

Supplementary data

Influence of the fused hetero-aromatic centers on molecular conformation and photovoltaic performance of solution-processed organic solar cells

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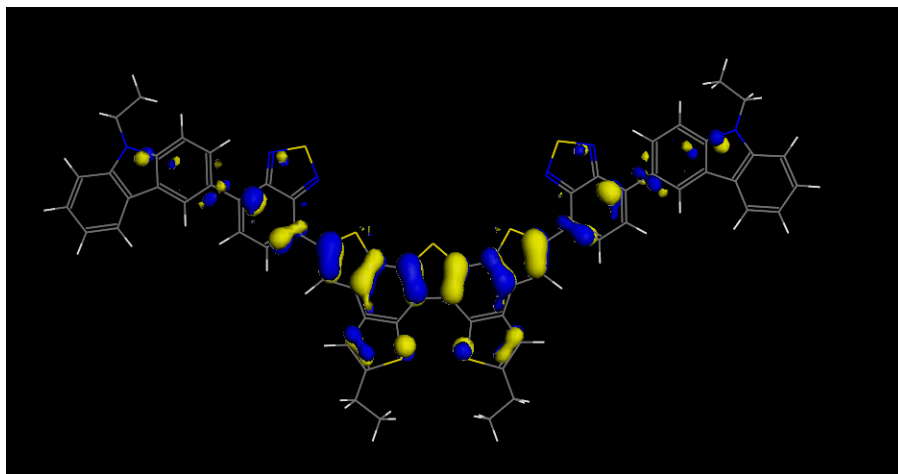
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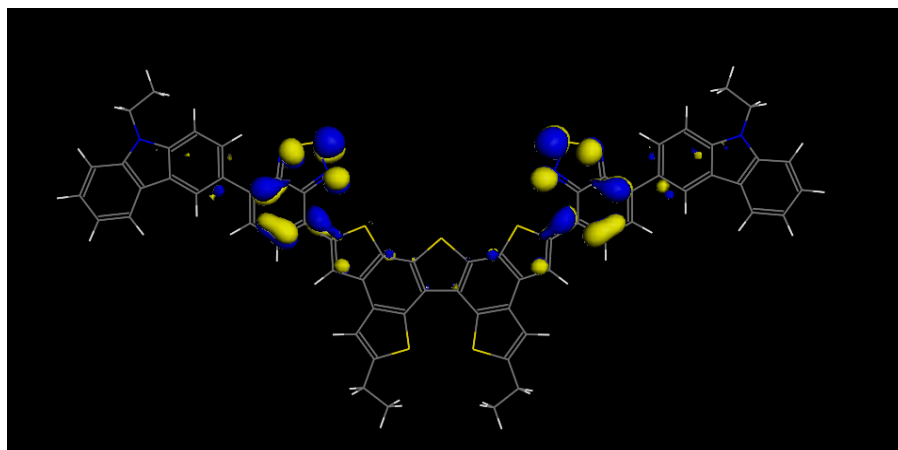
Fig. S1. The electron-density contribution of the HOMO and LUMO of

