List of Symbols

Symbol	*Description*
χ	Electron Affinity
σ	Strain, Standard Deviation, Sheet Charge Density
ϕ	Work Function
ϕ_S	Surface potential
ε_o	Permittivity of Vacuum
ΔE_C	Conduction Band Discontinuity
ΔE_g	Energy Bandgap difference
ΔE_V	Valence Band Discontinuity
ε_r	Relative Permittivity
μ	Electron Mobility
a	Lattice Constant
c	Height of The Cell
C_{ij}	Elastic Constant
d	Lattice Spacing
D_n, D_p	Diffusivity of Electrons and Holes
E	Electric Field
E_C	Conduction Band Energy Level
E_F	Fermi Energy Level
E_g	Energy Bandgap
e_{ij}	Piezoelectric Moduli
E_V	Valance Band Energy Level
I_{DS}	Drain to Source Current
I_{DSN}	Normalized Drain to Source Current
J_n	Electron Current Density
J_p	Hole Current Density
$k_{Pb^{2+},j}^{amp}$	Selectivity Coefficient
L	Length of The Gate, Contact Spacing
L_G	Length of Gate
L_{GD}	Gate to Drain Length
L_{GS}	Gate to Drain Length
m	Sensitivity
M_1, M_2	Concentration of Stock and Desired Solution
n_S	Sheet Carrier Concentration
p	Hole Density
P^{PZ}	Piezoelectric Polarization
P_{SP}	Spontaneous Polarization
q	Charge on Electron
$q\phi_b$	Schottky Barrier Height
R_C	Contact Resistance
R_{SH}	Sheet Resistance
R_T	Total Measured Resistance
S	Slope of Calibration
T	Temperature
u	*Bond Length of Cations*
V_1, V_2	Volume of Stock and Desired Solution
V_{DS}	Drain to Source Voltage
V_G	Gate Voltage
V_{GS}	Gate to Source Voltage
V_T	Threshold Voltage
W	Width of The Gate
θ	Angle of Diffraction
λ	Wavelength of X-Rays