

REFEREED PUBLICATIONS

>177 refereed publications, including 4 *Science* and *Nature* articles, 1 *Nature Physics*, 26 *Physical Review Letters* (not including comments and replies), and 64 *Physical Review B: Condensed Matter* papers. 5 papers cited more than 100 times, and >3068 total citations. Hirsch number (*h* papers cited *h* or more times) *h* = 30, *m* (*h*/years since Ph.D.) = 2.14

1. W. Tian, M.B. Stone, D.G. Mandrus, B.C. Sales, R. Jin, D.T. Adroja, S.E. Nagler, "Magnetic Excitations in the Orbitally Degenerate Triangular Lattice LiVO₂," *Physica B* (in press).
2. R. Jin, Z. X. Zhou, D. Mandrus, I. N. Ivanov, G. Eres, J. Howe, A. Puretzky, D. Geohegan, "The Effect of Annealing on the Electrical and Thermal Transport Properties of Macroscopic Bundles of Long Multi-Wall Carbon Nanotubes," *Physica B* (in press).
3. C.A.M. dos Santos, J.J. Neumeier, R.K. Bollinger, Y.K. Yu, R. Jin, D. Mandrus, B.C. Sales, "The Thermodynamic Nature of the Antiferromagnetic Transition in Na_xCoO₂," *Physical Review B: Condensed Matter* **74**, 132402 (2006).
4. F. Wang, S. K. Mo, J. W. Allen, H. D. Kim, J. He, R. Jin, D. Mandrus, A. Sekiyama, M. Tsunekawa, S. Suga, "Case for bulk nature of spectroscopic Luttinger liquid signatures observed in angle-resolved photoemission spectra of Li_{0.9}Mo₆O₁₇," *Physical Review B* **74**, 113107 (2006).
5. Zhixian Zhou, R. Jin, Gyula Eres, Alaska Subedi, and D. Mandrus, "The Control of Electron Transport Related Defects in *In situ* Fabricated Single-Wall Carbon Nanotube Devices" *Applied Physics Letters* **89**, 133124 (2006).
6. J. S. Bae, H. K. Ko, I. S. Yang, Y. S. Lee, T. W. Noh, R. Jin, J. He, and D. Mandrus, "Temperature-Dependent Raman Study of the Pyrochlore Superconductor Cd₂Re₂O₇," *J. Korean Phys. Soc.* **48**, 946 (2006).
7. J. L. Feldman, P. Dai, T. Enck, B. C. Sales, D. Mandrus, and D. J. Singh, "Lattice Vibrations in La(Ce)Fe₄Sb₁₂ and CoSb₃: Inelastic Neutron Scattering and Theory," *Phys. Rev. B: Condens. Matter* **71**, 014306 (2006).
8. J. L. Feldman, D. J. Singh, C. Kendziora, D. Mandrus, and B. C. Sales, "Lattice Dynamics of Filled Skutterudites: La(Fe,Co)₄Sb₁₂. [Erratum]," *Phys. Rev. B: Condens. Matter* **73**, 019902 (2006).
9. R. P. Hermann, F. Grandjean, V. Keppens, W. Schweika, G. S. Nolas, D. G. Mandrus, B. C. Sales, H. M. Christen, P. Bonville, and G. J. Long, "The Dynamics of the Guests in Filled Germanium Clathrates," *Mater. Res. Soc. Symp. Proc.* **886**, 389 (2006).
10. R. P. Hermann, V. Keppens, P. Bonville, G. S. Nolas, F. Grandjean, G. J. Long, H. M. Christen, B. C. Chakoumakos, B. C. Sales, and D. Mandrus, "Direct Experimental Evidence for Atomic Tunneling of Europium in Crystalline Eu₈Ga₁₆Ge₃₀," *Phys. Rev. Lett.* **97**, 017401 (2006).
11. R. Jin, H. Sha, P. G. Khalifah, R. E. Sykora, B. C. Sales, D. Mandrus, and J. Zhang, "Ba₂CoO₄: Crystal Growth, Structure Refinement, and Physical Properties," *Physical Review B: Condens. Matter* **73**, 174404 (2006).

12. K. C. Mandal, S. H. Kang, M. Choi, J. Bello, L. Zheng, H. Zhang, M. Groza, U. N. Roy, A. Berger, G. E. Jellison, Jr., D. E. Holcomb, G. W. Wright, and J. A. Williams, “Simulation, Modeling, and Crystal Growth of Cd_{0.9}Zn_{0.1}Te for Nuclear Spectrometers,” *J. Electron. Mater.* **35**, 1251 (2006).
13. K. T. Park, M. H. Pan, V. Meunier, and E. W. Plummer, “Surface Reconstructions of TiO₂(110) Driven by Sub-Oxides,” *Phys. Rev. Lett.* **96**, 226105 (2005).
14. Jesse C. Petersen, Michael D. Caswell, J. Steven Dodge, Ivan A. Sergienko, Jian He, Rongying Jin and David Mandrus, “Nonlinear Optical Signatures of the Tensor Order in Cd₂Re₂O₇,” *Nature Phys.* **2**, 605 (2006).
15. R. C. Rai, J. Cao, J. L. Musfeldt, D. J. Singh, X. Wei, R. Jin, Z. X. Zhou, B. C. Sales, and D. Mandrus, “Magnetodielectric Effect in the $S = 1/2$ Quasi-Two-Dimensional Antiferromagnet K₂V₃O₈,” *Phys. Rev. B: Condens. Matter* **73**, 075112 (2006).
16. B. C. Sales, R. Jin, D. Mandrus, and P. Khalifah, “Anomalous Hall Effect in Three Ferromagnets: EuFe₄Sb₁₂, Yb₁₄MnSb₁₁, and Eu₈Ga₁₆Ge₃₀,” *Phys. Rev. B: Condens. Matter* **73**, 224435 (2006).
17. D. J. Singh, R. C. Rai, J. L. Musfeldt, S. Auluck, N. Singh, P. Khalifah, S. McClure, and D. G. Mandrus, “Optical Properties and Electronic Structure of Spinel ZnRh₂O₄,” *Chem. Mater.* **18**, 2696 (2006).
18. M. B. Stone, M. D. Lumsden, R. Jin, B. C. Sales, D. Mandrus, S. E. Nagler, and Y. Qiu, “Temperature-Dependent Bilayer Ferromagnetism in Sr₃Ru₂O₇,” *Phys. Rev. B: Condens. Matter* **73**, 174426 (2006).
19. V. A. Trepakov, A. I. Gubaev, S. E Kapphan, P. Galinetto, F. Rossella, L. A. Boatner, P. P. Syrnikov, L. Jastrabik, “UV Light-induced IR Absorption and Photoconductivity in KTa_{1-x}Nb_xO₃,” *Ferroelectr.* **334**, 389 (2006).
20. M. Varela, T. Pennycook, W. Tian, D. Mandrus, S. Pennycook, V. Pena, Z. Sefrioui, and J. Santamaria, “Atomic Scale Characterization of Complex Oxide Interfaces,” *J. Mater. Sci.* **41**, 1 (2006).
21. S. Wakimoto, G. A. Samara, R. K. Grubbs, E. L. Venturini, L. A. Boatner, G. Xu, G. Shirane, and S.H. Lee, “Dielectric Properties and Lattice Dynamics of Ca-Doped K_{0.95}Li_{0.05}Ta₂O₅; KLT(5):Ca,” *Phys. Rev. B: Condens. Matter* **74**, 054101 (2006).
22. F. Wang, J. V. Alvarez, S. K. Mo, J. W. Allen, G.-H. Gweon, J. He, R. Jin, D. Mandrus, and H. Hochst, “New Luttinger-Liquid Physics from Photoemission on Li_{0.9}Mo₆O₁₇,” *Phys. Rev. Lett.* **96**, 196403 (2006).
23. H. Wu, Z. Hu, T. Burnus, J. D. Denlinger, P. G. Khalifah, D. G. Mandrus, L. Y. Jang, H. H. Hsieh, A. Tanaka, K. S. Liang, J. W. Allen, R. J. Cava, D. I. Khomskii, and L. H. Tjeng, “Orbitally Driven Spin-Singlet Dimerization in $S = 1$ La₄Ru₂O₁₀,” *Phys. Rev. Lett.* **96**, 256402 (2006).
24. D. Wu, N. L. Wang, G. Li, J. L. Luo, P. Zheng, X. H. Chen, C. H. Wang, X. G. Luo, R. Jin, and D. Mandrus, “Infrared Properties of Na_xCoO₂ Single Crystals with $x = 0.5, 0.7$, and 0.85,” *J. Phys. Chem. Solids* **67**, 635 (2006).

