

Athena S Sefat

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5074857/athena-s-sefat-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

247
papers

10,127
citations

52
h-index

93
g-index

272
ext. papers

10,873
ext. citations

4.8
avg, IF

5.85
L-index

#	Paper	IF	Citations
247	Superconductivity at 22 K in Co-doped BaFe ₂ As ₂ crystals. <i>Physical Review Letters</i> , 2008 , 101, 117004	7.4	940
246	Two-band superconductivity in LaFeAsO _{0.89} F _{0.11} at very high magnetic fields. <i>Nature</i> , 2008 , 453, 903-5	50.4	450
245	Bulk superconductivity at 14 K in single crystals of Fe _{1+y} Te _x Se _{1-x} . <i>Physical Review B</i> , 2009 , 79,	3.3	360
244	Small anisotropy, weak thermal fluctuations, and high field superconductivity in Co-doped iron pnictide Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Applied Physics Letters</i> , 2009 , 94, 062511	3.4	300
243	Superconductivity in LaFe _{1-x} Co _x AsO. <i>Physical Review B</i> , 2008 , 78,	3.3	289
242	Effects of nematic fluctuations on the elastic properties of iron arsenide superconductors. <i>Physical Review Letters</i> , 2010 , 105, 157003	7.4	283
241	Phase transitions in LaFeAsO: Structural, magnetic, elastic, and transport properties, heat capacity and Mössbauer spectra. <i>Physical Review B</i> , 2008 , 78,	3.3	270
240	Two-dimensional resonant magnetic excitation in BaFe _{1.84} Co _{0.16} As ₂ . <i>Physical Review Letters</i> , 2009 , 102, 107005	7.4	228
239	New Fe-based superconductors: properties relevant for applications. <i>Superconductor Science and Technology</i> , 2010 , 23, 034003	3.1	228
238	Contrasting spin dynamics between underdoped and overdoped Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Physical Review Letters</i> , 2010 , 104, 037001	7.4	209
237	Electronic correlations in the superconductor LaFeAsO _{0.89} F _{0.11} with low carrier density. <i>Physical Review B</i> , 2008 , 77,	3.3	206
236	Modification of Ni-Rich FCG NMC and NCA Cathodes by Atomic Layer Deposition: Preventing Surface Phase Transitions for High-Voltage Lithium-Ion Batteries. <i>Scientific Reports</i> , 2016 , 6, 26532	4.9	157
235	Spin Susceptibility, Phase Diagram, and Quantum Criticality in the Electron-Doped High T _c Superconductor Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Journal of the Physical Society of Japan</i> , 2009 , 78, 013711	1.5	153
234	Static and dynamic magnetism in underdoped superconductor BaFe _{1.92} Co _{0.08} As ₂ . <i>Physical Review Letters</i> , 2009 , 103, 087002	7.4	145
233	Evolution of spin excitations into the superconducting state in FeTe _{1-x} Sex. <i>Nature Physics</i> , 2010 , 6, 182-186	16.2	142
232	⁵⁷ Fe NMR investigation of the iron pnictide superconductor LaFeAsO _{0.89} F _{0.11} . <i>Physical Review B</i> , 2008 , 78,	3.3	119
231	Reversible Lithium Uptake by FeP[_{sub 2}]. <i>Electrochemical and Solid-State Letters</i> , 2003 , 6, A162		110

230	Investigating phase transformation in the Li _{1.2} Co _{0.1} Mn _{0.55} Ni _{0.15} O ₂ lithium-ion battery cathode during high-voltage hold (4.5 V) via magnetic, X-ray diffraction and electron microscopy studies. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6249	13	109
229	Comparative high-field magnetotransport of the oxypnictide superconductors RFeAsO _{1-x} F _x (R=La, Nd) and SmFeAsO. <i>Physical Review B</i> , 2008 , 78,	3.3	109
228	Polyferrocenylsilane microspheres: synthesis, mechanism of formation, size and charge tunability, electrostatic self-assembly, and pyrolysis to spherical magnetic ceramic particles. <i>Journal of the American Chemical Society</i> , 2002 , 124, 12522-34	16.4	105
227	Anisotropy of the Upper Critical Field in a Co-Doped BaFe ₂ As ₂ Single Crystal. <i>Journal of the Physical Society of Japan</i> , 2009 , 78, 084719	1.5	102
226	Influence of the rare-earth element on the effects of the structural and magnetic phase transitions in CeFeAsO, PrFeAsO and NdFeAsO. <i>New Journal of Physics</i> , 2009 , 11, 025011	2.9	102
225	Electronic structure and magnetism in BaMn ₂ As ₂ and BaMn ₂ Sb ₂ . <i>Physical Review B</i> , 2009 , 79,	3.3	98
224	⁵⁹ Co and ⁷⁵ As NMR Investigation of Electron-Doped High T _c Superconductor BaFe _{1.8} Co _{0.2} As ₂ (T _c = 22 K). <i>Journal of the Physical Society of Japan</i> , 2008 , 77, 103705	1.5	96
223	Evidence for strong itinerant spin fluctuations in the normal state of CeFeAsO _{0.89} F _{0.11} iron-oxypnictide superconductors. <i>Physical Review Letters</i> , 2008 , 101, 267001	7.4	95
222	Absence of superconductivity in hole-doped BaFe _{2-x} Cr _x As ₂ single crystals. <i>Physical Review B</i> , 2009 , 79,	3.3	94
221	Renormalized behavior and proximity of BaCo ₂ As ₂ to a magnetic quantum critical point. <i>Physical Review B</i> , 2009 , 79,	3.3	93
220	Pressure effects on two superconducting iron-based families. <i>Reports on Progress in Physics</i> , 2011 , 74, 124502	14.4	92
219	Correlating cation ordering and voltage fade in a lithium-manganese-rich lithium-ion battery cathode oxide: a joint magnetic susceptibility and TEM study. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 19496-509	3.6	91
218	Evidence for three-dimensional Fermi-surface topology of the layered electron-doped iron superconductor Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Physical Review B</i> , 2009 , 79,	3.3	89
217	Effect of uniaxial strain on the structural and magnetic phase transitions in BaFe ₂ As ₂ . <i>Physical Review Letters</i> , 2012 , 108, 087001	7.4	85
216	High-resolution EELS study of the vacancy-doped metal/insulator system, Nd _{1-x} TiO ₃ , to 0.33.. <i>Journal of Solid State Chemistry</i> , 2005 , 178, 1008-1016	3.3	81
215	Structure and anisotropic properties of BaFe _{2-x} Ni _x As ₂ (x=0, 1, and 2) single crystals. <i>Physical Review B</i> , 2009 , 79,	3.3	80
214	Neutron Diffraction and Magnetic Susceptibility Studies on a High-Voltage Li _{1.2} Mn _{0.55} Ni _{0.15} Co _{0.10} O ₂ Lithium Ion Battery Cathode: Insight into the Crystal Structure. <i>Chemistry of Materials</i> , 2013 , 25, 4064-4070	9.6	76
213	Materials Chemistry of BaFe ₂ As ₂ : A Model Platform for Unconventional Superconductivity. <i>Chemistry of Materials</i> , 2010 , 22, 715-723	9.6	68

