

RSC Advances Supporting Information

Semiconducting/Insulating Polymer Blends with Dual Phase Separation for Organic Field-Effect Transistors

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Table S1. Electrical properties of OFETs based on 24-DPP-TVT (29-DPP-TVT) films or 24-DPP-TVT (29-DPP-TVT)/PMMA blend films.

	μ^a [cm ² V ⁻¹ s ⁻¹]	μ^b [cm ² V ⁻¹ s ⁻¹]	I_{ON}/I_{OFF}
DPP-C24	0.4 (±) 0.09	0.013 (±) 0.001	10 ⁷
DPP-C24/PMMA	0.012 (±) 0.003	0.0008 (±) 0.0001	10 ⁶
DPP-C29	0.83 (±) 0.15	0.014 (±) 0.001	10 ⁸
DPP-C29/PMMA	0.67 (±) 0.1	0.011 (±) 0.001	10 ⁸

^a) Obtained at the low gate voltage near the turn-on region; ^b) Obtained at the high gate voltage in Figure 4(b).

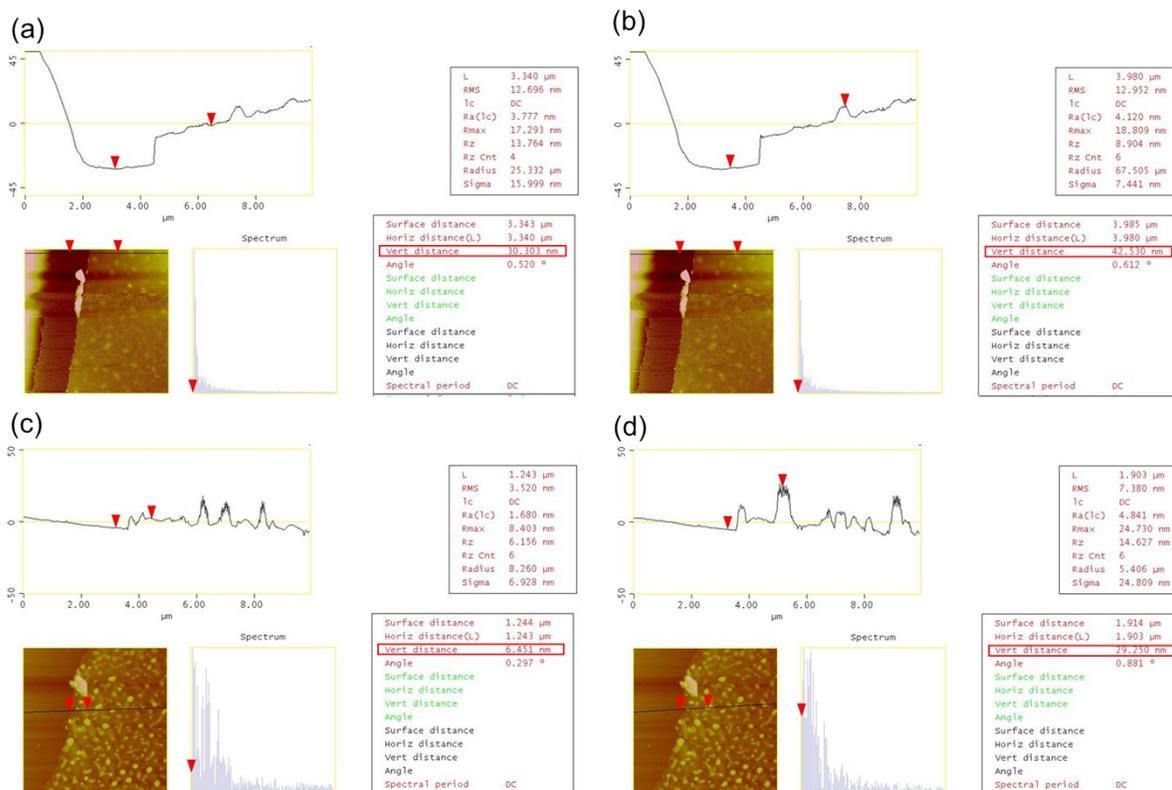


Figure S1. AFM surface profiles and height images of 24-DPP-TVT/PMMA blend films before (a, b) and after (c, d) etching PMMA layer with acetic acid. 24-DPP-TVT/PMMA blend films were scratched with a knife for measuring thickness.

