

July 2006

List of Publications (through June 2006): Roger Kirby

Roger D. Kirby

University of Nebraska-Lincoln, rkirby1@unl.edu

Follow this and additional works at: http://digitalcommons.unl.edu/physics_kirby



Part of the [Physics Commons](#)

Kirby, Roger D., "List of Publications (through June 2006): Roger Kirby" (2006). *Roger Kirby Publications*. 1.
http://digitalcommons.unl.edu/physics_kirby/1

This Article is brought to you for free and open access by the Research Papers in Physics and Astronomy at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Roger Kirby Publications by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Roger D. Kirby

Department of Physics and Astronomy
University of Nebraska
Lincoln, Nebraska 68588-0111
Phone: (402) 472-2784
FAX: (402) 472-2879
E-mail: rkirby1@unl.edu

Publications

1. A. Aktag, S. Michalski, L. Yue, S.-H. Liou, and R. D. Kirby, *Formation of an anisotropy lattice in Co/Pt multilayers by direct laser interference patterning*. Accepted for publication in J. Appl. Physics.
2. L. Y. Chen, S. Y. Wang, and R. D. Kirby, *Magneto-optical properties of nanostructured media* (Review Chapter), in book **Advanced Magnetic Materials**, Kluwer Academic/Plenum and Tsinghua University Press, 2006 (Y. Liu, D. Shindo, D. J. Sellmyer, Eds.)
3. J. Zhou, R. Skomski, A. Kashyap, K. D. Sorge, Y. Sui, M. Daniil, L. Gao, M. L. Yan, S. H. Liou, R. D. Kirby, and D. J. Sellmyer, *Highly coercive thin-film nanostructures*, J. Magn. Magn. Mater. **290-291**, 227-230 (2005).
4. K. D. Sorge, R. Skomski, M. Daniil, S. Michalski, L. Gao, J. Zhou, M. Yan, Y. Sui, R. D. Kirby, and D. J. Sellmyer, *Geometry and magnetism of LI_0 Nanostructures*, Scripta Materialia **53**, 459-463 (2005).
5. K. D. Sorge, A. Kashyap, R. Skomski, L. Yue, L. Gao, R. D. Kirby, S. H. Liou, and D. J. Sellmyer, *Interactions and switching behavior of anisotropic magnetic dots*, J. Appl. Physics **95**, 7414 (2004).
6. R. Skomski, R. D. Kirby, and D. J. Sellmyer, *Equivalence of sweep-rate and magnetic viscosity dynamics*, J. Appl. Physics **93**, 6820-6822 (2003).
7. R. Skomski, D. Leslie-Pelecky, R. D. Kirby, A. Kashyap, and D. J. Sellmyer, *Coercivity of disordered nanostructures*, Scripta Materialia **48**, 857-862 (2003).
8. H. Zeng, S. Michalski, R. D. Kirby, D. J. Sellmyer, L. Menon and S. Bandyopadhyay, *Effects of surface morphology on magnetic properties of Ni nanowire arrays in self-ordered porous alumina*, J. Phys.: Condensed Matter **14**, 715-721 (2002).
9. M. Zheng, L. Menon, H. Zeng, Y. Liu, S. Bandyopadhyay, R. D. Kirby, and D. J. Sellmyer, *Magnetic properties of Ni nanowires in self-assembled arrays*, Phys. Rev. B **62**, 12282 (2000).
10. Roger D. Kirby, Mingjun Yu, and D. J. Sellmyer, *Activation Volumes in Thin Film and Particulate Systems*, J. Appl. Phys. **87**, 5696 (2000).

11. Sa Huang, Sy-Hwang Liou, E. Klimek, R. D. Kirby and Y. D. Yao, *Enhancement of Coercivity in Nanometer-Size CoPt Crystallites*. J. Appl. Phys. **85**, 4334 (1999).
12. X. Gao, J. A. Woollam, R. D. Kirby, D. J. Sellmyer, C. T. Tanaka, J. Nowak, and J. S. Moodera, *Dielectric Tensor for Magneto-Optic NiMnSb*, Phys. Rev. B **59**, 9965 (1999).
13. R. Skomski, D. J. Sellmyer, and R. D. Kirby, *Activation Energy and Magnetic Viscosity*, J. Appl. Phys **85**, 5069 (1999).
14. D. J. Sellmyer, M. Yu, and R. D. Kirby, *Nanostructured Magnetic Films for Extremely High Density Recording*, Nanostructured Materials **12**, 1021 (1999)
15. J. M. Meldrim, R. D. Kirby, J. A. Woollam, and D. J. Sellmyer, *Magnetic and Magneto-Optic Study of Co/Pt Multilayers on Bismuth and Aluminum-Doped Dysprosium Iron Garnet*, IEEE Trans. Magn. **34**, 1991 (1998).
16. T. Matsui, R. D. Stevenson, R. D. Kirby, and D. J. Sellmyer, *Structural and Magnetic Properties of PrCo_{3-x}Si_x Compounds*, J. Appl. Phys. **83**, 7381 (1998).
17. D. J. Sellmyer, M. Yu, R. A. Thomas, Y. Liu, and R. D. Kirby, *Nanoscale Design of Films for Extremely High Density Magnetic Recording*, Proceedings of the International Conference on Superlattices and Microdevices, Physics of Low Dimensional Structures **1-2**, 155 (1998).
18. K. W. Wierman, J. N. Hilfiker, R. F. Sabiryanov, S. S. Jaswal, R. D. Kirby, and J. A. Woollam, *Optical and Magneto-Optical Constants of MnPt₃*, Phys. Rev. B **55**, 3093 (1997).
19. K. W. Wierman and R. D. Kirby, *Long Range Order and Magnetic Properties of Mn_xPt_{1-x} Thin Films*, J. Magn. Magn. Mater. **154**, 12-16 (1996).
20. Two articles in the *Macmillan Encyclopedia of Physics*, entitled *Paramagnetism* and *Drift Speed of Electrons*. (1996).
21. D. J. Sellmyer, R. D. Kirby, and S. S. Jaswal, *Magnetism and Magneto-Optics of Rare Earth-Transition Metal Glasses and Multilayers*, book chapter in The Magnetism of Amorphous Metals and Alloys, Eds. J. A. Fernandez-Baca and W. Y. Ching, (World Scientific Publishing, Singapore), 1996.
22. K. W. Wierman and R. D. Kirby, *Magnetic and Magneto-Optic Properties of (Mn_xZn_{1-x})_yPt_{1-y}*, J. Appl. Phys. **79**, 6206 (1996).
23. K. W. Wierman and R. D. Kirby, *Long Range Order and Magnetic Properties of Mn_xPt_{1-x} Thin Films*, J. Magn. Magn. Mater. **154**, 12-16 (1996).
24. R. D. Kirby, J. X. Shen, K. W. Wierman, J. Chen, Y. Liu, B. W. Robertson, and D. J. Sellmyer, *Nanostructured Magneto-Optic Films and Multilayers*, Chapter XI in Aspects of Modern Magnetism, Eds. F. C. Pu, Y. J. Wang, and C. H. Shang, (World Scientific Publishing, Singapore), 1996, pp. 203-218.
25. J. Chen, K. W. Wierman, R. D. Kirby, and D. J. Sellmyer, *Magnetic and Magneto-Optical Properties of Mn_xCuBi (x=0.75-2.0) Films*, IEEE Trans. Magn. **31**, 3334 (1995).

