Supplementary Data

		part (a)				part (b)			
		R_{T-R} = 1				R_{T-R} = 3			
2nd solvent	bp (°C)	$<\mu_{lin}>$ ($cm^2V^{-1}s^{-1}$)	$<\mu_{sat}>$ ($cm^2V^{-1}s^{-1}$)	$c_{v,sat}$ *(%)*	$<I_{OFF}>$ (nA)	$<\mu_{lin}>$ ($cm^2V^{-1}s^{-1}$)	$<\mu_{sat}>$ ($cm^2V^{-1}s^{-1}$)	$c_{v,sat}$ *(%)*	$<I_{OFF}>$ (nA)
butyl acetate	127	0.23	0.11	14	0.76	0.86	0.55	13	0.29
amyl acetate	149	0.17	0.07	23	53	0.93	0.65	17	1.7
cumene	153	0.29	0.19	22	0.01	0.92	0.60	13	0.59
anisole	154	0.62	0.45	83	1.6	1.33	1.22	27	0.99
mesitylene	166	0.09	0.05	39	43	1.11	0.80	8	0.85
4-methyl anisole	174	0.33	0.09	18	1.4	1.08	0.86	12	0.26
indan	176	0.06	0.06	84	36	0.96	0.63	7	0.56

5.6E-10

Table S1. Results of average linear mobility, $<\mu_{lin}>$, saturation mobility, $<\mu_{sat}>$, and off-current, $<I_{OFF}>$, for TFT devices prepared from TIPS-pentacene:PS blends based on single (mesitylene) and dual solvent solutions (mesitylene and 2nd solvent). The parameter, $c_{v,sat}$ *(%)*, is the coefficient of variation of each data set of saturation mobilities, i.e. the ratio of the standard deviation to the mean, $<\mu_{sat}>$. Statistics are from six random devices. Part (a) shows device performance from stock solutions mixed in ratio R_{T-R} = 1 and part (b) from R_{T-R} = 3

Statistics of terrace heights for surface morphology of typical TIPS-pentacene:PS film deposited from mesitylene-anisole solutions with R_{T-R} = 3 (Fig. 5a)

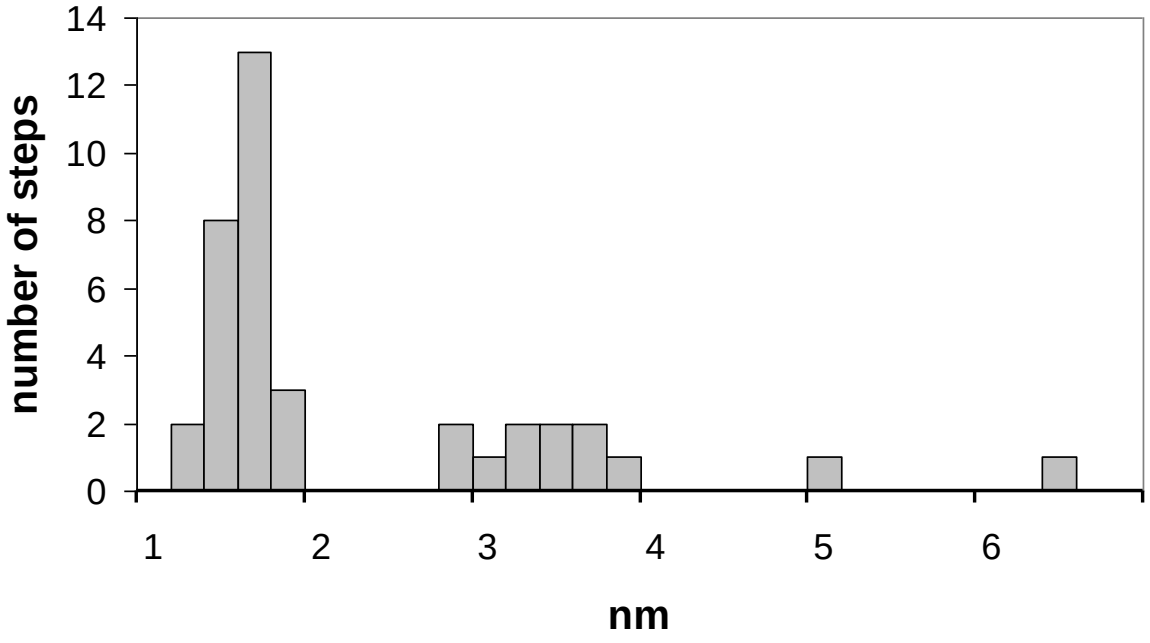

Figure S1. Histogram of the number of plateau height differentials identified in cross sectional analysis of AFM height scans (eg. Fig. 5a). A plateau was defined as a cross-sectional region with height variation < 5%. A total of 43 plateaus are used for the frequency distribution with bin size of 0.2nm. The data show a peak around d ~ 1.6 nm and 3.4 nm,

5.1 nm and 6.5 nm. Assuming that this is due to a series of monolayers, with variations due to random sources of small errors, the lattice unit was calculated as $\langle d \rangle = 1.64 \pm 0.04$ nm.