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Supporting Information

Highly π-Extended Small Molecules with Bis(alkylthio)methylene Side Chains for Organic Field-effect Transistors

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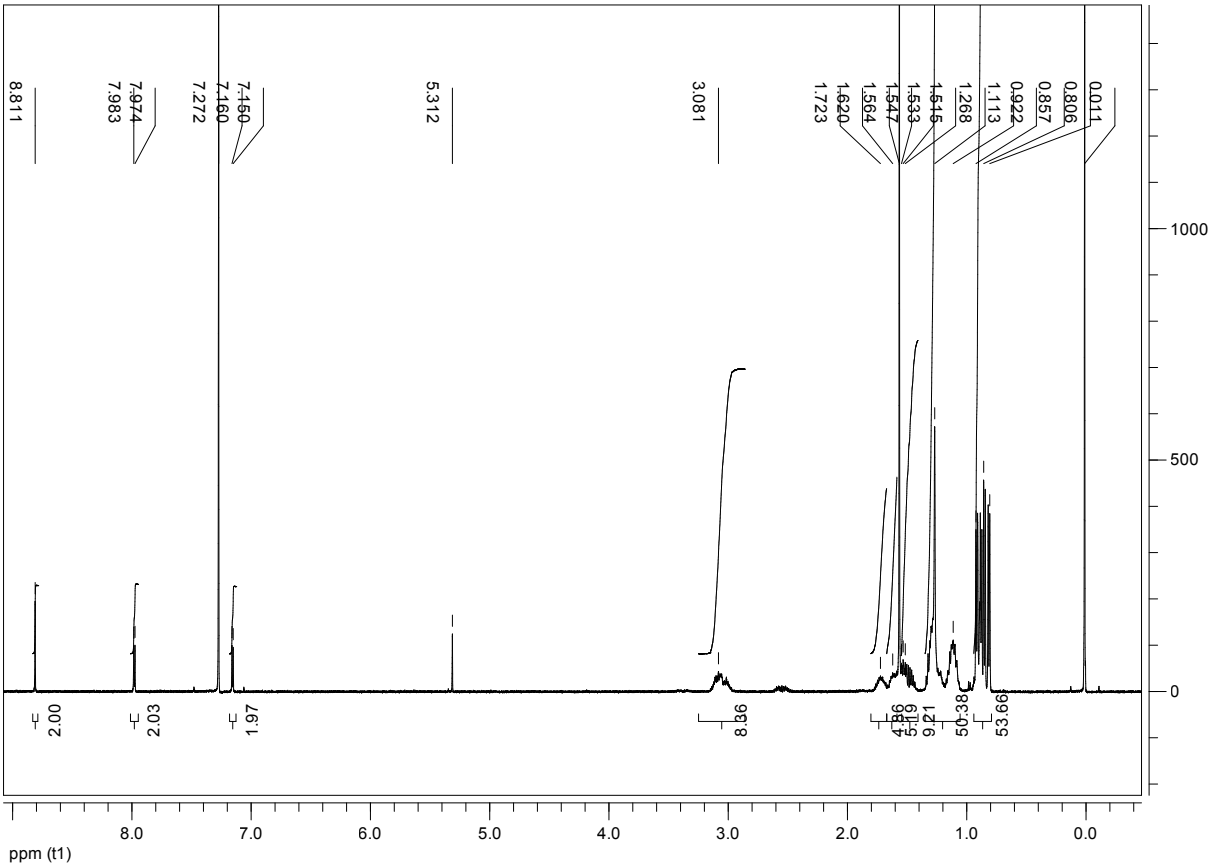