26. D. J. Sellmyer, R. D. Kirby, J. Chen, K. W. Wierman, J. X. Shen, Y. Liu, B. W. Robertson, and S. S. Jaswal, *Magneto-Optic and Structural Properties of Nanocrystalline MnBi-Based Films*, J. Phys. Chem. Solids **56**, 1549 (1995).
27. J. X. Shen, R. D. Kirby, K. W. Wierman, Y. B. Zhang, T. Suzuki, and D. J. Sellmyer, *Magneto-Optical and Structural Properties of DIG/T (T=Fe, Co, Dy) Multilayers*, J. Magn. Magn. Mater. **140-144**, 2139 (1995).
28. R. D. Kirby, J. X. Shen, R. J. Hardy, and D. J. Sellmyer, *Magnetization Reversal in Nanoscale Magnetic Films with Perpendicular Anisotropy*, Phys. Rev. B (Rapid Commun.) **49**, 10810 (1994).
29. K. W. Wierman, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Low-Temperature Characterization of the Magnetic Properties of MnBiAl Thin Films*, J. Appl. Phys. **75**, 6348 (1994).
30. Z. S. Shan, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Temperature Dependent Interface Magnetism and Magnetization Reversal in Co/Pt Multilayers*, J. Appl. Phys. **75**, 6418 (1994).
31. S. S. Jaswal, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Electronic Structure and Magneto-Optical Properties of MnBi and MnBiAl*, J. Appl. Phys. **75**, 6346 (1994).
32. J. X. Shen, K. W. Wierman, Y. B. Zhang, R. D. Kirby, J. A. Woollam, and D. J. Sellmyer, *Magneto-Optical and Structural Properties of BiAlDyIG/Fe Multilayers*, J. Appl. Phys. **75**, 6670 (1994).
33. Y. B. Zhang, P. He, J. A. Woollam, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Magnetic and Magneto-Optic Properties of Sputtered Co/Ni Multilayers*, J. Appl. Phys. **75**, 6495 (1994).
34. A. Kusov and R. D. Kirby, *Small Polarons and the Electronic Properties of Mo₂S₃*, Phys. Rev. B **50**, 16373 (1994).
35. J. X. Shen, R. D. Kirby, K. Wierman, Z. S. Shan, D. J. Sellmyer, and T. Suzuki, *Magnetization Reversal and Defects in Co/Pt Multilayers*, J. Appl. Phys. **73**, 6418 (1993).
36. D. Wang, R. D. Kirby, and D. J. Sellmyer, *Magnetization of Co/Cr Multilayer Films*, J. Appl. Phys. **73**, 6353 (1993).
37. R. D. Kirby, J. X. Shen, J. A. Woollam, and D. J. Sellmyer, *Magneto-Optic Properties of Uranium Based Compounds*, J. Appl. Phys. **69**, 4974 (1991).
38. Z. S. Shan, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Temperature and layer-Thickness Dependencies of Kerr Rotation in Dy/Co and Dy/Fe Multilayers*, J. Appl. Phys. **70**, 6203 (1991).
39. D. J. Sellmyer, Z. S. Shan, J. X. Shen, and R. D. Kirby, *Magnetic Structure, Anisotropy and Magneto-Optic Properties of Amorphous Rare-Earth Multilayers*, J. Mag. Soc. Jpn. **15**, Suppl. S1, 9 (1991).