212	Full Electroresistance Modulation in a Mixed-Phase Metallic Alloy. <i>Physical Review Letters</i> , 2016 , 116, 097203	7.4	67
211	Collapsed tetragonal phase and superconductivity of BaFe ₂ As ₂ under high pressure. <i>Physical Review B</i> , 2010 , 82,	3.3	64
210	Ceramics Containing Magnetic CoFe Alloy Nanoparticles from the Pyrolysis of a Highly Metallized Organometallic Polymer Precursor. <i>Advanced Materials</i> , 2003 , 15, 51-55	24	64
209	Phonon density of states of LaFeAsO(1-x)Fx. <i>Physical Review Letters</i> , 2008 , 101, 157004	7.4	63
208	NMR search for the spin nematic state in a LaFeAsO single crystal. <i>Physical Review Letters</i> , 2012 , 109, 247001	7.4	62
207	Competing magnetic ground states in nonsuperconducting Ba(Fe _{1-x} Cr _x) ₂ As ₂ as seen via neutron diffraction. <i>Physical Review B</i> , 2011 , 83,	3.3	61
206	Nanoscale chemical phase separation in FeTe _{0.55} Se _{0.45} as seen via scanning tunneling spectroscopy. <i>Physical Review B</i> , 2011 , 83,	3.3	60
205	Anomalous compressibility effects and superconductivity of EuFe ₂ As ₂ under high pressures. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 292202	1.8	59
204	Unusual relationship between magnetism and superconductivity in FeTe(0.5)Se(0.5). <i>Physical Review Letters</i> , 2010 , 104, 187002	7.4	59
203	Surface geometric and electronic structures of BaFe ₂ As ₂ (001). <i>Physical Review Letters</i> , 2009 , 103, 076104	7.4	58
202	Evidence for electromagnetic granularity in the polycrystalline iron-based superconductor LaO _{0.89} F _{0.11} FeAs. <i>Applied Physics Letters</i> , 2008 , 92, 252501	3.4	58
201	Polyferrocenylsilane and Magnetic Ceramic Microspheres. <i>Advanced Materials</i> , 2001 , 13, 732-736	24	58
200	Doping-dependent specific heat study of the superconducting gap in Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Physical Review B</i> , 2010 , 81,	3.3	56
199	Electronic correlations and unconventional spectral weight transfer in the high-temperature pnictide BaFe(2-x)Co(x)As ₂ superconductor using infrared spectroscopy. <i>Physical Review Letters</i> , 2012 , 108, 147002	7.4	56
198	Itinerant antiferromagnetism in BaCr ₂ As ₂ : Experimental characterization and electronic structure calculations. <i>Physical Review B</i> , 2009 , 79,	3.3	56
197	Infrared measurement of the pseudogap of P-doped and Co-doped high-temperature BaFe ₂ As ₂ superconductors. <i>Physical Review Letters</i> , 2012 , 109, 027006	7.4	54
196	Phonons in doped and undoped BaFe ₂ As ₂ investigated by inelastic x-ray scattering. <i>Physical Review B</i> , 2009 , 80,	3.3	54
195	Ni ₂ X ₂ (X = pnictide, chalcogenide, or B) based superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2009 , 469, 396-403	1.3	51

194	Spin glass and semiconducting behavior in one-dimensional BaFe ₂ Be ₃ (0.2) crystals. <i>Physical Review B</i> , 2011 , 84,	3.3	51
193	Effect of annealing on the specific heat of Ba(Fe _{1-x} Cox) ₂ As ₂ . <i>Physical Review B</i> , 2011 , 83,	3.3	50
192	Effect of pressure on the superconducting critical temperature of La[O _{0.89} F _{0.11}]FeAs and Ce[O _{0.88} F _{0.12}]FeAs. <i>Physica C: Superconductivity and Its Applications</i> , 2008 , 468, 2229-2232	1.3	48
191	Properties of binary transition-metal arsenides (TAs). <i>Superconductor Science and Technology</i> , 2012 , 25, 084016	3.1	46
190	Variation of the magnetic ordering in GdT ₂ Zn ₂₀ (T=Fe, Ru, Os, Co, Rh and Ir) and its correlation with the electronic structure of isostructural YT ₂ Zn ₂₀ . <i>Physical Review B</i> , 2008 , 77,	3.3	46
189	Magnetic excitations in the geometric frustrated multiferroic CuCrO ₂ . <i>Physical Review B</i> , 2011 , 84,	3.3	44
188	Pressure effects on the electron-doped high-T _c superconductor BaFe _{2-x} CoxAs ₂ . <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 472201	1.8	44
187	Magnetic phase transitions in NdCoAsO. <i>Physical Review B</i> , 2010 , 81,	3.3	42
186	Replicating the Structure of a Crosslinked Polyferrocenylsilane Inverse Opal in the Form of a Magnetic Ceramic. <i>Advanced Functional Materials</i> , 2002 , 12, 382	15.6	42
185	Gap structure in the electron-doped iron-arsenide superconductor Ba(Fe _{0.92} Co _{0.08}) ₂ As ₂ : low-temperature specific heat study. <i>New Journal of Physics</i> , 2010 , 12, 023006	2.9	39
184	Itinerant electrons, local moments, and magnetic correlations in the pnictide superconductors CeFeAsO _{1-x} F _x and Sr(Fe _{1-x} Cox) ₂ As ₂ . <i>Physical Review B</i> , 2012 , 85,	3.3	39
183	Electronic phase diagram of the iron-based high-T _c superconductor Ba(Fe _{1-x} Cox) ₂ As ₂ under hydrostatic pressure (0-0.099). <i>Physical Review B</i> , 2009 , 79,	3.3	38
182	Complex structures of different CaFe ₂ As ₂ samples. <i>Scientific Reports</i> , 2014 , 4, 4120	4.9	37
181	Electronic Band Structure of BaCo ₂ As ₂ : A Fully Doped Ferropnictide Analog with Reduced Electronic Correlations. <i>Physical Review X</i> , 2013 , 3,	9.1	37
180	Phase transition and superconductivity of SrFe ₂ As ₂ under high pressure. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 122201	1.8	37
179	Local inhomogeneity and filamentary superconductivity in Pr-doped CaFe ₂ As ₂ . <i>Physical Review Letters</i> , 2014 , 112, 047005	7.4	36
178	Crystal growth of new hexahydroxometallates using a hydroflux. <i>Inorganic Chemistry</i> , 2013 , 52, 11723-33	3.1	36
177	C ₅₉ o and A ₇₅ s NMR investigation of lightly doped Ba(Fe _{1-x} Cox) ₂ As ₂ (x=0.02,0.04). <i>Physical Review B</i> , 2009 , 79,	3.3	36

