LIST OF PUBLICATIONS

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JOURNAL ARTICLES AND PREPRINTS [googleScholar citation > 4750. H-index = 36]

1. Chuping Li, Lin Sun, Kaichao Zhang, Junru Wu, Yuxuan Wu, Dingli Yuan, Pengyi Chen, **Qijin Chen**, Rf spectra and pseudogap in ultracold Fermi gases across the BCS-BEC crossover from pairing fluctuation theory, arXiv:2604.06004.
2. Ke Wang, **Qijin Chen**, Rufus Boyack, K. Levin, Geometric superfluid stiffness of Kekulé superconductivity in magic-angle twisted bilayer graphene, arXiv:2603.24766.
3. Chuping Li, Lin Sun, Kaichao Zhang, Junru Wu, Yuxuan Wu, Dingli Yuan, Pengyi Chen, Qijin Chen, Spectral study of the pseudogap in unitary Fermi gases, arXiv:2603.06102.
4. Lin Sun and **Qijin Chen**, Achieving ultrahigh-Tc superfluidity by suppressing pairing fluctuations, submitted to Reports on Progress in Physics.
5. Junru Wu, Zongpu Wang, Lin Sun, Kaichao Zhang, Chuping Li, Yuxuan Wu, Pengyi Chen, Dingli Yuan, **Qijin Chen**, Effects of particle-hole fluctuations on the superfluid transition in two-dimensional atomic Fermi gases, arXiv:2510.23061.
6. Ke Wang, **Qijin Chen**, Rufus Boyack, and K. Levin, Anomalous Superfluid Density in Pair-Density-Wave Superconductors, npj Quantum Materials **11,** 13 (2026), arXiv:2506.13631.
7. Zhiqiang Wang, Ke Wang, Zhendong Zhang, **Qijin Chen**, Cheng Chin, K. Levin, Tunable Molecular Interactions Near an Atomic Feshbach Resonance: Stability and Collapse of a Molecular Bose-Einstein Condensate, Phys. Rev. Research **7**, L042069 (2025); arXiv:2504.09183.
8. Ke Wang, Zhiqiang Wang, **Qijin Chen**, K. Levin, Universal approach to light driven "superconductivity" via preformed pairs, npj Quantum Materials **10**, 73 (2025); arXiv:2412.05420.
9. Hao Deng, Lin Sun, Chuping Li, Yuxuan Wu, Junru Wu, and **Qijin Chen**, BCS-BEC crossover in atomic Fermi gases in quasi-two-dimensional Lieb lattices: Effects of flat band and finite temperature, arXiv:2401.02990.
10. Xi Li, Shuai Wang, Xiang Luo, Yu-Yang Zhou, Ke Xie, Hong-Chi Shen, Yu-Zhao Nie, **Qijin Chen**, Hui Hu, Yu-Ao Chen, Xing-Can Yao, and Jian-Wei Pan, Observation and quantification of pseudogap in unitary Fermi gases, Nature **626**, 288 (2024); arXiv:2310.14024. [Times cited: > 59]
11. Hao Deng, Chuping Li, Yuxuan Wu, Lin Sun, and **Qijin Chen**, Flat band effects on the ground-state BCS-BEC crossover in atomic Fermi gases in a quasi-two-dimensional Lieb lattice, Ann. Phys. **463**, 169639 (2024); arXiv:2310.12944.
12. **Qijin Chen**, Zhiqiang Wang, Rufus Boyack, and K. Levin, Test for BCS-BEC Crossover in the Cuprate Superconductors, npj Quantum Materials **9**, 27 (2024); arXiv:2307.08611.
13. Guitao Lyu, Kui-Tian Xi, Sukjin Yoon, **Qijin Chen**, and Gentaro Watanabe, Exciting long-lived Higgs mode in superfluid Fermi gases with particle removal, Phys. Rev. A **107**, 023321 (2023); arXiv:2210.09829.
14. **Qijin Chen**, Zhiqiang Wang, Rufus Boyack, Shuolong Yang, and K. Levin, When Superconductivity Crosses Over: From BCS to BEC, Rev. Mod. Phys. **96**, 025002 (2024); arXiv:2208.01774. [Times cited: > 81]
15. Lin Sun and **Qijin Chen**, *Ground states of atomic Fermi gases in a two-dimensional optical lattice with and without population imbalance*, Phys. Rev. A **106**, 013317 (2022); arXiv:2205.04045.
16. Lin Sun, Jibiao Wang, Xiang Chu, and **Qijin Chen**, *Pairing phenomena and superfluidity of atomic Fermi gases in a two-dimensional optical lattice: Unusual effects of lattice-continuum mixing*, Ann. Phys. (Berlin) **534**, 2100511 (2022); arXiv:2110.06845.

