

Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C

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Electronic Supplementary Information for

Spirobi[dibenzo[*b,e*][1,4]azasiline]: A New Platform for High Efficient Organic Light-Emitting Diodes

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Fig. S1 TGA and DSC (inset) curves of SDBS.

Fig. S2 Cyclic voltammograms of ferrocene.

Fig. S3 (a) J - V - L characteristics and EL spectra of blue (a, b), green (c, d), and red (e, f) devices.

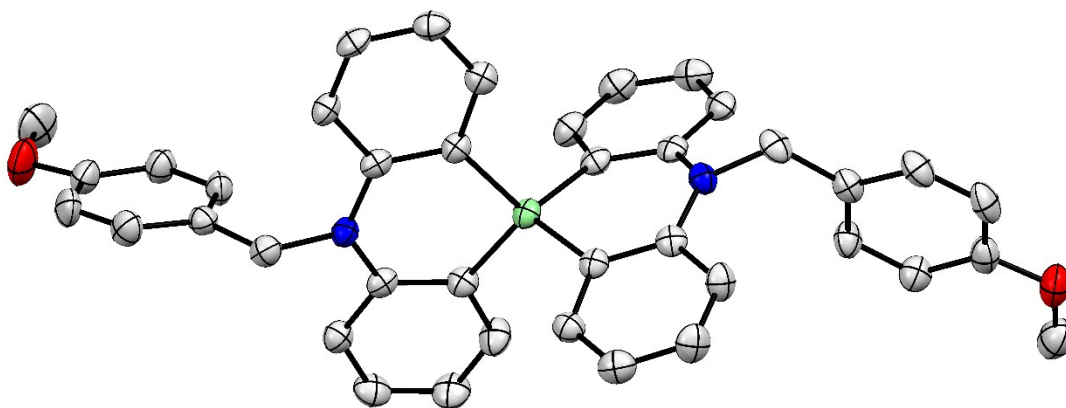
Fig. S4 Blue, green and red device structures and representative energy level diagram and structure of the materials.

Fig. S5 ^1H NMR spectrum of SDBS ($\text{DMSO-}d_6$).

Fig. S6 ^{13}C NMR spectrum of SDBS (CDCl_3).

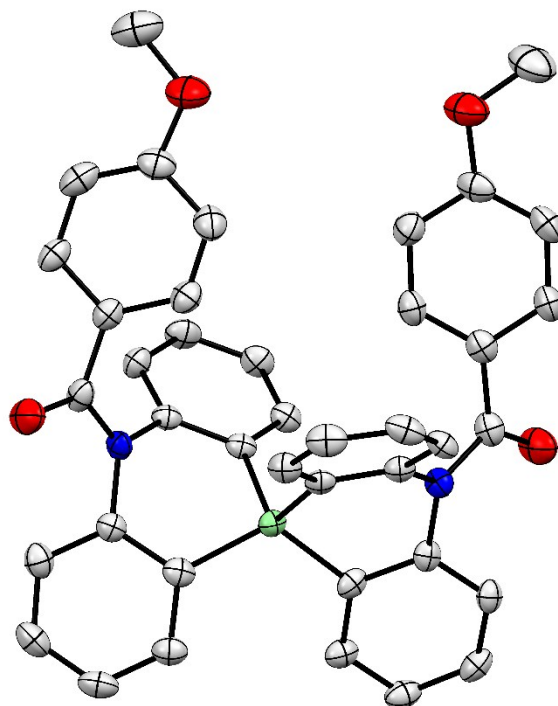
Fig. S7 ^1H NMR spectrum of SDBSO ($\text{DMSO-}d_6$).

Fig. S8 ^{13}C NMR spectrum of SDBSO (CDCl_3).



