Electronic Supplementary Information (ESI) for *Soft Matter*

A generalized method for alignment of block copolymer films: Solvent vapor annealing with soft shear

Zhe Qiang^a, Yuanzhong Zhang^a, Jesse Groff,^b Kevin A. Cavicchi^{a*} and Bryan D. Vogt^{a*}

^a Department of Polymer Engineering, University of Akron, Akron, OH 44325.
^b Marlington High School, 10450 Moulin Ave NE, Alliance, OH 44601

*Corresponding author

Kevin A. Cavicchi Department of Polymer Engineering, University of Akron 250 S Forge st, Akron, OH, 44325

Tel: (330) 972-8368 E-mail: kac58@uakron.edu

Bryan D. Vogt Department of Polymer Engineering, University of Akron 250 S Forge st, Akron, OH, 44325

Tel: (330) 972-8608 E-mail: vogt@uakron.edu



Figure S1. In-situ ellipsometry measurements of the thickness of (A) SIS and (B) PDMS-20 films as exposed to nearly saturated toluene vapor



Figure S2. AFM phase image of as-cast SIS film.



Figure S3. Defect analysis of AFM phase images of SIS film after SVA-SS by different crosslink ratio PDM. Red dot represents the defects.



Figure S4. AFM phase images of SIS films after (a) SVA with acetone; (b) SVA-SS with acetone; (c) SVA with hexane and (d) SVA-SS with hexane



Figure S5. AFM phase images of (a) SBS film after toluene vapor annealing; (b) PS-*b*-PSS-DMODA film after chloroform vapor annealing; (c) PS-*b*-PDMS film after THF vapor annealing and (d) PS-*b*-P2VP film after THF vapor annealing.



Figure S6. AFM phase images of PS-b-PMMA films (a) after standard SVA and (b) after SVA-SS



Figure S7. AFM phase images of PS-b-P2VP films after SVA-SS. (6μ m× 6μ m) composed from four 3 μ m x 3 μ m scans.