

BIBLIOGRAPHY:

1. H. W. Jiang and A. J. Dahm, CONFERENCE ARTICLE
"Mobility of Electrons on Helium Films"
The Proceedings of the 18th International Conference on Low-Temperature Physics
Jpn. J. Appl. Phys. 26, 745 (1987).
2. H. W. Jiang, M. A. Stan and A. J. Dahm, CONFERENCE ARTICLE (INVITED)
"Phase Diagrams and Melting in a Screened Two-Dimensional System: Electron on
Helium Films"
The Proceedings of the 7th International Conference on Electronic Properties of Two-Dimensional
Systems
Surface Sci. 196, 1 (1988).
3. H. W. Jiang and A. J. Dahm, RESEARCH ARTICLE
"Conduction Properties of a New Two-Dimensional Sliding Charge-Density Wave"
Phys. Rev. Lett. 62, 1396 (1989).
4. H. W. Jiang and A. J. Dahm, CONFERENCE ARTICLE
"Conduction Properties of Wigner Crystallization Induced Two-Dimensional Sliding Charge-
Density Wave"
The Proceedings of the 8th International Conference on Electronic Properties of Two-Dimensional
Systems
Surface Sci. 229, 352 (1990).
5. H. W. Jiang and A. J. Dahm, CONFERENCE ARTICLE
"A Model Weakly-Pinned Charge-Density Wave: Electrons on a Helium Film"
The Proceedings of the 19th International Conference on Low-Temperature Physics
Physica B. 166, 839 (1990).
6. H. W. Jiang, H. L. Stormer, D. C. Tsui, RESEARCH ARTICLE
L. N. Pfeiffer and K. W. West,
"Transport Anomalies in the Lowest Landau Level of Two-Dimensional Electrons at Half-
Filling"
Phys. Rev. B40, 12013, (1989).
7. G. S. Boebinger, H. W. Jiang, L. N. Pfeiffer RESEARCH ARTICLE
and K. W. West,
"Magnetic-Field-Driven Destruction of Quantum Hall States in a Double Quantum
Well"
Phys. Rev. Lett. 64, 1793 (1990).
8. H. W. Jiang, R. L. Willett, H. L. Stormer, RESEARCH ARTICLE
D. C. Tsui, L. N. Pfeiffer and K. W. West,
"Quantum Liquid Versus Electron Solid Around *=1/5 Landau Level Filling"

Phys. Rev. Lett. 65, 633 (1990).

9. A. J. Dahm and H. W. Jiang, CONFERENCE ARTICLE (INVITED)
"Two-Dimensional Electron Arrays on a Helium Film"
Sov. J. Low Temp. Phys. 17, 592 (1992).

10. H. W. Jiang, H. L. Stormer, D. C. Tsui, RESEARCH ARTICLE
L. N. Pfeiffer and K. W. West,
"Magneto-Transport Studies of the Insulating Phase around $\approx=1/5$ Landau-Level
Filling"
Phys. Rev. B44, 8107, (1991).

11. H. W. Jiang, H. L. Stormer, D. C. Tsui, CONFERENCE ARTICLE (INVITED)
L. N. Pfeiffer and K. W. West,
"Transport Measurements on the Electronic Phases Around $\approx=1/5$ Landau Level
Filling"
The Proceedings of the 9th International Conference on Electronic Properties of Two-
Dimensional Systems
Surface Sci. 263, 18 (1992).

12. H. W. Jiang, C. E. Johnson and K. L. Wang, RESEARCH ARTICLE
"Giant Negative Magneto-Resistance of a Degenerate Two-Dimensional Electron Gas in Variable
Range Hopping Regime"
Phys. Rev. B46, (Rapid Communication), 12830 (1992).

13. H. W. Jiang, L. W. Engel, D. C. Tsui, RESEARCH ARTICLE
H. L. Stormer, L. N. Pfeiffer and K. W. West,
"Transport-Properties of a Two-Dimensional Electron System at Even-Denominators Fillings of
the Lowest Landau Level"
Phys. Rev. B46, 10468 (1992).

14. C. E. Johnson, H. W. Jiang, K. Holzer, RESEARCH ARTICLE
R. B. Kaner, F. Diederich and R. L. Whetten
"Upper Critical Field - Temperature Phase Diagram of Alkali- Intercalated C60 Superconductors"
Phys. Rev. B46, (Rapid Communication), 5880 (1992).

15. A. J. Dahm and H. W. Jiang CONFERENCE ARTICLE
"Properties of a Pinned Electron Solid on a Liquid Helium Film"
Journal De Physique IV (Colloque) 3, 39 (1993).

16. C. E. Johnson and H. W. Jiang, RESEARCH ARTICLE
"Observation of a Nondivergent Hall Coefficient for a Localized, Two-Dimensional Electron Gas"
Phys. Rev. B48, (Rapid Communication), 2823 (1993).

