Igor I Mazin

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68 20,099 257 137 h-index g-index citations papers 7.08 21,719 279 5.4 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
257	Unconventional superconductivity with a sign reversal in the order parameter of LaFeAsO1-xFx. <i>Physical Review Letters</i> , 2008 , 101, 057003	7.4	2123
256	Superconductivity of metallic boron in MgB2. Physical Review Letters, 2001, 86, 4656-9	7.4	1037
255	Beyond Eliashberg superconductivity in MgB2: anharmonicity, two-phonon scattering, and multiple gaps. <i>Physical Review Letters</i> , 2001 , 87, 087005	7.4	879
254	Gap symmetry and structure of Fe-based superconductors. Reports on Progress in Physics, 2011, 74, 124	15 0.8 .4	877
253	Spin waves and revised crystal structure of honeycomb iridate Na2IrO3. <i>Physical Review Letters</i> , 2012 , 108, 127204	7.4	408
252	Superconductivity gets an iron boost. <i>Nature</i> , 2010 , 464, 183-6	50.4	354
251	How to Define and Calculate the Degree of Spin Polarization in Ferromagnets. <i>Physical Review Letters</i> , 1999 , 83, 1427-1430	7.4	349
250	Fermi surface nesting and the origin of charge density waves in metals. <i>Physical Review B</i> , 2008 , 77,	3.3	348
249	Electronic structure and magnetism in Ru-based perovskites. <i>Physical Review B</i> , 1997 , 56, 2556-2571	3.3	346
248	Pairing symmetry and pairing state in ferropnictides: Theoretical overview. <i>Physica C:</i> Superconductivity and Its Applications, 2009 , 469, 614-627	1.3	334
247	Problems with reconciling density functional theory calculations with experiment in ferropnictides. <i>Physical Review B</i> , 2008 , 78,	3.3	332
246	Correlated metals and the LDA+U method. <i>Physical Review B</i> , 2003 , 67,	3.3	330
245	Superconductivity in MgB2: clean or dirty?. <i>Physical Review Letters</i> , 2002 , 89, 107002	7.4	326
244	Magnetic Collapse in Transition Metal Oxides at High Pressure: Implications for the Earth. <i>Science</i> , 1997 , 275, 654-7	33.3	280
243	Ferromagnetic Spin Fluctuation Induced Superconductivity in Sr2RuO4. <i>Physical Review Letters</i> , 1997 , 79, 733-736	7.4	275
242	Monoclinic crystal structure of $\exists \mathbf{R}$ uCl3 and the zigzag antiferromagnetic ground state. <i>Physical Review B</i> , 2015 , 92,	3.3	264
241	Calculated thermoelectric properties of La-filled skutterudites. <i>Physical Review B</i> , 1997 , 56, R1650-R16	53 .3	254

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240	A key role for unusual spin dynamics in ferropnictides. <i>Nature Physics</i> , 2009 , 5, 141-145	16.2	237
239	Uniaxial-strain mechanical detwinning of CaFe2As2 and BaFe2As2 crystals: Optical and transport study. <i>Physical Review B</i> , 2010 , 81,	3.3	231
238	Electronic structure, electronphonon coupling, and multiband effects in MgB2. <i>Physica C:</i> Superconductivity and Its Applications, 2003 , 385, 49-65	1.3	228
237	Effect of magnetic and nonmagnetic impurities on highly anisotropic superconductivity. <i>Physical Review B</i> , 1997 , 55, 15146-15152	3.3	214
236	Competitions in Layered Ruthenates: Ferromagnetism versus Antiferromagnetism and Triplet versus Singlet Pairing. <i>Physical Review Letters</i> , 1999 , 82, 4324-4327	7.4	208
235	Effect of magnetic frustration on nematicity and superconductivity in iron chalcogenides. <i>Nature Physics</i> , 2015 , 11, 953-958	16.2	205
234	Plane dimpling and saddle-point bifurcation in the band structures of optimally doped high-temperature superconductors: A tight-binding model. <i>Physical Review B</i> , 1994 , 49, 4145-4157	3.3	205
233	What superconducts in sulfur hydrides under pressure and why. <i>Physical Review B</i> , 2015 , 91,	3.3	198
232	Charge Ordering as Alternative to Jahn-Teller Distortion. <i>Physical Review Letters</i> , 2007 , 98,	7.4	197
231	Fermi-surface nesting and the origin of the charge-density wave in NbSe2. <i>Physical Review B</i> , 2006 , 73,	3.3	187
230	Origin of high transport spin polarization in La0.7Sr0.3MnO3: Direct evidence for minority spin states. <i>Physical Review B</i> , 2001 , 63,	3.3	182
229	Probing spin polarization with Andreev reflection: A theoretical basis. <i>Journal of Applied Physics</i> , 2001 , 89, 7576-7578	2.5	180
228	Roles of multiband effects and electron-hole asymmetry in the superconductivity and normal-state properties of Ba(Fe1\(\text{B}\)Cox)2As2. <i>Physical Review B</i> , 2009 , 80,	3.3	170
227	Optical near-zone-center phonons and their interaction with electrons in YBa2Cu3O7: Results of the local-density approximation. <i>Physical Review B</i> , 1990 , 42, 2692-2695	3.3	158
226	Quantitative model for the superconductivity suppression in R1-xPrxBa2Cu3O7 with different rare earths. <i>Physical Review Letters</i> , 1995 , 74, 1000-1003	7.4	155
225	Extended sll scenario for the nuclear spin-lattice relaxation rate in superconducting pnictides. <i>Physical Review B</i> , 2008 , 78,	3.3	153
224	Electron-phonon interaction and charge carrier mass enhancement in SrTiO3. <i>Physical Review Letters</i> , 2008 , 100, 226403	7.4	150
223	Microscopic origin of magnetism and magnetic interactions in ferropnictides. <i>Physical Review B</i> , 2009 , 79,	3.3	147

