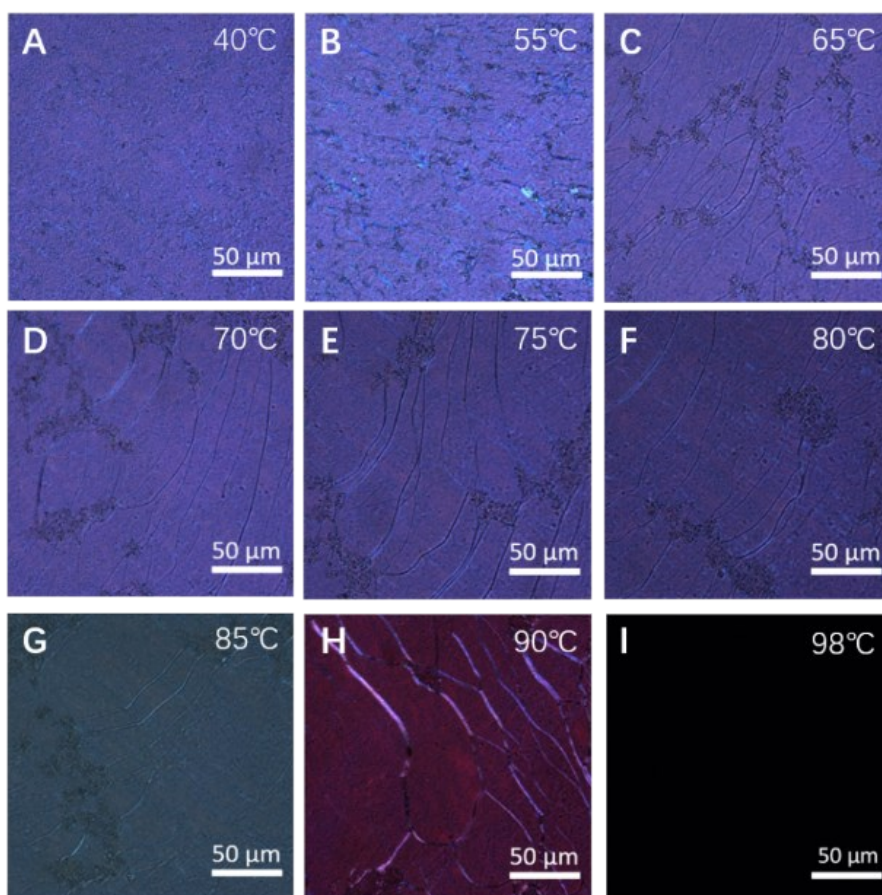


Fig. S6 POM images of C6M with 1.38 wt% R-5011 and 0.1 wt% TPETffBT at different temperatures.

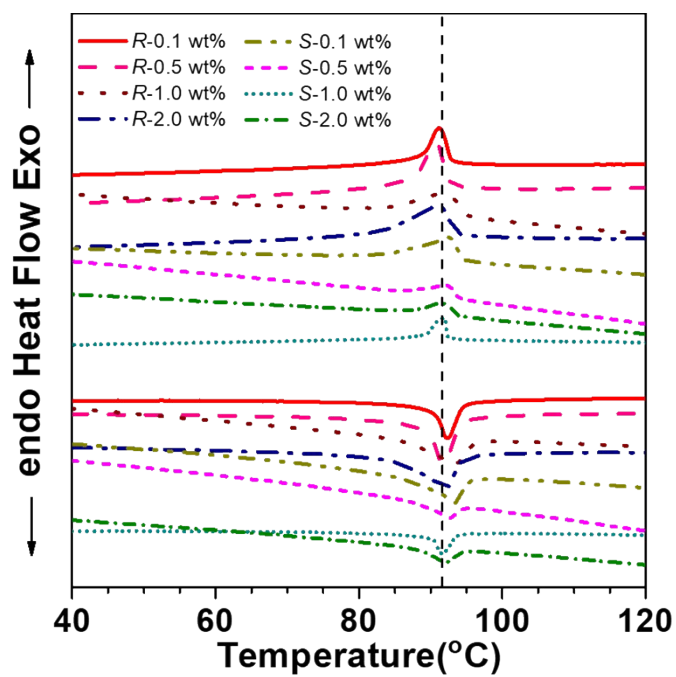


Fig. S7 DSC curves of the CLC mixtures with different weight ratios of TPETffBT.

