学位論文要約

Synthesis of Si Quantum Dots

 and

Development of Hybrid Light-Emitting Diode

(シリコン量子ドットの作製及び ハイブリッド発光ダイオードの開発)

Xin, Yunzi

(辛 韵子)

Department of Chemistry, Graduate School of Science, Hiroshima University

Content of the thesis

Content of the thesis	
Preface	
List of Paper	ſS
Table of con	tent
Chapter 1	General Introduction
Chapter 2	Synthesis of Blue Light-Emitting Si Nanoparticles (NPs) by Pulsed
	Laser Ablation: Solvent Dependence of Quantum Yield, Size and Aging Performance
Chapter 3	Fabrication of Si Quantum Dots (QDs) based Hybrid Light-Emitting
	Diode: Efficient Blue Emission, High Current and Optical Densities
Chapter 4	Synthesis of Si Nanocrystals (NCs) via Thermal Pyrolysis of (HSiO _{1.5}) _n
	polymers: Development of New Size-Controlling Method
Chapter 5	Synthesis of Si Nanoparticles (NPs) via Chemical Reduction of SiCl4:
	Surface Functionalization with Different Groups
Chapter 6	Concluding Remarks

Acknowledgement