Supporting Information

Langevin dynamics simulation on the optimal conditions for large and stable loops of adsorbed homopolymers on substrate

Rong-Xing Lu[1], Yun Zhou[1], Qing-Hui Yang[2], Jian-Hua Huang[1,*]

[1] *Department of Chemistry, Zhejiang Sci-Tech University, Hangzhou 310018, China*

[2] *Department of Physics, Hangzhou Dianzi University, Hangzhou 310018, China*

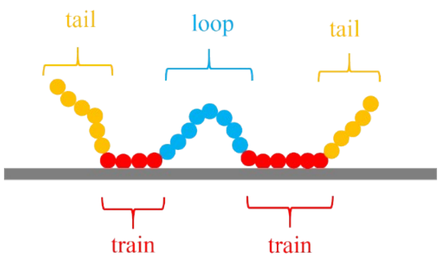

Fig. S1 Sketch of an adsorbed polymer chain with “train”, “loop”, and “tail”.

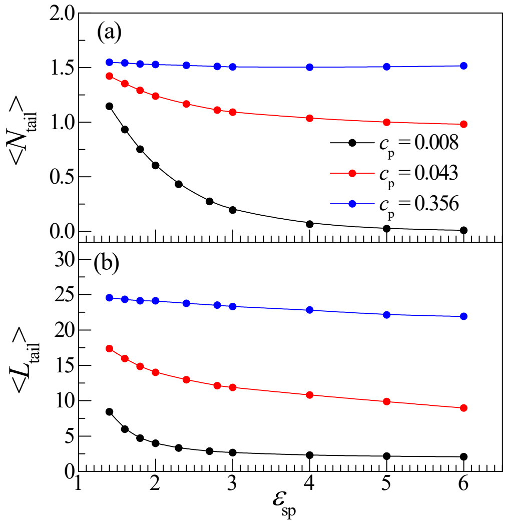

Fig. S2 Variation of the average number of tails $<N_{tail}>$ (a) and the average length of tails $<L_{tail}>$ (b) in each adsorbed chain with the substrate attraction strength ε_{sp} for polymers with chain length $N = 64$ at three concentrations $c_p = 0.008$, 0.043, and 0.356.

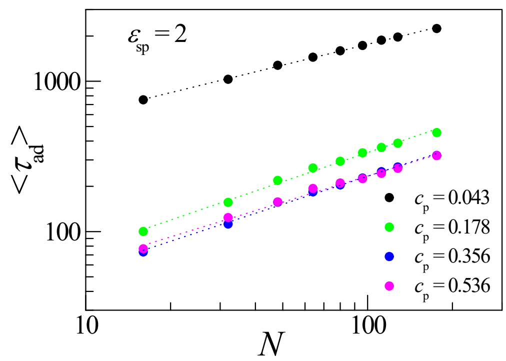

Fig. S3 Plot of the mean adsorbed time $<\tau_{ad}>$ as a function of polymer length N at four concentrations $c_p = 0.043$, 0.178, 0.356 and 0.536 at substrate attraction strength $\varepsilon_{sp} = 2$.