

Supporting Information for

Structure-property investigations of benzoylspirocyclic aromatics as small molecule hosts for solution-processable TADF devices

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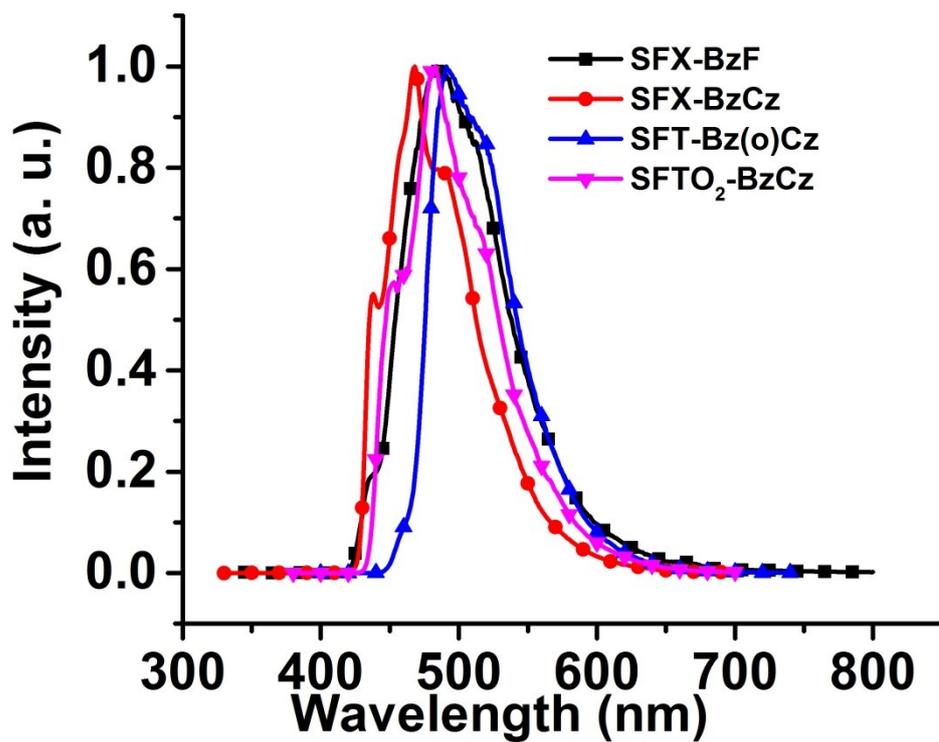


Fig. S1 Phosphorescence spectra of SFX-BzF, SFX-BzCz, SFT-Bz(o)Cz and SFTO₂-BzCz measured at 77 K in CH₂Cl₂

