SUPPLEMENTARY INFORMATION

Interplay of Surface Chemical Composition and Film Thickness on Graphoepitaxial Assembly of Asymmetric Block Copolymers

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Fig. S1 Top-down SEM images of self-assembled block copolymer films on a P(S-\(r\)-MMA)-OH modified surfaces containing different styrene fractions in the random copolymer. For all cases, the thin films with the thickness of ~ 0.8\(d_0\) were annealed at 220 °C for 3 hrs under vacuum. (Scale bar = 300 nm)
Fig. S2 Schematic depicting possible domain orientation on weakly PS or PMMA preferential surfaces as a function of film thickness (h) based on the commensurability of the film thickness. \( L_0 \) and \( d_0 \) represent periodicity and row-to-row distance, respectively.

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0.5L_0 = 0.5d_0(2/\sqrt{3}) = 0.58d_0
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Fig. S3 Top-down SEM images showing the assembly behavior of PS-\textit{b}-PMMA, (a) \textbf{OH58}-modified bottom with varied trench width from 260 nm to 390 nm, and (b) \textbf{OH70}-modified bottom with varied trench width from 260 nm to 390 nm.