40. R. D. Kirby, J. X. Shen, Z. S. Shan, and D. J. Sellmyer, *Studies of Domain Dynamics in Amorphous Dy/Fe Multilayers*, J. Appl. Phys. **70**, 6200 (1991).
41. J. X. Shen, R. D. Kirby, D. J. Sellmyer, and Y. J. Wang, *Magneto-Optical Properties of MnBiAl Thin Films*, J. Appl. Phys. **69**, 5984 (1991).
42. J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *The Structure and Magneto-Optic Properties of MnAl-Based Thin Films*, J. Appl. Phys. **67**, 4929 (1990).
43. R. O. Dillon, R. D. Kirby, and I. Spain, *Electrical Noise in Carbon Fibers*, J. Appl. Phys. **66**, 4282 (1989).
44. V. Katkanant, J. R. Hardy, R. D. Kirby, and F. G. Ullman, *Raman Scattering Studies of Rb_2ZnCl_4 and K_2ZnCl_4* , Ferroelectrics **99**, 213 (1989).
45. J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Magneto-Optic Properties of Evaporated Mn-Bi-Al Films*, J. Magn. Magn. Mater. **81**, 107 (1989).
46. H. Erdogan and R. D. Kirby, *Raman Spectrum and Lattice Dynamics of $NbTe_2$* , Solid State Commun. **70**, (1989).
47. V. Katkanant and R. D. Kirby, *Mixed-Crystal Lattice Dynamics of $Hf_xTi_{1-x}Se_2$* , Phys. Rev. B **40**, 1152 (1989).
48. R. L. Fagerquist, R. D. Kirby and E. A. Pearlstein, *Metastable Conduction States in Mo_2S_3 : Conductivity Fluctuations*, Phys. Rev. B **39**, 5139 (1989).
49. R. L. Fagerquist and R. D. Kirby, *Metastable Conduction States in Mo_2S_3 : Pulsed Conductivity*, Phys. Rev. B **38**, 3973 (1988).
50. G. A. Freund and R. D. Kirby, *Lattice Dynamics of Mixed Crystals of $TiSe_2$* , Phys. Rev. B. **30**, 7122 (1984).
51. R. D. Kirby, R. L. Fagerquist, and W. N. Nieveen, *Electronic Properties of Zr-Doped $TiSe_2$* , Solid State Commun. **51**, 131 (1984).
52. H. Rashid, D. J. Sellmyer, and R. D. Kirby, *Effect of Nickel Impurities on Charge Density Wave Formation in TaS_3* , Phys. Rev. B **29**, 5398 (1984).
53. H. Rashid, D. J. Sellmyer, V. Katkanant, and R. D. Kirby, *Electronic Properties and Phase Transitions in the Mo-Chain Compound Mo_2S_3* , Solid State Commun. **43**, 675 (1982).
54. J. Gaby, B. DeLong, F. C. Brown, R. D. Kirby, and F. Levy, *Origin of the Structural Transition in $TiSe_2$* , Solid State Commun. **39**, 1167 (1981).
55. J. R. Duffey and R. D. Kirby, *A Raman Investigation of the Charge Density Wave Mixed Crystal System $1T-TaS_{2-x}Se_x$* , Phys. Rev. B **23**, 1534 (1981).
56. D. W. Galliardt, W. R. Nieveen, and R. D. Kirby, *Lattice Properties of the Linear Chain Compound TiS_3* , Solid State Commun. **34**, 37 (1980).
57. R. D. Kirby and J. R. Duffey, *A Simple Helium Cryostat for Raman Spectroscopy*, Rev. Sci. Instrum. **50**, 663 (1979).

58. G. A. Freund, R. D. Kirby, and D. J. Sellmyer, *Raman Scattering from Pyrite Structure AuSb₂*, Solid State Commun. **22**, 5 (1977).
59. B. N. Ganguly, F. G. Ullman, J. R. Hardy, and R. D. Kirby, *Comments on Raman Scattering from Soft Modes in the Ferroelectric Phase of Gd₂(MoO₄)₃*, J. Phys. Soc. Japan **43**, 1085 (1977).
60. J. R. Duffey, R. D. Kirby, and R. V. Coleman, *Raman Scattering from 1T-TaSe₂*, Solid State Commun. **20**, 617 (1976).
61. B. N. Ganguly, F. G. Ullman, R. D. Kirby, and J. R. Hardy, *Raman Spectrum of Gadolinium Molybdate at 80 K*, Phys. Rev. B **13**, 1344 (1976).
62. B. N. Ganguly, F. G. Ullman, R. D. Kirby, and J. R. Hardy, *Optic Mode Coupling in Ferroelectric Gadolinium Molybdate*, Solid State Commun. **17**, 533 (1975).
63. B. N. Ganguly, F. G. Ullman, R. D. Kirby, and J. R. Hardy, *Effect of Uniaxial Stress on the Unstable A(TO) Mode in Gadolinium Molybdate*, Phys. Rev. B **12**, 3783 (1975).
64. B. S. Agrawal, R. D. Kirby, and J. R. Hardy, *Theoretical and Experimental Studies of the Second Order Raman Spectra of CsCl, CsBr, and CsI*, Phys. Rev. B **11**, 5153 (1975).
65. T. P. Sharma, R. D. Kirby, and S. S. Jaswal, *Phonon Induced Second Order Raman Scattering in LiF*, Phys. Rev. B **9**, 1971 (1974).
66. J. Schneider and R. D. Kirby, *Raman Scattering from ZnS Polytypes*, Phys. Rev. B **6**, 1290 (1972).
67. B. N. Ganguly, R. D. Kirby, M. V. Klein, and G. P. Montgomery, Jr., *Raman Active Resonance Modes, Overtones, and Anharmonicity in NaCl:Cu⁺*, Phys. Rev. Lett. **28**, 307 (1972).
68. R. D. Kirby, *Even Parity Lattice Resonances and Anharmonicity in KI:Ag⁺*, Phys. Rev. B **4**, 3557 (1971).
69. R. D. Kirby, *Low Lying Even Parity Resonances in KI:Ag⁺*, Phys. Rev. Letters, 512 (1971).
70. B. P. Clayman, R. D. Kirby, and A. J. Sievers, *Far-Infrared Properties of Lattice Resonant Modes: B. Second Order Stark Effect*, Phys. Rev. B **3**, 1, 351 (1971).
71. R. D. Kirby and A. J. Sievers, *Evidence for a Central Instability in KBr:Li⁺*, Phys. Lett. A **33**, 405 (1970).
72. R. D. Kirby, A. E. Hughes, and A. J. Sievers, *Far-Infrared Properties of Lattice Resonant Modes: IV. Paraelectric Impurities*, Phys. Rev. B **2**, 481 (1970).
73. I. G. Nolt, R. D. Kirby, C. D. Lytle, and A. J. Sievers, *A Double-Pass Spectrometer for the Far-Infrared*, Appl. Optics **8**, 309 (1969).
74. R. D. Kirby, A. E. Hughes, and A. J. Sievers, *Far-Infrared Absorption in NaCl:OH at Low Temperatures*, Phys. Lett. A **28**, 170 (1968).