176	Suppression of spin density wave by isoelectronic substitution in PrFe _{1-x} Ru _x AsO. <i>Journal of Solid State Chemistry</i> , 2009 , 182, 2326-2331	3-3	36
175	Interlayer coherence and superconducting condensate in the c-axis response of optimally doped Ba(Fe _{1-x} Co _x) ₂ As ₂ high-T(c) superconductor using infrared spectroscopy. <i>Physical Review Letters</i> , 2013 , 110, 097003	7-4	35
174	Pressure-induced electronic phase separation of magnetism and superconductivity in CrAs. <i>Scientific Reports</i> , 2015 , 5, 13788	4-9	34
173	BaT ₂ As ₂ single crystals (T=Fe, Co, Ni) and superconductivity upon Co-doping. <i>Physica C: Superconductivity and Its Applications</i> , 2009 , 469, 350-354	1-3	34
172	Phonon softening near the structural transition in BaFe ₂ As ₂ observed by inelastic x-ray scattering. <i>Physical Review B</i> , 2011 , 84,	3-3	34
171	Chemistry and electronic structure of iron-based superconductors. <i>MRS Bulletin</i> , 2011 , 36, 614-619	3-2	33
170	Fermi-surface reconstruction and complex phase equilibria in CaFe ₂ As ₂ . <i>Physical Review Letters</i> , 2014 , 112, 186401	7-4	32
169	Bulk synthesis of iron-based superconductors. <i>Current Opinion in Solid State and Materials Science</i> , 2013 , 17, 59-64	12	32
168	Crystal growth, structure, polarization, and magnetic properties of cesium vanadate, Cs ₂ V ₃ O ₈ : a structure-property study. <i>Inorganic Chemistry</i> , 2013 , 52, 6179-86	5-1	32
167	U ₃ F ₁₂ (H ₂ O), a noncentrosymmetric uranium(IV) fluoride prepared via a convenient in situ route that creates U ⁴⁺ under mild hydrothermal conditions. <i>Inorganic Chemistry</i> , 2013 , 52, 8303-5	5-1	31
166	High-resolution measurements of the thermal expansion of superconducting Co-doped BaFe ₂ As ₂ . <i>Physical Review B</i> , 2009 , 79,	3-3	31
165	Structure and property correlations in FeS. <i>Physica C: Superconductivity and Its Applications</i> , 2017 , 534, 29-36	1-3	29
164	Pressure dependence of the magnetic order in CrAs: A neutron diffraction investigation. <i>Physical Review B</i> , 2015 , 91,	3-3	29
163	Crystals, magnetic and electronic properties of a new ThCr ₂ Si ₂ -type BaMn ₂ Bi ₂ and K-doped compositions. <i>Journal of Solid State Chemistry</i> , 2013 , 204, 32-39	3-3	29
162	Crystal growth, structural characterization, and magnetic properties of new uranium(IV) containing mixed metal oxalates: Na ₂ U ₂ M(C ₂ O ₄) ₆ (H ₂ O) ₄ (M = Mn ²⁺ , Fe ²⁺ , Co ²⁺ , and Zn ²⁺). <i>Inorganic Chemistry</i> , 2013 , 52, 2199-207	5-1	28
161	Phonon splitting and anomalous enhancement of infrared-active modes in BaFe ₂ As ₂ . <i>Physical Review B</i> , 2011 , 84,	3-3	28
160	A semimetal model of the normal state magnetic susceptibility and transport properties of Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Physica C: Superconductivity and Its Applications</i> , 2010 , 470, 304-308	1-3	27
159	Field-induced magnetic transition and spin fluctuations in the quantum spin-liquid candidate CsYbSe ₂ . <i>Physical Review B</i> , 2019 , 100,	3-3	27

