

Appendix A

Abbreviations used in the thesis

Abbreviation	Expansion
ALD	Atomic Layer Deposition
BMP	Bound Magnetic Polaron
CCD	Charge coupled Device
CRT	Cathode Ray Tube
CVD	Chemical Vapor Deposition
DAC	Diamond Anvil Cell
DLE	Deep Level Emission
DMS	Diluted Magnetic Semiconductor
DRS	Diffuse Reflectance Spectroscopy
EDX	Energy Dispersive X-ray
FC	Field Cooling
FE	Field Emission
FM	Ferromagnetism

Abbreviation Expansion

FTIR	Fourier Transform Infrared
FWHM	Full Width Half Maximum
HETM	High Electron Mobility Transistors
HMS	Hierarchical Microspheres
HRTEM	High Resolution transmission Electron Microscope
IR	Infrared
JCPDS	Joint Committee on Powder Diffraction Standards
LD	Laser Diode
LED	Light emitting Diode
MBE	Molecular Beam Epitaxy
MOCVD	Metal Organic Chemical Vapor Deposition
MPMS	Magnetic Property Measurement System
NBE	Near Band Edge
PL	Photoluminescence
PLD	Pulsed Laser Deposition
PMT	Photomultiplier Tube
PVD	Physical Vapor Deposition
RKKY	Ruderman-Kittel-Kasuya-Yosida
RS	Rocksalt
RTFM	Room temperature Ferromagnetism
SAED	Selected Area Electron Diffraction
SE	Schottky Emission

Abbreviation Expansion

SEM	Scanning Electron Microscope
SET	Single Electron Transistor
SQUID	Superconducting Quantum Interference Device
TCO	Transparent Conducting Oxide
TE	Thermionic Emission
TEM	Transmission Electron Microscope
TM	Transition Metal
UV	Ultraviolet
VLS	Vapor Liquid Solid
VSM	Vibrating Sample Magnetometer
W	Wurtzite
WBG	Wide Band gap Semiconductor
XPS	X-ray Photoelectron Spectroscopy
XRD	X-ray diffraction
YSZ	Yttria Stabilized Zirconia
ZFC	Zero Field Cooling
ZnO	Zinc Oxide
ZnO:Co	Cobalt doped Zinc Oxide
ZnO:Cu	Copper doped Zinc Oxide
ZnO:Mn	Manganese doped Zinc Oxide
ZnO:Ni	Nickel doped Zinc Oxide

