Wenzhi Lin

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Education

Xiamen University, China	Physics & Electrical Communication	B.S., 2001
Xiamen University, China	Condensed Matter Physics	M.S., 2004
Ohio University	Physics	Ph.D., 2011

Professional Experience

2012	Postdoctoral Research Associate, Center for Nanophase Materials Sciences, ORNL
2011	Postdoctoral Researcher, Department of Physics and Astronomy, Ohio University

Research Synopsis

1. *Functional Oxide Materials*
   Investigation of functional oxide materials using scanning probe microscopy to explore oxide surfaces.

2. *Transition Metal/Ga-polar Wurtzite GaN Heterostructure*
   Scanning tunneling microscopy (STM) studies of initial phase of sub-monolayer iron on Ga-polar GaN (0001) surface prepared using molecular beam epitaxy (MBE) and *in-situ* monitoring of reflection high energy electron diffraction.

3. *Transition Metal/N-polar Wurtzite GaN Heterostructure*
   Investigation of sub-monolayer iron deposition onto N-polar GaN (000-1) surface using *in-situ* scanning tunneling microscopy, molecular beam epitaxy, and reflection high energy electron diffraction.

4. *Transition Metal Nitride/Ga-polar Wurtzite GaN Heterostructure*
   Growth and characterization of zinc-blende type iron nitride thin film on wurtizite GaN (0001), using a variety of techniques, including molecular beam epitaxy, reflection high energy electron diffraction and X-ray diffraction.

5. *Ultra-High Vacuum (UHV) Interconnected MBE and Cryogenic Superconducting Magnet STM Facility*
   Development of MBE/STM system with home-designed key components, including the UHV multi-chamber and modular STM head, for versatile functions in the UHV system.