

Supporting Information

Controlled Evaporative Self-Assembly of Hierarchically Structured Bottlebrush Block Copolymer with Nanochannels

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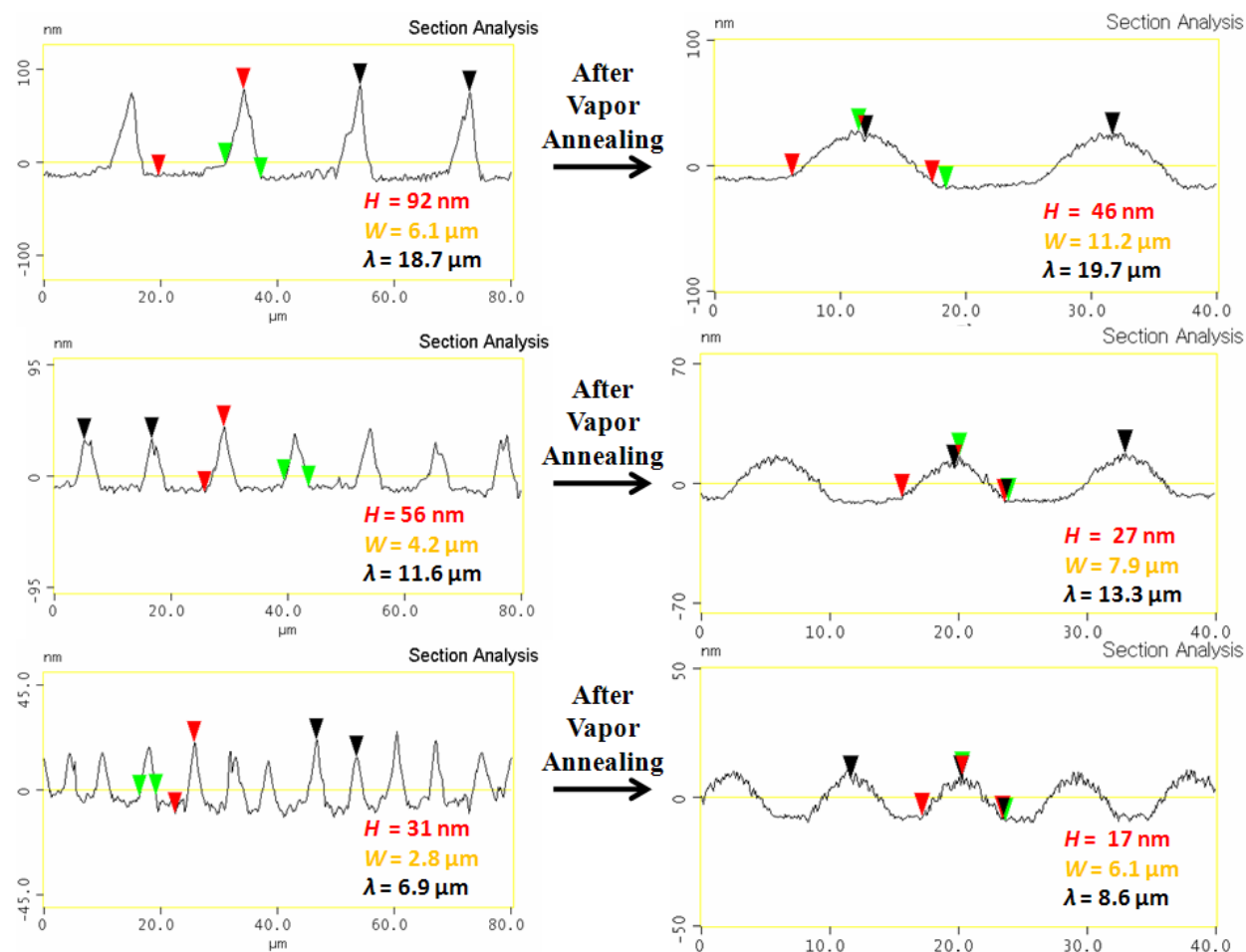


Figure S1. The cross-sectional view of AFM images shows the morphological evolution of the stripe height, H , stripe width, W , and the spacing between adjacent stripes, λ of PS-PLA stripes before and after the chloroform vapor annealing. The first, second, and third rows correspond to stripes taken in the outermost region, intermediate region, and innermost region, respectively.