FT1 and FT2

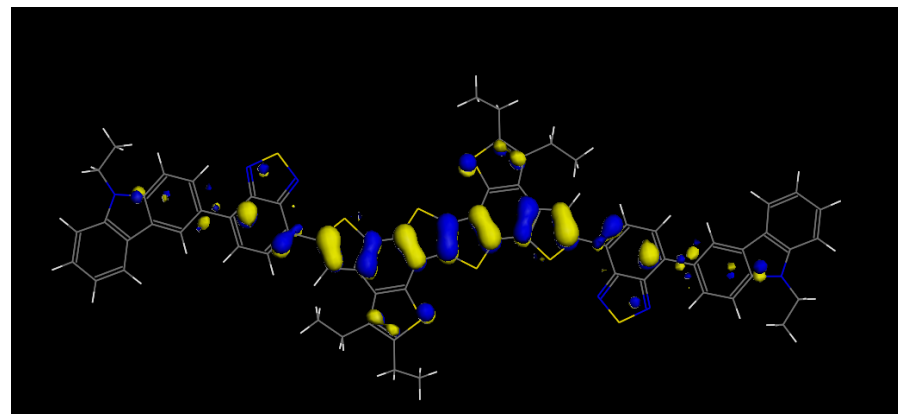
HOMO of FT1



LUMO of FT1



HOMO of FT2



LUMO of FT2

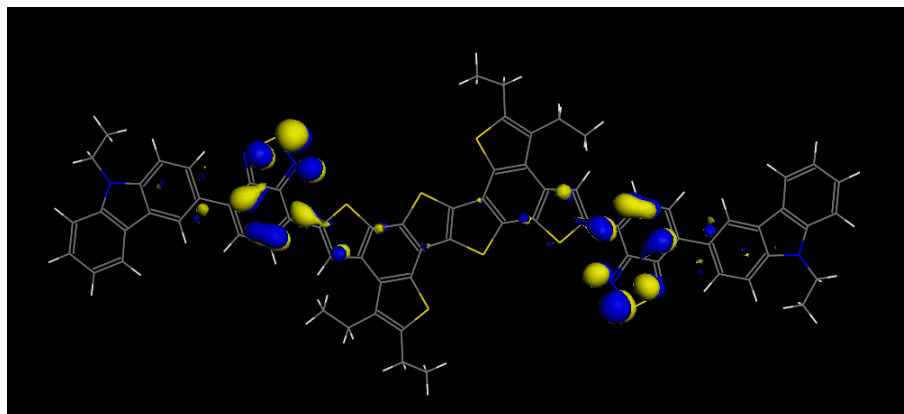


Fig. S2. The presumed packing mode for FT1 and FT2

FT1

Unfavorable mode

Favorable mode

FT2

General mode

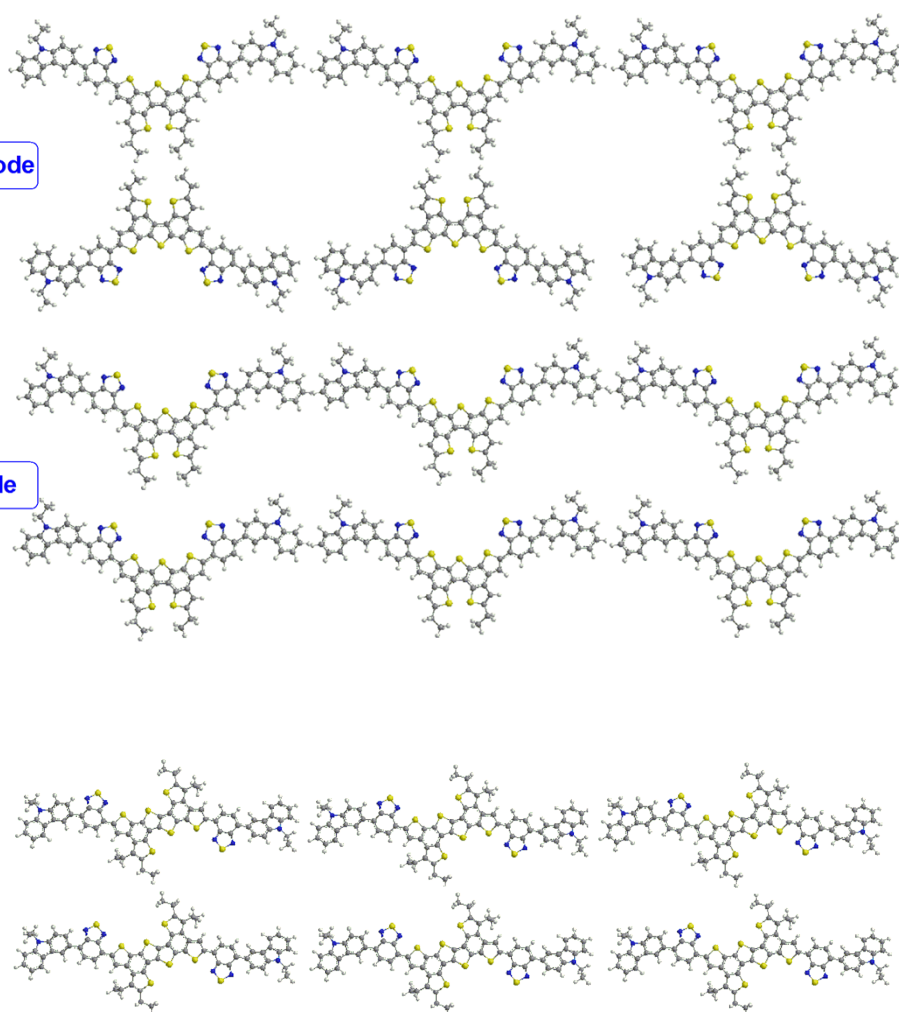


Fig. S3. UV–Vis absorption spectra of FT1 and FT2 in CHCl₃ with a concentration of 6.4×10^{-5} , 5.2×10^{-5} M, respectively.

