

## GARY J. MANKEY

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### Professional Preparation

Lycoming College	Physics & Math	B.A.	1982
The Pennsylvania State University	Physics	Ph.D.	1992

### Appointments

1993-1995	Postdoctoral Scholar, The Pennsylvania State University
1995-1996	Postdoctoral Researcher, Louisiana State University
1996-2001	Assistant Professor of Physics, University of Alabama
2001-2005	Associate Professor of Physics, University of Alabama
2005 - Present	Professor of Physics, University of Alabama

### Five Publications Closely Related to the Project

- D. Lott, F. Klose, H. Ambaye, G. J. Mankey, P. Mani, M. Wolff, A. Schreyer, H. M. Christen, and B. C. Sales, "Chemical-Order-Induced Magnetic Exchange Bias in Epitaxial FePt Films", *Phys. Rev.* **B77**: #132404 (2008).
- V. V. Krishnamurthy, G. J. Mankey, B. He, M. Piao, J. M. Wiest, D. E. Nikles, L. Porcar, and J. L. Robertson, "Orientational Distributions and Nematic Order of Rodlike Magnetic Nanoparticles in Dispersions", *Phys. Rev.* **E77**: #031403 (2008).
- R. L. Kurtz, D. A. Browne and G. J. Mankey, "Final State Effects in Photoemission Studies of Fermi Surfaces", *J. Phys. Cond. Matt.* **19**: #355001 (2007)
- H. Alouach and G. J. Mankey, "Critical Height and Growth Mode in Epitaxial Copper Nanowire Arrays Fabricated Using Glancing-Angle Deposition", *Appl. Phys. Lett.* **86**: #123114 (2005).
- Z. Zhao, P. Mani, G. J. Mankey, G. Gubbiotti, F. Spizzo, S. Tacchi, W.-T. Lee, C. T. Yu and M. J. Pechan, "Magnetic Properties of Uniaxial Synthetic Antiferromagnets for Spin-Valve Applications", *Phys. Rev.* **B71**: #104417 (2005).

### Five Other Significant Publications

- P. Mani V. V. Krishnamurthy J. L. Robertson, F. Klose, and G. J. Mankey, "Magnetic Transitions in Lattice-Matched, Ordered FePt<sub>3</sub>-based Antiferromagnetic / Ferromagnetic Films", *J. Appl. Phys.* **99**: #08C109 (2006).
- V. V. Krishnamurthy, I. Zoto, G. J. Mankey, J. L. Robertson, S. Maat, E. E. Fullerton, I. Nwagwu, and J. K. Akujieze, "Antiferromagnetic Phase Transitions in an Ordered Pt<sub>3</sub>Fe(111) Film Studied by Neutron Diffraction", *Phys. Rev.* **B70**: #024424 (2004).
- V. V. Krishnamurthy, N. Kawamura, M. Suzuki, T. Ishikawa, G. J. Mankey, P. Raj, A. Sathyamoorthy, Amish G. Joshi, and S. K. Malik, "Evidence for a Magnetic Moment on Ir in IrMnAl from X-ray Magnetic Circular Dichroism", *Phys. Rev.* **B68**: #214413 (2003).
- C. Yu, M. J. Pechan, and G. J. Mankey, "Dipolar-Induced, Spatially Localized Resonance in Magnetic Antidot Arrays", *Appl. Phys. Lett.* **83**: 3948 (2003).
- V. V. Krishnamurthy, A. S. Bhandar, M. Piao, I. Zoto, A. M. Lane, D. E. Nikles, J. M. Wiest, G. J. Mankey, L. Porcar and C. J. Glinka, "Shear and Magnetic Field-Induced Ordering in Magnetic Nanoparticle Dispersions from Small-Angle Neutron Scattering", *Phys. Rev.* **E67**: #051406 (2003).

### Synergistic Activities

Chair of the Magnetic Interfaces and Nanostructures Division of the AVS Science and Technology Society, 2008.

Regular host of students for NSF-REU.

Referee for Physical Review Letters, Physical Review B, Applied Physics Letters, Journal of Vacuum Science and Technology, Journal of Applied Physics, and IEEE Transactions on Magnetics. Reviewer for the NSF, US-DOE, European Science Foundation, the Research Corporation, U.S. Civilian Research and Development Foundation and Louisiana State Board of Regents.

### **Collaborators and Other Affiliations**

*Collaborators:* Hailemariam Ambaye (ORNL), Martin Bakker (UA), Silas Blackstock (UA), William Butler (UA), Nordel Cavadini (Paul Scherrer Institut), M. Lowell Crow (ORNL), William Doyle (UA-deceased), Hideo Fujiwara (UA), E. E. Fullerton (HGS), Charles Glinka (NIST), G. Gubbiotti (Università di Perugia), J.W. Harrell (UA), O. Hellwig (HGS), Tonya Klein (UA), Frank Klose (ANSTO), Richard L. Kurtz (LSU), Alan Lane (UA), Valeria Lauter (ORNL), Wai-Tung Lee (ORNL), Dieter Lott (GKSS), Robert Metzger (UA), John Mitchell (ANL), David Nikles (UA), Ragav Pandey (UA), R. Pechan (Miami U, OH), Lionel Porcar (NIST), J. Lee Robertson (ORNL), Rainer Schad (UA), Jian Shen (ORNL), Shane Street (UA), Greg Szulczewski (UA), Suzanne G.E. te Velthuis (ANL), V.V. Vavasori (Università di Ferrara), Pieter Visscher (UA), Mark Weaver (UA), John Wiest (UA), C. Yu (Miami U, OH), G. Zeltzer (HGS).

### **Graduate and Postdoctoral Advisors**

graduate and postdoctoral advisor: Roy F. Willis, Penn State University

postdoctoral advisor: Richard L. Kurtz, Louisiana State University