17. Xiang-Pei Liu, Xing-Can Yao, Hao-Ze Chen, Xiao-Qiong Wang, Yu-Xuan Wang, Yu-Ao Chen, **Qijin Chen**, K. Levin, and Jian-Wei Pan, *Observation of the density dependence of the closed-channel fraction of a ^{6}Li superfluid*, National Science Review 9(10), nwab226 (2022); arXiv:1903.12321.

18. Xiang-Pei Liu, Xing-Can Yao,Youjin Deng, Yu-Xuan Wang, Xiao-Qiong Wang, Xiaopeng Li, **Qijin Chen**, Yu-Ao Chen, and Jian-Wei Pan, *Dynamic formation of quasicondensate and spontaneous vortices in a strongly interacting Fermi gas*, Phys. Rev. Research **3**, 043115 (2021); arXiv:1902.07558.

19. Rufus Boyack, Zhiqiang Wang, **Qijin Chen**, and K. Levin, *Unified approach to electrical and thermal transport in high-Tc superconductors*, Phys. Rev. B **104**, 064508 (2021); arXiv:2104.04879.

20. Z.Q. Wang, G. Chaudhary, **Q.J. Chen**, and K. Levin, *Quantum geometric contributions to the BKT transition: Beyond mean field theory*, Phys. Rev. B **102**, 184504 (2020); arXiv:2007.15028. [Times cited: > 46]

21. J.B. Wang, L.F. Zhang, Y. Yu, C.H. Lee, and **Q.J. Chen**, *Superfluidity and pairing phenomena in ultracold atomic Fermi gases in one-dimensional optical lattices. II. Effects of population imbalance*, Phys. Rev. A **101**, 053618 (2020); arXiv:2001.04922.

22. J.B. Wang, L.F. Zhang, Y. Yu, C.H. Lee, and **Q.J. Chen**, *Superfluidity and pairing phenomena in ultracold atomic Fermi gases in one-dimensional optical lattices. I. Balanced case*, Phys. Rev. A **101**, 053617 (2020); arXiv:2001.00545.

23. H. Caldas and **Q.J. Chen**, *The Gor'kov and Melik-Barkhudarov correction to the mean-field critical field transition to Fulde-Ferrell-Larkin-Ovchinnikov states*, Ann. Phys. **(Berlin) 532**, 2000222 (2020); arXiv:1912.10215.

24. C.C. Xu, N.H. Wu, G.-X. Zhi, B.-H. Lei, X. Duan, F.L. Ning, C. Cao, **Q.J. Chen**, *Coexistence of nontrivial topological properties and strong ferromagnetic fluctuations in* $A_2Cr_3As_3$, npj Computational Materials **6**, 30 (2020); arXiv:1909.04346. [Times cited: > 22]

25. X.Y. Wang, **Q.J. Chen**, and K. Levin, *Strong Pairing in two dimensions: Pseudogap and other phenomena*, New J. Phys. 22**,** 063050 (2020); arXiv:1907.06121.

26. **Q.J. Chen**, J.B. Wang, and Y. Yu, *Unusual destruction and enhancement of superfluidity of atomic Fermi gases by population imbalance in a one-dimensional optical lattice*, Chin. Phys. Lett. **37**, 053702 (Express Letter) (2020); arXiv:1904.09576.

27. X.Y. Wang, Rufus Boyack, **Q.J. Chen**, and K. Levin, *Combined effects of pairing fluctuations and a pseudogap in the Cuprate Hall effect*, Phys. Rev. **B 99,** 134504 (2019); arXiv:1812.05140.