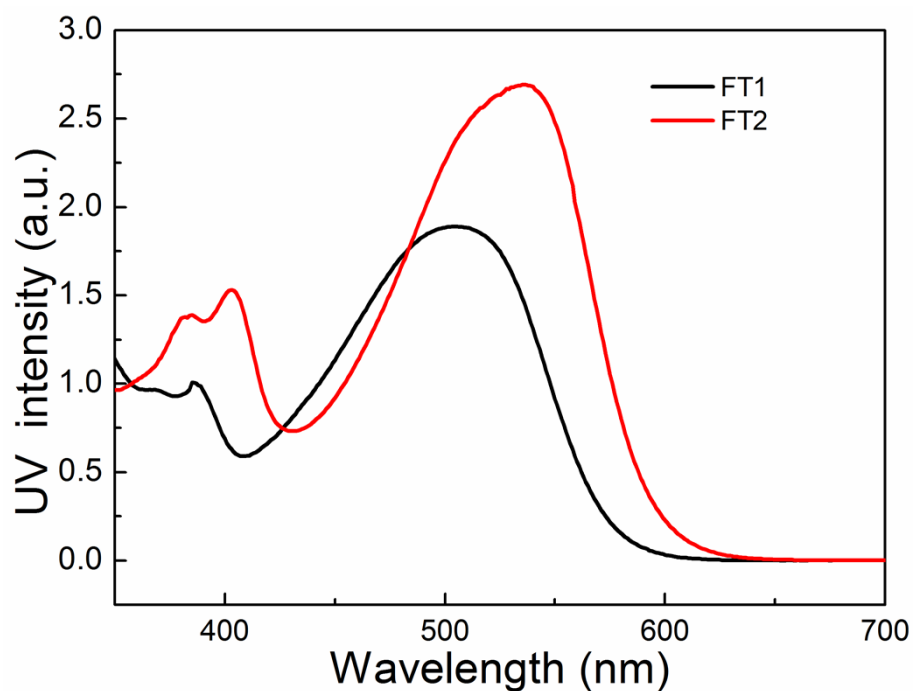


Fig. S4. Current density-voltage characteristics of the FT1- and FT2-based OSCs at varied blend ratios to PC₇₁BM