75. R. D. Kirby and A. J. Sievers, *Electric Field Induced Shift of a Far-Infrared Resonance in KBr:Li⁺*, Solid State Commun. **6**, 613 (1968).
76. R. D. Kirby, I. G. Nolt, R. W. Alexander, and A. J. Sievers, *Far-Infrared Properties of Lattice Resonant Modes: I. Isotope Shift*, Phys. Rev. **168**, 1057 (1968).

Abstracts and Proceedings

1. Aliekber Akgag, Lanping Yue, Steven Michalski, Sy Hwang Liou, Roger D. Kirby, *Direct laser interference patterning of Co/Pt thin film multilayers*, presented at the March Meeting of the American Physical Society, Montreal, Quebec March 22 - 26, 2004
2. A. Kashyap, R. Skomski, S. Jaswal, K. Sorge, J. Long, E. Tsymbal, S.-H. Liou, R. D. Kirby, and D. J. Sellmyer, *Micromagnetics of interacting nanodots*, 2003 International Conference on Magnetism, Rome, July 27 – August 1, 2003.
3. A. Akgag, Y. Sui, S. Michalski, N. Polushkin, L. Yue, R. D. Kirby, and D. J. Sellmyer, *Magnetic films patterned by direct laser interference lithography*, March Meeting of the American Physical Society, Austin, TX, March 3-7, 2003.
4. K. Sorge, L. Gao, S. Michalski, J. Long, R. D. Kirby, S.-H Liou, R. Skomski, and D. J. Sellmyer, *Interactions and switching behavior of anisotropic magnetic dots*, March Meeting of the American Physical Society, Austin, TX, March 3-7, 2003.
5. R. Skomski, D. Leslie-Pelecky, R. D. Kirby, and D. J. Sellmyer, *Coercivity of Disordered and Ordered Nanostructures*, Conf. on Nanostructured Advanced Magnetic Materials, Irsee, Germany, June 9-13, 2002
6. H. Zeng, S. Michalski, R. D. Kirby, and D. J. Sellmyer, *Coercivity and Activation Volumes of Ni Nanowire Arrays*, presented at the March Meeting of the American Physical Society, Seattle, WA, March 12-16, 2001
7. X. Zhao, M. Zheng, H. Zeng, L. Menon, Y. Liu, S. Bandyopadhyay, R. D. Kirby, and D. J. Sellmyer, *TEM Study of Self-Assembled Nanowires*, Presented at the International Kunming Symposium on Microscopy, Kunming, China, July 2-5, 2000
8. Roger D. Kirby, M. Yu, H. Zeng, and D. J. Sellmyer, *Magnetization Reversal Processes: Activation Volume Measurements in Nanostructured Thin Films and Nanomagnets*, Presented at the International Conference on Magnetism, Recife, Brazil, August 7-12, 2000.

9. M. Zheng, H. Zeng, R. D. Kirby, D. J. Sellmyer, and Yi. Liu, *Magnetic Properties of Self-Assembled Multilayered Fe/Pt Nanowire Arrays*, Presented at the March Meeting of the American Physical Society, Minneapolis, MN, March 16-20, 2000.
10. J. Mark Meldrim, R. D. Kirby, and D. J. Sellmyer, *Magnetization Reversal and Thermal Activation in Co/Pt Multilayers*, Presented at the March Meeting of the American Physical Society, Minneapolis, MN, March 16-20, 2000.
11. Roger D. Kirby, Mingjun Yu, and D. J. Sellmyer, *Activation Volumes in Thin Film and Particulate Systems*, Presented at the 44th Annual Conference on Magnetism and Magnetic Materials, San Jose, CA, November 14-18, 1999.
12. R. D. Kirby, *The Interpretation of Activation Volumes in Magnetic Viscosity Measurements*, Presented at the March 1999 at the APS Centennial Meeting, Atlanta, GA, Bull. Am. Phys. Soc. March 1999
13. R. Skomski, D. J. Sellmyer, and R. D. Kirby, *Activation Energy and Magnetic Viscosity*, Presented at the 43rd Annual Conference on Magnetism and Magnetic Materials, Miami, FL November 9-12, 1998.
14. *Enhancement of Coercivity in Nanometer-Size CoPt Crystallites*. Sa Huang, Sy-Hwang Liou, E. Klimek, and R. D. Kirby, Presented at the 43rd Annual Conference on Magnetism and Magnetic Materials, Miami, FL November 9-12, 1998.
15. *Experimental Determination and Theoretical Modeling of the Dielectric Tensor for Magneto-Optic Material NiMnSb*, X. Gao, J. A. Woollam, R. D. Kirby, D. J. Sellmyer, C. T. Tanaka, J. Nowak, and J. S. Moodera, Presented at the 43rd Annual Conference on Magnetism and Magnetic Materials, Miami, FL November 9-12, 1998.
16. R. D. Kirby, T. Matsui, and D. J. Sellmyer, *Magnetic and Magneto-Optical Properties of Epitaxially Grown C_{1b} -NiMnSb*, Bull. Am. Phys. Soc. **43**, 900 (1998). Presented at the March 1998 Meeting of the American Physical Society, Los Angeles, CA.
17. *Magnetic and Magneto-Optic Study of Co/Pt Multilayers on Bismuth and Aluminum-Doped Dysprosium Iron Garnet*, Presented at the Joint MMM-Intermag Conf., San Francisco, CA (January, 1998).
18. *T. Matsui, R. D. Stevenson, R. D. Kirby, and D. J. Sellmyer*, Structural and Magnetic Properties of $PrCo_{3-x}Si_x$ Compounds, Joint MMM-Intermag Conf., San Francisco, CA (January, 1998).
19. R. D. Kirby, Z. S. Shan, and D. J. Sellmyer, *Simulations of the Temperature Dependence of Activation Volumes in Thin Magnetic Films*, Bull. Am. Phys. Soc. **42**, xxx (1997).

