Supplementary Material (ESI) for Journal of Materials Chemistry

Highly ordered π-extended discotic liquid-crystalline triindoles

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Supporting Information

1. Cyclic Voltammetry Measurements

Cyclic voltammetric (CV) experiments were performed on an Epsilon Electrochemical Analyzer in a three electrode cell (Pt working electrode) at room temperature, under nitrogen atmosphere. Electrochemical measurements were performed in a milimolar CH_2Cl_2 solution of compounds Series I and Series II containing 0.1 M of recrystallized supporting electrolyte tetra-*n*-butylammonium hexafluorophosphate ($TBAPF_6$). Potentials were measured against Ag/AgCl as reference electrode. A large area coiled Pt wire was used as a counter electrode.

Table S1 . Cyclic Voltammetry data for Series I and Series II

Series I			Series II				
Compounds	**First Oxidation wave $E_{1/2}$**	**Second Oxidation wave $E_{1/2}$**	**Compounds**	**First Oxidation wave $E_{1/2}$**	**Second Oxidation wave $E_{1/2}$**	**Third Oxidation wave $E_{1/2}$**	**Fourth Oxidation wave $E_{1/2}$**
1	0.77	1.33	**8**	0.67	0.83	1.11	1.35
2	0.72	1.28	**9**	0.53	0.80	1.03	1.27
3	0.71	1.20	**10**	0.47	0.69	0.89	1.10
5	0.70	1.21	**11**	0.49	0.72	1.11	

