

Supplementary material

High Pressure Effect on Phase Transition Behavior of Lipid Bilayers

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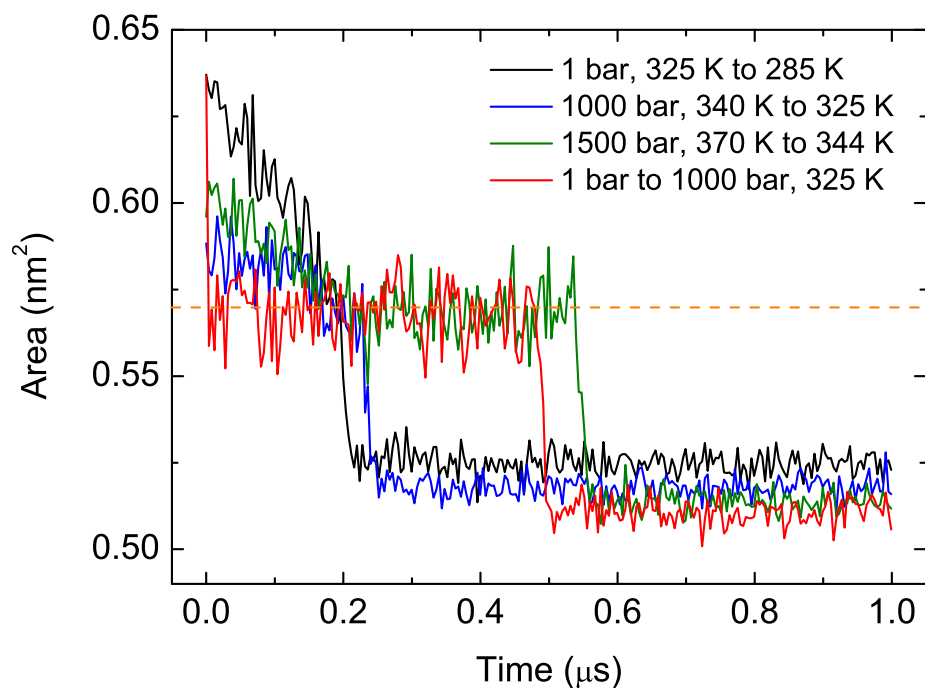


Fig. S1. Area per lipid during phase transformation as a function of simulation time at 1bar, 1000bar and 1500bar, with decrease of the annealing temperature from 325K to 285K, 340K to 325K and 370K to 344K in 200ns, respectively. Area per lipid in phase transformation by coupling lipid bilayer from 1bar to 1000bar at 325K is also shown in red line. The critical area 0.57nm^2 is shown in dash line.

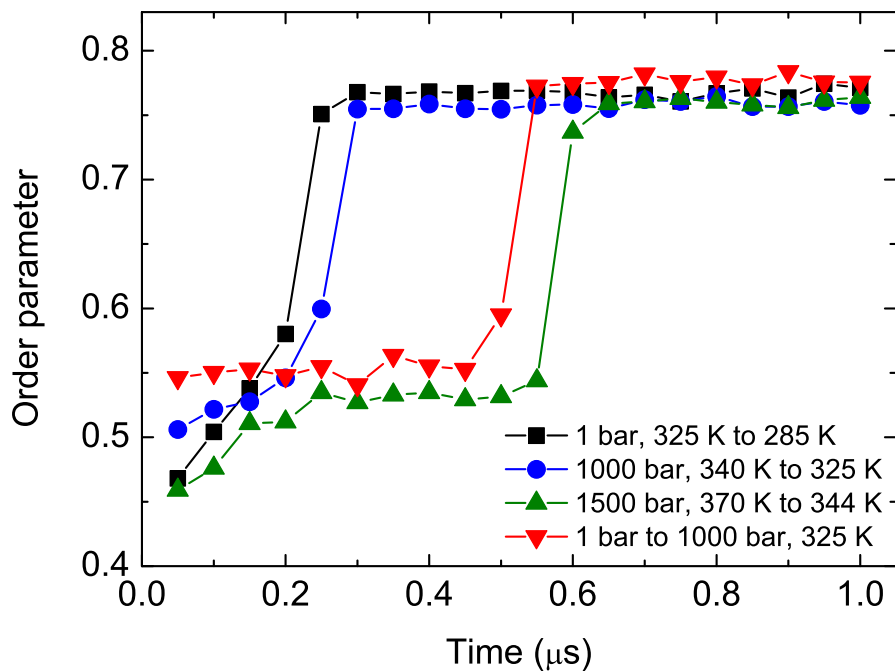


Fig. S2. Lipid tail order parameter during phase transformation as a function of simulation time at 1bar, 1000bar and 1500bar, with decrease of the annealing temperature from 325K to 285K, 340K to 325K and 370K to 344K in 200ns, respectively. Lipid tail order parameter in phase transformation by coupling lipid bilayer from 1bar to 1000bar at 325K is also shown in red.