

SHUYUN ZHOU

Professor of Physics
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EDUCATION:

Ph.D. Department of Physics, UC Berkeley, Berkeley, CA 94720, 2007/12

B.S. Department of Physics, Tsinghua University, Beijing, China, 2002/07

EXPERIENCE:

2016/12-now **Professor, Department of Physics, Tsinghua University**
2012/04-2016/11 **Associate professor, Department of Physics, Tsinghua University**
2011/05 – 2012/04 **Project Scientist, Materials Sciences Division, Lawrence Berkeley National Lab**
2008/07-2011/04 **Advanced Light Source Postdoc Fellow, Lawrence Berkeley National Lab**
2008/01-2008/07 **Physics Postdoc, Materials Sciences Division, Lawrence Berkeley National Lab**

HONORS AND AWARDS:

2016 **L’Oreal-UNESCO Award for Women in Science, Laureate for China**
 (第十三届 “中国青年女科学家奖”)
2013 **Qiushi Outstanding Young Scholar Award (求是杰出青年学者奖)**
2012 **Youth 1000-Talents Plan Investigator (青年千人)**

Editorial Board and conference organization:

- 2016 – now Editorial board for Journal of Semiconductors
- 2015 – now AIP China Advisory Board
- 2014 - now Editorial board for Scientific reports
- 2015 Co-organizer for 2015 MRS Fall meeting Symposium DDD: Lighting the Path towards Non-Equilibrium Structure-Property Relationships in Complex Materials
- Reviewer for PRL, PRX, Nature Physics, Nature Commun.

Publications

SELECTED PUBLICATIONS:

1. Wei Yao, Eryin Wang, Huaqing Huang, Ke Deng, Mingzhe Yan, Kenan Zhang, Koji Miyamoto, Taichi Okuda, Chaoxing Liu, Linfei Li, Yeliang Wang, Hongjun Gao, Chaoxing Liu, Wenhui Duan and Shuyun Zhou*, “Direct observation of spin-layer locking by local Rashba effect in monolayer semiconducting PtSe₂”, *Nature Commun.* **in press**.
2. Kenan Zhang, Changhua Bao, Qiangqiang Gu, Xiao Ren, Haoxiong Zhang, Ke Deng, Yang Wu, Yuan Li, Ji Feng and Shuyun Zhou*, “Raman signatures of inversion symmetry breaking and structural phase transition in type-II Weyl semimetal MoTe₂”, *Nature Commun.* **7**, 13552 (2016).
3. Eryin Wang⁺, Xiaobo Lu⁺, Shijie Ding, Wei Yao, Mingzhe Yan, Guoliang Wan, Ke Deng, Shuopei Wang, Guorui Chen, Jeil Jung, Johnathan Denglinger, Alexei V. Fedorov, Yuanbo Zhang, Guangyu Zhang and Shuyun Zhou*, “Gaps induced by inversion symmetry breaking and second-generation Dirac cones in graphene/hexagonal boron nitride”, *Nature Phys.* **12**, 1111-1115 (2016).
4. Ke Deng⁺, Guoliang Wan⁺, Peng Deng⁺, Kenan Zhang, Shijie Ding, Eryin Wang, Mingzhe Yan, Huaqing Huang, Hongyun Zhang, Zhilin Xu, Jonathan Denlinger, Alexei Fedorov, Haitao Yang, Wenhui Duan, Hong Yao, Yang Wu*, Shoushan Fan, Haijun Zhang, Xi Chen* and Shuyun Zhou*, “Experimental observation of topological Fermi arcs in type-II Weyl semimetal MoTe₂”, *Nature Phys.* **12**, 1105-1110 (2016).
5. Eryin Wang, Hao Ding, Alexei V. Fedorov, Wei Yao, Zhi Li, Yan-Feng Lv, Kun Zhao, Li-Guo Zhang, Zhixun Xu, John Schneeloch, Ruidan Zhong, Shuai-Hua Ji, Lili Wang, Ke He, Xucun Ma, Genda Gu, Hong Yao, Qi-Kun Xue, Xi Chen* and Shuyun Zhou*, “Fully gapped topological surface states in Bi₂Se₃ films induced by a d-wave high-temperature superconductor”, *Nature Phys.* **9**, 621-625 (2013).
6. S.Y. Zhou*, Y. Zhu, M.C. Langner, Y.-D. Chuang*, P. Yu, W.L. Yang, A.G. Cruz Gonzalez, M. Rini, N. Tahir, Y.-H. Chu, R. Ramesh, D.-H. Lee, Y. Tomioka, Y. Tokura, Z. Hussain and R.W. Schoenlein*, “Ferromagnetic Enhancement of CE-type Spin Ordering in (Pr, Ca)MnO₃”, *Phys. Rev. Lett.* **101**, 186404 (2011).
7. S.Y. Zhou, D.A. Siegel, A.V. Fedorov and A.Lanzara, “Metal to insulator transition in epitaxial graphene induced by molecular doping”, *Phys. Rev. Lett.* **101**, 086402 (2008).
8. S.Y. Zhou, G.-H. Gweon, A.V. Fedorov, P.N. First, W.A. de Heer, D.-H. Lee, F. Guinea, A.H. Castro Neto and A. Lanzara, “substrate induced band gap opening in epitaxial graphene”, *Nature Mater.* **6**, 770 (2007).
This paper was selected by Thomson Reuters “Essential Science Indicators” as “Fast Breaking Paper in the field of Materials Science” in 2008 August
9. S.Y. Zhou, D.A. Siegel, A.V. Fedorov and A. Lanzara, “Origin of the energy bandgap in epitaxial graphene - reply”, *Nature Mater.* **7**, 259 (2008).
10. S.Y. Zhou, G.-H. Gweon, J. Graf, A.V. Fedorov, C.D. Spataru, R.D. Diehl, Y. Kopelevich, D.-H. Lee, S.G. Louie, A. Lanzara, “First direct observation of Dirac fermions in graphite”, *Nature Phys.* **2**, 595 (2006).