28. L.F. Zhang, J.B. Wang, Y. Yu, and **Q.J. Chen**, *Ultra high temperature superfluidity in ultracold atomic Fermi gases with mixed dimensionality*, Sci. China: Phys. Mech. Astro. **63**, 227421(2020); arXiv:1807.05049. (Altmetric = 22)

29. C.C. Xu, **Q.J. Chen**, and C. Cao, *Unique crystal field splitting and multiband RKKY interactions in Ni-doped EuRbFe$_4$As$_4$*, Commun. Phys. **2**, 16 (2019); arXiv:1902.06867. [Times cited: > 20]

30. **Qijin Chen**, *Generalization of BCS theory to short coherence length superconductors: A BCS--Bose-Einstein crossover scenario*, arXiv:1801.06266 (PhD dissertation, Univ Chicago, 2000).

31. Rufus Boyack, **Q.J. Chen**, A. A. Varlamov, and K. Levin, *Cuprate diamagnetism in the presence of a pseudogap: Beyond the standard fluctuation formalism*, Phys. Rev. B **97,** 064503 (2018); arXiv:1710.03246. [Times cited: > 20]

32. J.B. Wang, Y.M. Che, L.F. Zhang, and **Q.J. Chen**, *Instability of Fulde-Ferrell-Larkin-Ovchinnikov states in three and two dimensions*, Phys. Rev. B **97**, 134513 (2018); arXiv:1703.00161. [Times cited: > 38]

33. L.F. Zhang, Y.M. Che, J.B. Wang, and **Q.J. Chen**, *Exotic superfluidity and pairing phenomena in atomic Fermi gases in mixed dimensions*, Sci. Rep. 7, 12948 (2017); arXiv:1710.00200.

34. Y.M. Che, L.F. Zhang, J.B. Wang, and **Q.J. Chen**, *Impurity effects on BCS-BEC crossover in ultracold atomic Fermi gases*, Phys. Rev. B **95**, 014504 (2017); arXiv:1608.02110.

