# SUPPORTING INFORMATION

## **Capillary Wave Confinement Induced Stabilization of Polymer Films**

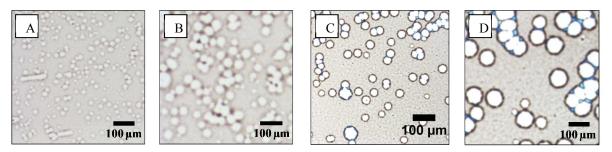
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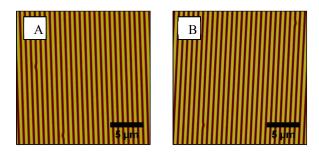
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#### **Supporting Information S1**



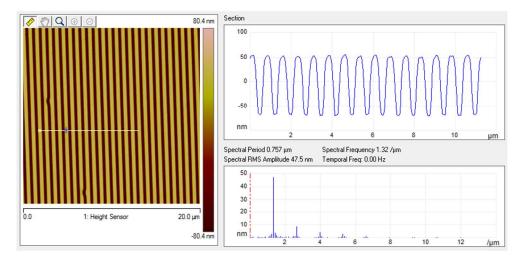
**Figure S1.** Effect of top-down flexible, unpatterned confinement on PS film stability; optical images of PS films of thickness (A) 30 nm (B) 70 nm (C) 120 nm (D) 220 nm

### **Supporting Information S2**



**Figure S2.** Representative AFM topography images of PS film surfaces following removal of nanopatterned confinement post-annealing (A) 70 nm PS film (B) 120 nm PS film

#### **Supporting Information 3**



**Figure S3.** Representative AFM section profile of the topography image of a 120 nm PS film surface confined, during thermal annealing, by DVD patterned PDMS.