

Supporting Information

(J. Mater. Chem., paper no. B918362K)

A Ternary Cascade Structure Enhances the Efficiency of Polymer Solar Cells

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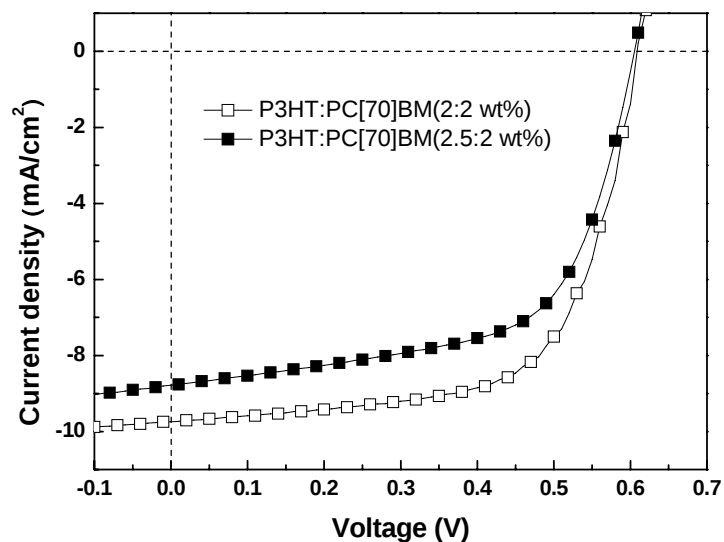


Figure S1 The comparison of the solar cell devices with different blending ratios. The PC[70]BM concentration was controlled at 2 wt%.

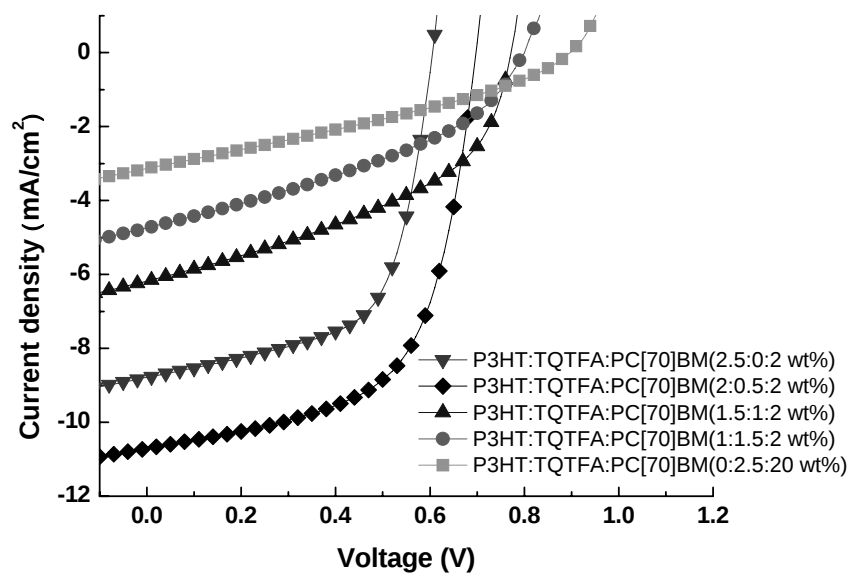


Figure S2 Device characteristics of BHJ devices with various blending concentrations.