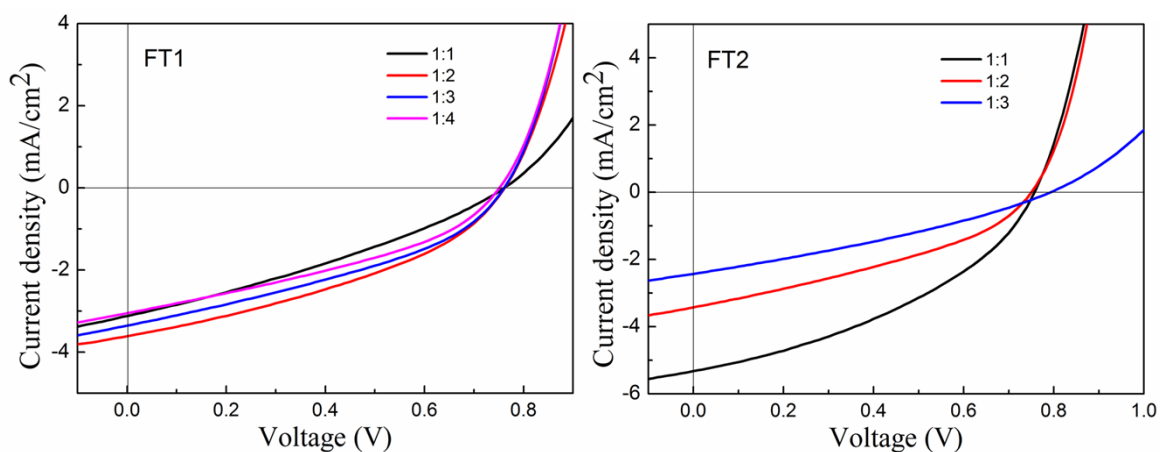
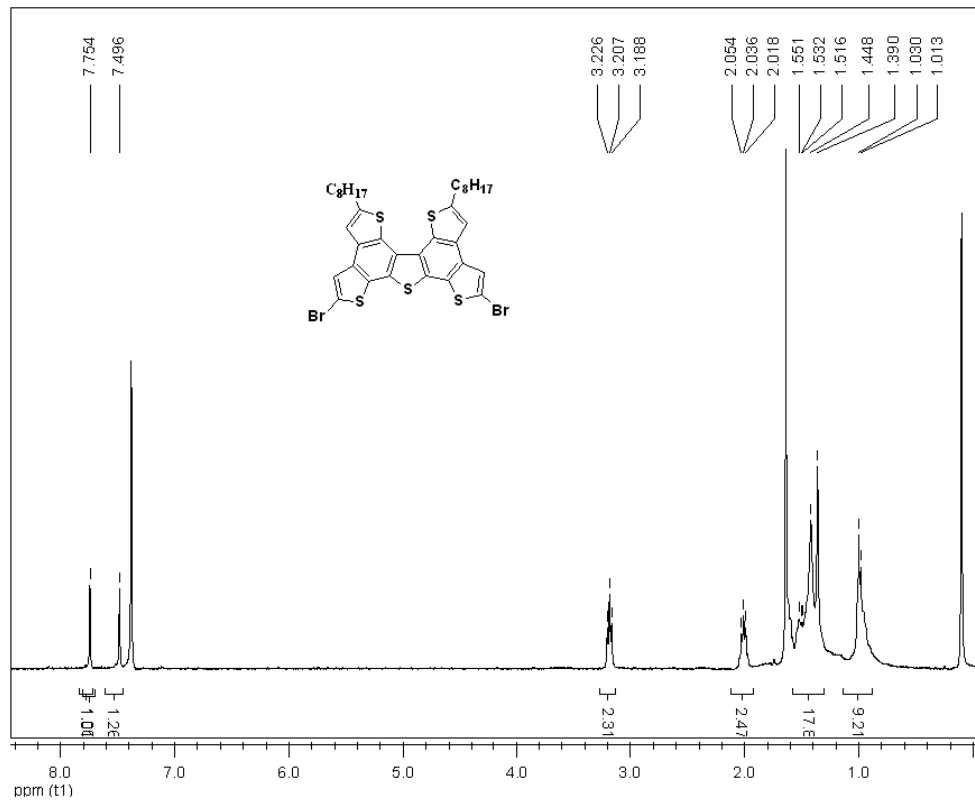
