

Yulin Chen

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Education

Ph. D. Physics	Stanford University; Stanford, California 94305, USA	2008
B. S. Physics	University of Science & Technology of China; Hefei, China	2000

Research Experience

Oxford University (Physics department)
University Lecturer / Associate Professor / Professor **2012-present**
Fellow of Jesus College

SIMES, SLAC National Accelerator Laboratory
Post-Doctoral Research Fellow / Associate Staff Scientist / Staff Scientist **2008-2011**

Stanford University (Physics Department) **2006-2008**
Research Assistant **2000-2003**

Lawrence Berkeley National Laboratory **2001-2008**
Beamline (HERS) Assistant

National Lab of Synchrotron Elettra, Trieste Italy **2003-2006**
Beamline (BACH) Assistant

University of Science & Technology of China **1997-2000**
Research Assistant

Teaching Experience

Oxford University (Jesus College/Physics department):

“Special relativity”, “Mechanics”, “Classical mechanics”, “Statistical physics”, “Thermal Physics”, “Statistics & Data Analysis” “Electromagnetism”, “Quantum, Atomic and Molecular Physics.”, “Optics”, “General Physics Lab”, “Condensed Matter Physics Lab”, “Scientific Programming Lab”, “Analog Electronics”

Stanford University (Physics Department):

“Electricity and optics”, “Light and heat”, and “Electricity”

Invited Presentations

1	Dynamics of Emerging Quasiparticles in Topological Dirac Materials, Berlin, Germany	2020
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2	5 th ICECS (International Conference on Energy Conversion and Storage) Beijing, China	2019
3	8 th International Workshop on Strong Correlations and Angle-Resolved Photoemission Spectroscopy, Oxford, UK	2019
4	CMQM (Condensed Matter and Quantum Materials) Conference 2019, St Andrews, UK	2019
5	17 th International Conference on the Formation of Semiconductor Interfaces, Shanghai, China	2019
6	IASTU Workshop on Topological Physics in Quantum Materials, Beijing, China	2019
7	The Shoucheng Zhang Memorial Workshop, Stanford, USA	2019
8	2018 APS March Meeting, Los Angeles, USA	2018
9	Quantum Materials Symposium 2018, Shanghai, China	2018
10	AVS 65 th International Symposium & Exhibition, Los Angeles, USA	2018
11	8 th Joint ICQ Annual Workshop on Topological Orders & Materials, Hefei, China	2018
12	KITS workshop on topological matter & quantum computation, Beijing, China	2018
13	9 th Joint Meeting of Chinese physicists worldwide, Beijing, China	2017
14	Spin Dynamics in Nanostructures (Gordon Research Conference) Les Diablerets, Switzerland	2017
15	BEYOND! Topology and Materials, Ringberg, Germany	2017
16	The 3rd Conference on Condensed Matter Physics, Shanghai, China	2017
17	Topological matter meets quantum information, Shanghai China	2017
18	Nakamura Lecture, Santa Babara, USA	2017
19	SRC Winter Workshop for quantum coherence and topological matter PyeongChang, South Korea	2017
20	Nano-Systems from Ions, spins and Electrons, Halle, Germany	2016
21	CMD 26, (European Physical Society: Condensed Matter Divesion) Groningen, Netherlands	2016
22	ICPS 2016 (33rd International Conference on the Physics of Semiconductors) Beijing, China	2016
23	KITPC Synthetic Topological Quantum Matter, Beijing, China	2016
24	ICEM2016 (International Conference on Electronic Materials), Singapore	2016
25	NTTI2016-NGS17 conference in Wurzburg, Germany	2016
26	NSF (USA) Frontiers of Condensed Matter Physics, Washington DC, USA	2016
27	4th CAS-DOE/BES Collaborative Workshop, Shanghai, China	2016
28	ICAM-China: The Frontier in Condensed Matter Physics, Beijing	