Phase data

Formula sum	C ₄₀ H ₃₄ N ₂ O ₂ Si
Formula weight	602.78 g/mol
Crystal system	triclinic
Space-group	P -1 (2)
Cell parameters	a=9.8552(5) Å b=13.7602(7) Å c=14.3746(9) Å α=108.204(2)° β=104.384(2)° γ=104.602(2)°
Cell ratio	a/b=0.7162 b/c=0.9573 c/a=1.4586
Cell volume	1674.62(16) Å ³
Z	2
Calc. density	1.19535 g/cm ³
R_{all}	0.0802
Pearson code	aP158
Formula type	NO ₂ P ₂ Q ₃₄ R ₄₀
Wyckoff sequence	i79



Phase data

Formula sum	C40 H30 N2 O4 Si
Formula weight	630.75 g/mol
Crystal system	monoclinic
Space-group	P 1 21/c 1 (14)
Cell parameters	a=10.8378(5) Å b=18.1918(8) Å c=32.1777(15) Å β =99.237(2)°
Cell ratio	a/b=0.5958 b/c=0.5654 c/a=2.9690
Cell volume	6261.86(50) Å ³
Z	8
Calc. density	1.33803 g/cm ³
RAll	0.1575
Pearson code	mP636
Formula type	NO2P4Q30R40
Wyckoff sequence	e159

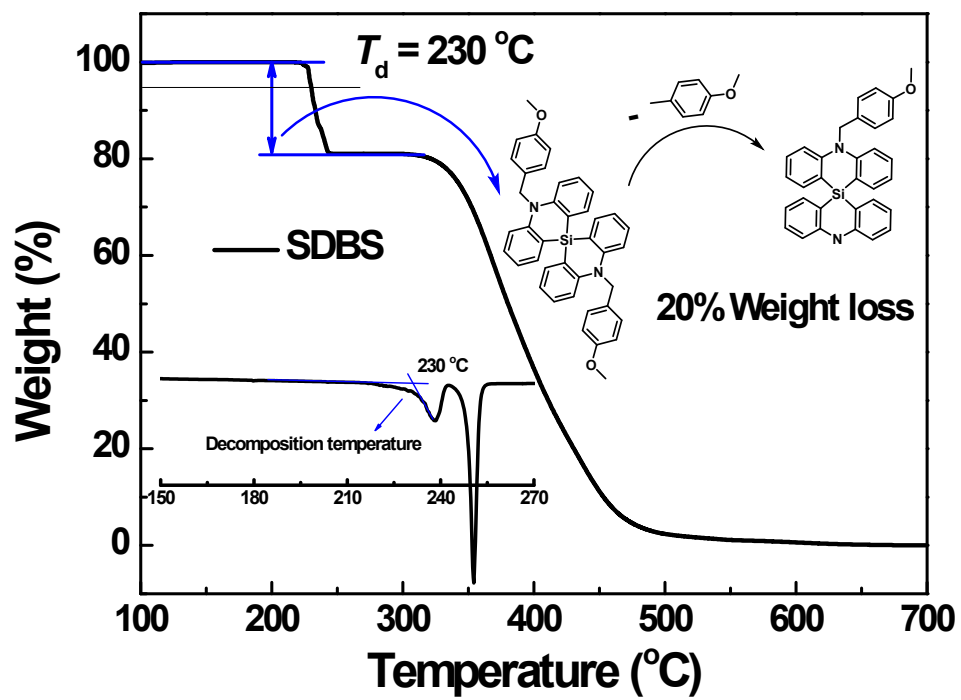


Fig. S1 TGA and DSC (inset) curves of SDBS.

