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List of Abbreviations

1D One-Dimensional
2D Two-Dimensional
3D Three-Dimensional
Al₂O₃ Alumina Oxide
AlAs Aluminum Arsenide

AlAsSb Aluminum Arsenide Antimony AlGaAs Aluminum Gallium Arsenide

AlGalassb AlGalium Arsenide Antimony
AlGalas AlGalium Algalium Indium Arsenide
Algalium Nitride

AlInAs Aluminum Indium Arsenide
AlInGaAs Aluminum Indium Gallium Arsenide

a-Si Amorphous Silica
CD Compact Disc
CO₂ Carbon Dioxide
CW Continuous Wave

DBR Distributed Bragg Reflector
DFB Distributed Feedback
DH Double Heterojunction
DSM Dynamic Single Mode

EDFA Erbium Doped Fiber Amplifiers
EELs Edge-Emitting Lasers

FTTH Fiber-to-the-House
GaAs Gallium Arsenide

GalasSb Gallium Arsenide Antimony
GalnAsSb Gallium Indium Arsenide Antimony
Gallium Indium Nitride Arsenide
Gallium Indium Nitride Arsenide

GaN Gallium Nitride

GSMBE Gas-source Molecular Beam Epitaxy
InAlGaP InGaAs Indium Aluminum Gallium Phosphide
InGaAs Indium Gallium Arsenide

InGaAsP Indium Gallium Arsenide Phosphide

InGaN Indium Gallium Nitride
InP Indium Phosphide

IR Infra-Red

KP Kronnig-Penney
LED Light Emitting Diode
L-I Light-Current

L-I-V Light-Current-Voltage
LO Longitudinal Optical
MBE Molecular Beam Epitaxy

MgO Magnesium Oxide MOCVD Metal-organic Chemical Vapor Deposition

MQW Multi Quantum Well
PbSeTe Lead Selenium Tellurium
PbSnSeTe Lead Tin Selenium Tellurium

PCM Pulse-Code-Modulated PECVD Plasma-enhanced Chemical-Vapor Deposition

PL Photoluminescence

OW Ouantum Well

SELs Surface-Emitting Lasers
SiC Silica Carbide

SiC Silica Carbide SiO₂ Silica Dioxide

SRH Shockley-Read-Hall

TE Transverse Electric
TM Transverse Magnetic

TMM Transfer Matrix Method VCD Video Compact Disc

VCSELs Vertical-Cavity Surface-Emitting Lasers

V-I Voltage-Current

WDM Wavelength-Division Multiplexing
ZnCdSe Zinc Cadmium Selenium

ZnSe Zinc Selenium