Electronic Supplementary Information:
Effect of Solvent Quality on the Polymer Adsorption from Bulk Solution onto Planar Surfaces

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Snapshots displaying the time evolution of the polymer adsorption of the Brownian dynamics simulations are given in Figs. S1–S4 for the four combinations of (i) flexible and (ii) rod-like polymers in (i) good and (ii) theta solvents. In particular, the snapshots display how the initial polymer-free slab at the surfaces are gradually filled with polymers and the conformation of adsorbed polymers given in red.

Furthermore, the equilibrium structure of the adsorbed polymer layer in theta solvent at increasing polymer stiffness is provided in Fig. S5. The nematic ordering with rod-like polymers is clearly visible (bottom left).

Figure Caption

Fig. S1 Snapshots displaying the time evolution with the time given in ns of the polymer adsorption at k_{angle} = 0 (flexible polymers) in a good solvent and ε_s = 2.5 kJ mol^{-1}. Beads residing in adsorbed polymers are given in red.

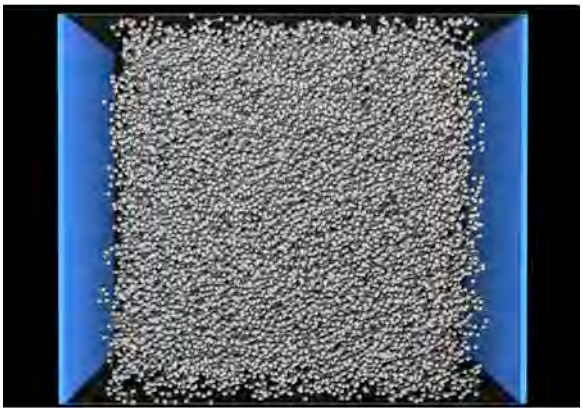
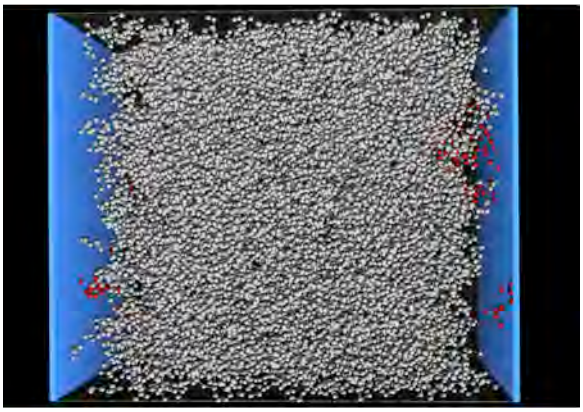
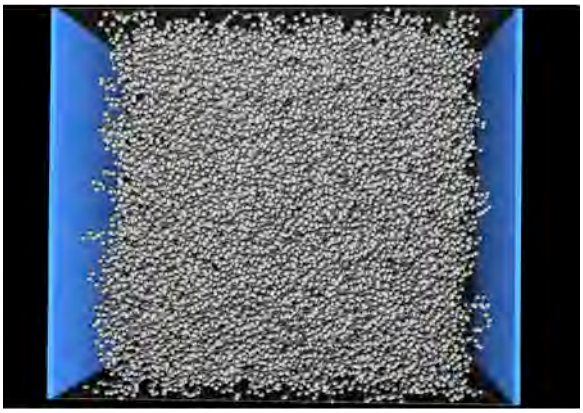
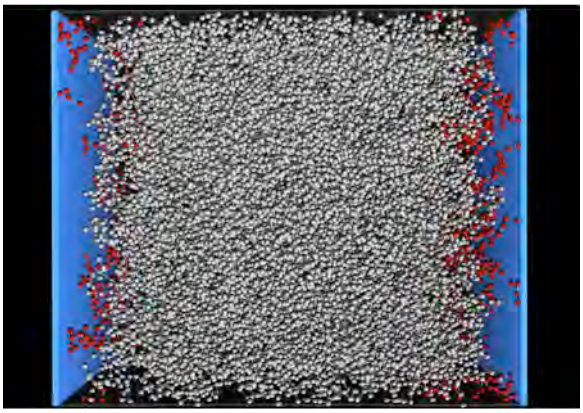
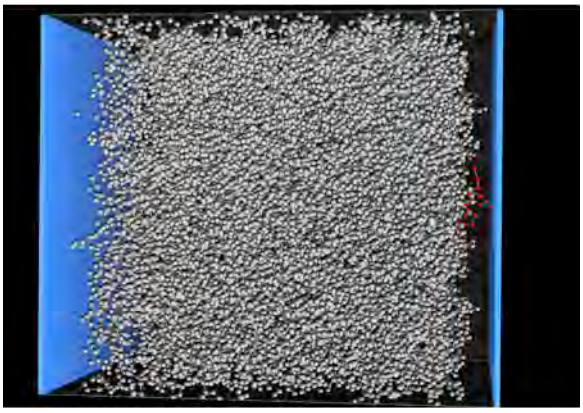
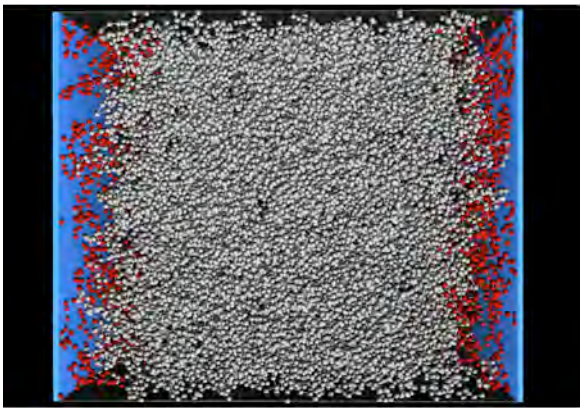
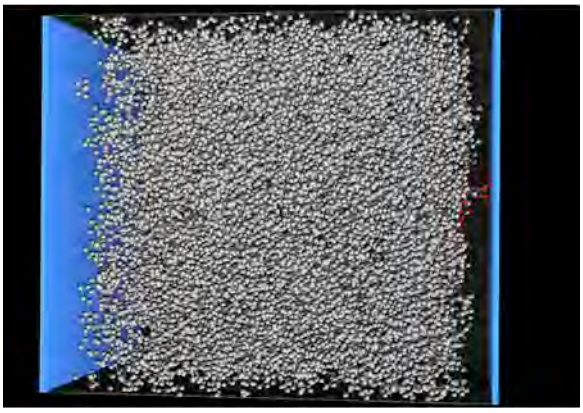
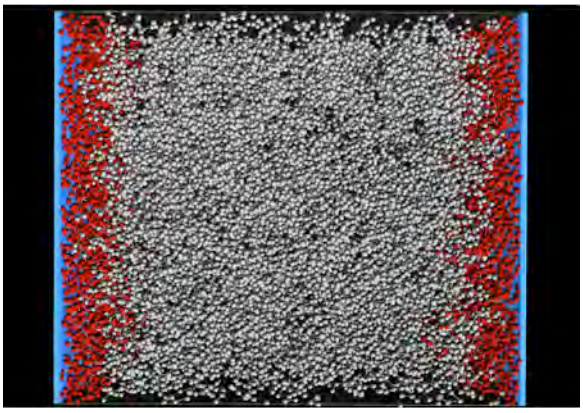
Fig. S2 Snapshots displaying the time evolution with the time given in ns of the polymer adsorption at k_{angle} = 30 J mol^{-1} deg^{-2} (rod-like polymers) in a good solvent and ε_s = 2.5 kJ mol^{-1}. Beads residing in adsorbed polymers are given in red.

Fig. S3 Snapshots displaying the time evolution with the time given in ns of the polymer adsorption at k_{angle} = 0 (flexible polymers) in a theta solvent and ε_s = 2.5 kJ mol^{-1}. Beads residing in adsorbed polymers are given in red.