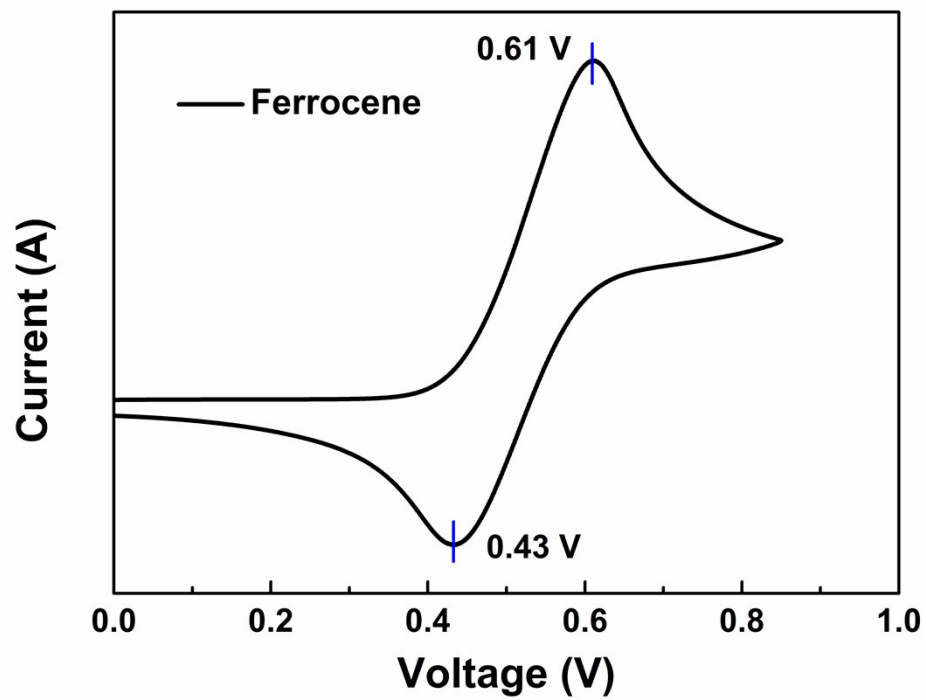


Fig. S2 Cyclic voltammograms of ferrocene.

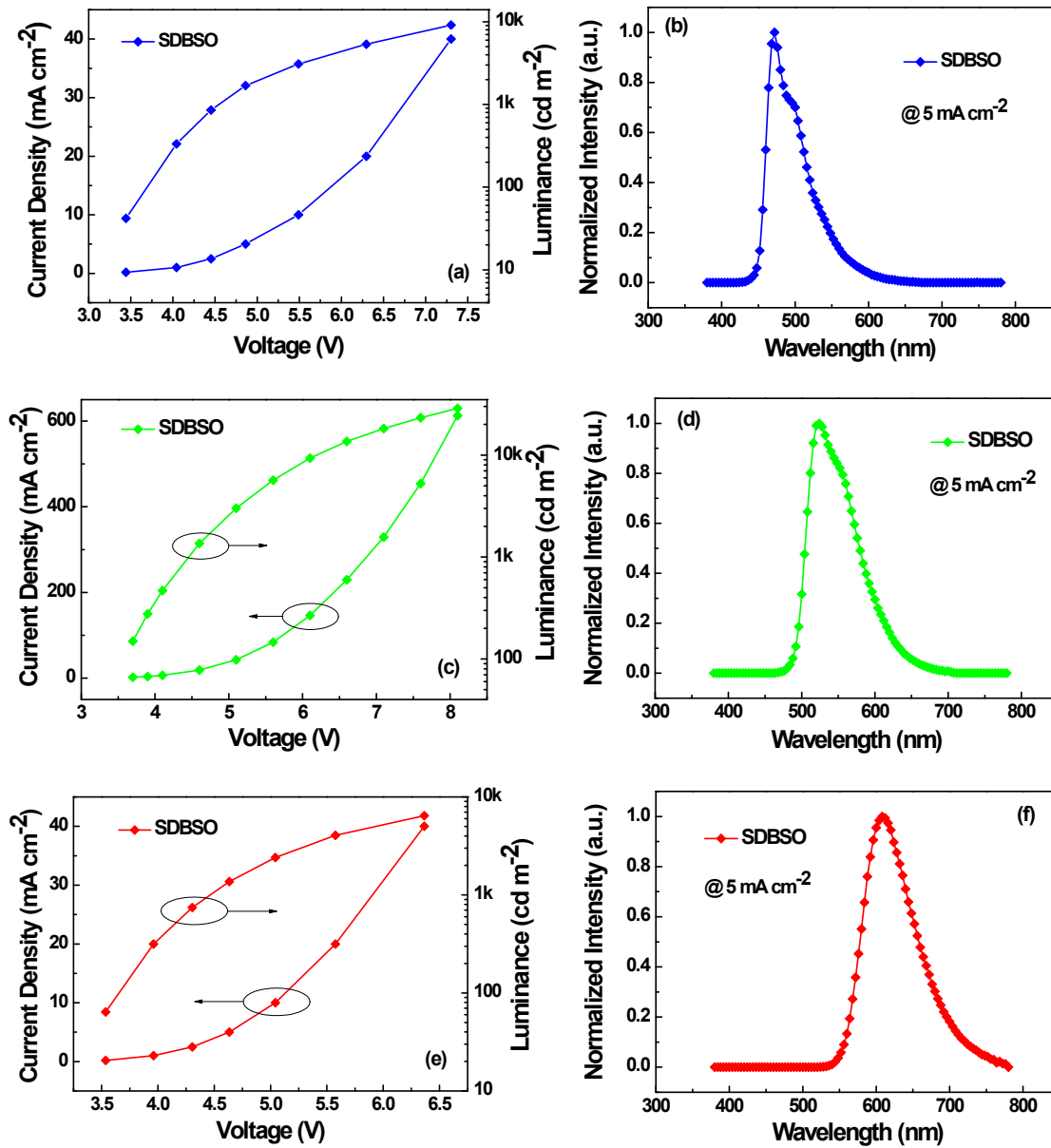


Fig. S3 (a) J - V - L characteristics and EL spectra of blue (a, b), green (c, d), and red (e, f) devices.