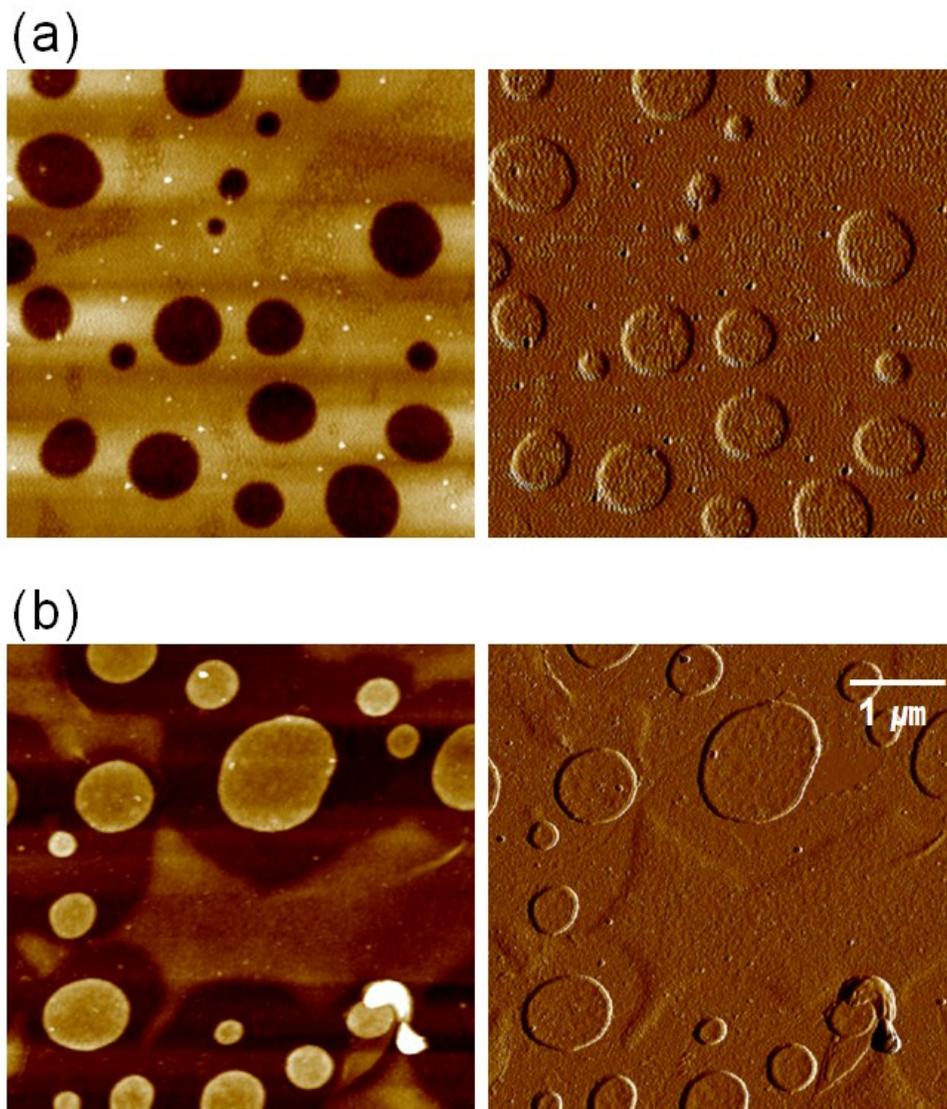
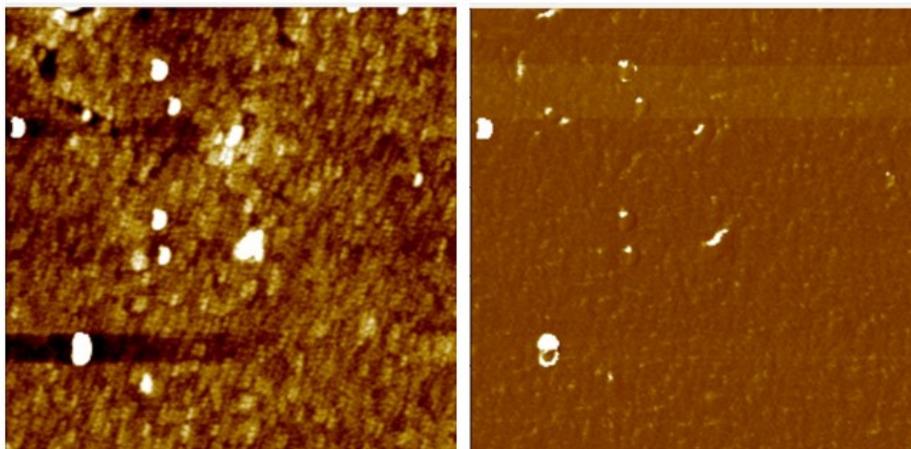


Figure S2. AFM height (left) and phase (right) images of P3HT:PMMA (1:3) blend film before (a) and after etching PMMA layer with acetic acid (b).

(a)



(b)

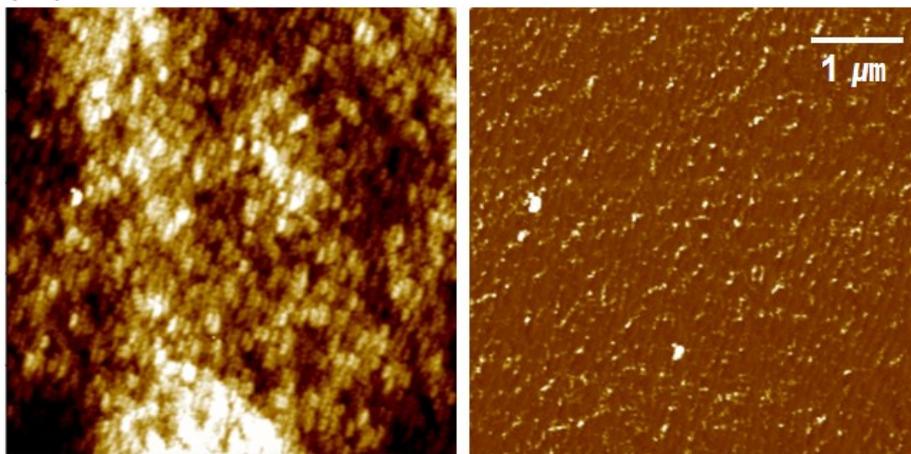


Figure S3. AFM height (left) and phase (right) images of 24-DPP-TVT film (a), and 29-DPP-TVT film (b).