Bing Lv

List of Publications by Citations

105 papers	3,438 citations	26 h-index	57 g-index
111 ext. papers	3,877 ext. citations	5 avg, IF	4.99 L-index

#	Paper	IF	Citations
105	Superconducting Fe-based compounds (A1-xSrx)Fe2As2 with A=K and Cs with transition temperatures up to 37 K. *Physical Review Letters*, **2008**, 101, 107007	7.4	635
104	LiFeAs: An intrinsic FeAs-based superconductor with Tc=18 K. *Physical Review B*, **2008**, 78,	3.3	633
103	High thermal conductivity in cubic boron arsenide crystals. *Science*, **2018**, 361, 579-581	33.3	220
102	Observation of temperature-induced crossover to an orbital-selective Mott phase in A(x)Fe(2-y)Se2 (A=K, Rb) superconductors. *Physical Review Letters*, **2013**, 110, 067003	7.4	158
101	n-type thermoelectric material Mg2Sn0.75Ge0.25 for high power generation. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 3269-74	11.5	152
100	Observation of universal strong orbital-dependent correlation effects in iron chalcogenides. *Nature Communications*, **2015**, 6, 7777	17.4	110
99	The synthesis and characterization of LiFeAs and NaFeAs. *Physica C: Superconductivity and Its Applications*, **2009**, 469, 326-331	1.3	110
98	Unusual superconducting state at 49 K in electron-doped CaFe2As2 at ambient pressure. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 15705-9	11.5	110
97	Ultrahigh thermal conductivity in isotope-enriched cubic boron nitride. *Science*, **2020**, 367, 555-559	33.3	90
96	Raman-scattering study of KxSr1−xFe2As2 (x=0.0,0.4). *Physical Review B*, **2008**, 78,	3.3	78
95	Hole-doped cuprate high temperature superconductors. *Physica C: Superconductivity and Its Applications*, **2015**, 514, 290-313	1.3	64
94	Experimental study of the proposed super-thermal-conductor: BAs. *Applied Physics Letters*, **2015**, 106, 074105	3.4	52
93	Absence of zero-energy surface bound states in CuxBi2Se3 studied via Andreev reflection spectroscopy. *Physical Review B*, **2013**, 88,	3.3	52
92	High Thermal Conductivity in Isotopically Enriched Cubic Boron Phosphide. *Advanced Functional Materials*, **2018**, 28, 1805116	15.6	51
91	A75s nuclear magnetic resonance study of antiferromagnetic fluctuations in the normal state of LiFeAs. *Physical Review B*, **2010**, 81,	3.3	48
90	Pressure shift of the superconducting T c of LiFeAs. *Europhysics Letters*, **2009**, 85, 27005	1.6	47
89	Evidence of quantum criticality in the phase diagram of KxSr1−xFe2As2 from measurements of transport and thermoelectricity. *Physical Review B*, **2009**, 79,	3.3	43

88	Pressure-induced shift of Tc in KxSr1−xFe2As2 (x=0.2,0.4,0.7): Analogy to the high-Tc cuprate superconductors. *Physical Review B*, **2008**, 78,	3.3	42
87	Evidence for multiple gaps in the specific heat of LiFeAs crystals. *Physical Review B*, **2010**, 81,	3.3	40
86	Meissner and mesoscopic superconducting states in 14 unit-cell FeSe films. *Physical Review B*, **2014**, 90,	3.3	38
85	Seeded growth of boron arsenide single crystals with high thermal conductivity. *Applied Physics Letters*, **2018**, 112, 031903	3.4	31
84	The superconductor KxSr1-xFe2As2: normal state and superconducting properties. *New Journal of Physics*, **2009**, 11, 025013	2.9	31
83	Disorder-induced bulk superconductivity in ZrTe3 single crystals via growth control. *Physical Review B*, **2013**, 87,	3.3	29
82	Lower critical field, anisotropy, and two-gap features of LiFeAs. *Physical Review B*, **2010**, 81,	3.3	28
81	Nanoscale surface element identification and dopant homogeneity in the high-Tc superconductor PrxCa1−xFe2As2. *Physical Review B*, **2013**, 87,	3.3	27
80	Anomalous vibrational properties of cubic boron arsenide. *Physical Review B*, **2014**, 89,	3.3	26
79	Superconductivity in ternary iron pnictides: AFe2As2 (A = alkali metal) and LiFeAs. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S276-S279	1.3	25
78	New Strategy for Black Phosphorus Crystal Growth through Ternary Clathrate. *Crystal Growth and Design*, **2017**, 17, 6579-6585	3.5	24
77	Evidence for defect-induced superconductivity up to 49 K in (Ca1−xRx)Fe2As2. *Physical Review B*, **2016**, 93,	3.3	20
76	Unusual doping dependence of superconductivity in NayFeAs. *Physical Review B*, **2009**, 79,	3.3	19
75	Tunable Electronic Properties of Graphene/g-AlN Heterostructure: The Effect of Vacancy and Strain Engineering. *Nanomaterials*, **2019**, 9,	5.4	19
74	Superconductivity in the Mn5Si3-type Zr5Sb3 system. *Physical Review B*, **2013**, 88,	3.3	18
73	Interface-induced superconductivity at ~25 K at ambient pressure in undoped CaFe2As2 single crystals. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 12968-12973	11.5	15
72	Chemical doping and high-pressure studies of layered PdBi2 single crystals. *Physical Review B*, **2015**, 92,	3.3	15
71	Development of Ti-sheathed MgB2wires with high critical current density. *Superconductor Science and Technology*, **2006**, 19, 1146-1151	3.1	15