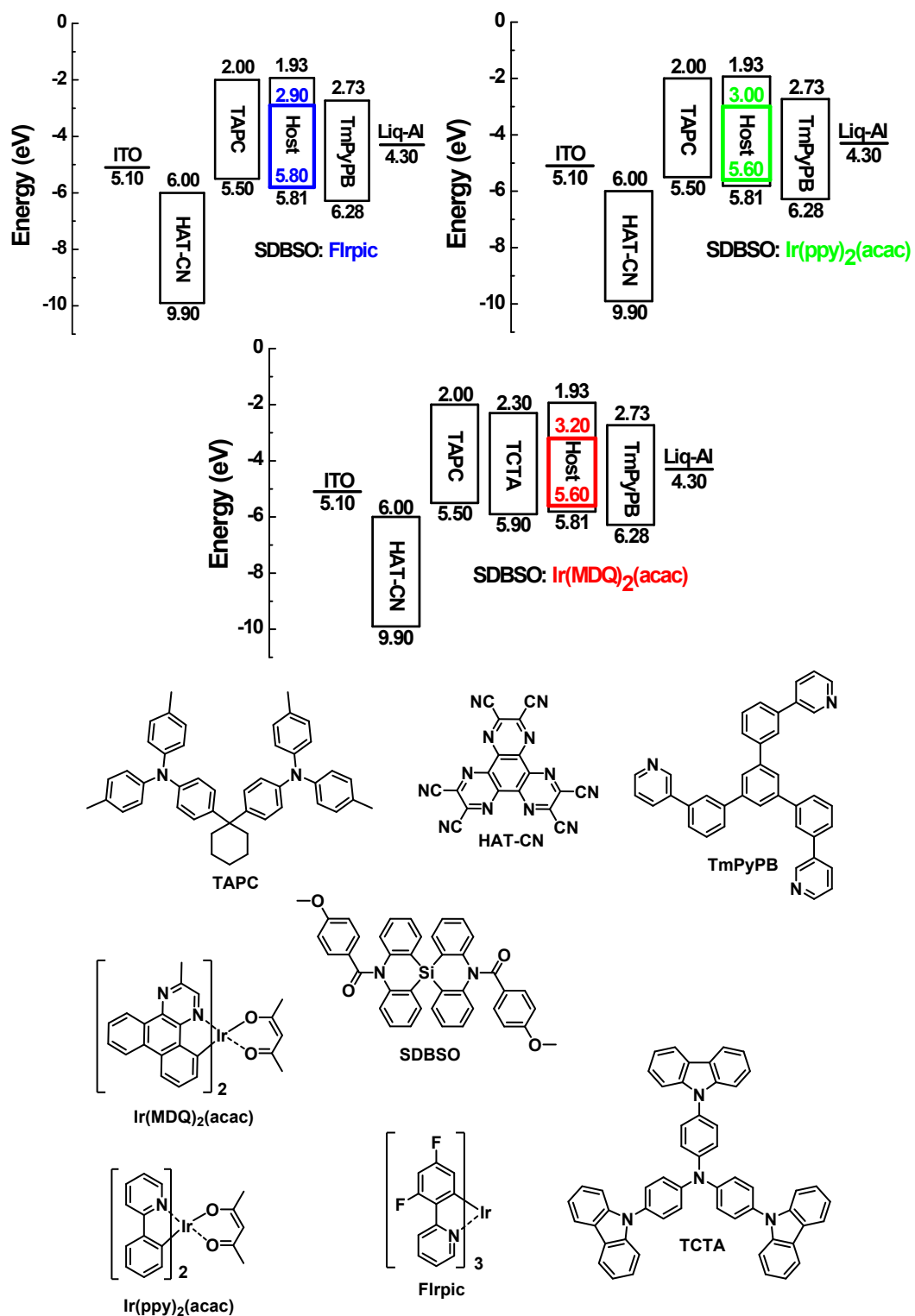


Fig. S4 Blue, green and red device structures and representative energy level diagram and structure of the materials.