29	The 1st Conference on Condensed Matter Physics, (The 14th International Conference on Condensed Matter Theory and Computational Materials Science) Beijing, China	2015
30	International Conference on the Electronic Structure of Complex Quantum Matter and Microstructure, Shanghai	2015
31	CORPES 15, International workshop on Strong correlations and angle-resolved photoemission spectroscopy, Paris, France	2015
32	Gordon Research Conference - Topological & Correlated Matter, Hong Kong, China	2015
33	American Physical Society March Meeting, San Antonio, USA	2015
34	9 th International Conference on Computational Physics,(ICCP9), Singapore	2015
35	7 th International Symposium on Surface Science (ISSS-7), Matsue, Japan	2014
36	E-MRS (European Materials Research Society) Fall Meeting, Warsaw, Poland	2014
37	8 th OCPA International Conference on Physics Education & Frontier Physics, Singapore	2014
38	17 th International Conference on Crystal Growth and Epitaxy, 2013, Wasaw, Poland	2013
39	2012 CECAM conference, Bremen, Germany	2012
400	MRS (Materials Research Society) Meeting, San Francisco, USA	2012
41	2012 EMN (Energy, Materials and Nanotechnology) conference, Orlando, USA	2012
42	26 th International Conference on Low Temperature Physics: Topological Insulator and Superconductors Satellite conference, Beijing, China	2011
43	American Physical Society March Meeting, Dallas, USA	2011
44	SpinAge 2010, Watsonville, USA	2010
45	Chinese academy of Science, IOP 2010Forum, Beijing, China	2010
46	American Physical Society March Meeting, Portland, USA	2010
47	Exotic Insulating States of Matter, John Hopkins University, USA	2010
48	Spin Currents 2009 South Lake Tahoe USA	2009
49	62 nd annual meeting of Japan Physical Society, Japan	2007
50	8 th International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors, Dresden, Germany	2006
	18 th International Symposium on Superconductivity, Tsukuba, Japan	2005

Honors and Awards

Nakamura Lecture Award Institution: University of California, Santa Barbara	2017
Outstanding Young Researcher Award (Macronix Prize) Institution: International Organization of Chinese Physicists and Astronomers	2012
William E. and Diane M. Spicer Young Investigator Award Institution: Stanford Synchrotron Radiation Lightsource	2009
ABC interview on realization of topological insulator Bi₂Te₃ Video link: http://abclocal.go.com/kgostory?section=news/technology&id=6871012	2009
ALS Doctoral Fellow Institution: Advanced Light Source (ALS), Lawrence Berkeley National Laboratory	2003 ~ 2006
Outstanding Thesis Award Institution: Department of Modern Physics, University of Science and Technology of China	2000
Procter & Gamble Scholarship for Outstanding Student Institution: University of Science and Technology of China (funded by Procter & Gamble Co.)	2000
University Scholarship for Outstanding Student Institution: University of Science and Technology of China	1996 ~ 1999
University Scholarship for Outstanding New Student Institution: University of Science and Technology of China	1995

Patent granted:

Hailin Peng, Yunfan Guo, Zhongfan Liu, **Yulin Chen**, Zhixun Shen
"Flexible transparent conductive material of topological insulator and preparation method and application"
Patent Number: CN103413594A

Selected Publications:

No.	Publication details
1	Yujie Chen, Juan Jiang, Haifeng Yang, Pavel Dudin, Alexey Barinov, Zhongkai Liu, Haihu Wen, Lexian Yang & Yulin Chen <i>Visualization of the electronic phase separation in superconducting KxFe_{2-y}Se₂</i> <u>Nano Research in press (2020) https://doi.org/10.1007/s12274-020-3119-8</u>

