

Supplemental Information

A novel buck heterojunction solar cell based on donor-acceptor conjugated triphenylamine dye

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1. Measurement of film morphologies by AFM

The morphologies of BzTCA : PCBM film with different weight ratios (1:1, 1:2 and 1:3, by weight) were measured by AFM. The measured substrates are indium tin oxide (ITO) spin-coated with a 40-nm layer of BzTCA : PCBM with various blend ratios. AFM images are collected under ambient conditions using the Innova scanning probe microscope (Veeco). Silicon probes with spring constants of $\sim 5 \text{ N m}^{-1}$ and resonant frequencies of 75 KHz (Budget Sensors) were used for tapping mode AFM measurements.

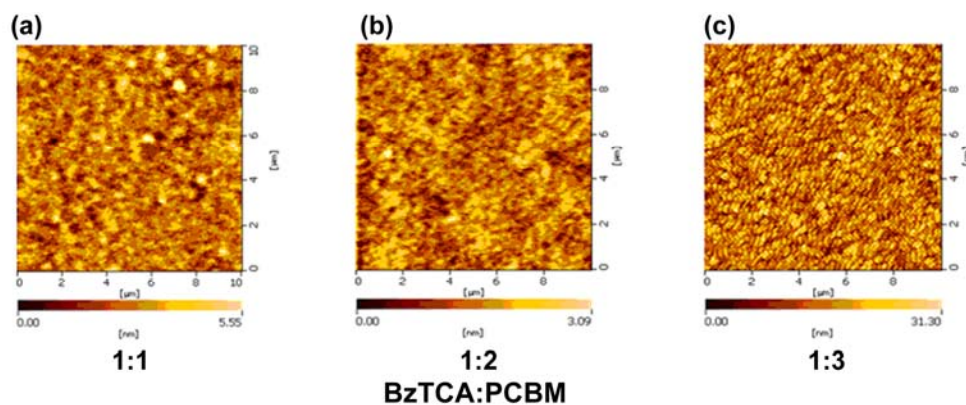


Fig. S1 AFM images of bulk heterojunction solar cells with various blend ratio of BzTCA : PCBM at 1:1 (a); 1:2 (b) and 1:3 (c).

Reference

1. Z. M. Tang , T. Lei , K. J. Jiang, Y. L. Song and J. Pei, Chemistry-An Asian Journal, 2010, 5, 1455.