17. H. W. Jiang, C. E. Johnson, K. L. Wang RESEARCH ARTICLE
and S. T. Hannahs,

"Observation of Magnetic-Field-Induced Delocalization: Transition from Anderson Insulator to Quantum Hall Conductor"
Phys. Rev. Lett., 71, 1439 (1993).

18. Y. Carmi, X. Hu, A. J. Dahm and H. W. Jiang CONFERENCE ARTICLE
" Giant Negative-Magnetoresistance in Variable-Range Hopping"
The Proceedings of the 20th International Conference on Low-Temperature Physics
Physica B194, 1103 (1994).
19. H. W. Jiang, C. E. Johnson, K. L. Wang CONFERENCE ARTICLE (INVITED)
and S. T. Hannahs,
"Magnetic-field-induced Transition: from an Anderson Insulator to a Quantum Hall Conductor"
The Proceedings of the 20th International Conference on Low-Temperature Physics
Physica B 97, 449 (1994).
20. H. W. Jiang, I. Glozman, C. E. Johnson, CONFERENCE ARTICLE
K. L. Wang, and S. T. Hannahs,
"Magnetic-field-induced Transition: from an Anderson Insulator to a Quantum Hall Conductor"
The Proceedings of the 9th International Conference on Electronic Properties of Two-
Dimensional Systems
Surface Sci. 305, 120 (1994).
21. X. Hu, Y. Carmi, A. J. Dahm, and H. W. Jiang, CONFERENCE ARTICLE
"Screening of the Coulomb gap in Two-Dimensional Variable-Range-Hopping"
High Magnetic Fields in the Physics of Semiconductors, p. 228
edited by D. Heimen, (World Scientific, Singapore, 1994).
22. Y. M. Kim, G. Mihaly, H. W. Jiang, and G. Gruner, CONFERENCE ARTICLE
"The Low Temperature Spin Density Wave Transport - Effects of Magnetic Field in
(TMTSF)(2)PF₆ and Disorder in (TMTSF)(2)XS."
Synthetic Metals, 70,1287 (1995).
23. I. Glozman, C. E. Johnson, and H. W. Jiang, RESEARCH ARTICLE
"Fate of the Delocalized States in a Vanishing Magnetic Field"
Phys. Rev. Lett. 74, 594 (1995).
24. L. Wong, H. W. Jiang, N. Trivedi and E. Palm, RESEARCH ARTICLE
"Disorder-Tuned Transition between Quantum Hall liquid and Hall-Insulator"
Phys. Rev. B51, 18033 (Rapid Communication), (1995).
25. F. W. Van Keuls, X. Hu, A. J. Dahm, and H. W. Jiang RESEARCH ARTICLE
"Screening of the Coulomb gap"
Solid State Comm. 96, 65 (1995).
26. I. Glozman, C. E. Johnson, and H. W. Jiang, RESEARCH ARTICLE
"Glozman, Johnson, and Jiang Reply"

Phys. Rev. Lett. 75, 2249 (1995).

27. I. Glozman, C. E. Johnson, L. W. Wong, and H.W. Jiang, CONFERENCE ARTICLE (INVITED) "An Experimental View of the Global Phase Diagram in the Quantum Hall Regime" Proceeding of the 6th International Conference on Hopping and Related Phenomena, p327, edited by O. Millo and Z. Ovadyahu, (Jerusalem, Israel,1995).
28. I. Glozman, C. E. Johnson, and H. W. Jiang, RESEARCH ARTICLE "Path-Dependent Conductivity in the Regime of Floating Delocalized States" Phys. Rev. B52, (Rapid Communication), 14348, (1995).
29. L. W. Wong, and H. W. Jiang, and W. Schaff, RESEARCH ARTICLE "Universality and Phase Diagram around Half-Filled Landau Level" Phys. Rev. B54, (Rapid Communication), 17323 (1996).
30. F. W. Van Keuls, X. L. Hu, A. J. Dahm, and H. W. Jiang, CONFERENCE ARTICLE "The Columb gap and the transition to Mott hopping" The Proceedings of the 10th International Conference on Electronic Properties of Two-Dimensional Systems Surface Sci. 362, 945 (1996).
31. L. W. Wong, H. W. Jiang, and E. Palm, and W. Schaff, RESEARCH ARTICLE "Termination of spin-resolved integer quantum Hall effect" Phys. Rev. B55, (Rapid Communication), R7343, (1997).
32. F. W. Van Keuls, X. L. Hu, H. W. Jiang, and A. J. Dahm, RESEARCH ARTICLE "Screening of the Coulomb interaction in two-dimensional variable-range hopping" Phys. Rev. B56, 1161 (1997).
33. F. W. Van Keuls, H. Mathur, H. W. Jiang, and A. J. Dahm, RESEARCH ARTICLE "Localization scaling relation in two dimensions: comparison with experiment" Phys. Rev. B56, 13263 (1997).
34. S. C. Dultz, H. W. Jiang, and W. J. Schaff, RESEARCH ARTICLE "Absence of Floating Delocalized States in a Two-Dimensional Hole Gas" Phys. Rev. B58, Rapid Communications, R7532 (1998).
35. L. W. Wong, S. J. Cai, R. Li, K. L. Wang, and H. W. Jiang, RESEARCH ARTICLE "Magnetotransport Study on the Two-Dimensional Electron Gas in AlGaN/GaN Heterostructure" Appl. Phys. Lett., 73, 1391 (1998).
36. Y. Kim, F. M. Munteanu, C. H. Perry, J. A. Simmons, X. Y. Lee, and H. W. Jiang, CONFERENCE ARTICLE "Magneto-Optical Studies of New Bound States in GaAs/AlGaAs Single Heterojunctions"

