

PUBLICATIONS

1. A. L. Levy, A. B. Sushkov, Fengguang Liu, Bing Shen, Ni Ni, H. D. Drew, and G. S. Jenkins, *Observation of dynamic chiral pumping in Weyl material TaAs*, manuscript in preparation (2018).
2. A. L. Levy, A. B. Sushkov, Fengguang Liu, Bing Shen, Ni Ni, H. D. Drew, and G. S. Jenkins, *Broadband THz Faraday magneto-optical study of Weyl semimetal TaAs*, manuscript in preparation (2018).
3. G. S. Jenkins, C. Lane, B. Barbiellini, A. B. Sushkov, R. L. Carey, F. Liu, J. W. Krizan, S. K. Kushwaha, Q. Gibson, T.-R. Chang, H.-T. Jeng, H. Lin, R. J. Cava, A. Bansil, and H. D. Drew, *Three-dimensional Dirac cone carrier dynamics in Na₃Bi and Cd₃As₂*, Phys. Rev. B 94, 085121. ([link](#))
4. A. B. Sushkov, G. S. Jenkins, T.-H. Han, Y. S. Lee, and H. D. Drew, *Infrared phonons as a probe of a spin-liquid states in herbertsmithite ZnCu₃(OH)₆Cl₂*, J. Phys.: Condes. Matter 29, 095802 (2017) (2016). ([link](#))
5. A. B. Sushkov, J. B. Hofmann, G. S. Jenkins, J. Ishikawa, S. Nakatsuji, S. Das Sarma, and H. D. Drew, *Optical evidence for a Weyl semimetal state in pyrochlore Eu₂Ir₂O₇*, Phys. Rev. B 92, 241108 (2015). ([link](#))
6. X. Cai, A. B. Sushkov, R. J. Suess, M. M. Jadidi, G. S. Jenkins, L. O. Nyakiti, R. L. Myers-Ward, S. Li, J. Yan, D. K. Gaskill, T. E. Murphy, H. D. Drew, and M. S. Fuhrer, *Sensitive room-temperature terahertz detection via the photothermoelectric effect in graphene*, Nature Nano advance online publication, (2014). ([link](#))
7. D. Schmadel, G. S. Jenkins, and H. D. Drew, *Proposal for a Graphene Plasmonic THz Emitter*, arXiv:1311.1605 [cond-mat] (2013). ([link](#))
8. G. S. Jenkins, D. C. Schmadel, A. B. Sushkov, H. D. Drew, M. Bichler, G. Koblmüller, M. Brahlek, N. Bansal, and S. Oh, *Dirac cone shift of a passivated topological Bi₂Se₃ interface state*, Phys. Rev. B 87, 155126 (2013). ([link](#))
9. G. S. Jenkins, A. B. Sushkov, D. C. Schmadel, M.-H. Kim, M. Brahlek, N. Bansal, S. Oh, and H. D. Drew, *Giant quantized plateau in the THz Faraday angle in gated Bi₂Se₃*, Phys. Rev. B 86, 235133 (2012). ([link](#))
10. Jun Yan, M.-H. Kim, J. A. Elle, A. B. Sushkov, G. S. Jenkins, H. M. Milchberg, M. S. Fuhrer, and H. D. Drew, *Dual-gated bilayer graphene hot-electron bolometer*, Nature Nanotechnology 7, 472–478 (2012) ([link](#)).
11. M. Rinzan, G. Jenkins, H. D. Drew, S. Shafranjuk, and P. Barbara, *Carbon Nanotube Quantum Dots As Highly Sensitive Terahertz-Cooled Spectrometers*, Nano Letters 12, no. 6 (2012): 3097–3100. ([link](#)).
12. G. S. Jenkins, D. C. Schmadel, A. B. Sushkov, G. D. Gu, H. Kontani, and H. D. Drew, *Terahertz Hall Measurements On Optimally Doped Single Crystal Bi₂Sr₂CaCu₂O_{8+x}*, Phys. Rev. B 82, 094518(2010) ([link](#)).
