

Lu Li

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Google Scholar Page: <https://scholar.google.com/citations?user=NtjEJmIAAAAJ&hl=en>

Education

Princeton University , Princeton, NJ	<i>2008</i>
Ph.D. in Physics Advisor: Prof. Nai Phuan Ong	
University of Science and Technology of China (USTC) , Hefei, China	<i>2002</i>
B.S. in Physics Advisor: Prof. Xianhui Chen	

Appointment

University of Michigan , Ann Arbor, MI	<i>2016 - current</i>
<i>Associate Professor in Department of Physics</i>	
University of Michigan , Ann Arbor, MI	<i>2011 - 2016</i>
<i>Assistant Professor in Department of Physics</i>	
Massachusetts Institute of Technology , Cambridge, MA	<i>2008 - 2011</i>
<i>Pappalardo Fellow in Physics Supervisor: Prof. Raymond Ashoori</i>	

Research Experience

University of Michigan , Ann Arobr, MI	<i>2011 - current</i>
Massachusetts Institute of Technology , Cambridge, MA	<i>2008 - 2011</i>
<i>Pappalardo Fellow in Physics Supervisor: Prof. Raymond Ashoori</i>	
Princeton University , Princeton, NJ	<i>2002 - 2008</i>
<i>Research Assistant in Prof. Nai Phuan Ong's group</i>	
National High Magnetic Field Laboratory , Tallahassee, FL	<i>2004 - present</i>
<i>User in DC field and pulsed field facilities</i>	
University of Science and Technology of China	<i>1999 - 2002</i>
<i>Undergraduate research in Prof. Xianhui Chen's group</i>	

Honors and Awards

- **OCPA Outstanding Young Researcher Award**, *2015*
- **Office of Naval Research Young Investigator Award**, *2015*
- **Lee Osheroff Richardson North American Science Prize**, Oxford Instruments, *2013*
- **Department of Energy Early Career Award**, *2012 - present*
- **Pappalardo Fellowship**, MIT, *2008 - 2011*
- **First Year Fellowship in Science and Engineering**, Princeton University, *2002 - 2003*
- **First Year Joseph Taylor Merit Prize**, Princeton University, *2002 - 2003*
- **Outstanding Undergraduate Thesis Award**, USTC, *2002*

Teaching Experience

- Physics 520 *Condensed Matter Physics* *Winter 2016*
- Physics 106 *Everyday Physics* *Fall 2015*
- Physics 340 *Waves, Light and Heat* *Winter 2015*
- Physics 341 *Waves, Light and Heat Lab* *Winter 2014*
- Physics 340 *Waves, Light and Heat* *Fall 2013*
- Physics 341 *Waves, Light and Heat Lab* *Winter 2013*
- Physics 106 *Everyday Physics* *Winter 2012*
- Physics 341 *Waves, Light and Heat Lab* *Fall 2011*

Group members

Postdoctoral Fellows

Ziji Xiang

Graduate Students

Ben Lawson, Tomoya Asaba, Fan Yu, Colin Tinsman, Lu Chen

Undergraduate Students

Adam Berkley, Tong Gao, Wudi Wang, Sheng Wang, Dou Liu, Timothy Barasa, Alexa Rakoski, Jia Li, Ilya Beskin, Erik Loyd, Eric Larson, Paul Corbae, Ahmed Zaid, Caroline Su, Zhen Su, Hongjie Ning

Former Postdoctoral Fellows

Gang Li

Former Listing Graduate Students

Ziji Xiang, Peng Cai

Invited Talks, Seminars, Colloquia and Public Talks

- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Johns Hopkins University, 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, International Conference on Strongly Correlated Electronic System, Hangzhou, China 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Sichuan University, Chengdu, China 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Zhejiang University, Hangzhou, China 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Rutgers University 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, University of California, Berkeley, CA, 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, University of Texas, Austin, TX, 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, 8th International conference on Physical Phenomena at High Magnetic Fields, Tallahassee, FL 2016
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, IAS Program and Croucher Conference on Topological Phases in Condensed Matter and Cold Atomic Systems, Hong Kong University of Science and Technology, 2015