FULL PUBLICATION LIST:

Including 10 papers in *Nature*, *Nature Materials*, *Nature Physics* and *Nature Communications*; 7 papers in *Phys. Rev. Lett.* and 2 book chapters. Total number of times cited: > 3000.

Research articles:

2016

Preprint/submitted:

1. Changhua Bao, Wei Yao, Eryin Wang, Chaoyu Chen, Jose Avila, Maria C. Asensio and **Shuyun Zhou***, "Stacking-dependent electronic structure of trilayer graphene resolved by nanospot angle-resolved photoemission spectroscopy", submitted.
2. Mingzhe Yan, Huaqing Huang, Kenan Zhang, Eryin Wang, Wei Yao, Ke Deng, Guoliang Wan, Hongyun Zhang, Masashi Arita, Haitao Yang, Zhe Sun, Hong Yao, Yang Wu, Shoushan Fan, Wenhui Duan* and Shuyun Zhou*, "Lorentz-violating type-II Dirac fermions in transition metal dichalcogenide PtTe_2 ", arXiv:1607.03643, under review in *Nature Materials*.

Published/accepted papers

1. Wei Yao, Eryin Wang, Huaqing Huang, Ke Deng, Mingzhe Yan, Kenan Zhang, Koji Miyamoto, Taichi Okuda, Chaoxing Liu, Linfei Li, Yeliang Wang, Hongjun Gao, Chaoxing Liu, Wenhui Duan and Shuyun Zhou*, "Direct observation of spin-layer locking by local Rashba effect in monolayer semiconducting PtSe_2 ", *Nature Commun.* in press.
2. Kenan Zhang, Changhua Bao, Qiangqiang Gu, Xiao Ren, Haoxiong Zhang, Ke Deng, Yang Wu, Yuan Li, Ji Feng and Shuyun Zhou*, "Raman signatures of inversion symmetry breaking and structural phase transition in type-II Weyl semimetal MoTe_2 ", *Nature Commun.* **7**, 13552 (2016).
3. Ke Deng⁺, Guoliang Wan⁺, Peng Deng⁺, Kenan Zhang, Shijie Ding, Eryin Wang, Mingzhe Yan, Huaqing Huang, Hongyun Zhang, Zhilin Xu, Jonathan Denlinger, Alexei Fedorov, Haitao Yang, Wenhui Duan, Hong Yao, Yang Wu*, Shoushan Fan, Haijun Zhang, Xi Chen* and Shuyun Zhou*, "Experimental observation of topological Fermi arcs in type-II Weyl semimetal MoTe_2 ", *Nature Phys.* **12**, 1105-1110, (2016).
4. 姚顺宇、邓可、周树云, "漫谈第二类 Weyl 半金属", 《物理》, 第 10 卷, 635 页 (2016)
5. Eryin Wang⁺, Xiaobo Lu⁺, Shijie Ding, Wei Yao, Mingzhe Yan, Guoliang Wan, Ke Deng, Shuopei Wang, Guorui Chen, Jeil Jung, Johnathan Denglinger, Alexei V. Fedorov, Yuanbo Zhang, Guangyu Zhang and Shuyun Zhou*, Gaps induced by inversion symmetry breaking and second-generation Dirac cones in graphene/hexagonal boron nitride, *Nature Phys.* **12**, 1111-1115 (2016).
6. Huaqing Huang, Shuyun Zhou and Wenhui Duan, "Type-II Dirac Fermions in the Transition Metal Dichalcogenide PtSe_2 Class", *Phys. Rev. B* **94**, 121117 (2016).
7. Eryin Wang, Guorui Chen, Guoliang Wan, Xiaobo Lu, Chaoyu Chen, Jose Avila, Alexei V. Fedorov, Guangyu Zhang, Maria C. Asensio, Yuano Zhang and Shuyun Zhou*, Electronic structure of transferred graphene/h-BN van der Waals heterostructures with nonzero stacking angles by Nano-ARPES, *J. Phys. Condens. Matter* **28**, 444002 (2016).