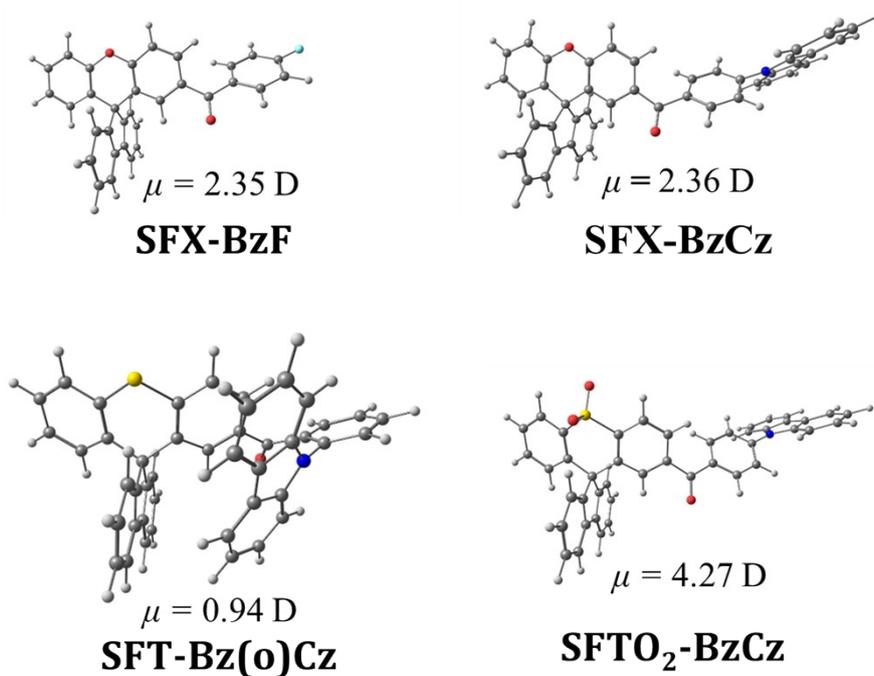


Fig. S2 The polarities of the four hosts calculated by DFT calculations

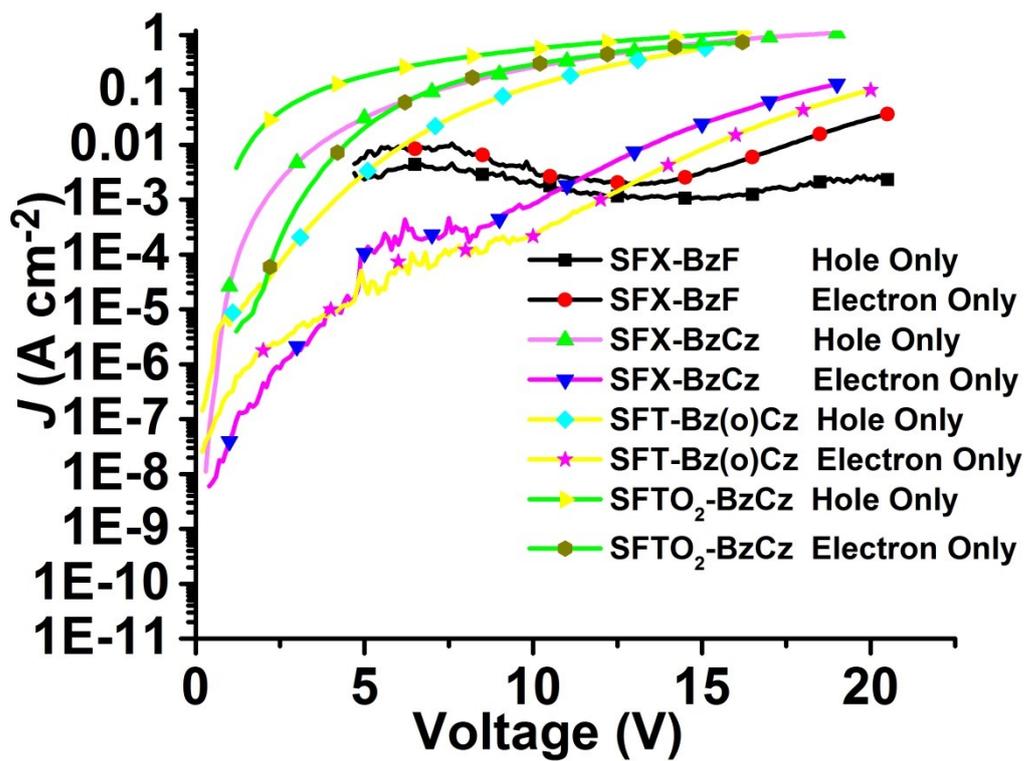


Fig. S3 Current density of hole-only and electron-only devices

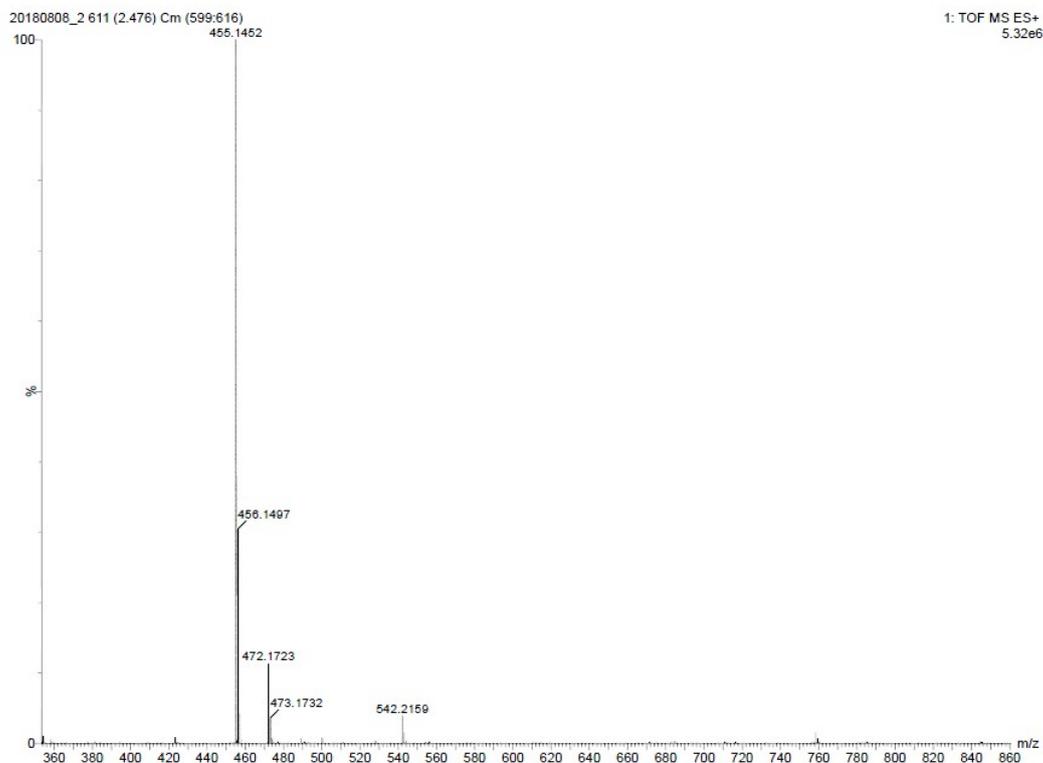


