

215. Zhen Wang, Lijun Wu, Jing Tao, A. B. Karki, J. Y. Pan, Yimei Zhu, E. W. Plummer, R. Jin  
 “Superlattice Crystal Structure and its Influence in Superconducting  $\text{Ca}_{10}\text{Pt}_4\text{As}_8((\text{Fe}_{1-x}\text{Pt}_x)_2\text{As}_2)_5$ ”  
 (under review)
214. Q. Zhang, G. Cao, F. Ye, H. Cao, M. Matsuda, D. A. Tennant, S. Chi, S. E. Nagler, W. A. Shelton, R. Jin, E. W. Plummer, J. Zhang  
 “Anomalous Magnetic Behavior in  $\text{Ba}_2\text{CoO}_4$  with Isolated  $\text{CoO}_4$  Tetrahedra”  
 (under review)
213. Ramakanta Chapai, Yating Jia, W. A. Shelton, Roshan K. Nepal, Mohammad Saghayezhian, J. F. DiTusa, E. W. Plummer, Changqing Jin, R. Jin  
 “Fermions and Bosons in Non-symmorphic  $\text{PdSb}_2$  with Six-fold Degeneracy”  
 (under review)
212. Hong Chang, Xin Gui, Silu Huang, Roshan K. Nepal, Ramakanta Chapai, Lingyi Xing, Weiwei Xie, R. Jin  
 “Mn-induced Ferromagnetism and Enhanced Thermoelectric Properties in  $\text{Ru}_{1-x}\text{Mn}_x\text{Sb}_{2.3}$ ”  
*Phys. Rev. Materials* (under review).
211. Simin Nie, Lingyi Xing, R. Jin, Weiwei Xie, Zhijun Wang, Fritz B. Prinz  
 “Topological Phases in the  $\text{TaSe}_3$  Compound”  
*Phys. Rev. B* **98**, 125143 (2018).
210. J. E. Taylor, Z. Zhang, G. Cao, L. H. Haber, R. Jin, E. W. Plummer,  
 “Electronic Phase Transition of  $\text{IrTe}_2$  Probed by Second Harmonic Generation”  
*Chinese Phys. Lett.* **35**, 007102 (2018).
209. Lingyi Xing, Xin Gui, Weiwei Xie, Huibo Cao, Brian C. Sales, R. Jin,  
 “Mn-induced Ferromagnetic Semiconducting Behavior with Linear Negative Magnetoresistance in  $\text{Sr}_4(\text{Ru}_{1-x}\text{Mn}_x)_3\text{O}_{10}$  Single Crystals”  
*Scientific Reports* **8**, 13330 (2018).
208. Nestor Haberkorn, Silu Huang, R. Jin,  
 “Anomalous Reduction in the Long-time Creep Relaxation in Superconducting  $\text{Ca}_{10}\text{Pt}_4\text{As}_8(\text{Fe}_{1-x}\text{Pt}_x\text{As})_5$ ”  
*Superconducting Science and Technology* **31**, 065010 (2018).
207. Yan Wu, Zhenhua Ning, Huibo Cao, Guixin Cao, W. A. Shelton, K. A. Benavides, G. T. McCandless, R. Jin, J. Y. Chan, J. F. DiTusa  
 “Spin Density Wave Instability in a Ferromagnet”  
*Scientific Report* **8**, 5225 (2018).
206. Meng Meng, Shuwei Li, Mohammad Saghayezhian, E. W. Plummer, Rongying Jin,  
 Observation of Large Exchange Bias abd Topological Hall Effect in Manganese Nitride Films  
*Appl. Phys. Lett.* **112**, 132402 (2018).
205. Xin Gui, Lingyi Xing, Xiaoxiong Wang, Guang Bian, Rongying Jin, Weiwei Xie,  
 “Pt-Bi Antibonding Interaction: The Key Factor for Superconductivity in Monoclinic  $\text{BaPt}_2\text{Bi}_2$ ”  
*Inorganic Chemistry* **57**, 1698 (2018).
204. Lea Gustin, Lingyi Xing, Max T. Pan, R. Jin, Weiwei Xie,  
 “Electron Counts, Structural Stability, and Magnetism in  $\text{BaCuSn}_2\text{-CeNi}_{1-x}\text{Si}_2$ -type  $\text{YT}_x\text{Ge}_2$  ( $T = \text{Cr, Mn, Fe, Co, and Ni}$ )”  
*J. Alloys & Compounds* **741**, 840 (2018).
203. Roshan Nepal, Qiang Zhang, Samuel Dai, Wei Tian, Stephen Nagler, Rongying Jin,  
 “Structural and Magnetic Transitions in Spinel  $\text{FeMn}_2\text{O}_4$  Single Crystals”  
*Phys. Rev. B* **97**, 024410 (2018).
202. Jiayun Pan, Amar Karki, E. W. Plummer, Rongying Jin,  
 “Doping Effect on the Physical Properties of  $\text{Ca}_{10}\text{Pt}_3\text{As}_8(\text{Fe}_2\text{As}_2)_5$  Single Crystals”  
*J. Phys.: Condens. Matter* **29**, 485702 (2017).

201. P. Rivero, R. Jin, C. Chen, V. Meunier, E. W. Plummer, W. A. Shelton,  
“Predicting Hidden Bulk Phases from Surface Phases in Bilayered  $\text{Sr}_3\text{Ru}_2\text{O}_7$ ”  
Scientific Report **7**, 10265 (2017).
200. Lin Li, Zhenyu Diao, R. Jin, E. W. Plummer, J. Guo, J. Zhang  
“Reentrance of Low-Temperature Nonmetallic Phase of  $\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3$  (110) Thin Films”  
Phys. Rev. Materials **1**, 034405 (2017).
199. Hangwen Guo, Zhen Wang, Shuai Dong, S. Ghosh, M. Saghayezhian, L. Chen, Y. Weng, A. Herklotz, T. Z. Ward, R. Jin, S. T. Pantelides, Y. Zhu, J. Zhang, E. W. Plummer  
“Designing Novel Magnetic Superlattices: Interface-induced Multiferroism in  $\text{BaTiO}_3/\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3$  Superlattices”  
PNAS **114**, E5062 (2017).
198. Q. Zhang, F. Ye, W. Tian, H. Cao, S. Chi, B. Hu, Z. Diao, D. T. Tennant, R. Jin, J. Zhang, E. W. Plummer  
“Mn-Induced Magnetic Symmetry Breaking and its Correlation with Metal-Insulator Transition in Bilayered  $\text{Sr}_3(\text{Ru}_{1-x}\text{Mn}_x)_2\text{O}_7$ ”  
Phys. Rev. B (R) **95**, 220403 (2017).
197. Silu Huang, Jisun Kim, W. Shelton, E. W. Plummer, R. Jin,  
“Non-Trivial Berry Phase in Magnetic  $\text{BaMnSb}_2$  Semimetal”  
PNAS **114**, 6256 (2017).
196. Jing Chen, Yiping Wang, Yating Zhang, Ying Yang, R. Jin,  
“Giant Electric Field-Induced Strain at Room Temperature in  $\text{LiNbO}_3$ -Doped  $0994(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3\text{-}0.06\text{BaTiO}_3$ ”  
J. Euro. Ceram. Soc. **37**, 2365 (2017).
195. Qiaomei Sun, Qilin Gu, Kongjun Zhu, Rongying Jin, Jinsong Liu, Jing Wang, Jinhong Qiu  
“Crystalline Structure, Defect Chemistry and Room Temperature Colossal Permittivity of Nd-doped Barium Titanate”  
Scientific Report **7**, 42274 (2017).
194. Chen Chen, Jisun Kim, Yifan Yang, Guixin Cao, R. Jin, E. W. Plummer  
“Surface Phases of the Transition-Metal Dichalcogenide  $\text{IrTe}_2$ ”  
Phys. Rev. B **95**, 094118 (2017).
193. Zhenyu Diao, H. N. Lee, M. F. Chisholm, R. Jin  
“Thermoelectric Properties of  $\text{Bi}_2\text{Sr}_2\text{Co}_2\text{O}_y$  Thin Films and Single Crystals”  
Physica B **511**, 42 (2017).
192. Z. Liao, R. Jin, E. W. Plummer, J. Zhang  
“Delicate Competing Electronic States in Ultrathin Magnanite Films”  
Phys. Rev. B **95**, 085130 (2017).
191. G. Cao, Weiwei Xie, W. A. Phelan, J. F. DiTusa, R. Jin  
“Electrical Anisotropy and Coexistence of Structural Transitions and Superconductivity in  $\text{IrTe}_2$ ”  
Phys. Rev. B **95**, 035148 (2017).
190. C. Dhital, M. Khan, M. Saghayezhian, W. A. Phelan, D. P. Young, R. Jin, J. F. DiTusa  
“Effect of Negative Pressure on the Prototypical Itinerant Magnet  $\text{MnSi}$ ”  
Phys. Rev. B **95**, 024407 (2017).
189. Arturo Carranze, M. Guadalupe Perez-Garcia, Kunlin Song, George Jhea, Zhenyu Diao, Rongying Jin, Nina Bogdanchikova, J. Felix Soltero, Mauricio Terrones, Qinglin Wu, J. Pojman, Josue Mota-Morales,  
“Deep-Eutectic Solvents as MWCNT Delivery Vehicles in the Synthesis of Functional Poly(HIPE) Nanocomposites for Applications as Selective Sorbents”  
ACS Materials & Interfaces **8**, 31295 (2016).