35. J.B Wang, Y.M. Che, L.F. Zhang, and **Q.J. Chen**, *Enhancement effect of mass imbalance on Fulde-Ferrell-Larkin-Ovchinnikov type of pairing in Fermi-Fermi mixtures of ultracold quantum gases,* Sci. Rep. **7**, 39783 (2017)*;* arXiv:1404.5696. [Times cited: > 47]
36. Y.M. Che, J.B Wang, and **Q.J. Chen**, *Reentrant superfluidity and pair density wave in single component dipolar Fermi gases,* Phys Rev A **93**, 063611 (2016); arXiv:1503.04453.
37. **Q.J. Chen,** *Effect of the particle-hole channel on BCS–Bose-Einstein condensation crossover in atomic Fermi,* Sci. Rep. **6**, 25772 (2016); arXiv:1109.2307.
38. **Q.J. Chen** and Jibiao Wang, *Pseudogap phenomena in ultracold atomic Fermi gases*, Front. Phys. **9**, 539 (2014); see also arXiv:1409.7881. (Invited review article) [Times cited: > 37]
39. J.B. Wang, H. Guo, **Q.J. Chen**, *Exotic phase separation and phase diagrams of a Fermi-Fermi mixture in a trap at finite temperature*, Phys. Rev. A **87**, 041601(R) (2013).
40. **Q.J. Chen,** *Zero density limit extrapolation of the superfluid transition temperature in a unitary atomic Fermi gas on a lattice,* Phys. Rev. A **86**, 023610 (2012).
41. **Q.J. Chen**, *Probing the homogeneous spectral function of a strongly interacting superfluid atomic Fermi gas in a trap using phase separation and momentum-resolved radio-frequency spectroscopy*, Phys. Rev. A **84**, 013624 (2011).(Selected for Virtual Journal of Atomic Quantum Fluids Vol. 8, issue 3, 2011.)
42. C.-C. Chien, Y. He, **Q.J. Chen**, and K. Levin, *Two-energy-gap preformed-pair scenario for the cuprates: Implications for angle-resolved photoemission spectroscopy*, Phys. Rev. B **79**, 214527 (2009).(Selected for Virtual Journal of Applications of Superconductivity Vol. 17, issue 1, 2009.) [Times cited: > 56]
43. H. Guo, C.-C. Chien, **Q.J. Chen**, Y. He, and K. Levin, *Finite-temperature behavior of an inter-species fermionic superfluid with population imbalance*, Phys. Rev. A **80**, 011601(R) (2009). (Selected for Virtual Journal of Atomic Quantum Fluids Vol. 1, issue 2, 2009.) [Times cited: > 21]
44. **Q.J. Chen**, Y. He, C.-C. Chien, and K. Levin, *Theory of radio frequency spectroscopy in ultracold Fermi gases and their relation to photoemission in the cuprates*, Rep. Prog. Phys. **72**, 122501 (2009). [Times cited: > 64]
45. K. Levin, **Q.J. Chen**, C.-C. Chien, and Y. He, *Comparison of different pairing fluctuation approaches to BCS-BEC Crossover*, Ann. Phys. **325**, 233 (2010), doi:10.1016/j.aop.2009.09.011. [Times cited: > 57]
46. C.-C. Chien, **Q.J. Chen**, and K. Levin, *Fermions with attractive interactions on optical lattices and implications for correlated systems,* Phys. Rev. A **78**, 043612 (2008). [Times cited: > 30]
47. **Q. J. Chen** and K. Levin, *Momentum resolved radio frequency spectroscopy in trapped Fermi gases*, Phys. Rev. Lett. **102**, 190402 (2009). [Times cited: > 102]
48. Y. He, C.-C. Chien, **Q.J. Chen**, and K. Levin, *Temperature and final state effects in radio frequency spectroscopy experiments on atomic Fermi gases*, Phys. Rev. Lett. **102**, 020402 (2009). [Times cited: > 24]
49. **Q. J. Chen** and K. Levin, *Phenomenological theory of the protected nodes and collapse of the Fermi arcs in underdoped cuprate superconductors*, Phys. Rev. B **78**, 020513(R) (2008). [Times cited: > 24]
50. Y. He, C.-C. Chien, **Q.J. Chen**, and K. Levin, *Radio frequency spectroscopy of trapped Fermi gases with population imbalance*, Phys. Rev. A **77**, 011602(R) (2008). [Times cited: > 21]
51. Y. He, C.-C. Chien, **Q.J. Chen**, and K. Levin, *Thermodynamics and superfluid density in BCS-BEC crossover with and without population imbalance*, Phys. Rev. B **76**, 224516 (2007). [Times cited: > 60]
52. C.-C. Chien, Y. He, **Q.J. Chen**, and K. Levin, *Superfluid-insulator transitions at non-integer filling in optical lattices of fermionic atoms*, Phys. Rev. A **77**, 011601(R) (2008). [Times cited: > 20]
53. Y. He, **Q.J. Chen**, C.-C. Chien, and K. Levin, *First and second sound-like modes at finite temperature in trapped Fermi gases from BCS to BEC*, Phys. Rev. A **76**, 051602(R) (2007). [Times cited: > 28]
54. C.-C. Chien, **Q.J. Chen**, Y. He, and K. Levin, *Superfluid phase diagrams of trapped Fermi gases with population imbalance*, Phys. Rev. Lett. **98**, 110404 (2007). [Times cited: > 77]