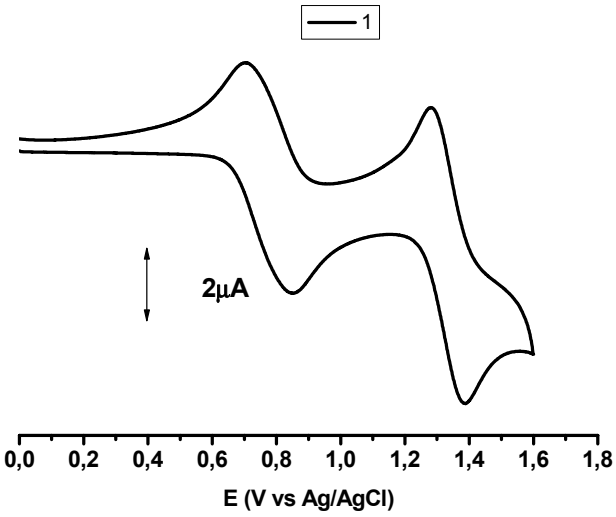


Figure S1. Cyclic voltammogram of **1.**

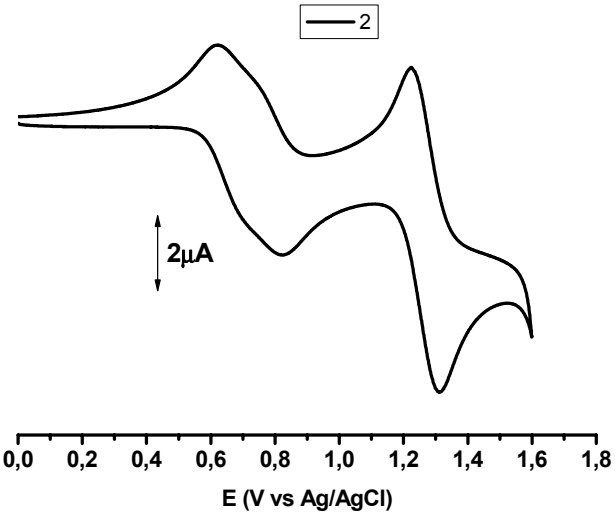


Figure S2. Cyclic voltammogram of **2.**

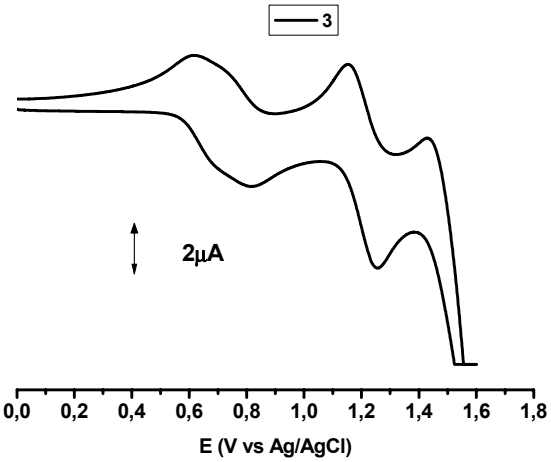


Figure S3. Cyclic voltammogram of **3.**

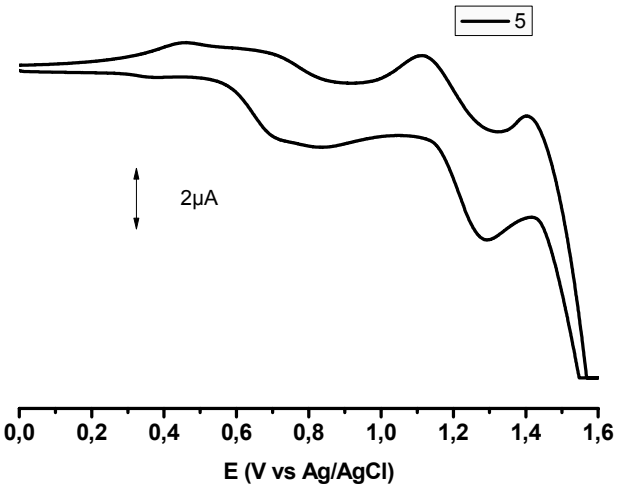


Figure S4. Cyclic voltammogram of **5.**

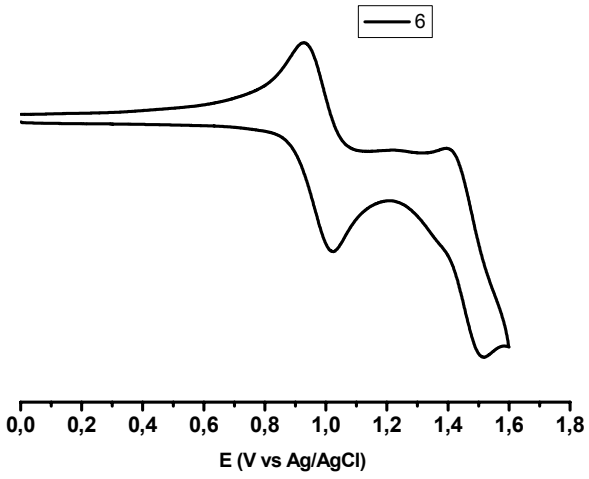


Figure S5. Cyclic voltammogram of **6.**

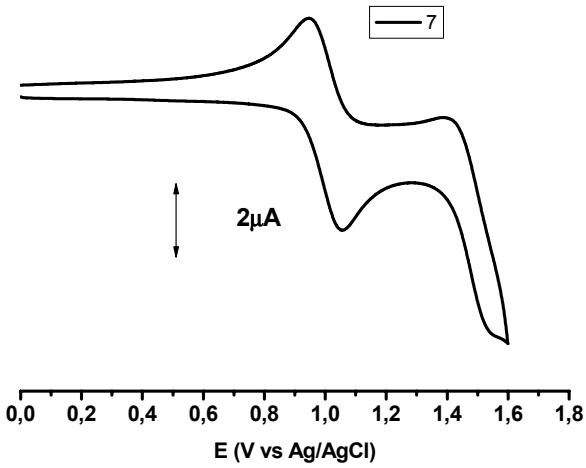


