Supporting Information for

Microstructure variability in poly(3-hexylthiophene) nanofibers

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Atomic Force Microscopy

Figure S1 shows topography atomic force microscope (AFM) images of nanofibers which were formed from different solvents. Solutions of nanofibers were diluted and spin-cast or drop-cast on a glass substrate. The nanofibers are all similiar in dimension, several micrometers in length, 40 ± 10 nm in width, and 5 ± 2 nm in height.

Figure S2 (top) shows the Pearson VII peaks fit to the powder XRD (010) peaks. These are aligned to each other to compare the relative breadth of each peak. The raw data with its fit is shown below. The "better" solvents result in narrower diffraction peaks, corresponding to larger coherent domains. The fits are reasonable.

65

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Figure S1: AFM topography images of P3HT nanofibers formed from a) 42 kDa in anisole, b) 65 kDa in anisole, c) 65 kDa in A/CF, d) 65 kDa in p-xylene, and e) 65 kDa in tolune. All the images are 5.0 μ m across, except d) which is 2.5 μ m.



Figure S2: The fits of the (010) peaks (top) are shown of the 65 kDa toluene, 65 kDa p-xylene, 65 kDa 4:1 A/CF, 65 kDa anisole and 42 kDa anisole nanofibers. Also shown (bottom) is the raw data plotted with its Pearson VII fit.