Supporting Information

New fluorene-based chiral copolymers with unusually high optical activity in pristine and annealed thin films

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Figure S1. DSC curves of PF-based chiroptical polymers.



Figure S2. UV-vis absorption spectra of polymer films made with chloroform solutions. (a) PF, (b) PFPh, (c) PFTh, (d) PFBT.



Figure S3. CD spectra of polymer films made with chloroform solution. (a) PF, (b) PFPh, (c) PFTh, (d) PFBT.



Figure S4. UV-vis absorption spectra of polymer films made with monochlorobenzene (MCB) solution. (a) PF, (b) PFPh, (c) PFTh, (d) PFBT.



Figure S5. CD spectra of polymer films made with monochlorobenzene (MCB) solution. (a) PF, (b) PFPh, (c) PFTh, (d) PFBT.



Figure S6. PL spectra of PF, PFPh, PFTh, and PFBT polymers in solution and film



Figure S7. Linear dichroism (LD) of polymer films before and after annealing



Figure S8. Relative potential energies of F-F, F-Ph, F-Th, and F-BT molecular structures as a function of torsion angles.



Figure S9. Potential energies of the F-F, F-Ph, F-Th, and F-BT molecular structures as a function of the torsion angles.