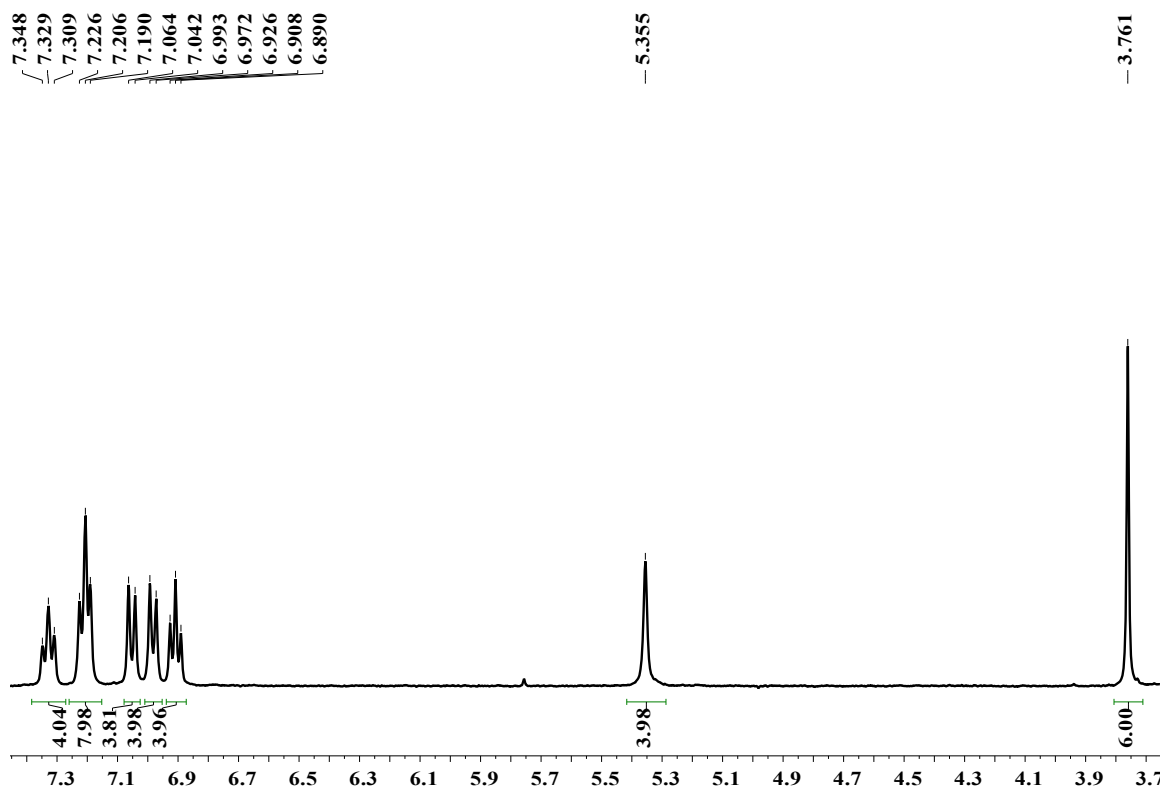


Fig. S5 ¹H NMR spectrum of SDBS (DMSO-*d*₆).

