Correction to Self-Assembly of Symmetric

Brush Diblock Copolymers [ACS Nano 2013, 7,

2551–2558. DOI: 10.1021/nn305867d]. Weiyin Gu, June Huh,* Sung Woo Hong, Benjamin R. Sveinbjornsson, Cheolmin Park, Robert Howard Grubbs,* and Thomas P. Russell*

Page 2555. In Figure 4A,B, the power law exponent for Case I (lower molecular weight brushes, 2.4K) was reported to be 0.84 when, in fact, the exponent should have been 0.93, and for Case II (higher molecular brushes, 4.5K), the exponent was reported to be 0.91, when the exponent should have been 0.82. The corrected Figure 4A,B is given below.

Based on the incorrectly calculated slopes, we made the statement, "Since group II BrBCPs have longer side chains compared with group I, steric hindrance may make the backbone more rigid and, thus, cause the value to be even larger", which is also not correct. Rather, in theory, the reason that the exponent is larger for smaller side chain relates to the dominance of side chain elasticity over interfacial energy contribution. The backbone will stretch to minimize the interfacial area (per unit volume), which decreases the cross-sectional area of the brush at the interface. The stretching is energetically more costly for the higher molecular weight brushes, which leads to

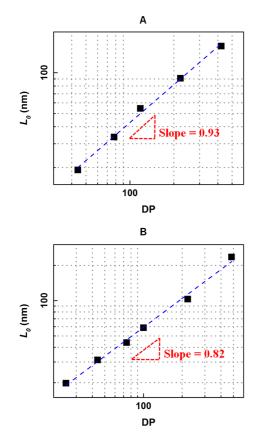


Figure 4. Scaling law between L_0 and DP. (A) Group I. (B) Group II.

the lower exponent. In addition, each brush has a terminal bromine atom that can also increase the value of the segmental interaction parameter, χ . This influence decreases with increasing molecular weight of the side chain, which could also lead to a reduced exponent for the higher molecular weight brushes.

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