70	Raman scattering study of electron-doped PrxCa1−xFe2As2 superconductors. *Physical Review B*, **2011**, 84,	3.3	14
69	Spacing dependent and cation doping independent superconductivity in intercalated 1T 2D SnSe 2. *2D Materials*, **2019**, 6, 045048	5.9	13
68	Anomalous hysteresis as evidence for a magnetic-field-induced chiral superconducting state in LiFeAs. *Physical Review B*, **2013**, 87,	3.3	13
67	Incommensurate spin-density wave and a multiband superconducting phase in NaxFeAs revealed by nuclear magnetic resonance. *Physical Review B*, **2011**, 84,	3.3	13
66	MOD multi-layer YBCO films on single-crystal substrate. *Superconductor Science and Technology*, **2008**, 21, 045015	3.1	13
65	Surface terminations and layer-resolved tunneling spectroscopy of the 122 iron pnictide superconductors. *Physical Review B*, **2019**, 99,	3.3	12
64	High-pressure and doping studies of the superconducting antiperovskite SrPt3P. *Physical Review B*, **2015**, 91,	3.3	12
63	The unusually high Tc in rare-earth-doped single crystalline CaFe2As2. *Philosophical Magazine*, **2014** , 94, 2562-2570	1.6	12
62	Experimental Investigation of the Electronic Structure of Ca 0.83 La 0.17 Fe 2 As 2. *Chinese Physics Letters*, **2013**, 30, 017402	1.8	11
61	High-pressure study of superconducting and nonsuperconducting single crystals of the same nominal composition Rb0.8Fe2Se2. *Physical Review B*, **2011**, 84,	3.3	10
60	Synthesis, structure, and superconductivity in the new-structure-type compound: SrPt6P2. *Inorganic Chemistry*, **2015**, 54, 1049-54	5.1	9
59	Thermodynamic evidence for pressure-induced bulk superconductivity in the Fe□As pnictide superconductor CaFe2As2. *New Journal of Physics*, **2012**, 14, 053034	2.9	9
58	Superconductivity in R(O,F)FeAs, AFe2As2, (A,A′)Fe2As2, AFeAs and LaNFeAs, where R = Rare Earth, A = Alkaline, and A = Alkaline Earth. *Journal of the Physical Society of Japan*, **2008**, 77, 72-77	1.5	9
57	New Verbeekite-type polymorphic phase and rich phase diagram in the PdSe2−xTex system. *Physical Review B*, **2021**, 104,	3.3	9
56	Extrapolated Defect Transition Level in Two-Dimensional Materials: The Case of Charged Native Point Defects in Monolayer Hexagonal Boron Nitride. *ACS Applied Materials & Interfaces*, **2020**, 12, 17055-17061	9.5	8
55	Thermal expansion coefficients of high thermal conducting BAs and BP materials. *Applied Physics Letters*, **2019**, 115, 011901	3.4	8
54	Critical scaling of transport properties in the phase diagram of iron pnictide superconductors KxSr1−xFe2As2 and KxBa1−xFe2As2. *Journal of Applied Physics*, **2010**, 107, 09E145	2.5	8
53	Determination of foreign phases in Fe□As based superconducting systems. *Hyperfine Interactions*, **2009**, 191, 61-65	0.8	7