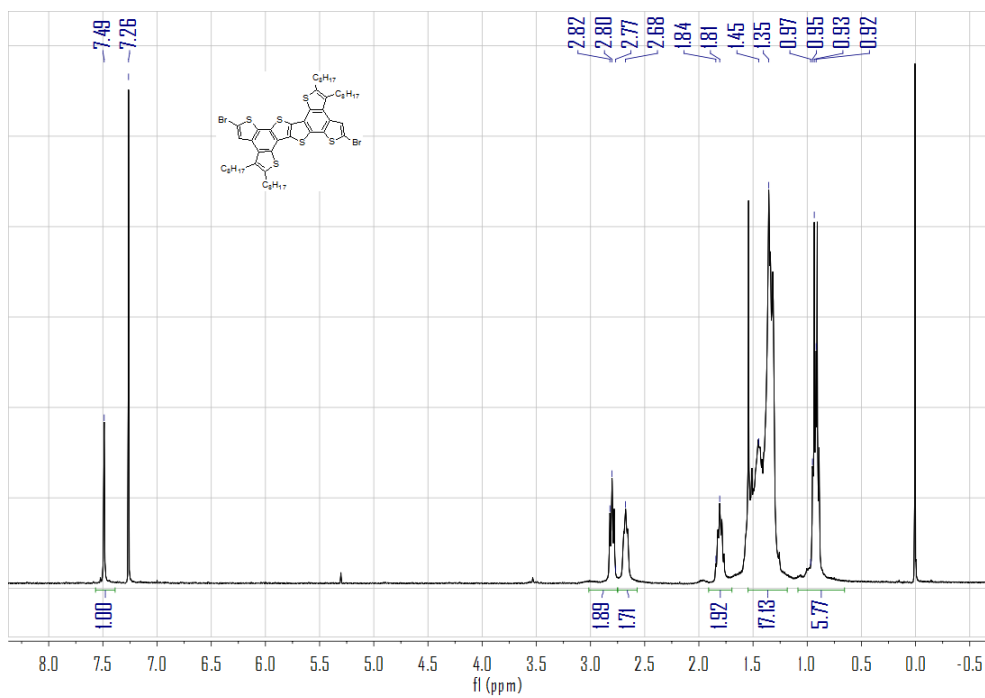
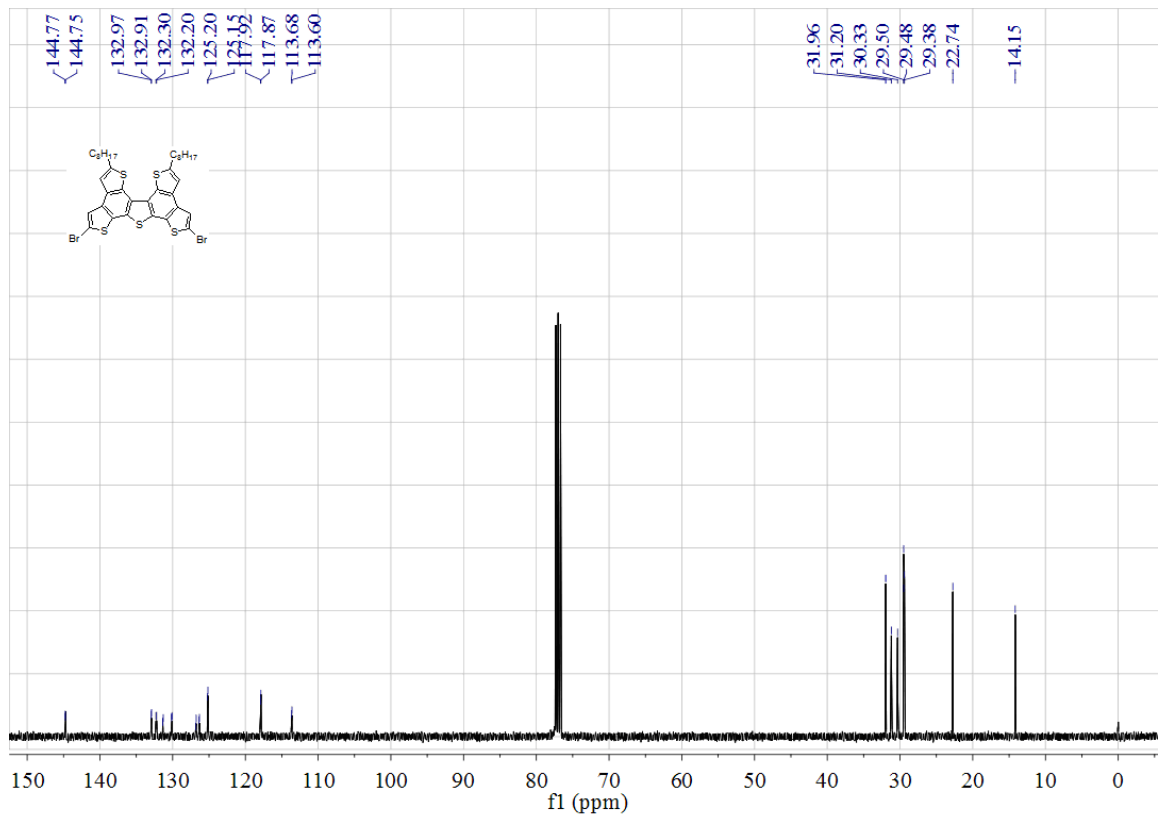
