Orthogonal Self Assembly and Selective Solvent Vapor Annealing: Simplified Processing of a Photovoltaic Blend

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ELECTRONIC SUPPORTING INFORMATION

Experimental Details.

Chemicals. Chloroform and methanol (spectrophotometric grade) were purchased from Aldrich Chemical co. and used as received. Dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene (DTBDT-C₆) and N,N'-Di-[

Techniques. UV-vis absorption spectra were recorded on a Jasco spectrophotometer (mod. V-560) using quartz cuvettes. Atomic force microscopy (AFM) and Kelvin Probe Force Microscopy (KPFM) images were recorded using a Multimode IIIA (Veeco) scanning probe microscope with Extender Electronics module. Imaging was done in tapping mode using a conductive SCM-PIT probe (Veeco, Pt/Ir coated Si with frequency $f₀=75$ KHz and nominal tip radius $≤20$nm). All images were collected under ambient conditions at 10% relative humidity and RT with a scanning raster rate of 1 Hz. KPFM measurements were acquired in lift mode (lift height = 30 nm, $V_{AC}$=500 mV).

References


**Fig. S1.** UV-vis absorption spectra of the electron donor (black), acceptor (red), and their blend (green) dissolved in CHCl₃. Concentrations: ~ 10⁻⁵ M; optical path length: 0.5 cm.

**Fig. S2.** Height of PEG-PDI layers after SVA in methanol vs. layer number, as determined through histogram analysis of AFM topographical images. First layer: (1.8 ± 0.2 nm); overlayers (2.9 ± 0.2 nm).