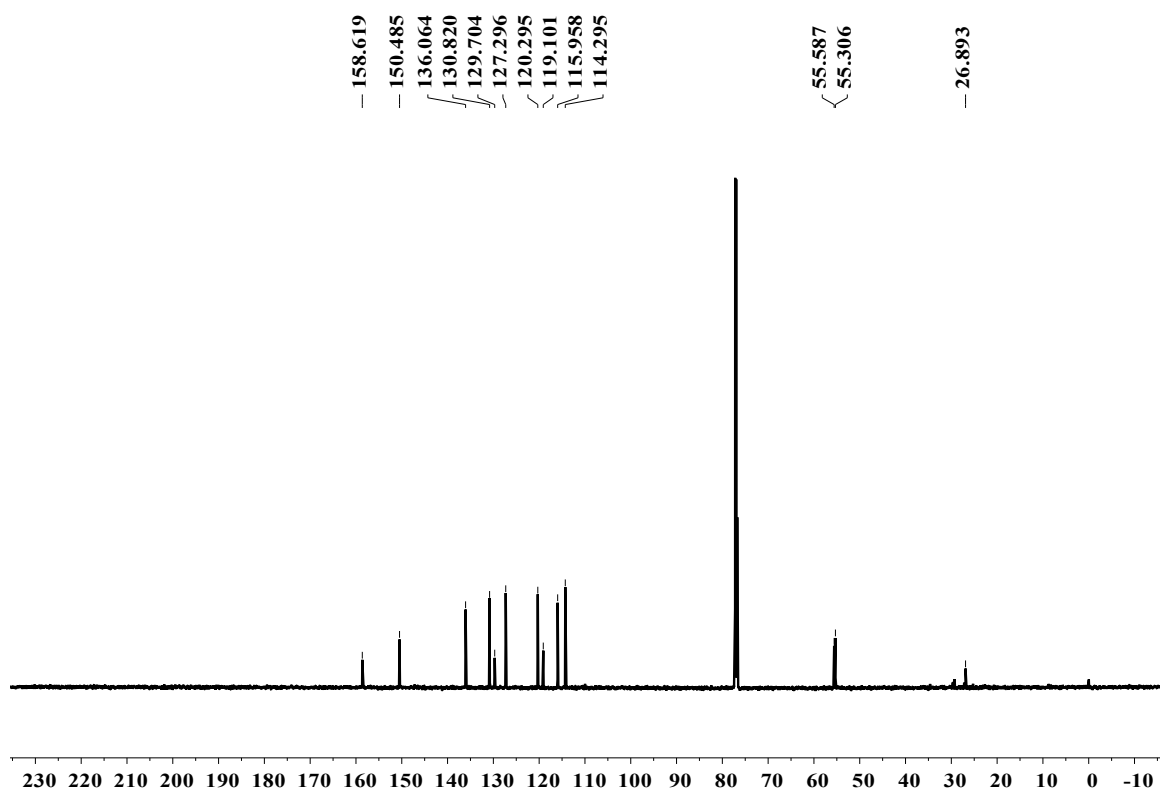


Fig. S6 ^{13}C NMR spectrum of SDBS (CDCl_3).