Fig. S4 Snapshots displaying the time evolution with the time given in ns of the polymer adsorption at k_{angle} = 30 J mol^{-1} deg^{-2} (rod-like polymers) in a theta solvent and ε_s = 2.5 kJ mol^{-1}. Beads residing in adsorbed polymers are given in red.

Fig. S5 (left) Perspective and (right) side view of snapshots displaying one surface with adsorbed polymers from the final equilibrium configuration at (top to bottom) k_{angle} = 0 (flexible polymers), k_{angle} = 1.2 J mol^{-1} deg^{-2} (semi-flexible polymers), k_{angle} = 10 J mol^{-1} deg^{-2} (stiff polymers), and k_{angle} = 30 J mol^{-1} deg^{-2} (rod-like polymers); all in a theta solvent and at ε_s = 2.5 kJ mol^{-1}.

Figure S1 (flexible polymer, good solvent)

0		2	
0.6		5	
0.7		10	
1		eq	

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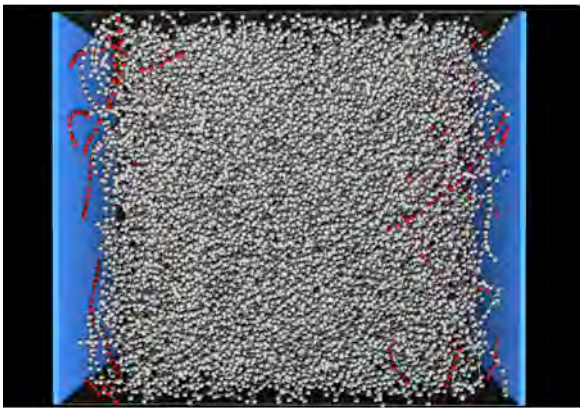
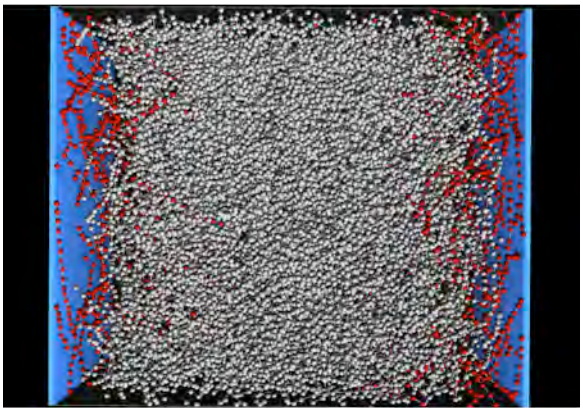
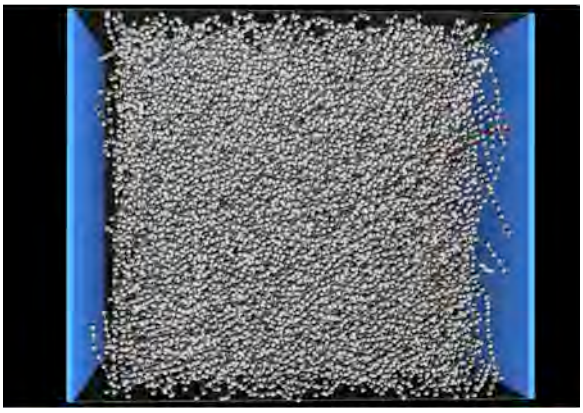
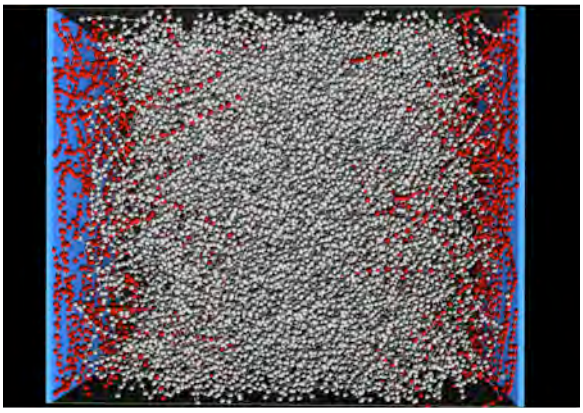
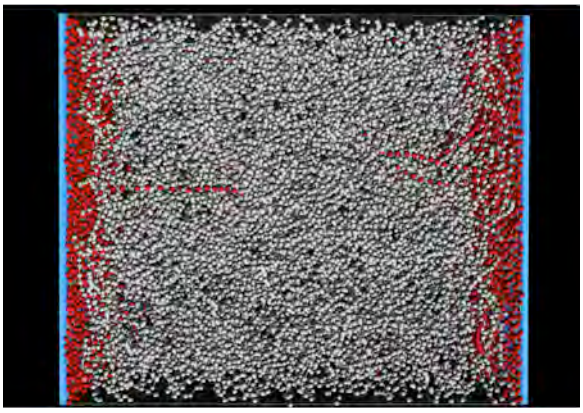
0		2	
0.5		5	
0.6		10	
1		eq	

