URN etd-0407109-183715-1158
Author Hsu Mao Hsin
Author's Email Address No Public.
Statistics This thesis had been viewed 48 times. Download 138 times.
Department
Year 2004
Semester 1
Degree Master
Type of Document Master's Thesis
Language zh-TW.Big5 Chinese
Title Study on Superconductors Pr2-xCexCu1-yMyO4(X=0.13~0.17;M=Zn,Ni) for Electron-Doped Effect
Date of Defense 0000-00-00
Page Count 78
Keyword
Superconductors

Abstract
From the results of low temperature specific heat), p-type 214 superconductor shows a d-wave behavior (C(T)=A/T2+γT+αT2+βT3). However, n-type 214 superconductor is not clear. Therefore we are strong interesting in investigating the electronic transportation mechanism of Pr2-xCexCu1-yMyO4 by doping magnetic and nonmagnetic atoms, and also comparing with p-type Pr2-xCexCu1-yMyO4.
In this thesis, we synthesis Pr2-xCexCu1-yMyO4(M=Zn、Ni，x=0.13、0.14、0.15、0.16、0.17，y=0、0.0025、0.005、0.0075、0.01) electronic superconductors using Solid State Reaction method and investigate the electronic properties of these samples with magnetic and non-magnetic dopants substituting Cu of samples. We also study the influence of various doping concentrations in superconductors on Tc and electronic properties.
Advisory Committee - advisor

Files etd-0407109-183715-1158-007.pdf
etd-0407109-183715-1158-002.pdf
etd-0407109-183715-1158-003.pdf
etd-0407109-183715-1158-001.pdf
etd-0407109-183715-1158-004.pdf
etd-0407109-183715-1158-005.pdf
etd-0407109-183715-1158-006.pdf

indicate access worldwide
Date of Submission 2005-08-12