Supporting Information

Kinetically Controlled Self-Assembly of Monolayered Micelle Films of P(S-*b*-4VP) on Bare and PS-grafted Substrates

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Figure S1 Reflection optical micrographs (top row images) and 2 μ m× 2 μ m AFM topographic images (bottom row images) of P(S-*b*-4VP) thin films self-assembled on substrates of three kinds: (a&d) SiO_x/Si, (b&e) PS_{4k}-SiO_x/Si and (c&f) PS_{19k}-SiO_x/Si. Thin films were prepared by spin-coating 0.1 wt% solutions in toluene/THF solvent mixture. The brown reflection color in the OM images corresponds to thick regions.



Figure S2 Cross sections of the 2D images AFM topographic images of P(S-*b*-4VP) thin films self-assembled on SiO_x/Si. The line-scanned profiles were generated by choosing a random scan line. Thin films were prepared by spin coating (a), and then were subjected to solvent annealing for various time periods: (b) 30, (c) 60, (d) 120, (e) 240, and (f) 300 min. Inset shows the corresponding 2D AFM image (2 μ m × 2 μ m) of line-scanned profile f. The dotted line was plotted for guiding eyes.



Figure S3 $1 \times 1 \ \mu m^2$ AFM topographic images of P(S-*b*-4VP) ultrathin films self-assembled on PS-grafted substrates: PS_{4k}-SiO_x/Si (top row) and PS_{19k}-SiO_x/Si (bottom row). All the ultrathin films were spun from a 0.1 wt% solution in co-solvent of toluene/THF 70/30.The height images were recorded (a&g) before and after P(S-*b*-4VP) films were subjected to solvent annealing for various time periods: (b&h) 30, (c&i) 60, (d&j) 120, (e&k) 240 and (f&l) 300 min. (scale bar: 200 nm)