- 2 Yuanfeng Xu, Luis Elcoro, Zhida Song, Benjamin J. Wieder, M. G. Vergniory, Nicolas Regnault, **Yulin Chen**, Claudia Felser, B. Andrei Bernevig
"High-throughput Calculations of Antiferromagnetic Topological Materials From Magnetic Topological Quantum Chemistry"
Nature, 586, 702 (2020)
- 3 Cheng Chen, Aiji Liang, Shuai Liu, Simin Nie, Junwei Huang, Meixiao Wang, Yiwei Li, Ding Pei, Haifeng Yang, Huijun Zheng, Yong Zhang, Donghui Lu, Makoto Hashimoto, Alexei Barinov, Chris Jozwiak, Aaron Bostwick, Eli Rotenberg, Xufeng Kou, Lexian Yang, Yanfeng Guo, Zhijun Wang, Hongtao Yuan, Zhongkai Liu, **Yulin Chen**
"Observation of Topological Electronic Structure in Quasi-1D Superconductor TaSe3"
Matter, 3, 2055 (2020)
- 4 Lixuan Xu, Yuanhao Mao, Hongyuan Wang, Jiaheng Li, Yujie Chen, Yunyouyou Xia, Yiwei Li, Ding Pei, Jing Zhang, Huijun Zheng, Kui Huang, Chaofan Zhang, Shengtao Cui, Aiji Liang, Wei Xia, Hao Su, Sungwon Jung, Cephise Cacho, Meixiao Wang, Gang Li, Yong Xu, Yanfeng Guo, Lexian Yang Zhongkai Liu, **Yulin Chen** and Mianheng Jiang
"Persistent surface states with diminishing gap in MnBi2Te4/Bi2Te3 superlattice antiferromagnetic topological insulator"
Science Bulletin, 65, 2086 (2020)
- 5 Yujie Chen, Xu Gu, Yiwei Li, Xian Du, Lexian Yang, and **Yulin Chen**
"Recent Advances in Topological Quantum Materials by Angle-resolved Photoemission Spectroscopy"
Matter, 3, 1114 (2020)
- 6 Shipu Xu, Huixia Fu, Ye Tian, Tao Deng, Jun Cai, Jinxiong Wu, Teng Tu, Tianran Li, Congwei Tan, Yan Liang, Congcong Zhang, Zhi Liu, Zhongkai Liu, **Yulin Chen**, Ying Jiang, Binghai Yan, Hailin Peng
"Exploiting Two-Dimensional Bi2O2Se for Trace Oxygen Detection"
Angewandte Chemie, 59,17938 (2020)
- 7 Shucui Sun, Yiwei Li, Yujie Chen, Xiang Xu, Lu Kang, Jingsong Zhou, Wei Xia, Shuai Liu, Meixiao Wang, Juan Jiang, Aiji Liang, Ding Pei, Kunpeng Zhao, Pengfei Qi, Xun Shi, Lidong Chen, Yanfeng Guo, Zhengguo Wang, **Yulin Chen**
"Electronic origin for the enhanced thermoelectric efficiency of Cu2Se"
Science Bulletin, 65, 1888 (2020)
- 8 S. A. Ekahana, Y. W. Li, Y. Sun, H. Namiki, H. F. Yang, J. Jiang, L. X. Yang, W. J. Shi, C. F. Zhang, D. Pei, C. Chen, T. Sasagawa, C. Felser, B. H. Yan, Z. K. Liu, and **Y. L. Chen**
"Topological Lifshitz transition of the intersurface Fermi-arc loop in NbIrTe4"
Physical Review B, 102, 085126 (2020)
- 9 J. J. P. Thompson, D. Pei, H. Peng, H. Wang, N. Channa, H. L. Peng, A. Barinov, N. B. M. Schröter, **Y. Chen** & M. Mucha-Kruczyński
"Determination of interatomic coupling between two-dimensional crystals using angle-resolved photoemission spectroscopy"
Nature Communications, 11, 3582 (2020)
- 10 Tao Deng, Cheng Chen, Hao Su, Junyi He, Aiji Liang, Shengtao Cui, Haifeng Yang, Chengwei Wang, Kui Huang, Chris Jozwiak, Aaron Bostwick, Eli Rotenberg, Donghui Lu, Makoto Hashimoto, Lexian Yang, Zhi Liu, Yanfeng Guo, Gang Xu, Zhongkai Liu, and **Yulin Chen**
"Electronic structure of the Si-containing topological Dirac semimetal CaAl2Si2"
Physical Review B 102, 045106 (2020)
- 11 X. Xu, Y. W. Li, S. R. Duan, S. L. Zhang, Y. J. Chen, L. Kang, A. J. Liang, C. Chen, W. Xia, Y. Xu, P. Malinowski, X. D. Xu, J.-H. Chu, G. Li, Y. F. Guo, Z. K. Liu, L. X. Yang, and **Y. L.**

