

Supporting Information

Ultra-rapid Pattern Formation of Block Copolymers with a high- χ parameter in the Immersion Annealing Induced by a Homopolymer

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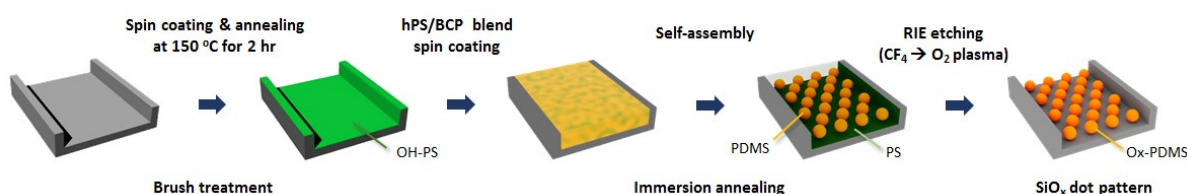


Figure S1. Schematic of the process sequence for the directed self-assembly of hPS/PS-*b*-PDMS blend in the immersion annealing.

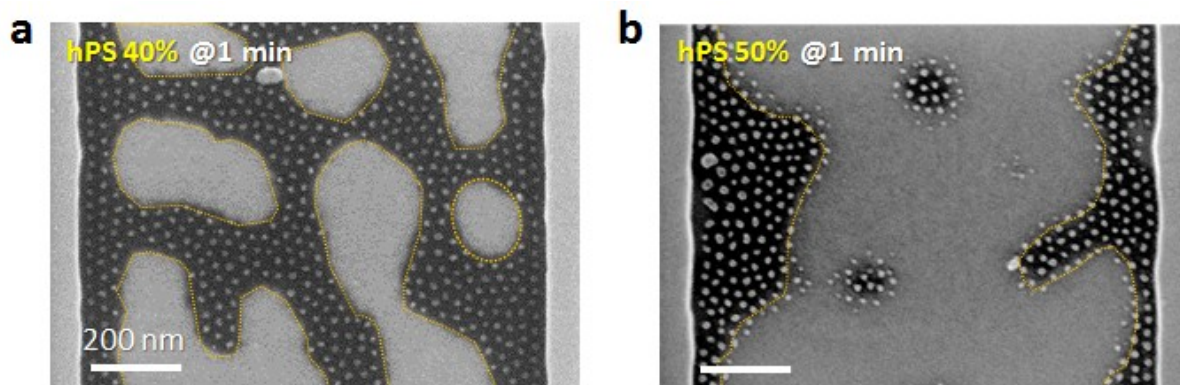


Figure S2. Self-assembled morphologies of the SD55 BCP with an excessive addition of hPS annealed at a fixed $V_{\text{tol}}/V_{\text{eth}}$ ratio of 0.43 for one minute. (a) hPS 40%. (b) hPS 50%.

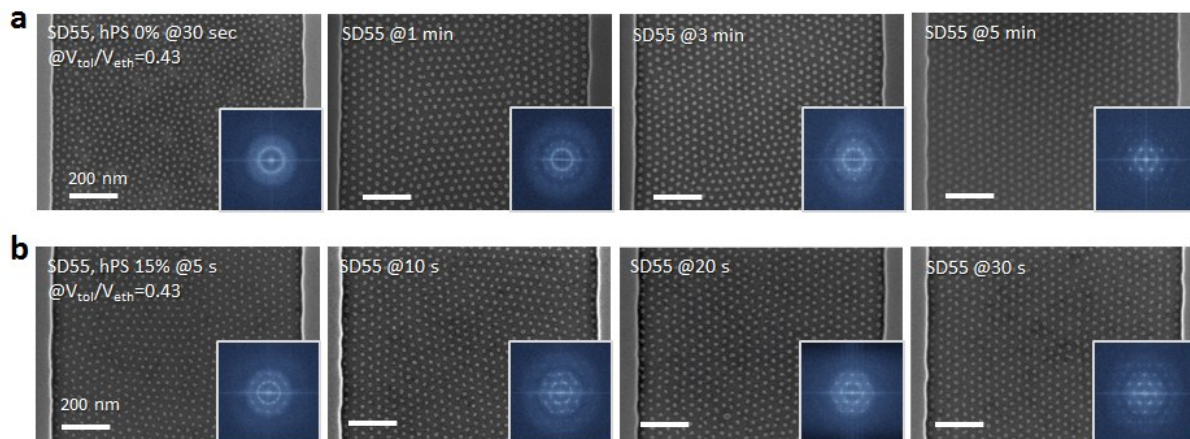


Figure S3. Time-evolution of the self-assembled of pure SD55 and hPS (15%)/SD55 blend when $V_{\text{tol}}/V_{\text{eth}} = 0.43$. (a) Pure SD55 BCP (hPS @ 0%). (b) hPS (15%)/ SD55 BCP blend.

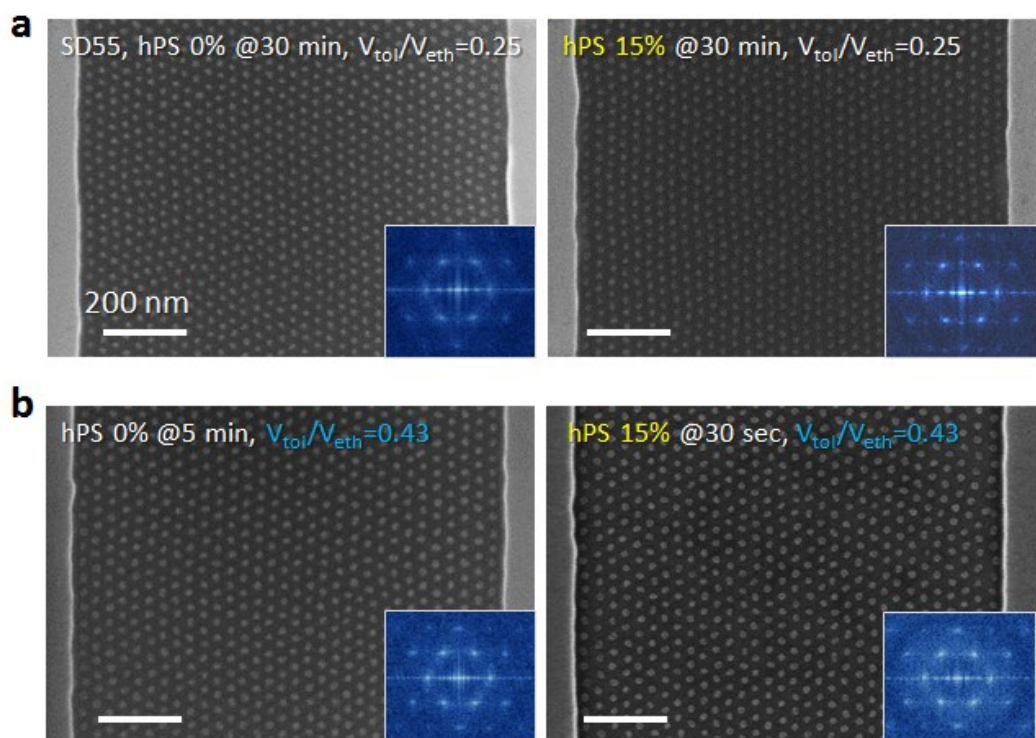


Figure S4. Comparison of the self-assembled dot patterns of pure SD55 and hPS (15%)/SD55 BCP blend when $V_{tol}/V_{eth} =$ (a) 0.25 and (b) 0.43.