Supporting Information

Processing of the P(NDI2OD-T2) Film without Intermediate Wetting Layer during the Spin-coating to Improve the Charge Carrier Mobility

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Table S1. The film thickness at various substrate temperatures.

Substrate temperature (°C)	Average film thickness (nm)
25	31±2
60	33±2
80	32±3
100	29±5
110	27±3

Table S2. Relationship between substrate temperature and solvent evaporation speed in p-Xylene (PX) solvent.

Solvent	Boiling point (°C)	Molar volume (ml mol^{-1})	Substrate temperature (°C)	Solvent evaporation speed (μm s^{-1})
			25	6.4±0.2
			60	31.6±1.0
			80	69.1±2.5
			90	98.0±3.5
PX	138	123.3	95	115.6±4.7
			98	129.0±5.3
			99	133.0±5.4
			100	137.0±5.6
			110	189.0±6.6
			120	257.5±9.1

Table S3. The fibrous length and width obtained by TEM.

Substrate temperature (°C)	Fibrous length (nm)	Fibrous length (nm)
25	90±14	4.2±1.5
60	113±19	5.6±1.9
80	145±26	7.1±2.4
100	185±27	9.8±3.8
110	187±32	11.6±4.6

Table S4. Relationship between the substrate temperature and solvent evaporation speed in o-Xylene (OX) solvent.

Solvent	Boiling point (°C)	Molar volume (ml mol⁻¹)	Substrate temperature (°C)	Solvent evaporation speed (μm s⁻¹)
			25	5.3±0.2
			60	26.8±1.1
			80	59.1±2.5
			90	84.8±3.4
OX	143	123.3	95	100.5±4.1
			100	117.9±4.8
			103	131.6±5.4
			105	139.8±5.7
			110	165.7±6.7
			120	225.9±9.2

Table S5. Relationship between the substrate temperature and solvent evaporation speed in m-Xylene (MX) solvent.

Solvent	Boiling point (°C)	Molar volume (ml mol⁻¹)	Substrate temperature (°C)	Solvent evaporation speed (μm s⁻¹)
			25	6.2±0.2
			60	30.6±1.2
			80	66.7±2.7
			90	94.6±3.9
MX	139	123.3	95	113.3±4.6
			100	133.0±5.4
			105	157.6±6.4
			110	184.9±7.6
			120	249.6±10.2

Table S6. Relationship between the substrate temperature and solvent evaporation speed in toluene (Tol) solvent.