13. G. S. Jenkins, A. B. Sushkov, D. C. Schmadel, N. P. Butch, P. Syers, J. Paglione, and H. D. Drew, *Terahertz Kerr and Reflectivity Measurements on the Topological Insulator Bi₂Se₃*, Phys. Rev. B 82, 125120 (2010) ([link](#)).
14. G. S. Jenkins, D. C. Schmadel, and H. D. Drew, *Simultaneous measurement of circular dichroism and Faraday rotation at terahertz frequencies utilizing electric field sensitive detection via polarization modulation*, Rev. Sci. Instrum. 81, 083903 (2010) ([link](#)).
15. A. B. Sushkov, G. S. Jenkins, D. C. Schmadel, N. P. Butch, J. Paglione, and H. D. Drew, *Far infrared cyclotron resonance and Faraday effect in low-doped Bi₂Se₃*, Phys. Rev. B 82, 125110(2010) ([link](#)).
16. N. P. Butch, K. Kirshenbaum, P. Syers, A. B. Sushkov, G. S. Jenkins, H. D. Drew, and J. Paglione, *Search for topological surface conduction in ultrahigh mobility Bi₂Se₃ crystals*, Phys. Rev. B 81, 241301 (2010) ([link](#)).

17. G. S. Jenkins, D. C. Schmadel, P. Fournier, Hiroshi Kontani, and H. D. Drew, "*Origin of the anomalous Hall Effect in overdoped n-type cuprates: current vertex corrections due to antiferromagnetic fluctuations*", Phys. Rev. B **81**, 024508 (2010) ([link](#)).
18. G. S. Jenkins, D. C. Schmadel, P. L. Bach, R. L. Greene, X. Bechamp-Laganriere, G. Roberge, P. Fournier, and H. D. Drew, "*Terahertz magnetotransport measurements in underdoped Pr_{2-x}Ce_xCuO₄ and comparison with angle-resolved photoemission*", Phys. Rev. B **79**, 224525 (2009) ([link](#)).
19. D. C. Schmadel, G. S. Jenkins, J. J. Tu, G. D. Gu, Hiroshi Kontani, and H. D. Drew, "*Infrared Hall conductivity in optimally doped Bi₂Sr₂CaCu₂O_{8+x}: Drude behavior examined by experiment and fluctuation-exchange-model calculations*", Phys. Rev. B **75**, 140506 (2007) ([link](#)).
20. G. S. Jenkins, *FIR Hall Effect in Single Crystal Bi₂Sr₂CaCu₂O_{8+x}*, Ph.D. thesis, University of Maryland at College Park, (2003) ([link](#)).
21. J. Cerne, M. Grayson, D. C. Schmadel, G. S. Jenkins, H. D. Drew, R. Hughes, A. Dabkowski, J. S. Preston, and P.-J. Kung, "*Infrared Hall Effect in High- T_c Superconductors: Evidence for Non-Fermi-Liquid Hall Scattering*", Phys. Rev. Lett. **84**, 3418-3421 (2000) ([link](#)).
22. J. Cerne, D. C. Schmadel, M. Grayson, G. S. Jenkins, J. R. Simpson, and H. D. Drew, "*Mid-infrared Hall effect in thin-film metals: Probing the Fermi surface anisotropy in Au and Cu*", Phys. Rev. B **61**, 8133-8140 (2000) ([link](#)).

