

❖ Abbreviations

3D	Three-Dimensional	EL	Electro-Luminescence
ACC	Automatic Current Control	FWHM	Full Width at Half Maxima
Ag	Silver	GaAs	Gallium Arsenide
Al ₂ O ₃	Aluminum Oxide	GaN	Gallium Nitride
AlGaAs	Aluminum Gallium Arsenide	GaP	Gallium Phosphide
AlGaInP	Aluminum Gallium Indium Phosphide	GPIB	General Purpose Interface Bus
AlGaN	Aluminum Gallium Nitride	GUI	Graphical User Interface
APC	Automatic Power Control	H ₂ O ₂	Hydrogen Peroxide
AR	Anti Reflection	H ₃ PO ₄	Phosphoric Acid
AsH ₃	Arsine	HPLD	High-Power Laser Diode
AuGe	Gold-Germanium	HR	High Reflection
AuSn	Gold-tin	HVPE	Hydride Vapor Phase Epitaxy
BHF	Buffer Hydro-Fluoric Acid	In	Indium
CEERI	Central Electronics Engineering Research Institute	InAs	Indium Arsenide
CH ₃ OH	Methanol	InGaAs	Indium Gallium Arsenide
COD	Catastrophic Optical Damage	InGaP	Indium Gallium Phosphide
COMD	Catastrophic Optical Mirror Damage	InP	Indium Phosphide
CTE	Coefficient of Thermal Expansion	LabVIEW	Laboratory Virtual Instrument Engineering Workbench
Cu	Copper	LASER	Light Amplification by the Stimulated Emission of Radiation
CuW	Copper-Tungsten	LIDT	Laser Induced Damage Threshold
CVD	Chemical Vapor Deposition	LOR	Lift-off Resist
CW	Continuous Wave	LPE	Liquid Phase Epitaxy
DAQ	Data Acquisition	MBE	Molecular-Beam Epitaxy
DFB	Distributed Feed-Back	mfp	Mean Free Path
DH	Double Heterostructure	MgF ₂	Magnesium Fluoride
DI	De-Ionized	MOVPE	Metalorganic Vapor Phase Epitaxy
DLD	Dark Line Defect	MQW	Multiple Quantum Well
DMZn	Dimethyl Zinc	Nd:YAG	Neodymium Yttrium Aluminum Garnet
DSD	Dark-Spot Defects	NH ₄ F	Ammonium Fluoride
DUT	Device Under Test	NPR	Negative Photoresist
ECDL	External Cavity Diode Laser		

PbSn	Lead-Tin	SEM	Scanning Electron Microscope
PH ₃	Phosphine	SH	Single Heterostructure
PL	Photo-Luminescence	SiO ₂	Silicon Dioxide
ppm	Parts Per Million	SSPL	Solid State Physics Laboratory
PPR	Positive Photoresist	T/C	Thermo-Compression
PVD	Physical Vapor Deposition	T/S	Thermosonic
QCW	quasi-CW	TEC	Thermo Electric Cooler
QD	Quantum Dot	TEGa	Triethyl Gallium
QW	Quantum Well	TIFR	Tata Institute of Fundamental Research
QWOT	Quarter-Wave Optical Thick	TiO ₂	Titanium dioxide
QWR	Quantum Wire	TMAI	Trimethyl Aluminum
REDC	Recombination Enhanced Dislocation Climb	TMGa	Trimethyl Gallium
REDG	Recombination Enhanced Dislocation Glide	TMIn	Trimethyl Indium
RF	Radio Frequency	U/S	Ultrasonic
rpm	Rotation Per Minute	USB	Universal Serial Bus
RRCAT	Raja Ramanna Centre for Advanced Technology	VECSEL	Vertical External Cavity Surface Emitting Laser
RTA	Rapid Thermal Annealing	VI	Virtual Instrumentation
SAMEER	Society for Applied Microwave Electronics Engineering and Research	VPE	Vapor Phase Epitaxy
		ZrO ₂	Zirconium Oxide

* * *