Supporting Information

Poly(thieno[3,2-b]thiophene-*alt*-bithiazole): a D-A copolymer donor showing improved photovoltaic performance with indene-C_{60} bisadduct acceptor

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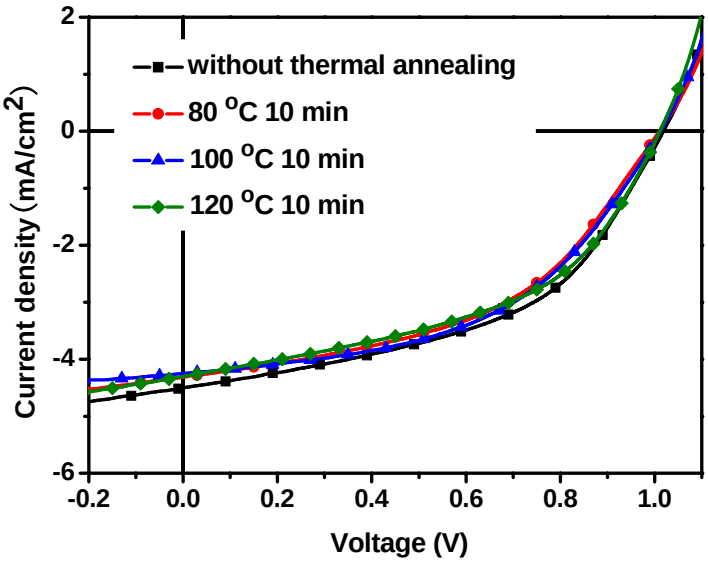

Figure S1. *I-V* curves of the PSCs based on **PTTBTz: ICBA** (1:1 w/w) without or with thermal annealing at different temperatures, under the illumination of AM 1.5, 100 mW cm^{-2}.

Table S1. Photovoltaic performances of the PSCs based on **PTTBTz: ICBA** (1:1 w/w) without or with thermal annealing at different temperatures, under the illumination of AM 1.5, 100 mW cm^{-2}

Thermal annealing	V_{oc} (V)	J_{sc} (mA/cm^2)	FF	PCE (%)
without	1.02	4.50	0.487	2.23
80 ^oC for 10 min	1.01	4.32	0.472	2.06
100 ^oC for 10 min	1.01	4.25	0.492	2.11
120 ^oC for 10 min	1.01	4.27	0.481	2.07

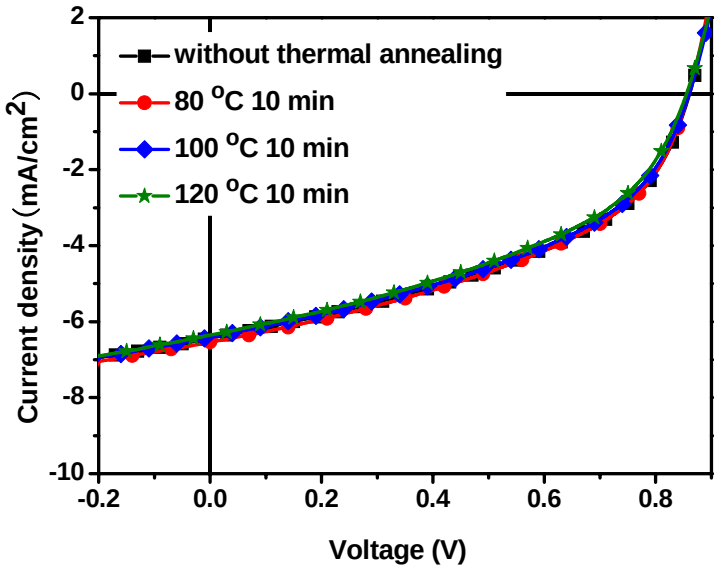

Figure S2. *I-V* curves of the PSCs based on **PTTBTz: $PC_{70}BM$** (1:1 w/w) without or with thermal annealing at different temperatures, under the illumination of AM 1.5, 100 mW cm^{-2}.

Table S2. Photovoltaic performances of the PSCs based on **PTTBTz: PC$_{70}$BM** (1:1 w/w) without or with thermal annealing at different temperatures, under the illumination of AM 1.5, 100 mW cm^{-2}

Thermal annealing	V_{oc} (V)	J_{sc} (mA/cm^2)	FF	PCE (%)
without	0.86	6.43	0.445	2.46
80 ^{o}C for 10 min	0.86	6.54	0.443	2.49
100 ^{o}C for 10 min	0.86	6.41	0.439	2.42
120 ^{o}C for 10 min	0.86	6.36	0.428	2.34

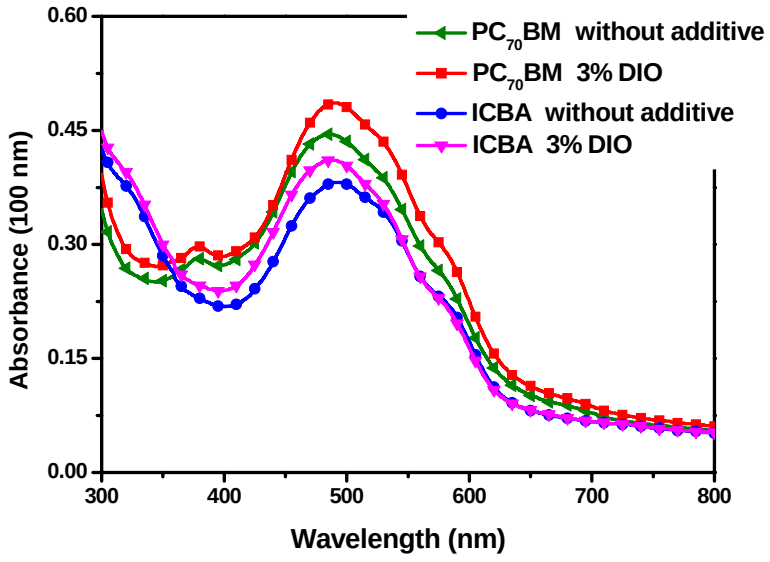

Figure S3. Absorption spectra of blend films of **PTTBTz: PC$_{70}$BM** and **PTTBTz: ICBA** (1:1 w/w) with or without DIO additive