25. J. Zhang, Ismail, R. G. Moore, S. C. Wang, H. Ding, R. Jin, D. G. Mandrus, and E. W. Plummer, “Dopant-Induced Nanoscale Electronic Inhomogeneities in $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$,” *Phys. Rev. Lett.* **96**, 066401 (2006).
26. H. B. Yang, Z. H. Pan, A. K. P. Sekharan, T. Sato, S. Souma, T. Takahashi, R. Jin, B. C. Sales, D. Mandrus, A. V. Fedorov, Z. Wang, and H. Ding, “Fermi surface evolution and luttinger theorem in Na_xCoO_2 : A systematic photoemission study,” *Phys. Rev. Lett.* **95**, 146401 (2005).
27. C. A. Kendziora, I. A. Sergienko, R. Jin, J. He, V. Keppens, B. C. Sales, and D. Mandrus, “Goldstone-mode phonon dynamics in the pyrochlore $\text{Cd}_2\text{Re}_2\text{O}_7$,” *Phys. Rev. Lett.* **95**, 125503 (2005).
28. J. Hager, R. Matzdorf, J. He, R. Jin, D. Mandrus, M. A. Cazalilla, and E. W. Plummer, “Non-fermi-liquid behavior in quasi-one-dimensional $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$,” *Phys. Rev. Lett.* **95**, 186402 (2005).
29. S. Srinath, P. Poddar, H. Srikanth, B. C. Sales, and D. Mandrus, “Observation of a new magnetic anomaly below the ferromagnetic curie temperature in $\text{Yb}_{14}\text{MnSb}_{11}$,” *Phys. Rev. Lett.* **95**, 227205 (2005).
30. B. C. Sales, P. Khalifah, T. P. Enck, E. J. Nagler, R. E. Sykora, R. Jin, and D. Mandrus, “Kondo lattice behavior in the ordered dilute magnetic semiconductor $\text{Yb}_{14-x}\text{La}_x\text{MnSb}_{11}$,” *Phys. Rev. B* **72**, 205207 (2005).
31. K. S. Burch, A. Schafgans, N. P. Butch, T. A. Sayles, M. B. Maple, B. C. Sales, D. Mandrus, and D. N. Basov, “Optical study of interactions in a d-electron kondo lattice with ferromagnetism,” *Phys. Rev. Lett.* **95**, 046401 (2005).
32. S. L. Li, S. D. Wilson, D. Mandrus, B. R. Zhao, Y. Onose, Y. Tokura, and P. C. Dai, “Spin-charge coupling in lightly doped $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_4$,” *Phys. Rev. B* **71**, 054505 (2005).
33. J. H. Chung, T. Proffen, S. Shamoto, A. M. Ghorayeb, L. Croguennec, W. Tian, B. C. Sales, R. Jin, D. Mandrus, and T. Egami, “Local structure of LiNiO_2 studied by neutron diffraction,” *Phys. Rev. B* **71**, 064410 (2005).
34. R. Jin, B. C. Sales, S. Li, and D. Mandrus, “Dependence of the specific heat of $\text{Na}_x\text{CoO}_2 \bullet y\text{H}_2\text{O}/\text{D}_2\text{O}$ on sodium and water concentrations,” *Phys. Rev. B* **72**, 060512 (2005).
35. J. Chakhalian, Z. Salman, J. Brewer, A. Froese, J. He, D. Mandrus, and R. Jin, “Magnetism in purple bronze $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$,” *Physica B-Condensed Matter* **359**, 1333 (2005).
36. C. X. Lu, J. D. Zhang, R. Jin, H. W. Qu, J. He, D. Mandrus, K. D. Tsuei, C. T. Tzeng, L. C. Lin, and E. W. Plummer, “Imperfection-driven phase transition at 120 K in $\text{Cd}_2\text{Re}_2\text{O}_7$,” *Phys. Rev. B* **70**, 092506 (2004).

