

Supporting Information for: The Effect of Heterocyclic Anchoring Sequence on the Properties of Dithienogermole- Based Solar Cells

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Table S1. Solar cell characteristics of **DTGe(ThFBTTh₂)₂** devices.

Ratio	Additive	Annealing (°C)	J_{SC} (mAcm ⁻²)	V_{OC} (V)	FF	PCE (%)
3:7	none	As-cast	3.915	0.516	0.305	0.617
3:7	none	80	4.523	0.618	0.310	0.867
3:7	none	100	4.388	0.675	0.294	0.870
3:7	none	120	0.003	0.660	0.192	0.000
4:6	none	As-cast	4.441	0.529	0.296	0.694
4:6	none	80	4.811	0.634	0.296	0.903
4:6	none	100	4.015	0.615	0.351	0.866
4:6	none	120	5.064	0.651	0.428	1.412
5:5	none	As-cast	4.391	0.572	0.291	0.732
5:5	none	80	5.506	0.631	0.263	0.914
5:5	none	100	6.497	0.622	0.366	1.476
5:5	none	120	7.658	0.675	0.349	1.803
6:4	none	As-cast	5.076	0.567	0.273	0.785
6:4	none	80	7.802	0.639	0.314	1.565
6:4	none	100	9.486	0.641	0.432	2.626
6:4	none	120	8.005	0.675	0.379	2.046
7:3	none	As-cast	4.395	0.585	0.284	0.730
7:3	none	80	7.589	0.668	0.466	2.361
7:3	none	100	8.334	0.670	0.522	2.915
7:3	none	120	6.365	0.688	0.446	1.951

Table S2. Solar cell characteristics of **DTGe(FBTTh₃)₂** devices.

Ratio	Additive	Annealing (°C)	J_{sc} (mAcm ⁻²)	V_{oc} (V)	FF	PCE (%)
3:7	none	As-cast	6.474	0.648	0.264	1.107
3:7	none	80	8.725	0.701	0.304	1.863
3:7	none	100	8.408	0.730	0.387	2.376
3:7	none	120	10.623	0.658	0.340	2.374
4:6	none	As-cast	6.858	0.667	0.244	1.117
4:6	none	80	6.875	0.715	0.295	1.449
4:6	none	100	8.470	0.757	0.388	2.488
4:6	none	120	8.247	0.691	0.375	2.137
5:5	none	As-cast	6.329	0.675	0.279	1.192
5:5	none	80	9.280	0.743	0.291	2.006
5:5	none	100	9.48	0.758	0.302	2.174
5:5	none	110	10.10	0.769	0.362	2.812
5:5	none	120	10.64	0.753	0.404	3.240
5:5	none	130	9.36	0.721	0.430	2.953
6:4	none	As-cast	6.680	0.645	0.293	1.262
6:4	none	80	6.109	0.685	0.323	1.350
6:4	none	100	7.676	0.768	0.413	2.435
6:4	none	120	8.399	0.704	0.456	2.693
7:3	none	As-cast	1.702	0.428	0.211	0.153
7:3	none	80	2.112	0.581	0.202	0.248
7:3	none	100	3.617	0.719	0.302	0.785
7:3	none	120	6.904	0.726	0.468	2.347

Table S3. Solar cell characteristics of **DTGe(FBTTh₃)₂** and **DTGe(ThFBTTh₂)₂** devices processed with CH₂Cl₂ vapor.