222	Effect of dimensionality on the charge-density wave in few-layer 2H-NbSe2. <i>Physical Review B</i> , 2009 , 80,	3.3	137
221	Electronic structure, local moments, and transport in Fe2VAl. <i>Physical Review B</i> , 1998 , 57, 14352-14356	3.3	137
220	Na2IrO3 as a molecular orbital crystal. <i>Physical Review Letters</i> , 2012 , 109, 197201	7.4	135
219	Ab initio analysis of the tight-binding parameters and magnetic interactions in Na2IrO3. <i>Physical Review B</i> , 2013 , 88,	3.3	134
218	Common Fermi-liquid origin of T2 resistivity and superconductivity in n-type SrTiO3. <i>Physical Review B</i> , 2011 , 84,	3.3	129
217	Phonon self-energies and the gap of high-temperature superconductors. <i>Solid State Communications</i> , 1990 , 75, 219-223	1.6	127
216	Resonant Raman scattering in YBa2Cu3O7: Band theory and experiment. <i>Physical Review Letters</i> , 1990 , 65, 3048-3051	7.4	125
215	Unconventional electronic reconstruction in undoped (Ba,Sr)Fe2As2 across the spin density wave transition. <i>Physical Review B</i> , 2009 , 80,	3.3	124
214	Double Indirect Interlayer Exciton in a MoSe/WSe van der Waals Heterostructure. <i>ACS Nano</i> , 2018 , 12, 4719-4726	16.7	111
213	Lattice dynamics and reduced thermal conductivity of filled skutterudites. <i>Physical Review B</i> , 2000 , 61, R9209-R9212	3.3	109
212	Intercalant-driven superconductivity in YbC6 and CaC6. <i>Physical Review Letters</i> , 2005 , 95, 227001	7.4	108
211	Effects of magnetism and doping on the electron-phonon coupling in BaFe2As2. <i>Physical Review B</i> , 2010 , 82,	3.3	107
21 0	Quantum and Classical Orientational Ordering in Solid Hydrogen. <i>Physical Review Letters</i> , 1997 , 78, 106	6 7 14069	102
209	Transport, optical, and electronic properties of the half-metal CrO2. <i>Physical Review B</i> , 1999 , 59, 411-41	8 3.3	101
208	Superconductivity and electronic structure of perovskite MgCNi3. <i>Physical Review B</i> , 2001 , 64,	3.3	99
207	Neutron scattering and superconducting order parameter in YBa2Cu3O7. <i>Physical Review Letters</i> , 1995 , 75, 4134-4137	7.4	99
206	Symmetry analysis of possible superconducting states in KxFeySe2 superconductors. <i>Physical Review B</i> , 2011 , 84,	3.3	97
205	Electronic structure and magnetism of Sr3Ru2O7. <i>Physical Review B</i> , 2001 , 63,	3.3	92

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204	Transport spin polarization of NixFe1⊠: Electronic kinematics and band structure. <i>Physical Review B</i> , 2000 , 61, R3788-R3791	3.3	91
203	Robust half metalicity in FexCo1⊠S2. <i>Applied Physics Letters</i> , 2000 , 77, 3000-3002	3.4	90
202	London penetration depth in single crystals of Ba(Fe1\(\text{BCox}\))2As2 spanning underdoped to overdoped compositions. <i>Physical Review B</i> , 2009 , 79,	3.3	89
201	Theoretical prediction of a strongly correlated Dirac metal. <i>Nature Communications</i> , 2014 , 5, 4261	17.4	86
200	Sign-reversal of the in-plane resistivity anisotropy in hole-doped iron pnictides. <i>Nature Communications</i> , 2013 , 4, 1914	17.4	83
199	Structural phase diagram and electron-phonon interaction in Ba1-xKxBiO3. <i>Physical Review B</i> , 1991 , 44, 5388-5391	3.3	83
198	Insulating gap in FeO: Correlations and covalency. <i>Physical Review B</i> , 1997 , 55, 12822-12825	3.3	81
197	Toward one-band superconductivity in MgB2. <i>Physical Review B</i> , 2003 , 68,	3.3	79
196	Anisotropic structure of the order parameter in FeSe(0.45)Te(0.55) revealed by angle-resolved specific heat. <i>Nature Communications</i> , 2010 , 1, 112	17.4	76
195	Quantitative theory of superconductivity in doped C60. <i>Physical Review B</i> , 1992 , 45, 5114-5117	3.3	76
194	Interband superconductivity: Contrasts between Bardeen-Cooper-Schrieffer and Eliashberg theories. <i>Physical Review B</i> , 2009 , 79,	3.3	75
193	Nesting, spin fluctuations, and odd-gap superconductivity in NaxCoO2.yH2O. <i>Physical Review Letters</i> , 2004 , 93, 097005	7.4	75
192	Why Ni3Al is an itinerant ferromagnet but Ni3Ga is not. <i>Physical Review Letters</i> , 2004 , 92, 147201	7.4	75
191	Andreev spectra and subgap bound states in multiband superconductors. <i>Physical Review Letters</i> , 2009 , 103, 077003	7.4	71
190	Valence bond liquid phase in the honeycomb lattice material Li2RuO3. <i>Physical Review B</i> , 2014 , 89,	3.3	70
189	First-principles study of Zn-Sb thermoelectrics. <i>Physical Review B</i> , 1998 , 57, 6199-6203	3.3	68
188	First-principles calculations of the optical properties of metals. <i>Journal of Physics F: Metal Physics</i> , 1988 , 18, 833-849		68
187	Structural, electronic, and magnetic properties of MnO. <i>Physical Review B</i> , 2001 , 64,	3.3	67