Fig. S4 The LC-MS of SFX-BzF

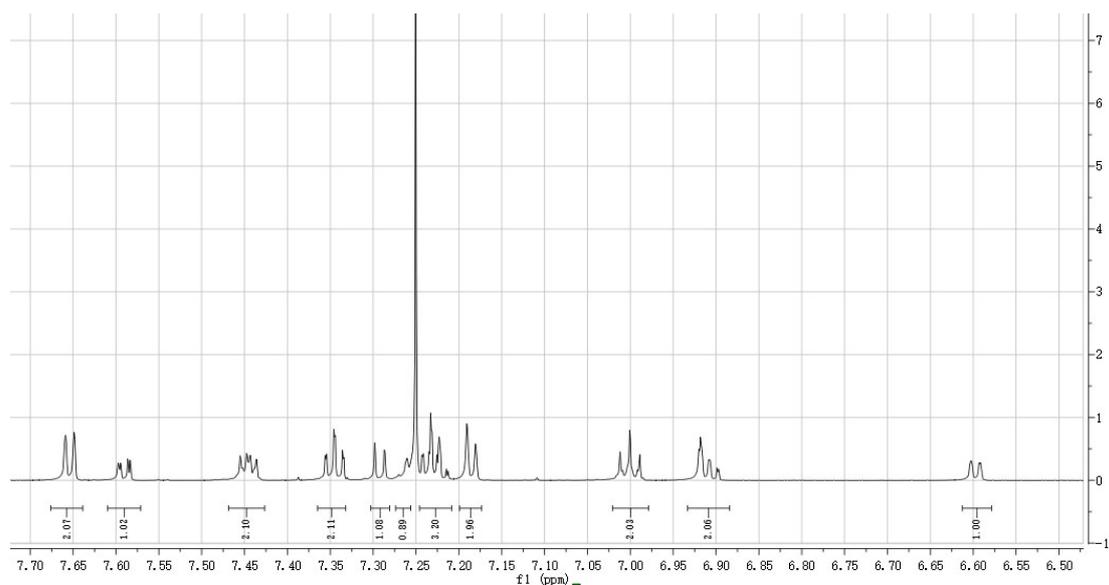


Fig. S5 ^1H NMR of SFX-BzF in CDCl_3

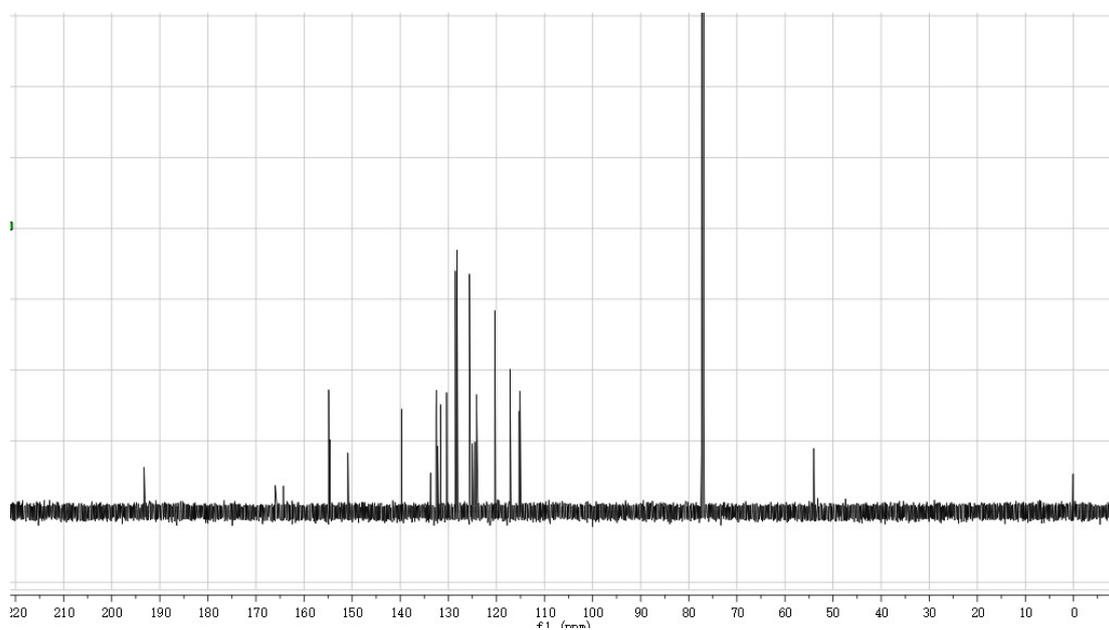


Fig. S6 ^{13}C NMR of SFX-BzF in CDCl_3

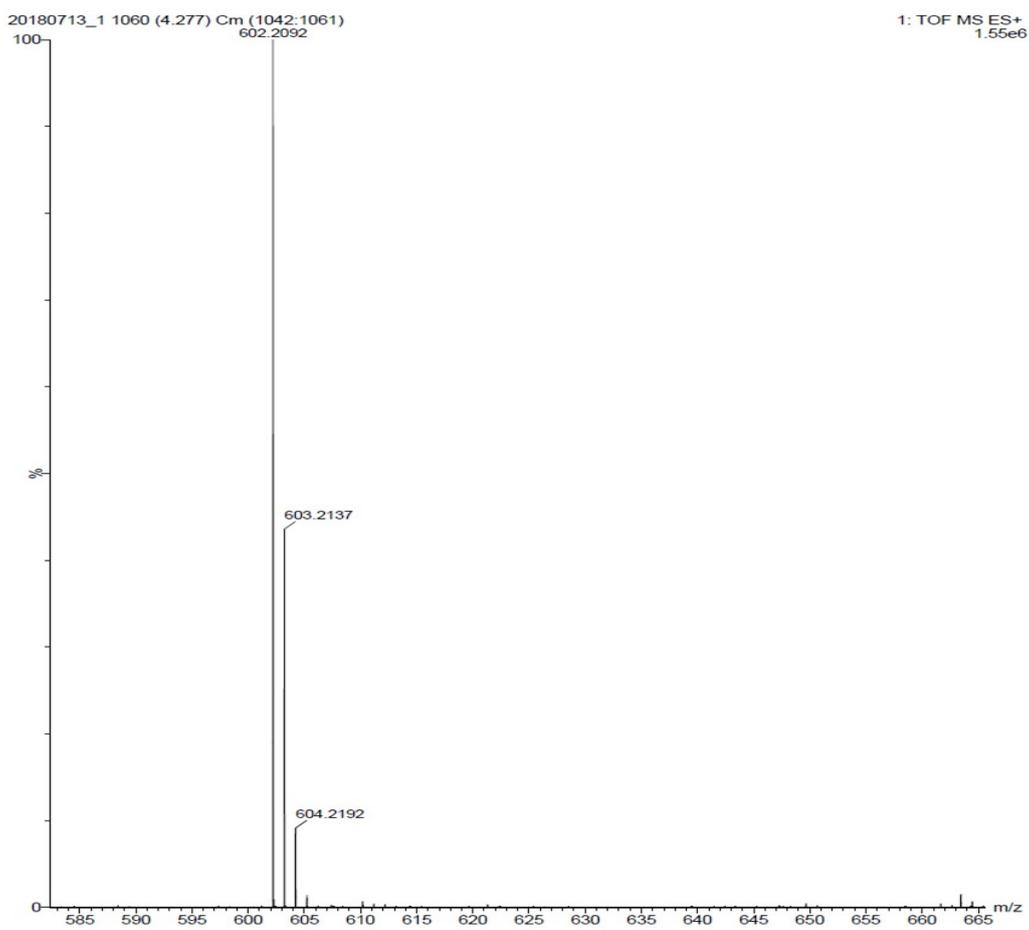