Material	D:A ratio	SVA (seconds)	J_{sc} (mAcm ⁻²)	V_{oc} (V)	FF	PCE (%)
DTGe(ThFBTTh ₂) ₂	7:3	0	4.516	0.630	0.277	0.790
DTGe(ThFBTTh ₂) ₂	7:3	10	11.154	0.595	0.373	2.476
DTGe(ThFBTTh ₂) ₂	7:3	20	12.736	0.584	0.447	3.329
DTGe(ThFBTTh ₂) ₂	7:3	40	11.513	0.567	0.495	3.229
DTGe(ThFBTTh ₂) ₂	7:3	80	11.843	0.540	0.562	3.595
DTGe(FBTTh ₃) ₂	5:5	0	7.613	0.649	0.360	1.782
DTGe(FBTTh ₃) ₂	5:5	10	7.731	0.591	0.339	1.550
DTGe(FBTTh ₃) ₂	5:5	20	7.344	0.513	0.324	1.222
DTGe(FBTTh ₃) ₂	5:5	40	10.138	0.570	0.327	1.889
DTGe(FBTTh ₃) ₂	5:5	80	9.548	0.613	0.518	3.029

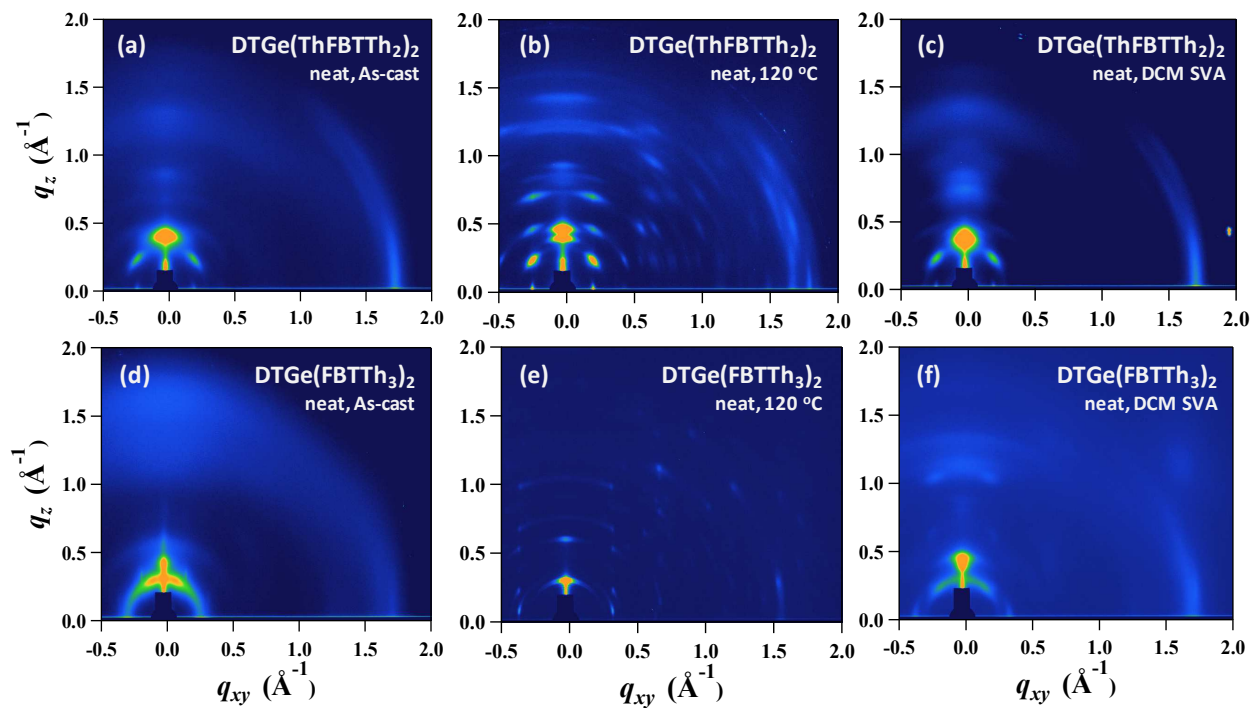


Figure S1. GIWAXS patterns of DTGe(ThFBTTh₂)₂ (a-c) and DTGe(FBTTh₃)₂ (d-f) neat films. Images (a, d) correspond to as-cast films; images (b, e) correspond to films thermally annealed at 120 °C while images (c, f) correspond to SVA films.