Electronic Supplementary Material (ESI) for Soft Matter.

Supplementary Information for: Thickness-Dependence of Block Copolymer Coarsening Kinetics

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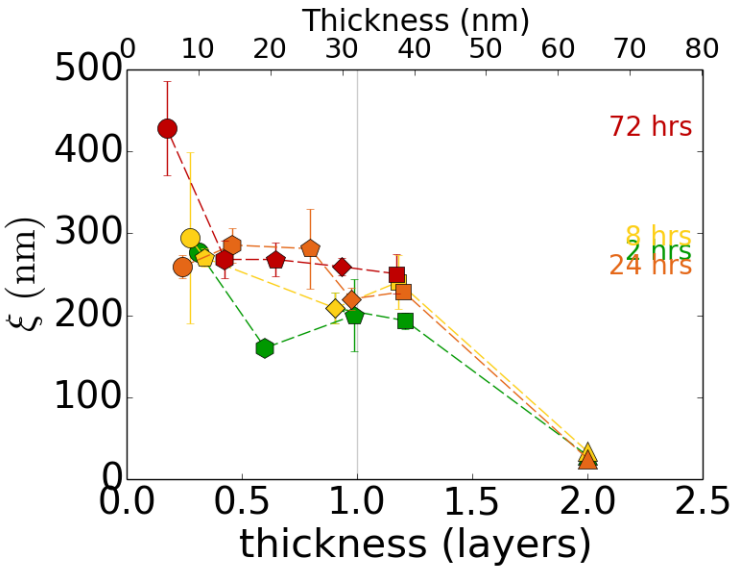

Figure S1: Grain sizes (ξ) for annealing (205ºC) of cylinder-forming PS-*b*-PMMA (67 kg/mol). These results confirm the results shown in Figure 2 of the main text (similar molecular weight of PS-*b*-PMMA, obtained from a completely independent synthesis batch). The grain size (ξ) follows a power-law in time.

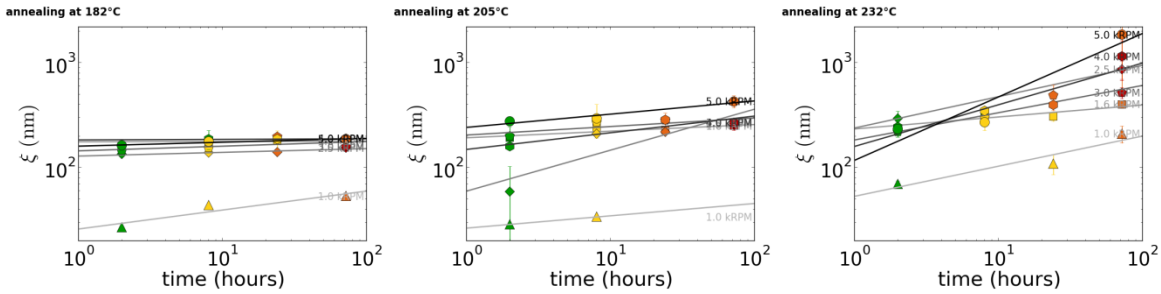

Figure S2: Grain coarsening during annealing of cylinder-forming PS-*b*-PMMA (67 kg/mol), for three different annealing temperatures (as indicated). The grain size (ξ) follows a power-law in time. As expected, grain sizes are quantitatively larger for higher annealing temperatures. Interestingly, grain sizes are also larger for thinner films than thicker films (spin-coating speeds are indicated alongside the curves; spin-speeds from 1.0 krpm (thicker films) to 5.0 krpm (thinner films) are shown). From the power-law fits (grey lines), we extract rate prefactors (k), which can be used in an Arrhenius analysis.

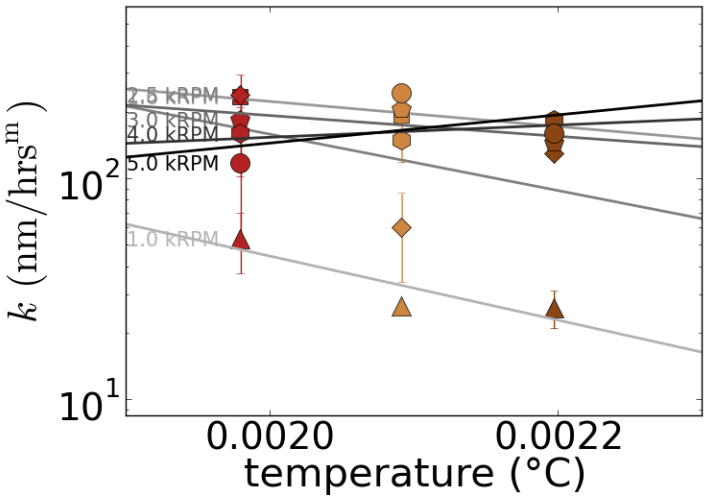

Figure S3: Arrhenius analysis of grain coarsening for cylinder-forming PS-*b*-PMMA (67 kg/mol). The ordering rates (k) are dependent on temperature (T). We plot ln(k) vs. 1/T; the corresponding linear fit returns the Arrhenius activation energy (E_a) from the slope. The slopes of the lines are dependent on film thickness (denoted by the spin-coating speed). In particular, for the thinnest films, the activation energies are extremely low (equal to zero, within error); which can be seen the insensitivity to temperature for these data.