Figure S6. Cyclic voltammogram of **7.**

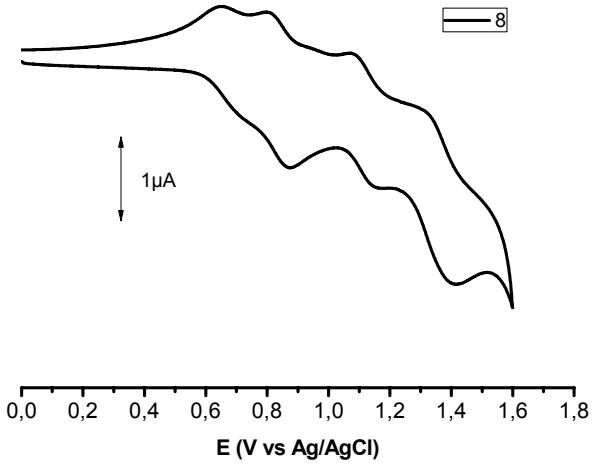


Figure S7. Cyclic voltammogram of **8.**

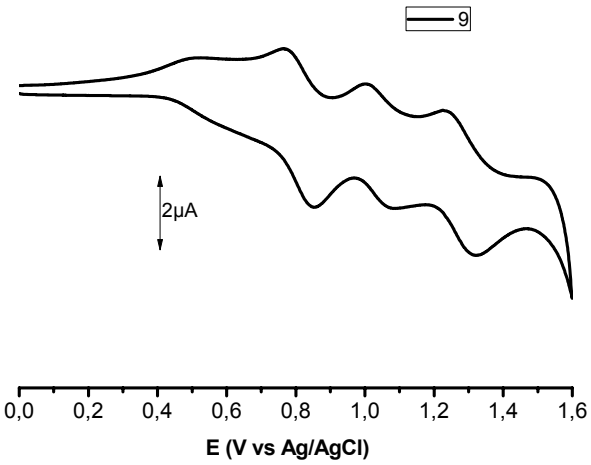


Figure S8. Cyclic voltammogram of **9.**

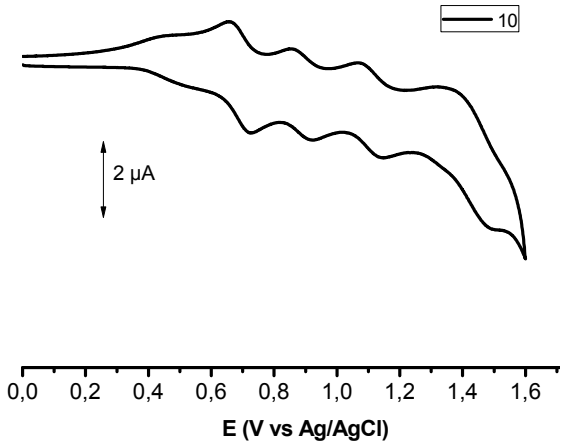


Figure S9. Cyclic voltammogram of **10.**

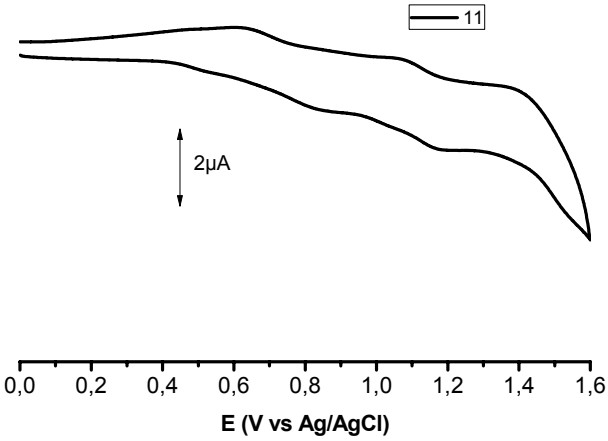


Figure S10. Cyclic voltammogram of **11.**

2. UV-Vis absorption Measurements

Steady-state absorption was carried out on a spectrophotometer UV-2401PC, Shimadzu