Chen

- "Signature for non-Stoner ferromagnetism in the van der Waals ferromagnet Fe₃GeTe₂"*
Physical Review B 101, 201104(R) (2020)
- 12 Chaofan Zhang, Yiwei Li, Ding Pei, Zhongkai Liu, and **Y. Chen**
"Angle-Resolved Photoemission Spectroscopy Study of Topological Quantum Materials"
Annual Review of Materials Research, 50, 131 (2020)
- 13 Cuiying Pei, Yunyouyou Xia, Jiazhen Wu, Yi Zhao, Lingling Gao, Tianping Ying, Bo Gao, Nana Li, Wenge Yang, Dongzhou Zhang, Huiyang Gou, **Yulin Chen**, Hideo Hosono, Gang Li and Yanpeng Qi
"Pressure-Induced Topological and Structural Phase Transitions in an Antiferromagnetic Topological Insulator"
Chinese Physics Letter, 37, 066401 (2020)
- 14 Yekai Song, Zhuojun Li, Hui Li, Shujie Tang, Gang Mu, Lixuan Xu, Wei Peng, Dawei Shen, **Yulin Chen**, Xiaoming Xie and Mianheng Jiang
"Epitaxial growth and characterization of high quality Bi₂O₂Se thin films on SrTiO₃ substrates by pulsed laser deposition"
Nanotechnology, 31, 165704 (2020)
- 15 Han Peng, Xiang Gao, Yu He, Yiwei Li, Yuchen Ji, Chuhang Liu, Sandy A. Ekahana, Ding Pei, Zhongkai Liu, Zhixun Shen, and **Yulin Chen**
"Super resolution convolutional neural network for feature extraction in spectroscopic data"
Review of Scientific Instruments 91, 033905 (2020)
- 16 Chengwei Wang, Meixiao Wang, Juan Jiang, Haifeng Yang, Lexian Yang, Wujun Shi, Xiaofang Lai, Sung-Kwan Mo, Alexei Barinov, Binghai Yan, Zhi Liu, Fuqiang Huang, Jinfeng Jia, Zhongkai Liu and **Yulin Chen**
"Electronic structure and spatial inhomogeneity of iron-based superconductor FeS"
Chinese Physics B, 29, 047401 (2020)
- 17 Hao Su, Benchao Gong, Wujun Shi, Haifeng Yang, Hongyuan Wang, Wei Xia, Zhenhai Yu, Peng-Jie Guo, Jinhua Wang, Linchao Ding, Liangcai Xu, Xiaokang Li, Xia Wang, Zhiqiang Zou, Na Yu, Zengwei Zhu, **Yulin Chen**, Zhongkai Liu, Kai Liu, Gang Li, Yanfeng Guo
"Magnetic exchange induced Weyl state in a semimetal EuCd₂Sb₂"
APL Materials, 8, 011109 (2020)
- 18 T. Zhang, Y. J. Chen, S. C. Sun, L. Kang, L. X. Yang, Z. K. Liu, H. J. Zhang and **Y. L. Chen**
"Topological Surface Dirac Fermion in BiTeCl-Based Heterostructures"
Spin, 9, 1940015 (2020)
- 19 T Zhang, G Li, S C Sun, N Qin, L Kang, S H Yao, H M Weng, S K Mo, L Li, Z K Liu, L X Yang and **Y L Chen**
"Electronic structure of correlated topological insulator candidate YbB₆ studied by photoemission and quantum oscillation"
Chinese Physics B, 29, 017304 (2020)
- 20 Y. J. Chen, L. X. Xu, J. H. Li, Y. W. Li, C. F. Zhang, H. Li, Y. Wu, A. J. Liang, C. Chen, S. W. Jung, C. Cacho, H. Y. Wang, Y. H. Mao, S. Liu, M. X. Wang, Y. F. Guo, Y. Xu, Z. K. Liu, L. X. Yang, and **Y. L. Chen**
"Topological Electronic Structure and Its Temperature Evolution in Antiferromagnetic Topological Insulator MnBi₂Te₄"
Physical Review X, 9, 041040 (2019)
- 21 J.-R. Soh, F. de Juan, M. G. Vergniory, N. B. M. Schröter, M. C. Rahn, D. Y. Yan, J. Jiang, M. Bristow, P. A. Reiss, J. N. Blandy, Y. F. Guo, Y. G. Shi, T. K. Kim, A. McCollam, S. H. Simon, **Y. Chen**, A. I. Coldea, and A. T. Boothroyd

