

Supplement material

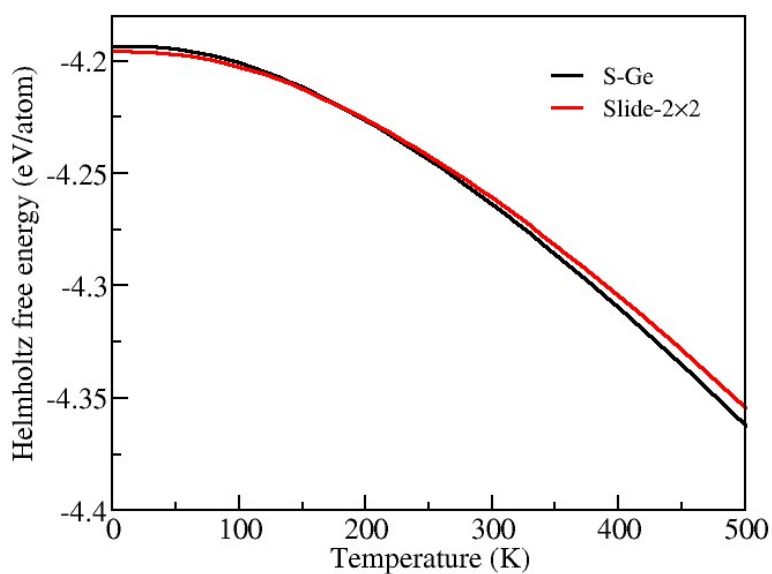


Fig. S1 Helmholtz free energy of S-Ge and slide-2×2 with respect to temperature.

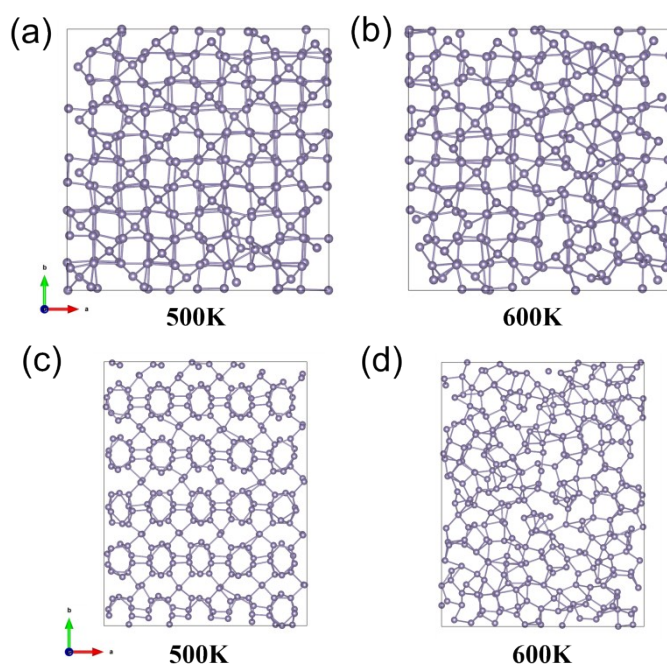


Fig. S2. Snapshots of S-Ge and P-Ge at the end of two independent 10 ps AIMD simulations: (a) S-Ge, (b) P-Ge. The time step is 2 fs.