158	Resolving the degradation pathways in high-voltage oxides for high-energy-density lithium-ion batteries; Alternation in chemistry, composition and crystal structures. <i>Nano Energy</i> , 2017 , 36, 76-84	17.1	26
157	Magnetism and disorder effects on muon spin rotation measurements of the magnetic penetration depth in iron-arsenic superconductors. <i>Physical Review Letters</i> , 2011 , 106, 127002	7.4	26
156	Search for pressure-induced superconductivity in CeFeAsO and CeFePO iron pnictides. <i>Physical Review B</i> , 2011 , 83,	3.3	26
155	Electronic structure of CeFeAsO $_{1-x}$ F $_x$ ($x=0, 0.11$, and 0.12). <i>Physical Review B</i> , 2010 , 82,	3.3	26
154	Formation of collapsed tetragonal phase in EuCoAs under high pressure. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 425701	1.8	26
153	Effect of molybdenum 4d hole substitution in BaFe $_2$ As $_2$. <i>Physical Review B</i> , 2012 , 85,	3.3	25
152	Precise measurements of radio-frequency magnetic susceptibility in ferromagnetic and antiferromagnetic materials. <i>Journal of Magnetism and Magnetic Materials</i> , 2008 , 320, 354-363	2.8	24
151	Direct probe of interplay between local structure and superconductivity in FeTeBe. <i>ACS Nano</i> , 2013 , 7, 2634-41	16.7	23
150	Spin-gap formation and thermal structural studies in reduced hybrid layered vanadates. <i>Inorganic Chemistry</i> , 2006 , 45, 5109-18	5.1	23
149	Crystal Synthesis and Frustrated Magnetism in Triangular Lattice CsRESe $_2$ (RE = La, U): Quantum Spin Liquid Candidates CsCeSe $_2$ and CsYbSe $_2$ 2020 , 2, 71-75		23
148	Magnetic properties of single crystal EuCo $_2$ As $_2$. <i>Journal of Applied Physics</i> , 2012 , 111, 07E106	2.5	22
147	Anderson-Mott transition induced by hole doping in Nd $_1-x$ TiO $_3$. <i>Physical Review B</i> , 2006 , 74,	3.3	22
146	Magnetic structure and spin excitations in BaMn $_2$ Bi $_2$. <i>Physical Review B</i> , 2014 , 89,	3.3	21
145	Crystal, magnetic, and electronic structures, and properties of new BaMnPnF (Pn = As, Sb, Bi). <i>Scientific Reports</i> , 2013 , 3, 2154	4.9	21
144	Evolution of antiferromagnetic susceptibility under uniaxial pressure in Ba(Fe $_{1-x}$ Co $_x$) $_2$ As $_2$. <i>Physical Review B</i> , 2014 , 89,	3.3	21
143	Effect of carrier doping on the formation and collapse of magnetic polarons in lightly hole-doped La $_1-x$ Sr $_x$ CoO $_3$. <i>Physical Review B</i> , 2011 , 83,	3.3	21
142	Pressure effects on the transport coefficients of Ba(Fe $_{1-x}$ Co $_x$) $_2$ As $_2$. <i>Physical Review B</i> , 2011 , 84,	3.3	21
141	Unusual phase transitions and magnetoelastic coupling in TlFe $_{1.6}$ Se $_2$ single crystals. <i>Physical Review B</i> , 2011 , 83,	3.3	21

140	Evidence of Mott physics in iron pnictides from x-ray spectroscopy. <i>Physical Review B</i> , 2017 , 96,	3.3	20
139	Metallic properties of Ba ₂ Cu ₃ P ₄ and BaCu ₂ Pn ₂ (Pn=As, Sb). <i>Journal of Solid State Chemistry</i> , 2012 , 191, 213-219	3.3	20
138	Orbital symmetry of Ba(Fe _{1-x} Cox) ₂ As ₂ superconductors probed with x-ray absorption spectroscopy. <i>Physical Review B</i> , 2010 , 81,	3.3	20
137	Deep data mining in a real space: separation of intertwined electronic responses in a lightly doped BaFeAs. <i>Nanotechnology</i> , 2016 , 27, 475706	3.4	20
136	Infrared pseudogap in cuprate and pnictide high-temperature superconductors. <i>Physical Review B</i> , 2014 , 90,	3.3	19
135	Point-contact spectroscopic studies on normal and superconducting AFe ₂ As ₂ -type iron pnictide single crystals. <i>Superconductor Science and Technology</i> , 2010 , 23, 054009	3.1	19
134	Cu substitution effects on the local magnetic properties of Ba(Fe _{1-x} Cu _x) ₂ As ₂ : a site-selective (75)As and (63)Cu NMR study. <i>Physical Review Letters</i> , 2014 , 113, 117001	7.4	18
133	Temperature and pressure dependence of the Fe-specific phonon density of states in Ba(Fe _{1-x} Cox) ₂ As ₂ . <i>Physical Review B</i> , 2010 , 81,	3.3	18
132	Epitaxial Growth of Intermetallic MnPt Films on Oxides and Large Exchange Bias. <i>Advanced Materials</i> , 2016 , 28, 118-23	24	18
131	Magnetization, resistivity and heat capacity of the anisotropic RV ₃ Sb ₃ crystals (R=La, Nd, Sm, Gd, Dy). <i>Journal of Magnetism and Magnetic Materials</i> , 2008 , 320, 120-141	2.8	17
130	Variation of physical properties in the nominal Sr ₄ V ₂ O ₆ Fe ₂ As ₂ . <i>Physica C: Superconductivity and Its Applications</i> , 2011 , 471, 143-149	1.3	16
129	Specific heat to H _{c2} : Evidence for nodes or deep minima in the superconducting gap of underdoped and overdoped Ba(Fe _{1-x} Cox) ₂ As ₂ . <i>Physical Review B</i> , 2012 , 86,	3.3	16
128	New correlated electron physics from new materials. <i>Physica B: Condensed Matter</i> , 2009 , 404, 2924-2929	2.8	16
127	Experimental and Computational Investigation of the Polar Ferrimagnet VOSe ₂ O ₅ . <i>Chemistry of Materials</i> , 2010 , 22, 5074-5083	9.6	16
126	NMR Measurements of Intrinsic Spin Susceptibility in LaFeAsO _{0.9} F _{0.1} . <i>Journal of the Physical Society of Japan</i> , 2008 , 77, 47-53	1.5	16
125	Tetragonal and collapsed-tetragonal phases of CaFe ₂ As ₂ : A view from angle-resolved photoemission and dynamical mean-field theory. <i>Physical Review B</i> , 2016 , 93,	3.3	15
124	Crystal growth, structures, magnetic and photoluminescent properties of NaLnGeO ₄ (Ln = Sm, Eu, Gd, Tb). <i>Solid State Sciences</i> , 2014 , 34, 24-30	3.4	15
123	Coupling of structure to magnetic and superconducting orders in quasi-one-dimensional K ₂ Cr ₃ As ₃ . <i>Physical Review B</i> , 2017 , 96,	3.3	15