Proceedings of Physical Phenomena at High Magnetic Fields-III, World Scientific, Edited Z. Fisk, L. Gor'kov, & R. Schrieffer (1999).

37. X. Y. Lee, H. W. Jiang, Y. Kim, and W. J. Schaff RESEARCH ARTICLE
"Observation of a Discontinuous Red-Shift in the Emission Spectrum of a Two-Dimensional Electron Gas"
Solid State Communications, 113, 63 (1999).
38. X. Y. Lee, H. W. Jiang, and W. J. Schaff RESEARCH ARTICLE
"Topological Phase Diagram of a Two-Subband Electron System"
Phys. Rev. Lett., 83, 3701 (1999).
39. Y. J. Wang, Y. A. Leem, B. D. McCombe, X. G. Wu, RESEARCH ARTICLE
F. M. Peeters, E. D. Jones, J. R. Reno, X. Y. Lee, and H. W. Jiang
"Strong resonant intersubband magnetopolaron effect in heavily modulation-doped GaAs/AlGaAs single quantum wells at high magnetic fields"
Physica E Low-Dimensional Systems & Nanostructures, 6, 195 (2000).
40. S. C. Dultz, and H. W. Jiang RESEARCH ARTICLE
"Thermodynamic Signature of a Two-Dimensional Metal-Insulator Transition"
Phys. Rev. Lett., 84, 4689 (2000).
41. R. Vrijen, E. Yablonovitch, K. Wang, H. W. Jiang, RESEARCH ARTICLE
A. Balandin, V. Roychowdhury, T. Mor, and D. DiVincenzo
"Electron Spin Resonance Transistors for Quantum Computing in Silicon-Germanium Heterostructure"
Phys. Rev. A 62, 012306 (2000).
42. H. W. Jiang, and E. Yablonovitch, RESEARCH ARTICLE
"Gate-Controlled Electron Spin Resonance in GaAs/AlGaAs Heterostructures",
Phys. Rev. B64, Rapid Communications, R041307 (2001).
43. Y. J. Wang, Y. A. Leem, B. D. McCombe, F. M. Peeters, E. D. Jones, J. R. Reno, RESEARCH ARTICLE
X. Y. Lee and H. W. Jiang,
"Strong Tree-Level Resonant Magnetopolaron Effect due to the Intersubband Coupling in Heavily Modulation-Doped GaAs/AlGaAs Single Quantum Wells at High Magnetic Fields",
Phys. Rev. B64, Rapid Communications, R161303 (2001).
44. C. Hillman, and H. W. Jiang, RESEARCH ARTICLE
"Magnetic Field Pinning of a Dynamic Electron-Spin-Resonance Line in a GaAs/AlGaAs Heterostructure",
Phys. Rev. B64, Rapid Communications, R201308 (2001).
45. Y. Kim, and H. W. Jiang, RESEARCH ARTICLE
"Positively Charged Magnetoexciton Transition in a p-doped GaAs/AlGaAs Single Heterojunction",

Appl. Phys. Lett. 81, 2020 (2002).