Figure S1. ^{1}H NMR spectrum for compound 2a

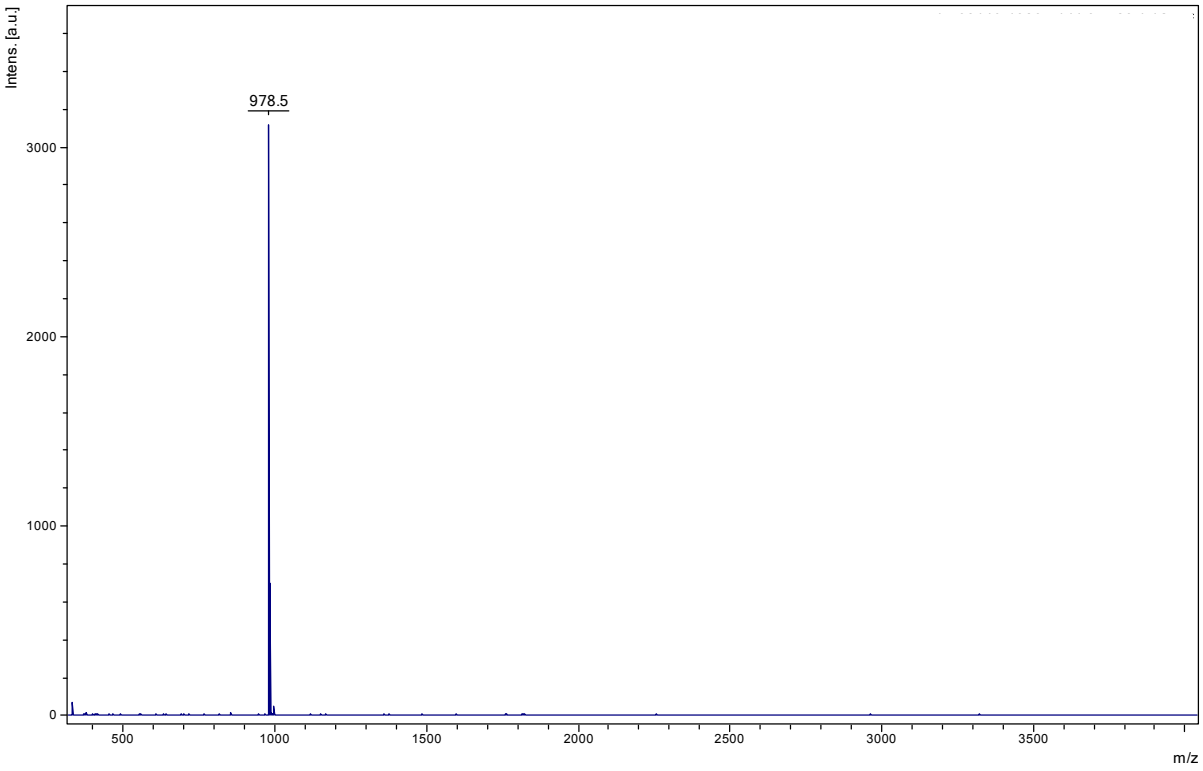

Figure S2. MALDI-TOF spectrum for compound 2a

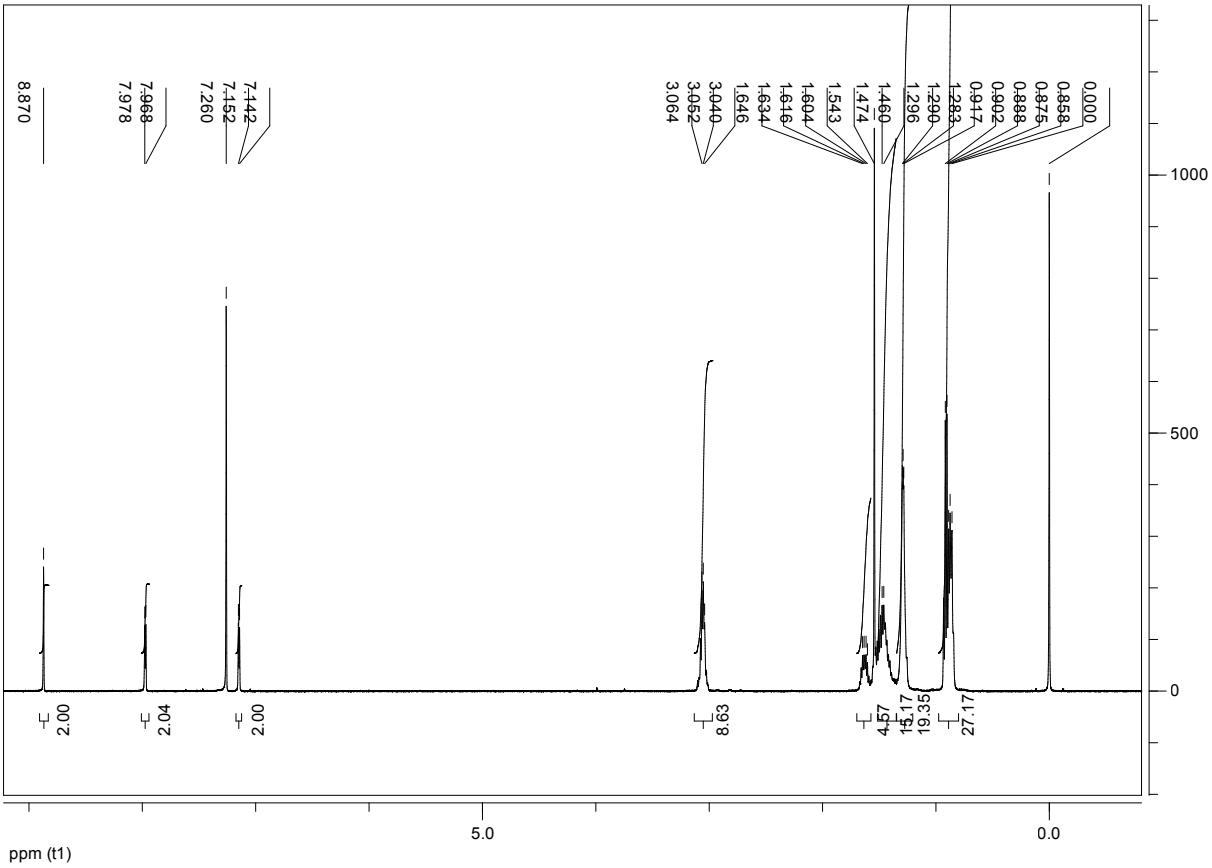

Figure S3. ^{1}H NMR spectrum for compound 2b

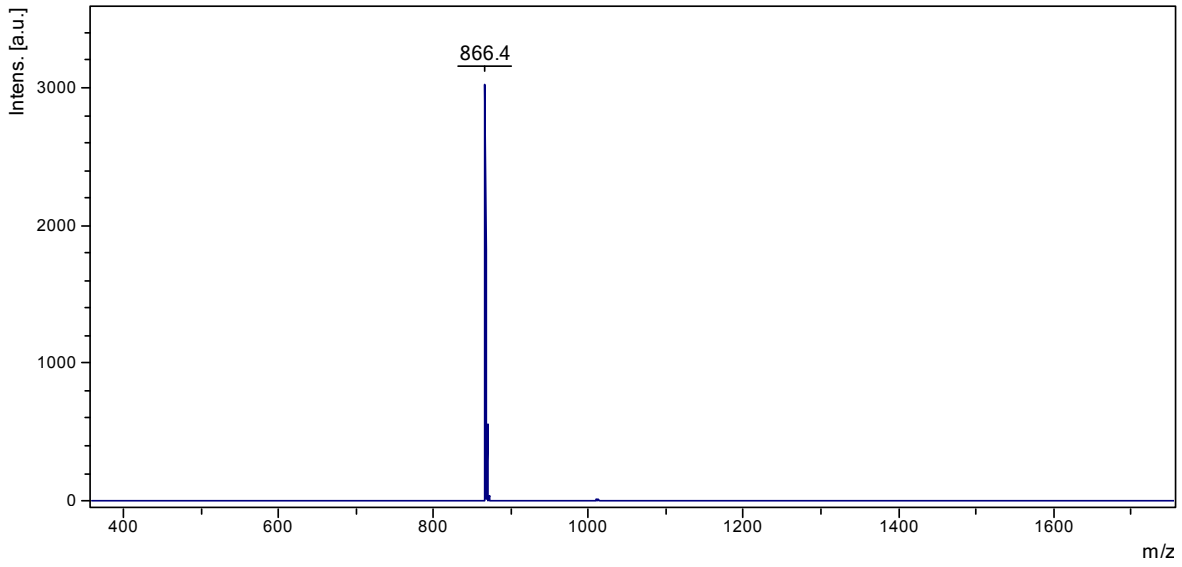

Figure S4. MALDI-TOF spectrum for compound 2b