- Presented at the March 1997 Meeting of the American Physical Society, Kansas City, MO.
20. T. Matsui, Z. S. Shan, R. D. Kirby, and D. J. Sellmyer. *Structure and Magnetic Properties of $(Ce_{1-x}Pr_x)_3Co_8Si$ Compounds*, Bull. Am. Phys. Soc. **42**, xxx (1997). Presented at the March 1997 Meeting of the American Physical Society.
 21. D. J. Sellmyer, M. Yu, R. A. Thomas, Y. Liu, and R. D. Kirby, *Nanoscale Design of Films for Extremely High Density Magnetic Recording*. Presented the International Conference on Superlattices and Microdevices, Lincoln, NE, June, 1997,
 22. T. Matsui, R. D. Kirby, D. J. Sellmyer, J. S. Moodera, *Magnetic and Magneto-Optical Properties of Epitaxially Grown Cl_b -NiMnSb*, Presented at the Midwest Solid State Conference, Manhattan, KS, October 4, 1997.
 23. K. W. Wierman, J. N. Hilfiker, R. F. Sabiryanov, S. S. Jaswal, R. D. Kirby, and J. A. Woollam, *Optical and Magneto-Optical Dielectric Constants of $MnPt_3$* , Bull. Am. Phys. Soc. **41**, 381 (1996). Presented at the March 1996 Meeting of the American Physical Society, St. Louis, MO.
 24. K. W. Wierman, J. N. Hilfiker, R. F. Sabiryanov, S. S. Jaswal, R. D. Kirby, and J. A. Woollam, *Optical and Magneto-Optical Properties of $MnPt_3$* , Presented at the 41st Annual Conference on Magnetism and Magnetic Materials, Atlanta, November 1996.
 25. Z. S. Shan, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Magnetic Properties and Magnetization Reversal in Co/Au Multilayers*, (**Abstract Only** published in J. Appl. Phys. **79**, 4786 (1996).
 26. R. D. Kirby, J. X. Shen, and D. J. Sellmyer, *Magnetization Reversal in Compositionally Modulated Tb/Fe Multilayers*, Presented at the 38th Annual Conference on Magnetism and Magnetic Materials, November 1993 (Minneapolis).
 27. J. X. Shen, K. W. Wierman, Y. B. Zhang, R. D. Kirby, J. A. Woollam, and D. J. Sellmyer, *Magneto-Optical and Structural Properties of BiDyIG/Fe Multilayers*, Presented at the 38th Annual Conference on Magnetism and Magnetic Materials, November 1993 (Minneapolis).
 28. Y. Zhang, P. He, J. X. Shen, R. D. Kirby, and J. A. Woollam, *Magnetic and Magneto-Optic Properties of Sputtered Co/Ni Multilayers*, Presented at the 38th Annual Conference on Magnetism and Magnetic Materials, November 1993 (Minneapolis).
 29. Z. S. Shan, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Temperature Dependent Interface Magnetism and Magnetization Reversal in Co/Pt Multilayers*, Presented at the 38th Annual Conference on Magnetism and Magnetic Materials, November 1993 (Minneapolis).