- "Ideal Weyl semimetal induced by magnetic exchange"*
Physical Review B 100, 201102(R)
- 22 D. F. Liu, A. J. Liang, E. K. Liu, Q. N. Xu, Y. W. Li, C. Chen, D. Pei, W. J. Shi, S. K. Mo, P. Dudin, T. Kim, C. Cacho, G. Li, Y. Sun, L. X. Yang, Z. K. Liu, S. S. P. Parkin, C. Felser, **Y. L. Chen**
"Magnetic Weyl semimetal phase in a Kagomé crystal"
Science 365, 1282 (2019)
- 23 Yan Liang, Yujie Chen, Yuanwei Sun, Shipu Xu, Jinxiong Wu, Congwei Tan, Xiaofeng Xu, Hongtao Yuan, Lexian Yang, **Yulin Chen**, Peng Gao, Jiandong Guo, and Hailin Peng
"Molecular Beam Epitaxy and Electronic Structure of Atomically Thin Oxyselenide Films"
Advanced Materials, 2019, 1901964 (2019)
- 24 H. F. Yang, L. X. Yang, Z. K. Liu, Y. Sun, C. Chen, H. Peng, M. Schmidt, D. Prabhakaran, B. A. Bernevig, C. Felser, B. H. Yan and **Y. L. Chen**
"Topological Lifshitz Transitions and Fermi Arc Manipulation in Weyl Semimetal NbAs"
Nature Communications, 10, 3478 (2019)
- 25 Jiaxin Zhang, Xiaochan Cai, Wei Xia, Aiji Liang, Junwei Huang, Chengwei Wang, Lexian Yang, Hongtao Yuan, **Yulin Chen**, Shilei Zhang, Yanfeng Guo, Zhongkai Liu, and Gang Li
"Unveiling Electronic Correlation and the Ferromagnetic Superexchange Mechanism in the van der Waals Crystal CrSiTe₃"
Physical Review Letter, 123, 047203 (2019)
- 26 X. Xu, J. Jiang, W. J. Shi, Vicky Süß, C. Shekhar, S. C. Sun, Y. J. Chen, S.-K. Mo, C. Felser, B. H. Yan, H. F. Yang, Z. K. Liu, Y. Sun, L. X. Yang, and **Y. L. Chen**
"Strong spin-orbit coupling and Dirac nodal lines in the three-dimensional electronic structure of metallic rutile IrO₂"
Physical Review B, 99, 195106 (2019)
- 27 Niels B. M. Schröter, Ding Pei, Maia G. Vergniory, Yan Sun, Kaustuv Manna, Fernando de Juan, Jonas A. Krieger, Vicky Süß, Marcus Schmidt, Pavel Dudin, Barry Bradlyn, Timur K. Kim, Thorsten Schmitt, Cephise Cacho, Claudia Felser, Vladimir N. Strocov, **Yulin Chen**
"Chiral topological semimetal with multifold band crossings and long Fermi arcs"
Nature Physics, 15, 759 (2019)
- 28 Z. Xiang, Y. Kasahara, T. Asaba, B. Lawson, C. Tinsman, Lu Chen, K. Sugimoto, H. Kawaguchi, Y. Sato, G. Li, S. Yao, **Y. L. Chen**, F. Iga, John Singleton, Y. Matsuda, L. Li
"Quantum Oscillations of Electrical Resistivity in an Insulator"
Science, 362, 65, (2018)
- 29 Cheng Chen, Meixiao Wang, Jinxiong Wu, Huixia Fu, Haifeng Yang, Zhen Tian, Teng Tu, Han Peng, Yan Sun, Xiang Xu, Juan Jiang, Niels B.M. Schröter, Yiwei Li, Ding Pei, Shuai Liu, Sandy A. Ekahana, Hongtao Yuan, Jiamin Xue, Gang Li, Jinfeng Jia, Zhongkai Liu, Binghai Yan, Hailin Peng and **Yulin Chen**
"Electronic Structures and Unusually Robust Bandgap in an Ultrahigh Mobility Layered Oxide Semiconductor, Bi₂O₂Se"
Science Advances, 4, eaat8355 (2018)
- 30 Haifeng Yang, Aiji Liang, Cheng Chen, Chaofan Zhang, Niels B.M. Schroeter and **Yulin Chen**
"Visualizing electronic structures of quantum materials by angle-resolved photoemission spectroscopy"
Nature Review Materials, 3, 341 (2018)
- 31 Enke Liu, Yan Sun, Nitesh Kumar, Lukas Muechler, Aili Sun, Lin Jiao, Shuo-Ying Yang, Defa Liu, Aiji Liang, Qiunan Xu, Johannes Kroder, Vicky Süß, Horst Borrmann, Chandra Shekhar, Zhaosheng Wang, Chuanying Xi, Wenhong Wang, Walter Schnelle, Steffen Wirth, **Yulin**