37. S. C. Wang, H. B. Yang, A. K. P. Sekharan, S. Souma, H. Matsui, T. Sato, T. Takahashi, C. X. Lu, J. D. Zhang, R. Jin, D. Mandrus, E. W. Plummer, Z. Wang, and H. Ding, “Fermi surface topology of $\text{Ca}_{1.5}\text{Sr}_{0.5}\text{RuO}_4$ determined by angle-resolved photoelectron spectroscopy,” *Phys. Rev. Lett.* **93**, 177007 (2004).
38. G. P. Zhang, T. A. Callcott, G. T. Woods, L. Lin, B. Sales, D. Mandrus, and J. He, “Low-energy excitations in resonant inelastic x-ray scattering of α' - NaV_2O_5 - Reply,” *Phys. Rev. Lett.* **93**, 169702 (2004).
39. P. Khalifah, I. Ohkubo, H. M. Christen, and D. G. Mandrus, “Evolution of transport and magnetic properties near the ferromagnetic quantum critical point in the series $\text{Ca}_x\text{Sr}_{1-x}\text{RuO}_3$,” *Phys. Rev. B* **70**, 134426 (2004).
40. G. H. Gweon, S. K. Mo, J. W. Allen, J. He, R. Jin, D. Mandrus, and H. Hochst, “Luttinger liquid angle-resolved photoemission line shapes from samples of $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ grown by the temperature-gradient-flux technique,” *Phys. Rev. B* **70**, 153103 (2004).
41. B. C. Sales, R. Jin, K. A. Affholter, P. Khalifah, G. M. Veith, and D. Mandrus, “Magnetic, thermodynamic, and transport characterization of $\text{Na}_{0.75}\text{CoO}_2$ single crystals,” *Phys. Rev. B* **70**, 174419 (2004).
42. G. P. Zhang, T. A. Callcott, G. T. Woods, L. Lin, B. Sales, D. Mandrus, and J. He, “Comment on Electron correlation effects in resonant inelastic x-ray scattering of NaV_2O_5 - Reply,” *Phys. Rev. Lett.* **92**, 219702 (2004).
43. I. Zerec, V. Keppens, M. A. McGuire, D. Mandrus, B. C. Sales, and P. Thalmeier, “Four-well tunneling states and elastic response of clathrates,” *Phys. Rev. Lett.* **92**, 185502 (2004).
44. G. E. Granroth, D. Mandrus, V. Keppens, and S. E. Nagler, “Long- and short-range magnetic order in the spinel $\text{Co}_2\text{Ru}_{1-x}\text{Mn}_x\text{O}_4$,” *Journal of Magnetism and Magnetic Materials* **272-76**, 1306 (2004).
45. P. Zheng, N. L. Wang, J. L. Luo, R. Jin, and D. Mandrus, “Optical properties of the pyrochlore oxide $\text{Pb}_2\text{Ru}_2\text{O}_{6.5}$,” *Phys. Rev. B* **69**, 193102 (2004).
46. H. B. Yang, S. C. Wang, A. K. P. Sekharan, H. Matsui, S. Souma, T. Sato, T. Takahashi, T. Takeuchi, J. C. Campuzano, R. Jin, B. C. Sales, D. Mandrus, Z. Wang, and H. Ding, “ARPES on $\text{Na}_{0.6}\text{CoO}_2$: Fermi surface and unusual band dispersion,” *Phys. Rev. Lett.* **92**, 246403 (2004).
47. W. Tian, M. F. Chisholm, P. G. Khalifah, R. Jin, B. C. Sales, S. E. Nagler, and D. Mandrus, “Single crystal growth and characterization of nearly stoichiometric LiVO_2 ,” *Mat. Res. Bull.* **39**, 1319 (2004).
48. I. Ohkubo, H. M. Christen, P. Khalifah, S. Sathyamurthy, H. Y. Zhai, C. M. Rouleau, D. G. Mandrus, and D. H. Lowndes, “Continuous composition-spread thin films of transition metal oxides by pulsed-laser deposition,” *Appl. Surf. Sci.* **223**, 35 (2004).

49. I. A. Sergienko, V. Keppens, M. McGuire, R. Jin, J. He, S. H. Curnoe, B. C. Sales, P. Blaha, D. J. Singh, K. Schwarz, and D. Mandrus, "Metallic "ferroelectricity" in the pyrochlore $\text{Cd}_2\text{Re}_2\text{O}_7$," *Phys. Rev. Lett.* **92**, 065501 (2004).
50. J. Choi, J. L. Musfeldt, J. He, R. Jin, J. R. Thompson, D. Mandrus, X. N. Lin, V. A. Bondarenko, and J. W. Brill, "Probing localization effects in $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ purple bronze: An optical-properties investigation," *Phys. Rev. B* **69**, 085120 (2004).
51. N. L. Wang, P. Zheng, D. Wu, Y. C. Ma, T. Xiang, R. Y. Jin, and D. Mandrus, "Infrared probe of the electronic structure and charge dynamics of $\text{Na}_{0.7}\text{CoO}_2$," *Phys. Rev. Lett.* **93**, 237007 (2004).
52. J. Choi, J. D. Woodward, J. L. Musfeldt, X. Wei, M. H. Whangbo, J. He, R. Jin, and D. Mandrus, "Magneto-optical properties of $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$: Color change in applied magnetic field," *Phys. Rev. B* **70**, 085107 (2004).
53. R. G. Moore, J. D. Zhang, S. V. Kalinin, Ismail, A. P. Baddorf, R. Jin, D. G. Mandrus, and E. W. Plummer, "Surface dynamics of the layered ruthenate $\text{Ca}_{1.9}\text{Sr}_{0.1}\text{RuO}_4$," *Physica Status Solidi B-Basic Research* **241**, 2363 (2004).
54. A. Zheludev, T. Masuda, B. Sales, D. Mandrus, T. Papenbrock, T. Barnes, and S. Park, "Distribution of exchange energy in a bond-alternating $S=1$ quantum spin chain," *Phys. Rev. B* **69**, 144417 (2004).
55. J. L. Feldman, D. J. Singh, C. Kendziora, D. Mandrus, and B. C. Sales, "Lattice dynamics of filled skutterudites: $\text{La}(\text{Fe},\text{Co})_4\text{Sb}_{12}$," *Phys. Rev. B* **68**, 094301 (2003).
56. R. Jin, Y. Onose, Y. Tokura, D. Mandrus, P. Dai, and B. C. Sales, "In-plane thermal conductivity of Nd_2CuO_4 : Evidence for magnon heat transport," *Phys. Rev. Lett.* **91**, 146601 (2003).
57. R. Jin, B. C. Sales, P. Khalifah, and D. Mandrus, "Observation of bulk superconductivity in $\text{Na}_x\text{CoO}_2 \bullet y\text{H}_2\text{O}$ and $\text{Na}_x\text{CoO}_2 \bullet y\text{D}_2\text{O}$ powder and single crystals," *Phys. Rev. Lett.* **91**, 217001 (2003).
58. K. J. Song, C. Park, S. S. Oh, Y. K. Kwon, J. R. Thompson, D. G. Mandrus, D. M. Paul, and C. V. Tomy, "Complementary study of heat capacity and magnetization for intermetallic $\text{YNi}_2\text{B}_2\text{C}$ single crystal," *Physica C* **398**, 107 (2003).
59. N. Barisic, L. Forro, D. Mandrus, R. Jin, J. He, and P. Fazekas, "Electrical properties of $\text{Cd}_2\text{Re}_2\text{O}_7$ under pressure," *Phys. Rev. B* **67**, 245112 (2003).
60. Ismail, L. Petersen, J.-D. Zhang, R. Jin, D. Mandrus, and E. W. Plummer, "The surface of $\text{Sr}_2\text{Ru}_{0.9}\text{Mo}_{0.1}\text{O}_4$: a LEED and STM Study," *Surface Science* **529**, 151 (2003).
61. R. P. Hermann, R. Jin, W. Schweika, F. Grandjean, D. Mandrus, B. C. Sales, and G. G. Long, "Einstein oscillators in thallium filled antimony skutterudites," *Phys. Rev. Lett.* **90**, 135505 (2003).
62. J. P. Castellan, B. D. Gaulin, J. van Duijn, M. J. Lewis, M. D. Lumsden, R. Jin, J. He, S. E. Nagler, and D. Mandrus, Structural ordering and symmetry breaking in $\text{Cd}_2\text{Re}_2\text{O}_7$," *Phys. Rev. B* **66**, 134528 (2002).

