## 学位論文要約

Field enhancement of plasmon-free materials: low dimensional structures studied by microspectroscopy and simulation

(プラズモンフリー物質の電磁場増強効果:顕微分光とシミュレーションによる低次元構造の研究)

坂本 全教

Department of Chemistry, Graduate School of Science, Hiroshima University

## **Content of the thesis**

Acknowledgements

Chapter 1. General introduction

Chapter 2. Theoretical background for field enhancement

Chapter 3. Field enhancement effect of MoS2: visualization of enhancement effect

Chapter 4. Spectral visualization of near-infrared enhancement in 2D layered WS2

Chapter 5. Field enhancement of porous Si synthesized from rice husk: coral structure presents large enhancement

Chapter 6. Fluctuation-free field enhancement of Si wire array

Chapter 7. General conclusion