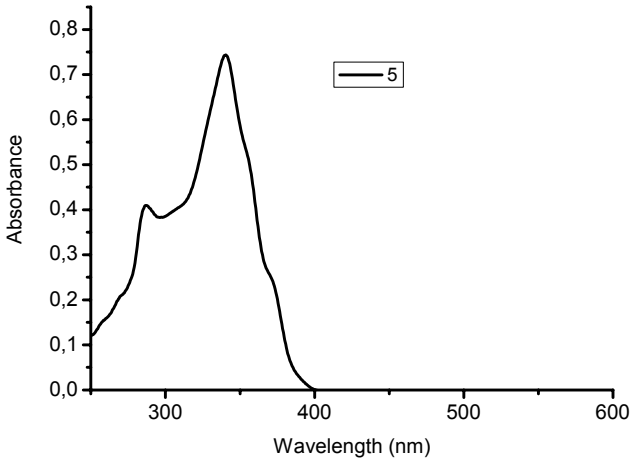


Figure S11. UV-visible of **5** in CH_2Cl_2

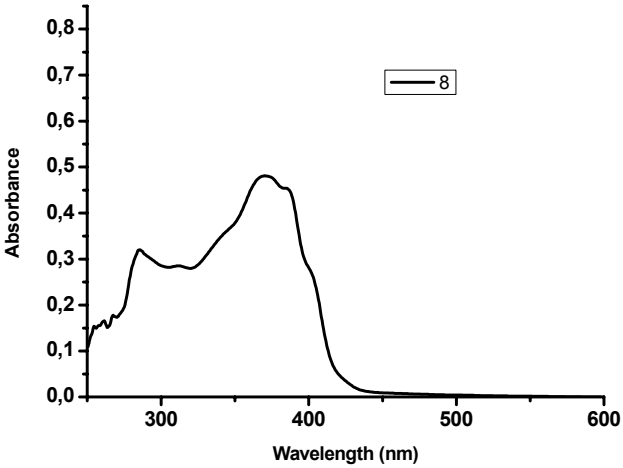


Figure S12. UV-visible of **8** in CH_2Cl_2

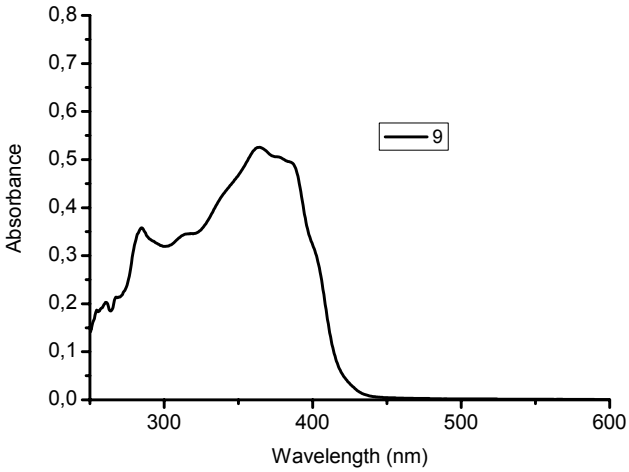


Figure S13. UV-visible of **9** in CH_2Cl_2

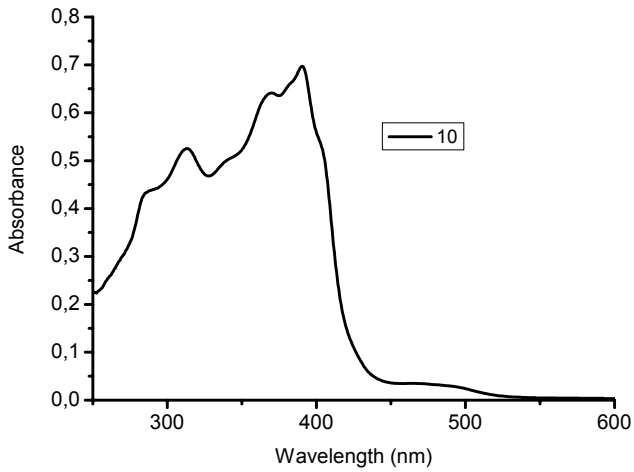


Figure S14. UV-visible of **10** in CH_2Cl_2

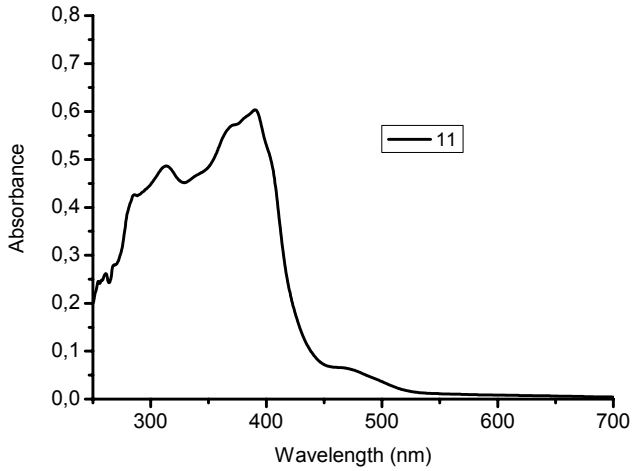


Figure S15. UV-visible of **11** in CH_2Cl_2

3. UV-Vis emission Measurements

Steady-state absorption was carried out on a spectrophotometer, Perkin-Elmer LS50B. Fluorescence spectra of Series I and II in CH_2Cl_2 and in mesophases.

