

# Ryotaro Arita

## List of Publications by Year in descending order

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332  
papers

20,992  
citations

11651

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336  
docs citations

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times ranked

14990  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unconventional Pairing Originating from the Disconnected Fermi Surfaces of Superconducting $\text{LaFeAsO}_{1-x}\text{F}_x$ . Physical Review Letters, 2008, 101, 087004.	12.6	914
2	Superconducting Dome in a Gate-Tuned Band Insulator. Science, 2012, 338, 1193-1196.	12.6	914
3	Wannier90 as a community code: new features and applications. Journal of Physics Condensed Matter, 2020, 32, 165902.	1.8	807
4	Giant Rashba-type spin splitting in bulk BiTeI. Nature Materials, 2011, 10, 521-526.	27.5	711
5	Pyrochlore height as a possible switch between high- $T_c$ and low- $T_c$ nodal pairings in the iron-based superconductors. Physical Review B, 2009, 79, .	3.2	615
6	Zeeman-type spin splitting controlled by an electric field. Nature Physics, 2013, 9, 563-569.	16.7	462
7	Evidence for magnetic Weyl fermions in a correlated metal. Nature Materials, 2017, 16, 1090-1095.	27.5	450
8	Spectroscopic evidence for a type II Weyl semimetallic state in MoTe2. Nature Materials, 2016, 15, 1155-1160.	27.5	437
9	Large anomalous Nernst effect at room temperature in a chiral antiferromagnet. Nature Physics, 2017, 13, 1085-1090.	16.7	432
10	Wien2wannier: From linearized augmented plane waves to maximally localized Wannier functions. Computer Physics Communications, 2010, 181, 1888-1895.	7.5	383
11	Valley-dependent spin polarization in bulk MoS2 with broken inversion symmetry. Nature Nanotechnology, 2014, 9, 611-617.	31.5	374
12	Giant anomalous Nernst effect and quantum-critical scaling in a ferromagnetic semimetal. Nature Physics, 2018, 14, 1119-1124.	16.7	366
13	A perspective on conventional high-temperature superconductors at high pressure: Methods and materials. Physics Reports, 2020, 856, 1-78.	25.6	304
14	Comparison of <i>Ab initio</i> Low-Energy Models for $\text{LaFePO}$ , $\text{LaFeAsO}$ , $\text{BaFe}_2\text{As}_2$ , $\text{LiFeAs}$ , $\text{FeSe}$ , and $\text{FeTe}$ : Electron Correlation and Covalency. Journal of the Physical Society of Japan, 2010, 79, 044705.	1.6	289
15	Large magneto-optical Kerr effect and imaging of magnetic octupole domains in an antiferromagnetic metal. Nature Photonics, 2018, 12, 73-78.	31.4	260
16	Emergent quantum confinement at topological insulator surfaces. Nature Communications, 2012, 3, 1159.	12.8	235
17	$\text{Pudding Mold}$ -Band Drives Large Thermopower in $\text{NaCo}_2\text{CoO}$ . Journal of the Physical Society of Japan, 2007, 76, 083707.	1.6	232
18	Emergence of non-centrosymmetric topological insulating phase in BiTeI under pressure. Nature Communications, 2012, 3, 679.	12.8	220

#	ARTICLE	IF	CITATIONS
19	Ab initio Studies on the Interplay between Spin-Orbit Interaction and Coulomb Correlation in $\text{SrBa}_2\text{IrO}_6$ Physical Review Letters, 2012, 108, 086403.	7.8	217
20	Octet-Line Node Structure of Superconducting Order Parameter in $\text{KFe}_2\text{As}_2$ . Science, 2012, 337, 1314-1317.	12.6	215
21	Electrical manipulation of a topological antiferromagnetic state. Nature, 2020, 580, 608-613.	27.8	212
22	Cluster multipole theory for anomalous Hall effect in antiferromagnets. Physical Review B, 2017, 95, .	3.2	200
23	First-Principles Study of the Honeycomb-Lattice Iridates in the Presence of Strong Spin-Orbit Interaction and Electron Correlations. Physical Review Letters, 2014, 113, 107201.	7.8	197
24	Quantum crystal structure in the 250-kelvin superconducting lanthanum hydride. Nature, 2020, 578, 66-69.	27.8	193
25	Bandwidth and Fermi surface of iron oxypnictides: Covalency and sensitivity to structural changes. Physical Review B, 2008, 78, .	3.2	189
26	Origin of giant bulk Rashba splitting: Application to BiTeI. Physical Review B, 2011, 84, .	3.2	181
27	Temperature-Induced Lifshitz Transition in $\text{WTe}_2$ . Physical Review Letters, 2015, 115, 166602.	7.8	176
28	Extremely high electron mobility in a phonon-glass semimetal. Nature Materials, 2013, 12, 512-517.	27.5	174
29	Derivation of Low-Energy Model for $\hat{\rho}$ -ET Type Organic Conductors. Journal of the Physical Society of Japan, 2009, 78, 083710.	1.6	163
30	Iron-based binary ferromagnets for transverse thermoelectric conversion. Nature, 2020, 581, 53-57.	27.8	162
31	Formation of a two-dimensional single-component correlated electron system and band engineering in the nickelate superconductor $\text{NdNiO}_2$ . Physical Review B, 2019, 100, .	3.2	161
32	Finite phenine nanotubes with periodic vacancy defects. Science, 2019, 363, 151-155.	12.6	159
33	Anomalous Fermi surface in FeSe seen by Shubnikov-de Haas oscillation measurements. Physical Review B, 2014, 90, .	3.2	155
34	Strongly Spin-Orbit Coupled Two-Dimensional Electron Gas Emerging near the Surface of Polar Semiconductors. Physical Review Letters, 2013, 110, 107204.	7.8	154
35	Phase diagram and gap anisotropy in iron-pnictide superconductors. Physical Review B, 2010, 81, .	3.2	149
36	First-principles study of the pressure and crystal-structure dependences of the superconducting transition temperature in compressed sulfur hydrides. Physical Review B, 2015, 91, .	3.2	141