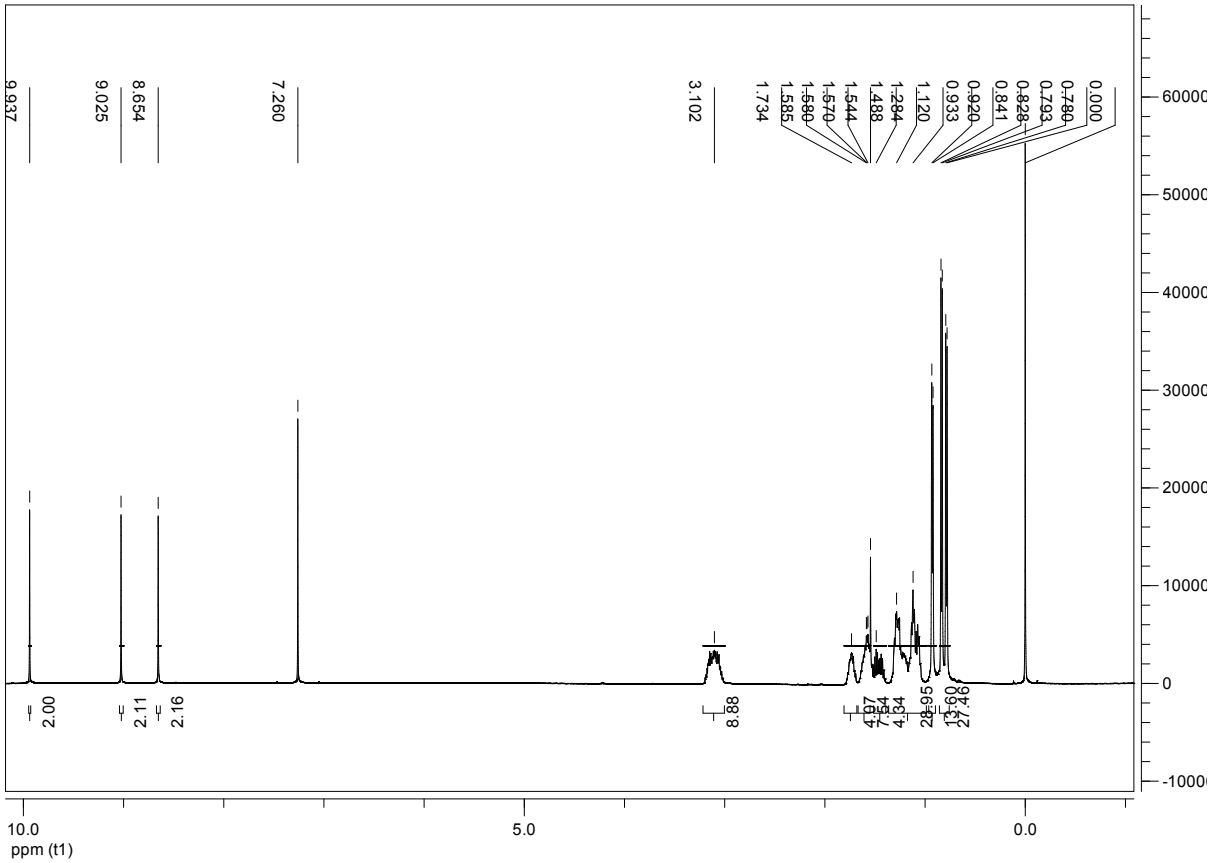

Figure S5. ^{1}H NMR spectrum for compound 3a

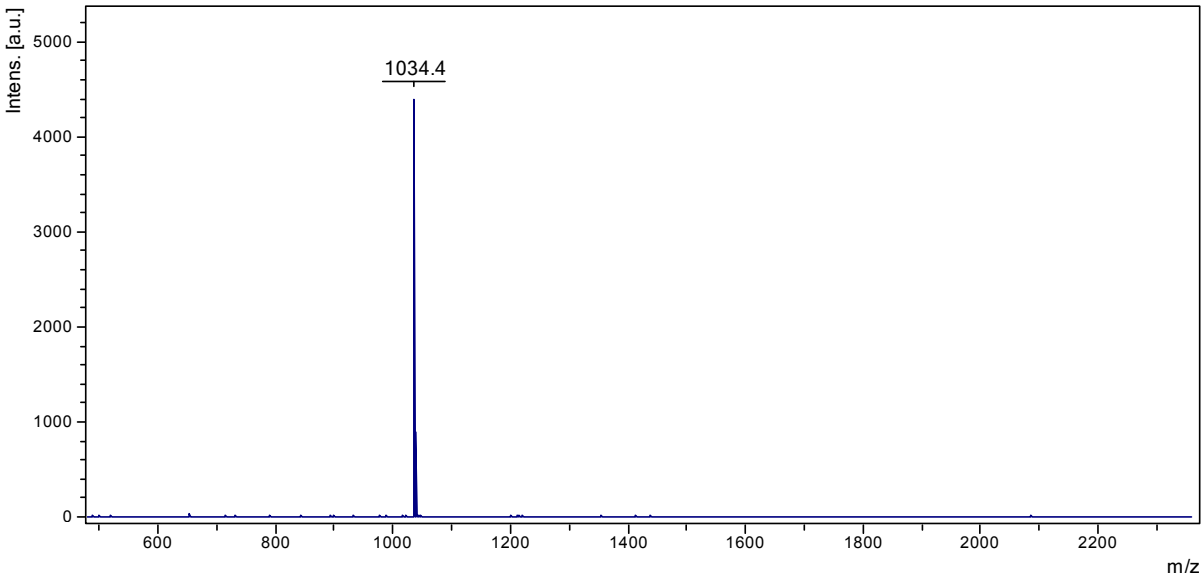

Figure S6. MALDI-TOF spectrum for compound 3a

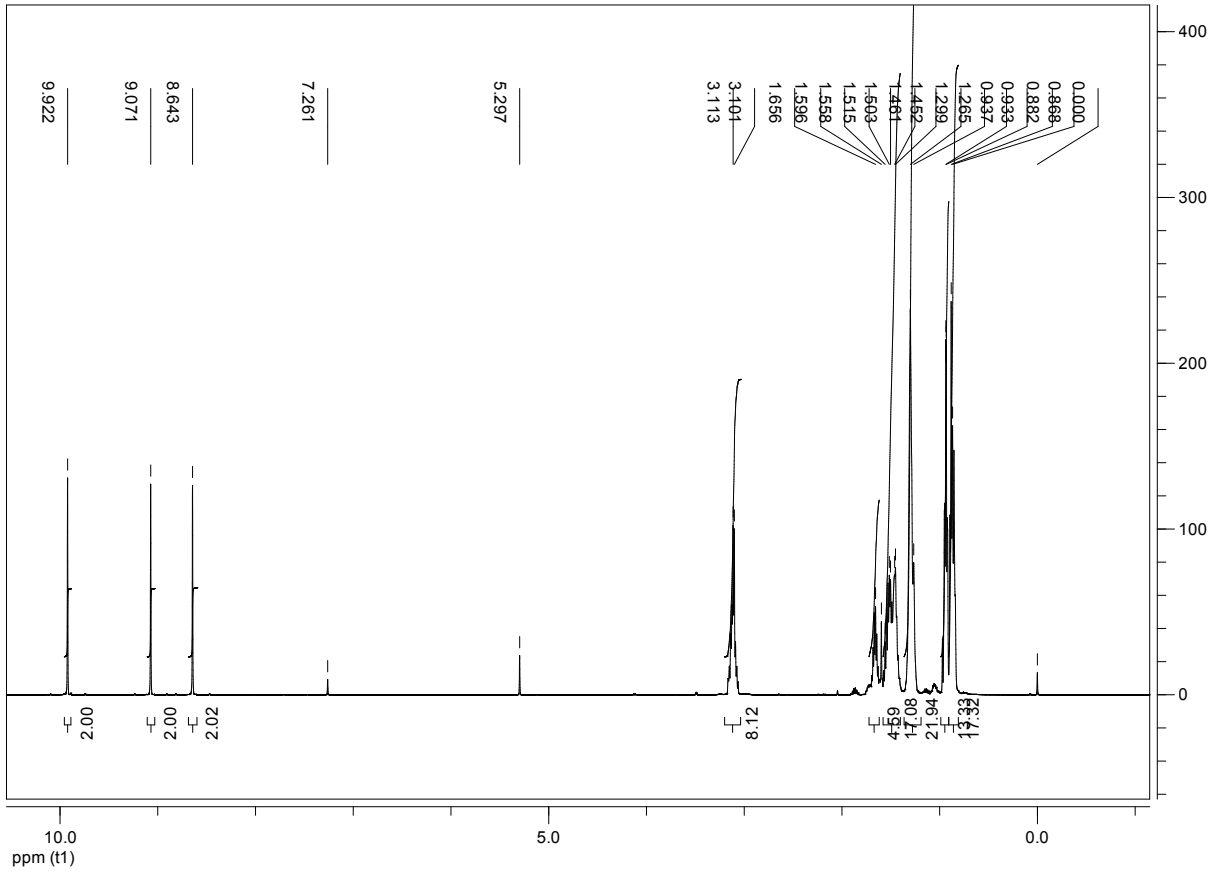

Figure S7. ^{1}H NMR spectrum for compound 3b

