Molecular Dynamics Simulation Report

Optimized Lattice Parameter: 5.2809e-10 m

Melting Point: 190 K

Boiling Point: 195 K

Total Runtime: 50.40 seconds

Best Verlet Algorithm: Velocity-Verlet (Adaptive)

Best Time Step: 1.00e-14 s

Reason: Lowest average potential energy (-1.31e-20 J) and minimal energy drift (1.46e-25 J) during preliminary simulation.