Huiqian Luo

List of Publications by Year in Descending Order

103 papers	2,909 citations	27 h-index	51 g-index
108 ext. papers	3,286 ext. citations	4.3 avg, IF	4.61 L-index

#	Paper	IF	Citations
103	Preferred Spin Excitations in the Bilayer Iron-Based Superconductor CaK(Fe_{0.96}Ni_{0.04})_{4}As_{4} with Spin-Vortex Crystal Order.. *Physical Review Letters*, **2022**, 128, 137003	7.4	0
102	Surface morphology and electronic structure in stoichiometric superconductor CaKFe4As4 probed by scanning tunneling microscopy/spectroscopy. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	0
101	Friedel Oscillations of Vortex Bound States under Extreme Quantum Limit in KCa_{2}Fe_{4}As_{4}F_{2}. *Physical Review Letters*, **2021**, 126, 257002	7.4	7
100	Common (□,□)Band Folding and Surface Reconstruction in FeAs-Based Superconductors. *Chinese Physics Letters*, **2021**, 38, 057404	1.8	3
99	Single-particle tunneling spectroscopy and superconducting gaps in the layered iron-based superconductor KCa2Fe4As4F2. *Physical Review B*, **2021**, 103,	3.3	5
98	Spin excitations and spin wave gap in the ferromagnetic Weyl semimetal Co3Sn2S2. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	10
97	Extreme Suppression of Antiferromagnetic Order and Critical Scaling in a Two-Dimensional Random Quantum Magnet. *Physical Review Letters*, **2021**, 126, 037201	7.4	4
96	Anisotropic magnetoelastic response in the magnetic Weyl semimetal Co3Sn2S2. *Science China: Physics, Mechanics and Astronomy*, **2021**, 64, 1	3.6	6
95	Spectroscopic evidence of bilayer splitting and strong interlayer pairing in the superconductor KCa2Fe4As4F2. *Physical Review B*, **2020**, 101,	3.3	10
94	Sharp peak of the critical current density in BaFe2□NixAs2 at optimal composition. *Physical Review B*, **2020**, 101,	3.3	4
93	ThMnPnN (Pn = P, As): Synthesis, Structure, and Chemical Pressure Effects. *Inorganic Chemistry*, **2020**, 59, 2937-2944	5.1	6
92	Spin-excitation anisotropy in the bilayer iron-based superconductor CaKFe4As4. *Physical Review Research*, **2020**, 2,	3.9	2
91	Vortex dynamics and phase diagram in the electron-doped cuprate superconductor Pr0.87LaCe0.13CuO4. *Physical Review B*, **2020**, 102,	3.3	2
90	Neutron Spin Resonance in a Quasi-Two-Dimensional Iron-Based Superconductor. *Physical Review Letters*, **2020**, 125, 117002	7.4	12
89	Doping Dependence of the Second Magnetization Peak, Critical Current Density, and Pinning Mechanism in BaFe2□NixAs2 Pnictide Superconductors. *ACS Applied Electronic Materials*, **2019**, 1, 179-188	4	6
88	Unconventional Antiferromagnetic Quantum Critical Point in Ba(Fe_{0.97}Cr_{0.03})_{2}(As_{1-x}P_{x})_{2}. *Physical Review Letters*, **2019**, 122, 037001	7.4	3
87	In-plane electrical impedance as a probe for the electron nematicity of BaFe2As2. *AIP Advances*, **2019**, 9, 035140	1.5	