Fig. S7 The LC-MS of SFX-BzCz

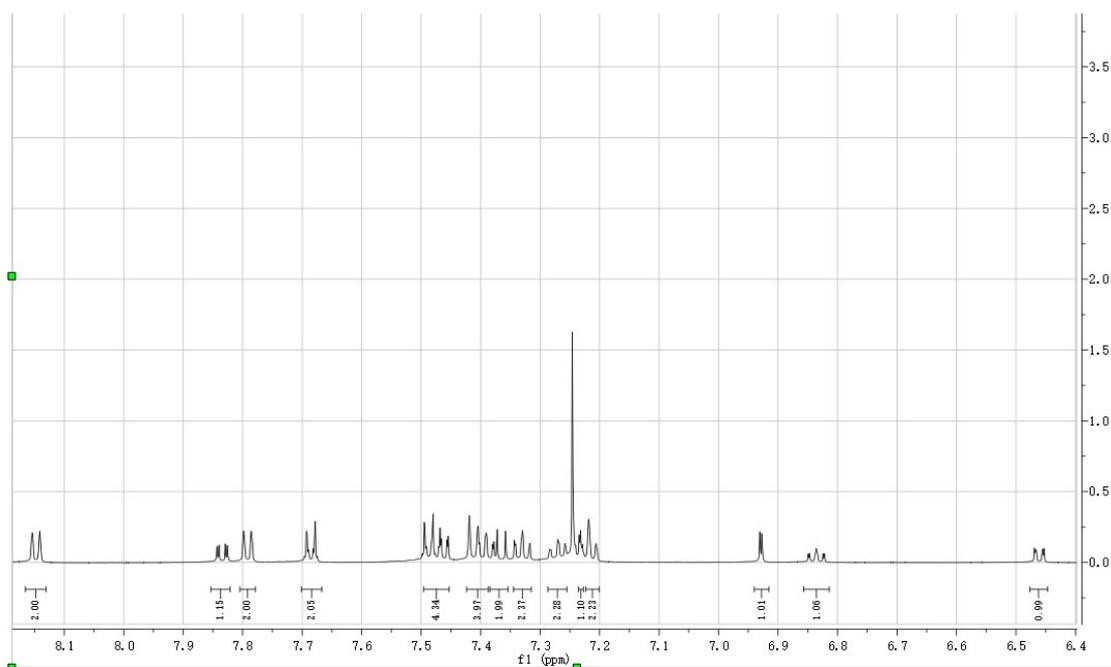


Fig. S8 ^1H NMR of SFX-BzCz in CDCl_3

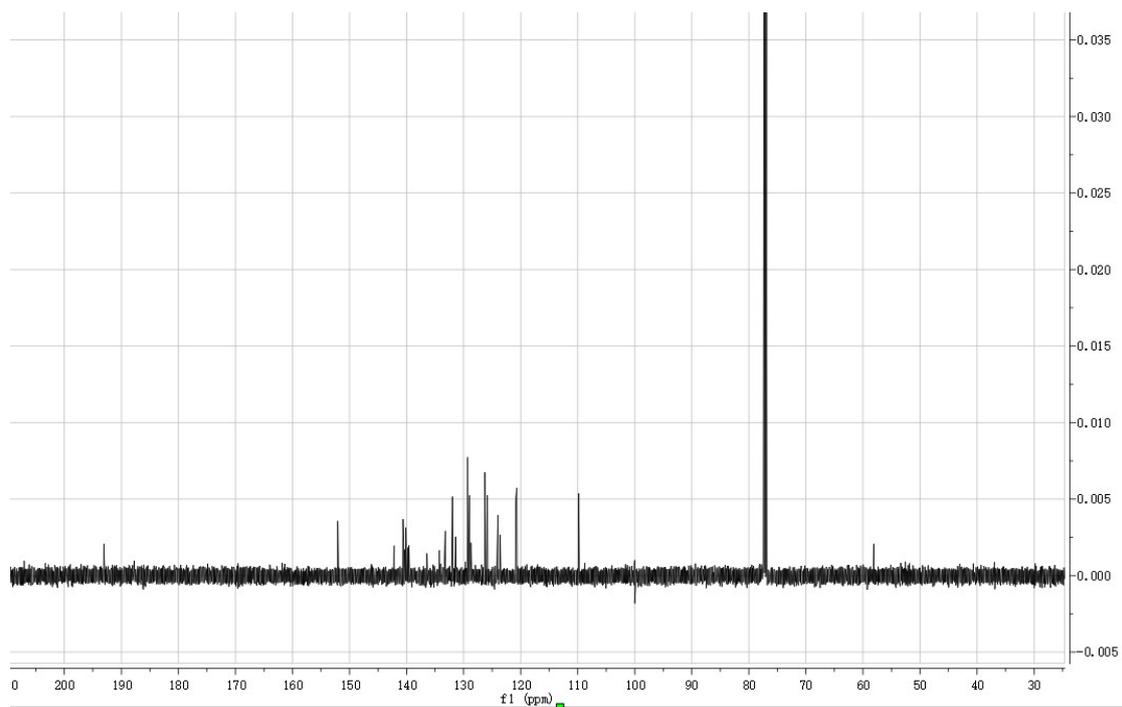


Fig. S9 ^{13}C NMR of SFX-BzCz in CDCl_3

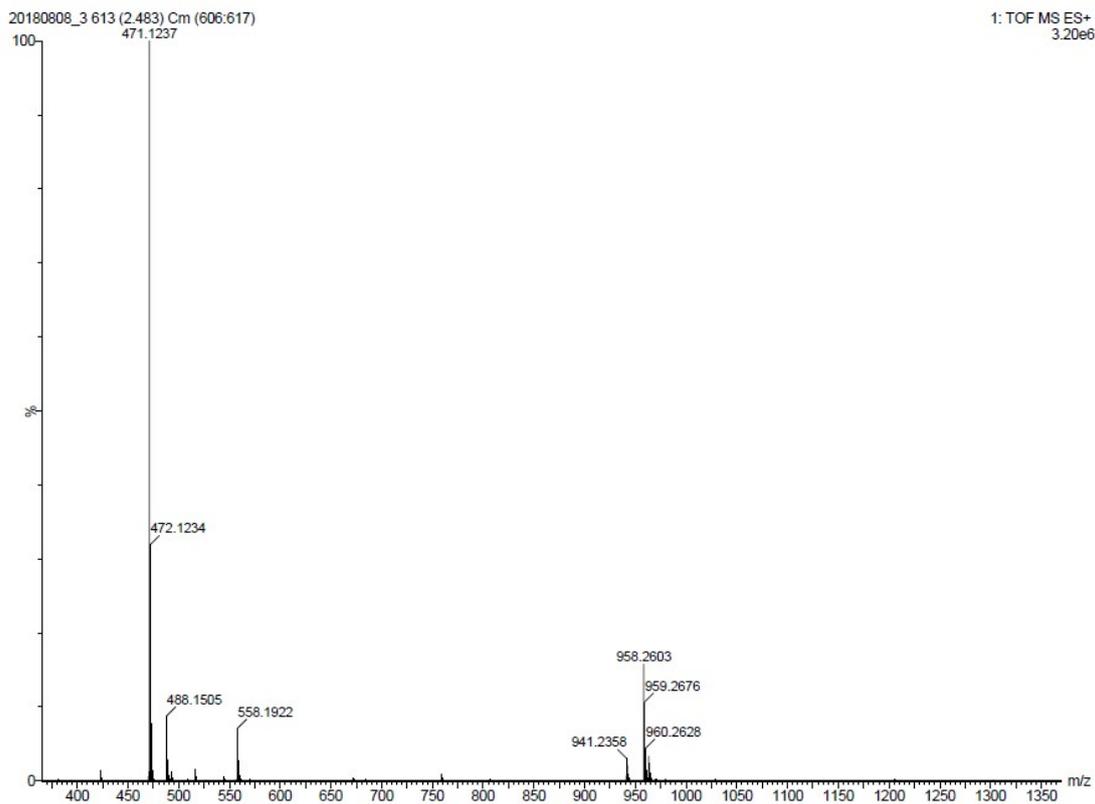