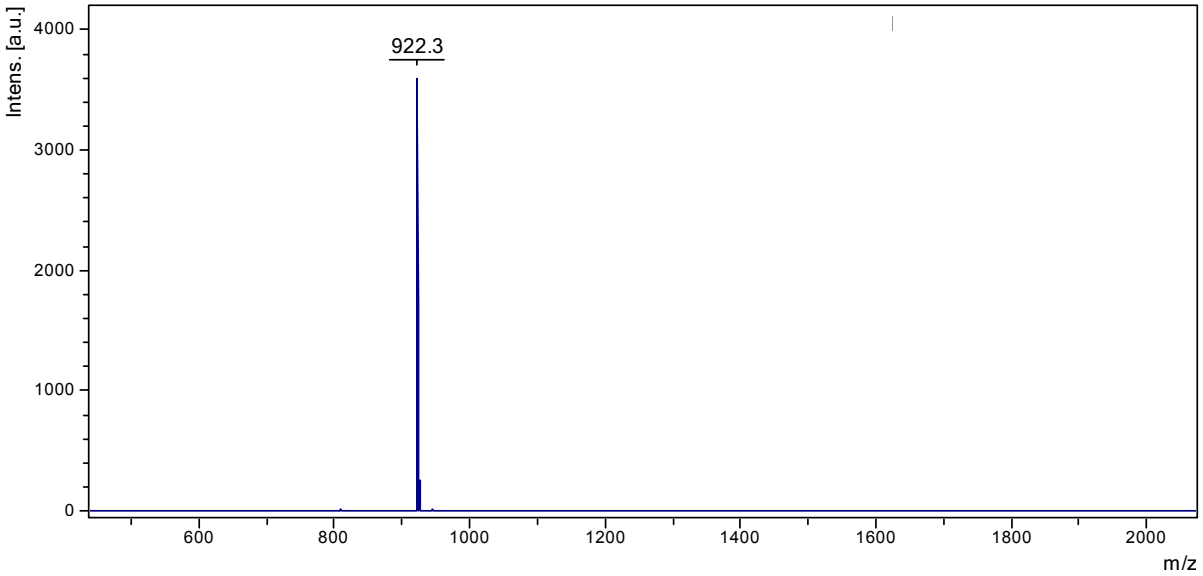

Figure S8. MALDI-TOF spectrum for compound 3b

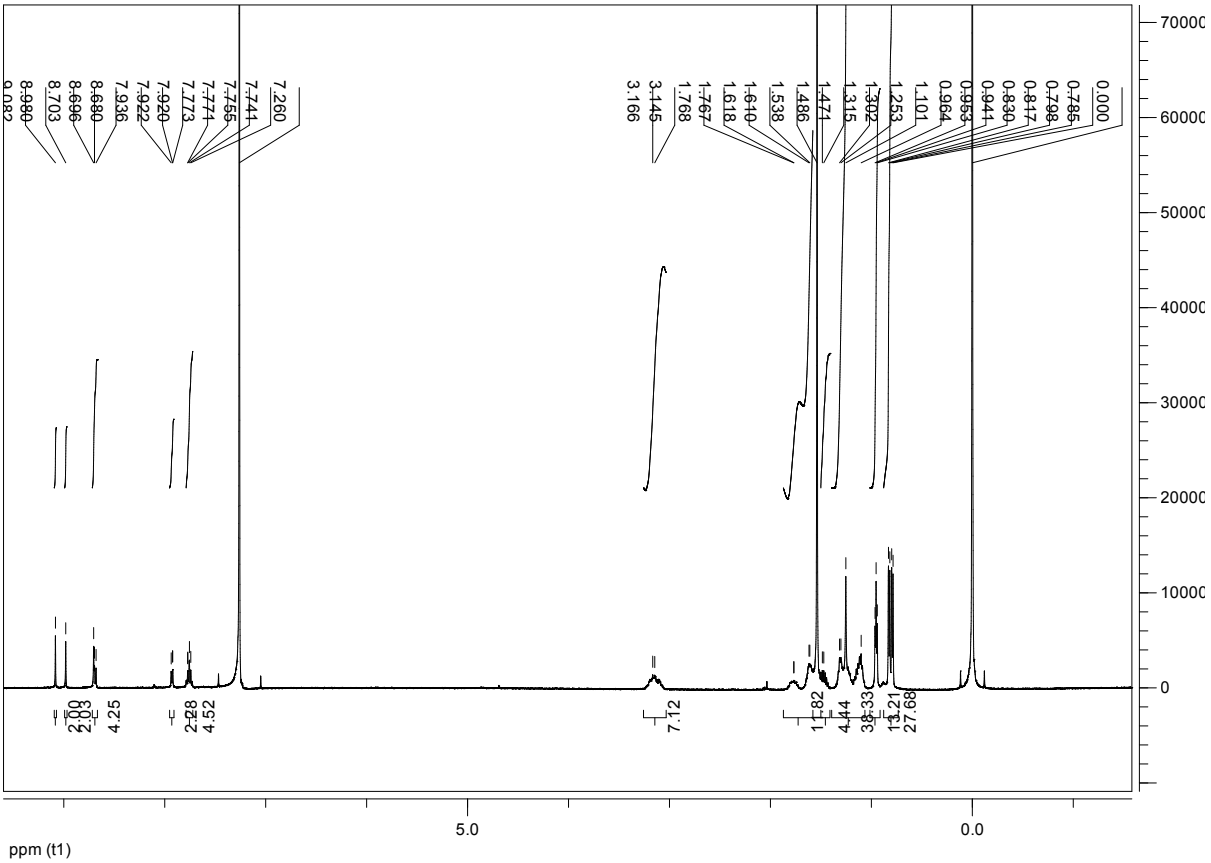

Figure S9. ^{1}H NMR spectrum for SMOIC

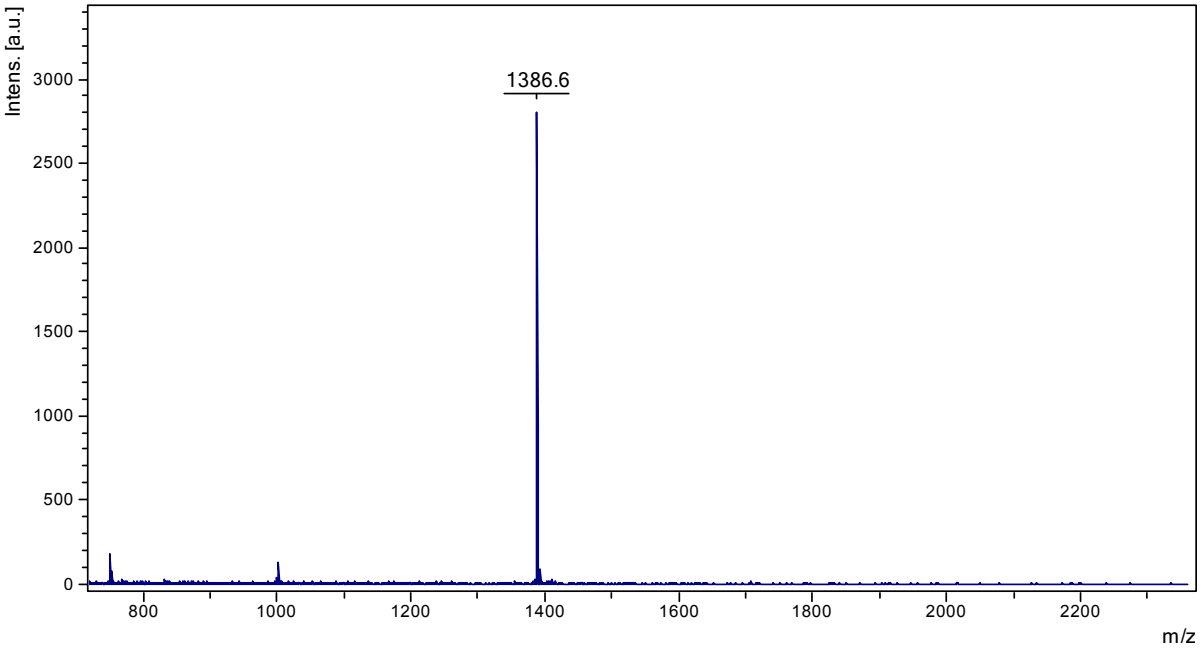

Figure S10. MALDI-TOF spectrum for SMOIC

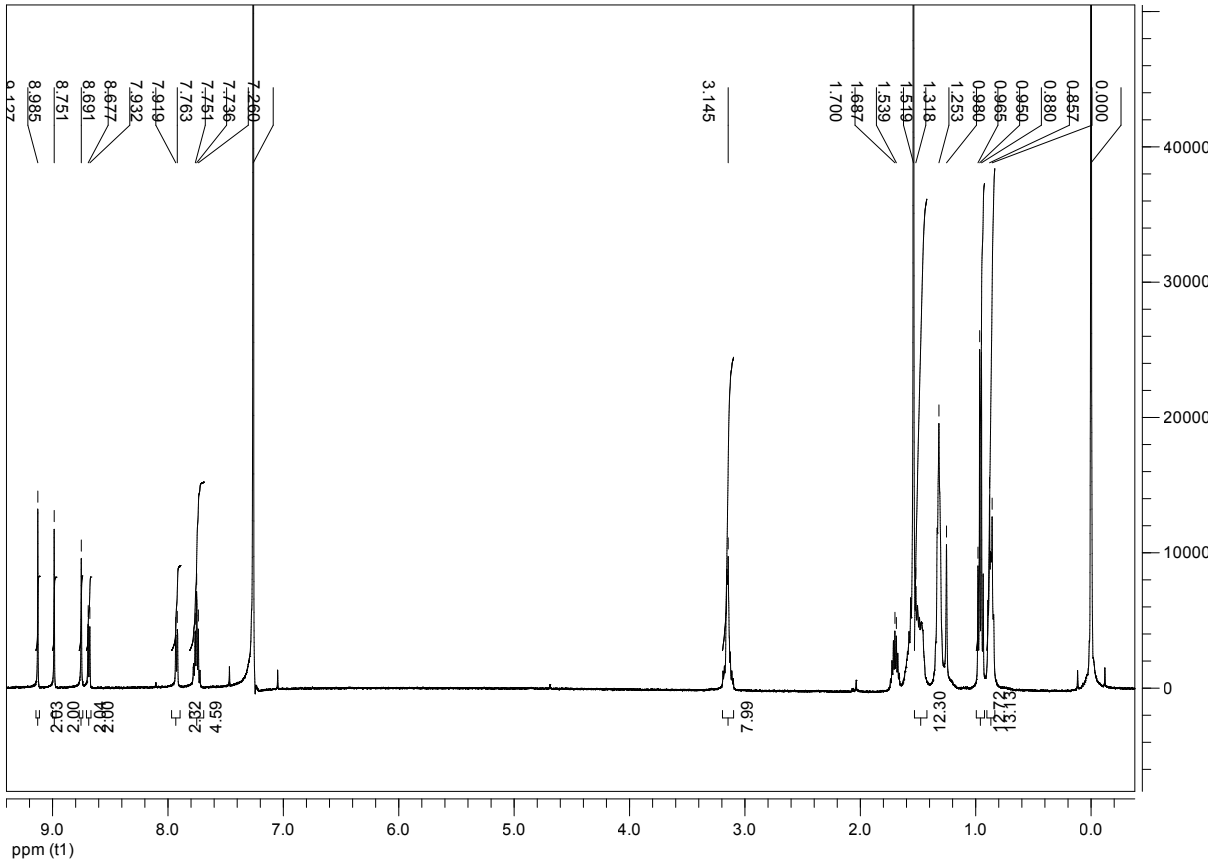