188. Jisun Kim, Hyoungdo Nam, Guorong Li, A. B. Karki, Zhen Wang, Yimei Zhu, Chih-Kang Shih, Jiandi Zhang, Rongying Jin, E. W. Plummer  
 “Interrogating Superconductor  $\text{Ca}_{10}(\text{Pt}_4\text{As}_8)(\text{Fe}_{2-x}\text{Pt}_x\text{As}_2)_5$  Layer-by-Layer,”  
*Scientific Report* **6**, 35365 (2016).
187. Chen Chen, Jisun Kim, V. B. Nascimento, Zhenyu Diao, Jing Teng, Biao Hu, Guorong Li, Fangyang Liu, Jiandi Zhang, R. Jin, E. W. Plummer,  
 “Hidden Phases of Layered  $\text{Sr}_3(\text{Ru}_{1-x}\text{Mn}_x)_2\text{O}_7$  Revealed at the Surface”  
*Phys. Rev. B* **94**, 085420 (2016).
186. Chen Chen, Jisun Kim, V. B. Nascimento, Zhenyu Diao, Jing Teng, Biao Hu, Guorong Li, Fangyang Liu, Jiandi Zhang, R. Jin, E. W. Plummer,  
 “Hidden Phases of Layered  $\text{Sr}_3(\text{Ru}_{1-x}\text{Mn}_x)_2\text{O}_7$  Revealed at the Surface”  
*Phys. Rev. B* **94**, 085420 (2016).
185. Zhaoliang Liao, Fengmiao Li, Peng Gao, Lin Li, Jiandong Guo, Xiaoqing Pan, R. Jin, E. W. Plummer, Jiandi Zhang,  
 “The Origin of Metal-Insulator Transition in Ultrathin Films of  $\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3$ ,”  
*Phys. Rev. B* **92**, 125123 (2015).
184. M. Poirier, M. Bilodeau, S. Lefebvre, A. B. Karki, R. Jin,  
 “Multimodal Theranostic Nanomaterials Derived from Phthalocyanine-based Organic Salt,”  
*RCS Advances* **5**, 30227 (2015).
183. J. H. Mendez, C. E. Ekuma, Y. Wu, B. Fulfer, J. C. Prestigiacomo, W. A. Shelton, M. Jarrell, J. Moreno, D. P. Young, P. W. Adams, A. B. Karki, R. Jin, J. Y. Chan, J. F. DiTusa  
 “Competing Magnetic States, Disorder, and the Magnetic Character of  $\text{Fe}_3\text{Ga}_4$ ,”  
*Phys. Rev. B* **91**, 144409 (2015).
182. M. Poirier, M. Bilodeau, S. Lefebvre, A. B. Karki, R. Jin  
 “Ultrasonic and Microwave Investigation of the Structural and Magnetic Transition in  $\text{CaFe}_2\text{As}_2$  and  $\text{BaFe}_2\text{As}_2$  Single Crystals”,  
*Phys. Rev. B* **89**, 155129 (2014).
181. G. Li, L. Liang, Q. Li, M. Pan, V. B. Nascimento, X. He, A. B. Karki, V. Meunier, R. Jin, J. Zhang, E. W. Plummer  
 “Role of Antiferromagnetic Ordering in the  $(1\times 2)$  Surface Reconstruction of  $\text{Ca}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ ,”  
*Phys. Rev. Lett.* **112**, 077205 (2014).
180. J. M. Farmer, L. A. Boatner, B. C. Chakoumakos, C. J. Rawn, D. Mandrus, R. Jin, J. C. Byran  
 “Polymorphism, Phase transition, and Thermal Expansion of  $\text{K}_3\text{Lu}(\text{PO}_4)_2$   
*J. Alloys & Compounds* **588**, 182 (2014).
179. G. Li, Q. Li, M. Pan, B. Hu, C. Chen, J. Teng, Z. Diao, J. Zhang, R. Jin, E. W. Plummer,  
 “Atomic-Scale Fingerprint of Mn Dopant at the Surface of  $\text{Sr}_3(\text{Ru}_{1-x}\text{Mn}_x)_2\text{O}_7$ ”,  
*Nature Scientific Reports* **3**, 2882 (2013).
178. B. Lu, K. Chen, W. J. Meng, A. Karki, R. Jin, “Quantification of Thermal Resistance of Transient-Liquid-Phase Bonded Cu/Al/Cu Interfaces for Assembly of Cu-Based Microchannel Heat Exchangers”, *J. Micro- and Nano-Manufacturing* **1**, 031001 (2013).
177. Z. Liao, P. Gao, S. Stadler, R. Jin, X. Pan, E. W. Plummer, and J. Zhang,  
 “Tuning Properties of Columnar Nanocomposite Oxides”, *Appl. Phys. Lett.* **103**, 043112 (2013).
176. A. B. Karki, V. O. Garlea, R. Custelcean, S. Stadler, E. W. Plummer, R. Jin, “Interplay between Superconductivity and Magnetism in  $\text{Fe}_{1-x}\text{Pd}_x\text{Te}$ ”, *PNAS* **110**, 9283 (2013).
175. N. Haldolaarachchige, W. A. Phelan, Y. M. Xiong, R. Jin, J. Y. Chan, S. Stadler, D. P. Young,  
 “Thermoelectric Properties of Intermetallic Semiconducting  $\text{RuIn}_3$  and Metallic  $\text{IrIn}_3$ ”, *J. Appl. Phys.* **113**, 083709 (2013).

174. D. Schmitt, N. Haldolaarachchige, J. Prestigiacomo, A. Karki, D. Young, S. Stadler, R. Jin, J. Y. Chan, "Structural Complexity Meets Transport and Magnetic Anisotropy in Single Crystalline  $\text{Ln}_{30}\text{Ru}_4\text{Sn}_{31}$  ( $\text{Ln} = \text{Gd-Dy}$ )", *JACS* **135**, 2748 (2013).
173. J. Teng, C. Chen, Y. Xiong, J. Zhang, R. Jin, E. W. Plummer, "Anomalous Surface Lattice Dynamics in the Low Temperature Phase of  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ ", *PNAS* **110**, 898 (2013).
172. M. Poirier, M. A. Richard, J. Pilon, A. B. Karki, R. Jin, "Magnetic Structure of the Spin-Density Wave Antiferromagnet  $\text{CaFe}_4\text{As}_3$  from Magneto-Elastic Coupling", *Phys. Rev. B* **87**, 014407 (2013).
171. T. Podlich, M. Klinke, B. Nansseu, M. Waelsch, R. Bienert, J. He, R. Jin, D. Mandrus, R. Matzdorf, "Luttinger Liquid Behavior of  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$  Studied by Scanning Tunnelling Microscopy", *J. Phys.: Condens. Matter* **25**, 014008 (2013).
170. J. Li, C. E. Ekuma, I. Vekhter, M. Jarrell, J. Moreno, S. Stadler, A. B. Karki, R. Jin, "Physical Properties of  $\text{Ba}_2\text{Mn}_2\text{Sb}_2\text{O}$  Single Crystals", *Phys. Rev. B* **86**, 195142 (2012).
169. V. O. Garlea, R. Jin, E. Garlea, G. Ehlers, E. Mamontov, D. B. Myers, F. Xie, R. Custelcean, "Structural and Magnetic Properties of the Cobaltate Series  $(\text{Ba},\text{Sr})_{8-x}\text{La}_x\text{Co}_4\text{O}_{15}$ ", *Phys. Rev. B* **86**, 094434 (2012).
168. G. Li, X. He, J. Zhang, R. Jin, A. S. Sefat, M. A. McGuire, D. C. Mandrus, B. C. Sales, E. W. Plummer, "Coupled Structural-Magnetic Antiphase Domain Walls on  $\text{BaFe}_2\text{As}_2$ ", *Phys. Rev. B (Rapid)* **86**, 060512 (2012).
167. D. Mesa, F. Ye, S. Chi, J. A. Fernandez-Baca, W. Tian, B. Hu, R. Jin, E. W. Plummer, J. Zhang, "Unusual Single Bilayer E-Type Antiferromagnetism in Mn-Substituted  $\text{Sr}_3\text{Ru}_2\text{O}_7$ ", *Phys. Rev. B (Rapid)* **85**, 180410 (2012).
166. D. C. Schmitt, N. Haldolaarachchige, Y. Xiong, D. P. Young, R. Jin, J. Y. Chan, "Exceptionally Low Thermal Conductivity in  $\text{Gd}_{117}\text{Co}_{56}\text{Sn}_{12}$  – A Phonon Glass-Electron Crystal System", *J. Am. Chem. Soc.* **134**, 5965 (2012).
165. A. B. Karki, D. Brown, S. Stadler, J. Li, R. Jin, "PdTe: A Strongly-Coupled Superconductor", *J. Phys.: Condensed Matter* **24**, 055701 (2012).
164. Min Li, G. M. Ganea, C. Lu, S. L. De Rooy, B. El-Zahab, R. Jin, S. Aggarwal, I. M. Warner "Lipophilic Phosphonium-Lanthanide Compounds with Magnetic, Luminescent, and Tumor Targeting Properties", *J. Inorganic Biochemistry* **107**, 40 (2012).
163. I. Nowik, I. Felner, A. B. Karki, R. Jin, " $^{57}\text{Fe}$  Mössbauer Spectroscopy Studies of  $\text{CaFe}_4\text{As}_3$ ", *Phys. Rev. B* **84**, 212402 (2011).
162. Rongying Jin, "Metal-Insulator Transitions in n=1 Ruddlesden-Popper Ruthenates", book chapter of *Frontiers of 4d- and 5d- Transition Metal Oxides* (World Scientific Publishing, 2011).
161. B. Hu, G. T. McCandless, V. O. Garlea, S. Stadler, Y. M. Xiong, J. Y. Chan, E. W. Plummer, R. Jin, "Structure-property coupling in  $\text{Sr}_3(\text{Ru}_{1-x}\text{Mn}_x)_2\text{O}_7$ ", *Phys. Rev. B* **84**, 174411 (2011).
160. D. C. Schmitt, N. Haldolaarachchige, D. P. Young, R. Jin, J. Y. Chan, "Crystal Structure and Physical Properties of  $\text{Yb}_3\text{Co}_{4-x}\text{Ru}_x\text{Sn}_{13}$  ( $x = 0, 0.38$ )", *Zeitschrift Anorganische und Allgemeine Chemie* **637**, 1 (2011).
159. A. B. Karki, G. T. McCandless, S. Stadler, Y. M. Xiong, J. Li, J. Y. Chan and R. Jin, "Structural and Physical Properties of  $\text{CaFe}_4\text{As}_3$ ", *Phys. Rev. B* **84**, 054412 (2011).