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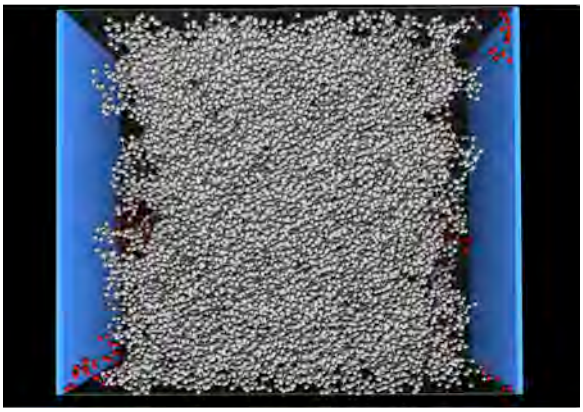
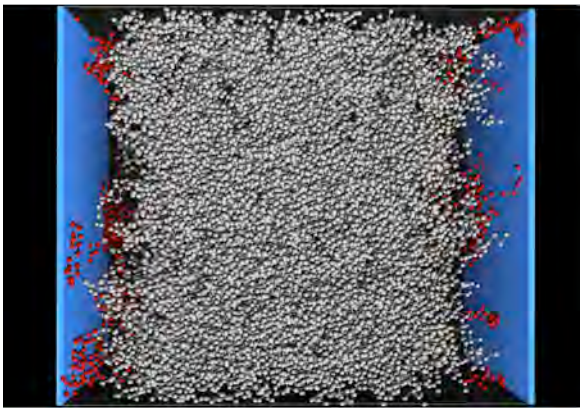
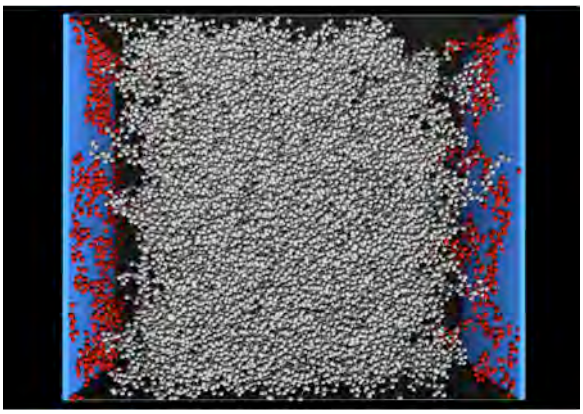
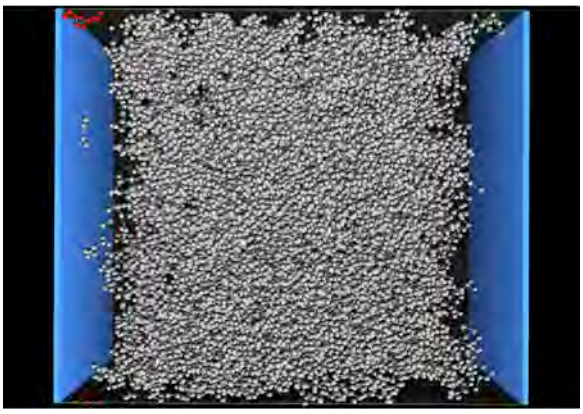
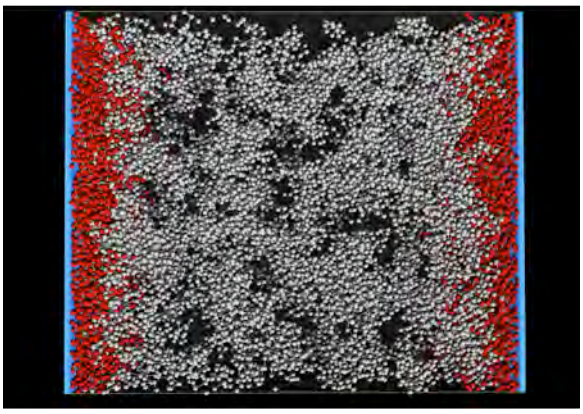
0		10	
2		20	
3		50	
5		eq	