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37	Breakdown of a Mott Insulator: A Nonadiabatic Tunneling Mechanism. <i>Physical Review Letters</i> , 2003, 91, 066406.	7.8	140
38	Two-Orbital Model Explains the Higher Transition Temperature of the Single-Layer Hg-Cuprate Superconductor Compared to That of the La-Cuprate Superconductor. <i>Physical Review Letters</i> , 2010, 105, 057003.	7.8	140
39	Emergent rank-5 nematic order in URu <sub>2</sub> Si <sub>2</sub> . <i>Nature Physics</i> , 2012, 8, 528-533.	16.7	138
40	<i>Ab initio</i> Derivation of Low-Energy Model for Iron-Based Superconductors LaFeAsO and LaFePO. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 093711.	1.6	130
41	Nickelate superconductors—a renaissance of the one-band Hubbard model. <i>Npj Quantum Materials</i> , 2020, 5, .	5.2	129
42	A weak topological insulator state in quasi-one-dimensional bismuth iodide. <i>Nature</i> , 2019, 566, 518-522.	27.8	119
43	Control of Dzyaloshinskii-Moriya interaction in Mn <sup>1-x</sup> FexGe: a first-principles study. <i>Scientific Reports</i> , 2015, 5, 13302.	3.3	113
44	Gate-Tuned Thermoelectric Power in Black Phosphorus. <i>Nano Letters</i> , 2016, 16, 4819-4824.	9.1	113
45	Topological transitions among skyrmion- and hedgehog-lattice states in cubic chiral magnets. <i>Nature Communications</i> , 2019, 10, 1059.	12.8	112
46	Dichotomy between Large Local and Small Ordered Magnetic Moments in Iron-Based Superconductors. <i>Physical Review Letters</i> , 2010, 104, 197002. <a href="#">Effect of Van Hove singularities on high-<math>T_c</math> superconductivity in <math>\text{Mn}_3\text{S}_2</math></a>	7.8	111
47	<a href="#">Effect of Van Hove singularities on high-<math>T_c</math> superconductivity in <math>\text{Mn}_3\text{S}_2</math></a>	3.2	108
48	Dzyaloshinskii-Moriya Interaction as a Consequence of a Doppler Shift due to Spin-Orbit-Induced Intrinsic Spin Current. <i>Physical Review Letters</i> , 2016, 116, 247201.	7.8	103
49	Evidence for a higher-order topological insulator in a three-dimensional material built from van der Waals stacking of bismuth-halide chains. <i>Nature Materials</i> , 2021, 20, 473-479.	27.5	98
50	Giant magneto-optical responses in magnetic Weyl semimetal Co <sub>3</sub> Sn <sub>2</sub> S <sub>2</sub> . <i>Nature Communications</i> , 2020, 11, 4619.	12.8	92
51	Spin-triplet f-wave-like pairing proposed for an organic superconductor (TMTSF) <sub>2</sub> PF <sub>6</sub> . <i>Physical Review B</i> , 2001, 63, .	3.2	90
52	Unified understanding of superconductivity and Mott transition in alkali-doped fullerenes from first principles. <i>Science Advances</i> , 2015, 1, e1500568.	10.3	90
53	Anomalous transport due to Weyl fermions in the chiral antiferromagnets Mn <sub>3</sub> X, X = Sn, Ge. <i>Nature Communications</i> , 2021, 12, 572.	12.8	90
54	Breakdown of an Electric-Field Driven System: A Mapping to a Quantum Walk. <i>Physical Review Letters</i> , 2005, 94, 100602.	7.8	89

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55	$dx^2-y^2$ - versus $dx_{y}$ - like pairings in organic superconductors $(BEDT-TTF)_2X$ . Physical Review B, 2002, 65, .	3.2	85
56	Electronic Structure and Electron Correlation in $LaFeAsO_{1-x}F_x$ and $LaFePO_{1-x}F_x$ . Journal of the Physical Society of Japan, 2008, 77, 093714.	1.6	84
57	<i>Ab initio</i> derivation of electronic low-energy models for C <sub>60</sub> and aromatic compounds. Physical Review B, 2012, 85, .	3.2	83
58	Origin of the material dependence of $T_c$ in the single-layered cuprates. Physical Review B, 2012, 85, .	3.2	82
59	Possible Spin-Triplet <i>f</i> -Wave Pairing Due to Disconnected Fermi Surfaces In $NaxCoO_2 \cdot yH_2O$ . Physical Review Letters, 2004, 93, 077001.	7.8	80
60	First-principles calculation of transition-metal impurities in $LaFeAsO$ . Physical Review B, 2011, 83, .	3.2	80
61	Optical Response of Relativistic Electrons in the Polar BiTeI Semiconductor. Physical Review Letters, 2011, 107, 117401.	7.8	80
62	The 2021 room-temperature superconductivity roadmap. Journal of Physics Condensed Matter, 2022, 34, 183002.	1.8	79
63	Local atomic structure of superconducting $FeSe_{1-x}Mn_x$ . Physical Review B, 2010, 81, .	3.2	78
64	Phase diagram of the two-dimensional extended Hubbard model: <i>f</i> Phase transitions between different pairing symmetries when charge and spin fluctuations coexist. Physical Review B, 2004, 70, .	3.2	76
65	Imaging the coupling between itinerant electrons and localised moments in the centrosymmetric skyrmion magnet $GdRu_2Si_2$ . Nature Communications, 2020, 11, 5925.	12.8	75
66	Spin-fluctuation exchange study of superconductivity in two- and three-dimensional single-band Hubbard models. Physical Review B, 1999, 60, 14585-14588.	3.2	74
67	First-Principles Electronic Structure of Solid Picene. Journal of the Physical Society of Japan, 2009, 78, 113704.	1.6	73
68	Dependence of Carrier Doping on the Impurity Potential in Transition-Metal-Substituted FeAs-Based Superconductors. Physical Review Letters, 2013, 110, 107007.	7.8	73
69	First-principles calculation of effective onsite Coulomb interactions of <i>d</i> transition metals: Constrained local density functional approach with maximally localized Wannier functions. Physical Review B, 2006, 74, .	3.2	72
70	Possible high- $T_c$ superconductivity mediated by antiferromagnetic spin fluctuations in systems with Fermi surface pockets. Physical Review B, 2001, 64, .	3.2	70
71	Orbital-selective Mott-Hubbard transition in the two-band Hubbard model. Physical Review B, 2005, 72, .	3.2	70
72	Superconductivity in $CuIrTe_2$ driven by interlayer hybridization. Physical Review B, 2013, 87, .	3.2	70