122	Temperature-dependent optical spectroscopy studies of Nd _{1-x} TiO ₃ . <i>Physical Review B</i> , 2006 , 73,	3-3	15
121	Synthesis, magnetization, and heat capacity of triangular lattice materials NaErSe ₂ and KErSe ₂ . <i>Physical Review Materials</i> , 2019 , 3,	3-2	15
120	Magnetic ground state of the Ising-like antiferromagnet DyScO ₃ . <i>Physical Review B</i> , 2017 , 96,	3-3	14
119	Unconventional irreversible structural changes in a high-voltage LiMn-rich oxide for lithium-ion battery cathodes. <i>Journal of Power Sources</i> , 2015 , 283, 423-428	8.9	14
118	Critical behavior of the spin density wave transition in underdoped Ba(Fe _{1-x} Cox) ₂ As ₂ (x=0.05): As ⁷⁵ NMR investigation. <i>Physical Review B</i> , 2014 , 89,	3-3	14
117	Crossover from spin waves to diffusive spin excitations in underdoped Ba(Fe _{1-x} Cox) ₂ As ₂ . <i>Physical Review B</i> , 2014 , 89,	3-3	14
116	Structure and magnetic order in the series BixRE _{1-x} Fe _{0.5} Mn _{0.5} O ₃ (RE=La,Nd). <i>Journal of Solid State Chemistry</i> , 2011 , 184, 830-842	3-3	14
115	A New Magnetically Ordered Polymorph of CuMoO ₄ : Synthesis and Characterization of β -CuMoO ₄ . <i>Chemistry of Materials</i> , 2008 , 20, 3785-3787	9.6	14
114	Enhancement of the critical current density by increasing the collective pinning energy in heavy ion irradiated Co-doped BaFe ₂ As ₂ single crystals. <i>Superconductor Science and Technology</i> , 2015 , 28, 055011	3-1	13
113	Decoupled spin dynamics in the rare-earth orthoferrite YbFeO ₃ : Evolution of magnetic excitations through the spin-reorientation transition. <i>Physical Review B</i> , 2018 , 98,	3-3	13
112	Direct spectroscopic evidence for completely filled Cu 3d shell in BaCu ₂ As ₂ and BaCu ₂ Sb ₂ . <i>Physical Review B</i> , 2015 , 91,	3-3	13
111	Electronic, magnetic and optical properties of two Fe-based superconductors and related parent compounds. <i>Superconductor Science and Technology</i> , 2010 , 23, 054005	3-1	13
110	Anisotropic thermal expansion of Fe _{1.06} Te and FeTe _{0.5} Se _{0.5} single crystals. <i>Physical Review B</i> , 2009 , 80,	3-3	13
109	Synthesis, Structure, and Physical Properties of Mixed Valent Mo ₂ SbS ₂ , the First Superconducting Antimonide-Sulfide. <i>Chemistry of Materials</i> , 2003 , 15, 780-786	9.6	13
108	Surface terminations and layer-resolved tunneling spectroscopy of the 122 iron pnictide superconductors. <i>Physical Review B</i> , 2019 , 99,	3-3	12
107	Orbital occupancy and charge doping in iron-based superconductors. <i>Advanced Materials</i> , 2014 , 26, 6193-6198	3-4	12
106	Local crystallography analysis for atomically resolved scanning tunneling microscopy images. <i>Nanotechnology</i> , 2013 , 24, 415707	3-4	12
105	NMR investigation of spin correlations in BaCo ₂ As ₂ . <i>Physical Review B</i> , 2014 , 90,	3-3	12

104	Spin excitations in BaFe _{1.84} Co _{0.16} As ₂ superconductor observed by inelastic neutron scattering. <i>Physical Review B</i> , 2009 , 80,	3.3	12
103	Physical properties of GdFe ₂ (Al _x Zn _{1-x}) ₂₀ . <i>Physical Review B</i> , 2011 , 83,	3.3	12
102	Coupled structural and magnetic antiphase domain walls on BaFe ₂ As ₂ . <i>Physical Review B</i> , 2012 , 86,	3.3	12
101	Angle-resolved photoemission observation of Mn-pnictide hybridization and negligible band structure renormalization in BaMn ₂ As ₂ and BaMn ₂ Sb ₂ . <i>Physical Review B</i> , 2016 , 94,	3.3	12
100	Study of the second magnetization peak and the pinning behaviour in Ba(Fe _{0.935} Co _{0.065}) ₂ As ₂ pnictide superconductor. <i>Superconductor Science and Technology</i> , 2017 , 30, 125007	3.1	11
99	Annealing effects on the properties of BFe ₂ As ₂ (B = Ca, Sr, Ba) superconducting parents. <i>Dalton Transactions</i> , 2014 , 43, 14971-5	4.3	11
98	Doping dependence of the spin excitations in the Fe-based superconductors Fe _{1+y} Te _{1-x} Sex. <i>Physical Review B</i> , 2013 , 87,	3.3	11
97	Stereo-Active Lone-Pair Control on the Ferromagnetic Behavior in VO(SeO ₂ OH) ₂ : A New Acentric Ferromagnetic Material. <i>Chemistry of Materials</i> , 2010 , 22, 6665-6672	9.6	11
96	Spatial inhomogeneity in RFeAsO _{1-x} F _x (R= Pr, Nd) determined from rare-earth crystal-field excitations. <i>Physical Review B</i> , 2011 , 83,	3.3	11
95	Direct measurement of the magnetic penetration depth by magnetic force microscopy. <i>Superconductor Science and Technology</i> , 2012 , 25, 112001	3.1	11
94	Evolution of the nuclear and magnetic structures of TlFe _{1.6} Se ₂ with temperature. <i>Physical Review B</i> , 2012 , 85,	3.3	11
93	Effect of Surface Morphology and Magnetic Impurities on the Electronic Structure in Cobalt-Doped BaFeAs Superconductors. <i>Nano Letters</i> , 2017 , 17, 1642-1647	11.5	10
92	Angle-resolved photoemission spectroscopy observation of anomalous electronic states in EuFe ₂ As(2-x)P(x). <i>Journal of Physics Condensed Matter</i> , 2014 , 26, 035702	1.8	10
91	Improving superconductivity in BaFeAs-based crystals by cobalt clustering and electronic uniformity. <i>Scientific Reports</i> , 2017 , 7, 949	4.9	10
90	Superconductivity in semimetallic Bi ₃ O ₂ S ₃ . <i>Physical Review B</i> , 2015 , 91,	3.3	10
89	Research Update: Spatially resolved mapping of electronic structure on atomic level by multivariate statistical analysis. <i>APL Materials</i> , 2014 , 2, 120701	5.7	10
88	Effect of annealing on the specific heat of optimally doped Ba(Fe _{0.92} Co _{0.08}) ₂ As ₂ . <i>Journal of Physics: Conference Series</i> , 2011 , 273, 012094	0.3	10
87	Structural phase transitions in EuFe ₂ As ₂ superconductor at low temperatures and high pressures. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 365703	1.8	10