30. K. Wierman, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Temperature Characterization of Magnetic and Magneto-Optic Properties of MnBiAl Thin Films*, Presented at the 38th Annual Conference on Magnetism and Magnetic Materials, November 1993 (Minneapolis).
31. S. S. Jaswal, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Electronic Structure and Magneto-Optical Properties of MnBi and MnBiAl*, Presented at the 38th Annual Conference on Magnetism and Magnetic Materials, November 1993 (Minneapolis).
32. Y. J. Wang, J. X. Shen, Z. S. Shan, R. D. Kirby, and D. J. Sellmyer, *Interface Anisotropy and Magnetization Reversal in Co/Au Multilayers*, Bull. Am Phys. Soc. **38**, 442 (1993). Presented at the March 1993 Meeting of the American Physical Society, Seattle, WA.
33. J. X. Shen, R. D. Kirby, K. Wierman, Z. S. Shan, D. J. Sellmyer, and T. Suzuki, *Magnetization Reversal and Defects in Co/Pt Multilayers*. Presented at the 37th Annual Conference on Magnetism and Magnetic Materials, Houston, TX (December 1-4, 1992).
34. D. Wang, R. D. Kirby, and D. J. Sellmyer, *Magnetization of Co/Cr Multilayer Films*. Presented at the 37th Annual Conference on Magnetism and Magnetic Materials, Houston, TX (December 1-4, 1992).
35. R. D. Kirby, J. X. Shen, K. Wierman, Z. S. Shan, and D. J. Sellmyer, *Magnetization Decay and Hysteretic Phenomena in Uniaxial Thin Films and Multilayers*. Presented at the 37th Annual Conference on Magnetism and Magnetic Materials, Houston, TX (December 1-4, 1992).
36. R. D. Kirby, J. X. Shen, R. J. Hardy, and D. J. Sellmyer, *Experiments and Simulations on Magnetization Reversal in Magneto-Optic Thin Films*. Presented at the Magneto-Optical Recording International Symposium, Tucson, AZ (December 7-9, 1992).
37. R. D. Kirby, R. J. Hardy, J. X. Shen, and D. J. Sellmyer, *A Model of Magnetization and Magnetization Reversal in Highly Anisotropic Amorphous Ferrimagnets*, Bull. Am. Phys. Soc. **37**, 88 (1992). Presented at the March Meeting of the American Physical Society, Indianapolis, IN (March 16-20, 1992).
38. J. X. Shen, R. D. Kirby, Z. S. Shan, and D. J. Sellmyer, *Magnetization Reversal in Amorphous Rare-Earth/Transition-Metal Multilayers*, Bull. Am. Phys. Soc. **37**, 89 (1992). Presented at the March Meeting of the American Physical Society, Indianapolis, IN (March 16-20, 1992).
39. J. X. Shen, R. D. Kirby, Z. S. Shan, and D. J. Sellmyer, *Magnetization Reversal in Rare-Earth/Transition-Metal Multilayers*. Presented at the 39th Annual Midwest Solid State Physics Conference, Ames, IA (October 1991).

40. Z. S. Shan, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Temperature and Layer-Thickness Dependencies of Kerr Rotation in Dy/Co and Dy/Fe Multilayers*. Presented at the 5th Joint MMM-Intermag Conference, Pittsburgh, PA (June 18-21, 1991).
41. R. D. Kirby, J. X. Shen, Z. S. Shan, and D. J. Sellmyer, *Studies of Domain Dynamics in Amorphous Dy/Fe Multilayers*. Presented at the 5th Joint MMM-Intermag Conference, Pittsburgh, PA (June 18-21, 1991).
42. D. J. Sellmyer, Z. S. Shan, J. X. Shen, and R. D. Kirby, *Magnetic Structure, Anisotropy and Magneto-Optic Properties of Amorphous Rare-Earth Multilayers*. Presented at the International Symposium on Magneto-Optical Recording, Tokyo, Japan (April 1991).
43. Z. S. Shan, J. X. Shen, R. D. Kirby, and D. J. Sellmyer, *Temperature Dependence of Magneto-Optic Kerr Effect for Dy/Fe Compositionally-Modulated Films*. Bull. Am. Phys. Soc. **36**, 1044 (1991). Presented at the 1991 March Meeting of the American Physical Society, Cincinnati, OH (March 18-22, 1991).
44. R. D. Kirby, J. X. Shen, Z. S. Shan, and D. J. Sellmyer, *Magnetization Reversal and Domain Growth in Dy/Fe Multilayers*. Bull. Am. Phys. Soc. **36**, 1043 (1991). Presented at the 1991 March Meeting of the American Physical Society, Cincinnati, OH (March 18-22, 1991).
45. J. X. Shen, R. D. Kirby, D. J. Sellmyer, and Y. J. Wang, *Magneto-Optical Properties of MnBiAl Thin Films*. Presented at the 35th Conference on Magnetism and Magnetic Materials, San Diego, CA (October, 1990).
46. R. D. Kirby, J. X. Shen, J. A. Woollam, and D. J. Sellmyer, *Magneto-Optical Properties of Uranium Based Compounds*. Presented at the 35th Conference on Magnetism and Magnetic Materials, San Diego, CA (October, 1990).
47. R. D. Kirby, J. X. Shen, S. H. Liou, and D. J. Sellmyer, *Magnetic Properties of the Intermetallic Compound $Dy_{1-x}Pr_xMn_2Ge_2$* , Bull. Am. Phys. Soc. **35**, 794 (1990). Present at the March Meeting of the American Physical Society, Anaheim, CA (March 1990).
48. R. D. Kirby, J. X. Shen, S. H. Liou, and D. J. Sellmyer, *Magneto-Optical Properties of Bulk and Thin Film Samples*. Presented at the 38th Annual Midwest Solid State Conference, Lincoln, NE (November, 1990).
49. R. D. Kirby, J. X. Shen, and D. J. Sellmyer, *The Structure and Magneto-Optic Properties of MnAl-Based Thin Films*. Present at the 34th Annual Conference on Magnetism and Magnetic Materials, Boston, MA (December, 1989)
50. J. X. Shen, R. D. Kirby, S. H. Liou, and D. J. Sellmyer, *Magnetic Properties of Intermetallic DyPrMnGe Compounds*. Presented at the 37th Annual Midwest Solid State Conference, Rolla MO (October, 1989).