INVITED TALKS AND CONFERENCE PRESENTATIONS

1. G. S. Jenkins, A. B. Sushkov, R. L. Carey, H. D. Drew, J. W. Krizan, S. K. Kushwaha, R. J. Cava, T.-R. Chang, H.-T. Jeng, H. Lin, C. Lane, B. Barbiellini, and A. Bansil, *Electronic structure of Na₃Bi near the Dirac point: Optical measurements*, in Bulletin of the American Physical Society March Meeting 2016. ([link](#))
2. A. B. Sushkov, J. B. Hofmann, G. S. Jenkins, H. D. Drew, J. Ishikawa, and S. Nakatsuji, *Optical evidence for a Weyl semimetal state in pyrochlore Eu₂Ir₂O₇*, in Bulletin of the American Physical Society March Meeting 2016. ([link](#))
3. C. Lane, G. S. Jenkins, H. D. Drew, B. Barbiellini, A. Bansil, J. W. Krizan, S. K. Kushwaha, Q. D. Gibson, and R. J. Cava, *Electronic structure of Na₃Bi near the Dirac point: Theory*, in Bulletin of the American Physical Society March Meeting 2016. ([link](#))
4. G. S. Jenkins, D. C. Schmadel, A. B. Sushkov, R. L. Carey, H. D. Drew, J. W. Krizan, S. K. Kushwaha, Q. D. Gibson, and R. J. Cava, *Gated Terahertz Magneto-optical Measurements of 3D Dirac Semimetals*, in American Physical Society March Meeting 2015. ([link](#))
5. A. B. Sushkov, G. S. Jenkins, T.-H. Han, and Y. Lee, *Infrared phonons as a probe of spin liquid in kagome antiferromagnet Herbertsmithite*, in American Physical Society March Meeting 2015. ([link](#))
6. C. Xinghan, A. B. Sushkov, R. J. Suess, M. M. Jadidi, G. S. Jenkins, J. Yan, D. K. Gaskill, T. E. Murphy, H. D. Drew, and M. S. Fuhrer, *Sensitive Room-Temperature Terahertz Detection via Photothermoelectric Effect in Graphene*, in American Physical Society March Meeting 2014. ([link](#))
7. A. Sushkov, C. Xinghan, D. C. Schmadel, G. S. Jenkins, H. D. Drew, and M. Fuhrer, *Graphene plasmonic THz detectors*, in American Physical Society March Meeting 2014 ([link](#))
8. X. Cai, R. J. Suess, A. Sushkov, G. Jenkins, M.-H. Kim, J. Yan, H. D. Drew, T. E. Murphy, and M. S. Fuhrer, *Sensitive bolometry using hot-electron thermoelectric effect in graphene devices*, in American Physical Society March Meeting 2013, Baltimore, MD. ([link](#))
9. R. J. Suess, X. Cai, A. Sushkov, G. Jenkins, M.-H. Kim, J. Yan, H. D. Drew, T. E. Murphy, and M. S. Fuhrer, *Temporal characterization of hot-electron thermoelectric effect in monolayer graphene devices*, in American Physical Society March Meeting 2013, Baltimore, MD. ([link](#))
10. D. Drew, X. Cai, A. Sushkov, G. Jenkins, M. Fuhrer, L. Nyakiti, V. D. Wheeler, R. L. Myers-Ward, N. Y. Garces, J. Eddy, and D. K. Gaskill, *Single layer graphene plasmonic detector for broadband THz spectroscopy*, in American Physical Society March Meeting 2013, Baltimore, MD. ([link](#))
11. G. S. Jenkins, A. B. Sushkov, D. C. Schmadel, M.-H. Kim, H. D. Drew, G. Koblmüller, M. Bichler, N. Bansal, M. Brahlek, and S. Oh, *Dirac cone shift and potential fluctuations in a passivated In₂Se₃/Bi₂Se₃ topological interface state*, in American Physical Society March Meeting 2013, Baltimore, MD. ([link](#))

12. D. C. Schmadel, M.-H. Kim, A. B. Sushkov, G. S. Jenkins, J. D. Koralek, J. E. Moore, J. Orenstein, Y. Ohno, H. Ohno, and H. D. Drew, *Helicity-dependent photocurrent in a (110) GaAs quantum well stack*, in American Physical Society March Meeting 2013, Baltimore, MD. ([link](#))
13. G. S. Jenkins, H. D. Drew, *Probing topological states of matter at terahertz frequencies*, Quantum Hall metrology seminar, NIST, Gaithersburg. MD (2013).
