

Index

Acknowledgment.....	I
Abstract (Chinese Version).....	1
Abstract	3
Chapter 1 Introduction.....	5
Chapter 2 Theoretical Backgrounds.....	7
2-1 Wurtzite Structure and Related Raman Tensor.....	7
2-2 Photoluminescence in Semiconductors.....	11
2-3 Raman scattering.....	18
2-4 Scanning electron microscopy (SEM) and Energy dispersive x-ray spectrometer (EDX).....	20
Chapter 3 Experiments.....	23
3-1 Sample preparation.....	23
3-2 Atomic Force Microscopy (AFM).....	24
3-3 Micro-PL system.....	28
3-4 Micro-Raman system.....	30
3-5 Field Emission SEM and EDX.....	32

Chapter 4 Results and Discussion.....	33
4-1 Morphology of hillocks.....	33
4-2 Micro-PL spectrum of hillocks.....	38
4-3 Micro-Raman spectra of hillocks.....	44
4-4 EDX analysis of hillocks.....	53
Chapter 5 Conclusion.....	57