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73	Gate-controlled BCS-BEC crossover in a two-dimensional superconductor. <i>Science</i> , 2021, 372, 190-195.	12.6	69
74	Phase diagram for the one-dimensional Hubbard-Holstein model: A density-matrix renormalization group study. <i>Physical Review B</i> , 2007, 76, .	3.2	67
75	Quantum dynamical screening of the local magnetic moment in Fe-based superconductors. <i>Physical Review B</i> , 2012, 86, .	3.2	65
76	Development of Density-Functional Theory for a Plasmon-Assisted Superconducting State: Application to Lithium Under High Pressures. <i>Physical Review Letters</i> , 2013, 111, 057006.	7.8	65
77	Correlation effects in (111) bilayers of perovskite transition-metal oxides. <i>Physical Review B</i> , 2014, 89, .	3.2	63
78	Possible $d$ - $s$ Phases and Self-Alloying in the Superconducting Sulfur Hydride. <i>Physical Review Letters</i> , 2016, 117, 075503.	7.8	63
79	Aromatic hydrocarbon macrocycles for highly efficient organic light-emitting devices with single-layer architectures. <i>Chemical Science</i> , 2016, 7, 896-904.	7.4	63
80	Three-Dimensional Electronic Structure of Superconducting Iron Pnictides Observed by Angle-Resolved Photoemission Spectroscopy. <i>Journal of the Physical Society of Japan</i> , 2009, 78, 123706.	1.6	62
81	Materials design of dynamically stable $d$ - $s$ layered nickelates. <i>Physical Review B</i> , 2020, 101, .	3.2	61
82	Giant thermoelectric power factor in ultrathin FeSe superconductor. <i>Nature Communications</i> , 2019, 10, 825.	12.8	61
83	$d$ - and $p$ -Wave Superconductivity Mediated by Spin Fluctuations in Two- and Three-Dimensional Single-Band Repulsive Hubbard Model. <i>Journal of the Physical Society of Japan</i> , 2000, 69, 1181-1191.	1.6	60
84	Crib-shaped triplet-pairing gap function for an orthogonal pair of quasi-one-dimensional Fermi surfaces in Sr <sub>2</sub> RuO <sub>4</sub> . <i>Physical Review B</i> , 2001, 63, .	3.2	60
85	Gate-Induced Band Ferromagnetism in an Organic Polymer. <i>Physical Review Letters</i> , 2002, 88, 127202.	7.8	60
86	Effective on-site interaction for dynamical mean-field theory. <i>Physical Review B</i> , 2012, 86, .	3.2	60
87	Strong-correlation induced high-mobility electrons in Dirac semimetal of perovskite oxide. <i>Nature Communications</i> , 2019, 10, 362.	12.8	59
88	Multipole expansion for magnetic structures: A generation scheme for a symmetry-adapted orthonormal basis set in the crystallographic point group. <i>Physical Review B</i> , 2019, 99, .	3.2	59
89	Visualization of the strain-induced topological phase transition in a quasi-one-dimensional superconductor TaSe <sub>3</sub> . <i>Nature Materials</i> , 2021, 20, 1093-1099.	27.5	57
90	Numerical algorithm for the double-orbital Hubbard model: $f$ Hund-coupled pairing symmetry in the doped case. <i>Physical Review B</i> , 2004, 70, .	3.2	56

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91	Dimensional and Three-Dimensional Fermi Surfaces of Superconducting $\text{BaFe}_2\text{As}_2$ $\text{BaFe}_2\text{As}_2$	7.8	55
92	Doped Mott Insulator as the Origin of Heavy-Fermion Behavior in $\text{LiV}_2\text{O}_4$ . Physical Review Letters, 2007, 98, 166402.	7.8	55
93	Band Jahn-Teller Instability and Formation of Valence Bond Solid in a Mixed-Valent Spinel Oxide $\text{LiRh}_2\text{O}_4$ $\text{LiRh}_2\text{O}_4$	7.8	55
94	Atomically resolved spectroscopic study of $\text{Sr}_2\text{IrO}_4$ : Experiment and theory. Scientific Reports, 2013, 3, 3073.	3.3	55
95	Topological Nernst Effect of the Two-Dimensional Skyrmion Lattice. Physical Review Letters, 2020, 125, 076602.	7.8	55
96	First-principles structural optimization and electronic structure of the superconductor picene for various potassium doping levels. Physical Review B, 2011, 84, .	3.2	54
97	Topological Kagome Magnet $\text{Co}_3\text{Sn}_2\text{S}_2$ Thin Flakes with High Electron Mobility and Large Anomalous Hall Effect. Nano Letters, 2020, 20, 7476-7481.	9.1	54
98	High-temperature superconductivity in layered nitrides $\text{Li}\hat{\Gamma}^2$ $\text{Li}\hat{\Gamma}^2$		