- “*Colloquium: Quantum Oscillations in Kondo Insulator SmB_6* ”, Boston College 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Ohio State University 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Washington University, St. Louis 2015
- “*Probing Strongly Correlated Materials with Magnetometry in Ultrahigh Magnetic Field*”, 2015 Experimental Condensed Matter Physics Principal Investigators’ Meeting, Department of Energy, Gaithersburg, MD 2015
- “*Two Dimensional Fermi Surfaces in Kondo Insulator SmB_6* ”, KITP Program: New Phases and Emergent Phenomena in Correlated Materials with Strong Spin-Orbit Coupling, University of California, Santa Barbara 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, 1st Conference on Condensed Matter Physics (1st-CCMP), Beijing, China 2015
- “*Tutorial on Quantum Oscillations in Strongly Correlated Materials*”, Tsinghua University, 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, 52nd Design Automation Conference, San Francisco CA 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, ICAM-I2CAM: Strongly Correlated Topological Insulators: SmB_6 and Beyond, Ann Arbor MI 2015
- “*Electrons and Topology in Solids*”, Saturday Morning Physics, University of Michigan 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, APS March Meeting, San Antonio TX 2015
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Los Alamos National Laboratory 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Massachusetts Institute of Technology 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Texas A & M University 2014
- “*Colloquium: Quantum Oscillations in Kondo Insulator SmB_6* ”, Oakland University 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Georgia Institute of Technology 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, University of Wisconsin 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Asia-Pacific Workshop on Strongly Correlated System, Beijing, China 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, European Materials Research Society (E-MRS) meeting, Warsaw, Poland 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, The 21st International Conference on High Magnetic Fields in Semiconductor Physics, Panama City Beach, Florida 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, University of British Columbia, Canada 2014
- “*Magnetism of $LaAlO_3/SrTiO_3$ heterostructure interfaces*”, University of Minnesota 2014
- “*Colloquium: Quantum Oscillations in Kondo Insulator SmB_6* ”, University of Chicago 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Aspen Center of Physics 2014
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Topological Materials Workshop, Mathematical Sciences Center, Tsinghua University 2013
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, University of Maryland 2013
- “*Quantum Oscillations in Kondo Insulator SmB_6* ”, Aspen Center of Physics 2013

- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Peking University, China 2013
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, University of Science and Technology of China, China 2013
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Lee Osheroff Richardson Prize Reception Talk, APS March Meeting, Baltimore, MA 2013
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, University of Notre Dame, 2013
- “*Diamagnetism and pairing in hole-doped high T_c superconductor*”, Energy Materials Nanotechnology (EMN) West Workshop, Houston 2013
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Tsinghua University 2012
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Institute of Advanced Studies (IAS) Asia Pacific Workshop, University of Science and Technology, Hong Kong 2012
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Michigan State University 2012
- “*Colloquium: Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Georgetown University 2012
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, University of Pennsylvania 2012
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Ohio State University 2012
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Aspen Center of Physics 2012
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Princeton University 2011
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, National High Magnetic Field Lab 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, Argonne National Lab 2011
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Indiana University 2011
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, University of Illinois 2011
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, The 19th International Conference on Electronic Properties of Two-Dimensional Systems (EP2DS 19), Tallahassee, FL 2011
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, University of Colorado 2011
- “*Magnetism of LaAlO₃/SrTiO₃ heterostructure interfaces*”, Penn State University 2011
- “*Oxide interface: a chance for new electronics*”, Pappalardo Symposium, MIT, Cambridge MA 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, Tulane University, New Orleans, LA 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, University of California, Irvine CA 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, University of Arkansas, Fayetteville AR 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, Stanford University, Stanford CA 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, University of Connecticut, Storrs, CT 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, McGill University, Montreal, Canada 2011

- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, Columbia University, New York, NY 2011
- “*Magnetism and electronic compressibility at LaAlO₃/SrTiO₃ interfaces*”, University of Michigan, Ann Arbor, MI 2011
- “*Phase transitions of Dirac electrons in Bismuth*”, Physical Phenomena at High Magnetic Fields (PPHMF-VII), Tallahassee, FL 2010
- “*Electronic compressibility and magnetism at LaAlO₃/SrTiO₃ interfaces*”, Brookhaven National Laboratory, Upton, NY 2010
- “*Electronic compressibility and magnetism at LaAlO₃/SrTiO₃ interfaces*”, Harvard University, Cambridge MA 2010
- “*Phase transitions of Dirac electrons in Bismuth*”, 19th International Conference on the Application of High Magnetic Fields in Semiconductor Physics and Nanotechnology (HMF-19), Fukuoka, Japan 2010
- “*Electronic compressibility and magnetism at LaAlO₃/SrTiO₃ interfaces*”, Univ. Tokyo, Japan 2010
- “*Negative electronic compressibility at the LaAlO₃/SrTiO₃ interface*”, 2010 Villa Conference on Complex Oxide Heterostructures, Santorini, Greece 2010
- “*Diamagnetism and pairing in hole-doped high T_c superconductors*”, Boston college, Boston, MA 2010
- “*Electronic compressibility and magnetism at LaAlO₃/SrTiO₃ interfaces*”, MIT, Cambridge MA 2010
- “*Torque Magnetometry in high T_c superconductors and Oxide Interfaces*”, Caltech, Pasadena, CA 2010
- “*Nernst effect and diamagnetism in pseudogap state*”, Quantum Vortices and Fluctuations in Superconductors and Superfluids, Aspen Center for Physics, Aspen CO 2009
- “*Diamagnetism and pairing above T_c in hole-doped high T_c superconductors*”, Seminar, National High Magnetic Field Lab, Florida State University, Tallahassee FL 2009
- “*Mystery of high T_c superconductors*”, Pappalardo Symposium, MIT, Cambridge MA 2009
- “*Torque Magnetometry in hole-doped high T_c superconductors*”, Faculty Lunch Meeting, MIT, Cambridge MA 2009
- “*Phase transitions of Dirac electrons in Bismuth*”, APS March Meeting, Pittsburgh PA 2009
- “*Phase transitions of Dirac electrons in Bismuth*”, Staff Meeting, MIT, Cambridge MA 2008

Conference Presentation

- “*Coexistence of Superconductivity and magnetism at the LaAlO₃/SrTiO₃ interface*”, APS March Meeting, Boston MA 2012
- “*Magnetism at the LaAlO₃/SrTiO₃ interface*”, APS March Meeting, Dallas TX 2011
- “*Unusual Nernst effect suggestive of time-reversal violation in the striped cuprate La_{2-x}Ba_xCuO₄*”, APS March Meeting, Dallas TX 2011
- “*Negative electronic compressibility at the LaAlO₃/SrTiO₃ interface*”, APS March Meeting, Portland OR 2010
- “*Negative electronic compressibility at the LaAlO₃/SrTiO₃ interface*”, Exotic Insulating States of Matter, Johns Hopkins University, Baltimore MD 2010

- “Phase transitions of Dirac electrons in Bismuth”, Gordon Conference, Biddeford ME 2008
- “Unusual diamagnetic response in p -wave superconductors Sr_2RuO_4 ”, APS March Meeting, New Orleans LA 2008
- “The low-temperature vortex liquid in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ and $\text{Bi}_2\text{Sr}_{2-y}\text{La}_y\text{CuO}_6$ ”, APS March Meeting, Denver CO 2007
- “Magnetization curves in underdoped cuprates measured at low T in fields up to 45 Tesla”, APS March Meeting, Baltimore MD 2006
- “Fractional-exponent behavior of magnetization near T_c in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ ”, APS March Meeting, Los Angeles CA 2005