55. Y. He, C.-C. Chien, **Q.J. Chen**, and K. Levin, *Single-plane-wave Larkin-Ovchinnikov-Fulde-Ferrell state in BCS--Bose-Einstein condensation crossover*, Phys. Rev. A **75**, 021602(R), 2007. [Times cited: > 40]
56. **Q.J. Chen**, Y. He, C.-C. Chien, and K. Levin, *Theory of superfluids with population imbalance: Finite temperature and BCS-BEC crossover effects*, Phys. Rev. B **75**, 014521 (2007). [Times cited: > 44]
57. **Q.J. Chen**, Y. He, C.-C. Chien, and K. Levin, *Stability conditions and phase diagrams for two component Fermi gases with population imbalance*, Phys. Rev. A **74**, 063603 (2006). [Times cited: >57]
58. C.-C. Chien, **Q.J. Chen**, Y. He, and K. Levin, *Finite temperature effects in trapped Fermi gases with population imbalance*, Phys. Rev. A **74**, 021602(R) (2006). [Times cited: > 32]
59. C.-C. Chien, **Q.J. Chen**, Y. He, and K. Levin, *Intermediate temperature superfluidity in an atomic Fermi gas with population imbalance*, Phys. Rev. Lett. **97**, 090402 (2006). [Times cited: > 93]
60. **Q.J. Chen**, C.A. Regal, D.S. Jin, and K. Levin, *Finite temperature momentum distribution of a trapped Fermi gas*, Phys. Rev. A **74**, 011601(R) (2006). [Times cited: > 25]
61. **Q.J. Chen**, C.A. Regal, M. Greiner, D.S. Jin, and K. Levin, *Understanding the superfluid phase diagram in trapped Fermi gases*, Phys. Rev. A **73**, 041601(R) (2006). [Times cited: > 32]
62. C.-C. Chien, Y. He, **Q.J. Chen**, and K. Levin, *Ground state description of a single vortex in an atomic Fermi gas: From BCS to Bose-Einstein condensation*, Phys. Rev. A **73**, 041603(R) (2006). [Times cited: > 40]
63. **Q.J. Chen**, J. Stajic, and K. Levin, *Applying BCS-BEC crossover theory to high temperature superconductors and ultracold atomic Fermi gases*, review article for the 20th anniversary of high Tc superconductivity, Low Temp. Phys. **32**, 406 (2006) [Fiz. Nizk. Temp. **32**, 538 (2006)]. [Times cited > 48]
64. **Q.J. Chen** and K. Levin, *Population of closed-channel molecules in trapped Fermi gases with broad Feshbach resonances*, Phys. Rev. Lett. **95**, 260406 (2005). [Times cited: > 46]
65. Y. He, **Q.J. Chen**, and K. Levin, *Radio frequency spectroscopy and the pairing gap in trapped Fermi gases*, Phys. Rev. A **72**, 011602(R) (2005). [Times cited: > 80]
66. **Q.J. Chen**, J. Stajic, and K. Levin, *Thermodynamics of interacting fermions in atomic traps,* Phys. Rev. Lett. **95**, 260405 (2005). [Times cited: > 94]
67. J. Kinast, A. Turlapov, J.E. Thomas, **Q.J. Chen**, J. Stajic, and K. Levin, Heat capacity of a strongly interacting Fermi gas, Science **307**, 1296 (2005), published online 27 January 2005 (Science Express, doi:10.1126/science.1109220). [Times cited: > 530]
68. J. Stajic, **Q.J. Chen**, and K. Levin, *Density profiles of strongly interacting trapped Fermi gases*, Phys. Rev. Lett. **94**, 060401 (2005). [Times cited: > 56]
69. **Q.J. Chen**, J. Stajic, S.N. Tan, and K. Levin, *BCS-BEC crossover: From high temperature superconductors to ultracold superfluids*, Physics Reports **412**, 1-88 (2005). [Times cited: > 1053]
70. J. Stajic, **Q.J. Chen**, and K. Levin, *Particle density distributions in Fermi gas superfluids: Differences between one and two channel models in the Bose-Einstein condensation limit*, Phys. Rev. A **71**, 033601 (2005).
71. J. Stajic, J.N. Milstein, **Q.J. Chen**, M.L. Chiofalo, M.J. Holland, and K. Levin, *Nature of superfluidity in ultracold Fermi gases near Feshbach resonances*, Phys. Rev. A 69, 063610 (2004). [Times cited > 135]
72. J. Stajic, A. Iyengar, **Q.J. Chen**, and K. Levin, *The pseudogap state in superconductors: Extended Hartree approach to time-dependent Ginzburg-Landau theory*, Phys. Rev. B **68**, 174517 (2003).
73. **Q.J. Chen** and J.R. Schrieffer, *Pairing fluctuation theory of high Tc superconductivity in the presence of nonmagnetic impurities*, Phys. Rev. B **66**, 014512 (2002). [Times cited: > 22]
74. Y.-J. Kao, A.P. Iyengar, **Q.J. Chen**, and K. Levin, *Magnetic field effects in the pseudogap phase: A competing energy gap scenario for precursor superconductivity*, Phys. Rev. B **64**, R140505 (2001). [Times cited: > 33]