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109	Exotic <i>s</i> -wave superconductivity in alkali-doped fullerides. Journal of Physics Condensed Matter, 2016, 28, 153001.	1.8	46
110	$\pi$ -electron $S=1/2$ quantum spin-liquid state in an ionic polyaromatic hydrocarbon. Nature Chemistry, 2017, 9, 635-643.	13.6	46
111	Density-Matrix Renormalization Group Study of Pairing when Electron-Electron and Electron-Phonon Interactions Coexist: Effect of the Electronic Band Structure. Physical Review Letters, 2005, 95, 226401.	7.8	44
112	Mechanism of Enhanced Optical Second-Harmonic Generation in the Conducting Pyrochlore-Type $PbO_7$ Oxide Compound. Physical Review Letters, 2013, 110, 187402.	7.8	44
113	Spin-triplet superconductivity in repulsive Hubbard models with disconnected Fermi surfaces: A case study on triangular and honeycomb lattices. Physical Review B, 2001, 63, .	3.2	43
114	Polar surface engineering in ultrathin $MgO(111)/Ag(111)$ : Possibility of a metal-insulator transition and magnetism. Physical Review B, 2004, 69, .	3.2	43
115	Enhanced Infrared Magneto-Optical Response of the Nonmagnetic Semiconductor BiTeI Driven by Bulk Rashba Splitting. Physical Review Letters, 2012, 109, 167401.	7.8	43
116	Three-dimensional bulk band dispersion in polar BiTeI with giant Rashba-type spin splitting. Physical Review B, 2012, 86, .	3.2	43
117	Two-Dimensional Valley Electrons and Excitons in Noncentrosymmetric $R\bar{3}c$ Physical Review Applied, 2015, 4, .	3.8	43
118	Superconductivity in infinite-layer nickelates. Reports on Progress in Physics, 2022, 85, 052501.	20.1	43
119	High-Tc superconductivity due to coexisting wide and narrow bands: A fluctuation exchange study of the Hubbard ladder as a test case. Physical Review B, 2005, 72, .	3.2	42
120	High-temperature superconductivity in dimer array systems. Physical Review B, 2002, 66, .	3.2	41
121	Competition between singlet and triplet pairings in $NaxCoO2 \cdot yH_2O$ . Physical Review B, 2005, 71, .	3.2	40
122	Pentagon-Embedded Cycloarylenes with Cylindrical Shapes. Angewandte Chemie - International Edition, 2017, 56, 9106-9110.	13.8	40
123	Absence of conventional room-temperature superconductivity at high pressure in carbon-doped $H_3S$ . Physical Review B, 2021, 104, .	3.2	40
124	Quantum Monte Carlo study for multiorbital systems with preserved spin and orbital rotational symmetries. Physical Review B, 2006, 74, .	3.2	38
125	Metal-Induced Gap States at Well Defined Alkali-Halide/Metal Interfaces. Physical Review Letters, 2003, 90, 196803.	7.8	37
126	<i>Ab initio</i> electronic structure of solid coronene: Differences from and commonalities to picene. Physical Review B, 2011, 84, .	3.2	37

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127	High antiferromagnetic transition temperature of the honeycomb compound $\text{SrRu}_2\text{O}_6$ . Physical Review B, 2015, 92, .	3.2	37
128	<i>Ab initio</i> downfolding for electron-phonon-coupled systems: Constrained density-functional perturbation theory. Physical Review B, 2015, 92, .	3.2	37
129	Large magneto-thermopower in MnGe with topological spin texture. Nature Communications, 2018, 9, 408.	12.8	36
130	Mechanisms of Enhanced Orbital Dia- and Paramagnetism: Application to the Rashba Semiconductor BiTeI. Physical Review Letters, 2012, 108, 247208.	7.8	35
131	Soft phonon mode coupled with antiferromagnetic order in incipient-ferroelectric Mott insulators $\text{SrBa}_2\text{Mn}_2\text{O}_7$ . Physical Review Letters, 2012, 108, 247208.	3.2	35
132	Magnetic properties and pairing tendencies of the iron-based superconducting ladder $\text{BaFe}_2\text{S}_3$ : Combined <i>ab initio</i> and density matrix renormalization group study. Physical Review B, 2016, 94, .	3.2	35
133	On the possibility of excitonic magnetism in Ir double perovskites. Physical Review B, 2016, 93, .	3.2	35
134	Weak phonon-mediated pairing in $\text{BiS}_2$ superconductor from first principles. Physical Review B, 2017, 95, .	3.2	35
135	First-Principles Evaluation of the Dzyaloshinskii-Moriya Interaction. Journal of the Physical Society of Japan, 2018, 87, 041011.	1.6	35
136	Exotic pairing state in quasicrystalline superconductors under a magnetic field. Physical Review Research, 2019, 1, .	3.6	35
137	Large anomalous Nernst effect and nodal plane in an iron-based kagome ferromagnet. Science Advances, 2022, 8, eabk1480.	10.3	35
138	Off-Site Repulsion-Induced Triplet Superconductivity: A Possibility for Chiral $p_x + y$ -Wave Pairing in $\text{Sr}_2\text{RuO}_4$ . Physical Review Letters, 2004, 92, 247006.	7.8	34
139	Extended-s-wave pairing originating from the $d$ -band in $\text{Na}_x\text{CoO}_2 \cdot y\text{H}_2\text{O}$ : Single-band U-V model with fluctuation exchange method. Physical Review B, 2006, 73, .	3.2	34
140	Multiorbital analysis of the effects of uniaxial and hydrostatic pressure on $T_c$ in the single-layered cuprate superconductors. Physical Review B, 2012, 86, .	3.2	34
141	Orbital mixture effect on the Fermi-surface in the cuprate superconductors: Bilayer vs. single layer. Physical Review B, 2014, 89, .	3.2	33
142	Controlling the helicity of magnetic skyrmions in a $\text{Mn}$ -type high-temperature chiral magnet. Physical Review B, 2018, 98, .	3.2	32
143	Magnetic exchange coupling in cuprate-analog nickelates. Physical Review Research, 2020, 2, .	3.2	32
144	Density-matrix renormalization-group study of the spin gap in a one-dimensional Hubbard model: Effect of the distant transfer and exchange coupling. Physical Review B, 1998, 57, 10324-10327.	3.2	31