86	Is BaCr ₂ As ₂ symmetrical to BaFe ₂ As ₂ with respect to half 3d shell filling?. <i>Physical Review B</i> , 2017 , 95,	3-3	9
85	Room-Temperature Ba(Fe _{1-x} Co _x) ₂ As ₂ is not Tetragonal: Direct Observation of Magnetoelastic Interactions in Pnictide Superconductors. <i>Advanced Materials</i> , 2015 , 27, 2715-21	24	9
84	Crystal-field Hamiltonian and anisotropy in KErSe ₂ and CsErSe ₂ . <i>Physical Review B</i> , 2020 , 101,	3-3	9
83	Influence of spin fluctuations on the thermal conductivity in superconducting Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Physical Review B</i> , 2013 , 88,	3-3	9
82	Effect of pressure, temperature, fluorine doping, and rare earth elements on the phonon density of states of LFeAsO studied by nuclear inelastic scattering. <i>Physical Review B</i> , 2013 , 87,	3-3	9
81	Low-temperature thermal conductivity of BaFe ₂ As ₂ : A parent compound of iron arsenide superconductors. <i>Physical Review B</i> , 2009 , 79,	3-3	9
80	Crystal structures and magnetic properties of CeAu ₄ Si ₂ and CeAu ₂ Si ₂ . <i>Journal of Solid State Chemistry</i> , 2008 , 181, 282-293	3-3	9
79	Effect of hole doping on the magnetic properties of the Mott-Hubbard antiferromagnetic insulator Nd _{1-x} Ti _x O ₃ . <i>Physical Review B</i> , 2006 , 74,	3-3	9
78	Frustrated Structural Instability in Superconducting Quasi-One-Dimensional K ₂ Cr ₃ As ₃ . <i>Physical Review Letters</i> , 2018 , 121, 187002	7-4	9
77	Frustrated Magnetism in Triangular Lattice TlYbS Crystals Grown via Molten Flux. <i>Frontiers in Chemistry</i> , 2020 , 8, 127	5	8
76	Superconductivity, pairing symmetry, and disorder in the doped topological insulator Sn _{1-x} In _x Te for x \leq 0.10. <i>Physical Review B</i> , 2018 , 97,	3-3	8
75	Role of magnetism in superconductivity of BaFe ₂ As ₂ : Study of 5d Au-doped crystals. <i>Physical Review B</i> , 2015 , 92,	3-3	8
74	Ternary chalcogenides Cs ₂ Zn ₃ Se ₄ and Cs ₂ Zn ₃ Te ₄ : Potential p-type transparent conducting materials. <i>Physical Review B</i> , 2014 , 90,	3-3	8
73	Temperature-composition phase diagrams for Ba _{1-x} Sr _x Fe ₂ As ₂ (0 \leq x \leq 1) and superconducting Ba _{0.5} Sr _{0.5} (Fe _{1-x} Co _x) ₂ As ₂ (0 \leq x \leq 1.41). <i>Physical Review B</i> , 2012 , 86,	3-3	8
72	Magnetotransport of proton-irradiated BaFe ₂ As ₂ and BaFe _{1.985} Co _{0.015} As ₂ single crystals. <i>Physical Review B</i> , 2015 , 91,	3-3	7
71	Evidence for superconductivity at T _c =12 K in oxygen-deficient MoO ₂ and properties of molybdenum arsenide and oxide binaries. <i>Physical Review B</i> , 2014 , 90,	3-3	7
70	MnNiO revisited with modern theoretical and experimental methods. <i>Journal of Chemical Physics</i> , 2017 , 147, 174703	3-9	7
69	High-resolution x-ray scattering studies of structural phase transitions in Ba(Fe _{1-x} Cr _x) ₂ As ₂ . <i>Physical Review B</i> , 2012 , 85,	3-3	7