Figure S11. ^{1}H NMR spectrum for SEHIC

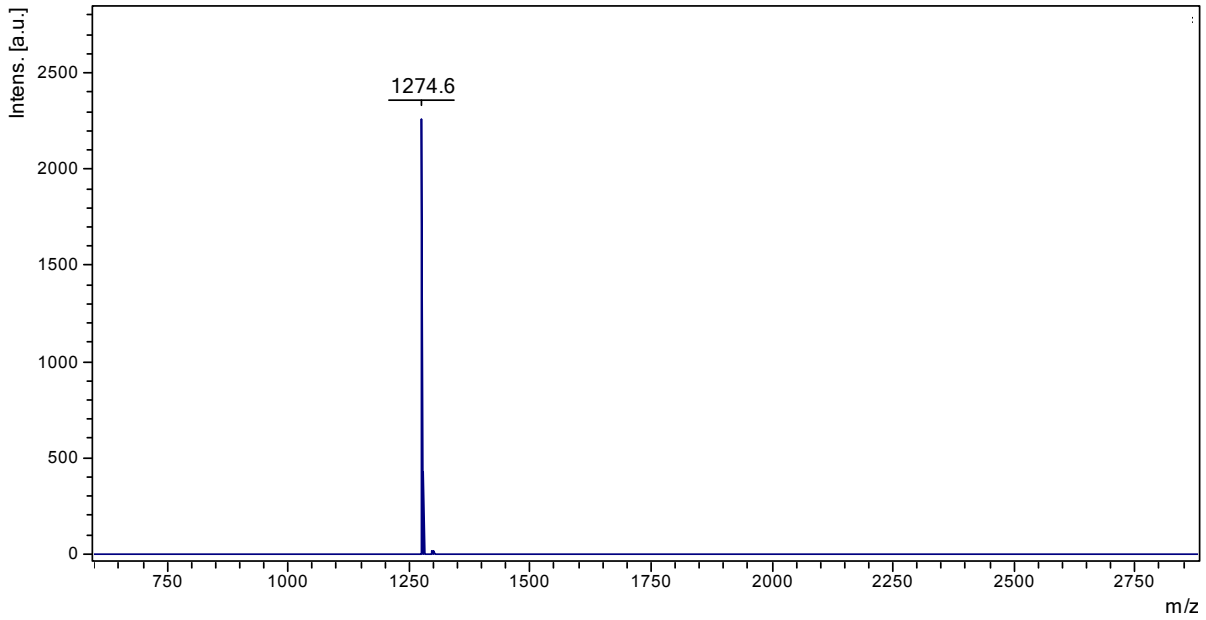

Figure S12. MALDI-TOF spectrum for SEHIC

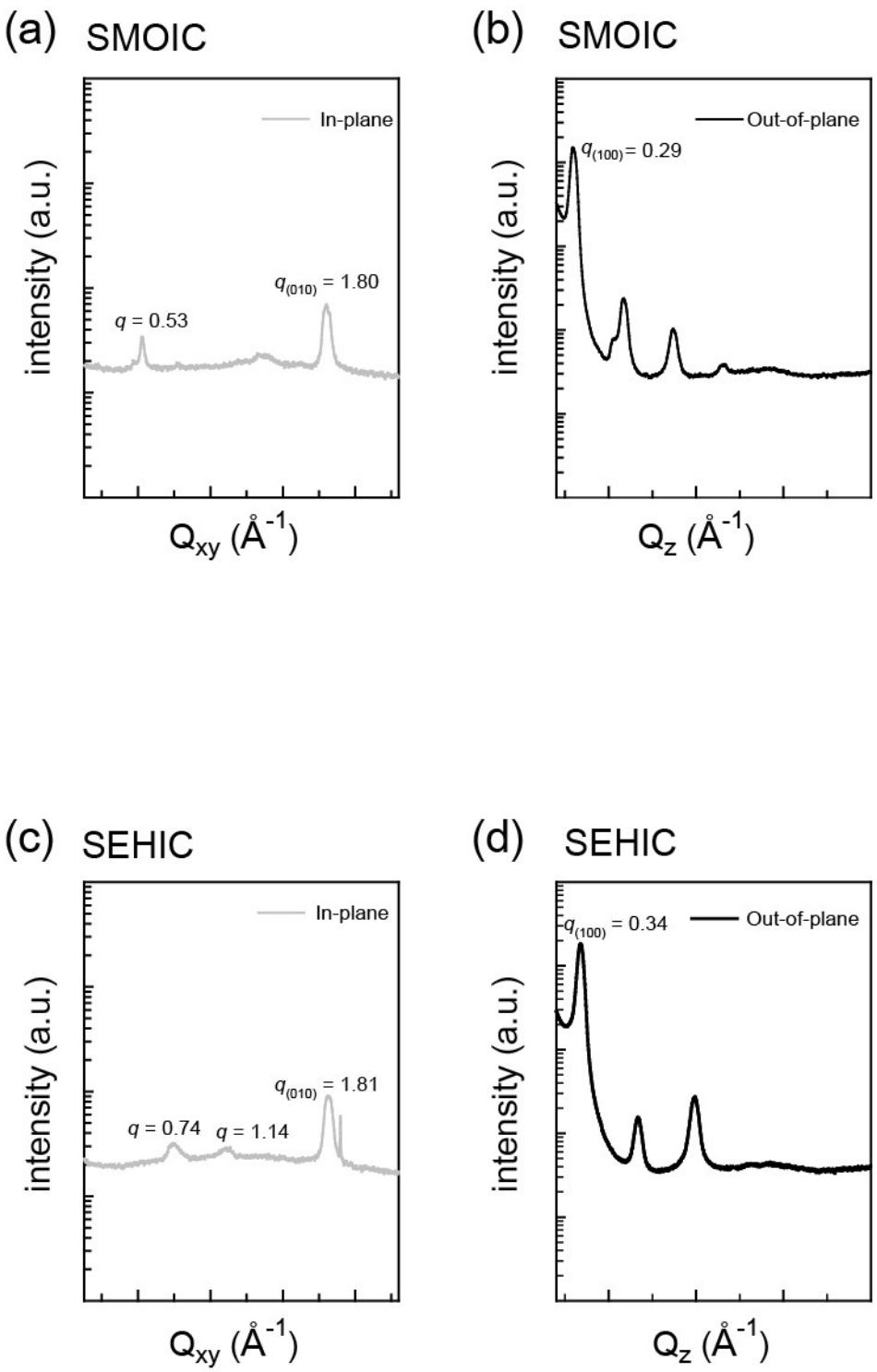

Figure S13. 1D profiles for SMOIC and SEHIC in-plane and out-of-plain directions

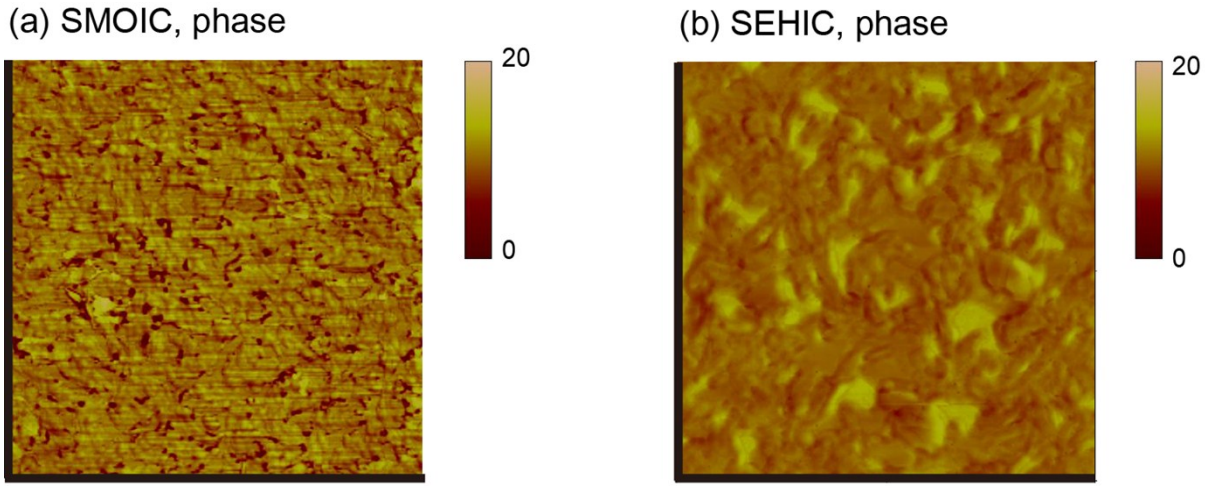