52	Two-gap features in the specific heat of (M,K)Fe2As2 (M = Ba, Sr). *Physical Review B*, **2011**, 84,	3.3	7
51	Chemistry in Superconductors. *Chemical Reviews*, **2021**, 121, 2966-2991	68.1	7
50	High-Pressure Resistivity of YFe2Si2 and Magnetic Studies of Y1− Ho y Fe2Si2 and YFe2(Si1− Ge x)2 Systems. *Journal of Superconductivity and Novel Magnetism*, **2015**, 28, 1207-1216	1.5	6
49	Fabrication, Characterization and Study of MOD Multi-Layer YBCO Films. *IEEE Transactions on Applied Superconductivity*, **2009**, 19, 3379-3382	1.8	6
48	Negative effects of crystalline-SiC doping on the critical current density in Ti-sheathed MgB2(SiC)ysuperconducting wires. *Superconductor Science and Technology*, **2007**, 20, 697-703	3.1	6
47	Investigation on the reported superconductivity in intercalated black phosphorus. *Materials Today Physics*, **2018**, 4, 7-11	8	5
46	Observation of pseudogaplike feature above Tc in LiFeAs by ultrafast optical spectroscopy. *Physical Review B*, **2014**, 90,	3.3	5
45	Magnetic and structural relationship of RFe2Si2 and R(Fe(1-x)M(x))2Si2(x = 0-1) systems (R = La, Y and Lu, M = Ni, Mn and Cu). *Journal of Physics Condensed Matter*, **2014**, 26, 476002	1.8	4
44	Effects of MgO impurities and micro-cracks on the critical current density of Ti-sheathed MgB2 wires. *Physica C: Superconductivity and Its Applications*, **2007**, 457, 47-54	1.3	4
43	Superconductivity in the ternary compound SrPt10P4 with complex new structure. *Physical Review Materials*, **2017**, 1,	3.2	4
42	Thermal transport properties of novel two-dimensional CSe. *Physical Chemistry Chemical Physics*, **2020**, 22, 17833-17841	3.6	4
41	Room-Temperature Topological Phase Transition in Quasi-One-Dimensional Material Bi4I4. *Physical Review X*, **2021**, 11,	9.1	4
40	Enhanced superconductivity in the Se-substituted 1T-PdTe2. *Physical Review Materials*, **2021**, 5,	3.2	4
39	Low-temperature microstructural studies on superconducting CaFeAs. *Scientific Reports*, **2019**, 9, 6393	4.9	3
38	Superconductivity from site-selective Ru doping studies in Zr5Ge3compound. *New Journal of Physics*, **2018**, 20, 013009	2.9	3
37	Y89 NMR observation of ferromagnetic and antiferromagnetic spin fluctuations in the collapsed tetragonal phase of YFe2(Ge,Si)2. *Physical Review B*, **2017**, 96,	3.3	3
36	Why is the Tc So High in Fe-Based Pnictide and Chalcogenide Superconductors?. *Materials Research Society Symposia Proceedings*, **2014**, 1684, 16		3
35	The Rise of Tc: A Promising Paradigm via Interfacial Mechanism. *Journal of Physics: Conference Series*, **2013**, 449, 012014	0.3	3