186	Calculation of magnetic anisotropy energy in SmCo5. Physical Review B, 2003, 67,	3.3	65
185	s-wave superconductivity from an antiferromagnetic spin-fluctuation model for bilayer materials. <i>Physical Review Letters</i> , 1995 , 74, 2303-2306	7.4	65
184	A critical assessment of the superconducting pairing symmetry in NaxCoO2IyH2O. <i>Nature Physics</i> , 2005 , 1, 91-93	16.2	64
183	Coupling of magnetic order to planar Bi electrons in the anisotropic Dirac metals AMnBi2 (A =Sr,Ca). <i>Physical Review B</i> , 2014 , 90,	3.3	60
182	Extended Stoner factor calculations for the half-metallic ferromagnets NiMnSb and CrO2. <i>Journal of Physics Condensed Matter</i> , 1990 , 2, 343-350	1.8	59
181	de Haas-van Alphen study of the Fermi surfaces of superconducting LiFeP and LiFeAs. <i>Physical Review Letters</i> , 2012 , 108, 047002	7.4	58
180	Possible phase-sensitive tests of pairing symmetry in pnictide superconductors. <i>Physical Review Letters</i> , 2009 , 102, 227007	7.4	58
179	Paramagnetism in the kagome compounds (Zn,Mg,Cd)Cu3(OH)6Cl2. <i>Physical Review B</i> , 2015 , 92,	3.3	56
178	Coexistence of superconductivity and a spin-density wave in pnictide superconductors: Gap symmetry and nodal lines. <i>Physical Review B</i> , 2009 , 80,	3.3	56
177	Phase-sensitive tests of the pairing state symmetry in Sr(2)RuO(4). <i>Physical Review Letters</i> , 2005 , 95, 217004	7.4	55
176	Fe-Mg order-disorder in tremoliteEctinoliteEerro-actinolite at ambient and high temperature. <i>American Mineralogist</i> , 1998 , 83, 451-457	2.9	54
175	Robust determination of the superconducting gap sign structure via quasiparticle interference. <i>Physical Review B</i> , 2015 , 92,	3.3	53
174	Origin of the insulating state in honeycomb iridates and rhodates. <i>Physical Review B</i> , 2013 , 88,	3.3	53
173	Dominance of the spin-dipolar NMR relaxation mechanism in fullerene superconductors. <i>Physical Review B</i> , 1993 , 47, 12373-12376	3.3	53
172	Pinpointing gap minima in Ba(Fe0.94Co0.06)2As2 via band-structure calculations and electronic Raman scattering. <i>Physical Review B</i> , 2010 , 82,	3.3	51
171	Orbital degeneracy removed by charge order in triangular antiferromagnet AgNiO2. <i>Physical Review Letters</i> , 2007 , 99, 157204	7.4	51
170	Electronic structure and superconductivity of CaAlSi and SrAlSi. <i>Physical Review B</i> , 2004 , 69,	3.3	51
169	Comment on E irst-principles calculation of the superconducting transition in MgB2 within the anisotropic Eliashberg formalism\(\textit{D}Physical Review B\), 2004 , 69,	3.3	50