158. X. He, G. Li, J. Zhang, A. B. Karki, R. Jin, B. C. Sales, A. S. Sefat, M. A. McGuire, D. Mandrus, E. W. Plummer, “Nanoscale Chemical Phase Separation in  $\text{FeTe}_{0.55}\text{Se}_{0.45}$  as Seen via Scanning Tunneling Spectroscopy”, *Phys. Rev. B* **83**, R220502 (2011).
157. V. Ovidiu Garlea, Andrei T. Savici, R. Jin, “Tuning the Magnetic Ground State of a Triangular Lattice System  $\text{Cu}(\text{Mn}_{1-x}\text{Cu}_x)\text{O}_2$ ”, *Phys. Rev. B* **83**, 172407 (2011).
156. N. Haldolaarachchige, A. B. Karki, W. Adam Phelan, Y. M. Xiong, R. Jin, Julia Y. Chan, S. Stadler, and D. P. Young, “Chemical Doping Effect on the Thermoelectric Properties of  $\text{TGa}_3$  ( $T = \text{Fe}, \text{Ru}, \text{Os}$ )”, *J. Appl. Phys.* **109**, 103712 (2011).
155. D. A. Zocco, R. E. Baumbach, J. J. Hamlin, M. Janoschek, I. K. Lum, M. A. McGuire, A. S. Sefat, B. C. Sales, R. Jin, D. Mandrus, J. R. Jeffries, S. T. Weir, Y. K. Vohra, and M. B. Maple, “Search for Pressure Induced Superconductivity in  $\text{CeFeAsO}$  and  $\text{CeFePO}$  Iron Pnictides”, *Phys. Rev. B* **83**, 094528 (2011).
154. B. Hu, G. T. McCandless, M. Menard, V. B. Nascimento, J. Y. Chan, E. W. Plummer, R. Jin, “Surface and Bulk Structural Properties of Single Crystalline  $\text{Sr}_3\text{Ru}_2\text{O}_7$ ”, *Phys. Rev. B* **81**, 184104 (2010).
153. H. A. Mook, M. D. Lumsden, A. D. Christianson, S. E. Nagler, B. C. Sales, R. Jin, M. A. McGuire, A. S. Sefat, D. Madrus, T. Egami, C. de la Cruz “Unusual Relationship between Magnetism and Superconductivity in  $\text{FeTe}_{0.5}\text{Se}_{0.5}$ ”, *Phys. Rev. Lett.* **104**, 187002 (2010).
152. H. Guo, Y. Li, D. Urbina, B. Hu, R. Jin, T. Liu, D. Fobes, Z. Mao, E. W. Plummer, J. Zhang, “Doping and Dimensionality Effects on the Core-Level Spectra of Layered Ruthenates,” *Phys. Rev. B* **81**, 155121 (2010).
151. X. Lu, W. K. Park, H. Q. Yuan, G. F. Chen, G. L. Luo, N. L. Wang, A. S. Sefat, M. A. McGuire, R. Jin, B. C. Sales, D. Mandrus, J. Gillett, S. E. Sebastian, and L. H. Greene, “Point-Contact Spectroscopic Studies on Normal and Superconducting  $\text{AFe}_2\text{As}_2$ -Type Iron Pnictide Single Crystals,” *Supercond. Sc. Technol.* (invited) **23**, 054009 (2010).
150. R. Jin, M. H. Pan, X. B. He, G. Li, D. Li, R. W. Peng, J. R. Thompson, B. C. Sales, A. S. Sefat, M. A. McGuire, D. Mandrus, J. F. Wendelken, V. Keppens, and E. W. Plummer, “Electronic, Magnetic and Optical Properties of Two Fe-Based Superconductors and Related Parent Compounds”, *Supercond. Sc. Technol.* (invited) **23**, 054005 (2010).
149. C. Parks Cheney, F. Bondino, T. A. Callcott, P. Vilmercati, D. Ederer, E. Magnano, M. Malvestuto, F. Parmigiani, A. S. Sefat, M. A. McGuire, R. Jin, B. C. Sales, D. Mandrus, D. J. Singh, J. W. Freeland, N. Mannella, “Orbital Symmetry of  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$  Superconductors Probed with X-Ray Absorption Spectroscopy,” *Phys. Rev. B* **81**, 104518 (2010).
148. T. -H. Kim, M. Angst, B. Hu, R. Jin, X. G. Zhang, J. F. Wendelken, E. W. Plummer, A. -P. Li, “Imaging the Competing Electronic Phases near the Mott Metal-Insulator Transition,” *PNAS* **107**, 5272 (2010).
147. M. Putti, I. Pallegchi, E. Bellingeri, M. Tropeano, C. Ferdeghini, A. Palenzona, C. Tarantini, A. Yamamoto, J. Jiang, J. Jaroszynski, F. Kametani, D. Abraimov, A. Polyanskii, J. D. Weiss, E. E. Hellstrom, A. Gurevich, D. C. Larbalestier, R. Jin, B. C. Sales, S. A. Sefat, M. A. McGuire, D. Mandrus, P. Cheng, Y. Jia, H. H. Wen, S. Lee, C. B. Eom, “New Fe-Based Superconductors: Properties Relevant for Applications,” *Supercond. Sc. Technol.* **23**, 034003 (2010).
146. J. T. Haraldsen, M. B. Stone, M. D. Lumsden, T. Barnes, R. Jin, J. W. Talor, and F. Fernandez-Alonso, Spin-Lozenge Thermodynamics and Magnetic Excitations in  $\text{Na}_3\text{RuO}_4$ ,” *J. Phys.:Cond. Matter* **21**, 506003 (2009).