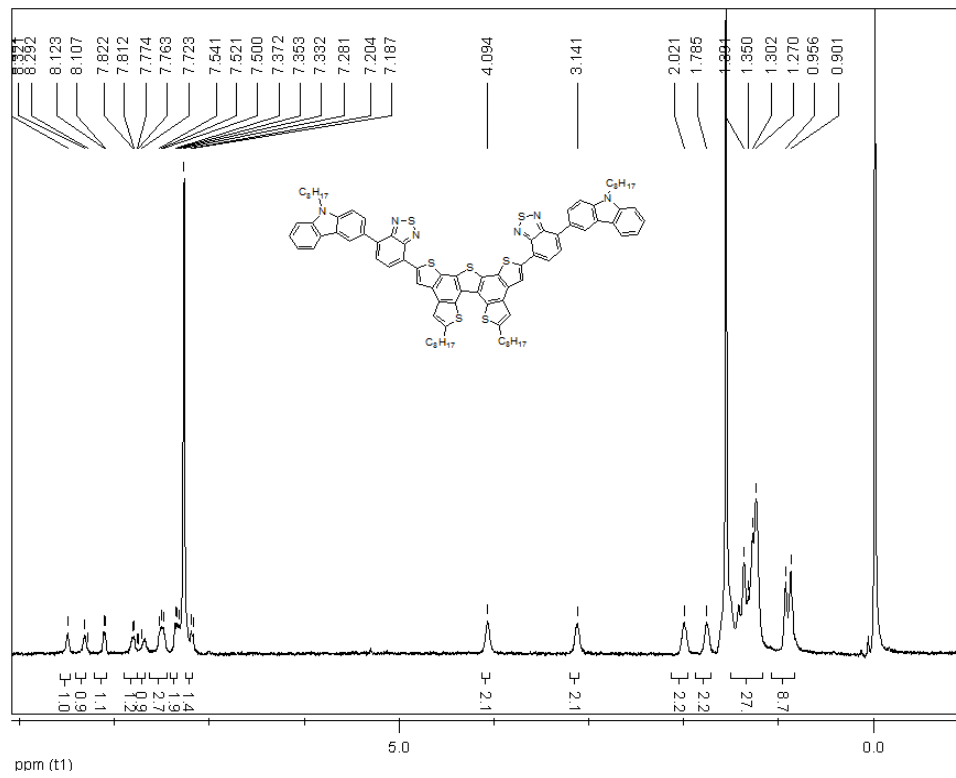
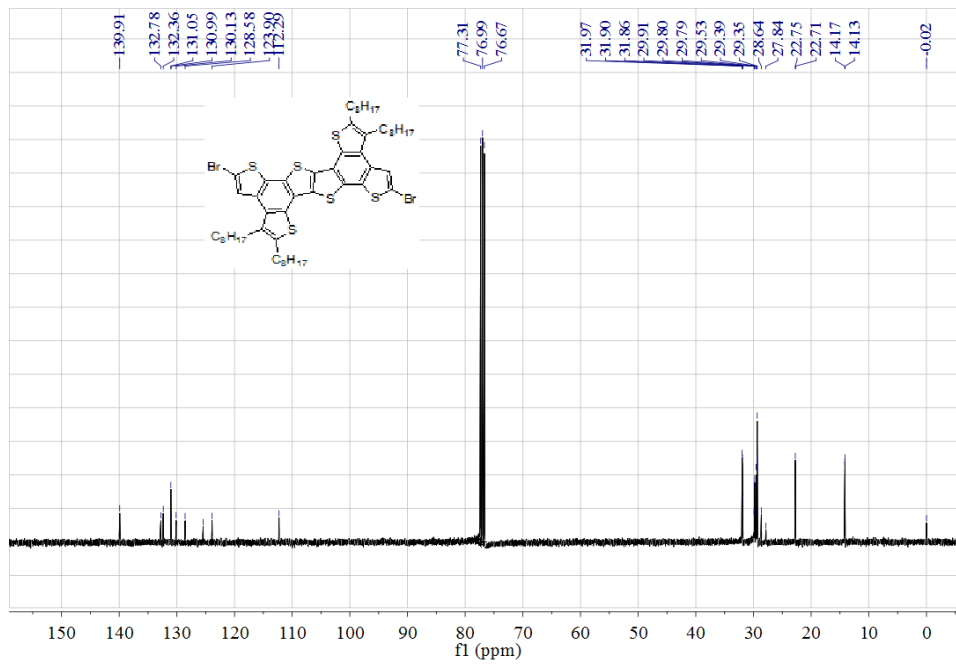