86	Strong pinning in the hole-doped pnictide superconductor La0.34Na0.66Fe2As2. *Journal of Applied Physics*, **2019**, 125, 123902	2.5	4
85	The c-axis complex permittivity and electrical impedance in BaFe2As2: Experimental examination on transformation validity. *Chinese Physics B*, **2019**, 28, 057702	1.2	
84	Nonlinear uniaxial pressure dependence of Tc in iron-based superconductors. *Physical Review Research*, **2019**, 1,	3.9	2
83	Protonation induced high- T c phases in iron-based superconductors evidenced by NMR and magnetization measurements. *Science Bulletin*, **2018**, 63, 11-16	10.6	34
82	Neutron Spin Resonance in the 112-Type Iron-Based Superconductor. *Physical Review Letters*, **2018**, 120, 137001	7.4	14
81	Odd and Even Modes of Neutron Spin Resonance in the Bilayer Iron-Based Superconductor CaKFe_{4}As_{4}. *Physical Review Letters*, **2018**, 120, 267003	7.4	18
80	Doping effects of Cr on the physical properties of BaFe1.9□Ni0.1CrxAs2. *Physical Review B*, **2018**, 98,	3.3	3
79	Spin Waves in Detwinned BaFe_{2}As_{2}. *Physical Review Letters*, **2018**, 121, 067002	7.4	14
78	EMuS Muon Facility and Its Application in the Study of Magnetism. *Quantum Beam Science*, **2018**, 2, 23	1.6	15
77	Spin dynamics of edge-sharing spin chains in SrCa13Cu24O41. *Physical Review B*, **2018**, 98,	3.3	5
76	Superconducting Ti15Zr15Nb35Ta35 High-Entropy Alloy With Intermediate Electron-Phonon Coupling. *Frontiers in Materials*, **2018**, 5,	4	21
75	Single-crystal growth of the iron-based superconductor La0.34Na0.66Fe2As2. *Superconductor Science and Technology*, **2018**, 31, 125008	3.1	2
74	Neutron powder diffraction study on the iron-based nitride superconductor ThFeAsN. *Europhysics Letters*, **2017**, 117, 57005	1.6	12
73	Multigap superconductivity in ThAsFeN investigated using □R measurements. *Physical Review B*, **2017**, 96,	3.3	19
72	Nature of the antiferromagnetic and nematic transitions in Sr1□BaxFe1.97Ni0.03As2. *Physical Review B*, **2017**, 96,	3.3	3
71	Unified Phase Diagram for Iron-Based Superconductors. *Physical Review Letters*, **2017**, 119, 157001	7.4	29
70	Two-Dimensional Massless Dirac Fermions in Antiferromagnetic AFe_{2}As_{2} (A=Ba,Sr). *Physical Review Letters*, **2017**, 119, 096401	7.4	16
69	Magnetic fluctuations in BaFe 2□ Ni x As 2 superconductors. *Solid State Communications*, **2017**, 267, 48-52	1.6	

68	Quasi-two-dimensional behavior of 112-type iron-based superconductors. *Physical Review B*, **2017**, 96,	3.3	8
67	Crystal growth and phase diagram of 112-type iron pnictide superconductor Ca1−LayFe1−NixAs2. *Superconductor Science and Technology*, **2017**, 30, 095002	3.1	13
66	Angular-dependent magnetic torque in iron-pnictide BaFe2−NixAs2. *International Journal of Modern Physics B*, **2017**, 31, 1750005	1.1	
65	Spin excitation anisotropy in the optimally isovalent-doped superconductor BaFe2(As0.7P0.3)2. *Physical Review B*, **2017**, 96,	3.3	11
64	Spin excitations in optimally P-doped BaFe2(As0.7P0.3)2 superconductor. *Physical Review B*, **2016**, 94,	3.3	14
63	Effect of Nematic Order on the Low-Energy Spin Fluctuations in Detwinned BaFe_{1.935}Ni_{0.065}As_{2}. *Physical Review Letters*, **2016**, 117, 227003	7.4	19
62	Electronic specific heat in BaFe2−NixAs2. *Physical Review B*, **2016**, 93,	3.3	4
61	Nematic magnetoelastic effect contrasted between Ba(Fe1−Cox)2As2 and FeSe. *Physical Review B* , **2016**, 93,	3.3	10
60	Impact of uniaxial pressure on structural and magnetic phase transitions in electron-doped iron pnictides. *Physical Review B*, **2016**, 93,	3.3	24
59	Effect of residual stress on nematic domains in BaFe 2−x Ni x As 2 studied by angular magnetoresistance. *Chinese Physics B*, **2016**, 25, 057402	1.2	
58	Spin waves and magnetic exchange interactions in the spin-ladder compound RbFe2Se3. *Physical Review B*, **2016**, 94,	3.3	21
57	Nematic Quantum Critical Fluctuations in BaFe_{2-x}Ni_{x}As_{2}. *Physical Review Letters*, **2016**, 117, 157002	7.4	24
56	Nodeless superconductivity in the presence of spin-density wave in pnictide superconductors: The case of BaFe2−NixAs2. *Physical Review B*, **2015**, 91,	3.3	21
55	Structural and Magnetic Phase Transitions near Optimal Superconductivity in BaFe2(As(1-x)Px)2. *Physical Review Letters*, **2015**, 114, 157002	7.4	42
54	Observation of an anomalous peak in isofieldM(T) curves in BaFe2(As0.68P0.32)2suggesting a phase transition in the irreversible regime. *Superconductor Science and Technology*, **2015**, 28, 055017	3.1	10
53	Doping evolution of antiferromagnetism and transport properties in nonsuperconducting BaFe2−xNixCrxAs2. *Physical Review B*, **2015**, 91,	3.3	11
52	Determination of the incommensurate modulated structure of Bi(2)Sr(1.6)La(0.4)CuO(6+δ)by aberration-corrected transmission electron microscopy. *Ultramicroscopy*, **2015**, 159 Pt 1, 67-72	3.1	5
51	Electronic nematic correlations in the stress-free tetragonal state of BaFe2−NixAs2. *Physical Review B*, **2015**, 92,	3.3	27