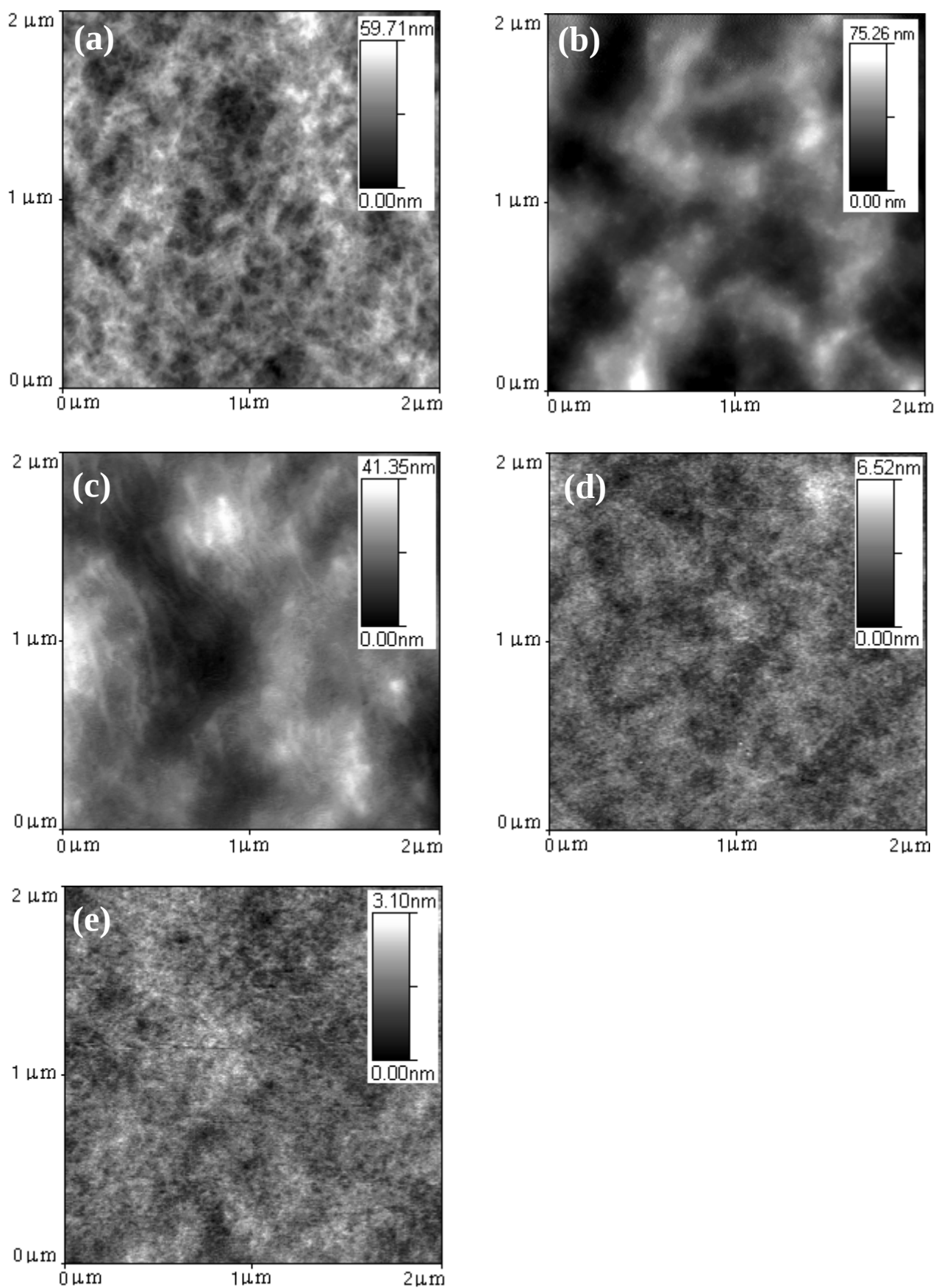


Figure 3S Topography of various blends for (a) P3HT:TQTF A:PC[70]BM (2.5:0:2 wt%), (b) (2:0.5:2 wt%), (c) (1.5:1:2 wt%), (d) (1:1.5:2 wt%) and (e) (0:2.5:2 wt%).

Table 1S The summary of the cell performance fabricated from various blending ratios.

P3HT:PC[70]BM:TQTFA	J_{SC}	V_{OC}	FF	PCE
(wt%)	(mA/cm ²)	(V)	(%)	(%)
25:0:20	8.78	0.60	62.1	3.27
20:5:20	10.62	0.69	60.7	4.50
15:10:20	6.18	0.77	44.7	2.13
10:15:20	4.73	0.80	38.3	1.45
0:25:20	3.13	0.89	32.4	0.90