List of Symbols

Symbol Description Α Area Absorption coefficient α β Shape factor BFull width at half maximum CCapacitance D Crystallite size Е Energy Activation energy Еа Eg Bandgap Dielectric permittivity ε h Plank constant Ι Current Reverse saturation current Is δ Dislocation density λ Wavelength Mobility μ Boltzmann constant k_B m^* Effective mass **Ideality factor** η N_D Carrier concentration Electronic charge q Time t θ Diffraction angle TTemperature RsSeries resistance Conductivity σ VVoltage V_o Oxygen vacancies Electron affinity χ Frequency υ Ω Ohm

Zinc interstitials Impedance

 Zn_i