63. P. Khalifah, R. Osborn, Q. Huang, H. W. Zandbergen, R. Jin, Y. Liu, D. Mandrus, and R. J. Cava, "Orbital ordering transition in $\text{La}_4\text{Ru}_2\text{O}_{10}$," *Science* **297**, 2237-2240 (2002).
64. M. D. Lumsden, S. R. Dunsiger, J. E. Sonier, R. I. Miller, R. F. Kiefl, R. Jin, J. He, D. Mandrus, S. T. Bramwell, and J. S. Gardner, "Temperature Dependence of the magnetic penetration depth in the vortex state of the pyrochlore superconductor $\text{Cd}_2\text{Re}_2\text{O}_7$," *Phys. Rev. Lett.* **89**, 147002 (2002).
65. H. J. Kang, P. C. Dai, D. Mandrus, R. Jin, H. A. Mook, D. T. Adroja, S. M. Bennington, S. H. Lee, and J. W. Lynn, "Doping evolution of the phonon density of states and electron-lattice interaction in $\text{Nd}_{2-x}\text{Ce}_x\text{CuO}_{4+\delta}$," *Phys. Rev. B* **66**, 064506 (2002).
66. N. L. Wang, J. J. McGuire, T. Timusk, R. Jin, J. He, and D. Mandrus, "Optical evidence for mass enhancement of quasiparticles in pyrochlore $\text{Cd}_2\text{Re}_2\text{O}_7$," *Phys. Rev. B* **66**, 014534 (2002).
67. W. J. Padilla, D. Mandrus, and D. N. Basov, "Searching for the Slater transition in the pyrochlore $\text{Cd}_2\text{Os}_2\text{O}_7$ with infrared spectroscopy," *Phys. Rev. B* **66**, 035120 (2002).
68. V. Keppens, M. A. McGuire, A. Teklu, C. Laermans, B. C. Sales, D. Mandrus, and B. C. Chakoumakos, "Glasslike excitations in single crystalline $\text{Sr}_8\text{Ga}_{16}\text{Ge}_{30}$ clathrates," *Physica B* **316**, 95 (2002).
69. G. P. Zhang, G. T. Woods, E. L. Shirley, T. A. Callcott, L. Lin, G. S. Chang, B. C. Sales, D. Mandrus, and J. He, "Orbital-resolved soft x-ray spectroscopy in NaV_2O_5 ," *Phys. Rev. B* **65**, 165107 (2002).
70. G. T. Woods, G. P. Zhang, T. A. Callcott, L. Lin, G. S. Chang, B. C. Sales, D. Mandrus, and J. He, "Site-selected O 2p densities of states in NaV_2O_5 determined from angular-dependent x-ray absorption and emission spectra," *Phys. Rev. B* **65**, 165108 (2002).
71. G. P. Zhang, T. A. Callcott, G. T. Woods, L. Lin, B. C. Sales, D. Mandrus, and J. He, "Electron correlation effects in resonant inelastic X-ray scattering of NaV_2O_5 ," *Phys. Rev. Lett.* **88**, 189902 (2002).
72. R. Jin, J. He, J. R. Thompson, M. F. Chisholm, B. C. Sales, and D. Mandrus, "Fluctuation effects on the physical properties of $\text{Cd}_2\text{Re}_2\text{O}_7$ near 200 K," *J. Phys. Condensed Matter* **14**, L117-L123 (2002).
73. B. C. Sales, M. D. Lumsden, S. E. Nagler, D. Mandrus, and R. Jin, "Magnetic field enhancement of heat transport in the 2D Heisenberg antiferromagnet $\text{K}_2\text{V}_3\text{O}_8$," *Phys. Rev. Lett.* **88**, 095901 (2002).
74. G. P. Zhang, T. A. Callcott, G. T. Woods, L. Lini, B. C. Sales, D. Mandrus, D and J. He, "Electron correlation effects in resonant inelastic x-ray scattering of NaV_2O_5 ," *Phys. Rev. Lett.* **88**, 077401 (2002).
75. J. Choi, Z. T. Zhu, J. L. Musfeldt, G. Ragghianti, D. Mandrus, B. C. Sales, and J. R. Thompson, "Local symmetry breaking in $\text{K}_2\text{V}_3\text{O}_8$ as studied by infrared spectroscopy," *Phys. Rev. B* **65**, 054101 (2002).

76. R. Jin, M Paranthaman, H. Y. Zhai, H.-M. Christen, S. K. Christen, and D. Mandrus, "Unusual Hall effect in superconducting MgB₂ films," *Phys. Rev. B* **64**, 220506 (2001).
77. R. Jin, J. He, S. McCall, C. S. Alexander, F. Drymiotis, and D. Mandrus, "Superconductivity in the correlated pyrochlore Cd₂Re₂O₇," *Phys. Rev. B* **64**, 180503 (2001).
78. W. Montfrooij, G. E. Granroth, D. Mandrus, and S. E. Nagler, "Spin dynamics of the quasi-one-dimensional ferromagnet CoC₁₂ ·2D(2)O," *Phys. Rev. B* **64**, 134426 (2001).
79. B. C. Sales, B. C. Chakoumakos, V. Keppens, R. Jin, D. Mandrus, and J. R. Thompson, "When does a crystal conduct heat like a glass?," Invited, "Thermoelectric Materials 2001—Research and Applications," ed. G. S. Nolas, D. C. Johnson, and D. G. Mandrus, MRS Symposium Proceedings Vol. **691**.
80. B. C. Sales, B. C. Chakoumakos and D. Mandrus, Invited, "Connections between Crystallographic Data and New Thermoelectric Compounds," proceedings of the Spring 2000 MRS meeting, Vol. **626**, pp. Z71.1-Z71.11 (Materials Research Society, Warrendale, PA)
81. V. Keppens, B. C. Sales, D. Mandrus, B. C. Chakoumakos and C. Laermans, Invited, "Ultrasound Studies of Clathrate Thermoelectrics" proceedings of the Spring 2000 MRS Meeting, Vol **626**, pp Z13.3.1-Z13.3.8.MRS 2000.
82. B. C. Sales, B. C. Chakoumakos, R. Jin, J. R. Thompson, and D. Mandrus, "Structural, Magnetic, Thermal, and Transport Properties of X₈Ga₁₆Ge₃₀ (X=Ba, Sr, Eu) Single Crystals, *Phys. Rev. B* **63**, 245113 (2001).
83. B. C. Chakoumakos, B. C. Sales and D. Mandrus, "Structural Disorder and Magnetism of the Semiconducting Clathrate Eu₈Ga₁₆Ge₃₀," *J. Alloys and Compounds* **322**, 127 (2001).
84. H. M. Christen, H. Y. Zhai, C. Cantoni, M. Paranthaman, B. C. Sales, C. Rouleau, D. P. Norton, D. K. Christen, D. H. Lowndes, "Superconducting magnesium diboride films with T_c= 24 K grown by pulsed laser deposition with in situ anneal," *Physica C* **353**, 157 (2001).
85. D. Mandrus, B. C. Sales, and R. Jin, "Localized vibrational mode analysis of the resistivity and specific heat of LaB₆," *Phys. Rev. B* **64**, 012302 (2001).
86. R. Jin, J. He, S. McCall, C.S. Alexander, F. Drymiotis, D. Mandrus, "Superconductivity in the correlated pyrochlore Cd₂Re₂O₇," *Phys. Rev. B* **64**, R15138 (2001).
87. D. Mandrus, J. R. Thompson, and L. M. Woods, "Slater transition in the pyrochlore Cd₂Os₂O₇," proceedings of the Fall 2000 MRS meeting Vol. **658**.
88. M. D. Lumsden, G. E. Granroth, D. Mandrus, S. E. Nagler, J. R. Thompson, J. P. Castellan, B. D. Gaulin, *Long-range antiferromagnetic order in the S=1 chain compound LiVGe₂O₆*, *Phys. Rev. B* **62**, R9244 (2000).