68	Magnetic behavior of $\text{RMn}_{2+x}\text{Al}_{10}\text{X}$ (R=La,Gd) crystals. <i>Physical Review B</i> , 2007 , 76,	3-3	7
67	Raman scattering study of spin-density-wave-induced anisotropic electronic properties in AFe_2As_2 (A=Ca, Eu). <i>Physical Review B</i> , 2016 , 93,	3-3	6
66	High-Voltage Performance of Ni-Rich NCA Cathodes: Linking Operating Voltage with Cathode Degradation. <i>ChemElectroChem</i> , 2019 , 6, 5571-5580	4-3	6
65	Structural and magnetic phase transitions in NdCoAsO under high pressures. <i>Journal of Physics Condensed Matter</i> , 2010 , 22, 185702	1.8	6
64	Tuning from frustrated magnetism to superconductivity in quasi-one-dimensional KCr_3As_3 through hydrogen doping. <i>Physical Review B</i> , 2019 , 100,	3-3	6
63	Single crystal neutron and magnetic measurements of $\text{RbMn}(\text{VO})\text{CO}$ and $\text{KCo}(\text{VO})\text{CO}$ with mixed honeycomb and triangular magnetic lattices. <i>Dalton Transactions</i> , 2020 , 49, 4323-4335	4-3	5
62	Modeling and characterization of the magnetocaloric effect in Ni_2MnGa materials. <i>International Journal of Refrigeration</i> , 2014 , 37, 289-296	3.8	5
61	Modified magnetism within the coherence volume of superconducting $\text{Fe}_{1+x}\text{Te}_{1-x}$. <i>Physical Review B</i> , 2014 , 90,	3-3	5
60	Absence of structural transition in $\text{M}_0.5\text{IrTe}_2$ (M = Mn, Fe, Co, Ni). <i>Physical Review B</i> , 2013 , 88,	3-3	5
59	Iron substitution in NdCoAsO : Crystal structure and magnetic phase diagram. <i>Physical Review B</i> , 2010 , 82,	3-3	5
58	Probing microscopic variations of superconductivity on the surface of $\text{Ba}(\text{Fe}_{1-x}\text{Co}_x)_2\text{As}_2$ single crystals. <i>Physical Review B</i> , 2009 , 80,	3-3	5
57	Properties of $\text{RRe}_2\text{Al}_{10}$ (R=Y, Gd) crystals. <i>Physical Review B</i> , 2009 , 79,	3-3	5
56	A reinterpretation of the magnetic properties of the mixed-valence (Nb(V)/Nb(IV)) Zintl phase, $\text{Cs}_9\text{Nb}_2\text{As}_6$. <i>Inorganic Chemistry</i> , 2004 , 43, 142-3	5.1	5
55	Local-Ising-type magnetic order and metamagnetism in the rare-earth pyrogermanate $\text{Er}_2\text{Ge}_2\text{O}_7$. <i>Physical Review Materials</i> , 2019 , 3,	3.2	5
54	Robust antiferromagnetism preventing superconductivity in pressurized $(\text{Ba}_{0.61}\text{K}_{0.39})\text{Mn}_2\text{Bi}_2$. <i>Scientific Reports</i> , 2014 , 4, 7342	4.9	4
53	Anomalous magneto-elastic and charge doping effects in thallium-doped BaFe_2As_2 . <i>Scientific Reports</i> , 2016 , 6, 21660	4.9	4
52	Metallicity of $\text{Ca}_2\text{Cu}_6\text{P}_5$ with single and double copper-pnictide layers. <i>Journal of Alloys and Compounds</i> , 2016 , 671, 334-339	5.7	4
51	High pressure effects on the superconductivity in rare-earth-doped CaFe_2As_2 . <i>High Pressure Research</i> , 2014 , 34, 49-58	1.6	4

50	Direct probe of the variability of Coulomb correlation in iron pnictide superconductors. <i>Physical Review B</i> , 2012 , 85,	3.3	4
49	High-pressure structural phase transitions in chromium-doped BaFe ₂ As ₂ . <i>Journal of Physics: Conference Series</i> , 2012 , 377, 012016	0.3	4
48	Aligned crystallite powder of NdFeAsO _{0.86} F _{0.14} : Magnetic hysteresis and penetration depth. <i>Physical Review B</i> , 2009 , 79,	3.3	4
47	Evidence of Ba-substitution induced spin-canting in the magnetic Weyl semimetal EuCd ₂ As ₂ . <i>Physical Review B</i> , 2020 , 102,	3.3	4
46	Stress-induced nematicity in EuFe ₂ As ₂ studied by Raman spectroscopy. <i>Physical Review B</i> , 2016 , 94,	3.3	4
45	Lattice parameters guide superconductivity in iron-arsenides. <i>Journal of Physics Condensed Matter</i> , 2017 , 29, 083001	1.8	3
44	Local superconductivity in vanadium iron arsenide. <i>Physical Review B</i> , 2019 , 100,	3.3	3
43	Multi-layered Chalcogenides with potential for magnetism and superconductivity. <i>Physica C: Superconductivity and Its Applications</i> , 2016 , 531, 25-29	1.3	3
42	Synthesis, Crystal Structure, and Electronic Properties of the CaRE ₃ SbO ₄ and Ca ₂ RE ₈ Sb ₃ O ₁₀ phases (RE = Rare-Earth Metal). <i>Chemistry of Materials</i> , 2014 , 26, 2289-2298	9.6	3
41	Pressure-induced structural phase transition in CeNi: X-ray and neutron scattering studies and first-principles calculations. <i>Physical Review B</i> , 2015 , 92,	3.3	3
40	Optimization of a non-arsenic iron-based superconductor for wire fabrication. <i>Superconductor Science and Technology</i> , 2015 , 28, 045018	3.1	3
39	Stripe antiferromagnetic ground state of the ideal triangular lattice compound KErSe ₂ . <i>Physical Review B</i> , 2021 , 103,	3.3	3
38	Nonrigid band shift and nonmonotonic electronic structure changes upon doping in the normal state of the pnictide high-temperature superconductor Ba(Fe _{1-x} Cox) ₂ As ₂ . <i>Physical Review B</i> , 2016 , 94,	3.3	3
37	Persistent magnetism in silver-doped BaFe ₂ As ₂ crystals. <i>Physical Review B</i> , 2016 , 94,	3.3	3
36	Transport Thermal Properties of (hbox {LiTaO}_{3}) Pyroelectric Sensor from 15 K to 400 K and Its Application to the Study of Critical Behavior in (hbox {EuCo}_{2}hbox {As}_{2}). <i>International Journal of Thermophysics</i> , 2016 , 37, 1	2.1	3
35	Stacking Faults and Short-Range Magnetic Correlations in Single Crystal Y ₅ Ru ₂ O ₁₂ : A Structure with Ru ^{+4.5} One-Dimensional Chains. <i>Physica Status Solidi (B): Basic Research</i> , 2021 , 258, 2000197	1.3	3
34	Effects of proton irradiation on flux-pinning properties of underdoped Ba(Fe _{0.96} Co _{0.04}) ₂ As ₂ pnictide superconductor. <i>Journal of Alloys and Compounds</i> , 2017 , 694, 1371-1375	5.7	2
33	Importance of doping and frustration in itinerant Fe-doped Cr ₂ Al. <i>Journal of Magnetism and Magnetic Materials</i> , 2015 , 392, 68-73	2.8	2

