102-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	X光繞射與奈米結構分析	Serial No. / ID	2143 / EGR5289
Dept.	電機工程學系碩士班	School System / Class	研究所碩士班1年1班
Lecturer	李得勝	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(二)678 / H369	Language	Chinese

Introduction

Familiar with the principles of X-ray diffraction, X-ray diffraction structural analysis of operating and Materials

Outline

One. based on principles of articles:
1.X-ray characteristics and detection (CH4)
2. free radiation protection (s)
3. Basic crystallography (CH1)
4. crystal geometry and projection (CH2)
5. inverted coordinate and reciprocal lattice (CH3)
6.X-ray scattering and diffraction (CH5)
Second, X spectrometer analysis of the basic principles and structure of articles:
1. of the diffraction factor (CH7, 8)
2. single crystal diffraction (CH9)
3. powder diffraction (CH10, 12)
Third, the practice articles:
1. θ -2 θ powder diffraction (data paper)
2. Film θ -2 θ diffraction (data paper)
3. superlattice (data paper)
4.Φ angle diffraction (data paper)
5. lattice stress analysis (data paper)

Prerequisite

Background knowledge required for this course as the basic electromagnetism, modern physics. There are good solid-state physics, but not absolutely necessary