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145	Principles study of magnetic properties in Fe ladder compound $BaFeS_2$ . Physical Review B, 2015, 92, .	3.2	31
146	Topological Magnets: Functions Based on Berry Phase and Multipoles. Annual Review of Condensed Matter Physics, 2022, 13, 119-142.	14.5	31
147	Ferromagnetism in a Hubbard model for an atomic quantum wire: A realization of flat-band magnetism from even-membered rings. Physical Review B, 1998, 57, R6854-R6857.	3.2	30
148	Quantum Monte Carlo study of the pairing symmetry competition in the Hubbard model. Physical Review B, 2004, 69, .	3.2	29
149	Nonempirical study of superconductivity in alkali-doped fullerenes based on density functional theory for superconductors. Physical Review B, 2013, 88, .	3.2	29
150	Shubnikov-de Haas oscillations in the bulk Rashba semiconductor BiTeI. Physical Review B, 2013, 87, .	3.2	29
151	Development of a two-particle self-consistent method for multiorbital systems and its application to unconventional superconductors. Physical Review B, 2013, 87, .	3.2	29
152	Density Functional Theory for Plasmon-Assisted Superconductivity. Journal of the Physical Society of Japan, 2014, 83, 061016.	1.6	29
153	Ab initio derivation of the low-energy model for alkali-cluster-loaded sodalites. Physical Review B, 2009, 80, .	3.2	28
154	Fermi-Surface Evolution by Transition-Metal Substitution in the Iron-based Superconductor LaFeAsO. Journal of the Physical Society of Japan, 2011, 80, 123701.	1.6	28
155	Theory of Topological Quantum Phase Transitions in 3D Noncentrosymmetric Systems. Physical Review Letters, 2013, 110, 086402.	7.8	28
156	Ab initio downfolding study of the iron-based ladder superconductor $BaFeS_2$ . Physical Review B, 2015, 92, .	3.2	28
157	Electronic properties of alkali-metal loaded zeolites: Supercrystal Mott insulators. Physical Review B, 2004, 69, .	3.2	27
158	$Sr_2VO_4$ and $Ba_2VO_4$ under pressure: An orbital switch and potential d <sub>1</sub> superconductor. Physical Review B, 2007, 75, .	3.2	27
159	Modification of electronic structure and thermoelectric properties of hole-doped tungsten dichalcogenides. Physical Review B, 2015, 91, .	3.2	27
160	Superconductivity in Uniquely Strained $RuO_2$ Films. Physical Review Letters, 2020, 125, 147001.	7.8	27
161	Numerical Study of a Superconductor-Insulator Transition in a Half-Filled Hubbard Chain with Distant Transfers. Journal of the Physical Society of Japan, 1997, 66, 3371-3374.	1.6	26
162	Itinerant Ferromagnetism in the Multiorbital Hubbard Model: A Dynamical Mean-Field Study. Physical Review Letters, 2007, 99, 216402.	7.8	26

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163	Multiorbital cluster dynamical mean-field theory with an improved continuous-time quantum Monte Carlo algorithm. <i>Physical Review B</i> , 2014, 89, .	3.2	25
164	Anisotropy of the superconducting gap in the iron-based superconductor BaFe <sub>2</sub> (As <sub>1-x</sub> P <sub>x</sub> ) <sub>2</sub> . <i>Scientific Reports</i> , 2014, 4, 7292.	3.3	25
165	Physical properties of weak-coupling quasiperiodic superconductors. <i>Physical Review B</i> , 2020, 102, .	3.2	25
166	Unified Origin for the 3D Magnetism and Superconductivity in Na <sub>x</sub> CoO <sub>2</sub> . <i>Physical Review Letters</i> , 2007, 98, 136401.	7.8	24
167	Nonlocal correlations induced by Hund's coupling: A cluster DMFT study. <i>Physical Review B</i> , 2015, 91, .	3.2	24
168	Phase Diagram of Nickelate Superconductors Calculated by Dynamical Vertex Approximation. <i>Frontiers in Physics</i> , 2022, 9, .	2.1	24
169	Electron-correlation-originated negative magnetoresistance in a system having a partly flat band. <i>Physical Review B</i> , 2000, 61, 3207-3210.	3.2	23
170	Flat-band ferromagnetism in organic polymers designed by a computer simulation. <i>Physical Review B</i> , 2003, 68, .	3.2	23
171	Angle-resolved photoemission spectroscopy study of PrFeAsO <sub>0.7</sub> : Comparison with LaFePO. <i>Physical Review B</i> , 2011, 84, .	3.2	23
172	Enhancement of the transverse thermoelectric conductivity originating from stationary points in nodal lines. <i>Physical Review B</i> , 2020, 102, .	3.2	23
173	Nonempirical Calculation of Superconducting Transition Temperatures in Light-Element Superconductors. <i>Advanced Materials</i> , 2017, 29, 1602421.	21.0	22
174	Electronic structure of stacked C <sub>60</sub> shuttlecocks. <i>Chemical Physics Letters</i> , 2004, 399, 157-161.	2.6	21
175	Epitaxially Stabilized EuMoO <sub>3</sub> : A New Itinerant Ferromagnet. <i>Chemistry of Materials</i> , 2012, 24, 3746-3750.	6.7	21
176	Devil's staircase transition of the electronic structures in CeSb. <i>Nature Communications</i> , 2020, 11, 2888.	12.8	21
177	Superconductivity assisted by interlayer pair hopping in multilayered cuprates. <i>Physical Review B</i> , 2013, 88, .	3.2	20
178	Giant Effective Damping of Octupole Oscillation in an Antiferromagnetic Weyl Semimetal. <i>Small Science</i> , 2021, 1, 2000062.	9.9	20
179	Metal-induced gap states in epitaxial organic-insulator/metal interfaces. <i>Physical Review B</i> , 2005, 72, .	3.2	19
180	Effect of Electron-Phonon Interactions on Orbital Fluctuations in Iron-Based Superconductors. <i>Physical Review Letters</i> , 2014, 112, 027002.	7.8	19