46. S. C. Dultz, and H. W. Jiang, CONFERENCE ARTICLE (INVITED)
"Thermodynamic compressibility measurements in the context of 2D metal- insulator transition"
Conference proceedings: "Quantum Transport and Quantum Coherence", Tokyo, 2002,
Journal of Physical Society of Japan, 72, 49 (2003).
47. M. Rahimi, M. Sakr, S.V. Kravchenko, S. Dultz, H.W. Jiang, RESEARCH ARTICLE
" Compressibility of a Two-Dimensional Hole Gas in a Tilted Magnetic Field",
Phys. Rev. B 67, Rapid Communications, R081302, (2003).
48. I. Martin, D. Mozyrsky, and H. W. Jiang, RESEARCH ARTICLE
"A scheme for Electrical Detection of Spin Resonance Signal from a Single-Electron Trap",
Phys. Rev. Lett. 90, 18301 (2003).
49. E. Yablonovitch, H. W. Jiang, REVIEW ARTICLE
H. Kosaka, H. Robinson, D. Sethu Rao, and T. Szkopek,
"Optoelectronic Quantum Telecommunications Based on Spins in Semiconductors"
Special Issue on Spintronics Technology, Proceedings of the IEEE, 91, 727 (2003).
50. S. C. Dultz, B. Alavi, H. W. Jiang, RESEARCH ARTICLE
"Thermodynamic Compressibility of a Two-Dimensional Electron System: Signature of a Droplet State",
arXiv:cond-mat/0210584 (2003).
51. M. Xiao, I. Martin, and H. W. Jiang, RESEARCH ARTICLE
" Probing Spin State of a Single Electron Trap by Random Telegraph Signal",
Phys. Rev. Lett. 93, 18301 (2003).
52. D.R. Faulhaber, and H.W. Jiang, RESEARCH ARTICLE
"Orbital Magnetization Measurement of the Quantum Hall to Insulator Transition",
arXiv:cond-mat/0309087 (2003).
53. M. Xiao, I. Martin, E. Yablonovitch, and H. W. Jiang, RESEARCH ARTICLE
"Electrical Detection of the Spin Resonance of a Single Electron in a Silicon Field-Effect Transistor"
Nature 430, 435 (2004).
54. M. Sakr, E. Croke, E. Yablonovitch, and H. W. Jiang, RESEARCH ARTICLE
" Fabrication and Characterization of Electrostatic Si/SiGe Quantum Dots with an Integrated Read-out Channel"
Appl. Phys. Lett. 87, 223104 (2005).
55. D. Sethu, Rao, T. Szkopek, E. Yablonovitch, and H. W. Jiang, RESEARCH ARTICLE
"Single Photoelectron Trapping, Storage, and Detection in a One-Electron Quantum Dot"
J. of Appl. Phys., 98, 114507 (2005).

56. X. C. Zhang, D. R. Faulhaber, and H. W. Jiang, RESEARCH ARTICLE
" Multiple Phases with the Same Quantized Hall Conductance in a Two-Subband System",
Phys. Rev. Lett. 95, 216801 (2005).
57. D.R. Faulhaber and H.W. Jiang, RESEARCH ARTICLE
" Nonequilibrium Magnetization of a Two-Dimensional Electron Gas in a Static Magnetic Field"
Phys. Rev. B 72, 233308 (2005).
58. X.C. Zhang, I. Martin, and H.W. Jiang, RESEARCH ARTICLE
"Landau level anticrossing manifestations in the phase-diagram topology of a two-subband system"
Phys. Rev. B 74, 073301 (2006).
59. Gavin D. Scott, Kelly S. Chichak, Andrea J. Peters, RESEARCH ARTICLE
J. Fraser Stoddart, and H. W. Jiang,
"Mechanism of enhanced rectification in unimolecular Borromean ring devices"
Phys. Rev. B74, 113404 (2006).
60. G. D. Scott, M. Xiao, E. Croke, E. Yablonovitch, and H. W. Jiang, RESEARCH ARTICLE
" Sputtered gold as an effective Schottky gate for strained Si/SiGe nanostructures",
Appl. Phys. Lett. 90, 032110 (2007)
61. X.C. Zhang, G. D. Scott, and H.W. Jiang, RESEARCH ARTICLE
" NMR Probing of Spin Excitations in the Ring-Like Structure of a Two-Subband System"
Phys. Rev. Lett., 98, 246802 (2007).
62. H. W. Jiang, E. Yablonovitch, M. Xiao, M. R. Sakr, G. D. Scott, and E. T. Croke, REVIEW ARTICLE
" Single Electron Spin Measurements in Si-Based Semiconductor NanoStructures",
A chapter in the book entitled "Electron Spin Resonance and Related Phenomena in Low Dimensional Structures", edited by Marco Fanciulli, Springer-Verlag, Topics in Applied Physics Series, ISBN-13: 978-3540793649, (2008).
63. Y. J. Zhao, T. Tu, X. J. Hao, G. C. Guo, H. W. Jiang, and G. P. Guo
RESEARCH ARTICLE
"Experimental Studies of Scaling Behavior of a Quantum Hall System with a Tunable Landau Level Mixing"
Phys. Rev. B 78, 233301 (2008).
64. G. P. Guo, Y. J. Zhao, T. Tu, X. J. Hao, X. C. Zhang, G. C. Guo and H. W. Jiang
RESEARCH ARTICLE
"Observation of an in-plane magnetic-field-driven phase transition in a quantum Hall system with SU(4) symmetry"
Phys. Rev. B 78, 233305 (2008).