Fig. S10 The LC-MS of SFT-Bz(o)F

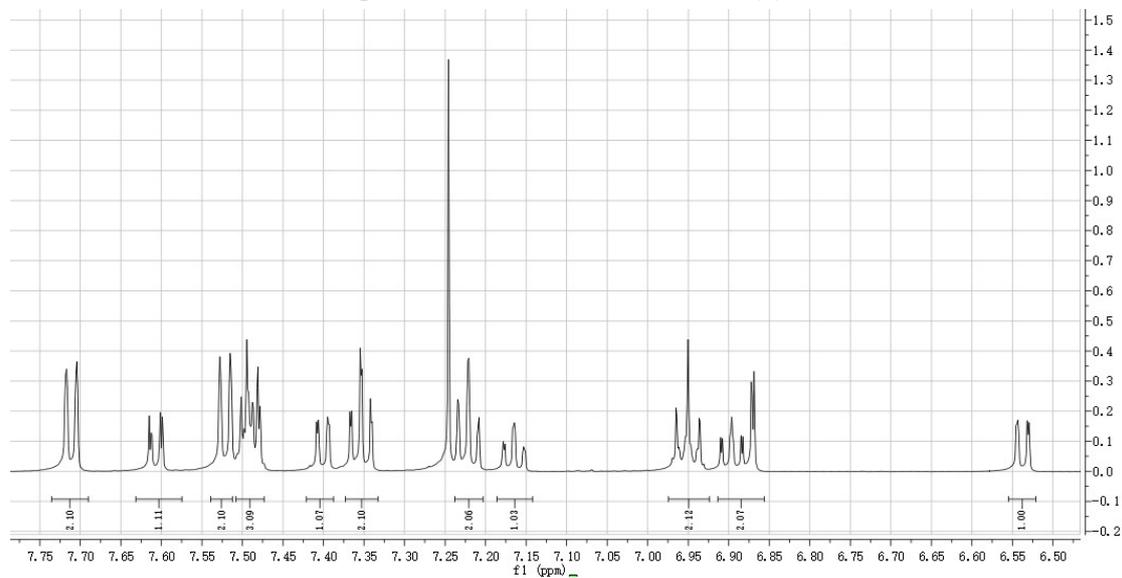


Fig. S11 ^1H NMR of SFT-Bz(o)F in CDCl_3

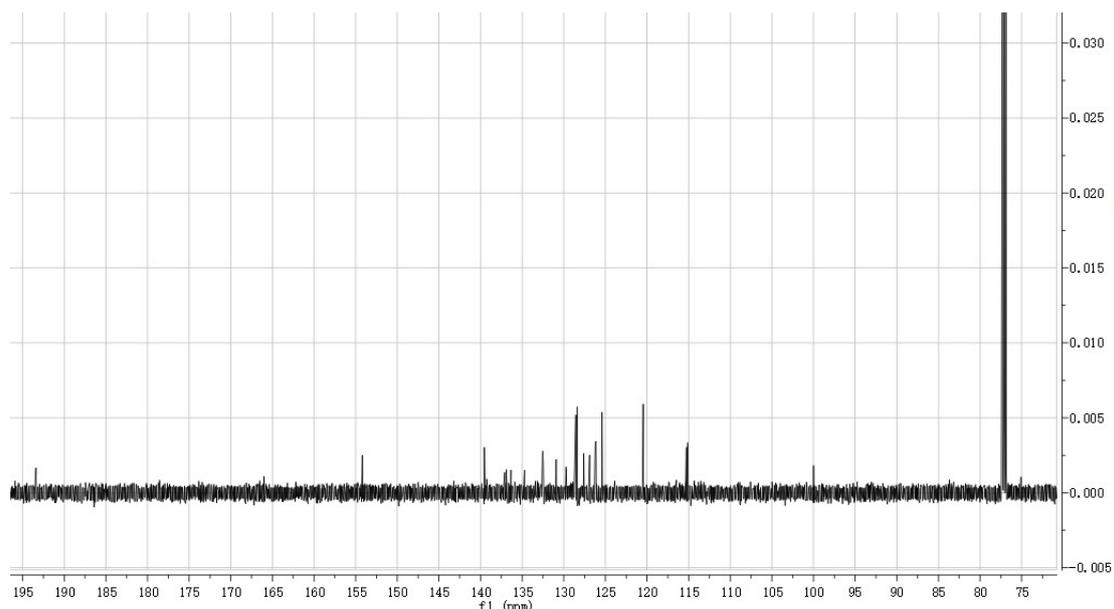


Fig. S12 ^{13}C NMR of SFT-Bz(o)F in CDCl_3

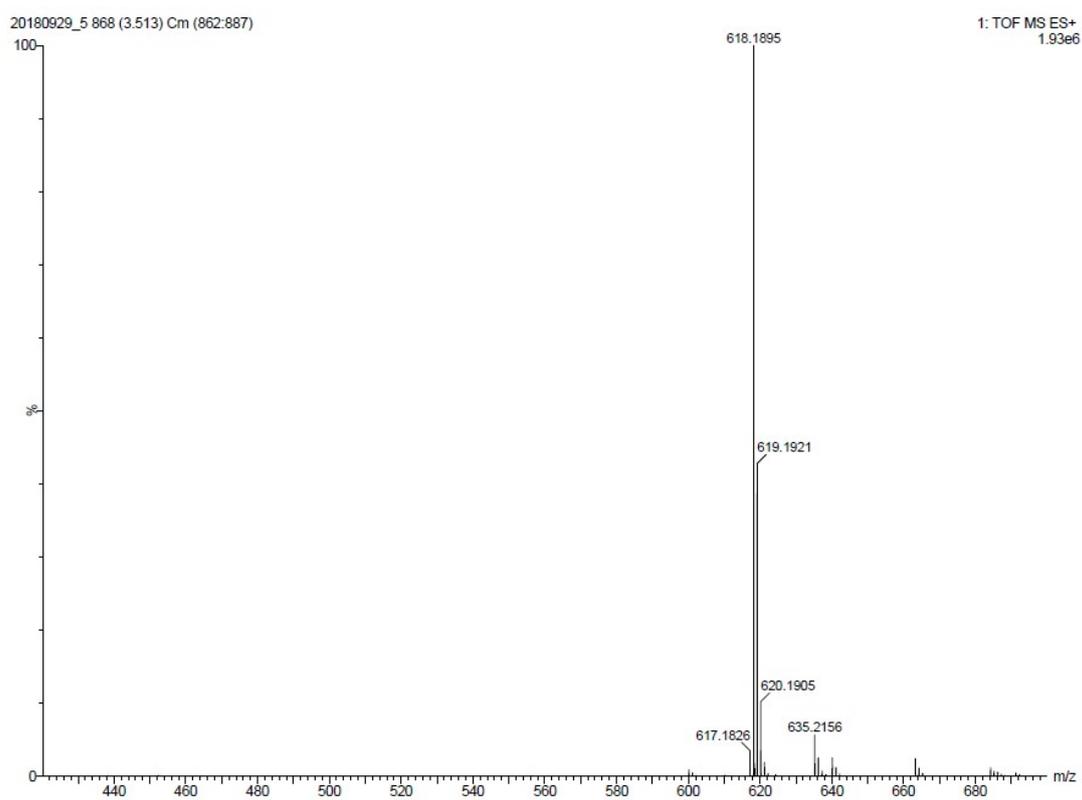