2015

8. Yeliang Wang, Linfei Li, Wei Yao, Shiru Song, J.T. Sun, Jinbo Pan, Xiao Ren, Chen Li, Eiji Okunishi, Yu-Qi Wang, Eryin Wang, Yan Shao, Yuyang Zhang, Haitao Yang, Eike F. Schwier, Hideaki Iwasawa, Kenya Shimada, Masaki Taniguchi, Chaohua Cheng, Shixuan Du*, Shuyun Zhou*, Stephen J. Pennycook, Sokrates T. Pantelides* and Hong-Jun Gao*, "Monolayer PtSe₂, a new semiconducting transition-metal-dichalcogenide, epitaxially grown by direct selenization of Pt", *Nano Lett.* 15, 4013 (2015).
9. Wei Yao, Eryin Wang, Ke Deng, Shuzhen Yang, Alexei V. Fedorov, Eike F. Schwier, Mingtian Zheng, Yohei Kojima, Hideaki Iwasawa, Kenya Shimada, Pu Yu, Jia Li and Shuyun Zhou*, Monolayer charge-neutral graphene on platinum with extremely weak electron-phonon coupling, *Phys. Rev. B* 92, 115421 (2015).
10. Eryin Wang, Peizhe Tang, Guoliang Wan, Alexei Fedorov, Ireneusz Miotkowski, Yong Chen, Wenhui Duan* and Shuyun Zhou*, "Robust gapless surface state and Rashba-splitting bands upon surface deposition of magnetic Cr on Bi₂Se₃", *Nano Lett.* 15, 2031-2036 (2015).

2014

11. Yuan Yan, Zhi-min Liao, Xiaoxing Ke, Gustaaf Van Tendeloo, Qinsheng Wang, Dong Sun, Wei Yao, Shuyun Zhou, Liang, Zhang, Han-Chun Wu and Da-Peng Yu, "Topological surface state enhanced photothermoelectric effect in Bi₂Se₃ nanoribbons", *Nano Lett.* 14, 4389 (2014).
12. S.Y. Zhou*, M.C. Langner, Y. Zhu, Y.-D. Chuang*, M. Rini, T.E. Glover, M.P. Hertlein, A.G. Cruz Gonzalez, N. Tahir, Y. Tomioka, Y. Tokura, Z. Hussain, R.W. Schoenlein*, "Glass-like recovery of antiferromagnetic spin ordering and dimensional crossover in a photo-excited manganite Pr_{0.7}Ca_{0.3}MnO₃", *Scientific Rep.* 4, 4050 (2014).

2013

13. Eryin Wang, Hao Ding, Alexei V. Fedorov, Wei Yao, Zhi Li, Yan-Feng Lv, Kun Zhao, Li-Guo Zhang, Zhixun Xu, John Schneeloch, Ruidan Zhong, Shuai-Hua Ji, Lili Wang, Ke He, Xucun Ma, Genda Gu, Hong Yao, Qi-Kun Xue, Xi Chen* and Shuyun Zhou*, "Fully gapped topological surface states in Bi₂Se₃ films induced by a d-wave high-temperature superconductor", *Nature Phys.* 9, 621-625 (2013).