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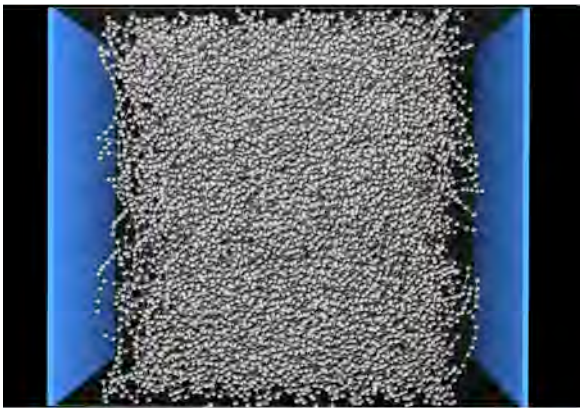
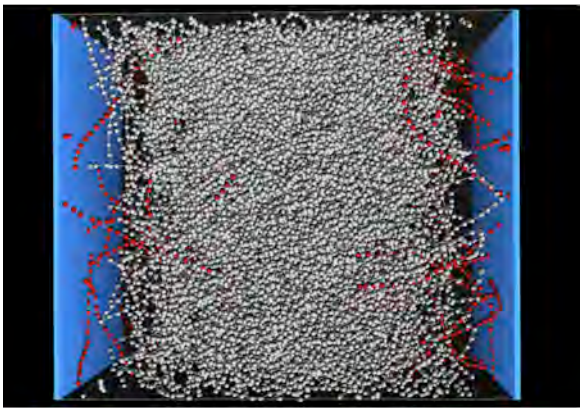
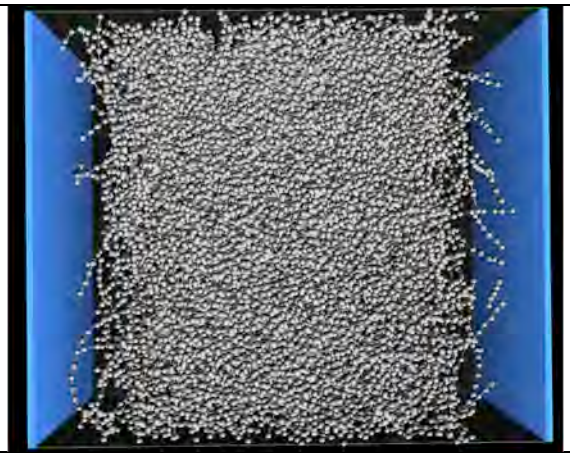
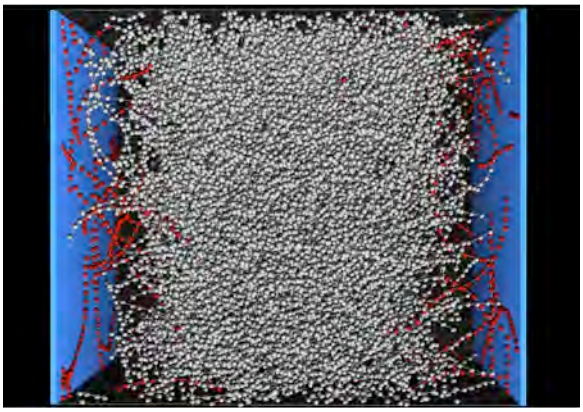
