Supporting Information

Quantitative Analysis of the Size Effect of Room Temperature Nanoimprinted P3HT Nanopillar Arrays on Photovoltaic Performance

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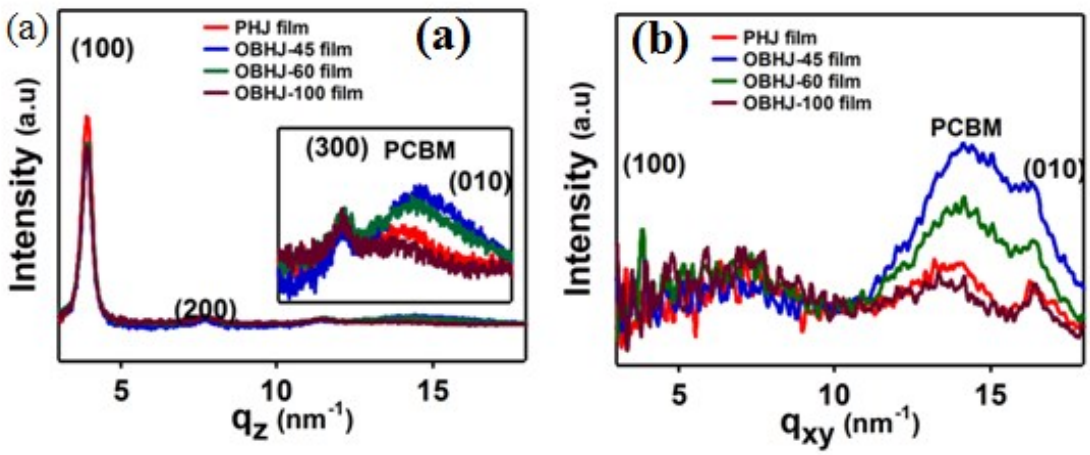

Fig. S1. One dimensional GIWAXD intensity profiles extracted from the 2D-GIWAXD images of diverse type films integrated along the q_z (a) and the q_{xy} (b) directions. The inset graph of (a) is the amplified views of diffraction intensity in the range of q_z=9-18 nm^{-1}.

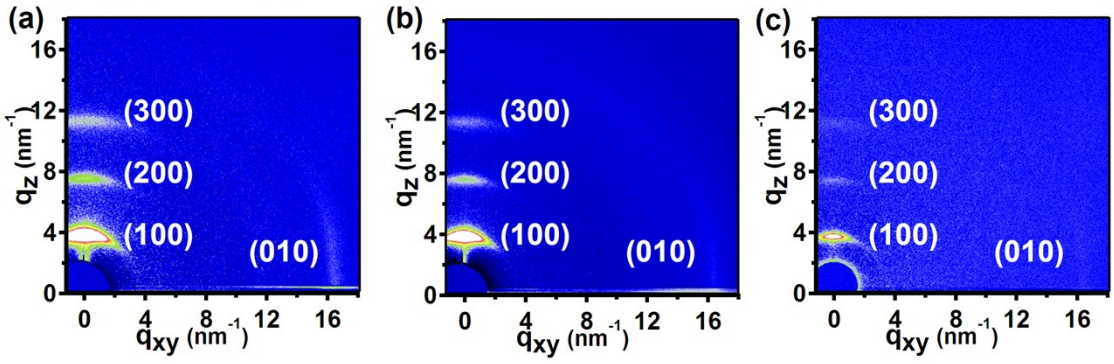

Fig. S2. The 2D-GIWAXD images of unprocessed P3HT films with thickness of 120 nm (a), 50 nm (b) and 20 nm (c).

