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Supporting Information

In situ Synchrotron Radiation X-ray Diffraction Studies on Molecular Aggregation Structure of Nylon 12 Films During Bulge Testing

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Figure S1. (a) SAXS profiles and (b) time dependence of long period obtained from SAXS peak position for Nylon 12 films isothermally crystallized at 165 °C. Note that this sample was isothermally crystallized not at 170 but 165 °C. Peaks observed at 0.4 nm⁻¹ shown in Figure S1 (a) can be assigned to long period due to stacked lamella. The long period increased and slightly decreased with an increase and decrease in pressure though data was quite scattered. The degree of recovery after decrease in pressure was so small in comparison with that obtained by WAXD shown in Figure 4. This is due to the crystalline lamellae, that is, scattering bodies, are connected by non-recoverable amorphous chains.