Fig. S13 The LC-MS of SFT-Bz(o)Cz

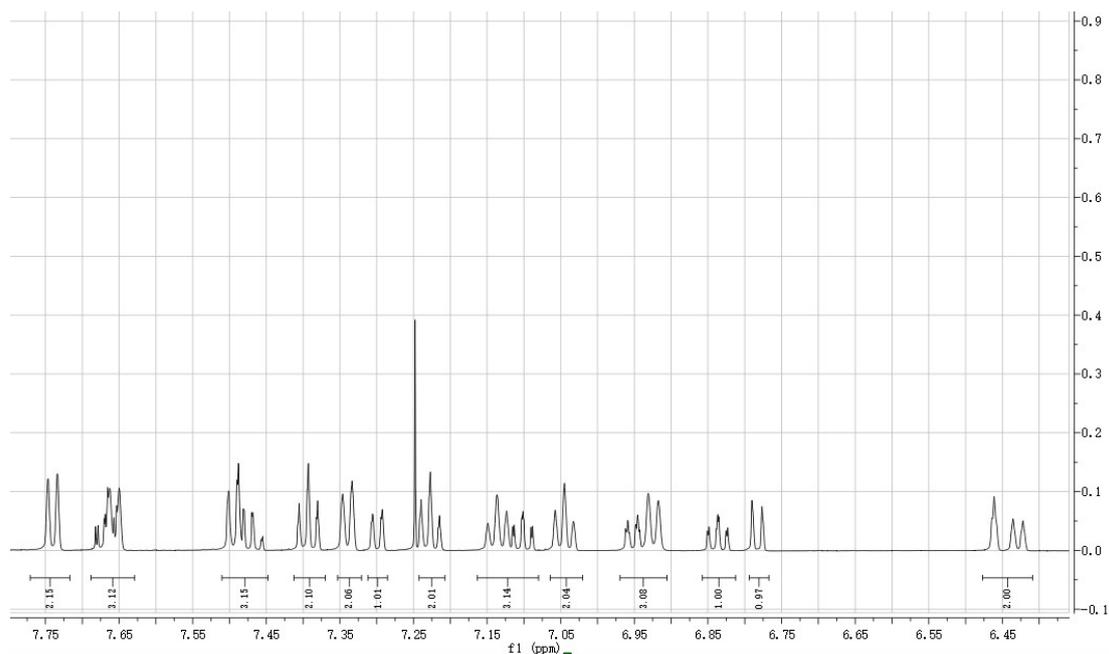


Fig. S14 ^1H NMR of SFT-Bz(o)Cz in CDCl_3

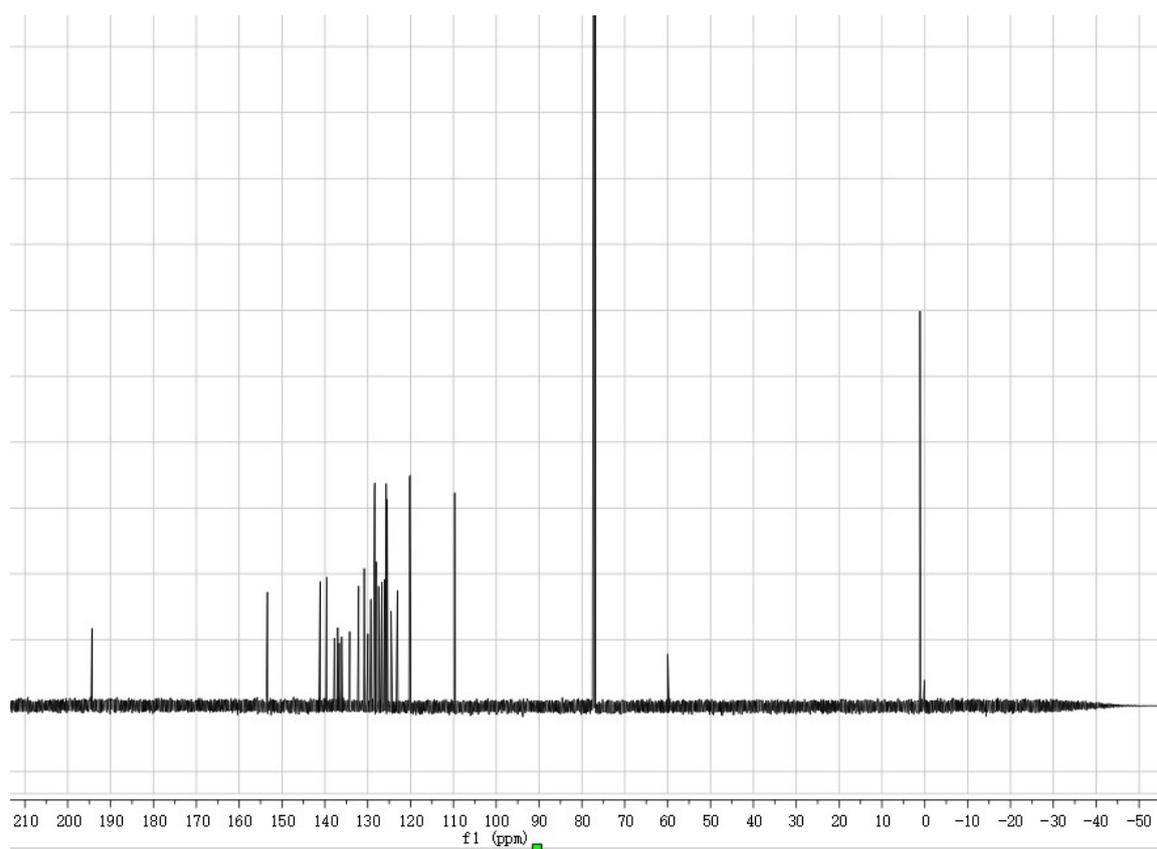


Fig. S15 ^{13}C NMR of SFT-Bz(o)Cz in CDCl_3

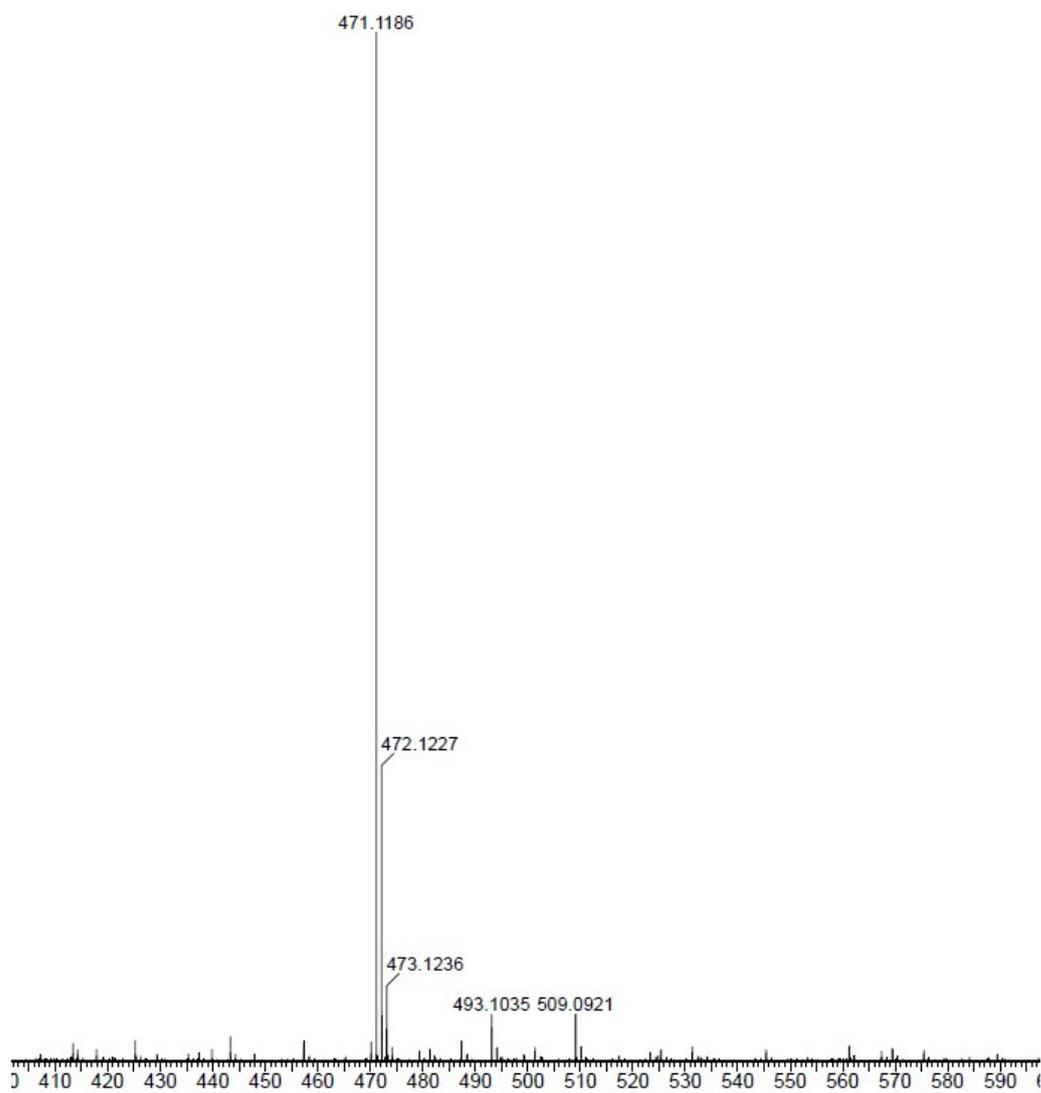


Fig.