145. T. -H. Kim, R. Jin, L. R. Walker, J. Y. Howe, M. H. Pan, J. F. Wendelken, J. R. Thompson, A. S. Sefat, M. A. McGuire, B. C. Sales, D. Mandrus, A. P. Li, "Probing Microscopic Variations of Superconductivity on the Surface of  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$  Single Crystals" *Phys. Rev. B* **80**, 214518 (2009).
144. Y. Luan, V. Keppens, R. Jin, and D. Mandrus, "Resonant Ultrasound Studies of the Layered Perovskite System  $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$ ," *J. Acoustical Soc. America* **126**, 2949 (2009)
143. M. B. Maple, R. E. Baumbach, J. J. Hamlin, D. A. Zocco, B. J. Taylor, N. P. Butch, J. R. Jeffrles, S. T. Weir, B. C. Sales, D. Mandrus, M. A. McGuire, A. S. Sefat, R. Jin, Y. K. Vohra, J. H. Chu, I. R. Fisher, "New Correlated Electron Physics from New Materials," *Physica B* **404**, 2924 (2009).
142. F. Wang, J.V. Alvarez, J.W. Allen, S.-K. Mo, J. He, R. Jin, D. Mandrus, H. Hochst, "New Quantum State of Matter in  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ ," *Phys. Rev. Lett.* **103**, 136401 (2009).
141. A.D. Christianson, M.D. Lumsden, S.E. Nagler, G.J. MacDougall, M.A. McGuire, A.S. Sefat, R. Jin, B.C. Sales, D. Mandrus, "Static and Dynamic Magnetism in Underdoped Superconductor  $\text{BaFe}_{1.92}\text{Co}_{0.08}\text{As}_2$ ," *Phys. Rev. Lett.* **103**, 087002 (2009).
140. P. L. Russo, J. Sugiyama, J. H. Brewer, E. J. Ansaldi, S. L. Stubbs, K. H. Chow, R. Jin, H. Sha, J. Zhang, "Muon Spin Rotation/Relaxation Study of  $\text{Ba}_2\text{CoO}_4$ ," *Phys. Rev. B* **80**, 104421 (2009).
139. M. Neupane, P. Richard, Z.-H. Pan, Y. Xu, R. Jin, D. Mandrus, X. Dai, Z. Fang, Z. Wang, H. Ding, "Observation of a Novel Orbital Selective Mott Transition in  $\text{Ca}_{1.8}\text{Sr}_{0.2}\text{RuO}_4$ ," *Phys. Rev. Lett.* **103**, 097001 (2009).
138. V. B. Nascimento, Ang Li, D. R. Jayasundara, Yi Xuan, J. O'Neal, Shuheng H. Pan, T. Y. Chien, Biao Hu, X. B. He, Guorong Li, A.S. Sefat, M.A. McGuire, B.C. Sales, D. Mandrus, M. H. Pan, Jiandi Zhang, R. Jin, E. W. Plummer, "Surface Geometric and Electronic Structure of  $\text{BaFe}_2\text{As}_2(001)$ ," *Phys. Rev. Lett.* **103**, 076104 (2009).
137. A. S. Sefat, D. J. Singh, L. H. VanBebber, Y. Mozharivskyi, M. A. McGuire, R. Jin, B. C. Sales, V. Keppens, D. Mandrus, "Absence of Superconductivity in Hole-Doped  $\text{BaFe}_{2-x}\text{Cr}_x\text{As}_2$  Single Crystals," *Phys. Rev. B* **79**, 224524 (2009).
136. Y.L. Zuev, E.D. Specht, C. Cantoni, D.K. Christen, J.R. Thompson, R. Jin, A.S. Sefat, D. Mandrus, M.A. McGuire, B.C. Sales, "Aligned Crystallite Powder of  $\text{NdFeAsO}$ ," Magnetic Hysteresis and Penetration Depth,"*Phys. Rev. B* **79**, 224523 (2009).
135. M. R. Koehler, Y. Keppens, B. C. Sales, R. Jin, D. Mandrus, "Elastic Moduli of Superhard Rhenium Diboride," *J. Physics D: Applied Physics* **42**, 095414 (2009).
134. X. Xu, A.F. Bangura, J.G. Analytis, J.D. Fletcher, M.M.J. French, N. Shannon, J. He, S. Zhang, D. Mandrus, R. Jin, N.E. Hussey, "Directional Field-Induced Metallization of Quasi-One-Dimensional  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ ," *Phys. Rev. Lett.* **102**, 206602 (2009).
133. M.S. da Luz, J.J. Neumeier, R.K. Bollinger, A.S. Sefat, M.A. McGuire, R. Jin, B.C. Sales, D. Mandrus, "High-Resolution Thermal Expansion Measurements of Superconducting, Co-Doped  $\text{BaFe}_2\text{As}_2$ ," *Phys. Rev. B* **79**, 214505 (2009).
132. P. Vilmercati, A. Fedorov, I. Vobornik, U. Manju, G. Panaccione, A. Goldoni, A.S. Sefat, M.A. McGuire, B.C. Sales, R. Jin, D. Mandrus, D.J. Singh, and N. Mannella "Evidence for Three-Dimensional Fermi-Surface Topology of the Layered Electron-Doped Iron Superconductor  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ ," *Phys. Rev. B* **79**, 220503® (2009).
131. R. G. Moore, M. D. Lumsden, M. B. Stone, J. Zhang, Y. Chen, J. W. Lynn, R. Jin, D. Mandrus, E. W. Plummer, "Phonon Softening and Anomalous Mode Near  $x_c = 0.5$  Quantum Critical Point in  $\text{Ca}_{2-x}\text{Sr}_x\text{RuO}_4$ ," *Phys. Rev. B* **79**, 172301 (2009).

130. F. L. Ning, K. Ahilan, T. Imai, A. S. Sefat, R. Jin, M. A. McGuire, B. C. Sales, and D. Mandrus, “ $^{59}\text{Co}$  and  $^{75}\text{As}$  NMR Investigation of the Lightly Doped  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$  ( $x = 0.02, 0.04$ )”, *Phys. Rev. B* **79**, 140506 (2009).
129. M. D. Lumsden, A. D. Christianson, D. Parshall, M. B. Stone, S. E. Nagler, G. J. MacDougall, H. A. Mook, K. Lokshin, T. Egami, D. L. Abernathy, E. A. Goremychkin, R. Osborn, M. A. McGuire, A. S. Sefat, R. Jin, B. C. Sales, D. Mandrus, “Two-Dimensional Resonant Magnetic Excitation in  $\text{BaFe}_{1.84}\text{Co}_{0.16}\text{As}_2$ ”, *Phys. Rev. Lett.* **102**, 107005 (2009).
128. A.S. Sefat, M.A. McGuire, B.C. Sales, R. Jin, D.J. Singh, D. Mandrus, “ $\text{BaT}_2\text{As}_2$  Single Crystals ( $T = \text{Fe}, \text{Co}, \text{Ni}$ ) and superconductivity upon Co - Doping”, *Physica C* **469**, 350 (2009).
127. B. C. Sales, A. S. Sefat, M. A. McGuire, R. Jin, D. Mandrus, “Bulk Superconductivity at 14 K in Single Crystals of  $\text{Fe}_{1+y}\text{Te}_x\text{Se}_{1-x}$ ”, *Phys. Rev. B* **79**, 094521 (2009).
126. A.S. Sefat, R. Jin, M.A. McGuire, B.C. Sales, D. Mandrus, F. Ronning, E.D. Bauer, Y. Mozharivskyj, “Structure and Anisotropic Properties of  $\text{BaFe}_{2-x}\text{Ni}_x\text{As}_2$  ( $x=0,1,2$ ) Single Crystals”, *Phys. Rev. B* **79**, 094508 (2009).
125. Z. X. Zhou, G. Eres, R. Jin, A. Subedi, D. Mandrus, E. H. Kim, “The Performance of in situ Grown Schottky-Barrier Single Wall Carbon Nanotube Field-Effect Transistors”, *Nanotechnology* **20**, 085709 (2009).
124. M. A. McGuire, R. P. Hermann, A. S. Sefat, B. C. Sales, R. Jin, D. Mandrus, F. Grandjean, G. J. Long, “Influence of the Rare-Earth Element on the effects of the Structural and Magnetic Phase Transitions in  $\text{CeFeAsO}$ ,  $\text{PrFeAsO}$ , and  $\text{NdFeAsO}$ ”, *New J. of Physics* **11**, 025011 (2009).
123. A. Yamamoto, J. Jaroszynski, C. Tarantini, L. Balicas, J. Jiang, A. Gurevich, D. C. Larbalestier, R. Jin, A. S. Sefat, M. A. McGuire, B. C. Sales, D. K. Christen, and D. Mandrus, “Small Anisotropy, Weak Thermal Fluctuations, and High Field Superconductivity in Co-doped Iron Pnictide  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ ”, *Applied Physics Letters* **94**, 062511 (2009).
122. A.S. Sefat, D.J. Singh, R. Jin, M.A. McGuire, B.C. Sales, and D. Mandrus, “Renormalized Behavior and Proximity of  $\text{BaCo}_2\text{As}_2$  to a Magnetic Quantum Critical Point”, *Phys. Rev. B* **79**, 024512 (2009).
121. F. Ning, K. Ahilan, T. Imai, A. S. Sefat, R. Jin, M. A. McGuire, B. C. Sales, D. Mandrus, “Spin Susceptibility, Phase Diagram, and Quantum Criticality in the Electron-Doped High  $T_c$  Superconductor  $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ ”, *J. Phys. Soc. Jpn.* **78**, 013711 (2009).
120. P. Brandao, J. Rocha, M. S. Reis, A. M. dos Santos, R. Jin, “Magnetic Properties of  $\text{KNaMSi}_4\text{O}_{10}$  Minerals ( $M = \text{Mn}, \text{Fe}, \text{Cu}$ )”, *J. Solid State Chemistry* **182**, 253 (2009).
119. J. Dong, D. Wu, J. L. Luo, M. E. Li, X. G. Luo, X.H. Chen, R. Jin, D. Mandrus, N. L. Wang, “Charge Dynamics and Optical Properties of Layered Cobaltates”, *J. Phys. & Chem. Solids* **69**, 3052 (2008).
118. T. Imai, K. Ahilan, F. Ning, M. A. McGuire, A. S. Sefat, R. Jin, B. C. Sales, D. Mandrus, “NMR Measurements of Intrinsic Spin Susceptibility in  $\text{LaFeAsO}_{0.9}\text{F}_{0.1}$ ”, *Japanese J. of Phys. Soc.* **77**, 47 (2008) Supplement C.
117. F. Bondino, E. Magnano, M. Malvestuto, F. Parmigiani, M. A. McGuire, A. S. Sefat, B. C. Sales, R. Jin, D. Mandrus, E. W. Plummer, D. J. Singh, N. Mannella, “Evidence for Strong Itinerant Spin Fluctuations in the Normal State of  $\text{CeFeAsO}_{0.89}\text{F}_{0.11}$  Iron-Oxypnictides”, *Phys. Rev. Lett.* **101**, 267001 (2008).
116. M. Angst, R. P. Hermann, A. D. Christianson, M. D. Lumsden, C. Lee, M.-H. Whangbo, J. -W. Kim, P. J. Ryan, S. E. Nagler, W. Tian, R. Jin, B.C. Sales, D.