34	Carrier contribution to the specific heat coefficient of Sr1−xKxFe1−xAs2. *Physical Review B*, **2011**, 83,	3.3	3
33	Native Point Defects in Monolayer Hexagonal Boron Phosphide from First Principles. *Journal of Electronic Materials*, **2020**, 49, 5782-5789	1.9	3
32	Elastic constants of cubic boron phosphide and boron arsenide. *Physical Review Materials*, **2021**, 5,	3.2	3
31	Tip-Pressure-Induced Incoherent Energy Gap in CaFe 2 As 2. *Chinese Physics Letters*, **2016**, 33, 067401	1.8	3
30	The external electric-field-induced Schottky-to-ohmic contact transition in graphene/As2S3 interface: A study by the first principles. *International Journal of Energy Research*, **2021**, 45, 4727-4734	4.5	3
29	The Role of Crystal Growth Conditions on the Magnetic Properties of LnFeCo Sb (Ln = La and Ce). *Inorganic Chemistry*, **2019**, 58, 6028-6036	5.1	2
28	Canted antiferromagnetism in the quasi-one-dimensional iron chalcogenide BaFe2Se4. *Physical Review B*, **2020**, 102,	3.3	2
27	Peroxide-Templated Assembly of a Trimetal Neodymium Complex Single-Molecule Magnet. *Inorganic Chemistry*, **2020**, 59, 10379-10383	5.1	2
26	Possible interface superconductivity in rare-earth-doped CaFe(_{2})As(_{2}) and undoped CaFe(_{2})As(_{2}). *Quantum Studies: Mathematics and Foundations*, **2018**, 5, 103-109	0.6	2
25	Ultrafast dynamics of quasiparticles and coherent acoustic phonons in slightly underdoped (BaK)Fe2As2. *Scientific Reports*, **2016**, 6, 25962	4.9	2
24	Electronic band structure of SrCu4As2 and KCu4As2: Metals with diversely doped CuAs layers. *Physical Review B*, **2011**, 84,	3.3	2
23	Doping dependence of phase-separation morphology in (Sr,K)Fe2As2. *Physical Review B*, **2011**, 83,	3.3	2
22	In-Field ${rm J}_{rm C}$ Enhancement on Ti-Sheathed ${rm MgB}_{2}$ Wires Doped With TiC Nanoparticles. *IEEE Transactions on Applied Superconductivity*, **2009**, 19, 2760-2762	1.8	2
21	Gate-Tunable Transport in Quasi-One-Dimensional □BiI Field Effect Transistors.. *Nano Letters*, **2022**,	11.5	2
20	Novel Polymorphic Phase of BaCu2As2: Impact of Flux for New Phase Formation in Crystal Growth. *Crystal Growth and Design*, **2020**, 20, 5922-5930	3.5	2
19	X-ray photoelectron spectroscopy characterization of band offsets of MgO/Mg2Si and SiO2/Mg2Si heterojunctions. *Surface and Interface Analysis*, **2021**, 53, 852-859	1.5	2
18	Impact of the vertical strain on the Schottky barrier height for graphene/AlN heterojunction: a study by the first-principles method. *European Physical Journal B*, **2021**, 94, 1	1.2	2
17	Effect of isotope disorder on the Raman spectra of cubic boron arsenide. *Physical Review Materials*, **2021**, 5,	3.2	2

List of Publications

16	The Degradation Mechanism of Mg2Si during Exploitation at High Temperature. *Physica Status Solidi (B): Basic Research*, **2021**, 258, 2100425	1.3	2
15	Synthesis and Structure of a Nonstoichiometric ZrPtSb Compound. *Inorganic Chemistry*, **2019**, 58, 12017-12024	5.2	1
14	Effects of Nickel Doping on the Multiferroic and Magnetic Phases of MnWO4. *Integrated Ferroelectrics*, **2015**, 166, 17-29	0.8	1
13	Exploration of n- and p-type doping for two-dimensional gallium nitride: charged defect calculation with first principles. *European Physical Journal B*, **2020**, 93, 1	1.2	1
12	The External Electric Field-Induced Tunability of the Schottky Barrier Height in Graphene/AlN Interface: A Study by First-Principles. *Nanomaterials*, **2020**, 10,	5.4	1
11	Interfacial Superconductivity Achieved in Parent AEFeAs (AE = Ca, Sr, Ba) by a Simple and Realistic Annealing Route. *Nano Letters*, **2021**, 21, 2191-2198	11.5	1
10	Interface-Induced and Interface-Enhanced Superconductivity. *Journal of Superconductivity and Novel Magnetism*, **2019**, 32, 7-15	1.5	1
9	Doping dependence and high-pressure studies on Eu x Ca1 x Fe2As2 (0 1). *Superconductor Science and Technology*, **2020**, 33, 095010	3.1	0
8	Determination of the interface band alignment of Mg 2 Si/4H-SiC heterojuction for potential photodetector application. *Surface and Interface Analysis*, **2022**, 54, 270-276	1.5	0
7	Crystal Structure and Electronic Properties of New Compound ZrPtSe. *Inorganic Chemistry*, **2020**, 59, 8196-8202	5.1	
6	CBED Investigations of Boron Monoarsenide Crystals. *Microscopy and Microanalysis*, **2018**, 24, 30-31	0.5	
5	Comparison of Pr-doped Ca 122 and Ca 112 Pnictides by Low-field Microwave Absorption Spectroscopy. *Materials Research Society Symposia Proceedings*, **2014**, 1684, 10		
4	Determination of foreign phases in FeAs based superconducting systems **2009**, 391-395		
3	Superconductivity and phase diagram in a transition metal doped Zr5Ge3 compound. *Superconductor Science and Technology*, **2018**, 31, 085001	3.1	
2	New layered quaternary BaCu6Sn2As4-x and BaCu6Sn2P4-x phases: crystal growth and physical properties. *Journal of Alloys and Compounds*, **2021**, 892, 162111	5.7	
1	Tunable Schottky Barrier and Interfacial Electronic Properties in Graphene/ZnSe Heterostructures. *Frontiers in Chemistry*, **2021**, 9, 744977	5	