3.1 Fluorescence Spectra of Series I

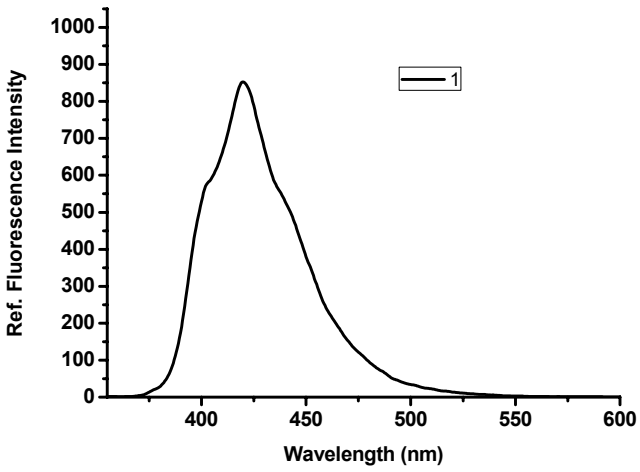


Figure S16. Normalized emission of **1**

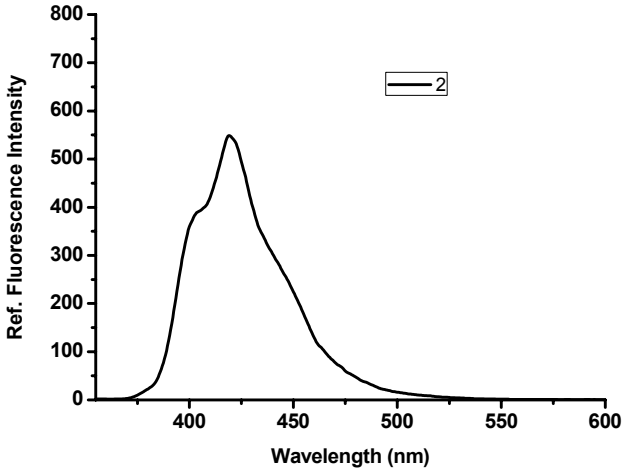


Figure S17. Normalized emission of **2**

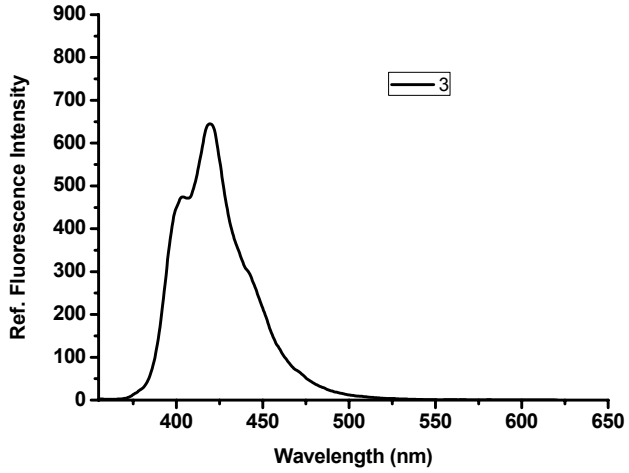


Figure S18. Normalized emission of **3**