Before 2013

14. Y.D. Chuang, W.S. Lee, Y.F. Kung, A.P. Sorini, B. Moritz, R.G. Moore, L. Patthey, M. Grigo, D.H. Lu, P.S. Kirchmann, M. Yi, O. Krupin, M. Langner, Y. Zhu, S.Y. Zhou, D.A. Reis, N. Huse, J.S. Robinson, R.A. Kaindl, R.W. Schoenlein, S.L. Johnson, M. Forst, D. Doering, P. Denes, W.F. Schlotter, J.J. Turner, T. Sasagawa, Z. Hussain, Z.X. Shen, T.P. Devereaux, "Real time manifestation of strongly coupled spin and charge order parameters in stripe-ordered La_{1.75}Sr_{0.25}NiO₄ nickelate crystals using time-resolved resonant X-ray diffraction", *Phys. Rev. Lett.* 110, 127404 (2013).
15. W.S. Lee, Y.D. Chuang, R.G. Moore, Y. Zhu, L. Patthey, M. Trigo, D.H. Lu, P.S. Kirchmann, O. Krupin, M. Yi, M. Langner, N. Huse, J.S. Robinson, Y. Chen, S.Y. Zhou, G. Coslovich, B. Huber, D.A. Reis, R.A. Kaindl, R.W. Schoenlein, D. DOering, P. Denes, W.F. Schlotter, J.J. Turner, S.L. Johnson, M. Forst, T. Sasagawa, Y.F. Kung, A.P. Sorini, A.F. Kemper, B. Moritz, T.P. Devereaux, D.H. Lee, Z.X. Shen, Z. Hussain. "Phase fluctuations and the absence of topological defects in photo-excited charge ordered Nickelate", *Nature Commun.* 3, 838. (2012).
16. S.Y. Zhou*, Y. Zhu, M.C. Langner, Y.-D. Chuang*, P. Yu, W.L. Yang, A.G. Cruz Gonzalez, M. Rini, N. Tahir, Y.-H. Chu, R. Ramesh, D.-H. Lee, Y. Tomioka, Y. Tokura, Z. Hussain and