Student Conference Presentations from my group

- Gang Li, Colin Tinsman, Benjamin Lawson, Fan Yu, Tomoya Asaba, Xiangfeng Wang, Johnpierre Paglione and Lu Li, “Quantum oscillations in magnetically doped SmB_6 ”, APS March Meeting, San Antonio TX 2015
- Colin Tinsman, Gang Li, Benjamin Lawson, Fan Yu, Tomoya Asaba, Xiangfeng Wang, Johnpierre Paglione and Lu Li, “Torque magnetometry study of Fe and Ni doped SmB_6 ”, APS March Meeting, San Antonio TX 2015
- Benjamin Lawson, Gang Li, Colin Tinsman, Fan Yu, Tomoya Asaba, Xiangfeng Wang, Johnpierre Paglione and Lu Li, “High field magnetization of Half-Heusler compound LuPdBi ”, APS March Meeting, San Antonio TX 2015
- Tomoya Asaba, Fan Yu, Gang Li, Benjamin Lawson, Colin Tinsman, Jochen Mannhart and Lu Li, “Electric field control of thermoelectric effect in oxide interface $\text{LaAlO}_3/\text{SrTiO}_3$ ”, APS March Meeting, San Antonio TX 2015
- F. Yu, G. Li, T. Asaba, B. Lawson, P. Kai, C. Tinsman, M. Hirschberger, J. Singleton, T. Lowe, B. Keimer, N. P. Ong and Lu Li, “Measurement of diamagnetic signal on UD YBCO”, APS March Meeting, Denver CO 2014
- G. Li, Z. Xiang, F. Yu, T. Asaba, B. Lawson, P. Kai, C. Tinsman, A. Berkeley, S. Wolgast, Y. S. Eo, D. J. Kim, . Kurdak, K. Sun, J. W. Allen, X. H. Chen, Y. Y. Wang, Z. Fisk, and Lu Li, “Two dimensional Fermi surfaces in Kondo insulator SmB_6 ”, APS March Meeting, Denver CO 2014
- C. Tinsman, G. Li, Z. Xiang, F. Yu, T. Asaba, B. Lawson, P. Kai, A. Berkeley, S. Wolgast, Y. S. Eo, D. J. Kim, . Kurdak, K. Sun, J. W. Allen, X. H. Chen, Y. Y. Wang, Z. Fisk, and Lu Li, “High Field Torque Magnetometry of SmB_6 ”, APS March Meeting, Denver CO 2014
- B. J. Lawson, G. Li, T. Asaba, F. Yu, Z. Xiang, C. Tinsman, Y. S. Hor, and Lu Li “Quantum oscillations in $\text{Cu}_x\text{Bi}_2\text{Se}_3$ ” intense magnetic field”, APS March Meeting, Denver CO 2014
- Lu Li, T. Asaba, T. Han, B. J. Lawson, F. Yu, C. Tinsman, G. Li, and Y. S. Lee “Magnetic Field Driven Phase Transitions in $S = \text{Kagome Lattice Antiferromagnet } \text{ZnCu}_3(\text{OH})_6\text{Cl}_2$ ”, APS March Meeting, Denver CO 2014
- T. Asaba, G. Li, B. J. Lawson, F. Yu, Z. Xiang, C. Tinsman, H. Hwang, J. Mannhart, and Lu Li “Magnetic ordering temperatures at oxide interface $\text{LaAlO}_3/\text{SrTiO}_3$ ”, APS March Meeting, Denver CO 2014
- B. J. Lawson, Y. S. Hor, and Lu Li “Quantum oscillations in topological superconductor candidate $\text{Cu}_x\text{Bi}_2\text{Se}_3$ ”, Autumn School on Correlated Electrons: Emergent Phenomena in Correlated Matter, Forschungszentrum Jlich Germany
- T. Asaba, G. Li, B. J. Lawson, F. Yu, Z. Xiang, P. Cai, C. Tinsman, T. Han, Y. S. Lee, and Lu Li “High field magnetic studies of Herbertsmithite $\text{ZnCu}_3(\text{OH})_6\text{Cl}_2$ ”, Autumn School on Correlated Electrons: Emergent Phenomena in Correlated Matter, Forschungszentrum Jlich Germany