168	Surface electronic structure of Sr2RuO4. <i>Physical Review B</i> , 2001 , 64,	3.3	50
167	Sign reversal of the order parameter in (Li1⊠Fex)OHFe1ŪZnySe. <i>Nature Physics</i> , 2018 , 14, 134-139	16.2	48
166	Manifestation of multiband optical properties of MgB2. Solid State Communications, 2002, 121, 479-484	1.6	48
165	Point contact spin spectroscopy of ferromagnetic MnAs epitaxial films. <i>Physical Review B</i> , 2003 , 68,	3.3	48
164	Competition of spin fluctuations and phonons in superconductivity of ZrZn(2). <i>Physical Review Letters</i> , 2002 , 88, 187004	7.4	48
163	Invariant points and phase transitions in deuterium at megabar pressures. <i>Physical Review Letters</i> , 1995 , 75, 2514-2517	7.4	48
162	Strong-coupling effects in alkali-metal-doped C60. <i>Physical Review B</i> , 1993 , 47, 538-541	3.3	48
161	Calculations of the optical properties of metals by LMTO method. <i>European Physical Journal B</i> , 1983 , 53, 263-270	1.2	48
160	Phenomenological interpretations of the ac Hall effect in the normal state of YBa2Cu3O7. <i>Physical Review B</i> , 1998 , 57, 3089-3098	3.3	47
159	Raman excitations and orientational ordering in deuterium at high pressure. <i>Physical Review B</i> , 1996 , 54, R15590-R15593	3.3	47
158	Theory of Mn-doped II-II-V semiconductors. <i>Physical Review B</i> , 2014 , 90,	3.3	46
157	Interpretation of the de HaasNan Alphen experiments in MgB2. <i>Physical Review B</i> , 2002 , 65,	3.3	46
156	Evidence of upper-critical-field enhancement in K3C60 powders. <i>Physical Review B</i> , 1992 , 46, 5876-5879	3.3	46
155	Competition between spin-orbit coupling, magnetism, and dimerization in the honeycomb iridates: Hai2IrO3 under pressure. <i>Physical Review B</i> , 2018 , 97,	3.3	43
154	Superconductivity in compressed iron: Role of spin fluctuations. <i>Physical Review B</i> , 2002 , 65,	3.3	43
153	Structural and electronic properties of the two-dimensional superconductor CuS with 113-valent copper. <i>Physical Review B</i> , 2012 , 85,	3.3	41
152	Sign reversal of the order parameter in s wave superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 1995 , 243, 153-159	1.3	41
151	Dual character of magnetism in EuFe2As2: Optical spectroscopic and density-functional calculation study. <i>Physical Review B</i> , 2010 , 81,	3.3	4 0

150	Three-dimensional magnetic interactions in NaxCoO2: First-principles calculations and analysis of exchange mechanisms. <i>Physical Review B</i> , 2005 , 71,	3.3	39
149	Accounting for spin fluctuations beyond local spin density approximation in the density functional theory. <i>Physical Review B</i> , 2012 , 86,	3.3	38
148	Sr2VO3FeAs as compared to other iron-based superconductors. <i>Physical Review B</i> , 2010 , 81,	3.3	38
147	Effects of doping on the magnetic anisotropy energy in SmCo5\(\mathbb{I}\)Fex and YCo5\(\mathbb{I}\)Fex. <i>Physical Review B</i> , 2004 , 69,	3.3	38
146	Electronic structure and heavy-fermion behavior in LiV2O4. <i>Physical Review B</i> , 1999 , 60, 16359-16363	3.3	38
145	Theoretical search for Chevrel-phase-based thermoelectric materials. <i>Physical Review B</i> , 1999 , 59, 7969.	-7,9372	38
144	Orientational order in A3C60: Antiferromagnetic Ising model for the fcc lattice. <i>Physical Review Letters</i> , 1993 , 70, 4142-4145	7.4	38
143	Effect of doping and pressure on magnetism and lattice structure of iron-based superconductors. <i>Physical Review B</i> , 2010 , 82,	3.3	36
142	First-principles study of spin-orbit effects and NMR in Sr2RuO4. <i>Physical Review B</i> , 2006 , 74,	3.3	36
141	Displacive excitation of coherent phonons in YBa2Cu3O7. <i>Physical Review B</i> , 1994 , 49, 9210-9213	3.3	36
140	Indications of weak electronic correlations in SrRuO3 from first-principles calculations. <i>Physical Review B</i> , 2012 , 86,	3.3	35
139	Effect of isoelectronic doping on the honeycomb-lattice iridate A2IrO3. <i>Physical Review B</i> , 2014 , 89,	3.3	34
138	Spin fluctuations and the magnetic phase diagram of ZrZn2. <i>Physical Review B</i> , 2004 , 69,	3.3	34
137	Designing phase-sensitive tests for Fe-based superconductors. <i>Applied Physics Letters</i> , 2013 , 102, 03260	03.4	33
136	Electronic structure and magnetism in the frustrated antiferromagnet LiCrO2: First-principles calculations. <i>Physical Review B</i> , 2007 , 75,	3.3	33
135	NMR relaxation rates and Knight shifts in MgB2. <i>Physical Review B</i> , 2001 , 64,	3.3	33
134	Fermi-surface and low-energy excitation spectrum of YBa2Cu3O7: Role of the Ba-O plane. <i>Physical Review B</i> , 1992 , 45, 5103-5106	3.3	33
133	Tight-binding Hamiltonians for Sr-filled ruthenates: Application to the gap anisotropy and Hall coefficient in Sr2RuO4. <i>Physical Review B</i> , 2000 , 61, 5223-5228	3.3	31