Solvent	Boiling point (°C)	Molar volume (ml mol⁻¹)	Substrate temperature (°C)	Solvent evaporation speed (μm s⁻¹)
Tol	111	105.9	25	14.2±0.5
			40	29.1±1.2
			60	63.4±2.6
			80	131.6±5.4
			81	135.6±5.6
			85	156.0±6.4
			90	181.3±7.4
			100	252.1±10.3
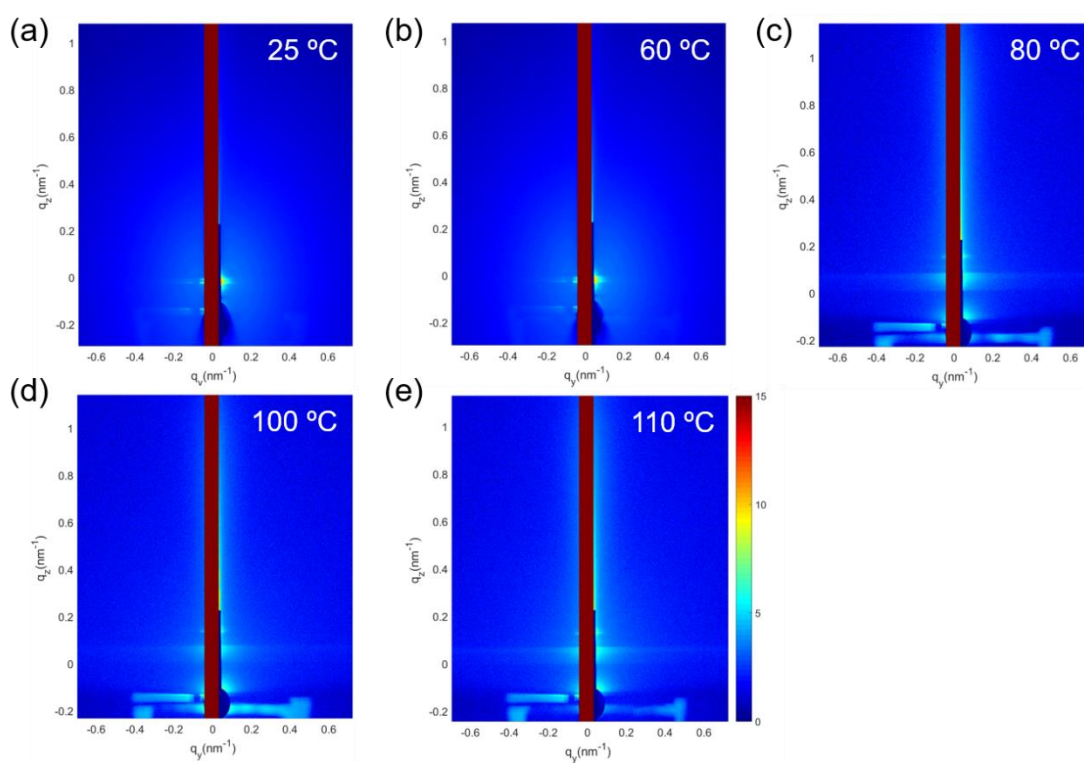
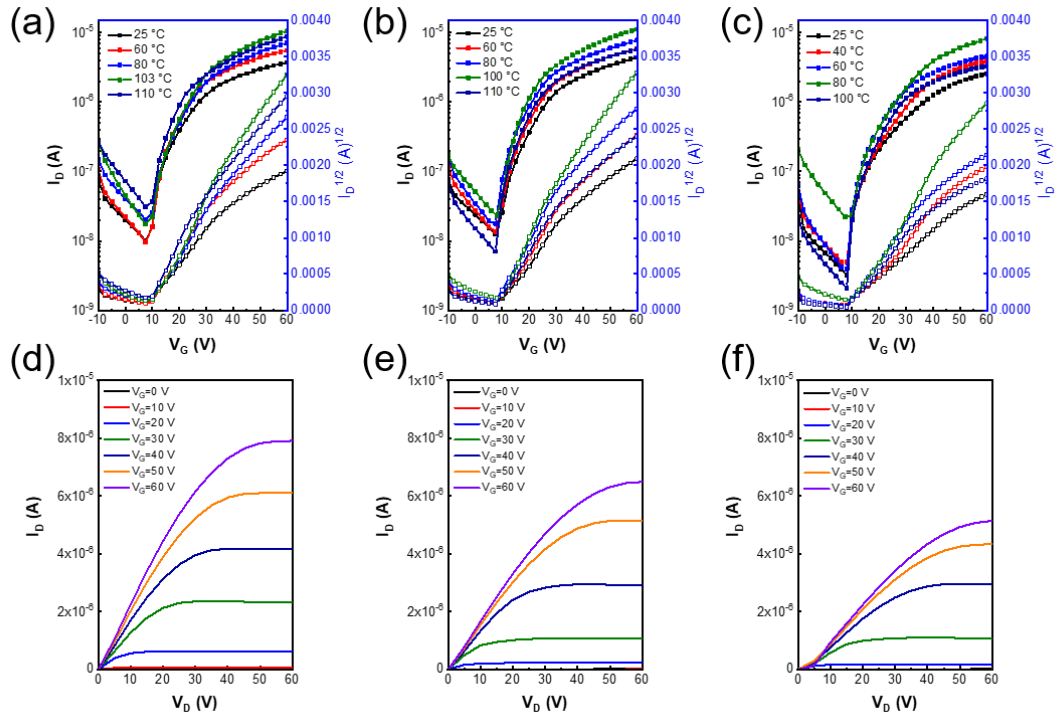**Fig. S1** SAXS diffraction patterns of P(NDI2OD-T2) films at different substrate temperatures.

Fig. S2 Transfer and output characteristic curves of OFETs devices with P(NDI2OD-T2) film under different film formation conditions (a, d) OX, (b, e) MX, and (c, f) Tol, respectively.