#	ARTICLE	IF	CITATIONS
181	Robust flat bands in $\text{Co}_2\text{R}_2\text{O}_7$	3.2	19
182	Large Variation of Dirac Semimetal State in Perovskite $\text{CaIrO}_3$ with Pressure-Tuning of Electron Correlation. Physical Review Letters, 2019, 123, 216601.	7.8	19
183	Efficient <i>ab initio</i> Migdal-Eliashberg calculation considering the retardation effect in phonon-mediated superconductors. Physical Review B, 2020, 102, .	3.2	19
184	Link between the spin fluctuation and Fermi surface in high-Tc cuprates: A consistent description within the single-band Hubbard model. Physical Review B, 1999, 60, 9850-9854.	3.2	18
185	First-principles study on the origin of large thermopower in hole-doped $\text{LaRhO}_3$ and $\text{CuRhO}_2$ . Journal of Physics Condensed Matter, 2009, 21, 064223.	1.8	18
186	Density functional theory for superconductors with particle-hole asymmetric electronic structure. Physical Review B, 2013, 88, .	3.2	18
187	Pentagon-Embedded Cycloarylenes with Cylindrical Shapes. Angewandte Chemie, 2017, 129, 9234-9238.	2.0	18
188	Ferromagnetic state above room temperature in a proximitized topological Dirac semimetal. Physical Review B, 2019, 100, .	3.2	18
189	Correlated Band Structure of a Transition Metal Oxide ZnO Obtained from a Many-Body Wave Function Theory. Physical Review Letters, 2017, 118, 026402.	7.8	17
190	Magnetic Properties of the Hubbard Model on Three-Dimensional Lattices: Fluctuation-Exchange and Two-Particle Self-Consistent Studies. Journal of the Physical Society of Japan, 2000, 69, 785-795.	1.6	16
191	Unconventional pairing originating from disconnected Fermi surfaces in the iron-based superconductor. New Journal of Physics, 2009, 11, 025017.	2.9	16
192	Doping control and thermoelectric properties in $\text{Co}_2\text{R}_2\text{O}_7$		

#	ARTICLE	IF	CITATIONS
199	Efficient Blue Electroluminescence from a Single-layer Organic Device Composed Solely of Hydrocarbons. Chemistry - an Asian Journal, 2017, 12, 730-733.	3.3	15
200	Local force method for the ab initio tight-binding model: Effect of spin-dependent hopping on exchange interactions. Physical Review B, 2020, 102, .	3.2	15
201	Superconductivity in repulsive electron systems with three-dimensional disconnected Fermi surfaces. Physical Review B, 2003, 68, .	3.2	14
202	Possibility of superconductivity in the repulsive Hubbard model on the Shastry-Sutherland lattice. Physical Review B, 2004, 69, .	3.2	14
203	Strain-induced topological transition in $\text{SrRuO}_6$ and $\text{CaOsO}_6$ . Physical Review B, 2016, 93, .	3.2	14
204	Image-potential band-gap narrowing at a metal/semiconductor interface. Physical Review B, 2001, 64, .	3.2	13
205	Superconductivity in quantum dot superlattices composed of quantum wire networks. Physical Review B, 2002, 66, .	3.2	13
206	Flat-band ferromagnetism in undoped and doped polyaminotriazole crystal. Physical Review B, 2003, 68, .	3.2	13
207	Electronic properties of metal-induced gap states at insulator/metal interfaces: Dependence on the alkali halide and the possibility of excitonic mechanism of superconductivity. Physical Review B, 2004, 69, .	3.2	13
208	Iterative diagonalization of the non-Hermitian transcorrelated Hamiltonian using a plane-wave basis set: Application to sp-electron systems with deep core states. Journal of Chemical Physics, 2016, 144, 104109.	3.0	13
209	Localized-itinerant dichotomy and unconventional magnetism in $\text{SrRu}_2\text{O}_6$ . Scientific Reports, 2017, 7, 11742.	3.3	13
210	Tailoring band structure and band filling in a simple cubic (IV, III)-VI superconductor. Physical Review Materials, 2018, 2, .	2.4	13
211	Magneto-optical spectroscopy on Weyl nodes for anomalous and topological Hall effects in chiral $\text{MnGe}$ . Nature Communications, 2021, 12, 5974.	12.8	13
212	Spin Hall effect in iron-based superconductors: A Dirac-point effect. Physical Review B, 2012, 86, .	3.2	12
213	Magneto-orbital effect without spin-orbit interactions in a noncentrosymmetric zeolite-templated carbon structure. Physical Review B, 2012, 86, .	3.2	12
214	Flat-band ferromagnetism induced by off-site repulsions. Physical Review B, 1998, 57, 10609-10612.	3.2	11
215	Superconductivity induced by interband nesting in the three-dimensional honeycomb lattice. Physical Review B, 2002, 65, .	3.2	11
216	Magnetic-Field Induced Triplet Superconductivity in the Repulsive Hubbard Model on the Triangular Lattice. Journal of the Physical Society of Japan, 2004, 73, 533-536.	1.6	11

#	ARTICLE	IF	CITATIONS
217	Local strain and anharmonicity in the bonding of $\text{Bi}_2\text{Se}_3$ . Physical Review B, 2013, 88, .	3.2	11
218	Microscopic characterization of the superconducting gap function in $\text{Sn}_2\text{Te}$ . Physical Review B, 2020, 101, .	3.2	11
219	Benchmark for <i>Ab Initio</i> Prediction of Magnetic Structures Based on Cluster-Multipole Theory. Physical Review X, 2021, 11, .	8.9	11
220	Efficient fluctuation-exchange approach to low-temperature spin fluctuations and superconductivity: From the Hubbard model to $\text{Na}_2\text{VO}_2$ . Physical Review B, 2021, 103, .	3.2	11
221	Anharmonic Gr $\frac{1}{4}$ neisen theory based on self-consistent phonon theory: Impact of phonon-phonon interactions neglected in the quasiharmonic theory. Physical Review B, 2022, 105, .	3.2	11
222	Relationship between spiral and ferromagnetic states in the Hubbard model in the thermodynamic limit. Physical Review B, 2000, 61, 12261-12270.	3.2	10
223	Superconductivity from long-range interaction: A crossover between the electron gas and the lattice model. Physical Review B, 2006, 73, .	3.2	10
224	Orbital characters of three-dimensional Fermi surfaces in $\text{Eu}_2\text{xSr}_x\text{NiO}_4$ as probed by soft-x-ray angle-resolved photoemission spectroscopy. Physical Review B, 2011, 84, .	3.2	10
225	Polar Antiferromagnets Produced with Orbital Order. Physical Review Letters, 2012, 108, 157603.	7.8	10
226	Effects of transition-metal substitution in the iron-based superconductor $\text{LaFeAsO}$ : Momentum- and real-space analysis from first principles. Solid State Communications, 2012, 152, 728-734.	1.9	10
227	Competing spin modulations in the magnetically frustrated semimetal $\text{EuCuSb}$ . Physical Review B, 2020, 102, .	3.2	10
228	Metal-to-insulator transition in Pt-doped $\text{TiSe}_2$ driven by emergent network of narrow transport channels. Npj Quantum Materials, 2021, 6, .	5.2	10
229	Emergence of spin-orbit coupled ferromagnetic surface state derived from Zak phase in a nonmagnetic insulator $\text{FeSi}$ . Science Advances, 2021, 7, eabj0498.	10.3	10
230	Skyrmion-size dependence of the topological Hall effect: A real-space calculation. Physical Review B, 2021, 104, .	3.2	10
231	Spectral function of the spiral spin state in the trestle and ladder Hubbard model. Physical Review B, 1998, 58, R11833-R11836.	3.2	9
232	Spin-Triplet Superconductivity Induced by Charge Fluctuations in Extended Hubbard Model. Journal of the Physical Society of Japan, 2005, 74, 2579-2585.	1.6	9
233	Spin-density-functional study of the organic polymer dimethylaminopyrrole: A realization of the organic periodic Anderson model. Physical Review B, 2010, 82, .	3.2	9
234	<i>Ab initio</i> Derivation of Correlated Superatom Model for Potassium Loaded Zeolite A. Journal of the Physical Society of Japan, 2011, 80, 124705.	1.6	9