- R.W. Schoenlein*, “Ferromagnetic Enhancement of CE-type Spin Ordering in (Pr, Ca)MnO₃”, *Phys. Rev. Lett.* 101, 186404 (2011).
17. D’Astuto, M. Calandra, N. Bendiab, G. Louprias, F. Mauri, S.Y. Zhou, J. Graf, A. Lanzara, N. Emery, C. Herold, P. Lagrange, D. Petitgrand, M. Hoesch, “Phonon dispersion and low energy anomaly in CaC₆”, *Phys. Rev. B* 81, 104519 (2010)
 18. D.A. Siegel, S.Y. Zhou, F. El Gabaly, A.K. Schmid, K.F. McCarty and A. Lanzara, “Three-fold diffraction symmetry in epitaxial graphene and the SiC substrate”, *Phys. Rev. B* 80, 241407 (2009).
 19. S.Y. Zhou, C.O. Girit, A. Scholl, C.J. Jozwiak, D.A. Siegel, P. Yu, J.T. Robinson, F. Wang, A. Zettl and A. Lanzara, “Instability of two-dimensional graphene: Breaking sp² bonds with soft xrays”, *Phys. Rev. B* 80, 121409 (2009).
 20. H. Choi, F. Borondics, D.A. Siegel, S.Y. Zhou, M.C. Martin, A. Lanzara and R.A. Kaindl, “Broadband electromagnetic response and ultrafast dynamics of few-layer epitaxial graphene”, *Appl. Phys. Lett.* 94, 172102 (2009)
 21. C. Jozwiak, J. Graf, S.Y. Zhou, A. Bostwick, E. Rotenberg, H. Zheng, J.F. Mitchell and A. Lanzara, “Bilayer splitting and c-axis coupling in bilayer manganites showing colossal magnetoresistance”, *Phys. Rev. B* 80, 235111 (2009)
 22. D.A. Siegel, S.Y. Zhou, F. El Gabaly, A.V. Fedorov, A.K. Schmid and A. Lanzara, “Self-doping effects in epitaxially grown graphene”, *Appl. Phys. Lett.* 93, 243119 (2008).
 23. S.Y. Zhou, D.A. Siegel, A.V. Fedorov and A. Lanzara, “Kohn anomaly and interplay of electron-electron and electron-phonon interactions in epitaxial graphene”, *Phys. Rev. B* 78, 193404 (2008).
 24. S.Y. Zhou, D.A. Siegel, A.V. Fedorov and A. Lanzara, “Metal to insulator transition in epitaxial graphene induced by molecular doping”, *Phys. Rev. Lett.* 101, 086402 (2008).
 25. S.Y. Zhou, D.A. Siegel, A.V. Fedorov and A. Lanzara, “Origin of the energy bandgap in epitaxial graphene - reply”, *Nature Mater.* 7, 259 (2008).
 26. S.Y. Zhou, D.A. Siegel, A. V. Fedorov and A. lanzara, “Departure from the conical dispersion in epitaxial graphene”, *Physica E* 40, 2642 (2007).
 27. S.Y. Zhou, G.-H. Gweon, A.V. Fedorov, P.N. First, W.A. de Heer, D.-H. Lee, F. Guinea, A.H. Castro Neto and A. Lanzara, “Substrate induced band gap opening in epitaxial graphene”, *Nature Mater.* 6, 770 (2007).
 28. J. Graf, G.-H. Gweon, K. McElroy, S.Y. Zhou, C. Jozwiak, E. Rotenberg, A. Bill, T. Sasagawa, H. Eisaki, S. Uchida, H. Takagi, D.-H. Lee and A. Lanzara, “A universal high energy anomaly in angle resolved photoemission spectra of high temperature superconductors – possible evidence of spinon and holon branches”, *Phys. Rev. Lett.* 98, 067004 (2007)
 29. D.R. Garcia, S.Y. Zhou, G.-H. Gweon, M.H. Jung, Y.S. Kwon and A. Lanzara, “Probing the band structure of LaTe₂ using angle-resolved photoemission spectroscopy”, *J. Elec. Spec. Relat. Phenom.* 156-158, 58 (2007).
 30. D.R. Garcia, G.-H. Gweon, S.Y. Zhou, J. Graf, C.J. Jozwiak, M.H. Jung, Y.S. Kwon and A. Lanzara, “Revealing charge density wave formation in the LaTe₂ system by angle resolved photoemission spectroscopy”, *Phys. Rev. Lett.* 98, 166403 (2007).
 31. S.Y. Zhou, G.-H. Gweon, J. Graf, A.V. Fedorov, C.D. Spataru, R.D. Diehl, Y. Kopelevich, D.-H. Lee, S.G. Louie, A. Lanzara, “First direct observation of Dirac fermions in graphite”, *Nature Phys.* 2, 595 (2006).

32. S.Y. Zhou, G.-H. Gweon and A. Lanzara, “Low energy excitations in graphite: the role of dimensionality and lattice defects”, *Ann. Phys.* 321, 1730 (2006).
33. E. Rollings, G.-H. Gweon, S.Y. Zhou, B.S. Mun, J.L. McChesney, B.S. Hussain, A.V. Fedorov and A. Lanzara, “Synthesis and characterization of atomically-thin graphite films on a silicon carbide substrate”, *J. Phys. Chem. Solids* 67, 2172 (2006).
34. G.-H. Gweon, S.Y. Zhou, M.C. Watson, T. Sasagawa, H. Takagi and A. Lanzara, “Strong and complex electron-lattice correlation in optimally doped $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ ”, *Phys. Rev. Lett.* 97, 227001 (2006).
35. K. McElroy, G.-H. Gweon, S.Y. Zhou, J. Graf, S.I. Uchida, H. Eisaki, H. Takagi, T. Sasagawa, D.-H. Lee and A. Lanzara, “Elastic scattering susceptibility of the high temperature superconductor $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$: a comparison between real and momentum space photoemission spectroscopies”, *Phys. Rev. Lett.* 96, 067005 (2006).
36. T. Sasagawa, A. Lanzara, G.-H. Gweon, S. Zhou, J. Graf, Survadijaya, H. Takagi, “Oxygen isotope effect on the electron dynamics in $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$: angle-resolved photoemission spectroscopy”, *Physica C – superconductivity and its applications* 426, 436 (2005).
37. S.Y. Zhou, G.-H. Gweon, C.D. Spataru, J. Graf, D.-H. Lee, S.G. Louie and A. Lanzara, “Coexistence of sharp quasiparticle dispersions and disorder features in graphite”, *Phys. Rev. B* 71, 161403(R) (2005).
38. Yong-qiang Cheng, Shu-yun Zhou and Bang-fen Zhu, “Isotope effect on phonon spectra in single-walled carbon nanotubes”, *Phys. Rev. B* 72, 035410 (2005).
39. G.-H. Gweon, T. Sasagawa, S.Y. Zhou, J. Graf, H. Takagi, D.H. Lee and A. Lanzara, “Anomalous isotope effect on the electron dynamics of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ high temperature superconductor”, *Nature* 430, 187 (2004).