51. R. D. Kirby, J. X. Shen, Z. S. Shan, and D. J. Sellmyer, *Magneto-Optical Properties of Thin Film Multilayers*, Bull Am. Phys. Soc. **34**, 624 (1989). Presented at the March Meeting of the American Physical Society, St. Louis, MO (March 1989).
52. Z. S. Shan, R. D. Kirby, and D. J. Sellmyer, *Magnetic Properties of Compositionally-Modulated Dy/Co Films*, Bull Am. Phys. Soc. **33**, 392 (1988). Presented at the March Meeting of the American Physical Society, New Orleans, LA (March 1988).
53. S. Nafis, Z. R. Zhao, Z. S. Shan, R. D. Kirby, and D. J. Sellmyer, *Random and Coherent Anisotropy in Fe/RE Amorphous Multilayered Films*. Bull Am. Phys. Soc. **32**, 650 (1987). Presented at the March Meeting of the American Physical Society, New York, NY (March 1987).
54. R. D. Kirby and R. L. Fagerquist, *Electrical Noise Measurements in Mo_2S_3* , Bull Am. Phys. Soc. **31**, 287 (1986). Presented at the March Meeting of the American Physical Society, Las Vegas, NV (March 1986).
55. R. D. Kirby and R. L. Fagerquist, *Metastable Conduction States in Mo_2S_3* , Bull Am. Phys. Soc. **30**, 571 (1985). Presented at the March Meeting of the American Physical Society, Baltimore, MD (March 1985).
56. R. L. Fagerquist and R. D. Kirby, *Thermopower Measurements in Mo_2S_3* . Presented at the 32nd Annual Midwest Solid State Conference, Lincoln, NE (October 1984).
57. R. L. Fagerquist and R. D. Kirby, *Equilibrium Conductivity Fluctuations in Mo_2S_3* , Bull. Am. Phys. Soc. **29**, 317 (1984). Presented at the March Meeting of the American Physical Society, Detroit, MI (March, 1984).
58. R. D. Kirby and R. L. Fagerquist, *Non-Equilibrium Electrical Conduction in the Linear Chain Compound Mo_2S_3* , Bull. Am. Phys. Soc. **29**, 317 (1984). Presented at the March Meeting of the American Physical Society, Detroit, MI (March, 1984).
59. V. Katkanant and R. D. Kirby, *Lattice Dynamics of Mixed Crystal $Hf_xTi_{1-x}Se_2$* , Bull. Am. Phys. Soc. **28**, 380 (1983). Presented at the March Meeting of the American Physical Society, Los Angeles, CA (March, 1983).
60. H. Rashid, V. Katkanant, D. J. Sellmyer, and R. D. Kirby, *Electronic Properties and Phase Transitions in Quasi-One-Dimensional Mo_2S_3* , Bull. Am. Phys. Soc. **27**, 283 (1982). Presented at the March Meeting of the American Physical Society, Dallas, TX (March, 1982).
61. D. W. Galliardt and R. D. Kirby, *Far-Infrared Optical Properties of $Fe_xTa_{1-x}Se_2$* , Bull. Am. Phys. Soc. **26**, 412 (1981). Presented at the March Meeting of the American Physical Society, Phoenix, AZ (March, 1981).

62. R. D. Kirby, G. A. Freund, and R. L. Fagerquist, *Lattice Dynamics of Mixed Crystal $Zr_xTi_{1-x}Se_2$* , Bull. Am. Phys. Soc. **25**, 201 (1980). Presented at the March Meeting of the American Physical Society, New York, NY (March, 1980).
63. G. A. Freund, W. R. Nieveen, and R. D. Kirby, *Lattice Dynamics of Mixed Crystal Layered Compounds*, Bull. Am. Phys. Soc. **24**, 475 (1979). Presented at the March Meeting of the American Physical Society, Chicago, IL (March, 1979).
64. H. Eckhardt, C. J. Eckhardt, and R. D. Kirby, *Direct and Piezo Modulated Reflection Spectra of $1T-VSe_2$* , Bull. Am. Phys. Soc. **24**, 475 (1979). Presented at the March Meeting of the American Physical Society, Chicago, IL (March, 1979).
65. W. L. Burmester, R. D. Kirby, and D. J. Sellmyer, *Properties of Magnetic Layered Compounds Based on VS_2* , Bull. Am. Phys. Soc. **24**, 446 (1979). Presented at the March Meeting of the American Physical Society, Chicago, IL (March, 1979).
66. W. R. Nieveen and R. D. Kirby, *Resistivity of $Zr_xTi_{1-x}Se_2$* , Bull. Am. Phys. Soc. **24**, 445 (1979). Presented at the March Meeting of the American Physical Society, Chicago, IL (March, 1979).
67. D. W. Galliardt, R. D. Kirby, W. L. Burmester, W. R. Nieveen, and D. J. Sellmyer, *Raman Scattering and Resistivity Measurements on the Linear Chain Compound TiS_3* , Bull. Am. Phys. Soc. **24**, 388 (1979). Presented at the March Meeting of the American Physical Society, Chicago, IL (March, 1979).
68. J. R. Duffey, R. D. Kirby, and R. V. Coleman, *Superlattice Formation in $4Hb-TaSe_2$* , Bull. Am. Phys. Soc. **23**, 245 (1978). Presented at the March Meeting of the American Physical Society, Washington, DC (March, 1978).
69. G. A. Freund, W. R. Nieveen, and R. D. Kirby, *Raman Scattering and the Vanishing CDW-Superlattice in $TiS_{2-x}Se_x$* , Bull. Am. Phys. Soc. **23**, 244 (1978). Presented at the March Meeting of the American Physical Society, Washington, DC (March 1978).
70. Q. Kim, F. G. Ullman, R. D. Kirby, and J. R. Hardy, *Raman Scattering Measurements of the Effect of Uniaxial Stress on the Ferroelectric Transition in $Gd_2(MoO_4)_3$* . Proc. Of the International Conference on Lattice Dynamics, M. Balkanski, ed., Flammarion Press (Paris, 1978), p. 664
71. J. R. Duffey, R. D. Kirby, F. J. DiSalvo, and R. V. Coleman, *A Raman Investigation of the Charge Density Wave Mixed Crystal System $1T-TaS_{2-x}Se_x$* , Bull. Am. Phys. Soc. **22**, 281 (1977). Presented at the March Meeting of the American Physical Society, San Diego (March 1977).
72. J. R. Duffey, R. D. Kirby, and R. V. Coleman, *Charge Density Wave Excitations in $1T-TaS_2$* , Bull. Am. Phys. Soc. **21**, 260 (1976). Presented at the March Meeting of the American Physical Society, Atlanta, GA (March 1976).