50	Electron doping dependence of the anisotropic superconductivity in BaFe2−xNixAs2. *Physical Review B*, **2015**, 92,	3.3	20
49	Energy dependence of the spin excitation anisotropy in uniaxial-strained BaFe1.9Ni0.1As2. *Physical Review B*, **2015**, 92,	3.3	16
48	Nematic Crossover in BaFe(2)As(2) under Uniaxial Stress. *Physical Review Letters*, **2015**, 115, 197002	7.4	20
47	Superconducting fluctuations in isovalently substituted BaFe2(As1−xPx)2: Possible observation of multiband effects. *Physical Review B*, **2015**, 92,	3.3	13
46	Large increase of the anisotropy factor in the overdoped region of Ba(Fe1-xNix)2As2as probed by fluctuation spectroscopy. *Superconductor Science and Technology*, **2015**, 28, 075004	3.1	3
45	A study of one-dimensional incommensurate modulated structure determination in high-resolution transmission electron microscopy. *Acta Crystallographica Section A: Foundations and Advances*, **2014** , 70, 563-571	1.7	3
44	The effect of Cr impurity to superconductivity in electron-doped BaFe2−xNixAs2. *Superconductor Science and Technology*, **2014**, 27, 115003	3.1	11
43	Superconductivity. Nematic spin correlations in the tetragonal state of uniaxial-strained BaFe(2-x)Ni(x)As□*Science*, **2014**, 345, 657-60	33.3	144
42	Surface impedance of BaFe2−xNixAs2 crystals. *Solid State Communications*, **2014**, 185, 10-13	1.6	2
41	Measurements of the superconducting fluctuations in optimally doped BaFe2−xNixAs2under high magnetic fields: probing the 3D-anisotropic Ginzburg□andau approach. *Superconductor Science and Technology*, **2014**, 27, 075001	3.1	14
40	Surface impedance in the antiferromagnetic and superconducting states of underdoped BaFe1.93Ni0.07As2 crystals. *Solid State Communications*, **2014**, 192, 47-50	1.6	1
39	Short-range cluster spin glass near optimal superconductivity in BaFe2−xNixAs2. *Physical Review B*, **2014**, 90,	3.3	40
38	Localization of charge carriers in the normal state of underdoped Bi2+xSr2−xCuO6+□*Physical Review B*, **2014**, 89,	3.3	3
37	Avoided quantum criticality and magnetoelastic coupling in BaFe(2-x)Ni(x)As2. *Physical Review Letters*, **2013**, 110, 257001	7.4	57
36	Spin excitation anisotropy as a probe of orbital ordering in the paramagnetic tetragonal phase of superconducting BaFe1.904Ni0.09As2. *Physical Review Letters*, **2013**, 111, 107006	7.4	48
35	Doping dependence of spin excitations and its correlations with high-temperature superconductivity in iron pnictides. *Nature Communications*, **2013**, 4, 2874	17.4	82
34	Longitudinal Spin Excitations and Magnetic Anisotropy in Antiferromagnetically Ordered BaFe2As2. *Physical Review X*, **2013**, 3,	9.1	32
33	Electron doping evolution of the magnetic excitations in BaFe2−xNixAs2. *Physical Review B*, **2013**, 88,	3.3	35