65. X.C. Zhang, G. Mazzeo, A. Brataas, M. Xiao, and H. W. Jiang RESEARCH ARTICLE
 "Tunable electron counting statistics in a quantum dot at thermal equilibrium"
Phys. Rev. B 80, 035321 (2009).
66. M.G. House, H.W. Jiang, and X.C. Zhang RESEARCH ARTICLE
 "Analysis of electron tunneling events with the hidden Markov model"
Phys. Rev. B 80, 113308 (2009).
67. Xiao-Jie Hao, Tao Tu, Yong-Jie Zhao, Guang-Can Guo, RESEARCH ARTICLE
 H.W.Jiang, Guo-Ping Guo,
 "Phase diagram of a quantum Hall pseudospin ferromagnet in a two-subband electron system",
J. Phys.: Condens. Matter. 21, 455802 (2009).
68. G. P. Guo, Y. J. Zhao, T. Tu, X. J. Hao, G. C. Guo, H. W. Jiang, RESEARCH ARTICLE
 "Probing Quantum Hall Pseudospin Ferromagnet by Resistively Detected NMR"
Phys. Rev. B 81, Rapid Communication, 041306(R) (2010).
69. M. Xiao, M. G. House, and H. W. Jiang, RESEARCH ARTICLE
 "Measurement of the Spin Relaxation Time of Single Electrons in a Silicon MOS-Based Quantum Dot"
Phys. Rev. Lett. 104, 096801 (2010).
70. G. Mazzeo, E. Yablonovitch, H. W. Jiang, Y. Bai, and E. A. Fitzgerald, RESEARCH ARTICLE
 "Conduction band discontinuity and electron confinement at the $\text{Si}_x\text{Ge}_{1-x}/\text{Ge}$ interface"
Appl. Phys. Lett. 96, 213501 (2010).
71. M. Xiao, M. G. House, and H. W. Jiang, RESEARCH ARTICLE
 "Parallel Spin Filling and Energy Spectroscopy in Few-Electron Si MOS-Based Quantum Dots"
Appl. Phys. Lett. 97, 032103 (2010).
72. Zhongming Zeng; Kwun Hung Cheung, H.W. Jiang, Ilya Krivorotov, and J. A. Katine RESEARCH ARTICLE
 "Evolution of Spin-Wave Modes in Magnetic Tunnel Junction Nanopillars"
Phys. Rev. B, Rapid Communications, 100410(R) (2010).
73. L. J. Wang, G. Cao, T. Tu, H.Q. Li, C. Zhou, X. J. Hao, Z. Su, G. C. Guo, H. W. Jiang, and G. P. Guo RESEARCH ARTICLE
 "A Graphene Quantum Dot with a Single Electron Transistor as Integrated Charge Sensor"
Appl. Phys. Lett. 97, 262113 (2010).

74. A. Khalili i, Z. M. Zeng, P. Upadhyaya, G. Rowlands, H. Zhao, I. N. Krivorotov, J. P. Wang, H. W. Jiang, J. A. Katine, J. Langer, K. Galatsis, and K. L. Wang,

RESEARCH ARTICLE

"Low-Write-Energy Magnetic Tunnel Junctions for High-Speed Spin Transfer Torque MRAM"
IEEE Electron Device Letters, 32, 57 (2011).

75. Z. M. Zeng, P. Khalili Amiri,² G. Rowlands, H. Zhao, I. N. Krivorotov, J.-P. Wang, J. A. Katine, J. Langer, K. Galatsis, K. L. Wang, and H. W. Jiang,

RESEARCH ARTICLE

"Effect of resistance-area product on spin-transfer switching in MgO-based magnetic tunnel junction memory cells"

Appl. Phys. Lett. 98, 072512, (2011).

76. G. E. Rowlands, T. Rahman, J. A. Katine, J. Langer, A. Lyle, H. Zhao, J. G. Alzate, A. A. Kovalev, Y. Tserkovnyak, Z. M. Zeng, H. W. Jiang, K. Galatsis, Y. M. Huai, P. Khalili Amiri, K. L. Wang, I. N. Krivorotov, and J.-P. Wang

RESEARCH ARTICLE

"Deep Sub-nanosecond Spin Torque Switching in Magnetic Tunneling Junctions with Combined In-Plane and Perpendicular Polarizers",

Appl. Phys. Lett. 98, 102509 (2011).

77. P. Khalili Amiri, Z. M. Zeng, J. Langer, H. Zhao, G. Rowlands, Y.-J. Chen, I. N. Krivorotov, J.-P. Wang, H. W. Jiang, J. A. Katine, Y. Huai, K. Galatsis, and K. L. Wang

RESEARCH ARTICLE

"Switching Current Reduction Using Perpendicular Anisotropy in CoFeB-MgO Magnetic Tunnel Junctions"

Appl. Phys. Lett. 98, 112507 (2011).

78. Pramey Upadhyaya, Pedram Khalili Amiri, Alexey A. Kovalev, Yaroslav Tserkovnyak, Graham Rowlands, Zhongming Zeng, Ilya Krivorotov, Hongwen Jiang, and Kang L. Wang

CONFERENCE PROCEEDINGS

"Thermal Stability Characterization of Magnetic Tunneling Junctions Using Hard-Axis Magnetoresistance Measurements"

Journal of Applied Physics, 109, 07C108 (2011).

79. H. Zhao, A. Lyle, Y. Zhang, P. K. Amiri, G. Rowlands, Z. Zeng, J. Katine, H. Jiang, K. Galatsis, K. L. Wang, I. N. Krivorotov, and J.-P. Wang,

RESEARCH ARTICLE

"Low Writing Energy and Sub Nano-Second Spin Torque Transfer Switching of In-plane Magnetic Tunnel Junction for STT-RAM"

Journal of Applied Physics, 109, 07C920 (2011).