75. **Q.J. Chen**, K. Levin, and I. Kosztin, *Superconducting phase coherence in the presence of a pseudogap: Relation to specific heat, tunneling and vortex core spectroscopies*, Phys. Rev. B **63**, 184519 (2001). [Times cited: > 89]
76. I. Kosztin, **Q.J. Chen**, Y.-J. Kao, and K. Levin, *Pair excitations, collective modes and gauge invariance in the BCS--Bose-Einstein crossover scenario*, Phys. Rev. B **61**, 11662 (2000). [Times cited: > 104]
77. **Q.J. Chen**, I. Kosztin, and K. Levin, *Unusual thermodynamical and transport signatures of the BCS Bose- Einstein crossover scenario below Tc*, Phys. Rev. Lett. **85**, 2801 (2000). [Times cited: > 58]
78. **Q.J. Chen**, I. Kosztin, B. Jank´o, and K. Levin, *Superconducting transitions from the pseudogap state: d-wave symmetry, lattice, and low-dimensional effects*, Phys. Rev. B **59**, 7083 (1999). [Times cited > 117]
79. **Q.J. Chen**, I. Kosztin, B. Jank´o, and K. Levin, *Pairing fluctuation theory of superconducting properties in underdoped to overdoped cuprates*, Phys. Rev. Lett. **81**, 4708 (1998). [Times cited: > 265]
80. I. Kosztin, **Q.J. Chen**, B. Jank´o, and K. Levin, *Relationship between the pseudo- and superconducting gaps: Effects of residual pairing correlations below Tc*, Phys. Rev. B **58**, R5936 (1998). [Times cited >86]
81. S.T. Lee, Y.W. Lam, Z.D. Lin, Y. Chen and **Q.J. Chen**, *Pressure effect on diamond nucleation in a hot-filament CVD system*, Phys. Rev. B **55**, 15937 (1997). [Times cited: > 87]
82. Z.-D. Lin, Y. Chen, **Q.-J. Chen**, S.T. Lee, and Y. W. Lam, Very low pressure nucleation of diamond on mirror-smooth silicon in hot filament chemical vapor deposition system, Chin. Phys. Lett. **13**, 753 (1996).
83. Y. Chen, **Q.J. Chen**, and Z.D. Lin, *High efficiency deposition of diamond film by hot filament chemical vapor deposition*, J. Mater. Res. **11**, 2957 (1996).
84. **Q.J. Chen**, and Z.D. Lin, *Experimental approach to the mechanism of the negative bias enhanced nucleation of diamond on Si via hot filament chemical vapor deposition*, J. Appl. Phys. **80**, 797 (1996). [Times cited: > 25]
85. **Q.J. Chen**, Y. Chen, J. Yang, and Z.D. Lin, *Oriented and textured growth of (111) diamond on silicon using hot filament chemical vapor deposition*, Thin Solid Films **274**, 160 (1996). (Altmetric = 6)
86. **Q.J. Chen**, and Z.D. Lin, *Electron-emission-enhanced diamond nucleation on Si by chemical vapor deposition*, Appl. Phys. Lett. **68**, 2450 (1996). [Times cited: > 53]
87. **Q.J. Chen**, L.-X. Wang, Z. Zhang, J. Yang, and Z.D. Lin, *Epitaxially oriented growth of diamond on silicon by chemical vapor deposition*, Appl. Phys. Lett. **68**, 176 (1996). [Times cited: > 40]
88. **Q.J. Chen** and Z.D. Lin, *Synthesis of oriented textured diamond films on silicon via hot filament chemical vapor deposition*, Appl. Phys. Lett. **67**, 1853 (1995). [Times cited: > 111]
89. J. Yang, X.W. Su, **Q.J. Chen**, and Z.D. Lin, *Si^+ implantation: A pretreatment method for diamond nucleation on a Si wafer*, Appl. Phys. Lett. **66**, 3284 (1995). [Times cited: > 40]
90. **Q.J. Chen**, and Z.D. Lin, *Diamond growth on thin Ti wafer via chemical vapor deposition*, J. Mater. Res. **10**(RC), 2685 (1995).
91. J. Yang, **Q.J. Chen**, Z.D. Lin, L.X. Wang, X. Jin, and Z. Zhang, Heteroepitaxial diamond film formed on Si(001) wafer, Prog. Nat. Sci. **5**(2), 246 (1995).