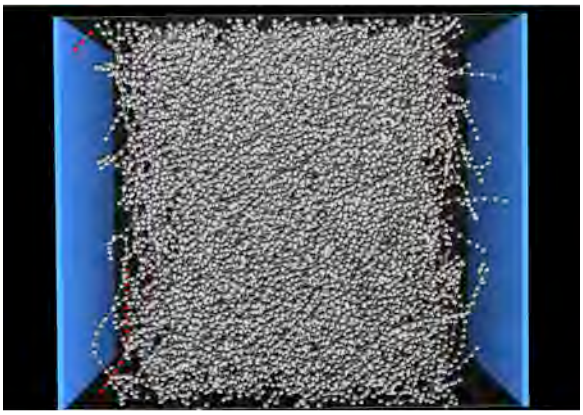
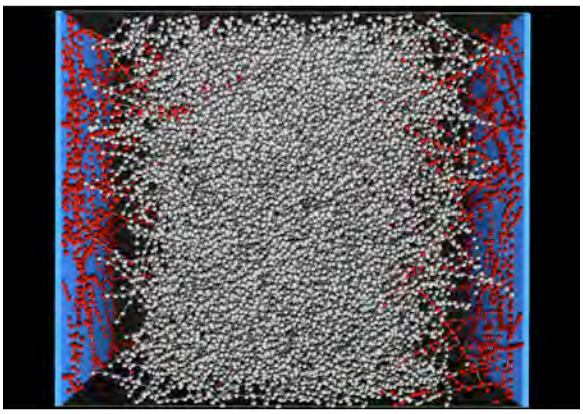
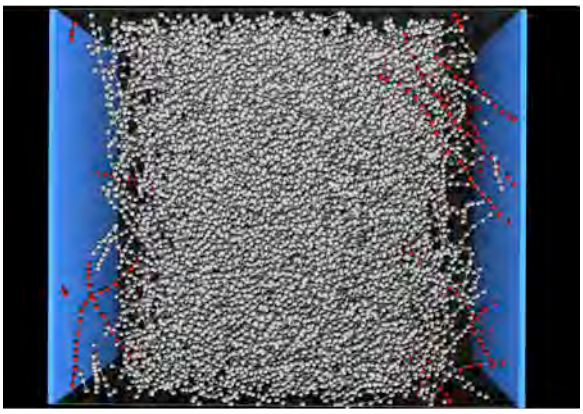
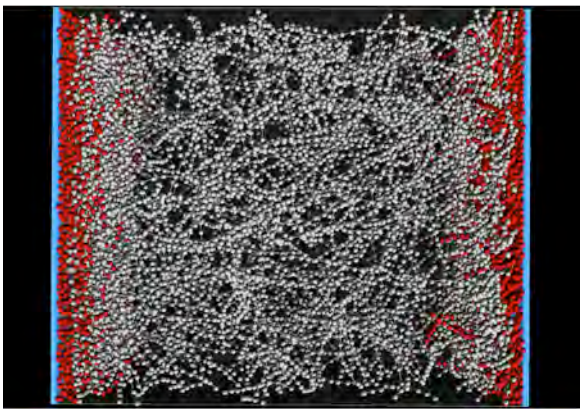
0		10	
0.8		20	
0.9		50	
5		eq	