- Chen**, Sebastian Goennenwein, and Claudia Felser
"Giant anomalous Hall effect in a ferromagnetic Kagomé-lattice semimetal"
Nature Physics, 14, 1125 (2018)
- 32 Jianbo Yin, Zhenjun Tan, Hao Hong, Jinxiong Wu, Hongtao Yuan, Yujing Liu, Cheng Chen, Congwei Tan, Fengrui Yao, Tianran Li, **Yulin Chen**, Zhongfan Liu, Kaihui Liu, and Hailin Peng
"Ultrafast and highly-sensitive infrared photodetectors based on two-dimensional oxyselenide crystals"
Nature Communications, 9, 3311 (2018)
- 33 H. F. Yang, C. Chen, H. Wang, Z. K. Liu, T. Zhang, H. Peng, N.B.M. Schröter, S. A. Ekahana, J. Jiang, L. X. Yang, V. Kandyba, A. Barinov, C. Y. Chen, J. Avila, M. C. Asensio, H. L. Peng, Z. F. Liu, and **Y. L. Chen**
"Single Crystalline Electronic Structure and Growth Mechanism of Aligned Square Graphene Sheets"
APL Materials, 6, 036107 (2018)
- 34 Y. W. Li, J. Jiang, H. F. Yang, D. Prabhakaran, Z. K. Liu, L. X. Yang, **Y. L. Chen**
"Folded superstructure and degeneracy-enhanced band gap in a weak-coupling CDW system"
Physical Review B, 97, 115118 (2018)
- 35 J. Jiang, N. B. M. Schröter, S.-C. Wu, N. Kumar, C. Shekhar, H. Peng, X. Xu, C. Chen, H. F. Yang, C.-C. Hwang, S.-K. Mo, C. Felser, B. H. Yan, Z. K. Liu, L. X. Yang, and **Y. L. Chen**
"Observation of topological surface states and strong electron/hole imbalance in extreme magnetoresistance compound LaBi"
Physical Review Materials, 2, 024201 (2018)
- 36 Xin-Yi Yang, Guan-Yong Wang, Chen-Xiao Zhao, Zhen Zhu, Lu Dong, Ai-Min Li, Yang-Yang Lv, Shu-Hua Yao, Yan-Bin Chen, Dan-Dan Guan, Yao-Yi Li, Hao Zheng, Dong Qian, Canhua Liu, **Yu-lin Chen**, Jin-Feng Jia
"Surface Structure and Reconstructions of HgTe (111) Surfaces"
Chinese Physics Letter, 35, 026802 (2018)
- 37 Guang-Hao Hong, Cheng-Wei Wang, Juan Jiang, Cheng Chen, Sheng-Tao Cui, Hai-Feng Yang, Ai-Ji Liang, Shuai Liu, Yang-Yang Lv, Jian Zhou, Yan-Bin Chen, Shu-Hua Yao, Ming-Hui Lu, Yan-Feng Chen, Mei-Xiao Wang, Le-Xian Yang, Zhong-Kai Liu, **Yu-lin Chen**
"Measurement of the bulk and surface bands in Dirac line-node semimetal ZrSiS"
Chinese Physics B, 27, 017105 (2018)
- 38 M. R. Scholz, V. A. Rogalev, L. Dudy, F. Reis, F. Adler, J. Aulbach, L. J. Collins-McIntyre, L. B. Duffy, H. F. Yang, **Y. L. Chen**, T. Hesjedal, Z. K. Liu, M. Hoesch, S. Muff, J. H. Dil, J. Schäfer, R. Claessen
"The topological surface state of α -Sn on InSb(001) as studied by photoemission"
Physical Review B, 97, 075101 (2018)
- 39 Moon-Sun Nam, Benjamin H. Williams, **Yulin Chen**, Sonia Contera, Shuhua Yao, Minghui Lu, Yan-Feng Chen, Grigore A. Timco, Christopher A. Muryn, Richard E.P. Winpenny, Arzhang Ardavan
"How to probe the spin contribution to momentum relaxation in topological insulators"
Nature communications, in press (<https://www.nature.com/articles/s41467-017-02420-4>)
- 40 Yiwei Li, Yunyouyou Xia, Sandy Adhitha Ekahana1, Nitesh Kumar, Juan Jiang, Lexian Yang, Cheng Chen, Chaoxing Liu, Binghai Yan, Claudia Felser, Gang Li, Zhongkai Liu, **Yulin Chen**
"Topological origin of the type-II Dirac fermions in PtSe2"
Physical Review Materials, 1, 074202, (2017)