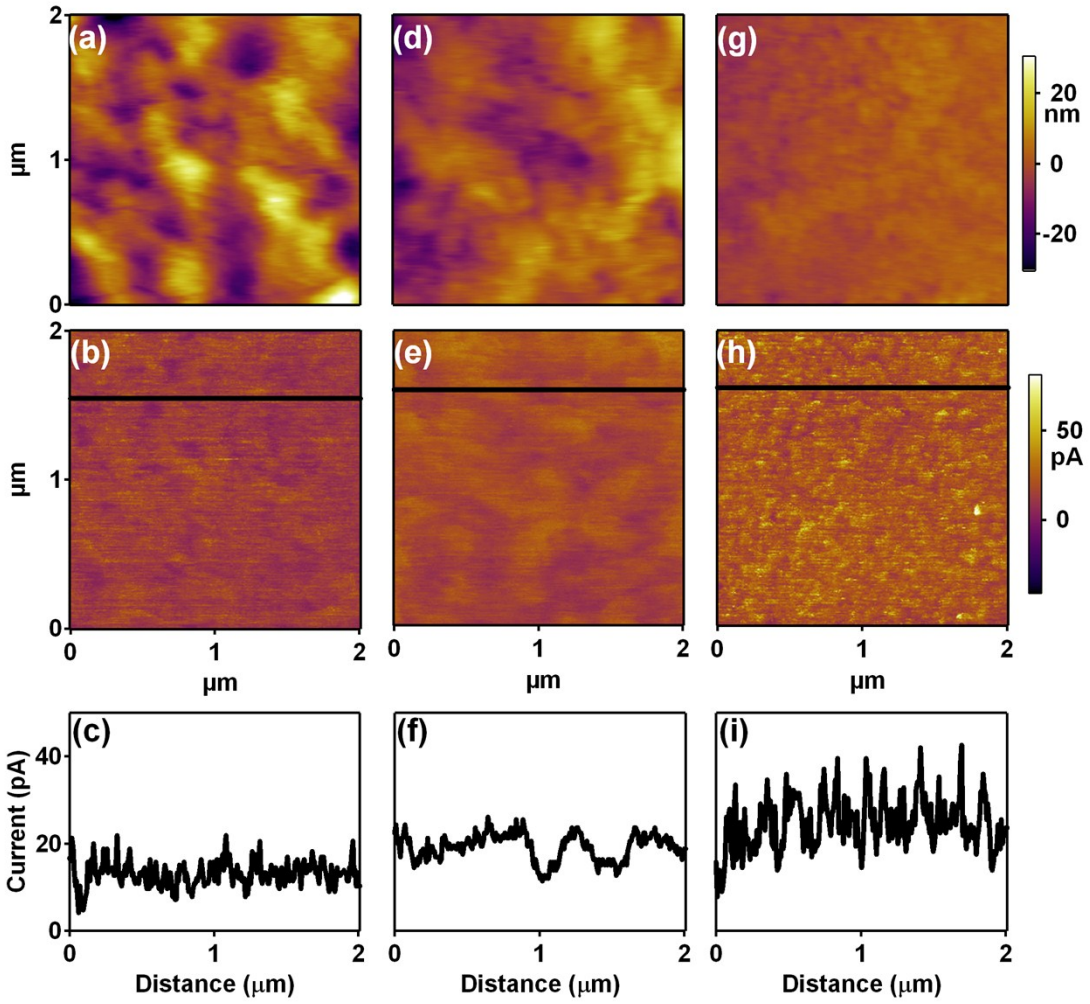

Figure S3. Left column: C-AFM height image (a), current image (b) and cross-sectional profile (c) of P3HT thin film with thickness of 120 nm. **Middle column**: height image (d), current image (e) and cross-sectional profile (f) of P3HT thin film with thickness of 50 nm. **Right column**: height image (g), current image (h) and cross-sectional profile (i) of P3HT film with thickness of 20 nm. The black lines in graphs (b), (e) and (h) show the directions of corresponding cross-sectional images (c), (f) and (i).

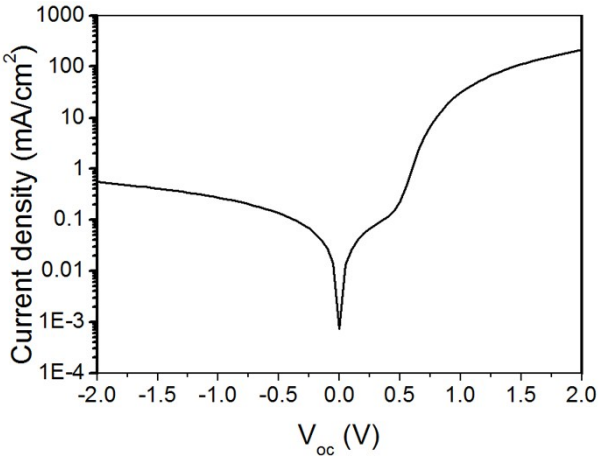

Figure S4. Dark *J-V* curve of PSCs based on OBHJ-45.