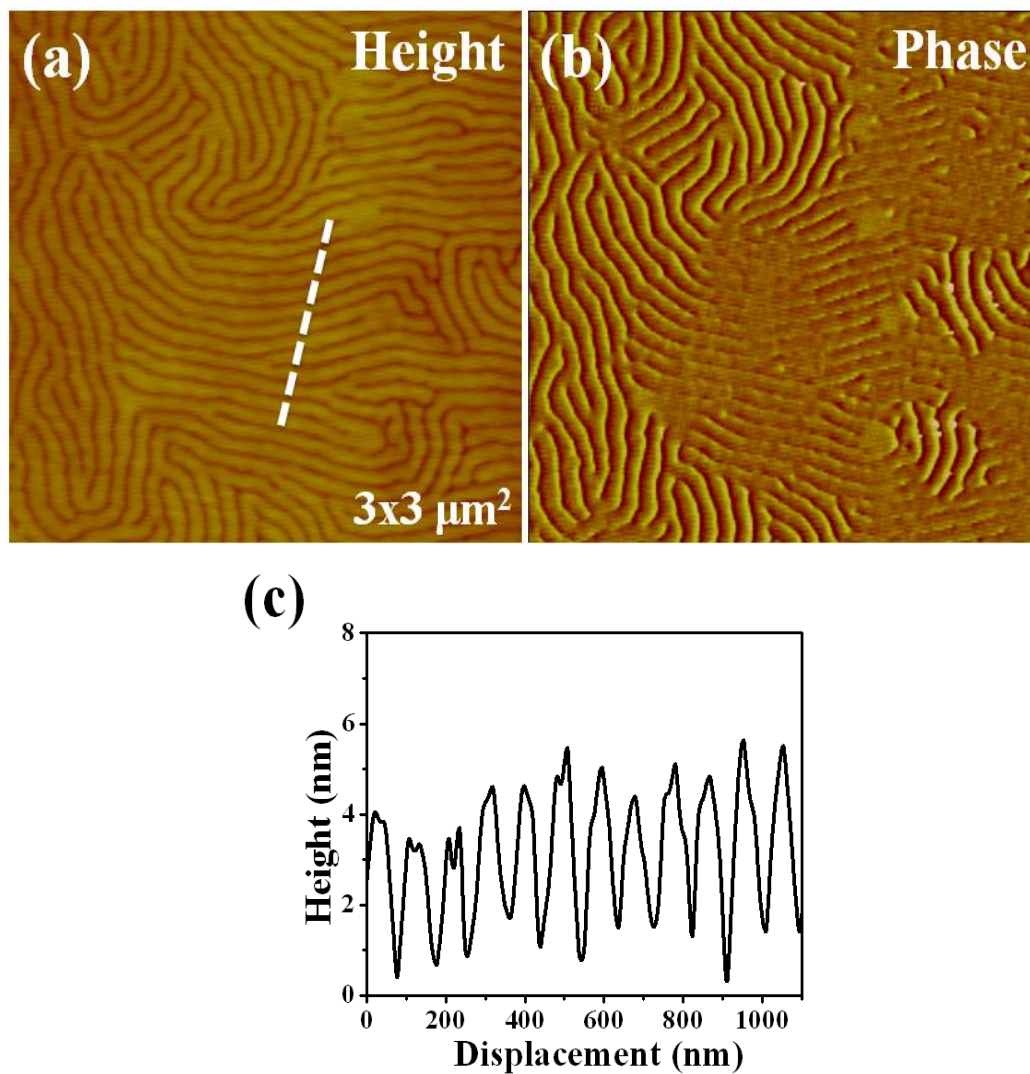


Figure S2. (a) AFM height and (b) phase images of lamellar morphology of PS-PLA within a stripe after the vapor annealing. (c) The cross-section analysis of the surface PS-PLA, corresponding to the white line labeled in (a). The average domain spacing, $L_0 = 105 \pm 5$ nm, measured from the cross-section analysis in (c). Image size = $3\mu\text{m} \times 3\mu\text{m}$. Z range of the height image = 60nm.

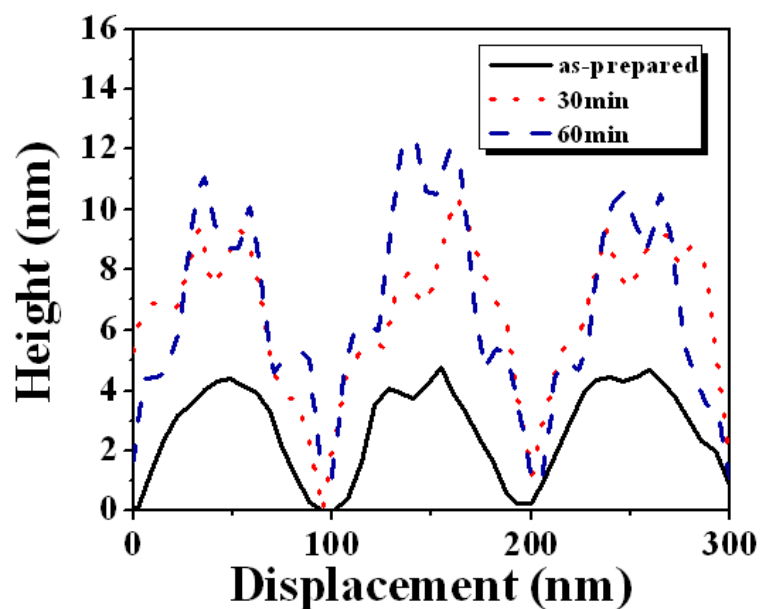


Figure S3. The height profiles for the AFM images shown in Figure 5, corresponding to different degradation times (i.e., as-prepared, 30min and 60min). The nanochannel depth increased with increased degradation time, which is indicative of the successful removal of PLA arms.