- Mandrus, "Charge Order in LuFe<sub>2</sub>O<sub>4</sub>: Antiferroelectric Ground State and Coupling to Magnetism", *Phys. Rev. Lett.* **101**, 227601 (2008).
115. K. Ahilan, J. Balasubramaniam, F.L. Ning, T. Imai, A.S. Sefat, R. Jin, M.A. McGuire, B.C. Sales, and D. Mandrus, "Pressure Effects on the Electron-Doped High T<sub>c</sub> Superconductor BaFe<sub>2-x</sub>Co<sub>x</sub>As<sub>2</sub>", *J. Phys.: Cond. Matter* **20**, 472201 (2008).
114. A. D. Christianson, M. D. Lumsden, O. Delaire, M. B. Stone, D. L. Abernathy, M. A. McGuire, A. S. Sefat, R. Jin, B. C. Sales, D. Mandrus, E. D. Mun, P. C. Canfield, J. Y. Lin, M. Lucas, M. Kresch, J. B. Keith, B. Fultz, E. A. Goremychkin, and R. J. McQueeney, "Phonon Density of States of LaFeAsO<sub>1-x</sub>F<sub>x</sub>", *Phys. Rev. Lett.* **101**, 157004 (2008).
113. F. L. Ning, K. Ahilan, T. Imai, A. S. Sefat, R. Jin, M. A. McGuire, B. C. Sales, D. Mandrus, "<sup>59</sup>Co and <sup>75</sup>As NMR Investigation of Electron-Doped High-T<sub>c</sub> Superconductor BaFe<sub>1.8</sub>Co<sub>0.2</sub>As<sub>2</sub> (T<sub>c</sub> = 22 K)", *J. Phys. Soc. Jpn.* **77**, 103705 (2008) (awarded as editor's choice).
112. M. A. McGuire, A. D. Christianson, A. S. Sefat, B. C. Sales, M. D. Lumsden, R. Jin, E. A. Payzant, D. Mandrus, Y. Luan, V. Keppens, V. Varadarajan, J. W. Brill, R. P. Hermann, M. T. Sougrati, F. Grandjean, G.J. Long, "Phase Transitions in LaFeAsO: Structural, Magnetic, Elastic, and Transport Properties, Heat Capacity and Mossbauer Spectra", *Phys. Rev. B* **78**, 094517 (2008).
111. D. A. Zocco, J. J. Hamlin, R. E. Baumbach, M. B. Maple, M. A. McGuire, A. S. Sefat, B. C. Sales, R. Jin, D. Mandrus, J. R. Jeffries, S. T. Weir, Y. K. Vohra, "Effect of Pressure on the Superconducting Critical Temperature of LaFeAsO<sub>0.89</sub>F<sub>0.11</sub> and CeFeAsO<sub>0.88</sub>F<sub>0.12</sub>", *Physica C* **468**, 2229 (2008).
110. K. Ahilan, F. L. Ning, T. Imai, A. S. Sefat, R. Jin, M. A. McGuire, B. C. Sales, D. Mandrus, "<sup>19</sup>F NMR Investigation of LaAsFeO<sub>0.89</sub>F<sub>0.11</sub> Superconductor", *Phys. Rev. B* **78**, 100501 (2008).
109. A. S. Sefat, R. Jin, M. A. McGuire, B. Sales, D. Singh, D. Mandrus, "Superconductivity at 22 K in Co-Doped BaFe<sub>2</sub>As<sub>2</sub> Crystals", *Phys. Rev. Lett.* **101**, 117004 (2008).
108. A. S. Sefat, A. Hug, M. A. McGuire, R. Jin, B. C. Sales, D. Mandrus, L. M. D. Cranswick, P. W. Stephens, K. H. Stone, "Superconductivity in LaFe<sub>1-x</sub>Co<sub>x</sub>AsO", *Phys. Rev. B* **78**, 104505 (2008).
107. J. Jaroszynski, S. C. Riggs, F. Hunte, A. Gurevich, D. C. Larbalestier, G. S. Boebinger, F. F. Balakirev, A. Migliori, Z. A. Ren, W. Lu, J. Yang, X. L. Shen, X. L. Dong, Z. X. Zhao, R. Jin, A. S. Sefat, M. A. McGuire, B. C. Sales, D. K. Christen, D. Mandrus, "Comparative High Field Magneto-Transport of Rare Earth Oxypnictides with Maximum Transition Temperatures", *Phys. Rev. B* **78**, 064511 (2008).
106. B. C. Chakoumakos, R. Custelcean, J. O. Ramey, J. A. Kolopus, R. Jin, J. S. Neal, D. J. Wisniewski, L. A. Boatner, "Cerium Chloride – Methanol Adduct Crystals, CeCl<sub>3</sub>(CH<sub>3</sub>OH)<sub>4</sub>: Preparation, Crystallography, and Scintillation Properties", *Crystal Growth & Design* **8**, 2070 (2008).
105. A. Yamamoto, J. Jiang, C. Tarantini, N. Craig, A. A. Polyanskii, F. Kametani, F. Jaroszynski, E. E. Hellstrom, D. C. Larbalestier, R. Jin, A. S. Sefat, M. A. McGuire, B. C. Sales, D. K. Christen, D. Mandrus, "Evidence for Electromagnetic Granularity in the Polycrystalline Iron-Based Superconductor LaAsFeO<sub>0.89</sub>F<sub>0.11</sub>", *Appl. Phys. Lett.* **92**, 252501 (2008).
104. F. Hunte, J. Jaroszynski, A. Gurevich, D. C. Larbalestier, R. Jin, A. S. Sefat, M. A. McGuire, B. C. Sales, D. K. Christen, D. Mandrus, "Very High Field Two-Band Superconductivity in LaFeAsO<sub>0.89</sub>F<sub>0.11</sub>", *Nature* **453**, 903 (2008).