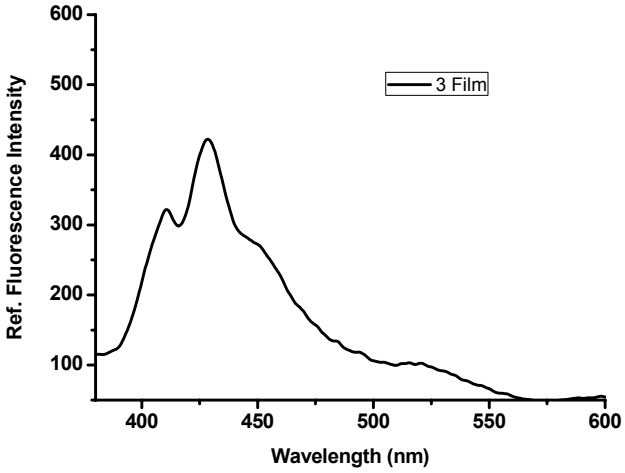


Figure S19. Normalized emission of **3 Film**

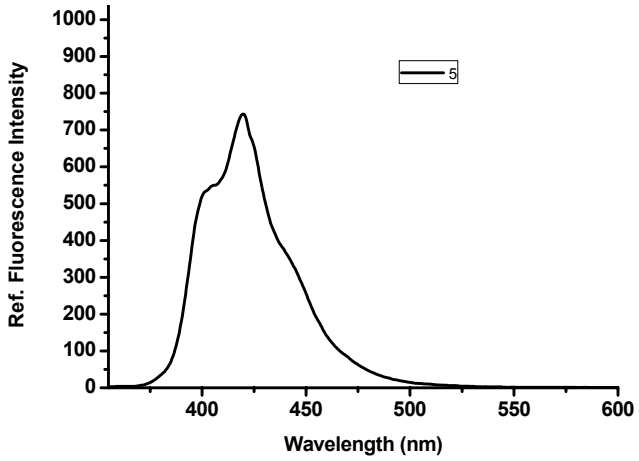


Figure S20. Normalized emission of **5**

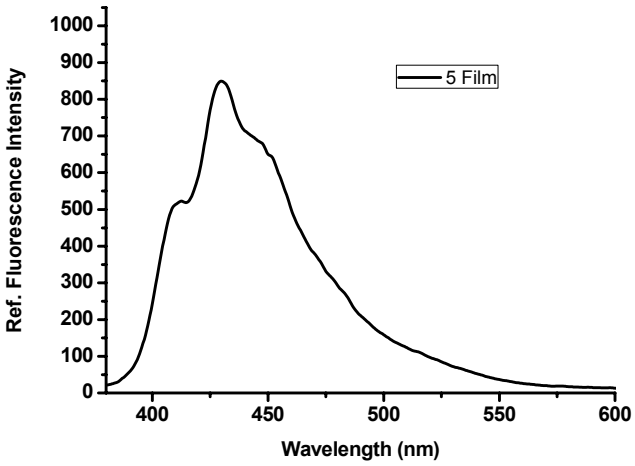
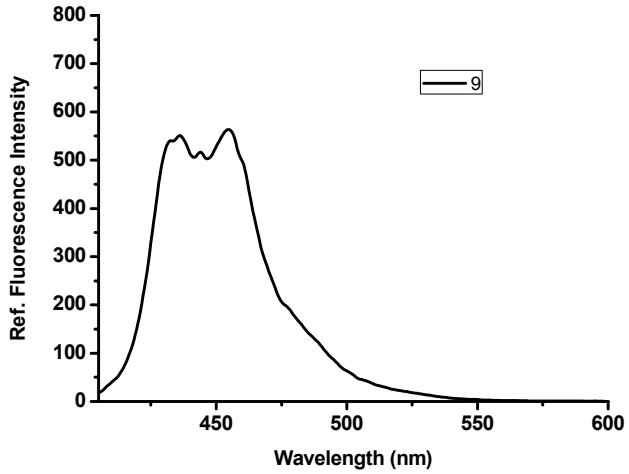