14. G. S. Jenkins, *Optical experiments in strong topological insulators*, Aspen Center for Physics, New Topological States of Quantum Matter Summer Workshop, Aspen, CO. (2012)
15. G. S. Jenkins, A. B. Sushkov, D. C. Schmadel, M.-H. Kim, K. M. Bhamidipati, P. Syers, J. Paglione, H. D. Drew, N. P. Butch, J. G. Analytis, and I. R. Fisher, *Terahertz Kerr Measurements of the Surface States on n- and p-type Bi₂Se₃ Topological Insulators*, in Bulletin of the American Physical Society March Meeting 2012, Boston, MA ([link](#))
16. J. Yan, M.-H. Kim, A. B. Sushkov, H. M. Milchberg, H. D. Drew, and M. S. Fuhrer, *Bolometric photo response of dual-gated bilayer graphene*, in Bulletin of the American Physical Society March Meeting 2012, Boston, MA. ([link](#))
17. A. B. Sushkov, C. Xinghan, D. C. Schmadel, G. S. Jenkins, H. D. Drew, D. K. Gaskill, and M. S. Fuhrer, *Graphene plasmonic THz detectors*, in Bulletin of the American Physical Society March Meeting 2012, Boston, MA. ([link](#))
18. M.-H. Kim, J. Yan, A. B. Sushkov, G. S. Jenkins, H. M. Milchberg, M. S. Fuhrer, and H. D. Drew, *GHz response of bilayer graphene hot electron bolometer*, in Bulletin of the American Physical Society March Meeting 2012, Boston, MA. ([link](#))
19. G. S. Jenkins, A. B. Sushkov, D.C. Schmadel, N.P. Butch, P. Syers, J. Paglione, M.-H. Kim, J.G. Analytis, I.R. Fisher, H.D. Drew, *Terahertz Kerr and Reflectivity Measurements on the Topological Insulator Bi₂Se₃*, American Physical Society March Meeting 2011, Dallas, TX.
20. Andrei Sushkov, G. S. Jenkins, N.P. Butch, J. Paglione, K.R. Choi, S.-W. Cheong, H.D. Drew, *Optical properties of novel topological insulators*, American Physical Society March Meeting 2011, Dallas, TX.
21. M.-H. Kim, J. Yan, G.S. Jenkins, A.B. Sushkov, D.C. Schmadel, M.S. Fuhrer, J. Melngailis, H.D. Drew, *Photoconductive response study on a dual-gated bilayer graphene*, American Physical Society March Meeting 2011, Dallas, TX.
22. Mohamed Rinzan, G.S. Jenkins, H.D. Drew, S. Shafranjuk, P. Barbara, *CNT Quantum dots as Terahertz detectors*, American Physical Society March Meeting 2011, Dallas, TX.
23. G. S. Jenkins, D.C. Schmadel, I. Tsukada, G.D. Gu, H. Kontani, and H.D. Drew, *IR and dc magneto-transport and ARPES compared: p-type cuprates*, American Physical Society March Meeting 2010, Portland, OR.
24. G. S. Jenkins, D.C. Schmadel, P.L. Bach, R. L. Greene, H. Kontani, X. Bechamp-Laganriere, G. Roberge, P. Fournier, and H.D. Drew, *IR and dc magneto-transport and ARPES compared: n-type cuprates*, American Physical Society March Meeting 2010, Portland, OR.
25. G. S. Jenkins, D.C. Schmadel, R.L. Greene, P. Fournier, Hiroshi Kontani, and H.D. Drew, *IR Hall measurements in overdoped Pr_{2-x}Ce_xCuO₄: evidence for magnon induced current-vertex corrections*, American Physical Society March Meeting 2009, Pittsburg, PA.
