

Molecular Dynamics Simulation Report

Optimized Lattice Parameter: $5.2823\text{e-}10\text{ m}$

Melting Point: 90 K

Boiling Point: 105 K

Total Runtime: 30.84 seconds

Best Verlet Algorithm: Velocity-Verlet (Adaptive)

Best Time Step: $1.00\text{e-}14\text{ s}$

Reason: Lowest average potential energy ($-1.32\text{e-}20\text{ J}$) and minimal energy drift ($2.66\text{e-}25\text{ J}$) during preliminary simulation.