Figure S21. Normalized emission of **5 Film**

3.2 Fluorescence Spectra of Series II



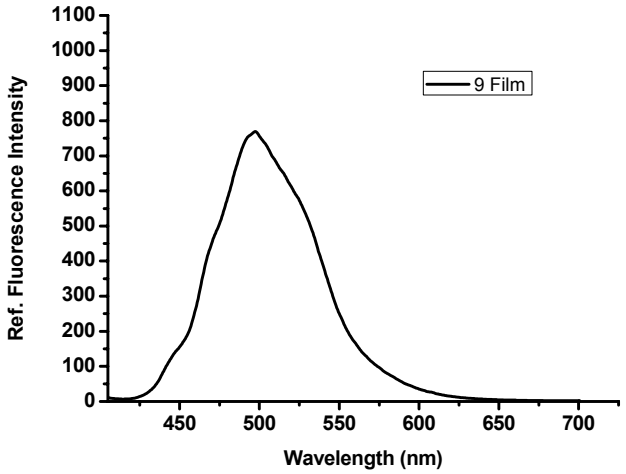


Figure S22. Normalized emission of **9**

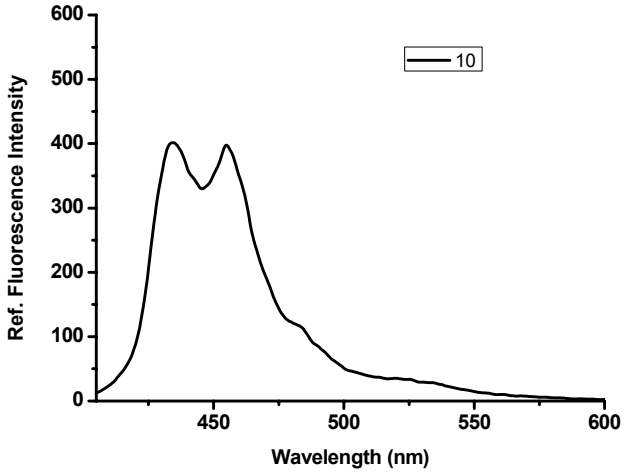


Figure S23. Normalized emission of **9 Film**

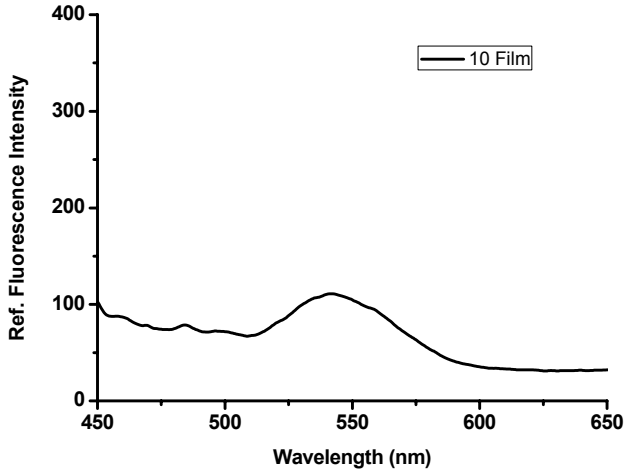


Figure S24. Normalized emission of **10**

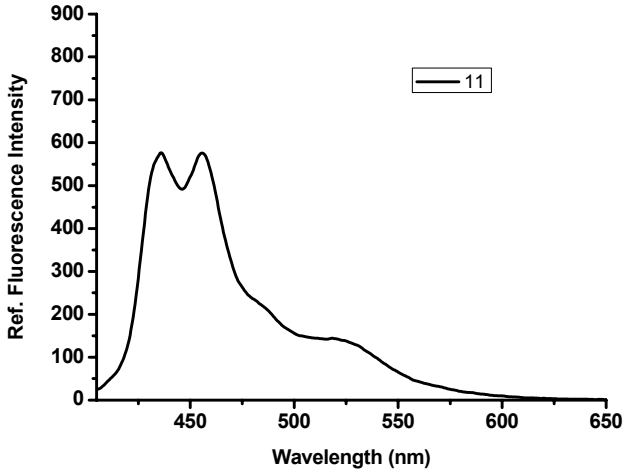


Figure S25. Normalized emission of **10 Film**

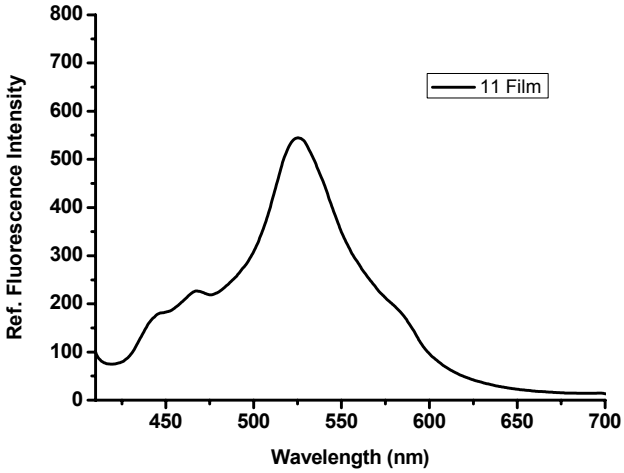


Figure S26. Normalized emission of **11**

Figure S27. Normalized emission of **11 Film**

4. ^{1}H NMR Experiments of 8 in $CDCl_3$ at variable concentration

^{1}H NMR experiments spectra were conducted on a Bruker AC-200 spectrometer operating at 200MHz