103. A. S. Sefat, M. A. McGuire, B. C. Sales, R. Jin, J. Y. Howe, D. Mandrus, “Electronic Correlations in the Superconductor LaFeAsO<sub>0.89</sub>F<sub>0.11</sub> with Low Carrier Density”, *Phys. Rev. B* **77**, 174503 (2008).
102. F. Wang, J. V. Alvarez, S. -K. Mo, J. W. Allen, G.-H. Allen, J. He, R. Jin, D. Mandrus, H. Hochst, “New Luttinger-Liquid Physics from Angle-Resolved Photoemission on a Paradigm Material Li<sub>0.9</sub>Mo<sub>6</sub>O<sub>17</sub>”, *Physica B* **403**, 1490 (2008).
101. A. D. Christianson, M. D. Lumsden, M. Angst, Z. Yammi, W. Tian, R. Jin, A. Payzant, S. E. Nagler, B. C. Sales, D. Mandrus, “Three Dimensional Charge and Magnetic Order in LuFe<sub>2</sub>O<sub>4</sub>”, *Phys. Rev. Lett.* **100**, 107601 (2008).
100. B. C. Sales, R. Jin, D. Mandrus, “Zintle Compounds: From Power Generation to the Anomalous Hall Effect”, *J. Phys. Soc. Jpn.* **77**, 48 (2008) Suppl. A
99. V. O. Garlea, R. Jin, D. Mandrus, B. Roessli, Q. Huang, M. Miller, A. J. Schultz, S. E. Nagler, “Magnetic and Orbital Ordering in the Spinel MnV<sub>2</sub>O<sub>4</sub>”, *Phys. Rev. Lett.* **100**, 66404 (2008).
98. R. G. Moore, V. B. Nascimento, J. Zhang, J. Rundgren, R. Jin, D. Mandrus, E. W. Plummer, “Manifestations of Broken Symmetry: The Surface Phases of Ca<sub>2-x</sub>Sr<sub>x</sub>RuO<sub>4</sub>”, *Phys. Rev. Lett.* **100**, 66102 (2008).
97. B. C. Sales, R. Jin, and D. Mandrus, “Orientation Dependence of the Anomalous Hall Resistivity in Single Crystals of Yb<sub>14</sub>MnSb<sub>11</sub>”, *Phys. Rev. B* **77**, 24409 (2008).
96. R. G. Moore, J. Zhang, V. B. Nascimento, R. Jin, J. Guo, G. T. Wang, Z. Fang, D. Mandrus, E. W. Plummer, “A Surface-Tailored Purely Electronic Mott Insulator-to-Metal Transition”, *Science* **318**, 615 (2007).
95. Z. Zhou, R. Jin, G. Eres, D. Mandrus, V. Barzykin, P. Schlottmann, Y.S. Hor, Z. L. Xiao, J.F. Mitchell, “Evidence for Two Distinct Gaps in Superconducting NbSe<sub>2</sub> Nanowires”, *Phys. Rev. B* **76**, 104511 (2007).
94. J. He, R. Jin, B. C. Chakoumakos, J. S. Gardner, D. Mandrus, T. M. Tritt, “Crystal Growth, Structure, and Stoichiometry of the Superconducting Pyrochlore Cd<sub>2</sub>Re<sub>2</sub>O<sub>7</sub>”, *J. Electronic Materials* **36**, 740 (2007).
93. Z. Zhou, K. Xiao, R. Jin, D. Mandrus, Jing Tao, D.B. Geohegan, and S. Pennycook, “One-Dimensional Electron Transport in Cu-Tetracyanoquino-dimethane Organic Nanowires”, *Appl. Phys. Lett.* **90**, 193115 (2007).
92. V. B. Nascimento, R. G. Moore, J. Rundgren, J. Zhang, L. Cai, R. Jin, D. G. Mandrus, E. W. Plummer, “Procedure for LEED I-V Structural Analysis of Metal Oxide Surfaces: Ca<sub>1.5</sub>Sr<sub>0.5</sub>RuO<sub>4</sub>”, *Phys. Rev. B* **75**, 35408 (2007).
91. 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* **388**, 326 (2007).
90. 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 LiVO<sub>2</sub>”, *Physica B* **385-386**, 50 (2006).
89. I. Ivanov, A. Puretzky, G. Eres, H. Wang, Z. Pan, H. Cui, R. Jin, J. Howe, D.B. Geohegan, “Fast and Highly Anisotropic Thermal Transport through Vertically Aligned Carbon Nanotube Arrays”, *Appl. Phys. Lett.* **89**, 223110 (2006).
88. Y. V. Sushko, O. Korneta, S. Leontsev, R. Jin, B. C. Sales, and D. Mandrus, “Pressure Dependence of Magnetic and Superconducting Transitions in Sodium Cobalt Oxides Na<sub>x</sub>CoO<sub>2</sub>”, *J. of Low Temperature Physics* **142**, 573 (2006).

87. F. Wang, S. -K. Mo, J. W. Allen, H. -D. Kim, J. He, R. Jin, D. Mandrus, A. Sekiyama, M. Tsunekawa, and S. Suga, "Case for Bulk Nature of Spectroscopic Luttinger Liquid Signatures Observed in Angle-Resolved Photoemission Spectra of  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ ", *Phys. Rev. B* **74**, 113107 (2006).
86. Zhixian Zhou, R. Jin, G. Eres, A. Subedi, D. Mandrus, "The Control of Electron Transport Related Defects in In-situ Fabricated Single Wall Carbon Nanotube Devices", *Applied Physics Letters* **89**, 133124 (2006).
85. 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  $\text{Na}_x\text{CoO}_2$ ", *Phys. Rev. B* **74**, 132402 (2006).
84. J. C. Petersen, M. C. Caswell, J. S. Dodge, I. A. Sergienko, J. He, R. Jin, D. Mandrus, "Tensor Order in  $\text{Cd}_2\text{Re}_2\text{O}_7$  Determined with Optical Second Harmonic Ellipsometry", *Nature Physics* **2**, 605 (2006).
83. B. C. Sales, R. Jin, D. Mandrus, P. Khalifah, "Anomalous Hall Effect in Three Ferromagnets:  $\text{EuFe}_4\text{Sb}_{12}$ ,  $\text{Yb}_{14}\text{MnSb}_{11}$ , and  $\text{Eu}_8\text{Ga}_{16}\text{Ge}_{30}$ ", *Phys. Rev. B* **73**, 224435 (2006).
82. F. Wang, J. V. Alvarez, S. -K. Mo, J. W. Allen, G.-H. Gweon, J. He, R. Jin, D. Mandrus, H. Hochst, "New Luttinger Liquid Physics from Photoemission on  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ ", *Phys. Rev. Lett.* **96**, 196403 (2006).
81. 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  $\text{Cd}_2\text{Re}_2\text{O}_7$ ", *J. Korean Phys. Soc.* **48**, 946 (2006).
80. M. B. Stone, M. D. Lumsden, R. Jin, B. C. Sales, Y. Qiu, D. Mandrus, S. E. Nagler, "Temperature Dependent Bilayer Ferromagnetism in  $\text{Sr}_3\text{Ru}_2\text{O}_7$ ", *Phys. Rev. B* **73**, 174426 (2006).
79. R. Jin, Hao Sha, P.G. Khalifah, R.E. Sykora, B.C. Sales, D. Mandrus, and Jiandi Zhang, "Ba<sub>2</sub>CoO<sub>4</sub>: Crystal Growth, Structure Refinement, and Physical Properties", *Phys. Rev. B* **73**, 174404 (2006).
78. J. Zhang, Ismail, R. G. Moore, S.-C. Wang, H. Ding, R. Jin, D. 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**, 66401 (2006).
77. R. C. Rai, J. Cao, J. L. Musfeldt, D. J. Singh, X. Wei, R. Jin, Z. X. Zhou, B. C. Sales, D. Mandrus, "Magneto-Dielectric Effect in the S = 1/2 Quasi-Two-Dimensional Antiferromagnet", *Phys. Rev. B* **73**, 75112 (2006).
76. D. Wu, N. L. Wang, G. Li, J. L. Luo, P. Zheng, X. H. Chen, C. H. Wang, X. G. Luo, R. Jin, D. Mandrus, "Infrared Properties of  $\text{Na}_x\text{CoO}_2$  Single Crystals with x=0.5, 0.7, and 0.85", *J. of Phys. and Chem. of Solids* **67**, 635 (2006).
75. B. C. Sales, P. Khalifah, T. P. Enck, E. J. Nagler, R. E. Sykora, R. Jin, 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).
74. J. Hager, R. Matzdorf, J. He, R. Jin, D. Mandrus, M.A. Cazalilla, 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).
73. 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, H. Ding, "Fermi Surface Evolution and Luttinger Theorem in  $\text{Na}_x\text{CoO}_2$ : A Systematic Photoemission Study", *Phys. Rev. Lett.* **95**, 146401 (2005).

72. 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).
71. R. Jin, B.C. Sales, S. Li and D. Mandrus, “Dependence of the Specific Heat of  $\text{Na}_x\text{CoO}_2\text{yH}_2\text{O}/\text{D}_2\text{O}$  on Sodium and Water”, *Phys. Rev. B* **72**, 60512(R) (2005).
70. J.-H. Chung, Th. Proffen, S.-L. Shamoto, A.M. Ghorayeb, L. Croguennec, W. Tian, B.C. Sales, R. Jin, D. Mandrus, T. Egami, “Local Structure of  $\text{LiNiO}_2$  Studied by Neutron Diffraction”, *Phys. Rev. B* **71**, 64410 (2005).
69. J. Chakhalian, Z. Salman, J. Brewer, A. Froese, J. He, D. Mandrus, R. Jin, “Probing Magnetism in  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$  by Muon Spin Relaxation”, *Physica B* **359**, 1333 (2005).
68. S.-C. Wang, H.-B. Yang, A.K.P. Sekharan, S. Souma, H. Matsui, T. Sato, T. Takahashi, C. Lu, J. Zhang, R. Jin, D. Mandrus, E.W. Plummer, Z. Wang, H. Ding, “Fermi Surface Topology of  $\text{Ca}_{1.5}\text{Sr}_{0.5}\text{RuO}_4$ ”, *Phys. Rev. Lett.* **93**, 177007 (2004).
67. N. L. Wang, P. Zheng, D. Wu, Y.C. Ma, T. Xiang, R. Jin, 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).
66. B. C. Sales, R. Jin, K. A. Affholter, P. Khalifah, G. M. Veith, and D. Mandrus, “Evidence and Characterization of a SDW Transition in  $\text{Na}_{0.75}\text{CoO}_2$  Single Crystals”, *Phys. Rev. B* **70**, 174419 (2004).
65. B. C. Sales, R. Jin, D. Mandrus, “Thermal Spin Valves”, *Proceedings of the 27<sup>th</sup> International Thermal Conductivity Conference & the 15<sup>th</sup> International Thermal Expansion Symposium* (edited by H. Wang and W. Porter) p65 (2004).
64. C. Lu, J. Zhang, R. Jin, H. Qu, J. He, D. Mandrus, K. D. Tsuei, C. T. Tzeng, L. C. Lin, and E. W. Plummer, “An Imperfection-Driven Phase Transition at 120 K in  $\text{Cd}_2\text{Re}_2\text{O}_7$ ”, *Phys. Rev. B* **70**, 92506 (2004).
63. G.-H. Gweon, S.-K. Mo, J. W. Allen, J. He, R. Jin, D. Mandrus, H. Höchst, “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).
62. Y. G. Shi, Y. L. Liu, H. X. Yang, C. J. Nie, R. Jin, J. Q. Li, “Raman Spectroscopy Study of  $\text{Na}_x\text{CoO}_2$ ”, *Phys. Rev. B* **70**, 52502 (2004).
61. R. G. Moore, J. Zhang, S. V. Kalinin, Ismail, A. P. Baddorf, R. Jin, D. G. Mandrus, E. W. Plummer, “Surface Dynamics of the Layered Ruthenate  $\text{Ca}_{1.9}\text{Sr}_{0.1}\text{RuO}_4$ ”. *Phys. Stat. Sol. (b)* **241**, 2363 (2004).
60. J. Choi, J. D. Woodward, J. L. Musfeldt, X. Wei, M.-H. Wangbo, 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**, 85107 (2004).
59. W. Tian, M. F. Chisholm, P. G. Khalifah, R. Jin, B.C. Sales, S.E. Nagler, D. Mandrus, “Single Crystal Growth and Anomalous Properties of  $\text{LiVO}_2$ ”, *Materials Research Bulletin* **39**, 1319 (2004).
58. P. Zheng, N.L. Wang, J.L. Luo, R. Jin, D. Mandrus, “Optical Properties of the Pyrochlore Oxide  $\text{Pb}_2\text{Ru}_2\text{O}_{6.5}$ ”, *Phys. Rev. B* **69**, 193102 (2004).
57. 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, H. Ding, “ARPES on  $\text{Na}_{0.6}\text{CoO}_2$ : Fermi Surface, Extended Flat Dispersion, and Unusual Band Splitting”, *Phys. Rev. Lett.* **92**, 246403 (2004).
56. 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  $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$ ”, *Phys. Rev. B* **69**, 85120 (2004).