Figure S14. Tapping-mode AFM phase images of the small molecule thin films

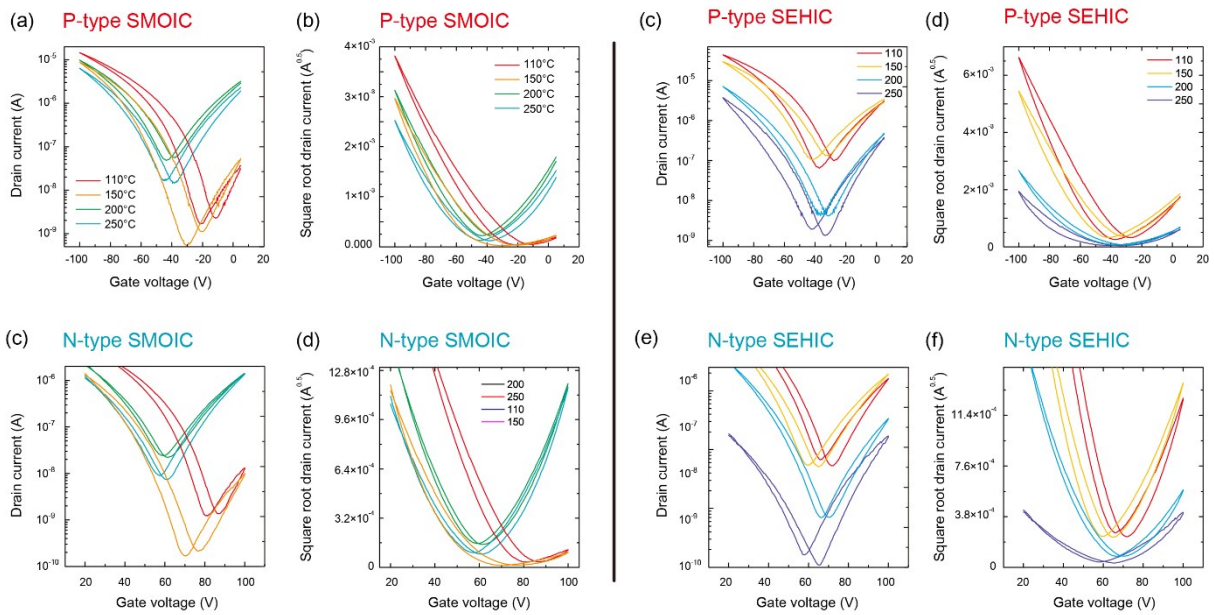

Figure S15. Transfer characteristics of OTFTs based on small molecule thin film for different annealing temperatures

Table S1. OTFT device performance for different annealing temperatures

	Annealing Temperature (°C)							
	110		**150**		**200**		**250**	
	P-type							
	μ	V_{th}	μ	V_{th}	μ	V_{th}	μ	V_{th}
SMOIC	0.044 (0.023)	-46.36 (10.24)	0.039 (0.013)	-54.57 (1.82)	0.052 (0.002)	-52.40 (1.44)	0.04 (0.007)	-57.15 (0.95)
SEHIC	0.148 (0.024)	-39.54 (1.66)	0.137 (0.024)	-46.64 (2.32)	0.035 (0.020)	-60.16 (6.17)	0.068 (0.004)	-59.42 (1.94)
	N-type							
SMOIC	4×10^{-4} (4.74×10^{-5})	78.96 (0.45)	3×10^{-4}	78.24	0.02 (0.003)	70.75 (0.38)	0.023 (0.004)	68.24 (1.16)
SEHIC	0.023 (0.004)	68.24 (1.16)	0.018 (0.005)	65.13 (0.26)	0.004 (0.001)	71.33 (1.89)	0.007 (0.0003)	74.01 (0.26)