#	ARTICLE	IF	CITATIONS
253	Unconventional orbital ordering and emergent dimensional reduction in fulleride superconductors. Physical Review B, 2019, 99, .	3.2	6
254	Negative-pressure-induced helimagnetism in ferromagnetic cubic perovskites Sr $1-x$ Ba $x$ CoO $_3$ . Physical Review Materials, 2018, 2, .	2.4	6
255	Hyperuniform electron distributions controlled by electron interactions in quasicrystals. Physical Review B, 2022, 105, .	3.2	6
256	Ab Initio Downfolding Based on the GW Approximation for Infinite-Layer Nickelates. Frontiers in Physics, 2022, 10, .	2.1	6
257	Doping fingerprints of spin and lattice fluctuations in moiré superlattice systems. Physical Review B, 2022, 105, .	3.2	6
258	Hybridization-induced superconductivity from electron repulsion on a tetramer lattice having a disconnected Fermi surface. Physical Review B, 2002, 66, .	3.2	5
259	Design of a $d^{1-}$ -analogue of cuprates: Sr $_2$ VO $_4$ and Ba $_2$ VO $_4$ under pressure. Journal of Physics Condensed Matter, 2007, 19, 365204.	1.8	5
260	Three-orbital Study on the Orbital Distillation Effect in the High Tc Cuprates. Physics Procedia, 2013, 45, 13-16.	1.2	5
261	Calculation of plasmon excitations in the quasi-one-dimensional organic compound (TMTSF) $_2$ PF $_6$ with multiple Dirac fermions. Physical Review B, 2021, 104, .	3.2	5
262	Publisher's Note: Dependence of Carrier Doping on the Impurity Potential in Transition-Metal-Substituted FeAs-based Superconductors [Phys. Rev. Lett. <b>110</b> , 107007 (2013)]. Physical Review Letters, 2013, 110, .	7.8	5
263	Structural Modulation of Macrocyclic Materials for Charge Carrier Transport Layers in Organic Light-Emitting Devices. ECS Journal of Solid State Science and Technology, 2017, 6, M3065-M3067.	1.8	5
264	First-principles design of halide-reduced electrides: Magnetism and topological phases. Physical Review Materials, 2021, 5, .	2.4	5
265	Anisotropic superconductivity in the topological crystalline metal $Pb_{1-x}Ta_xS_2$ with multiple Dirac fermions. Physical Review B, 2021, 104, .	3.2	5
266	Extended Aharonov-Bohm Period Analysis of Strongly Correlated Electron Systems. Journal of the Physical Society of Japan, 1997, 66, 2086-2096.	1.6	5
267	Fermi Surface Expansion above Critical Temperature in a Hund Ferromagnet. Physical Review Letters, 2022, 128, .	7.8	5
268	Odd-even layer-number effect of valence-band spin splitting in $WTe_2$ . Physical Review Research, 2022, 4, .	3.6	5
269	Title is missing!. Journal of Low Temperature Physics, 1999, 117, 247-251.	1.4	4
270	Nonlinear transport in a one-dimensional Mott insulator in strong electric fields. Physica B: Condensed Matter, 2005, 359-361, 759-761.	2.7	4



#	ARTICLE	IF	CITATIONS
289	Two-orbital view on the origin of the material dependence of $T_c$ in the single-layer cuprates. Journal of Physics: Conference Series, 2012, 400, 022100.	0.4	2
290	Emergent Magn $\pi$ -li-type crystal phases and their mixture in pressurized sulfur hydride. Novel Superconducting Materials, 2017, 3, .	0.8	2
291	Fully filling-controlled pyrochlore ruthenates: Emergent ferromagnetic-metal state and geometrical Hall effect. Physical Review B, 2021, 103, .	3.2	2
292	High-pressure synthesis of $\text{Ba}_{2-x}\text{Mn}_x\text{Rh}_2\text{O}_{10}$ , a rhodate analog of the layered perovskite Sr-ruthenate. Physical Review Materials, 2021, 5, .	2.4	2
293	First Principles Study of Flat-Band Ferromagnetism in Polymers of Five-Membered Rings. E-Journal of Surface Science and Nanotechnology, 2004, 2, 38-44.	0.4	2
294	Magnetic structures and electronic properties of cubic-pyrochlore ruthenates from first principles. Journal of Physics Condensed Matter, 2022, 34, 194003.	1.8	2
295	Quantum wire networks for superconducting quantum-dot superlattices. Physica B: Condensed Matter, 2003, 329-333, 1395-1396.	2.7	1
296	SPIN CONFIGURATION IN THE ELECTRON MOLECULE IN FEW-ELECTRON QUANTUM DOTS IN STRONG MAGNETIC FIELDS $\hat{e}$ SUPERPOSITION OF MULTIPLE CONFIGURATIONS. International Journal of Modern Physics B, 2007, 21, 1643-1648.	2.0	1
297	Unified origin for superconductivity, magnetism, and large thermopower in $\text{Na}_x\text{Co}_2\text{O}_4$ . Theoretical analysis of electronic and magnetic properties of $\text{Na}_x\text{Co}_2\text{O}_4$ . Physical Review B, 2008, 78, 040401.	4.0	1
298	Theoretical analysis of electronic and magnetic properties of $\text{Na}_x\text{Co}_2\text{O}_4$ . Physical Review B, 2008, 78, 040401.	3.2	1
299	Conductivity and incommensurate antiferromagnetism of $\text{Fe}_{1.02}\text{Se}_{0.10}\text{Te}_{0.90}$ under pressure. Europhysics Letters, 2012, 98, 37002.	2.0	1
300	Cluster Multipole Dynamics in Noncollinear Antiferromagnets. , 2020, , .		1
301	Quantum transport observed in films of the magnetic topological semimetal $\text{EuSb}_2$ . Physical Review B, 2021, 103, .	3.2	1
302	Anomalous transport properties of the antiferromagnetic Weyl semimetals $\text{Mn}_3\text{X}$ (X = Sn, Tl). Physical Review B, 2019, 100, 040401.	0.4	1
303	Wannier-based implementation of the coherent potential approximation with applications to Fe-based transition metal alloys. Physical Review B, 2022, 105, .	3.2	1
304	Fluctuation exchange study of singlet and triplet superconductivity in 2D and 3D single-band Hubbard model. Journal of Physics and Chemistry of Solids, 2001, 62, 249-251.	4.0	0
305	Zero-energy peak and pairing symmetry of quasi-one-dimensional organic superconductor $(\text{TMTSF})_2\text{X}$ . Journal of Physics and Chemistry of Solids, 2002, 63, 1273-1276.	4.0	0
306	A possibility of high- $T_c$ superconductivity on a disconnected Fermi surface in a decorated square lattice. Physica B: Condensed Matter, 2003, 328, 20-22.	2.7	0