- B. J. Lawson, G. Li, Y. S. Hor, and Lu Li “*Quantum oscillations in topological superconductor candidate $Cu_xBi_2Se_3$* ”, APS March Meeting, Baltimore MD 2013
- T. Asaba, G. Li, B. J. Lawson, F. Yu, Z. Xiang, P. Cai, C. Tinsman, T. Han, Y. S. Lee, and Lu Li “*High field magnetic studies of $S=1/2$ Kagome lattice single crystalline Herbertsmithite*”, APS March Meeting, Baltimore MD 2013

Publications

3200+ citation, H-index = 20

★ marks the postdoctoral fellow and visiting students I advised.

* marks the graduate students I advised.

** marks the undergraduate students I advised.

Papers in preprint

- CR Hughes, T Harada, T Asaba, R Ashoori, AV Boris, H Hilgenkamp, ME Holtz, **Lu Li**, J Mannhart, DA Muller, X Renshaw Wang, DG Schlom, A Soukiassian, H Boschker. *Ferromagnetism and conductivity in atomically thin $SrRuO_3$* , arXiv preprint arXiv:1609.08901 (2016)
- Tomoya Asaba, BJ Lawson, Colin Tinsman, Lu Chen, Paul Corbae, Gang Li, Y Qiu, YS Hor, Liang Fu, **Lu Li**. *Rotational Symmetry Breaking in a Trigonal superconductor Nb-doped Bi_2Se_3* , arXiv preprint arXiv:1603.04040 (2016)
- JD Denlinger, Sooyoung Jang, G Li, L Chen, BJ Lawson, T Asaba, C Tinsman, F Yu, Kai Sun, JW Allen, C Kurdak, Dae-Jong Kim, Z Fisk, **Lu Li**. *Consistency of photoemission and quantum oscillations for surface states of SmB_6* , arXiv preprint arXiv:1601.07408 (2016)

Journal Publication

1. Fan Yu*, Max Hirschberger, Toshinao Loew, Gang Li*, Benjamin J. Lawson*, Tomoya Asaba*, J. B. Kemper, Tian Liang, Juan Porras, G. S. Boebinger, J. Singleton, B. Keimer, **Lu Li**, and N. P. Ong, “*Magnetic phase diagram of underdoped $YBa_2Cu_3O_{6.6}$ inferred from torque magnetization and thermal conductivity*”, Proceedings of the National Academy of Sciences, **113**, 12667(2016)
2. Colin Tinsman*, G. Li*, Caroline Su**, Tomoya Asaba*, B. J. Lawson*, F. Yu*, and **Lu Li**, “*Probing the thermal Hall effect using miniature capacitive strontium titanate thermometry*”, Applied Physics Letters, **108**, 261905 (2016)
3. B. J. Lawson*, Paul Corbae**, G. Li*, F. Yu*, Tomoya Asaba*, Colin Tinsman*, Y. S. Qiu, J. E. Medvedeva, Y. Hor, and **Lu Li**, “*Multiple Fermi surfaces in superconducting Nb-doped Bi_2Se_3* ”, Physical Review B, **94**, 041114(R) (2016)
4. S. Wolgast, Y. S. Eo, T. Ozturk, G. Li*, Z. Xiang*, C. Tinsman*, T. Asaba*, B. Lawson*, F. Yu*, J. W. Allen, K. Sun, **Lu Li**, C. Kurdak, D.-J. Kim, and Z. Fisk. “*Magnetotransport measurements of the surface states of samarium hexaboride using Corbino structures*”, Physical Review B, **92**, 115110 (2015)
5. G. Li*, Z. Xiang*, F. Yu*, T. Asaba*, B. J. Lawson*, P. Cai*, C. Tinsman*, A. Berkley**, S. Wolgast, Y. S. Eo, Dae-Jeong Kim, C. Kurdak, J. W. Allen, K. Sun, X. H. Chen, Y. Y. Wang, Z. Fisk, and **Lu Li**. “*Two-dimensional Fermi surfaces in Kondo insulator SmB_6* ”, Science, **346**, 1208 (2014)
6. BJ Lawson*, G. Li*, F. Yu*, T. Asaba*, C. Tinsman*, T. Gao*, W. Wang*, YS Hor, and **Lu Li**. “*Quantum oscillations in $Cu_{0.25}Bi_2Se_3$ in High Magnetic Fields*”, Physical Review B, **90**, 195141 (2014)
7. Tomoya Asaba*, Tian-Heng Han, B. J. Lawson*, F Yu*, C Tinsman*, Z Xiang*, G Li*, Young S Lee, and **Lu Li**. “*High-field magnetic ground state in $S=\frac{1}{2}$ kagome lattice antiferromagnet $ZnCu_3(OH)_6Cl_2$* ”, Physical Review B, **90**, 064417 (2014)