80. Z. M. Zeng, P. Upadhyaya, P. Khalili Amiri, K. H. Cheung, J. A. Katine, J. Langer, K. L. Wang, and H. W. Jiang,

RESEARCH ARTICLE

"Enhancement of microwave emission in magnetic tunnel junction oscillators through in-plane field orientation"

Appl. Phys. Lett. 99, 032503 (2011).

81. M. House, H. Pan, M. Xiao, and H. W. Jiang, RESEARCH ARTICLE
"Non-equilibrium charge stability diagrams of a silicon double quantum dot"
Appl. Phys. Lett. 99, 11216 (2011).

82. Hui Zhao, Brian Glass, Pedram Khalili Amiri, Andrew Lyle, Yisong Zhang, Yu-Jin Chen, Graham Rowlands, Pramey Upadhyaya, Zhongming Zeng, J A Katine, Juergen Langer, Kosmas Galatsis, Hongwen Jiang, Kang L Wang, Ilya N Krivorotov and Jian-Ping Wang, RESEARCH ARTICLE
"Sub-200 ps spin transfer torque switching in in-plane magnetic tunnel junctions with interface perpendicular anisotropy"
J. Phys. D: Appl. Phys. 45, 025001 (2012).

83. HaiOu Li, Ming Xiao, Gang Cao, Cheng Zhou, RuNan Shang, Tao Tu, GuangCan Guo, HongWen Jiang, and GuoPing Guo RESEARCH ARTICLE
"Back-action-induced non-equilibrium effect in electron charge counting statistics"
Appl. Phys. Lett. 100, 092112 (2012).

84. Hui Zhao, Pedram Khalili Amiri, Yisong Zhang, Andrew Lyle, Jordan A. Katine, Juergen Langer, Hongwen Jiang, Kang L. Wang, Ilya N. Krivorotov, and Jian-Ping Wang RESEARCH ARTICLE
"Spin-Transfer Torque Switching Above Room Temperature"
IEEE MAGNETICS LETTERS, Volume 3, 3000304 (2012).

85. Zeng, Zhongming; Khalili Amiri, Pedram; Krivorotov, Ilya; Zhao, Hui; Finocchio, Giovanni; Wang, Jian-Ping; Katine, Jordan; Huai, Yiming; Langer, Juergen; Galatsis, Kosmas; Wang, Kang; Jiang, HongWen RESEARCH ARTICLE
"High-power coherent microwave emission from magnetic tunnel junction nano-oscillators with perpendicular anisotropy"
ACS Nano, 6 (7), pp 6115–6121 (2012).

86. H. Pan, M. G. House, X. Hao, and H. W. Jiang RESEARCH ARTICLE
"Fabrication and characterization of a silicon metal-oxide-semiconductor based triple quantum dot"
Appl. Phys. Lett. 100, 263109 (2012).

87. Z.M. Zeng, P. Khalili Amiri, J.A. Katine, J. Langer, K.L. Wang, H.W. Jiang, RESEARCH ARTICLE
"Nanoscale magnetic tunnel junction sensors with perpendicular anisotropy sensing layer"
Appl. Phys. Lett., Vol. 101, No. 6, pp. 062412/1-4, (2012).

88. H. Zhao, Y. Zhang, P.K. Amiri, J.A. Katine, J. Langer, H.W. Jiang, I.N. Krivorotov, K.L. Wang, J.-P. Wang, RESEARCH ARTICLE

"Spin-Torque Driven Switching Probability Density Function Asymmetry"

IEEE Transactions on Magnetics, Vol. 48, No. 11, pp. 3818-3820, (2012).

89. Gang Cao, Hai-Ou Li, Tao Tu, Li Wang, Cheng Zhou, Ming Xiao, Guang-Can Guo, Hong-Wen Jiang and Guo-Ping Guo
RESEARCH ARTICLE
"Ultrafast Universal Quantum Control of a Quantum Dot Charge Qubit Using Landau-Zener-Stückelberg Interference"
Nature Communications, 4, 1401 (2013).

90. Zhongming Zeng, Giovanni Finocchio and HongWen Jiang,
INVITED REVIEW ARTICLE
"Spin Transfer Nano-Oscillators"
Nanoscale 5 (6), 2219 - 2231 (2013).

91. Gang Cao, Ming Xiao, HaiOu Li, Cheng Zhou, RuNan, Shang, Tao Tu, HongWen Jiang, GuoPing Guo
RESEARCH ARTICLE
"Back-action driven electron spin excitation in a single quantum dot"
New Journal of Physics, 15, 023021 (2013).