73. J. R. Hardy, R. D. Kirby, and B. S. Agrawal, *Theoretical and Experimental Studies of the Second Order Raman Spectra of the Cesium Halides*. Proceedings of the Third International Conference on Light Scattering in Solids (Ed. M. Balkanski), Flammarion Press, p. 948 (1976).
74. F. G. Ullman, B. N. Ganguly, J. R. Hardy, and R. D. Kirby, *Raman Scattering Studies of the Ferroelectric Transition in Gadolinium Molybdate*. Proceedings of the Third International Conference on Light Scattering in Solids (Ed. M. Balkanski), Flammarion Press, p. 948 (1976).
75. J. R. Duffey, R. D. Kirby, and R. V. Coleman, *Raman Scattering from NbSe₂, a Layered Compound*. Proceedings of the Third International Conference on Light Scattering in Solids (Ed. M. Balkanski), Flammarion Press, p. 383 (1976).
76. F. G. Ullman, B. N. Ganguly, J. R. Hardy, and R. D. Kirby, *New Features of the A₁ Raman Spectrum of Gadolinium Molybdate*, Bull. Am. Phys. Soc. **20**, 326 (1975). Presented at the March Meeting of the American Physical Society, Denver, CO (March 1975).
77. G. A. Freund and R. D. Kirby, *Raman Scattering from Pyrite Structure Gold Antimonide (AuSb₂)*, Bull. Am. Phys. Soc. **20**, 379 (1975). Presented at the March Meeting of the American Physical Society, Denver, CO (March 1975).
78. J. R. Duffey and R. D. Kirby, *The Raman Spectrum of 2H-NbSe₂*, Bull. Am. Phys. Soc. **20**, 379 (1975). Presented at the March Meeting of the American Physical Society, Denver, CO (March 1975).
79. J. R. Duffey and R. D. Kirby, *A Sodium Filter for the Reduction of Elastically Scattered Light in Raman Scattering Experiments*, Bull. Am. Phys. Soc. **20**, 45 (1975). Presented at the March Meeting of the American Physical Society, Denver, CO (March 1975).
80. B. N. Ganguly, R. D. Kirby, J. R. Hardy, and F. G. Ullman, *Analysis of the Uniaxial Stress Dependence of the Soft Mode in Ferroelectric Gadolinium Molybdate*, Bull. Am. Phys. Soc. **19**, 278 (1974). Presented at the March Meeting of the American Physical Society, Philadelphia, PA (March 1974).
81. T. P. Sharma, R. D. Kirby, and S. S. Jaswal, *Phonon-Induced Second-Order Raman Scattering in LiF*, Bull. Am. Phys. Soc. **18**, 482 (1973). Presented at the March Meeting of the American Physical Society, San Francisco, CA (March 1973).
82. B. S. Agrawal, R. D. Kirby, and J. R. Hardy, *Title*, Bull. Am. Phys. Soc. **18**, 370 (1973). Presented at the March Meeting of the American Physical Society, San Francisco, CA (March 1973).

83. R. D. Kirby, *Raman Scattering from Magnons and Excitons in CoO*, Bull. Am. Phys. Soc. **18**, 330 (1973). Presented at the March Meeting of the American Physical Society, San Francisco, CA (March 1973).
84. B. N. Ganguly, f. G. Ullman, J. R. Hardy, and R. D. Kirby, *Effect of Uniaxial Stress on the Soft Mode in Gadolinium Molybdate*, Bull. Am. Phys. Soc. **18**, 314 (1973). Presented at the March Meeting of the American Physical Society, San Francisco, CA (March 1973).
85. J. Schneider and R. D. Kirby, *Raman Scattering from Wurtzite 2H and 4H ZnS*, Bull. Am. Phys. Soc. **17**, 314 (1972). Presented at the March Meeting of the American Physical Society, (March 1972).
86. G. P. Montgomery and R. D. Kirby, *Raman Active Resonant Modes and Anharmonicity in NaCl:Cu⁺*. Proceedings of the Second International Conference on Light Scattering in Solids, Ed. M. Balkanski (Flammarion Press, Paris 1971), pp. 297-301.
87. R. D. Kirby, *Even Parity Lattice Resonance in KI:Ag⁺*, Bull. Am. Phys. Soc. **16**, 335 (1971). Presented at the March Meeting of the American Physical Society, Cleveland, OH (March 1971).
88. R. D. Kirby and A. J. Sievers, *Far-Infrared Absorption by Off-Center Li⁺ in KCl*, Bull. Am. Phys. Soc. **14**, 301 (1969). Presented at the March Meeting of the American Physical Society, Philadelphia, PA (March 1969).
89. R. D. Kirby, A. E. Hughes, and A. J. Sievers, *Far IR Absorption in NaCl:OH Below 1 K*. Proceedings of the 11th International Conference on Low Temperature Physics. J. F. Allen, D. M. Finlayson, and D. M. McCall (eds.). University of St. Andrews Press, 1968, pp. 558-562.
90. R. D. Kirby, A. J. Sievers, and A. E. Hughes, *Tunneling Levels in the Far-Infrared Absorption Spectrum of NaCl:OH*, Bull. Am. Phys. Soc. **13**, 659 (1968). Presented at the April Meeting of the American Physical Society, Washington DC (April 1968).