32	Signatures of filamentary superconductivity in antiferromagnetic BaFe ₂ As ₂ single crystals. <i>Europhysics Letters</i> , 2015 , 111, 37005	1.6	2
31	Superconductivity with T _c ≈ K under pressure for Cu- and Au-doped BaFeAs. <i>Journal of Physics Condensed Matter</i> , 2020 , 32, 295602	1.8	2
30	Magnetic and thermal behavior of a family of compositionally related zero-dimensional fluorides. <i>Solid State Sciences</i> , 2018 , 81, 19-25	3.4	2
29	Strain-activated structural anisotropy in BaFe ₂ As ₂ . <i>Physical Review B</i> , 2016 , 93,	3.3	2
28	Effect of Li ₂ O on the microstructure, magnetic and transport properties of Tl-2223 superconductor. <i>Physica C: Superconductivity and Its Applications</i> , 2015 , 519, 108-111	1.3	2
27	Structural and superconducting features of Tl-1223 prepared at ambient pressure. <i>Superconductor Science and Technology</i> , 2015 , 28, 115006	3.1	2
26	Competitive and cooperative electronic states in Ba(Fe _{1-x} T _x) ₂ As ₂ with T = Co, Ni, Cr. <i>Npj Quantum Materials</i> , 2021 , 6,	5	2
25	Observation of a Large Magnetic Anisotropy and a Field-Induced Magnetic State in SrCo(VO)(OH): A Structure with a Quasi One-Dimensional Magnetic Chain. <i>Inorganic Chemistry</i> , 2020 , 59, 1029-1037	5.1	2
24	Nanoscale Superconducting States in the Fe-Based Filamentary Superconductor of Pr-Doped CaFeAs. <i>Nanomaterials</i> , 2021 , 11,	5.4	2
23	Unusual effects of Be doping in the iron-based superconductor FeSe. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 445701	1.8	2
22	Effect of Pressure on the Superconducting Properties of Tl ₂ Ba ₂ Ca ₂ Cu ₃ O ₉ - δ Crystals, 2019 , 9, 4	2.3	1
21	Superconducting properties in heavily overdoped Ba(Fe _{0.86} Co _{0.14}) ₂ As ₂ single crystals. <i>Solid State Communications</i> , 2015 , 201, 20-24	1.6	1
20	Nanoscale interlayer defects in iron arsenides. <i>Journal of Solid State Chemistry</i> , 2019 , 277, 422-426	3.3	1
19	Pressure-induced superconductivity and structural transitions in Ba(Fe _{0.9} Ru _{0.1}) ₂ As ₂ . <i>European Physical Journal B</i> , 2014 , 87, 1	1.2	1
18	On the nature of filamentary superconductivity in metal-doped hydrocarbon organic materials. <i>Novel Superconducting Materials</i> , 2015 , 1,		1
17	Crystal and electronic structures of metallic Ba ₂ Pd ₅ Ge ₄ . <i>Dalton Transactions</i> , 2012 , 41, 12920-5	4.3	1
16	Pressure-induced superconductivity in Ba _{0.5} Sr _{0.5} Fe ₂ As ₂ . <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 495702	1.8	1
15	Superconductivity near a quantum critical point in Ba(Fe _{1-x} Co _x) ₂ As ₂ . <i>Physica C: Superconductivity and Its Applications</i> , 2010 , 470, S273-S275	1.3	1

14	Synthesis and anisotropic magnetism in quantum spin liquid candidates AYbSe ₂ (A = K and Rb). <i>APL Materials</i> , 2021 , 9, 111104	5.7	1
13	Coupling of fully symmetric As phonon to magnetism in Ba(Fe _{1-x} Aux) ₂ As ₂ . <i>Physical Review B</i> , 2020 , 102,	3.3	1
12	Pseudospin versus magnetic dipole moment ordering in the isosceles triangular lattice material K ₃ Er(VO ₄) ₂ . <i>Physical Review B</i> , 2020 , 102,	3.3	1
11	Magnetoelastic coupling, negative thermal expansion, and two-dimensional magnetic excitations in FeAs. <i>Physical Review B</i> , 2021 , 103,	3.3	1
10	Dynamic magnetic response across the pressure-induced structural phase transition in CeNi. <i>Physical Review B</i> , 2019 , 99,	3.3	1
9	Systematic extraction of crystal electric-field effects and quantum magnetic model parameters in triangular rare-earth magnets. <i>Physical Review Research</i> , 2021 , 3,	3.9	1
8	Synthesis, crystal structure and magnetic properties of KLnSe ₂ (Ln = La, Ce, Pr, Nd) structures: A family of 2D triangular lattice frustrated magnets. <i>Journal of Solid State Chemistry</i> , 2022 , 308, 122917	3.3	0
7	Multiband effects on the upper critical field angular dependence of 122-family iron pnictide superconductors. <i>Scientific Reports</i> , 2021 , 11, 11526	4.9	0
6	Mesoscale interplay between phonons and crystal electric field excitations in quantum spin liquid candidate CsYbSe ₂ . <i>Journal of Materials Chemistry C</i> , 2022 , 10, 4148-4156	7.1	0
5	Neutron Scattering of CeNi at the SNS-ORNL: A Preliminary Report. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1683, 26		
4	Magnetic properties of off-stoichiometric R ₂ Co ₃ Zn ₁₄ (R=Y, Gd) single crystals. <i>Journal of Magnetism and Magnetic Materials</i> , 2008 , 320, 1035-1042	2.8	
3	Deep Data Mining in a Real Space: Application to Scanning Probe Microscopy Studies on a Parent State of a High Temperature Superconductor. <i>Microscopy and Microanalysis</i> , 2016 , 22, 1418-1419	0.5	
2	Ferromagnetism: Epitaxial Growth of Intermetallic MnPt Films on Oxides and Large Exchange Bias (Adv. Mater. 1/2016). <i>Advanced Materials</i> , 2016 , 28, 204-204	24	
1	Lattice disorder effect on magnetic ordering of iron arsenides. <i>Scientific Reports</i> , 2019 , 9, 20147	4.9	