8. **Lu Li**, Y. Wang, and N. P. Ong "Reply to 'Comment on Diamagnetism and Cooper pairing above T_c in cuprates'" Physical Review B, **87**, 056502 (2013)
9. B. J. Lawson*, Y. S. Hor, and **Lu Li** "Quantum oscillations in topological superconductor candidate $Cu_{0.25}Bi_2Se_3$ " Physical Review Letters, **109**, 226406 (2012)
10. J. G. Checkelsky, R. Thomale, **Lu Li**, G. F. Chen, J. L. Luo, N. L. Wang, and N. P. Ong "Thermal Hall conductivity as a probe of gap structure in multiband superconductors: The case of $Ba_{1-x}K_xFe_2As_2$ " Physical Review B, **86**, 180502 (2012)
11. **Lu Li**, N. Alidoust, J. M. Tranquada, G. D. Gu, and N. P. Ong "Unusual Nernst effect suggestive of time-reversal violation in the striped cuprate $La_{2-x}Ba_xCuO_4$ " Physical Review Letters, **107**, 277001 (2011)
12. **Lu Li**, C. Richter, J. Mannhart, and R. C. Ashoori "Coexistence of magnetic order and two-dimensional superconductivity at $LaAlO_3/SrTiO_3$ interfaces", Nature Physics, **7**, 762 (2011)
13. **Lu Li**, C. Richter, S. Paetel, T. Kopp, J. Mannhart, and R. C. Ashoori "Very large capacitance enhancement in a two-dimensional electron system", Science, **332**, 825 (2011)
14. **Lu Li**, Y. Wang, S. Komiya, S. Ono, Y. Ando, G. D. Gu, and N. P. Ong "Diamagnetism and Cooper pairing above T_c in cuprates", Physical Review B, **81**, 054510 (2010)
15. J. G. Checkelsky, **Lu Li**, and N. P. Ong "Divergent resistance at the Dirac point in graphene: Evidence for a transition in a high magnetic field", Physical Review B, **79**, 115434 (2009)
16. L. Wray, D. Qian, Y. Xia, **Lu Li**, J. G. Checkelsky, A. Pasupathy, K. K. Gomes, C. V. Parker, A. V. Fedorov, G. F. Chen, J. L. Luo, A. Yazdani, N. P. Ong, N. L. Wang, and M. Z. Hasan "Momentum dependence of superconducting gap, strong-coupling dispersion kink, and tightly bound Cooper pairs in the high- T_c $(Sr, Ba)_{1-x}(K, Na)_xFe_2As_2$ superconductors", Physical Review B, **78**, 184508 (2008)
17. **Lu Li**, J. G. Checkelsky, Y. S. Hor, R. J. Cava, C. Uher, A. F. Hebard, and N. P. Ong "Phase transitions of Dirac electrons in bismuth", Science **321**, 547-550 (2008)
18. J. G. Checkelsky, **Lu Li**, and N. P. Ong "Zero-Energy state of graphene in a high magnetic field", Physical Review Letters, **100**, 206801 (2008)
19. K. L. Holman, E. Morosan, P. A. Casey, **Lu Li**, N. P. Ong, T. Klimczuk, C. Felser, and R. J. Cava "Crystal structure and physical properties of $Mg_6Cu_{16}Si_7$ -type $M_6Ni_{16}Si_7$, for $M = Mg, Sc, Ti, Nb$, and Ta ", Materials Research Bulletin, **43**, 9-15 (2007)
20. Y. Onose, **Lu Li**, C. Petronic and N. P. Ong "Anomalous thermopower and Nernst effect in $CeCoIn_5$: Loss of entropy current in precursor state", Europhysics Letters, **79**, 17006 (2007)
21. **Lu Li**, J. G. Checkelsky, S. Komiya, Y. Ando and N. P. Ong "Low-temperature vortex liquid in $La_{2-x}Sr_xCuO_4$ ", Nature Physics, **3**, 311-314 (2007)
22. E. Morosan, H. W. Zandbergen, **Lu Li**, M. Lee, J. G. Checkelsky, M. Heinrich, T. Siegrist, N. P. Ong and R. J. Cava "Sharp switching of the magnetization in $Fe_{1/4}TaS_2$ ", Physical Review B, **75**, 104401 (2007)
23. E. Morosan, **Lu Li**, N. P. Ong and R. J. Cava "Anisotropic properties of the layered superconductor $Cu_{0.07}TiSe_2$ ", Physical Review B, **75**, 10505 (2007)
24. N. P. Ong, Y. Y. Wang, **Lu Li** and M. J. Naughton "Comment on 'Field-Enhanced diamagnetism in the pseudogap state of the cuprate $Bi_2Sr_2CaCu_2O_{8+\delta}$ superconductor in an intense magnetic field' - Ong et al. reply", Physical Review Letters, **98**, 119702 (2007)
25. M. Lee, L. Viciu, **Lu Li**, Y. Wang, M. L. Foo, S. Watauchi, R. A. Pascal, R. J. Cava and N. P. Ong "Large enhancement of the thermopower in Na_xCoO_2 at high Na doping", Nature Materials, **5**, 537-540 (2006)