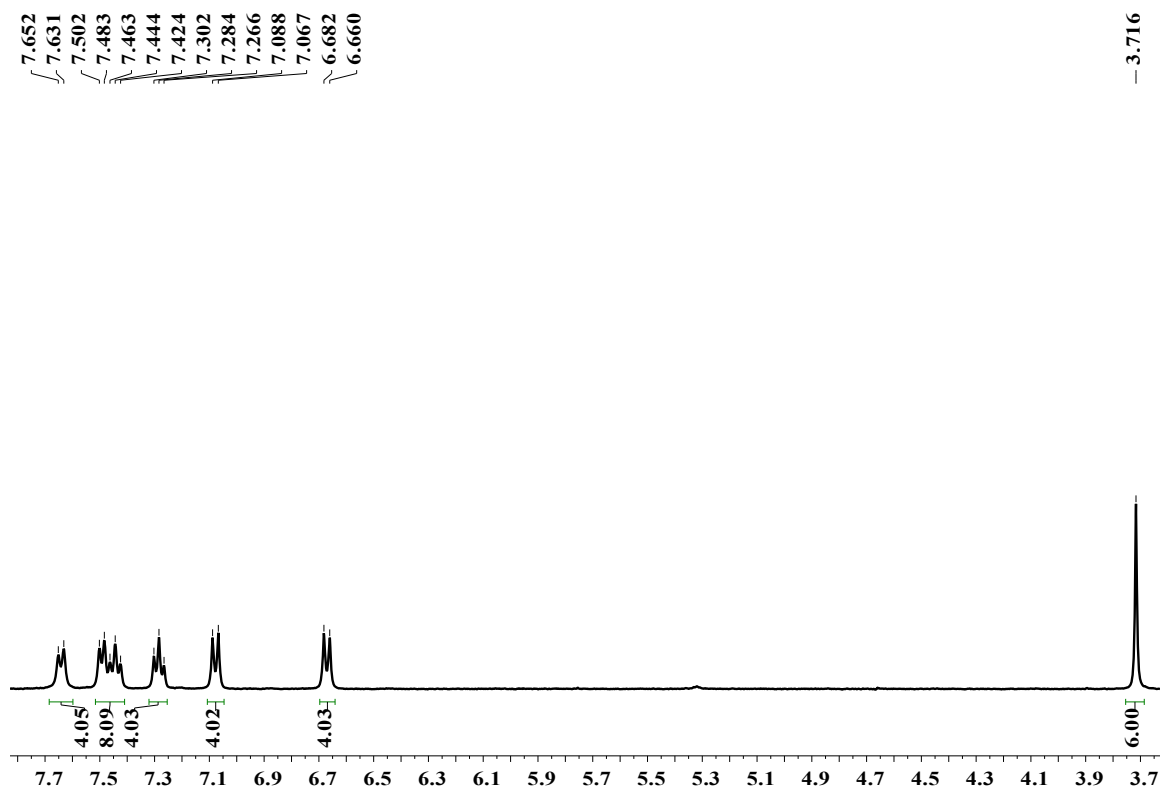


Fig. S7 ^1H NMR spectrum of SDBSO ($\text{DMSO-}d_6$).

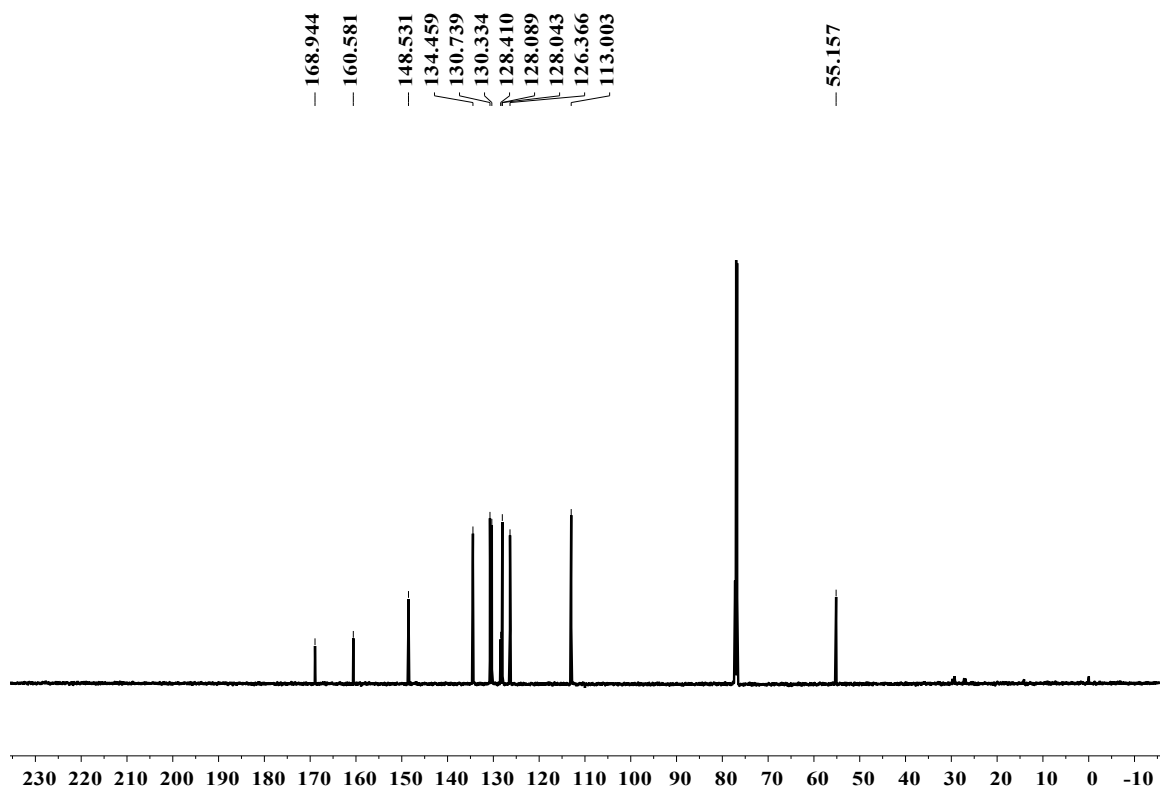


Fig. S8 ^{13}C NMR spectrum of SDBSO (CDCl_3).