Book chapters:

1. S.Y. Zhou and A. Lanzara, “The electronic structure of epitaxial graphene – a view from angle-resolved photoemission spectroscopy” in Oxford Handbook of Nanoscience and Technology: Frontiers and Advances. Narlikar, A.V. & Fu, Y.Y. Eds. (Oxford Univ. Press, Oxford, 2009)
2. A. Lanzara, G.-H. Gweon, S.Y. Zhou, “Lattice dynamics and paired electrons in high temperature superconductors” in New Challenges in Superconductivity: Experimental Advances and Emerging Theories, NATO Science Series II – Mathematics, Physics and Chemistry. Ashkenazi J. *et al.* EDs. (Springer, Netherlands, 2005)

Invited Talks, Conference Talks and University Seminars

1. “New topological phases in transition metal dichalcogenides”, 15th low temperature conference of China, Guangdong, Nov. 15-18, 2016.
2. “New topological phases in transition metal dichalcogenides”, 290K seminar, UC Berkeley, Nov. 7, 2016.
3. “Two-dimensional materials and heterostructures for new topological phases and tailored electronic structure”, RIKEN-Tsinghua workshop, Oct. 19, 2016.
4. “Electronic Structure Investigation Of Two-Dimensional Materials and Van Der Waals Heterostructure”, XXV International Materials Research Congress 2016, Cancun, Mexico, 2016/08/15