#	ARTICLE	IF	CITATIONS
307	Triplet superconductivity in the repulsively interacting electron system on a triangular lattice: a possibility of magnetic-field-induced superconductivity. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 1471-1472.	2.7	0
308	Possible high temperature superconductivity in systems with nested Fermi surface pockets. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 74-75.	1.2	0
309	How to determine pairing symmetry of quasi-1D organic superconductors through magnetotunneling spectroscopy. <i>Physica C: Superconductivity and Its Applications</i> , 2003, 388-389, 587-588.	1.2	0
310	Theoretical study on the tunneling spectrum of quasi-one dimensional organic superconductors (TMTSF)2X. <i>Synthetic Metals</i> , 2003, 133-134, 37-39.	3.9	0
311	Superconductivity in the Hubbard Model on the Shastry's Sutherland Lattice. <i>Journal of Low Temperature Physics</i> , 2004, 134, 805-810.	1.4	0
312	Quantum Monte Carlo study on the pairing symmetry competition in the Hubbard model. <i>Physica C: Superconductivity and Its Applications</i> , 2004, 412-414, 59-63.	1.2	0
313	Phase diagram of the two-dimensional extended Hubbard model: pairing from charge and spin fluctuations. <i>Physica B: Condensed Matter</i> , 2005, 359-361, 518-520.	2.7	0
314	Metal induced gap states at tetratetracontane/Cu interface. <i>European Physical Journal Special Topics</i> , 2006, 132, 199-203.	0.2	0
315	Study of d- and p-wave Pairing in the Hubbard Model Using the Dynamical Cluster Approximation. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
316	Density-Matrix Renormalization Group Study of Phase Diagram in Systems with Strong Electron-Electron and Electron-Phonon Interactions. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
317	Two Band Fluctuation Exchange Study on the Pressure Dependence of the Superconducting Transition Temperature of $\text{Li}^{2+}\text{-(BEDT-TTF)}_2\text{Cl}_2$ . <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
318	Superconductivity from a Long-Range Repulsive Interaction. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	0
319	Singlet pairing versus triplet pairing in a cobaltate superconductor $\text{Na}_x\text{CoO}_2 \cdot y\text{H}_2\text{O}$ . <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 542-545.	4.0	0
320	Dynamical cluster approximation study of d- and p-wave pairing in the Hubbard model at. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 310, 645-647.	2.3	0
321	Unified origin for superconductivity and 3D magnetism in. <i>Physica B: Condensed Matter</i> , 2008, 403, 1151-1153.	2.7	0
322	An improved algorithm for the functional renormalization group and its application to the 2D Hubbard model. <i>Journal of Physics: Conference Series</i> , 2009, 150, 052261.	0.4	0
323	Study on the origin of large thermopower in hole doped $\text{LaRhO}_3$ based on ab-initio downfolding. <i>Journal of Physics: Conference Series</i> , 2009, 150, 022095.	0.4	0
324	Pnictogen height as a switch between high- $T_c$ nodeless and low- $T_c$ nodal pairings in the iron-based superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2010, 470, S416-S417.	1.2	0

#	ARTICLE	IF	CITATIONS
325	Functional renormalization group beyond the static approximation and its application to the two-dimensional Hubbard model. <i>Physica C: Superconductivity and Its Applications</i> , 2010, 470, S35-S36.	1.2	0
326	SCDFT Study of High Tc Nitride Superconductors. <i>Physics Procedia</i> , 2013, 45, 25-28.	1.2	0
327	Development of Density Functional Theory for Plasmon-Assisted Superconductivity. <i>Advances in Science and Technology</i> , 0, , .	0.2	0
328	Theoretical Study of the Chemical Pressure Effect on Tc in the Cuprate Superconductors. <i>Physics Procedia</i> , 2014, 58, 34-37.	1.2	0
329	Chemical physics of superconductivity in layered yttrium carbide halides from first principles. <i>Physical Review B</i> , 2021, 103, .	3.2	0
330	DESIGN OF SUPERCONDUCTORS IN QUANTUM DOT SUPERLATTICES. , 2003, , .		0
331	FERMIOLOGY EFFECT ON THE TUNNELING SPECTRUM OF ORGANIC SUPERCONDUCTORS (TMTSF) <sub>2</sub> X. , 2003, , .		0
332	Electron-Phonon Interactions and Orbital Fluctuations in Iron-based Superconductors. , 2014, , .		0