26. Y. Wang, **Lu Li** and N. P. Ong “*Nernst effect in high- T_c superconductors*”, Physical Review B, **73**, 024510 (2006)
27. Y. Wang, **Lu Li**, M. J. Naughton, G. Gu, S. Uchida and N. P. Ong “*Field-enhanced diamagnetism in the pseudogap state of the cuprate $Bi_2Sr_2CaCu_2O_{8+\delta}$ superconductor in an intense magnetic field*”, Physical Review Letters, **95**, 247002 (2005)
28. **Lu Li**, Y. Wang, M. J. Naughton, S. Ono, Y. Ando and N. P. Ong “*Strongly nonlinear magnetization above T_c in $Bi_2Sr_2CaCu_2O_{8+\delta}$* ”, Europhysics Letters, **72**, 451-457 (2005)
29. M. L. Foo, T. Klimczuk, **Lu Li**, N. P. Ong and R. J. Cava “*Superconductivity in three-layer $Na_{0.3}CoO_2 \cdot 1.3H_2O$* ”, Solid State Communications, **133**, 407-410 (2005)
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31. Z. Sun, X. H. Chen, R. Fan, X. G. Luo and **Lu Li** “*Structure and magnetic properties of perovskite $Sr_2CuNbO_{6-\delta}$* ”, Journal of Physics and Chemistry of Solids, **64**, 59-62 (2003)
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