55. I. A. Sergienko, V. Keppens, M. McGurie, 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  $Cd_2Re_2O_7$ ”, *Phys. Rev. Lett.* **92**, 65501 (2004).
54. C. Zeng, S. C. Erwin, L. C. Feldman, A. P. Li, R. Jin, Y. Song, J. R. Thompson, and H. H. Weitering, “Epitaxial Ferromagnetic  $Mn_5Ge_3$  on Ge(111)”, *App. Phys. Lett.* **83**, 5002 (2003).
53. R. Jin, B. C. Sales, P. Khalifah, D. Mandrus, “Observation of Bulk Superconductivity in  $Na_xCoO_2yH_2O$  and  $Na_xCoO_2yD_2O$  Single Crystals”, *Phys. Rev. Lett.* **91**, 217001 (2003).
52. R. Jin, Y. Onose, Y. Tokura, D. Mandrus, P. Dai, B. C. Sales, “In-Plane Thermal Conductivity of  $Nd_2CuO_4$ ”, *Phys. Rev. Lett.* **91**, 146601 (2003).
51. Y. Liu, K. D. Nelson, Z. Q. Mao, R. Jin, Y. Maeno, “Tunneling and Phase-Sensitive Studies of the Pairing Symmetry in  $Sr_2RuO_4$ ”, *J. Low Temp. Phys.* **131**, 1509 (2003).
50. N. Barisic, L. Forro, D. Mandrus, R. Jin, J. He, P. Fazekas, “Electrical Properties of  $Cd_2Re_2O_7$  Under Pressure”, *Phys. Rev. B* **67**, 245112 (2003).
49. Ismail, L. Petersen, J. Zhang, R. Jin, D. G. Mandrus, E. W. Plummer, “The Surface of  $Sr_2Ru_{0.9}Mo_{0.1}O_4$ : a LEED and STM Study”, *Surface Science* **529**, 151 (2003).
48. R. P. Herman, R. Jin, W. Schweika, F. Grandjean, D.G. Mandrus, B. Sales, and G. J. Long, “Einstein Oscillators in Thallium Filled Antimony Skutterudites”, *Phys. Rev. Lett.* **90**, 135505 (2003).
47. M. P. Paranthaman, D. K. Christen, H. M. Christen, J. R. Thompson, C. Cantoni, H. Y. Zhai, R. Jin, “Superconducting  $MgB_2$  Film with Enhanced Critical Current Densities and Irreversibility Fields”, *Studies of High Temperature Superconductors*, Vol. **38**, pp475-484 (2002).
46. H. J. Kang, P. 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  $Nd_{2-x}Ce_xCuO_4$ ”, *Phys. Rev. B* **66**, 64506 (2002).
45. 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  $Cd_2Re_2O_7$ ”, *Phys. Rev. B* **66**, 134528 (2002).
44. 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,  $Cd_2Re_2O_7$ ”, *Phys. Rev. Lett.* **89**, 147002 (2002).
43. P. Khalifah, R. Osborn, Q. Huang, H. W. Zandbergen, R. Jin, Y. Liu, D. Mandrus, R.J. Cava, “Orbital Ordering Transition  $La_4Ru_2O_{10}$ ”, *Science* **297**, 2237 (2002).
42. N. L. Wang, J. J. McGuire, T. Timusk, R. Jin, J. He, and D. Mandrus, “Optical Evidence for an Anomalous Metallic Phase in Pyrochlore  $Cd_2Re_2O_7$ ”, *Phys. Rev. B* **66**, 14534 (2002).
41. B. C. Sales, M. D. Lumsden, S. E. Nagler, D. Mandrus, R. Jin, “Magnetic Field Enhancement of Heat Transport in the 2D Heisenberg Antiferromagnet  $K_2V_3O_8$ ”, *Phys. Rev. Lett.* **88**, 95901 (2002).
40. R. Jin, J. He, J. R. Thompson, M. F. Chisholm, B. C. Sales, and D. Mandrus, “Fluctuation Effects on the Physical Properties of  $Cd_2Re_2O_7$ ”, *J. Phys.: Cond. Matt.* **14**, L117 (2002).
39. B. C. Sales, B. C. Chakoumakos, V. Keepens, R. Jin, D. Mandrus, J. R. Thompson, “When Does a Crystal Conduct Heat Like a Glass?”, Thermoelectric Material 2001 – Research and Applications Symposium *MRS Proceedings* **691**, pp. G7.2 (2001).

38. R. Jin, M. Paranthaman, H. Y. Zhai, H. M. Christen, D. K. Christen, and D. Mandrus, "Unusual Hall Effect in Superconducting MgB<sub>2</sub> Films", *Phys. Rev. B* **64**, R220506 (2001).
37. R. Jin, J. He, S. McCall, C. S. Alexander, F. Drymiotis, and D. Mandrus, "Superconductivity in the Correlated Pyrochlore Cd<sub>2</sub>Re<sub>2</sub>O<sub>7</sub>", *Phys. Rev. B* **64**, R180503 (2001).
36. D. Mandrus, B. C. Sales, R. Jin, "Localized Vibrational Mode Analysis of the Resistivity and Specific Heat of LaB<sub>6</sub>", *Phys. Rev. B* **64**, 12302 (2001).
35. Z. Q. Mao, K. D. Nelson, R. Jin, Y. Liu, and Y. Maeno, "Observation of Andreev Surface Bound States in the 3-K Phase Region of Sr<sub>2</sub>RuO<sub>4</sub>", *Phys. Rev. Lett.* **87**, 37003 (2001).
34. B. C. Sales, B. C. Chakoumakos, R. Jin, J. R. Thompson, and D. Mandrus, "Structural, Magnetic, Thermal, and Transport Properties of X<sub>8</sub>Ga<sub>16</sub>Ge<sub>30</sub> (X=Eu, Sr, Ba) Single Crystals", *Phys. Rev. B* **63**, 245113 (2001).
33. P. Khalifah, K. D. Nelson, R. Jin, Z. Q. Mao, Y. Liu, Q. Huang, X. P. A. Gao, A. P. Ramirez, and R. J. Cava, "Non-Fermi-Liquid Behavior in La<sub>4</sub>Ru<sub>6</sub>O<sub>19</sub>", *Nature* **411**, 669 (2001).
32. Y. Liu, R. Jin, Z. Q. Mao, K. D. Nelson, M.K. Haas, R. J. Cava, "Electrical Transport Properties of Single-Crystal Sr<sub>3</sub>Ru<sub>2</sub>O<sub>7</sub>", *Phys. Rev. B* **63**, 174435 (2001).
31. S. M. Loureiro, D. P. Young, R. J. Cava, R. Jin, Y. Liu, P. Bordet, Y. Qin, H. Zandbergen, M. Godinho, M. Nunez-Regueiro, B. Batlogg, "Enhancement of Metallic Behavior in Bismuth Cobaltates Through Lead Doping", *Phys. Rev. B* **63**, 94109 (2001).
30. S. M. Loureiro, D. P. Young, R. Jin, Y. Liu, P. Bordet, Y. Qin, H. Zandbergen, M. Godinho, M. Nunez-Regueiro, B. Batlogg, R.J. Cava, "Suppression of the Metal to Semiconductor Transition in Bismuth Cobaltates: Can Cobaltates Superconduct?", *Physica C* **341-348**, 793 (2000).
29. R. Jin, Y. Liu, Z. Q. Mao, Y. Y. Maeno, "Experimental Observation of the Selection Rule in Josephson Coupling between In and Sr<sub>2</sub>RuO<sub>4</sub>", *Europhysics Letter* **51**, 341 (2000).
28. R. Jin, Y. Liu and F. Lichtenberg, "Linear-Field Dependence of Normal-State In-plane Magnetoresistance of Sr<sub>2</sub>RuO<sub>4</sub>", *Phys. Rev. B* **60**, 10418 (1999).
27. J. T. Rijseenbeek, R. Jin, Yu. Zadorozhny, B. Batlogg, Y. Liu and R. J. Cava, "Absence of Local Moment and Other Electrical and Magnetic Properties of the Two Crystallographic Forms of BaRuO<sub>3</sub>", *Phys. Rev. B* **59**, 4651 (1999).
26. R. Jin, Y. Zadorozhny, Y. Liu, D.G. Schlom, Y. Mori, Y. Y. Maeno, "Observation of Anomalous Temperature Dependence of the Critical Current in Pb/Sr<sub>2</sub>RuO<sub>4</sub>/Pb Junctions", *Phys. Rev. B* **59**, 4433 (1999).
25. R. Jin, Y. Zadorozhny, Y. Liu, D.G. Schlom, F. Lichtenberg and J. G. Bednorz, "Normal-State Properties of Sr<sub>2</sub>RuO<sub>4</sub> Single Crystals", *J. of Phys. and Chem. of Solids* **59**, 2215 (1998).
24. R. Jin, H.R. Ott, "Hall Effect of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> Single Crystals", *Phys. Rev. B* **57**, 13872 (1998).
23. R. Jin, H.R. Ott, "Hall Conductivity of Bi-based Superconducting Cuprates Close to T<sub>c</sub>", *Physica C* **282-287**, 1209 (1997).
22. R. Jin, H.R. Ott and Th. Wolf, "Anisotropy of the Magnetization of an Oxygen-depleted YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6.82</sub> Single Crystal", Preceedings of LT21, *Czechoslovak Journal of Physics* **46**, S3, 1767(1996).