132	Magnetic properties of SmCo5 and YCo5. Journal of Applied Physics, 2003, 93, 6888-6890	2.5	30
131	Magnetism, critical fluctuations, and susceptibility renormalization in Pd. <i>Physical Review B</i> , 2004 , 69,	3.3	30
130	Insulator-metal transition in solid hydrogen: Implication of electronic-structure calculations for recent experiments. <i>Physical Review B</i> , 1995 , 52, R8597-R8600	3.3	30
129	Ab initio investigation of magnetic interactions in the frustrated triangular magnet NiGa2S4. <i>Physical Review B</i> , 2007 , 76,	3.3	29
128	Electronic structure and electron-phonon coupling in the 18K superconductor Y2C3. <i>Physical Review B</i> , 2004 , 70,	3.3	28
127	Critical temperature and enhanced isotope effect in the presence of paramagnons in phonon-mediated superconductors. <i>Physical Review Letters</i> , 2005 , 95, 257003	7.4	28
126	Electron-phonon effects in 4d metals: calculation of coupling constant and resistivity. <i>Journal of Physics F: Metal Physics</i> , 1984 , 14, 167-174		28
125	Localized itinerant electrons and unique magnetic properties of SrRu2O6. <i>Physical Review B</i> , 2015 , 92,	3.3	27
124	Superconductivity in Ca-intercalated bilayer graphene. <i>Philosophical Magazine Letters</i> , 2010 , 90, 731-73	38 ₁	27
123	Ferromagnetism and spin-orbital compensation in Sm intermetallics. <i>Physical Review B</i> , 2003 , 68,	3.3	27
122	First-principles study of the minimal model of magnetic interactions in Fe-based superconductors. <i>Physical Review B</i> , 2014 , 89,	3.3	26
121	"Chain scenario" for Josephson tunneling with pi shift in YBa2Cu3O7. <i>Physical Review Letters</i> , 1995 , 75, 2574-2577	7.4	25
120	Nonspherical rigid-muffin-tin calculations of electron-phonon coupling in high-Tc perovskites. <i>Physical Review B</i> , 1990 , 42, 366-370	3.3	25
119	Spin Fluctuations in Sr_{2}RuO_{4} from Polarized Neutron Scattering: Implications for Superconductivity. <i>Physical Review Letters</i> , 2019 , 122, 047004	7.4	24
118	Superconductivity: Extraordinarily conventional. <i>Nature</i> , 2015 , 525, 40-1	50.4	24
117	Topology and correlations on the kagome lattice. <i>Nature Materials</i> , 2020 , 19, 137-138	27	24
116	Vibron effective charges in dense hydrogen. <i>Europhysics Letters</i> , 1997 , 37, 403-408	1.6	24
115	Optical properties and correlation effects in NaxCoO2. <i>Physical Review B</i> , 2005 , 71,	3.3	24

114	Magnetic order multilayering in FeRh thin films by He-Ion irradiation. <i>Materials Research Letters</i> , 2018 , 6, 106-112	7.4	24
113	Tunneling of Bloch electrons through vacuum barrier. <i>Europhysics Letters</i> , 2001 , 55, 404-410	1.6	23
112	Structural origin of the anomalous temperature dependence of the local magnetic moments in the CaFe2As2 family of materials. <i>Physical Review Letters</i> , 2015 , 114, 047001	7.4	22
111	Electrons and phonons in YbC6: Density functional calculations and angle-resolved photoemission measurements. <i>Physical Review B</i> , 2005 , 72,	3.3	22
110	Effect of disorder on the electronic structure of palladium. <i>Physical Review B</i> , 1990 , 41, 7988-7998	3.3	22
109	Comment on "Low-lying States and hidden kinematic collective charge instabilities in parent cobaltate superconductors". <i>Physical Review Letters</i> , 2008 , 101, 089703; author reply 089704	7.4	21
108	Low-energy interband transitions in YBa2Cu3O7. Physical Review B, 1992, 46, 11232-11235	3.3	21
107	Competing magnetic phases and fluctuation-driven scalar spin chirality in the kagome metal YMnSn. <i>Science Advances</i> , 2020 , 6,	14.3	21
106	Combining the advantages of superconducting MgB2 and CaC6 in one material: Suggestions from first-principles calculations. <i>Physical Review B</i> , 2007 , 75,	3.3	20
105	Location of holes in Y1⊠PrxBa2Cu3O7. <i>Physical Review B</i> , 1998 , 57, 150-152	3.3	20
104	Estimation of the electron-phonon coupling in YBa2Cu3O7 from the resistivity. <i>Physical Review B</i> , 1992 , 45, 2509-2511	3.3	20
103	Role of defects in the metal-insulator transition in VO2 and V2O3. <i>Physical Review B</i> , 2019 , 99,	3.3	19
102	Anisotropy of magnetic interactions and symmetry of the order parameter in unconventional superconductor Sr2RuO4. <i>Npj Quantum Materials</i> , 2017 , 2,	5	19
101	Growth and magnetic properties of single crystal Fe1\(\mathbb{Q}\)CoxS2 (x=0.35\(\mathbb{I}\)). Journal of Applied Physics, 2003 , 93, 6847-6849	2.5	19
100	Ginzburg-Landau analysis of superconducting K3C60. Solid State Communications, 1992, 81, 935-938	1.6	19
99	Superconductivity: The FeSe riddle. <i>Nature Materials</i> , 2015 , 14, 755-6	27	18
98	Calculation of magnetic anisotropy energy in YCo5. <i>Journal of Magnetism and Magnetic Materials</i> , 2003 , 264, 7-13	2.8	18
97	Superconducting and transport electron-phonon coupling constants in YBa2Cu3O7: effect of the interband anisotropy. <i>Physica C: Superconductivity and Its Applications</i> , 1993 , 209, 125-128	1.3	18