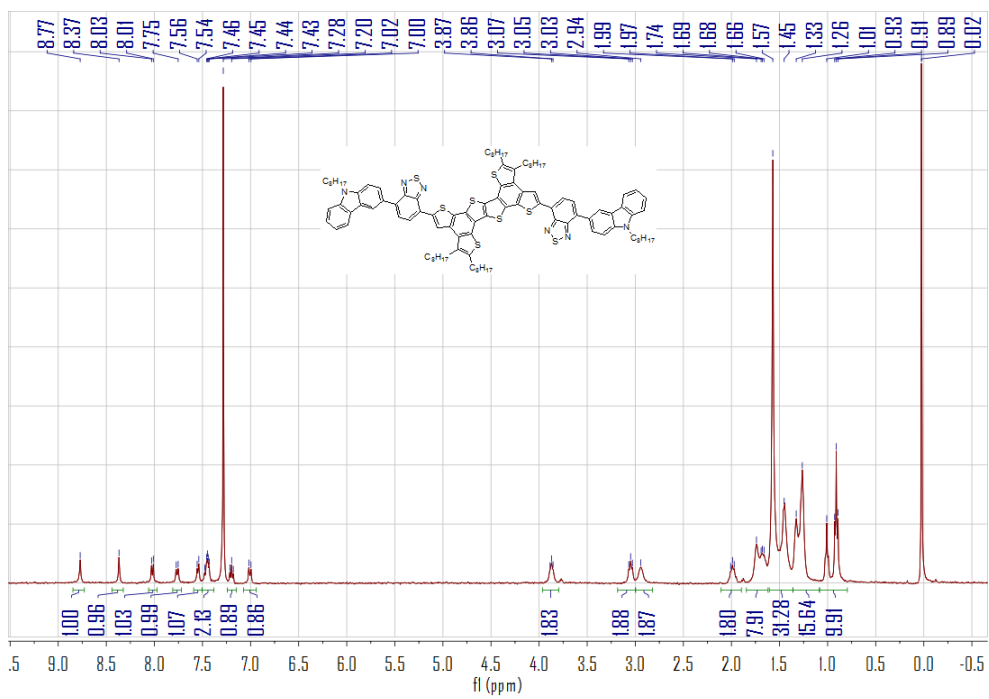
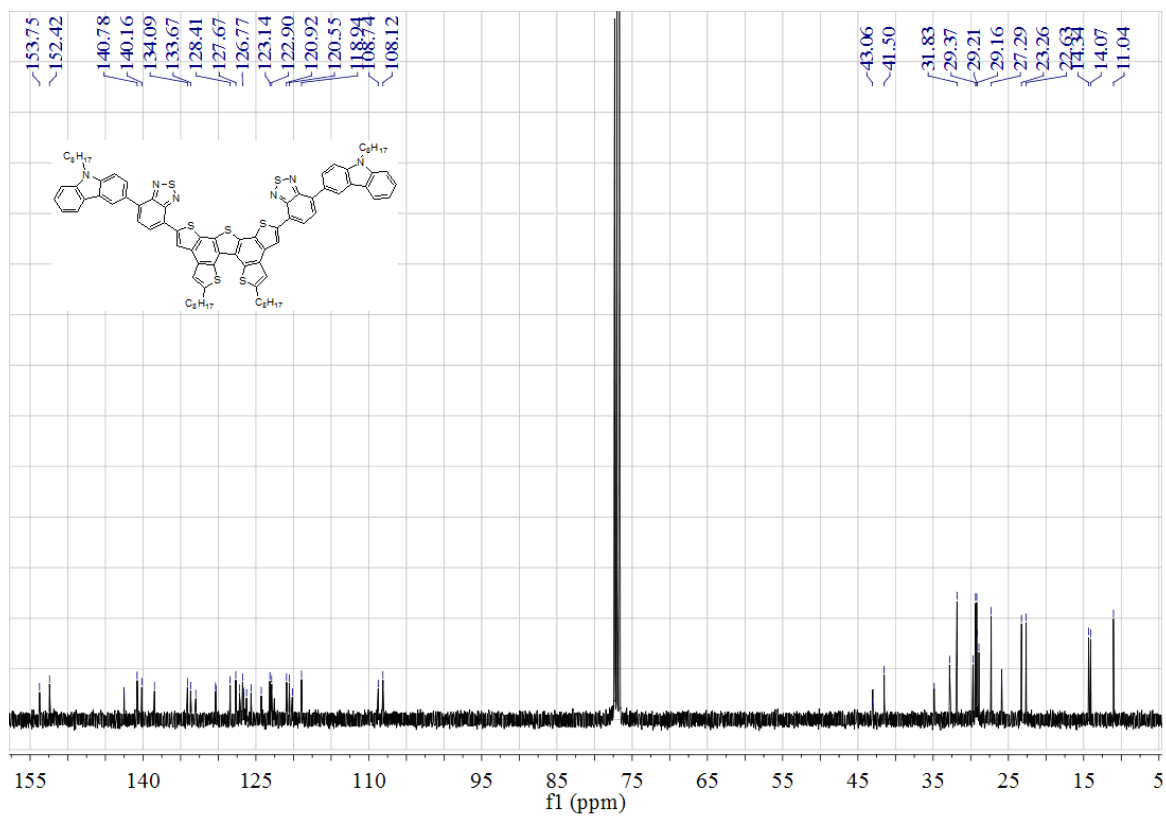
Fig. S5. The NMR and MS for FT1 and FT2