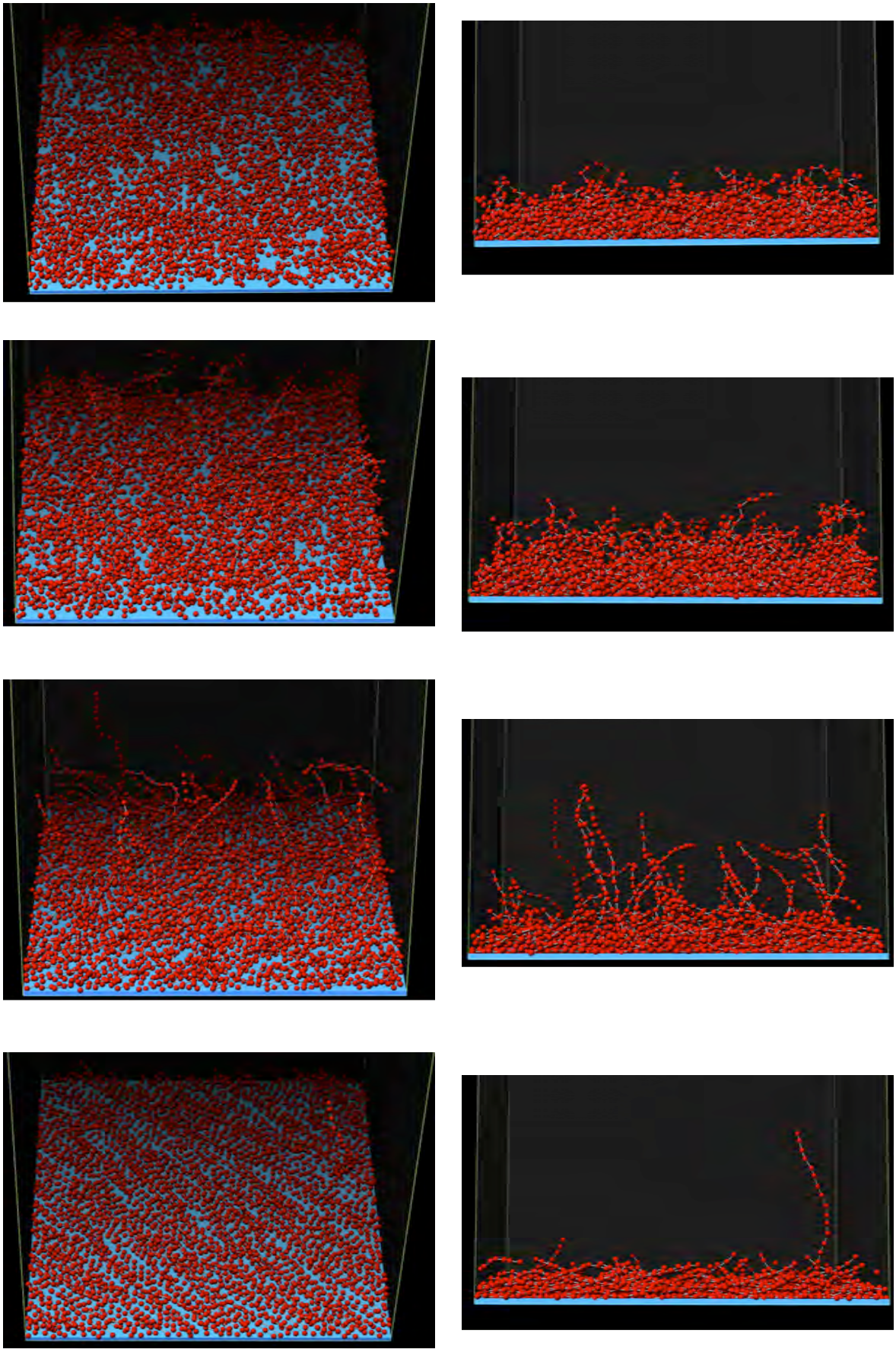


Figure S5