

List of Symbols

<i>Symbol</i>	<i>Description</i>
θ	Angle of incident
O_{zn}	Antisite oxygen
A	Area
E_g	Band gap energy
ϕ_B	Barrier height
k	Boltzmann constant
V_{bi}	Build in potential
ΔI	Change in current
ΔR	Change in resistance
ΔV	Change in voltage
ΔE_c	Conduction band offset
J	Current density
I_a	Current in air
I_g	Current in target gas
E_c	Conduction band energy
τ_d	Decay time
W	Depletion width
q	Electron charge
G	Electron conduction
χ	Electron affinity
μ	Electron mobility
$q\phi_r$	Energy difference in conduction band and fermi level
ν	Frequency
η	Ideality factor
σ	In plane stress
d	Inter plane spacing
β	Interface related parameters
c	Lattice constant
l	Length
$\overline{\phi_B}$	Mean barrier height
Φ_m	Metal work function
hkl	Miller indices
T	Operating temperature
O_i	Oxygen interstitial
V_o	Oxygen vacancies
h	Plank constant
n	Power coefficient
S	Relative response
R_a	Resistance in air
R_g	Resistance in target gas
ϕ_r	Reverse barrier height
V_r	Reverse bias voltage
I_o	Reverse saturation current
J_r	Reverse saturation current density
A^*	Richardson constant
τ_r	Rise time

α	Roughness exponent
γ	Slop
σ	Standard deviation
c_0	Stress free lattice constant
E_v	Valance band energy
ΔE_v	Valance band offset
V_a	Voltage in air
V_g	Voltage in target gas
λ	Wavelength
Zn_i	Zinc interstitial
V_{zn}	Zinc vacancies