

Yan Chen

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3543 Aristotle Ave.
Orlando, FL 32826

EDUCATION

Ph.D.(working towards),

Material Science and Engineering, University of Central Florida, Orlando, FL **2009~Present**

M.S., Material Science and Engineering (MSE), Tsinghua University (THU), China **2007~2009**

B.S., Material Science and Engineering, Tsinghua University, China **2003~2007**

- 2007, Second Class Gua-Chuan Scholarship for Overall Excellence, Department of MSE
- 2005, Third Class Gua-Chuan Scholarship for Overall Excellence, Department of MSE
- 2004, Second Class Scholarship for Overall Excellence, Tsinghua University

RESEARCH EXPERIENCE

Research Assistant, State Key Laboratory of New Ceramics and Fine Processing, THU **09/2007~07/2009**

Project: Morphotropic Phase Boundary (MPB) of Perovskite-type Ferroelectric Solid Solutions and Its Relation to Electrical Properties

- Systematically explored the MPB region of BNT-BKT-BT-PT quaternary system with Linear Combination Rule (LCR) of MPB, and investigated the electrical properties
- Modified BNT-based ceramics by doping some selected elements
- Investigate relation between nano-domain and properties near MPB by TEM

B.S. Thesis: State Key Laboratory of New Ceramics and Fine Processing, THU **02/2007~06/2007**

Project: MPB and Electrical Properties of PMN-PZN-PT Ceramics

- Verified the assumption LCR of MPB in PMN-PZN-PT ternary system
- Studied the phase character near MPB by XRD and microstructure by SEM
- Investigated electrical properties changing versus composition near MPB region
- Studied influence of sintering technology (temperature and atmosphere) upon the electrical properties

Intern, State Key Laboratory of New Ceramics and Fine Processing, THU **08/2006~09/2006**

Project: Research on the MPB of PMN-PZN-PNN-PT-PZ ferroelectric ceramics

- Prepared a series of PMN-PZN-PNN-PT-PZ ferroelectric ceramics with solid oxide method
- Determined the MPB region of the system through XRD
- Tested ferroelectric and piezoelectric properties

Students Research Training: Department of MSE, THU **03/2005~01/2006**

Project: Prepare Amorphous Thin Films with Ion Beam Assisted Deposition

- Prepared Cu-Nb and Cu-Co amorphous thin films via Physical Vapor Deposition with ion beam assisted
- Studied the effects of both composition proportion and incidence angle of ion beam upon the formation of meta-stable phase, and characterized the phase structure through TEM

HONORS

- 2005 Outstanding Individual of Tsinghua University for Social Practice
- 2005 Second Place in Mathematical Modeling Competition in THU
- 2004 First Place in Ma-Yuehan Cup Chess Team Match in THU
- 2004 First Place in Beijing Physics Competition for University Students
- 2003 First Place in Machine Design Innovation Competition in THU
- 2002 Second Place in National Physics Olympiads Competition (on behalf of Guangxi)

EXTRACURRICULAR EXPERIENCE

Chief, Communication Department in Chess Association, THU **10/2003~06/2005**

Monitor, Class 32 in Department of MSE **08/2003~09/2004**

PROFESSIONAL SKILLS

- **Programming Languages & Math Package:** C, Java, Matlab
- **Test skills:** Electrical Properties Test (universal test instruments), Analyze Microstructure by SEM, Characterize Phase by XRD, Mechanical Test (universal test machine)
- **Fabrication:** Solid Phase Method for Ceramics, Physical Vapor Deposition for Thin Films