21. R. Jin, H.R. Ott, "Sign Reversal of the Hall Resistivity of Single Crystalline  $\text{Bi}_{1.95}\text{Sr}_{1.65}\text{La}_{0.4}\text{CuO}_{6+\delta}$  and  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$  above and below  $T_{c0}$ ", *Phys. Rev. B* **53**, 9406 (1996).
20. R. Jin, H.R. Ott and D.P. Grindatto, "Normal-State Resistivity of superconducting  $\text{Bi}_{1.95}\text{Sr}_{1.65}\text{La}_{0.4}\text{CuO}_{6+\delta}$  Single Crystals ", *Physica C* **250**, 395 (1995).
19. R. Jin, H.R. Ott and A. Schilling, "Magnetization of Superconducting  $\text{Bi}_{1.95}\text{Sr}_{1.65}\text{La}_{0.4}\text{CuO}_{6+\delta}$  and  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$  Single Crystals Close to  $T_c$ ", *Physica C* **235-240**, 1923 (1994).
18. A. Schilling, R. Jin, J.D. Guo and H.R. Ott, "Irreversibility Boundaries of  $\text{Bi}_{1.95}\text{Sr}_{1.65}\text{La}_{0.4}\text{CuO}_{6+\delta}$ ,  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$  and Oxygen Depleted  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ ", *Physica C* **235-240**, 2741 (1994).
17. R. Jin, H.R. Ott and A. Schilling, "Magnetization of Superconducting  $\text{Bi}_{1.95}\text{Sr}_{1.65}\text{La}_{0.4}\text{CuO}_{6+\delta}$  Single Crystals Near  $T_c$ ", *Physica C* **228**, 401 (1994).
16. D.A. Brawner, R. Jin, H.R. Ott, R.J. Haug, K. Ploog, K. von Klitzing, "Observation of Vortex Fluctuations in  $\text{Bi}_{1.95}\text{Sr}_{1.65}\text{La}_{0.4}\text{CuO}_{6+\delta}$  with a Micro-Hall Probe", *Physica C* **228**, 115 (1994).
15. R. Jin, A. Schilling and H.R. Ott, "Temperature Dependence of the Magnetization of a  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$  Single Crystal Close to  $T_c$ ", *Phys. Rev. B* **49**, 9218 (1994).
14. A. Schilling, R. Jin, J.D. Guo and H.R. Ott, "Critical Fields and Characteristic Lengths of Monocrystalline Superconducting  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$  Derived from Magnetization Measurements in the Mixed State", *Physica B* **194-196**, 2815 (1994).
13. A. Schilling, R. Jin, J.D. Guo and H.R. Ott, "Reply to H. Pastoriza, M. F. Goffman, and F. de la Cruz", *Phys. Rev. Lett.* **72**, 1304 (1994).
12. A. Schilling, R. Jin, J.D. Guo, H.R. Ott, I. Tanaka and H. Kojima, "Irreversibility Boundaries of  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ ,  $\text{La}_{1.86}\text{Sr}_{0.14}\text{CuO}_4$ , and  $\text{YBa}_2\text{Cu}_3\text{O}_7$ : An Interpretation Based on the Vortex-Lattice Quantum-Melting Model", *Physica B* **194-196**, 1555 (1994).
11. A. Schilling, R. Jin, J.D. Guo and H.R. Ott, "Irreversibility Line of Monocrystalline  $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ : Experimental Evidence for a Dimensional Crossover of the Vortex Ensemble", *Phys. Rev. Lett.* **71**, 1899 (1993).
10. D. Jin, J.P. Wkaelin, N. E. Hussey, A. J. Osborne, K. Prassides, R. Jin and A. L. Thomson, "Low Temperature Specific Heat and Thermal Conductivity of  $\text{Bi}_{0.6}\text{K}_{0.4}\text{BiO}_3$ ,  $\text{Y}_{1-x}\text{Pr}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  and  $\text{Bi}_2\text{Sr}_2\text{Pr}_x\text{CuO}_y$ ", *Preceedings of Internattional Conference on High-T<sub>c</sub> Superconductivity*, Beijing (May, 1992).
9. S.H. Han, R.Y. Jin, H. Han and B. G. Shen, "D-wave phase shift of Cu-Zr metallic glass system under pressure", *Material Science and Engineering*, **A133**, 104(1991).
8. Z. Y. Liu, S. L. Jia, Y. M. Ni, Y. Z. Huang, J. Q. Li, Y. Zhang, L. Q. Qian, W. Li, B. Yin, X. S. Rong, R. Y. Jin, X. H. Hou, J. Q. Bi and Z. X. Zhao, "Experimental Observation on the possible Superconductivity in V-Sr-Tl-O System", *Chinese Science Bulletin* **36**, 988 (1991).
7. F. Shi, T. S. Rong, S. Z. Zhou, X. F. Wu, J. Du, Z. H. Shi, C. G. Cui, R. Y. Jin, J. L. Zhang, Q. Z. Ran, "Preparation Process, Crystal Structure, and Physical Properties of the 110 K Single-phase Pb-Bi-Sr-Ca-Cu-O Superconductor", *Phys. Rev. B* **41**, 6541 (1990).
6. R.Y. Jin, F. Shi, Qi-ze Ran, N. C. Shi and S. Z. Zhou, "The Specific Heat of the Single-Phase  $(\text{Bi},\text{Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$  Superconductor", *Physica C* **158**, 255 (1990).
5. Qize Ran, R.Y. Jin, Z. Xiao, B.J. Jin and D. Jin, "Effect of Sintering Times on the specific Heat of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Samples", *Chinese J. of Low Temp. Phys.* **12**, 39 (1989).

4. Qize Ran, R.Y. Jin, G.M. Zhao, R. Wan, H. Li, B.J. Jin and D. Jin, "Study on Antiferromagnetism of  $\text{La}_2\text{CuO}_{4-y}$ ", *Chinese J. of Low Temp. Phys.* **12**, 33 (1990).
3. Y.M. Yang, P. Out, B.R. Zhao, Y.Y. Zhao, L. Li, Q.Z. Ran and R.Y. Jin, "Characterization of  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$  Bulk Samples Prepared by Citrate Synthesis and Solid-State Reaction", *J. of Appl. Phys.* **66**, 312 (1989).
2. Qize Ran, R.Y. Jin, Z. Xiao and B.J. Jin, "Anomaly of Specific Heat around 200K in  $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ ", *Chinese J. of Low Temp. Phys.* **11**, 458 (1989).
1. R.Y. Jin, Zhao Guo-meng and Qi-ze Ran, "Antiferromagnetism of  $\text{La}_2\text{CuO}_{4-y}$  Studied by Specific Heat", *Solid State Commun.* **67**, 415 (1988).