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LIST OF SYMBOLS AND ABBREVIATIONS

E_g	-	Bandgap energy (eV)
Å	-	Angstrom
λ	-	Wavelength
μ	-	Mobility of the charge carrier ($\text{cm}^2\text{V}^{-1}\text{s}^{-1}$)
ρ	-	Resistivity (ohm cm)
σ	-	Electrical conductivity ($\text{ohm}^{-1}\text{cm}^{-1}$)
AFM	-	Atomic Force Microscopy
B	-	Magnetic field (Tesla)
CBD	-	Chemical Bath Deposition
DTA	-	Differential Thermal Analysis
EDTA	-	Ethylene Diamine Tetra acetic Acid
EDX	-	Energy Dispersive X-ray Analysis
h	-	Plank's constant (J.s)
JCPDS	-	Joint Committee on Powder Diffraction Society
K	-	Boltzmann's constant (J/K)
LO	-	Longitudinal optical phonon
PCD	-	Photochemical Deposition
PECVD	-	Plasma enhanced chemical vapour deposition
RMS	-	Root Means Square
R_{sh}	-	Sheet resistance (ohms/square)
RT	-	Room Temperature
SEM	-	Scanning Electron Microscopy
SP	-	Surface Phonon
TGA	-	Thermo gravimetric Analysis
TO	-	Transverse Optical phonon
VH	-	Hall voltage (V)
XRD	-	X-ray Diffraction