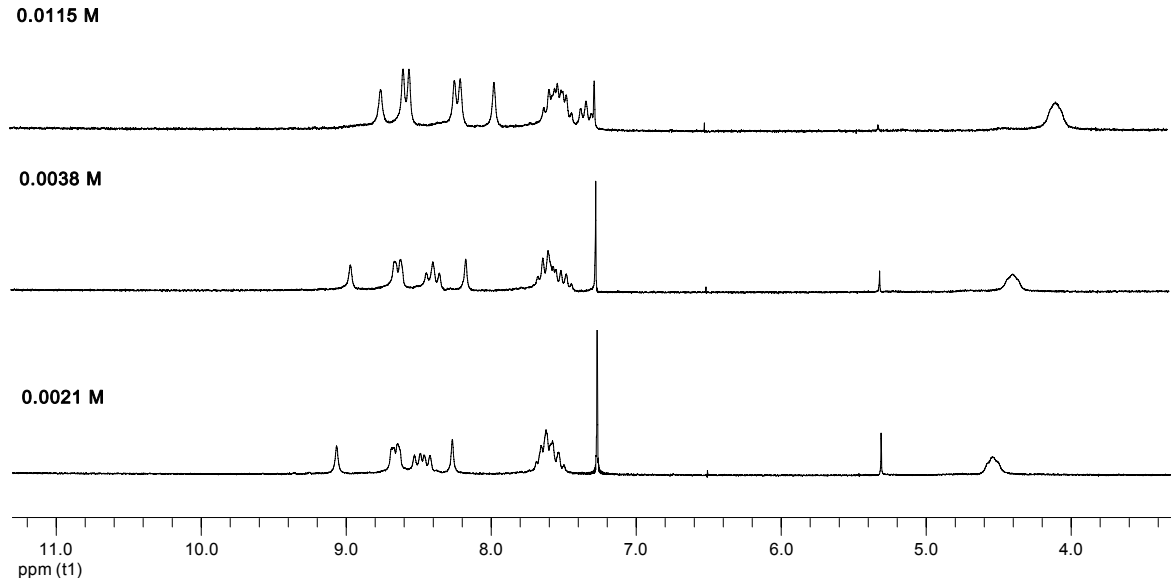


Figure S28. Concentration-dependent ^{1}H NMR spectra of **8** in $CDCl_3$.

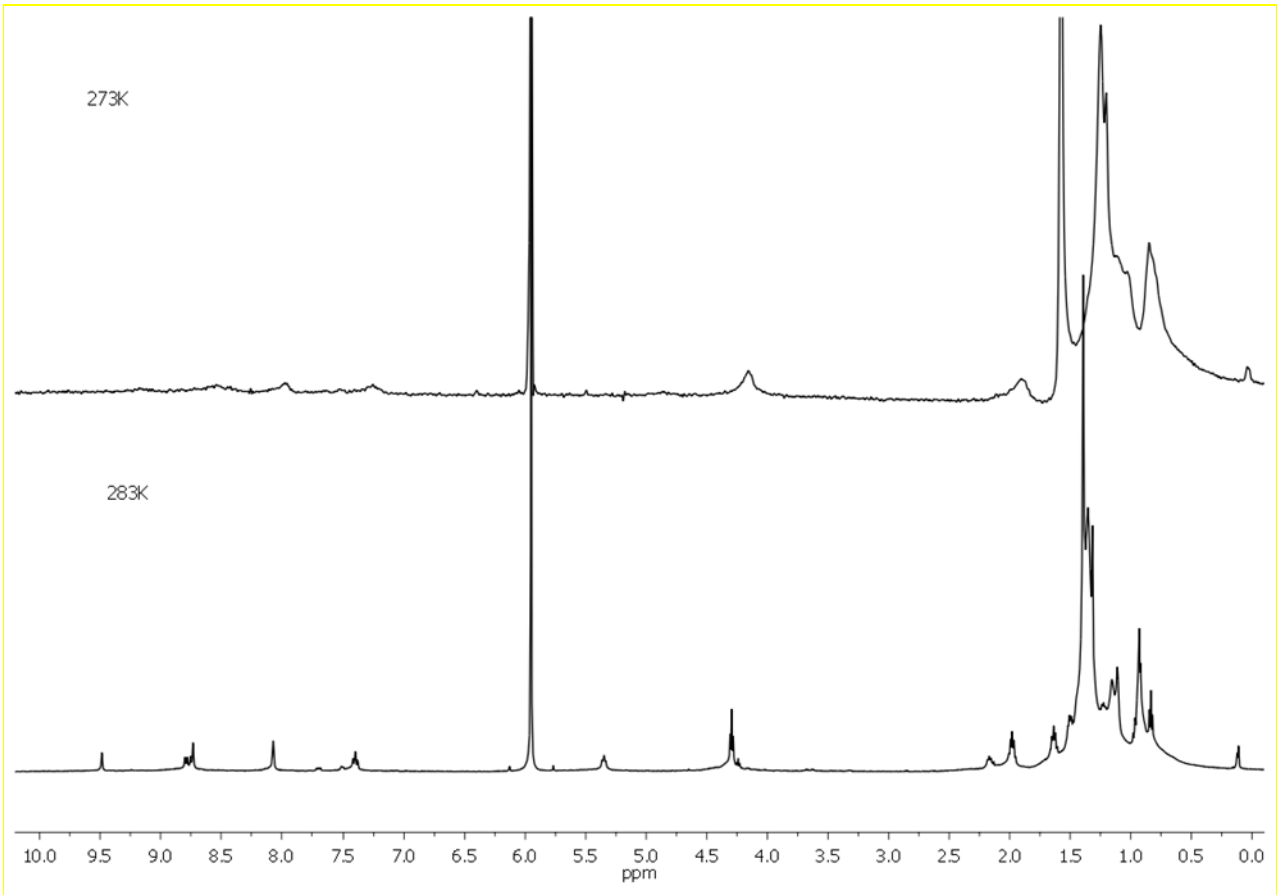


Figure S29. Temperature-dependent ^{1}H NMR spectra of **11** in $C_2D_2Cl_4$**.**