89. B. C. Sales, B. C. Chakoumakos, D. Mandrus, and J. W. Sharp, "Finding new thermoelectric compounds using crystallographic data: atomic displacement parameters," *Proceedings, Eighteenth International Conference on Thermoelectrics*, 1999, Baltimore, MD.
90. B. C. Sales, D. G. Mandrus, and B. C. Chakoumakos, "Use of atomic displacement parameters in thermoelectric materials research," in: *Semiconductors and Semimetals*, Vol. **70** (2001). Invited book chapter.
91. D. Mandrus, R. S. Fishman, B. C. Chakoumakos, J. R. Thompson, L. Forro, R. Gaal, L. M. Woods, V. Keppens, and J. C. Bryan, "Continuous Metal-Insulator Transition in the Pyrochlore $\text{Cd}_2\text{Os}_2\text{O}_7$," *Phys. Rev. B* **63**, 195104 (2001).
92. R.S. Fishman, W.-T. Lee, D. Mandrus, J.L. Robertson, K.J. Song, J.R. Thompson, and S.H. Liu, "Structural and magnetic phase transitions in MnNi alloys," *Phys. Rev. B* **61**, 12159 (2000).
93. M.D. Lumsden, B.C. Sales, D. Mandrus, S.E. Nagler, and J.R. Thompson, "Weak ferromagnetism and field-induced spin reorientation in $\text{K}_2\text{V}_3\text{O}_8$," *Phys. Rev. Lett.* **86**, 159 (2001).
94. K. J. Song, J. R. Thompson, M. Yehtiraj, D.K. Christen, D. Mandrus, C.V. Tomy, and D. McK. Paul, "Non-local superconductivity and the vortex-state properties of $\text{YNi}_2\text{B}_2\text{C}$," *Physica B* **284-288**, 777 (2000).
95. B.C. Sales, B.C. Chakoumakos, and D. Mandrus, "Thermoelectric properties of thallium-filled skutterudites," *Phys. Rev. B* **61**, 2475 (2000).
96. B.C. Chakoumakos, B.C. Sales, D. Mandrus, J.W. Sharp, and G.S. Nolas, "Structural disorder and thermal conductivity of the clathrate $\text{Sr}_8\text{Ga}_{16}\text{Ge}_{30}$," *J. of Alloys and Compds.* **296**, 80 (2000).
97. V. Keppens, B.C. Sales, D. Mandrus, B.C. Chakoumakos, and C. Laermans, "When does a crystal conduct heat like a glass?," *Phil. Mag. Lett.* **80**, 807 (2000).
98. E. D. Bauer, R. Chau, N.R. Dilley, M.B. Maple, D. Mandrus, and B. C. Sales, "Pressure Dependence of the electrical resistivity of the filled skutterudites $\text{LnFe}_4\text{Sb}_{12}$ ($\text{Ln}=\text{Ce}, \text{Yb}$)," *J. Phys. Cond. Matt.* **12**, 1261 (2000).
99. J.L. Feldman, D.J. Singh, I.I. Mazin, D. Mandrus, and B.C. Sales, "Why do filled skutterudites have low thermal conductivity?," *Phys. Rev. B* **61**, 2475 (2000).
100. M.B. Maple, N.R. Dilley, D.A. Gajewski, E.D. Bauer, E.J. Freeman, R. Chau, D. Mandrus, and B.C. Sales, "Strongly correlated electron phenomena in filled skutterudite compounds," *Physica B* **259-261**, 8 (1999).
101. B.C. Chakoumakos, B.C. Sales, D. Mandrus, and V. Keppens, "Disparate atomic displacements in skutterudite-type $\text{LaFe}_3\text{CoSb}_{12}$, a model for thermoelectric behavior," *Acta Cryst. B* **55**, 341 (1999).