- 41 A.J. Liang, J. Jiang, M.X. Wang, Y. Sun, N. Kumar, C. Shekhar, C. Chen, H. Peng, C.W. Wang, X. Xu, H.F. Yang, S.T. Cui, G.H. Hong, Y.-Y. Xia, S.-K. Mo, Q. Gao, X.J. Zhou, L.X. Yang, C. Felser, B.H. Yan, Z.K. Liu, and **Y.L. Chen**
"Observation of the topological surface state in the nonsymmorphic topological insulator KHgSb"
***Physical Review B*, 96, 165143 (2017)**
- 42 C.W. Wang, Y.Y.Y. Xia, Z. Tian, J. Jiang, B.H. Li, S.T. Cui, H.F. Yang, A.J. Liang, X.Y. Zhan, G.H. Hong, S. Liu, C. Chen, M.X. Wang, L.X. Yang, Z. Liu, Q.X. Mi, G. Li, J.M. Xue, Z.K. Liu, and **Y.L. Chen**
"Photoemission study of the electronic structure of valence band convergent SnSe"
***Physical Review B*, 96, 165118 (2017)**
- 43 Fucong Fei, Xiangyan Bo, Rui Wang, Bin Wu, Juan Jiang, Dongzhi Fu, Ming Gao, Hao Zheng, **Yulin Chen**, Xuefeng Wang, Haijun Bu, Fengqi Song, Xiangang Wan, Baigeng Wang, and Guanghou Wang
"Nontrivial Berry phase and type-II Dirac transport in the layered material PdTe₂"
***Physical Review B*, 96, 041201(R) (2017)**
- 44 Qihang Zhang, Zhongkai Liu, Yan Sun, Haifeng Yang, Juan Jiang, Sung-Kwan Mo, Zahid Hussain, Xiaofeng Qian, Liang Fu, Shuhua Yao, Minghui Lu, Claudia Felser, Binghai Yan, **Yulin Chen**, Lexian Yang
"Lifshitz Transitions Induced by Temperature and Surface Doping in Type-II Weyl Semimetal Candidate Td-WTe₂"
***Physica Status Solidi, RRL*, 2017, 1700209 (2017)** Niels B M Schröter, Matthew D Watson, Liam B Duffy, Moritz Hoesch, **Yulin Chen**, Thorsten Hesjedal and Timur K Kim
"Emergence of Dirac-like bands in the monolayer limit of epitaxial Ge films on Au(111)"
***2D Materials*, 4, 031005 (2017)** Sandy Adhitha Ekahana; Shu-Chun Wu; Juan Jiang; Kenjiro Okawa; Dharmalingam Prabhakaran; Chan-Cuk Hwang; Sung-Kwan Mo; Takao Sasagawa; Claudia Felser; Binghai Yan; Zhongkai Liu; **Yulin Chen**
"Observation of nodal line in non-symmorphic topological semimetal InBi"