5. “Experimental realization of Lorentz-violating type-II Weyl and Dirac Semimetals”, 第二届全国凝聚态物理会议, “拓扑量子系统”分会邀请报告, Nanjing, 2016/07/21
6. “Electronic Structure Investigation Of Two-Dimensional Materials and Van Der Waals Heterostructure”, 第二届全国凝聚态物理会议, “低维与人工微结构物理”分会邀请报告, Nanjing, 2016/07/21
7. “Electronic Structure Investigation of Two-Dimensional Materials and Van Der Waals Heterostructure”, International Union of materials research societies – International Conference on electronic materials, Singapore, 2016/07/07
8. “ARPES studies of graphene/h-BN van der Waals heterostructure”, International Symposium on Physics and Device Applications of Two-dimensional Materials, Fudan University, Shanghai, 2016/06/30
9. “Experimental realization of Lorentz violating type-II Weyl semimetal in MoTe₂”, ICQM seminar, Peking University, 2016/05/11
10. “Direct Observation of Helical Spin Texture in Centrosymmetric Monolayer PtSe₂ Film”, UTokyo-Tsinghua Joint Symposium 2016, Tokyo, 2016/03/10
11. “Superlattice Engineering of Graphene/h-BN van der Waals heterostructure”, 量子物质科学协同创新中心 2015 年年终交流总结大会, 2015/12/04
12. “Electronic structure investigation of novel two-dimensional materials”, 15th International Conference on the Formation of Semiconductor Interfaces, Hiroshima, 2015//11/18
13. 新型二维量子材料的电子能谱研究, 1st IOP young researcher’s meeting on the emerging phenomena of condensed matter physics: an atomic perspective, Beijing, 2015/10/23
14. New Opportunities of SXFEL for Condensed Matter Physics, 上海 X 射线自由电子激光 (SXFEL) 第一届研讨会, 上海, 2015 年 9 月 8 日
15. 新型二维量子材料的电子能谱研究, 国家同步辐射实验室 2015 年用户年会量子功能材料研究专题研讨, 合肥, 2015 年 8 月 14 日
16. “Electronic structures of novel 2D-Materials and Van der Waals Heterostructure”, International Symposium and Summer School of Physics and Device Applications of Two-dimensional Materials, Peking University, Beijing, 2015 July 6.
17. “Electronic structure of nearly free-standing graphene and van der Waals heterostructure”, Shanghai Jiaotong University, Department of Physics, Colloquium, 2014 Dec. 10.
18. “Proximity-Induced Gap On The Surface States Of Bi₂Se₃ Topological Insulator Film By A High Temperature Superconductor”, IUMRS-ICYRAM2014 Second international conference of young researches on Advanced Materials, Haikou, 2014 Oct. 26
19. “Dirac electrons in a periodic potential – an ARPES study of graphene/BN heterostructure”, 1st International conference on two-dimensional layered materials, Hangzhou, 2014, Oct. 15
20. “Proximity-Induced Gap On The Surface States Of Bi₂Se₃ Topological Insulator Film By A High Temperature Superconductor”, 2014 Caltech-Tsinghua workshop – frontiers of Science and Technology, Pasadena, USA, 2014, Sept. 14
21. “Proximity-Induced Gap On The Surface States Of Bi₂Se₃ Topological Insulator Film By A High Temperature Superconductor”, OCPA 8 international conference on physics education and frontier physics, Singapore, 2014, June 24
22. “Proximity-Induced Gap On The Surface States Of Bi₂Se₃ Topological Insulator Film By A High Temperature Superconductor”, Beijing Forum on High-Temperature Superconductivity, Beijing, 2014, May 24
23. “Proximity-Induced Gap On The Surface States Of Bi₂Se₃ Topological Insulator Film By A High Temperature Superconductor”, Tsinghua-RIKEN Joint Workshop on Emergent Matter Science, Beijing, 2014, May 20
24. “Proximity-Induced Gap On The Surface States Of Bi₂Se₃ Topological Insulator Film By A High Temperature Superconductor”, Invited talk at ALS triennial review (by DOE), Berkeley, USA, 2014, Mar. 26

25. “Proximity-Induced Gap On The Surface States Of Bi_2Se_3 Topological Insulator Film By A High Temperature Superconductor”, 10th Surface Nano-Science Workshop, Invited talk, Yongpyong, Korea, 2014, Feb. 7
26. “拓扑绝缘体 / 高温超导体异质界面的近邻效应研究”，北京大学国际量子物理中心 ICQM Seminar, 2013年12月25日
27. “拓扑绝缘体 / 高温超导体异质界面的近邻效应研究”，人民大学物理系 Seminar, 2013年12月18日
28. “Proximity-Induced Gap On The Surface States Of Bi_2Se_3 Topological Insulator Film By A High Temperature Superconductor”, 1000-Plan Mathematics and Physics Professional Society Symposium, 2013, Nov. 9
29. “Proximity-Induced Gap On The Surface States Of Bi_2Se_3 Topological Insulator Film By A High Temperature Superconductor”, Invited Science Highlight talk in 2013 Advanced Light Source users’ meeting, Berkeley, USA, 2013 Oct. 8
30. “拓扑绝缘体 / 高温超导体异质界面的近邻效应研究”，香山科学会议“低维体系高温超导”，苏州，2013年9月27日
31. “拓扑绝缘体 / 高温超导体异质界面的近邻效应研究”，中国物理学会秋季年会邀请报告，厦门，2013年9月15日
32. “低维量子材料的电子谱学和超快动力学研究”，第三届全国凝聚态物理青年科学家论坛，长春，2013年8月8日
33. “Melting and recovery dynamics of spin ordering across the insulator-metal transition in manganites – What did we learn from ultrafast X-rays?” 1st Germany-China young scientist symposium on ultrafast light sources and spectroscopy applications, Hamburg, Germany, 2013 June 25
34. “庞磁阻材料的局域化电子序在相变中的超快动态过程研究”，凝聚态物理-北京大学论坛，2012年12月6日
35. “Glass-like dynamics and dimensional crossover in the antiferromagnetic spin-ordered state in a photo-excited $\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ manganite”，清华大学高等研究院，2012年11月7日
36. “Glass-like dynamics and dimensional crossover in the antiferromagnetic spin-ordered state in a photo-excited $\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ manganite”，Tsinghua University-RIKEN joint workshop, Oct. 22 2012
37. “Glass-like dynamics and dimensional crossover in the antiferromagnetic spin-ordered state in a photo-excited $\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ manganite”，Hiroshima University, Oct. 2 2012
38. “庞磁阻材料中电子序在相变过程中的超快动态过程研究”，中国物理学会秋季年会邀请报告，广州，2012年9月23日
39. “Dynamic evolution of spin ordering across the insulator-metal transition in a correlated manganite”，Ultrafast Phenomena XVIII, Lausanne Switzerland, July 8-13, 2012
40. “Glassy recovery dynamics and dimensional crossover of CE-type spin ordering across the insulator-metal transition in a manganite”，国家同步辐射研究中心，台湾，2012年6月1日
41. “Glassy relaxation dynamics of spin ordering across the photo-induced insulator-metal transition in $\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ manganite”，Stanford RIXS/REXS workshop, Jan 16-19, 2012
42. “Cooperative interplay between CE-type spin ordering and ferromagnetism in $(\text{Pr,Ca})\text{MnO}_3$ ”，中国物理学会秋季年会邀请报告，杭州，2011年9月17日
43. “Glassy relaxation dynamics of spin ordering across the photo-induced insulator-metal transition in $\text{Pr}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ manganite”，Workshop on time-resolved x-ray science at the ALS, Oct. 5, 2011
44. “Cooperative interplay between CE-type spin ordering and ferromagnetism in $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$ manganites”，International workshop on strong correlations and angle-resolved photoemission spectroscopy, Berkeley, CA, July 2011