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96	Hume-Rothery phases. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1999 , 79, 205-221		17	
95	Normal-state electronic Raman-scattering efficiencies of YBa2Cu3O7- delta, Bi2Sr2CaCu2O8, and Tl2Ba2Ca2Cu3O10: Effects of local-density-approximation Fermi-surface mass fluctuations. <i>Physical Review B</i> , 1995 , 51, 5949-5954	3.3	16	
94	Direct observation of charge order in triangular metallic AgNiO2 by single-crystal resonant X-ray scattering. <i>Physical Review Letters</i> , 2011 , 106, 157206	7.4	15	
93	CeMnNi4: Impostor half metal. <i>Physical Review B</i> , 2006 , 73,	3.3	15	
92	Magnetic states and structural transformations in Sm(Co,Cu)5and Sm(Co,Fe,Cu)5permanent magnets. <i>Journal Physics D: Applied Physics</i> , 2005 , 38, 1337-1341	3	15	
91	Nonlocal density functionals and the linear response of the homogeneous electron gas. <i>Physical Review B</i> , 1998 , 57, 6879-6883	3.3	15	
90	Theoretical possibilities for superconductivity in PrBa2Cu3O7. <i>Physical Review B</i> , 1999 , 60, 92-95	3.3	15	
89	Double-stage nematic bond ordering above double stripe magnetism: Application to BaTi2Sb2O. <i>Physical Review B</i> , 2017 , 95,	3.3	14	
88	Magnetic properties and spin polarization of Ru doped half metallic CrO2. <i>Applied Physics Letters</i> , 2015 , 107, 012402	3.4	14	
87	Notes on the static dielectric response function in the density functional theory. <i>Ferroelectrics</i> , 1997 , 194, 263-270	0.6	14	
86	Formation of an unconventional Ag valence state in Ag2NiO2. <i>Physical Review B</i> , 2007 , 75,	3.3	14	
85	Competition between electron-phonon coupling and spin fluctuations in superconducting hole-doped CuBiSO. <i>Physical Review B</i> , 2011 , 83,	3.3	13	
84	Interpretation of de Haas-van Alphen measurements on YBa2Cu3O7. <i>Physical Review Letters</i> , 1992 , 68, 3936	7.4	13	
83	On microscopical derivation of Lorentz-Lorenz formula. <i>Solid State Communications</i> , 1978 , 27, 527-530	1.6	13	
82	Role of correlations in determining the Van Hove strain in Sr2RuO4. <i>Physical Review B</i> , 2019 , 100,	3.3	13	
81	Nature of optical excitations in the frustrated kagome compound herbertsmithite. <i>Physical Review B</i> , 2017 , 96,	3.3	12	
80	Field-induced magnetic transitions in Ca10(Pt3As8)((Fe1\(\text{P}\) Ptx)2As2)5 compounds. <i>Physical Review B</i> , 2014 , 89,	3.3	12	
79	Non-nesting spin-density-wave antiferromagnetism in FeAs from first principles. <i>Physical Review B</i> , 2011 , 83,	3.3	12	

78	Unconventional superconducting pairing symmetry induced by phonons. <i>Physical Review B</i> , 2006 , 74,	3.3	12
77	Effect of lattice relaxation on magnetic anisotropy: Zr-doped Sm2Co17. Physical Review B, 2004, 69,	3.3	12
76	Uncovering the Mechanism of the Impurity-Selective Mott Transition in Paramagnetic V_{2}O_{3}. <i>Physical Review Letters</i> , 2018 , 121, 106401	7.4	12
75	Highly unconventional surface reconstruction of Na2IrO3 with persistent energy gap. <i>Physical Review B</i> , 2015 , 91,	3.3	11
74	Electronic structure of the NaxCoO2 surface. <i>Physical Review Letters</i> , 2008 , 101, 246808	7.4	11
73	Origin of a1g and eg? orderings in NaxCoO2. <i>Physical Review B</i> , 2008 , 78,	3.3	11
72	Ising Superconductivity and Magnetism in NbSe2. <i>Physical Review X</i> , 2020 , 10,	9.1	11
71	Spin-orbit driven Peierls transition and possible exotic superconductivity in CsW2O6. <i>Physical Review B</i> , 2016 , 94,	3.3	11
70	Nontrivial Role of Interlayer Cation States in Iron-Based Superconductors. <i>Physical Review Letters</i> , 2017 , 118, 017204	7.4	10
69	Normal State O17 NMR Studies of Sr2RuO4 under Uniaxial Stress. <i>Physical Review X</i> , 2019 , 9,	9.1	10
68	First-principles evidence of Mn moment canting in hole-doped Ba1½xK2xMn2As2. <i>Physical Review B</i> , 2014 , 89,	3.3	10
67	Quasiparticle interference in antiferromagnetic parent compounds of iron-based superconductors. <i>Physical Review B</i> , 2011 , 83,	3.3	10
66	Transport, optical and electronic properties of the half metal CrO2. <i>Journal of Applied Physics</i> , 1999 , 85, 6220-6222	2.5	10
65	Reduction of the Spin Susceptibility in the Superconducting State of Sr_{2}RuO_{4} Observed by Polarized Neutron Scattering. <i>Physical Review Letters</i> , 2020 , 125, 217004	7.4	10
64	Spectroscopic signatures of molecular orbitals in transition metal oxides with a honeycomb lattice. <i>Physical Review B</i> , 2016 , 94,	3.3	10
63	Superconductivity and magnetism in CuBiSO from first principles. <i>Physical Review B</i> , 2010 , 81,	3.3	9
62	Effect of impurities on magnetic properties of Y(Co5\(\mathbb{U}\)Cux) and Y2(Co7\(\mathbb{N}\)Ix). <i>Journal of Magnetism and Magnetic Materials</i> , 2004 , 269, 176-183	2.8	9
61	Electron-phonon coupling and specific heat in YBa2Cu3O7. <i>Physica C: Superconductivity and Its Applications</i> , 1992 , 192, 41-46	1.3	9