Fig. S16 The LC-MS of SFT-BzF

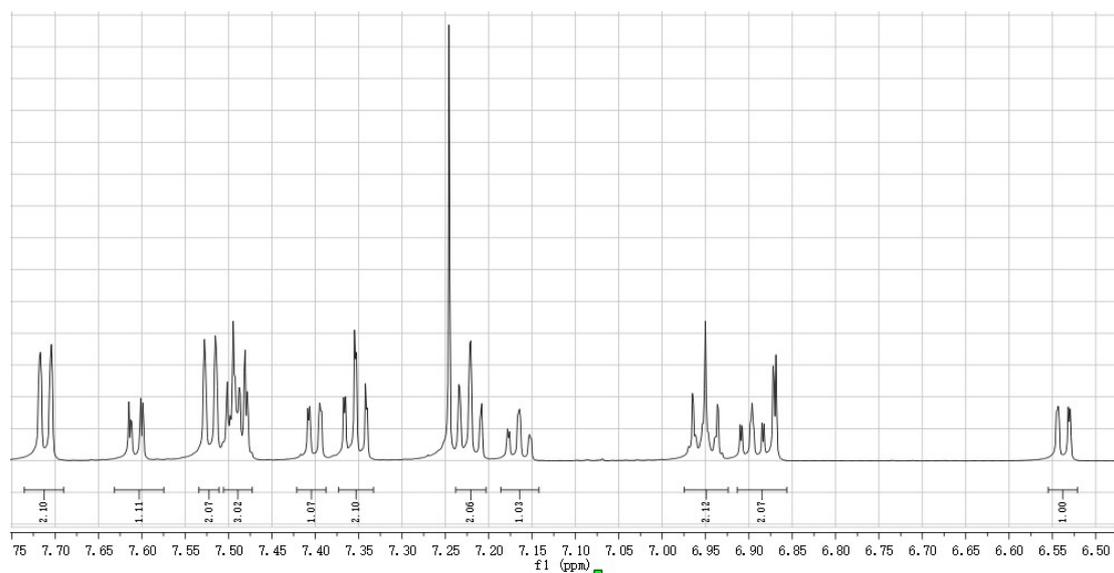


Fig. S17 ^1H NMR of SFT-BzF in CDCl_3

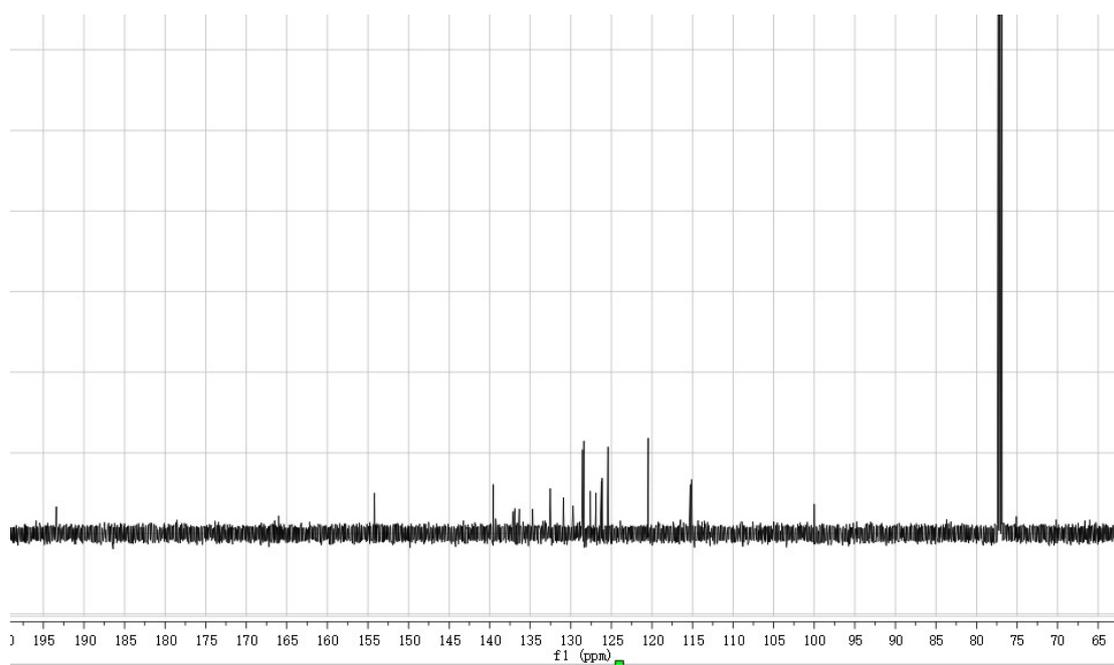


Fig. S18 ^{13}C NMR of SFT-BzF in CDCl_3

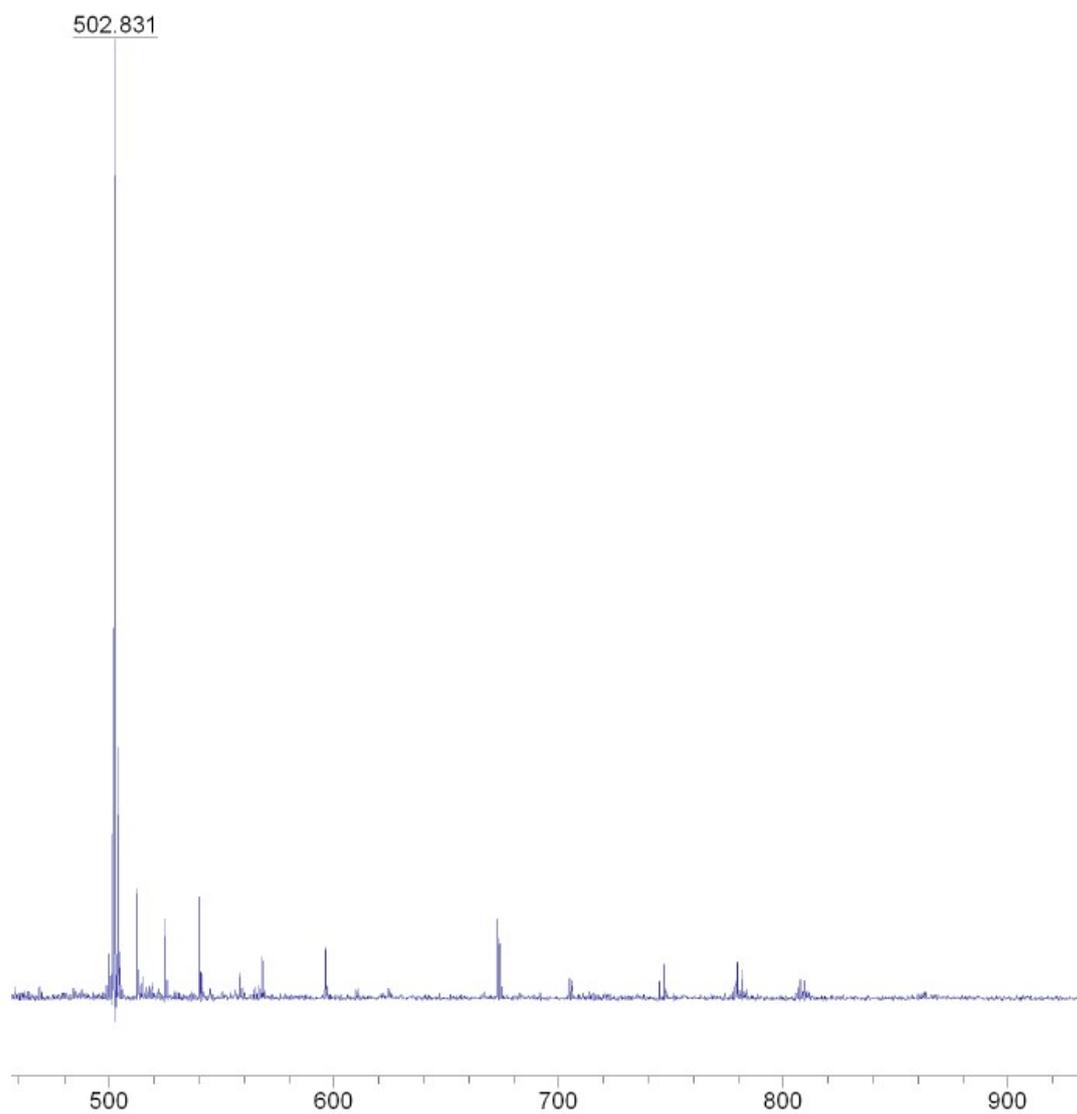


Fig. S19 The LC-MS of SFTO₂-BzF

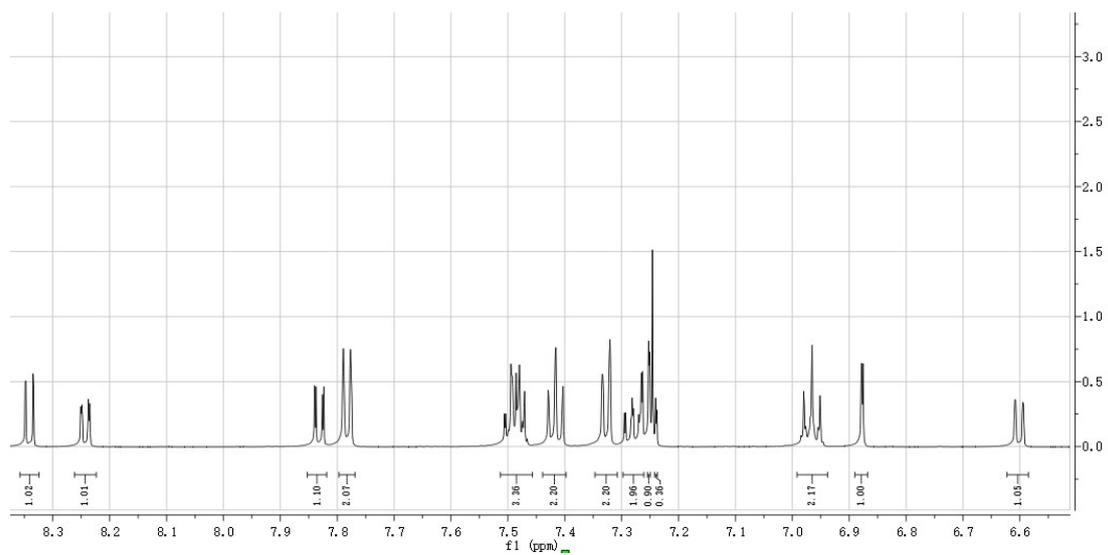


Fig. S20 ^1H NMR of SFTO₂-BzF in CDCl₃