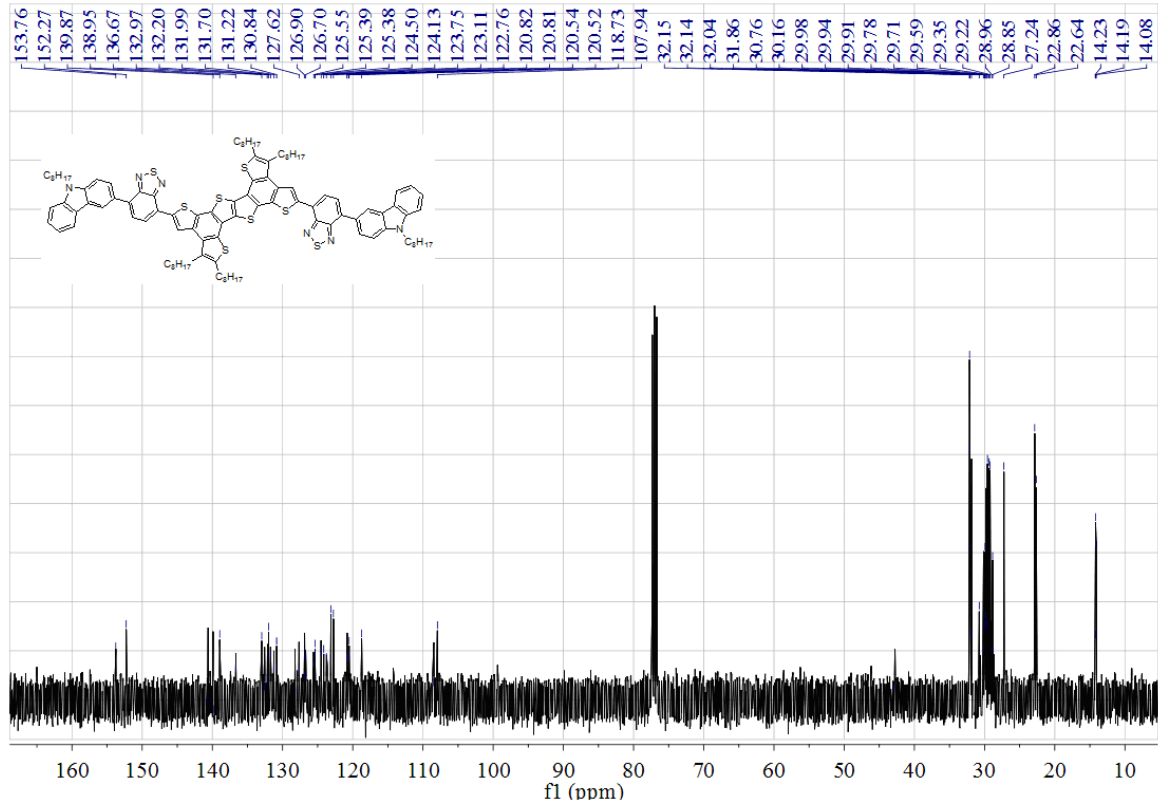
NMR Spectra











MS spectra