(2020-1990)

60	Structural phase diagram of BaBiO3 in the potential induced breathing model. <i>Solid State Communications</i> , 1990 , 76, 1267-1272	1.6	9
59	Direct-Write of Nanoscale Domains with Tunable Metamagnetic Order in FeRh Thin Films. <i>ACS Applied Materials & Discourse (Materials & Discourse)</i> 13, 836-847	9.5	9
58	Quantum oscillations and Dirac dispersion in the BaZnBi2 semimetal guaranteed by local Zn vacancy order. <i>Physical Review B</i> , 2018 , 97,	3.3	8
57	Weak doping dependence of the antiferromagnetic coupling between nearest-neighbor Mn2+ spins in (Ba1kx)(Zn1kmy)2As2. <i>Physical Review B</i> , 2018 , 97,	3.3	8
56	Magnetic spiral induced by strong correlations in MnAu2. <i>Physical Review B</i> , 2014 , 90,	3.3	8
55	Why MgFeGe is not a superconductor. <i>Physical Review B</i> , 2013 , 87,	3.3	8
54	Applications of the NRL tight-binding method to magnetic systems. <i>Journal of Applied Physics</i> , 2001 , 89, 6880-6882	2.5	8
53	Reflectance measurements and superconductivity in MgB2. <i>Physical Review Letters</i> , 2002 , 89, 129703	7.4	8
52	Interplay of lattice, electronic, and spin degrees of freedom in detwinned BaFe2As2: A Raman scattering study. <i>Physical Review B</i> , 2018 , 98,	3.3	8
51	Detecting sign-changing superconducting gap in LiFeAs using quasiparticle interference. <i>Physical Review B</i> , 2018 , 97,	3.3	7
50	MAGNETISM AND SPIN-FLUCTUATION INDUCED SUPERCONDUCTIVITY IN RUTHENATES TALK PRESENTED AT THE SNS'97 CONFERENCE, CAPE COD, 1997 Journal of Physics and Chemistry of Solids, 1998, 59, 2185-2189	3.9	7
49	Momentum dependence of the linewidth of Raman-active phonons in the normal state of YBa2Cu3O7. <i>Physical Review B</i> , 1995 , 51, 3961-3964	3.3	7
48	Breathing instability and disproportionation of Bi4 ions in BaBiO3. Ferroelectrics, 1995, 164, 169-175	0.6	7
47	Frustration-driven C symmetric order in a naturally-heterostructured superconductor SrVOFeAs. <i>Nature Communications</i> , 2017 , 8, 2167	17.4	6
46	Self-consistent theory of phonon renormalization and electron-phonon coupling near a two-dimensional Kohn singularity. <i>Physical Review B</i> , 2008 , 77,	3.3	6
45	Interpretation of the Femtosecond Optical Response of YBa2Cu3O7\(\textit{IPhysical Review Letters}\), 1998 , 80, 3664-3664	7.4	6
44	Properties of Novel Thermoelectrics from First Principles Calculations. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 545, 3		6
43	Density functional theory-based electric field gradient database. <i>Scientific Data</i> , 2020 , 7, 362	8.2	6

42	Novel Fe-Based Superconductor LaFe_{2}As_{2} in Comparison with Traditional Pnictides. <i>Physical Review Letters</i> , 2019 , 123, 267001	7.4	6
41	Phonons and Electron Correlations in High-Temperature and Other Novel Superconductors. <i>Advances in Condensed Matter Physics</i> , 2010 , 2010, 1-2	1	5
40	Stabilization of itinerant (band) magnetism in FeAl by Ga substitution for Al. <i>Journal of Applied Physics</i> , 2001 , 89, 6889-6891	2.5	5
39	Effect of low symmetry on electron-phonon coupling in perovskite superconductors. <i>Solid State Communications</i> , 1988 , 68, 93-95	1.6	5
38	A Simple Approach to Calculation of the Phonon-Limited Electrical Resistivity in Metals. <i>Physica Status Solidi (B): Basic Research</i> , 1982 , 112, 29-33	1.3	5
37	Magnetization Process of Atacamite: A Case of Weakly Coupled S=1/2 Sawtooth Chains. <i>Physical Review Letters</i> , 2021 , 126, 207201	7·4	5
36	Tuning magnetism and band topology through antisite defects in Sb-doped MnBi4Te7. <i>Physical Review B</i> , 2021 , 104,	3.3	5
35	Field-tunable toroidal moment in a chiral-lattice magnet. <i>Nature Communications</i> , 2021 , 12, 5339	17.4	5
34	Microscopic Theory of Magnetic Detwinning in Iron-Based Superconductors with Large-Spin Rare Earths. <i>Physical Review X</i> , 2018 , 8,	9.1	4
33	Vitaly Ginzburg and high temperature superconductivity: Personal reminiscences. <i>Physica C:</i> Superconductivity and Its Applications, 2008 , 468, 105-110	1.3	4
32	High efficiency nonvolatile ferromagnet/superconductor switch. <i>Applied Physics Letters</i> , 2002 , 80, 3973	-3,9475	4
31	Comment on "Unified formalism of Andreev reflection at a ferromagnet/superconductor interface". <i>Physical Review Letters</i> , 2013 , 111, 139703	7.4	3
30	Critical temperature and the giant isotope effect in the presence of paramagnons. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 434226	1.8	3
29	Three-molecular-orbital treatment of the orientational ordering in A3C60. <i>Solid State Communications</i> , 1994 , 91, 497-500	1.6	3
28	Theoretical search for bistability of apical oxygen in YBa2Cu3O7. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1994 , 70, 643-646		3
27	Spectral reflectivity crossover at the metamagnetic transition in FeRh thin films. <i>Optical Materials Express</i> , 2019 , 9, 2870	2.6	3
26	Chiral properties of the zero-field spiral state and field-induced magnetic phases of the itinerant kagome metal YMn6Sn6. <i>Physical Review B</i> , 2021 , 103,	3.3	3
25	Impact of biaxial and uniaxial strain on V2O3. <i>Physical Review B</i> , 2019 , 100,	3.3	3