102. J. W. Sharp, B.C. Sales, D.G. Mandrus, and B.C. Chakoumakos, "Thermoelectric properties of two ternary tellurides," Materials Research Society Proceedings **545**, 1999.
103. B.C. Sales, B.C. Chakoumakos, D. Mandrus, J.W. Sharp, N.R. Dilley, and M.B. Maple, "Atomic displacement parameters: a useful tool in the search for advanced thermoelectric materials?," Materials Research Society Proceedings **545**, 1999.
104. D. Mandrus, V. Keppens, B.C. Chakoumakos, G.E. Granroth, and S.E. Nagler, *A neutron diffraction study of $Co_2Ru_{1-x}Mn_xO_4$ spinels*, Materials Research Society Proceedings **547**, 177 1999.
105. B.C. Sales, D. Mandrus, B.C. Chakoumakos, and J.W. Sharp, *Thermal conductivity from atomic displacement parameters*, Journal of Solid State Chemistry, **146**, 528 (1999).
106. J.W. Sharp, B.C. Sales, D.G. Mandrus, and B.C. Chakoumakos, *Thermoelectric properties of Tl_2SnTe_5 and Tl_2GeTe_5* , Applied Physics Letters **74**, 3794 (1999).
107. D. Mandrus, V. Keppens, and B.C. Chakoumakos, *Spin glass formation in Co_2RuO_4* , Materials Research Bulletin **34**, 1013 (1999).
108. D.A. Gajewski, N.R. Dilley, E.D. Bauer, E.J. Freeman, R. Chau, M.B. Maple, D. Mandrus, and B.C. Sales, *Heavy fermion behavior of the cerium-filled skutterudites $CeFe_4Sb_{12}$ and $Ce_{0.9}Fe_3CoSb_{12}$* , Journal of Physics: Condensed Matter **10**, 3973 (1998).
109. B.C. Chakoumakos and D. Mandrus, *Ru_3Sn_7 with the Ir_3Ge_7 structure type*, Journal of Alloys and Compounds **281**, 157 (1998).
110. V. Keppens, D. Mandrus, B.C. Sales, B.C. Chakoumakos, P. Dai, M.B. Maple, D.A. Gajewski, and E.J. Freeman, *Local-mode thermodynamics of La-filled skutterudite antimonides*, Nature **395**, 876 (1998).
111. D. Mandrus, V. Keppens, B.C. Sales, and J.L. Sarrao, *Unusual transport and large diamagnetism in the intermetallic semiconductor $RuAl_2$* , Phys. Rev. B **58**, 3712 (1998).
112. V. Keppens, D. Mandrus, And L.A. Boatner, *Chemical and sonochemical approaches to the formation of VO_2 films and VO_2 -impregnated materials*, Materials Research Society Proceedings **495**, 439 (1998).
113. S.E. Nagler, D.A. Tennant, and D. Mandrus, *Spin waves in $CsVBr_3$* , Physica B **241**, 561 (1997).
114. T. Graf, M.F. Hundley, R. Modler, R. Movshovich, J. D. Thompson, D. Mandrus, R.A. Fisher, and N.E. Phillips, *Magnetic phase transitions in $CeRh_2Si_2$: specific heat, susceptibility, and resistance studies*, Phys. Rev. B **57**, 7442 (1998).
115. B.C. Sales, D. Mandrus, B.C. Chakoumakos, V. Keppens, and J.R. Thompson, *Filled skutterudite antimonides: electron-crystals and phonon glasses*, Phys. Rev. B **56**, 15081 (1997).
116. C. Kendziora, M.C. Martin, L. Mihaly, L. Forro, and D. Mandrus, *Comment on optical conductivity of high- T_C superconductors: from underdoped to overdoped*, Phys. Rev. Lett. **79**, 4935 (1997).

117. A.J. Arko, J.J. Joyce, A.B. Andrews, J.D. Thompson, J.L. Smith, D. Mandrus, M.F. Hundley, A.L. Cornelius, E. Moshopoulou, Z. Fisk, P.C. Canfield, and A. Menovsky, *Strongly correlated electron systems: photoemission and the single-impurity model*, *Phys. Rev. B* **56**, R7041 (1997).
118. M.A. Chernikov, L. Degiori, E. Felder, S. Paschen, A.D. Bianchi, H.R. Ott, J.L. Sarrao, and D. Mandrus, *Low temperature transport, optical, magnetic and thermodynamic properties of $Fe_{1-x}Co_xSi$* , *Phys. Rev. B* **56**, 1366 (1997).
119. Y. Uwatoko, T. Ishii, G. Oomi, H. Takahashi, N. Mori, S. Nimori, G. Kido, J.L. Sarrao, D. Mandrus, Z. Fisk, and J.D. Thompson, *Effect of pressure on the electrical resistivity and magnetization of CeScGe*, *Physica B* **237**, 207 (1997).
120. H.-M. Christen, D.G. Mandrus, D.P. Norton, L.A. Boatner, and B.C. Sales, *Properties of $CoSb_3$ films grown by pulsed laser deposition*, in *Thermoelectric Materials: New Directions and Approaches*, edited by M. Kanatzidis, H. Lyon, G. Mahan, and T. Tritt., Materials Research Society Proceedings **478** (1997).
121. D. Mandrus, B.C. Sales, V. Keppens, B.C. Chakoumakos, P. Dai, L.A. Boatner, R.K. Williams, J.R. Thompson, T.W. Darling, A. Migliori, M.B. Maple, D.A. Gajewski, and E.J. Freeman, *Filled skutterudite antimonides: validation of the electron-crystal phonon-glass Approach to New Thermoelectric Materials*, in *Thermoelectric Materials: New Directions and Approaches*, edited by M. Kanatzidis, H. Lyon, G. Mahan, and T. Tritt., Materials Research Society Proceedings **478**, 199 (1997).
122. V. Keppens, D. Mandrus, J. Rankin, and L.A. Boatner, *The Formation of Metal-Matrix Nanocomposites by the Ultrasonic Dispersion of Immiscible Liquid Metals*, in *Nanophase and Nanocomposite Materials II*, edited by S. Komarmani, J.C. Parker, and H.J. Wollenberger, Materials Research Society Proceedings **457**, 784 (1997).
123. B. Bushinger, C. Geibel, F. Steglich, D. Mandrus, D. Young, J.L. Sarrao, and Z. Fisk, *Transport properties of $FeSi$* , *Physica B* **230**, 784 (1997).
124. M.A. Chernikov, E. Felder, S. Paschen, A.D. Bianchi, H.R. Ott, J.L. Sarrao, D. Mandrus, and Z. Fisk, *Low temperature magnetic and thermodynamic properties of $Fe_{1-x}Co_xSi$* , *Physica B* **230**, 790 (1997).
125. T. Graf, J.D. Thompson, M.F. Hundley, R. Moshovich, Z. Fisk, D. Mandrus, R.A. Fisher, and N.E. Phillips, *Comparison of $CeRh_2Si_2$ and $CeRh_{2-x}Ru_xSi_2$ near their magnetic-nonmagnetic boundaries*, *Phys. Rev. Lett.* **78**, 3769 (1997).
126. D. Mandrus, J.L. Sarrao, B.C. Chakoumakos, J.A. Fernandez-Baca, S.E. Nagler, and B.C. Sales, *Magnetism in $BaCoS_2$* , *Journal of Applied Physics* **81**, 4620 (1997).
127. D. Mandrus, M. Kele, R.L. Hettich, G. Guiochon, B.C. Sales, and L.A. Boatner, *Sonochemical synthesis of $C_{60}H_2$* , *Journal of Physical Chemistry B* **207**, 602 (1997).
128. J. Arko, J.J. Joyce, A.B. Andrews, D. Mandrus, E. Moshopoulou, Z. Fisk, and P.C. Canfield, *The 5f band structure of antiferromagnetic USb_2 from angle-resolved photoemission spectroscopy: application to heavy fermions*, *Philosophical Magazine B* **75**, 603 (1997).