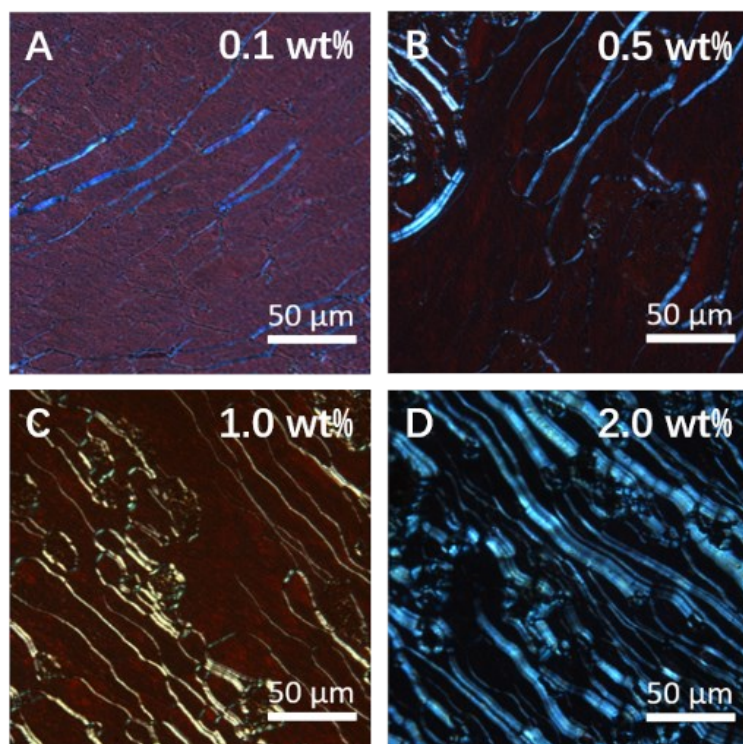


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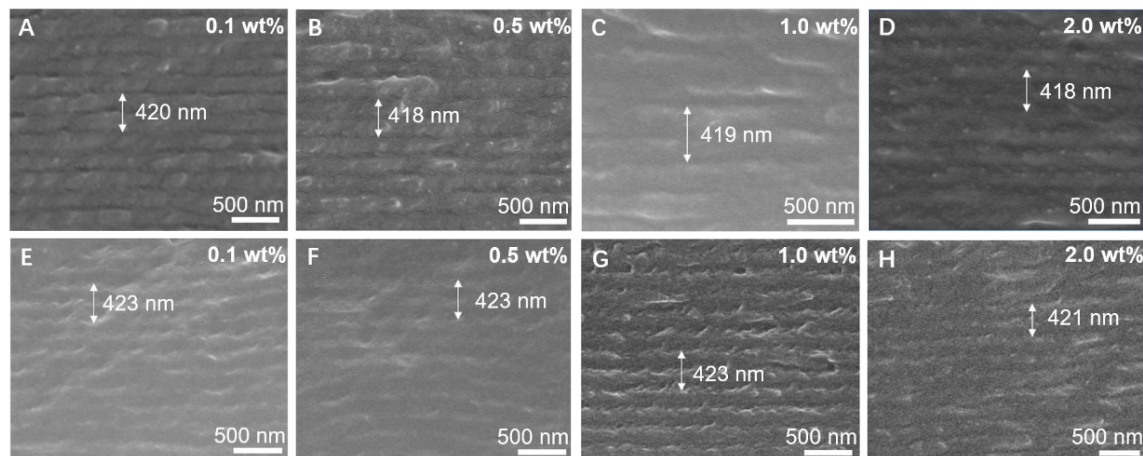


Fig. S9 FESEM images of the cross-section of the *R-/S-T-CLC* film with different weight ratio of TPETffBT.

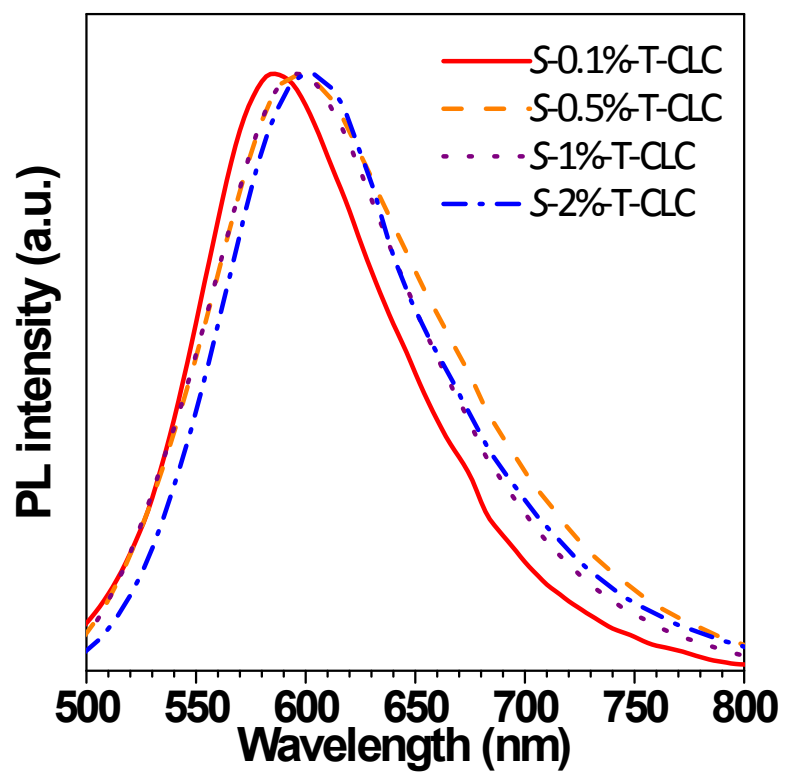


Fig. S10 PL spectra of *S*-T-CLC films with different weight ratios of TPETffBT, λ_{ex} : 457 nm.