(2021-2020)

24	SrRuO3BrTiO3 heterostructure as a possible platform for studying unconventional superconductivity in Sr2RuO4. <i>Physical Review B</i> , 2020 , 101,	3.3	2
23	Magnetic Collapse and the Behavior of Transition Metal Oxides: FeO at High Pressures. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 499, 27		2
22	Microscopic analysis of the transmittance of YBa2Cu3O7 thin films. <i>Physics Letters, Section A:</i> General, Atomic and Solid State Physics, 1990 , 150, 43-46	2.3	2
21	Ultrafast dynamics in the high-symmetry and in the charge density wave phase of 2HNbSe2. <i>Physical Review B</i> , 2020 , 102,	3.3	2
20	Anomalous gap ratio in anisotropic superconductors: Aluminum under pressure. <i>Physical Review B</i> , 2021 , 103,	3.3	2
19	Quantitative assessment of the role of spin fluctuations in 2D Ising superconductor NbSe2. <i>Computational Materials Science</i> , 2021 , 200, 110758	3.2	2
18	Why have band theorists been so successful in explaining and predicting novel superconductors?. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 174001	1.8	1
17	Unusual electronic state of Sn in AgSnSe2. <i>Physical Review B</i> , 2020 , 101,	3.3	1
16	Where Should We Look For High Zt Materials: Suggestions From Theory <i>Materials Research Society Symposia Proceedings</i> , 2000 , 626, 631		1
15	Electronic susceptibility of YBa2Cu3O7and its relation to phonon anomalies. <i>Journal of Physics Condensed Matter</i> , 1993 , 5, A377-A380	1.8	1
14	Localization in YBa2Cu3O7 induced by the self-interaction correction to the density functional theory. <i>Physica C: Superconductivity and Its Applications</i> , 1988 , 156, 717-719	1.3	1
13	Charge density wave activated excitons in TiSe2MoSe2 heterostructures. APL Materials, 2022, 10, 0111	0 3.7	1
12	Phase diagram of a distorted kagome antiferromagnet and application to Y-kapellasite. <i>Npj Computational Materials</i> , 2022 , 8,	10.9	1
11	Direct-Write of Nanoscale Domains with Tunable Metamagnetic Order in FeRh Thin Films		1
10	Magnetic and electronic ordering phenomena in the Ru2O6-layer honeycomb lattice compound AgRuO3. <i>Physical Review B</i> , 2021 , 103,	3.3	1
9	Ab initio prediction of a two-dimensional variant of the iridate IrO2. <i>Physical Review B</i> , 2019 , 100,	3.3	1
8	Magnetism-driven unconventional effects in Ising superconductors: Role of proximity, tunneling, and nematicity. <i>Physical Review B</i> , 2021 , 104,	3.3	1
7	Spin spiral and topological Hall effect in Fe3Ga4. <i>Physical Review B</i> , 2021 , 104,	3.3	1

6	Nontrivial Doping Evolution of Electronic Properties in Ising-Superconducting Alloys <i>Advanced Materials</i> , 2022 , e2200492	24	1
5	Effect of alloying in monolayer niobium dichalcogenide superconductors <i>Nature Communications</i> , 2022 , 13, 2376	17.4	O
4	Magnetism and magnetoelastic coupling in layered ruthenates. <i>IEEE Transactions on Magnetics</i> , 2001 , 37, 2721-2723	2	
3	Magnetism, Spin Fluctuations and Superconductivity in Perovskite Ruthenates. <i>Lecture Notes in Physics</i> , 2002 , 256-270	0.8	
2	On the interpretation of neutron scattering in superconducting YBa2Cu3O7. <i>Journal of Physics and Chemistry of Solids</i> , 1995 , 56, 1777-1778	3.9	
1	Density Functional Calculations Near Ferromagnetic Quantum Critical Points 2004 , 139-154		