32	Vortex dynamics as a function of field orientation in BaFe1.9Ni0.1As2. *Superconductor Science and Technology*, **2013**, 26, 025006	3.1	7
31	Coexistence and competition of the short-range incommensurate antiferromagnetic order with the superconducting state of BaFe(2-x)Ni(x)As2. *Physical Review Letters*, **2012**, 108, 247002	7.4	76
30	Polarized neutron scattering studies of magnetic excitations in electron-overdoped superconducting BaFe1.85Ni0.15As2. *Physical Review B*, **2012**, 85,	3.3	25
29	Electron doping evolution of the anisotropic spin excitations in BaFe2−xNixAs2. *Physical Review B*, **2012**, 86,	3.3	40
28	Vortex creep and critical current densities in superconducting (Ba,K)Fe2As2 single crystals. *Physical Review B*, **2012**, 86,	3.3	14
27	Nature of magnetic excitations in superconducting BaFe1.9Ni0.1As2. *Nature Physics*, **2012**, 8, 376-381	16.2	109
26	Temperature dependence of the paramagnetic spin excitations in BaFe2As2. *Physical Review B*, **2012**, 86,	3.3	21
25	Temperature dependence of the resonance and low-energy spin excitations in superconducting FeTe0.6Se0.4. *Physical Review B*, **2012**, 85,	3.3	8
24	Specific heat of optimally doped Ba(Fe1−xTMx)2As2 (TM = Co and Ni) single crystals at low temperatures: A multiband fitting. *Physical Review B*, **2012**, 85,	3.3	6
23	Magnetic phase diagram of the layered superconductor Bi2+xSr2−xCuO6+δ (Bi2201) withTc≈7 K. *Superconductor Science and Technology*, **2012**, 25, 105004	3.1	4
22	Systematic growth of BaFe2−xNixAs2large crystals. *Superconductor Science and Technology*, **2011**, 24, 065004	3.1	48
21	Magnetic field effect on static antiferromagnetic order and spin excitations in the underdoped iron arsenide superconductor BaFe1.92Ni0.08As2. *Physical Review B*, **2011**, 83,	3.3	28
20	Fishtail and vortex dynamics in the Ni-doped iron pnictide BaFe1.82Ni0.18As2. *Physical Review B*, **2011**, 84,	3.3	20
19	Neutron scattering studies of spin excitations in hole-doped Ba(0.67)K(0.33)Fe(2)As(2) superconductor. *Scientific Reports*, **2011**, 1, 115	4.9	65
18	Propeller-Like Low Temperature Fermi Surface of Ba1-xKxFe2As2 from Magnetotransport and Photoemission Measurements. *Journal of the Physical Society of Japan*, **2011**, 80, 023710	1.5	16
17	Electron-doping evolution of the low-energy spin excitations in the iron arsenide superconductor BaFe2−xNixAs2. *Physical Review B*, **2010**, 81,	3.3	69
16	Flux dynamics associated with the second magnetization peak in the iron pnictide Ba1−xKxFe2As2. *Physical Review B*, **2010**, 82,	3.3	58
15	Precision microwave electrodynamic measurements of K- and Co-doped BaFe2As2. *Physical Review B*, **2010**, 82,	3.3	25

14	Low temperature specific heat in BaFe1.9Ni0.1As2 single crystals. *Science China: Physics, Mechanics and Astronomy*, **2010**, 53, 1221-1224	3.6	4
13	Superconductivity and phase diagrams of the 4d- and 5d-metal-doped iron arsenides SrFe2−xMxAs2 (M=Rh,Ir,Pd). *Physical Review B*, **2009**, 80,	3.3	102
12	Roles of multiband effects and electron-hole asymmetry in the superconductivity and normal-state properties of Ba(Fe1−xCox)2As2. *Physical Review B*, **2009**, 80,	3.3	170
11	Quasiparticle heat transport in single-crystalline Ba1−xKxFe2As2: Evidence for a k-dependent superconducting gap without nodes. *Physical Review B*, **2009**, 80,	3.3	100
10	Low temperature specific heat of the hole-doped Ba0.6K0.4Fe2As2 single crystals. *Physical Review B*, **2009**, 79,	3.3	142
9	Specific-heat measurement of a residual superconducting state in the normal state of underdoped Bi_{2}Sr_{2-x}La_{x}CuO_{6+delta} cuprate superconductors. *Physical Review Letters*, **2009**, 103, 067002	7.4	47
8	Growth of NdFeAs(O1−xFx) single crystals at ambient pressure and their transport properties. *Journal of Crystal Growth*, **2009**, 311, 358-361	1.6	20
7	Superconducting fluctuations in the reversible magnetization of the iron-pnictide Ba1−xKxFe2As2. *Physical Review B*, **2009**, 80,	3.3	27
6	Growth and characterization of A1−xKxFe2As2(A = Ba, Sr) single crystals withx= 0–0.4. *Superconductor Science and Technology*, **2008**, 21, 125014	3.1	95
5	Fishtail effect and the vortex phase diagram of single crystal Ba0.6K0.4Fe2As2. *Applied Physics Letters*, **2008**, 93, 142506	3.4	141
4	Growth and post-annealing studies of Bi2Sr2−xLaxCuO6+δ(0.0≤x≤1.00) single crystals. *Superconductor Science and Technology*, **2008**, 21, 125024	3.1	13
3	Critical fields and anisotropy of NdFeAsO0.82F0.18 single crystals. *Applied Physics Letters*, **2008**, 93, 032503	3.4	157
2	Superconductivity at 36 K in gadolinium-arsenide oxides GdO1−x F x FeAs **2008**, 51, 719-722		138
1	Growth and characterization of Bi2+xSr2-xCuO6+δsingle crystals. *Journal of Crystal Growth*, **2007**, 305, 222-227	1.6	15