***New Journal of Physics*, 19, 065007 (2017)**
- 45 Jixiong Wu, Hongtao Yuan, Mengmeng Meng, Cheng Chen, Yan Sun, Zhuoyu Chen, Wenhui Dang, Congwei Tan, Yujing Liu, Jianbo Yin, Yubing Zhou, Shaoyun Huang, Hongqi Xu, Yi Cui, Harold Hwang, Zhongfan Liu, **Yulin Chen**, Binghai Yan, and Hailin Peng
"High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting Bi₂O₂Se"
***Nature Nanotechnology* 12, 530 (2017)**
- 46 C. Chen, X. Xu, J. Jiang, S.-C. Wu, Y. P. Qi, L. X. Yang, M. X. Wang, Y. Sun, N.B.M. Schröter, H. F. Yang, L. M. Schoop, Y. Y. Lv, J. Zhou, Y. B. Chen, S. H. Yao, M. H. Lu, Y. F. Chen, C. Felser, B. H. Yan, Z. K. Liu and **Y.L. Chen**
"Dirac Line-nodes and Effect of Spin-orbit Coupling in Non-symmorphic Critical Semimetal MSiS (M=Hf, Zr)"
***Phys. Rev. B*, 95, 125126 (2017)**
- 47 J. Jiang, Z. K. Liu, Y. Sun, H. F. Yang, R. Rajamathi, Y. P. Qi, L. X. Yang, C. Chen, H. Peng, C.-C. Hwang, S. Z. Sun, S.-K. Mo, I. Vobornik, J. Fujii, S. S. P. Parkin, C. Felser, B. H. Yan, **Y. L. Chen***
"Signature of type-II Weyl semimetal phase in MoTe₂"
***Nature Communications*, 8, 13973 (2017)**
- 48 Thorsten Hesjedal and **Yulin Chen***
"Topological insulators: Engineered heterostructures"
***Nature Materials*, 16, 3 (2017)**

- 49 L. Shen, M. X. Wang, S. C. Sun, J. Jiang, X. Xu, T. Zhang, Q. H. Zhang, S. H. Yao, M. H. Lu, Y. F. Chen, C. Felser, B. H. Yan, Z. K. Liu, L. X. Yang and **Y. L. Chen***
"Spectroscopic evidence for the gapless electronic structure in bulk ZrTe5"
***J. Electron Spectrosc.*, 219, 45 (2017)**
- 50 Yi Zhang, Zhongkai Liu, Bo Zhou, Yeongkwan Kim, Lexian Yang, Hyejin Ryu, Choongyu Hwang, **Yulin Chen**, Zahid Hussain, Zhi-Xun Shen, Sung-Kwan Mo
"ARPES study of the epitaxially grown topological crystalline insulator SnTe(111)"
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