129. Y. He, R.B. Schwarz, D. Mandrus, and L Jacobsen, *Elastic moduli, density , and structural relaxation in bulk amorphous $Zr_{41.2}Ti1_{3.8}Cu1_{2.5}Ni10Be_{22.5}$ alloy*, Journal of Non-Crystalline Solids, **205-207**, 602 (1996).
130. J.L Sarrao, C.D. Immer, C.L. Benton, Z. Fisk, J.M. Lawrence, D. Mandrus, and J.D. Thompson, *Evolution from first order valence transition to heavy-fermion behavior in $YbIn_{1-x}Ag_xCu_4$* , Phys. Rev. B **54**, 12207 (1996).
131. J.L. Sarrao, L.S. Cassady, Z. Fisk, D. Mandrus, and J.D. Thompson, *Lithium doping in $La_{2-y}Sr_yCuO_4$* , in Proceedings of Physical Phenomena at High Magnetic Fields II, Tallahassee, FL, USA. Edited by Z. Fisk, L. Gor'kov, D. Meltzer, and R. Schrieffer (World Scientific, Singapore, 1996).
132. B.C. Sales, D. Mandrus, and R.K. Williams, *Filled skutterudite antimonides: a new class of thermoelectric materials*, Science **272**, 1325 (1996).
133. J. M. Lawrence, G. H. Kwei, J.L. Sarrao, Z. Fisk, D. Mandrus, and J.D. Thompson, *Structure and disorder in $YbInCu_4$* , Phys. Rev. B **54**, 6011 (1996).
134. R. Moshovich, T. Graf, D. Mandrus, M. F. Hundley, J.D. Thompson, R.A. Fisher, N.E. Phillips, and J.L. Smith, *Response of $CeRb_2Si_2$ to pressure*, Physica B **223-224**, 126 (1996).
135. J.L. Sarrao, C.L. Benton, Z. Fisk, J.M. Lawrence, D. Mandrus, and J.D. Thompson, *$YbIn_{1-x}Ag_xCu_4$: crossover from first order valence transition to heavy fermion behavior*, Physica B **223-224**, 366 (1996).
136. Y. He, R.B. Schwarz, and D. Mandrus, *Thermal expansion of bulk amorphous $Zr_{41.2}Ti1_{3.8}Cu1_{2.5}Ni10Be_{22.5}$ alloy*, Journal of Materials Research **11**, 1836 (1996).
137. J.M. Lawrence, T. Graf, M.F. Hundley, D. Mandrus, J.D. Thompson, A. Lacerda, M. Torikachvili, J.L. Sarrao, and Z. Fisk, *Kondo hole behavior in $Ce_{0.97}La_{0.03}Pd_3$* , Phys. Rev. B **53**, 12559 (1996).
138. R. Moshovich, T. Graf, D. Mandrus, J.D. Thompson, J.L. Smith, and Z. Fisk, *Superconductivity in heavy-fermion $CeRb_2Si_2$* , Phys. Rev. B **53**, 8241 (1996).
139. C.-H. Park, Z.-X. Shen, A.G. Loeser, D.S. Dessau, D. Mandrus, J.L. Sarrao, A.. Migliori, and Z. Fisk, *Direct observation of a narrow band near the gap edge of FeSi*, Rapid Communications, Phys. Rev. B **52**, R12981 (1996).
140. B. Bucher, Z. Schlessinger, D. Mandrus, J.L. Sarrao, J.F. DiTusa, C. Oglesby, G. Aeppli, and E. Bucher, *Charge dynamics of Ce-based compounds: connection between the mixed-valent and Kondo insulator states*, rapid Communications, Phys. Rev. B **53**, R2948 (1995).
141. A.L. Cornelius, J.S. Schilling, D. Mandrus, and J.D. Thompson, *Anomalous hydrostatic pressure dependence of the Curie temperature of the Kondo lattice compound $YbNiSn$ to 38 GPa*, Rapid Communications, Phys. Rev. B **52**, 15399 (1995).
142. T. Ohama, H. Yasuoko, D. Mandrus, Z. Fisk, and J.L. Smith, *Anomalous transferred hyperfine coupling in $CeCu_2Si_2$* , Journal of the Physical Society of Japan **64**, 2628 (1995).

143. D, Mandrus, A. Migliori, M.F. Hundley, T.W. Darling, E.J. Peterson, and J.D. Thompson, *Electric transport in lightly doped CoSb₃*, *Phys. Rev. B* **52**, 4926 (1995).
144. Z. Fisk, J.L. Sarrao, J.D. Thompson, D. Mandrus, M.F. Hundley, A. Migliori, B. Bucher, Z. Schlessinger, G. Aeppli, H.-R. Ott, P.C. Canfield, and S. Brown, *Kondo insulators*, *Physica B* **206-207**, 798 (1995).
145. D. Mandrus, J.L. Sarrao, A. Migliori, J.D. Thompson, and Z. Fisk, *Thermodynamics of FeSi*, *Phys. Rev. B* **51**, 4763 (1995).
146. T. Graf, D. Mandrus, J.M. Lawrence, J. D. Thompson, P.C. Canfield, and S.-W. Cheong, *Suppression of the metal-to-insulator transition in BaVS, with pressure*, *Phys. Rev. B* **51**, 2037 (1995).
147. A. Lacerda, T. Graf, J.L. Sarrao, D. Mandrus, M.F. Hundley, J.D. Thompson, Z. Fisk, and L. Van Bockstal, *Magnetic field dependence of T_c of EuB₆*, *Journal of Applied Physics* **76**, 7052 (1994).
148. A. Lacerda, T. Graf, J.L. Sarrao, D. Mandrus, M.F. Hundley, J.D. Thompson, Z. Fisk, and L. Van Bockstal, *Magnetotransport measurements in magnetic fields up to 50 T in SmB₆ and FeSi*, in *Proceedings of the 1993 Los Alamos Symposium on Correlated electron Systems*, Ed. By K. Bedell et al. (Addison-Wesley, New York, 1994).
149. J.L. Sarrao, D. Mandrus, A. Migliori, Z. Fisk, I. Tanaka, H. Kojima, P.C. Canfield, and P.D. Kodali, *Complete elastic moduli of La_{2-x}Sr_xCuO₄ (x=0.00 and x=0.14) near the tetragonal-orthorhombic structural phase transition*, *Phys. Rev. B* **56**, 13125 (1994).
150. D. Mandrus, J.L. Sarrao, A. Lacerda, A. Migliori, J.D. Thompson, and Z. Fisk, *Low temperature thermal expansion of SmB₆: evidence for a single energy scale in the thermodynamics of Kondo insulators*, *Rapid Communications, Phys. Rev. B* **49**, 16809 (1994).
151. J.D. Thompson, M.F. Hundley, Y. Uwatoko, D. Mandrus, T. Graf, P.C. Canfield, H. A. Vorges, C. Godart, and L.C. Gupta, *Magnetism in CeX₂Ge₂*, *Physica B* **199-200**, 589 (1994).
152. J.L. Sarrao, D. Mandrus, A. Migliori, Z. Fisk, and E. Bucher, *Elastic constants of FeSi*, *Physica B* **199-200**, 478 (1994).
153. D. Mandrus, J.L. Sarrao, A. Migliori, J.D. Thompson, M.F. Hundley, and Z. Fisk, *Thermal expansion study of Fe_{1-x}Co_xSi*, *Physica B* **199-200**, 471 (1994).
154. A. Migliori, J.L. Sarrao, D. Mandrus, Z. Fisk, A. Balatsky, and S.A. Trugman, *Ultrasound studies of U₂Zn₁₇ and UCu₅*, *Physica B* **199-200**, 36 (1994).
155. J. Hartge, L. Forro, D. Mandrus, M.C. Martin, C. Kendziora, and L. Mihaly, *Tunneling and infrared spectroscopy on high-T_c superconductors*, *Journal of the Physics and Chemistry of Solids* **54**, 1359 (1993).
156. L. Mihaly, C. Kendziora, J. Hartge, D. Mandrus, and L. Forro, *High-pressure cell for oxygen annealing at elevated temperatures*, *review of Scientific Instruments* **64**, 2397 (1993).

