

LIST OF SYMBOLS AND ABBREVIATIONS

ASA	-	Atomic Sphere Approximation
APW	-	Augmented Plane Wave
k_B	-	Boltzmann's Constant
B_0	-	Bulk modulus
E_{coh}	-	Cohesive energy
Θ_D	-	Debye temperature
DFT	-	Density functional theory
$N(E_F)$	-	Density of states at Fermi energy
μ^*	-	Electron-electron interaction parameter
Γ	-	Electronic specific heat coefficient
E_{TOT}	-	Electronic total energy
λ	-	Electron-phonon coupling constant
I^2	-	Electron-phonon interaction matrix element
EOS	-	Equation of state
r_0	-	Equilibrium Wigner-Seitz radius
E_F	-	Fermi energy
E_g	-	Fundamental bandgap
γ_G	-	Gruneisen constant
ΔH	-	Heat of Formation
a, b, c	-	Lattice constants
LDA	-	Local Density Approximations
D_l	-	Logarithmic Derivative
$\langle \omega^2 \rangle$	-	mean square phonon frequency
T_C	-	Superconducting transition temperature
TB-LMTO	-	Tight-Binding Linear Muffin-tin Orbital