92. Z. M. Zeng, G. Finocchio, B. S. Zhang, P. Khalili Amiri, J. A. Katine, I. Krivorotov, Y. Huai, J. Langer, B. Azzerboni, K. L. Wang, and H. W. Jiang
RESEARCH ARTICLE
"Ultralow-Current-Density and Bias-Field-Free Spin-Transfer Nano-Oscillator"
NPG Scientific Report 3, 1426 (2013).

93. M. G. House, Ming Xiao, GuoPing Guo, HaiOu Li, Gan Cao, M. M. Rosenthal, and HongWen Jiang
RESEARCH ARTICLE
"Detection and measurement of spin-dependent dynamics in random telegraph signals"
Physical Review Letters, 111, 126803 (2013).

94. Ru-Nan Shang, Hai-Ou Li, Gang Cao, Ming Xiao, Tao Tu, Hong-Wen Jiang and Guo-Ping Guo
RESEARCH ARTICLE
"Photon-Assisted-Tunneling in a Coupled Double Quantum Dot under High Microwave Excitation Powers"
Appl. Phys. Lett., 103, 162109 (2013).

95. Da Wei, Hai-Ou Li, Gang Cao, Gang Luo, Zhi-Xiong Zheng, Tao Tu, Ming Xiao, Guang-Can Guo, H. W. Jiang, and GuoPing Guo
RESEARCH ARTICLE
"Tuning inter-dot tunnel coupling of an etched graphene double quantum dot by adjacent metal gates"
NPG Scientific Report 3, 3175 (2013).

96. Miao-Lei Zhang, Guang-Wei Deng, Shu-Xiao Li, Hai-Ou Li, Gang Cao, Tao Tu, Ming Xiao, Guang-Can Guo, Hong-Wen Jiang, Irfan Siddiqi, and Guo-Ping Guo, RESEARCH ARTICLE

"Symmetric reflection line resonator and its quality factor modulation by a two-dimensional electron gas"

Appl. Phys. Lett., 104, 083511 (2014).

97. Li Wang, Cheng Zhou, Tao Tu, Hong-Wen Jiang, Guo-Ping Guo, and Guang-Can Guo,
RESEARCH ARTICLE

"Quantum simulation of the Kibble-Zurek mechanism using a semiconductor electron charge qubit"

Phys. Rev. A 89, 022337 (2014).

98. Xiaojie Hao, Rusko Ruskov, Ming Xiao, Charles Tahan, and HongWen Jiang,
RESEARCH ARTICLE

"Electron Spin Resonance and Spin-Valley Physics in a Silicon Double Quantum Dot"

Nature Communications 5, 3860 (2014).

99. Miao-Lei Zhang, Da Wei, Guang-Wei Deng, Shu-Xiao Li, Hai-Ou Li, Gang Cao, Tao Tu,
Ming Xiao, Guang-Can Guo, Hong-Wen Jiang, and Guo-Ping Guo RESEARCH ARTICLE

"Measuring the complex admittance of a nearly isolated graphene quantum dot"

Appl. Phys. Lett., 105, 073510 (2014).

100. Hai-Ou Li, Gang Cao, Ming Xiao, Jie You, Da Wei, Tao Tu, Guang-Can Guo, Hong-Wen
Jiang and Guo-Ping Guo RESEARCH ARTICLE

"Fabrication and characterization of an undoped GaAs/AlGaAs quantum dot device"

Journal of Applied Physics 116, 174504 (2014).

101. XiangXiang Song, Hai-Ou Li, Jie You, TianYi Han, Gang Cao, Tao Tu, Ming Xiao, Guang-
Can Guo, Hong-Wen Jiang, and GuoPing Guo RESEARCH ARTICLE

"Suspending Effect on Low-Frequency Charge Noise in Graphene Quantum Dot"

NPG Scientific Report (2015).

102. Hai-Ou Li, Gang Cao, Guo-Dong Yu, Ming Xiao, Guang-Can Guo, Hong-Wen Jiang, and
Guo-Ping Guo RESEARCH ARTICLE

"Conditional Rotation of Two Strongly Coupled Semiconductor Charge Qubits",

Nature Communications, 6,7681 (2015).

103. Runan Shang, Hai-Ou Li, Gang Cao, Guodong Yu,Ming Xiao,Tao Tu, Guang-Can Guo,
Hongwen Jiang, A. M. Chang, and Guo-Ping Guo RESEARCH ARTICLE

"Observation of the Kondo effect in a quadruple quantum dot"

PHYSICAL REVIEW B 91, 245102 (2015).

104. Guang-Wei Deng, Da Wei, J.R. Johansson, Miao-Lei Zhang,, Shu-Xiao Li, Hai-Ou Li, Gang
Cao, Ming Xiao, Tao Tu, Guang-Can Guo, Hong-Wen Jiang, Franco Nori, and Guo-Ping Guo,

"Charge number dependence of the dephasing rates of a graphene double quantum dot in a circuit
QED architecture" RESEARCH ARTICLE

Phys. Rev. Lett., 115, 126804 (2015).