157. M.C. Martin, C. Kendziora, D. Mandrus, and L. Mihaly, *Increase of J_c and no spectroscopic Gap in single-crystal $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ with ion-induced flux pinning sites*, AIP Conference Proceedings **273**, 205 (1993).
158. D. Mandrus, J. Hartge, C. Kendziora, D. Koller, L. Mihaly, and L. Forro, *Gapless superconductivity in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$* , Europhysics Letters **22**, 199 (1993).
159. D. Mandrus, J. Hartge, C. Kendziora, D. Koller, L. Forro, and L. Mihaly, *No far-infrared Spectroscopic gap in clean and dirty high T_c -superconductors*, Phys. Rev. Lett. **70**, 2329 (1993).
160. D. B. Tanner, F. Gao, M. Quijada, D.B. Romero, J.P. Rice, D.M. Ginsberg, J. Talvacchio, M.G. Forrester, D. Mandrus, L. Mihaly, G.L. Carr, and G.P. Williams, *Optical conductivity of the high T_c 's - search for the energy gap*, Journal of the Physics and Chemistry of Solids **53**, 1611 (1992).
161. W.W. Shultz, L. Forro, C. Kendziora, R. Wentzcovitch, D. Mandrus, L. Mihaly, and P.B. Allen, *Band structure and electronic transport properties of the superconductor NbO* , Phys. Rev. B **46**, 14297 (1992).
162. C. Kendziora, D. Mandrus, L. Mihaly, and L. Forro, *Single-band model for the temperature-dependent Hall coefficient of high- T_c superconductors*, Rapid Communications, Phys. Rev. B **46**, 14297 (1992).
163. D. Mandrus, L. Forro, D. Koller, C. Kendziora, and L. Mihaly, *Electron relaxation rate in high T_c superconductors below T_c* , Phys. Rev. B **46**, 8632 (1992).
164. C. Kendziora, L. Forro, D. Mandrus, J. Hartge, P. Stephens, L. Mihaly, R. Reeder, D. Moecher, M. Rivers, and S. Sutton, *Composition, structure, and electrical properties of $\text{Bi}_2\text{Sr}_2\text{YxCa}_{1-x}\text{Cu}_2\text{O}_8$ – a single crystal study*, Phys. Rev. B **45**, 13025 (1992).
165. D. Mandrus, L. Forro, C. Kendziora, and L. Mihaly, *Resistivity studies of $\text{Bi}_2\text{Sr}_2\text{YxCa}_{1-x}\text{Cu}_2\text{O}_8$ single crystals*, Rapid Communications, Phys. Rev. B **45**, 12640 (1992).
166. D.B. Romero, C.D. Porter, D.B. Tanner, L. Forro, D. Mandrus, L. Mihaly, G.L. Carr, and G.P. Williams, *On the phenomenology of the infrared properties of the copper oxide superconductors*, Solid State Communications **82**, 183 (1992).
167. D. Mandrus, L. Forro, C. Kendziora, and L. Mihaly, *Two-dimensional electron localization in bulk single crystals of $\text{Bi}_2\text{Sr}_2\text{YxCa}_{1-x}\text{Cu}_2\text{O}_8$* , Helvetica Physica Acta **65**, 393 (1992).
168. L. Forro, D. Mandrus, J. Hartge, D. Koller, and L. Mihaly, *Giant tunneling anisotropy of a high temperature superconductor*, Helvetica Physica Acta **65**, 395 (1992).
169. D.B. Romero, C.D. Porter, D.B. Tanner, L. Forro, D. Mandrus, L. Mihaly, G.L. Carr, and G.P. Williams, *Quasiparticle damping in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ and $\text{Bi}_2\text{Sr}_2\text{Cu}_2\text{O}_6$* , Phys. Rev. Lett. **68**, 1590 (1992).
170. D. Mandrus, L. Forro, C. Kendziora, and L. Mihaly, *Metal-Insulator transition in $\text{Bi}_2\text{Sr}_2\text{Y}_{x}\text{Ca}_{1-x}\text{Cu}_2\text{O}_8$ single crystals*, in Superconductivity and its Applications, Buffalo, NY 1990, eds. Y.-H. Kao, P. Coppens, and H.-S. Kwok (New-York: American Institute of Physics, 1991).

171. L. Forro, D. Mandrus, C. Kendziora, and L. Mihaly, *Infrared Spectroscopy and break-junction tunneling on $Bi_2Sr_2CaCu_2O_8$* , in Superconductivity and its Applications, Buffalo, NY 1990, eds. Y.-H. Kao, P. Coppens, and H.-S. Kwok (New-York: American Institute of Physics, 1991).
172. D. B. Tanner, D.B., Romero, K. Kamaras, G.L. Carr, L. Forro, D. Mandrus, L. Mihaly, and G.P. Williams, *Infrared studies of high- T_c superconductors – where's the gap?* In High temperature superconductivity: Physical Properties, Microscopic Theory, and Mechanisms, edited by J. Ashkenazi et al. (New York, Plenum, 1991).
173. D. Mandrus, L. Forro, C. Kendziora, and L. Mihaly, *Two-dimensional electron localization in bulk single crystals of $Bi_2Sr_2Y_xCa_{1-x}Cu_2O_8$* , Rapid Communications, *Phys. Rev. B* **44**, 2418 (1991).
174. D. Mandrus, L. Forro, D. Koller, and L. Mihaly, Giant tunneling anisotropy in the high-Tc superconductor $Bi_2Sr_2CaCu_2O_8$, *Nature* **351**, 460 (1991).
175. L. Forro, D. Mandrus, B. Keszei, L. Mihaly, and R. Reeder, *Preparation and characterization of ultrathin $Bi_2Sr_2CaCu_2O_8$ single crystals*, *Journal of Applied Physics* **68**, 4876 (1990).
176. L. Forro, D. Mandrus, C. Kendziora, L. Mihaly, and R. Reeder, *Hall effect measurements on superconducting and non-superconducting copper-oxide-based metals*, Rapid Communications, *Phys. Rev. B* **42**, 8704 (1990).
177. L. Forro, G.L. Carr, G.P. Williams, D. Mandrus, and L. Mihaly, *Far infrared transmission study of single crystals $Bi_2Sr_2CaCu_2O_8$ superconductors*, *Phys. Rev. Lett.* **65**, 1941 (1990).