45. “Dynamics of Orbital and Spin Orderings in Manganites - A direct view from time-resolved resonant X-ray scattering”, workshop on Ultrafast Dynamics in Strongly Correlated Systems, ETH Zurich, Apr. 2011
46. “Revealing the static and dynamic electronic structure in advanced materials – examples from graphene and manganites”, Condensed Matter Seminar, Physics Department, University of Illinois at Urbana-Champaign, Mar. 2011
47. “Revealing the static and dynamic electronic structure in advanced materials – examples from graphene and manganites”, Physics Department seminar, McGill University, Mar. 2011
48. “The role of orbital and spin orderings in manganites – a direct view from static and time-resolved resonant X-ray scattering”, Applied Physics and Photon science seminar, Stanford University, Mar. 2011
49. “Revealing the static and dynamic electronic structure in advanced materials – examples from graphene and manganites”, seminar, Oxford University, Feb. 2011
50. “Revealing the static and dynamic electronic structure in advanced materials – examples from graphene and manganites”, CM-AMO seminar, Physics Department, University of Michigan, Feb. 2011
51. “Spectroscopic studies of graphene and manganites in equilibrium and in the excited state”, Applied & Engineering Physics seminar, Cornell University, Nov. 2010
52. “Spectroscopic studies of advanced materials”, Surface Science seminar, State Key Laboratory for surface physics, Institute of Physics, Chinese Academy of Sciences, Sept. 2010
53. “Tuning the properties of Dirac fermions in graphene”, **invited talk, American Physical Society March Meeting**, Pittsburgh, March 2009
54. “Band gap opening and the effects of quantum confinement on epitaxial graphene”, ALS/CXRO seminar, Lawrence Berkeley National Lab, Apr. 2008
55. “Dirac Fermions in epitaxial graphene”, **invited talk, American Physical Society March Meeting**, New Orleans, March 2008
56. “Substrate-induced band gap opening in epitaxial graphene”, ALS/CXRO seminar, Lawrence Berkeley National Lab, Sept. 2007
57. “From graphene to graphite – the dynamics of Dirac Fermions and many body interactions”, International seminar and workshop “Dynamics and Relaxation in Complex Quantum and Classical Systems and Nanostructures”, **invited talk**, Max Planck Institute for the Physics of Complex Systems, Dresden, Germany, Sept. 2006
58. “Dirac Fermions and many body interactions in graphene and graphite”, condensed matter physics seminar, IMPMC, Universite Pierre et Marie Curie, Paris, France, Sept. 2006
59. “Electron-lattice interaction in high temperature superconductors: a view from photoemission”, **invited talk**, International school of physics “Enrico Fermi” – “Polarons in bulk materials and systems with reduced dimensionality”, Varenna, Italy, July 2005