

Electronic Supplementary Information (ESI)

The maintaining of nanoimprinting-induced face-on alignment in poly(3-hexylthiophene) nanopillars after thermal annealing

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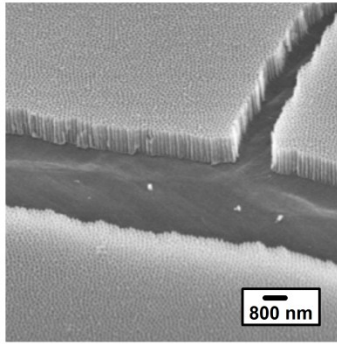


Fig. S1 The cross-sectional SEM image of the AAO template.

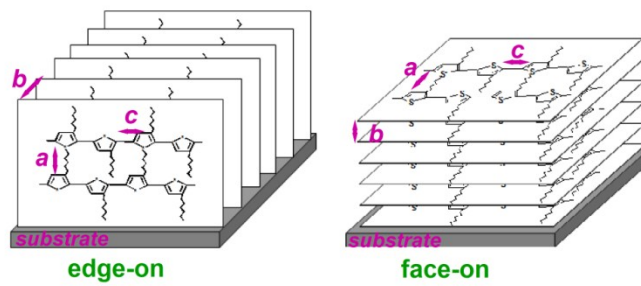


Fig. S2 Schematic alignment of edge-on and face-on molecular orientation of P3HT molecule chains.

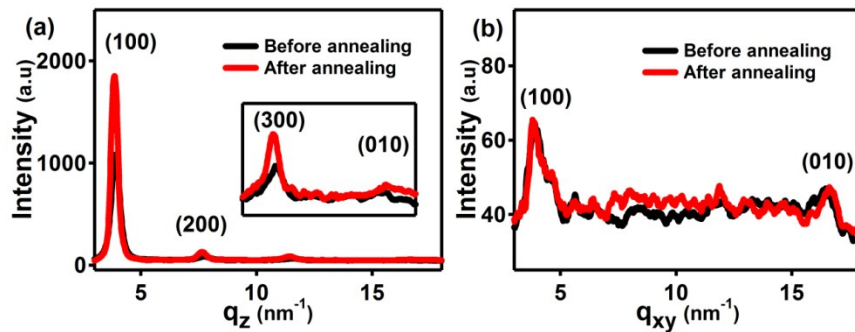


Fig. S3 The one dimensional (1D) GIWAXD intensity profiles integrated along the q_z direction (a) and along the q_{xy} direction (b) for P3HT nanopillar film before and after annealing. The integrated data are collected from the corresponding 2D images as shown in Figures 2 and 3.

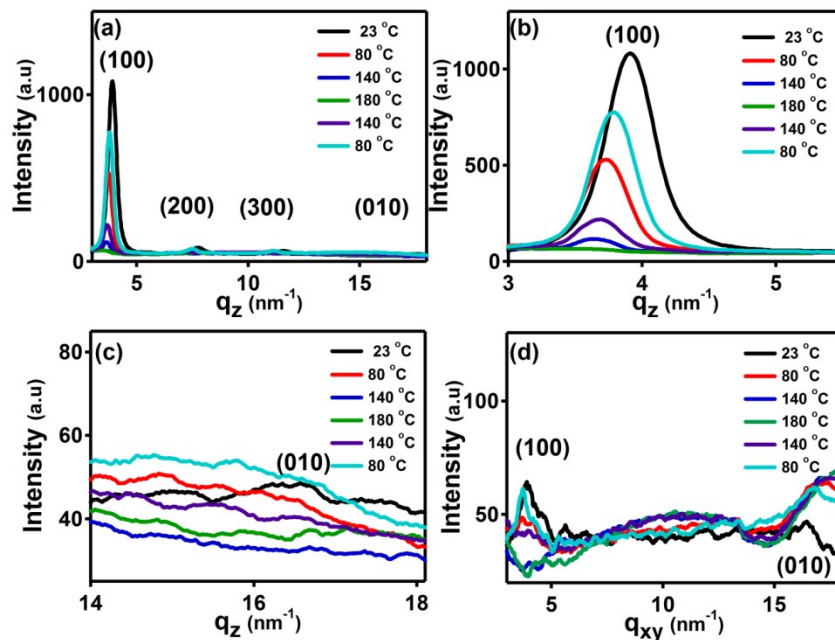


Fig. S4 The 1D GIWAXD intensity profiles of P3HT nanopillar film integrated along the q_z direction (a-c) and along the q_{xy} direction (d). The integrated data are obtained from the 2D patterns shown in Figure 4. The integrated figures (b) and (c) show magnified details of the (100) and (010) peaks along the q_z direction.

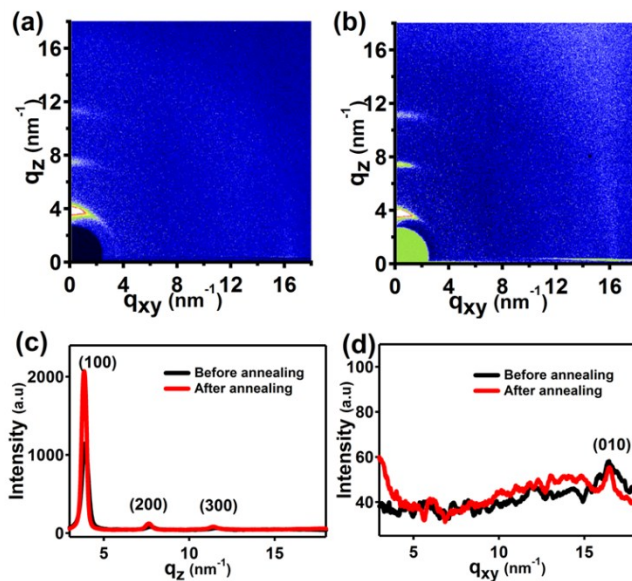


Fig. S5 The 2D GIWAXD images of unpatterned P3HT film before (a) and after (b) thermal annealing. 1D GIWAXD intensity profiles of unpatterned polymer film integrated along the q_z direction (c) and along the q_{xy} direction (d). The integrated data in (c) and (d) are collected from the corresponding 2D images as shown in (a) and (b).