CONFERENCE PAPERS

92. Y. Yu and **Q.J. Chen,** *Superfluidity in atomic Fermi gases*, Physica C **470**, S900 (2010), (Proc. M2S-IX Tokyo, September 2009, invited talk).
93. **Q.J. Chen**, C.-C. Chien, Y. He, and K. Levin, *Fermionic superfluidity: From high Tc superconductors to ultracold Fermi gases*, J. supercond. Nov. Magn. **20**, 515 (2007).
94. K. Levin and **Q.J. Chen**, *What can ultracold Fermi gases teach us about high Tc superconductors and vice versa?* Physica C **460-462**, 347 (2007).

95.K. Levin and **Q.J. Chen**, *Finite temperature effects in ultracold Fermi gases*, in *Ultracold Fermi Gases, Proc. the Int'l School of Physics "Enrico Fermi"*, Course CLXIV, Varenna, Italy, June 20-30, 2006, ed. by M. Inguscio, W. Ketterle, and C. Salomon (IOS Press, Amsterdam), pp. 751-778, 2008; doi:10.3254/978-1-58603-846-5-751; see also arXiv:cond-mat/0610006.

96.Y.-J. Kao, A.P. Iyengar, **Q.J. Chen**, K. Levin, *A precursor superconductivity approach to magnetic field effects in the pseudogap phase*, Physica B **312-313**, 42 (2002).

97.A.P. Iyengar, Y.-J. Kao, **Q.J. Chen**, and K. Levin, *Magnetic field effects in the pseudogap phase: A precursor superconductivity scenario*, J. Phys. Chem. Solids **63**, 2349 (2002).

98.**Q.J. Chen**, Y.-J. Kao, A.P. Iyengar, and K. Levin, *Magnetic field effects on Tc and the pseudogap onset temperature in cuprate superconductors*, Int. J. Mod. Phys. B **16**, 3176 (2002).

99.K. Levin, **Q.J. Chen**, I. Kosztin, B. Janko, Y.-J. Kao, and A.P. Iyengar, *The origin of the pseudogap phase: Precursor superconductivity versus a competing energy gap scenario*, J. Phys. Chem. Solids **63**, 2233 (2002).

100.**Q.J. Chen**, I. Kosztin, and K. Levin, *Nodal quasiparticles versus phase fluctuations in high Tc superconductors: An intermediate scenario*, Physica C **341**, Pt. 1, 149 (2000).

101.K. Levin, **Q.J. Chen**, and I. Kosztin, *Short coherence length superconductivity: A generalization of BCS theory for the underdoped cuprates*, Physica C **341**, Pt. 2, 851 (2000).

102.I. Kosztin, Q.J. Chen, B. Jankó, and K. Levin, *Pseudogap phenomena in the superconducting phase of the cuprates*, AIP Conf. Proc. **483**, 57 (1999); doi:10.1063/1.59645.

103.**Q.J. Chen**, I. Kosztin, B. Jankó, and K. Levin, *A BCS Bose-Einstein crossover theory and its application to the cuprates*, AIP Conf. Proc. **483**, 22 (1999); doi:10.1063/1.59579.

104.J. Yang, X.W. Su, **Q.J. Chen**, and Z.D. Lin, *Diamond nucleation and growth on mirror-polished Si wafer pretreated by Si^+ implantation*, in *Proc. Applied Diamond Conf.* 1995, 3rd Int'l Conf. on Appl. of Diamond Films and Relat. Mater., ed. A. Feldman, Y. Tzeng, W. A. Yarbrough, M. Yoshikawa and M. Murakawa, (NIST Special Publication Vol. 885, Gaithersburg, MD, 21-24 Aug. 1995), pp. 343-346.

105.Y. Chen, J. Mei, **Q.J. Chen**, and Z.D. Lin, *Achieving high nucleation density of diamond film under low pressures in hot-filament chemical vapor deposition*, in *Materials Research Society symposia proceedings*, Vol. **363**, pp. 175-182, (1995), (Chemical Vapor Deposition of Refractory Metals and Ceramics III, MRS, Boston, MA, Nov., 1994).