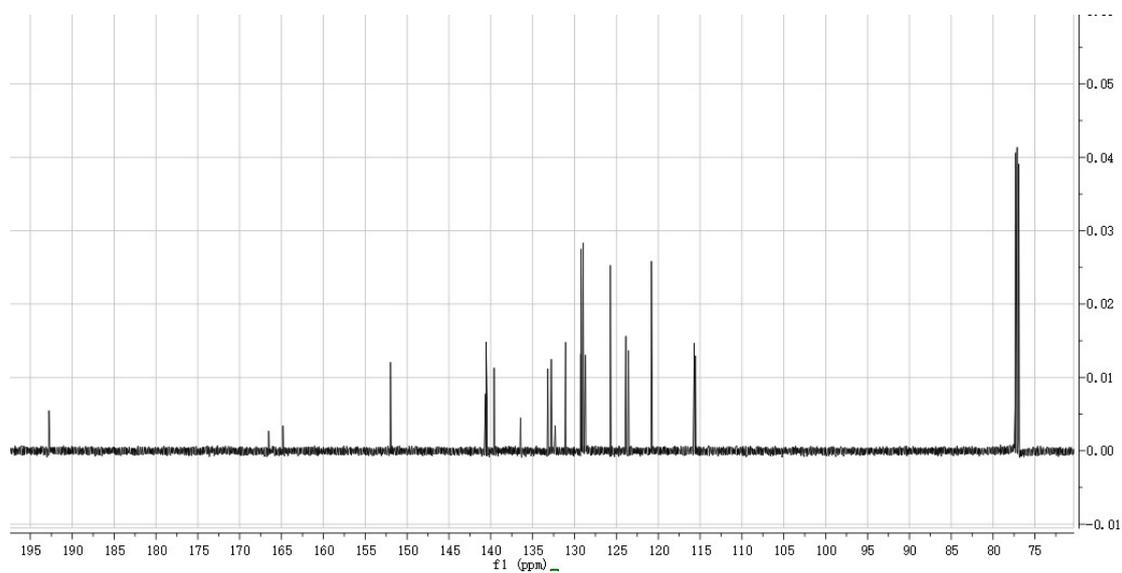


Fig. S21 ^{13}C NMR of SFTO₂-BzF in CDCl₃

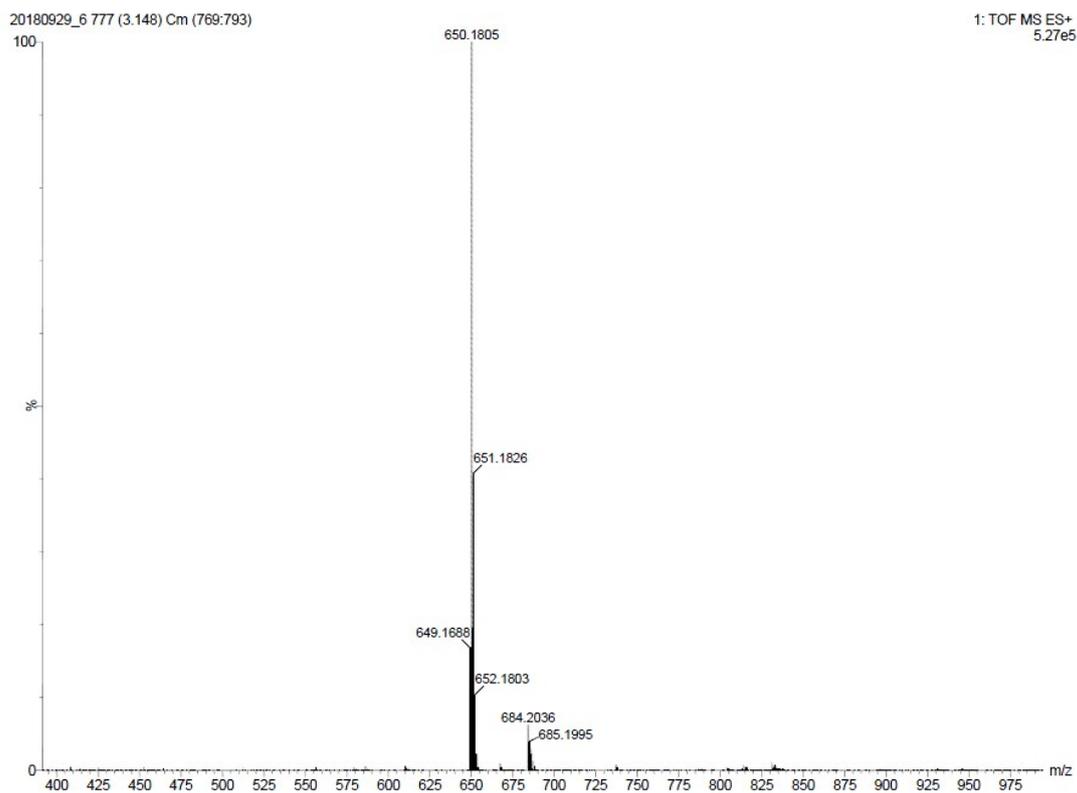


Fig. S22 The LC-MS of SFTO₂-BzCz

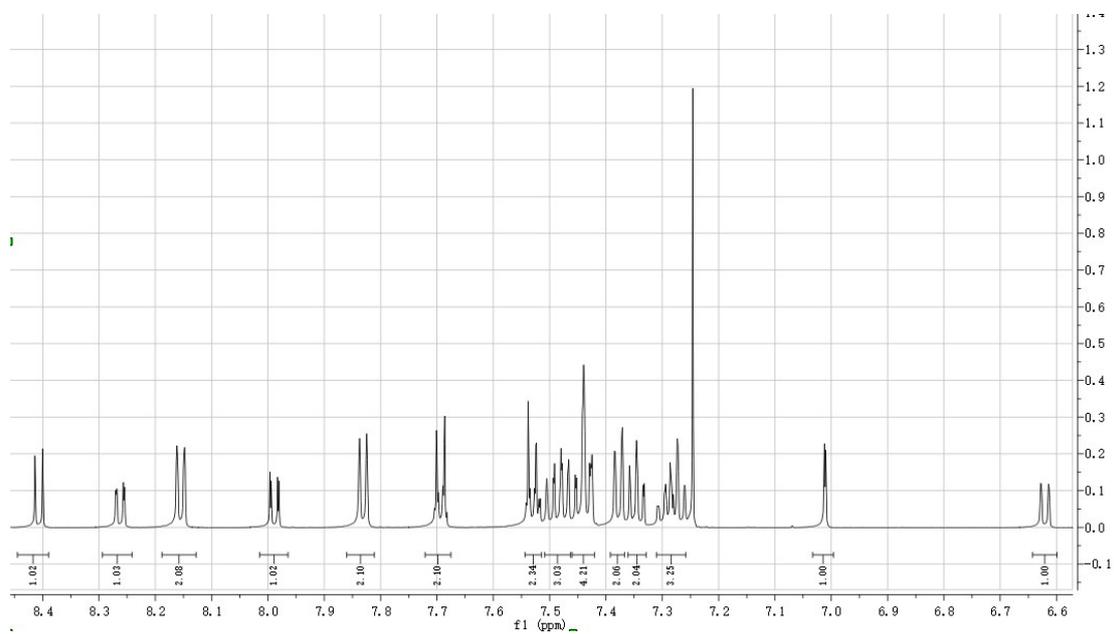


Fig. S23 ¹H NMR of SFTO₂-BzCz in CDCl₃

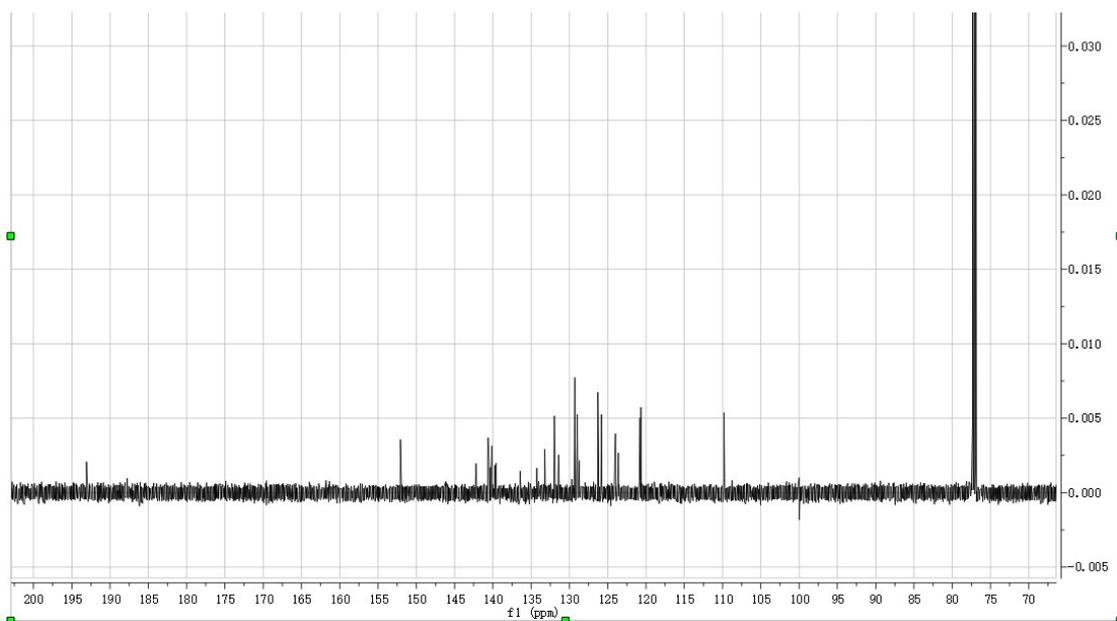


Fig. S24 ^{13}C NMR of SFTO₂-BzCz in CDCl₃