26. G. S. Jenkins, D.C. Schmadel, R.L. Greene, P. Fournier, Hiroshi Kontani, and H.D. Drew, *Fermi surface reconstruction in e-doped cuprates: IR Hall measurements in underdoped Pr_{2-x}Ce_xCuO₄*, American Physical Society March Meeting 2009, Pittsburg, PA.
27. H. D. Drew, G. S. Jenkins, D.C. Schmadel, R.L. Greene, I. Tsukada, *Evidence for Fermi surface reconstruction in h-doped cuprates: IR Hall measurements in underdoped La_{2-x}Sr_xCuO₄*, American Physical Society March Meeting 2009, Pittsburg, PA.
28. G. S. Jenkins, D.C. Schmadel, R.L. Greene, P. Fournier, Hiroshi Kontani, and H.D. Drew, *"Origin of the anomalous Hall Effect in High-Tc cuprates: IR Hall angle, ARPES, and current vertex corrections from fluctuating magnons"*, Johns Hopkins University Physics Seminar, Jan 26, 2009.

29. G. S. Jenkins, D.C. Schmadel, R.L. Greene, P. Fournier, Hiroshi Kontani, and H.D. Drew, "*IR Hall and ARPES compared: arcs and pockets, gaps and pseudogaps*", Workshop on Cuprate Fermiology by UMD CNAM/ICAM, November 2008.
30. G. S. Jenkins, D.C. Schmadel, R.L. Greene, P. Fournier, and H.D. Drew, "*Fermi Surface Reconstruction in Cuprates: ARPES, Quantum Oscillations, and IR Hall measurements*", University of Maryland guest lecturer for course PHYS838C: "Special Topics in Experimental Solid State Physics: Superconductivity, Quantum Materials and Nanoscience Seminar", September 2008
31. G.S. Jenkins, D.C. Schmadel, P. Bach, R.L. Greene, and H.D. Drew, "*Evidence of Fermi Surface Reconstruction in $Pr_{2-x}Sr_xCuO_{4+x}$* ", American Physical Society March Meeting 2008, New Orleans, LA.
32. G. S. Jenkins, D. C. Schmadel, A. B. Sushkov, G. D. Gu, and H. D. Drew, "*FIR Hall Effect in Single Crystal $Bi_2Sr_2CaCu_2O_{8+x}$* ", American Physical Society March Meeting 2006, Baltimore, MD
33. G. S. Jenkins, D. C. Schmadel, A. B. Sushkov, G. D. Gu, "*IR Hall Angle Response of Single Crystal $Bi_2Sr_2CaCu_2O_{8+x}$* ", American Physical Society March Meeting 2003, Austin, TX
34. G. S. Jenkins, H. D. Drew, R. S. Decca, B. Maiorov, E. Osquiguil, R. Hughes, J. S. Preston, "*Far-infrared study of $YBa_2Cu_3O_{6.4}$ films near the metal-insulator transition*", American Physical Society March Meeting 2001, Seattle, WA.
35. G. S. Jenkins, H. D. Drew, R. S. Decca, B. Maiorov, E. Osquiguil, S. C. de Bariloche, R. Hughes, J. S. Preston, "*Optical studies of the metal-insulator transition in photodoped $YBa_2Cu_3O_{6+x}$ films*", American Physical Society March Meeting 2000, Minneapolis, MN
36. G. S. Jenkins, H. D. Drew, R. S. Decca, B. Maiorov, E. Osquiguil, S. C. de Bariloche, R. Hughes, J. S. Preston, "*Optical properties of the metal-insulator transition in photodoped $YBa_2Cu_3O_{6+x}$ films*", American Physical Society Centennial Meeting 1999, Atlanta, GA.
37. G. S. Jenkins, R. A. Webb, "*Single Electron Transistor measurements: sputtered AuPd dirty conductors and Anderson localization*", Center for Superconductivity Center, University of Maryland at College Park 1996