105. Deng, Guang-Wei; Wei, Da; Li, Shu-Xiao; Johansson, J. R.; Kong, Wei-Cheng; Li, Hai-Ou; Cao, Gang; Xiao, Ming; Guo, Guang-Can; Nori, Franco; Jiang, Hong-Wen; Guo, Guo-Ping
RESEARCH ARTICLE
 "Coupling Two Distant Double Quantum Dots with a Microwave Resonator"
Nano Letters, 15, 6620 (2015).
106. Gang Cao, Hai-Ou Li, Guo-Dong Yu, Bao-Chuan Wang , Bao-Bao Chen, Xiang-Xiang Song, Ming Xiao, Guang-Can Guo, Hong-Wen Jiang, Xuedong Hu, and Guo-Ping Guo
RESEARCH ARTICLE
 "Tunable Hybrid Qubit in a GaAs Double Quantum Dot "
Phys. Rev. Lett., 116, 086801 (2016).
107. Bin Fang,, Mario Carpentieri, Xiaojie Hao, HongWen Jiang, Jordan A. Katine, Ilya N.Krivorotov, Berthold Ocker, Juergen Langer, Kang L. Wang, Baoshun Zhang, Bruno Azzerboni, Pedram Khalili Amiri, Giovanni Finocchio and Zhongming Zeng
RESEARCH ARTICLE
 "Giant Spin-Torque Diode Sensitivity in the Absence of Bias Magnetic Field"
Nature Communications, 7, 11259 (2016).
108. Yu, Guo-Dong; Li, Hai-Ou; Cao, Gang; Xiao, Ming; Jiang, HongWen; Guo, GuoPing
RESEARCH ARTICLE
 "Tunable Capacitive Coupling between Two Semiconductor Charge Qubits"
Nanotechnology 27, 324003 (2016).
109. Blake M. Freeman, Joshua S. Schoenfield, and HongWen Jiang
RESEARCH ARTICLE
 " Comparison of Low Frequency Charge Noise in Identically Patterned Si/SiO₂ and Si/SiGe Quantum Dots"
Appl. Phys. Lett. 108, 253108 (2016).
110. Bao-Bao Chen, Bao-Chuan Wang, Gang Cao, Hai-Ou Li, Ming Xiao, Guang-Can Guo, Hong-Wen Jiang, Xuedong Hu, and Guo-Ping Guo,
RESEARCH ARTICLE
 "Spin blockade and coherent dynamics of high-spin states in a three-electron double quantum dot"
Phys. Rev. B 95, 035408 (2017).
111. Bao-Chuan Wang, Gang Cao, Hai-Ou Li, Ming Xiao, Guang-Can Guo, Xuedong Hu, Hong-Wen Jiang, and Guo-Ping Guo,
RESEARCH ARTICLE
 "A tunable hybrid qubit in a triple quantum dot"
Phys Review Applied 8, 064035 (2017)
112. Joshua S. Schoenfield, Blake Freeman, and H. W. Jiang,
RESEARCH ARTICLE
 "Coherent Manipulation of Valley States at Multiple charge configurations of a silicon quantum dot device",

Nature Communications, 10.1038, 8, 64 (2017).

113. Hai-Ou Li, Gang Cao, Guo-Dong Yu, Ming Xiao, Guang-Can Guo, Hong-Wen Jiang, and Guo-Ping Guo

RESEARCH ARTICLE

“Controlled Quantum Operations of a Semiconductor Three-Qubit System”

Phys. Rev. Applied 9, 024015 (2018).

114. Bin Fang, Mario Carpentieri, Steven Louis, Vasyl Tiberkevich, Andrei Slavin, Ilya N. Krivorotov, Riccardo Tomasello, Anna Giordano, Hongwen Jiang, Jialin Cai,¹ Yaming Fan, Zehong Zhang, Baoshun Zhang, Jordan A. Katine, Kang L. Wang, Pedram Khalili Amiri, Giovanni Finocchio, and Zhongming Zeng,

RESEARCH ARTICLE

“Experimental Demonstration of Spintronic Broadband Microwave Detectors and Their Capability for Powering Nanodevices”

Phys. Rev. Applied 11, 014022 (2018).

115. N. E. Penthorn, X. Hao, Z. Wang, Y. Huai, and H. W. Jiang,

RESEARCH ARTICLE

“Experimental Observation of Single Skyrmion Signatures in a Magnetic Tunnel Junction”

Phys. Rev. Lett. 122, 257201(2019).

116. NE Penthorn, JS Schoenfield, JD Rooney, HW Jiang,

RESEARCH ARTICLE

“Reduction of charge impurities in a silicon metal-oxide-semiconductor quantum dot qubit device patterned with nano-imprint lithography”

Nanotechnology, 30, 465302 (2019).

117. Nicholas E. Penthorn, Joshua S. Schoenfield, John D. Rooney, Lisa F. Edge, and HongWen Jiang,

RESEARCH ARTICLE

“Two-axis quantum control of a fast valley qubit in silicon”

npj Quantum Information, 5,94 (2019).