Molecular Dynamics Simulation Report

Optimized Lattice Parameter: 5.2823e-10 m

Melting Point: 45 K

Boiling Point: 105 K

Total Runtime: 100.96 seconds

Best Verlet Algorithm: Standard Verlet (Adaptive)

Best Time Step: 1.00e-14 s

Reason: Lowest average potential energy (-1.22e-20 J) and minimal energy drift (8.98e-24 J) during preliminary simulation.