

# Douglas L Abernathy

## List of Publications by Year in descending order

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270  
papers

9,228  
citations

33972

52  
h-index

53958

85  
g-index

281  
all docs

281  
docs citations

281  
times ranked

12427  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metallization of vanadium dioxide driven by large phonon entropy. <i>Nature</i> , 2014, 515, 535-539.	36.2	267
2	Layering of a liquid metal in contact with a hard wall. <i>Nature</i> , 1997, 390, 379-381.	36.2	246
3	Two-dimensional resonant magnetic excitation in $\text{BaFe}_{1.84}\text{Co}$ . <i>Physical Review Letters</i> , 2009, 102, 107005.	8.0	238
4	Design and operation of the wide angular-range chopper spectrometer ARCS at the Spallation Neutron Source. <i>Review of Scientific Instruments</i> , 2012, 83, 015114.	1.4	218
5	Structural Relationship between Negative Thermal Expansion and Quartic Anharmonicity of Cubic $\text{ScF}_3$ . <i>Physical Review Letters</i> , 2011, 107, 195504.	8.0	205
6	Financial Impact of Surgical Site Infections on Hospitals. <i>JAMA Surgery</i> , 2013, 148, 907.	4.5	201
7	Absence of long-range chemical ordering in equimolar FeCoCrNi. <i>Applied Physics Letters</i> , 2012, 100, .	3.2	184
8	X-Ray Intensity Fluctuation Spectroscopy Observations of Critical Dynamics in Fe <sub>3</sub> Al. <i>Physical Review Letters</i> , 1995, 74, 2010-2013.	8.0	182
9	Tuning mobility and stability of lithium ion conductors based on lattice dynamics. <i>Energy and Environmental Science</i> , 2018, 11, 850-859.	32.2	182
10	The Spallation Neutron Source in Oak Ridge: A powerful tool for materials research. <i>Physica B: Condensed Matter</i> , 2006, 385-386, 955-960.	2.8	173
11	Class-like phonon scattering from a spontaneous nanostructure in AgSbTe <sub>2</sub> . <i>Nature Nanotechnology</i> , 2013, 8, 445-451.	30.5	171
12	Evolution of spin excitations into the superconducting state in FeTe <sub>1-x</sub> Sex. <i>Nature Physics</i> , 2010, 6, 182-186.	11.8	151
13	Higgs mode and its decay in a two-dimensional antiferromagnet. <i>Nature Physics</i> , 2017, 13, 633-637.	11.8	138
14	Long-Range Antiferromagnetic Order in a Rocksalt High Entropy Oxide. <i>Chemistry of Materials</i> , 2019, 31, 3705-3711.	7.1	131
15	Dynamics of Block Copolymer Micelles Revealed by X-Ray Intensity Fluctuation Spectroscopy. <i>Physical Review Letters</i> , 1997, 78, 1275-1278.	8.0	124
16	Ecosystem simplification, biodiversity loss and plant virus emergence. <i>Current Opinion in Virology</i> , 2015, 10, 56-62.	5.6	122
17	Predicting plasticity in disordered solids from structural indicators. <i>Physical Review Materials</i> , 2020, 4, .	2.5	121
18	Self-assembly of organic films on a liquid metal. <i>Nature</i> , 1996, 384, 250-252.	36.2	116

#	ARTICLE	IF	CITATIONS
19	A comparison of four direct geometry time-of-flight spectrometers at the Spallation Neutron Source. Review of Scientific Instruments, 2014, 85, 045113.	1.4	114
20	Coherent Propagation of X Rays in a Planar Waveguide with a Tunable Air Gap. Physical Review Letters, 1999, 82, 1696-1699.	8.0	112
21	Photon Correlation Spectroscopy of Colloidal Palladium Using a Coherent X-Ray Beam. Physical Review Letters, 1996, 77, 5437-5440.	8.0	105
22	Small-Angle X-ray Scattering Using Coherent Undulator Radiation at the ESRF. Journal of Synchrotron Radiation, 1998, 5, 37-47.	2.4	102
23	Two-dimensional overdamped fluctuations of the soft perovskite lattice in CsPbBr <sub>3</sub> . Nature Materials, 2021, 20, 977-983.	26.6	100
24	Phonon softening and metallization of a narrow-gap semiconductor by thermal disorder. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4725-4730.	7.6	99
25	Phonon localization drives polar nanoregions in a relaxor ferroelectric. Nature Communications, 2014, 5, 3683.	13.2	99
26	Giant electromechanical coupling of relaxor ferroelectrics controlled by polar nanoregion vibrations. Science Advances, 2016, 2, e1501814.	10.9	98
27	Selective breakdown of phonon quasiparticles across superionic transition in CuCrSe <sub>2</sub> . Nature Physics, 2019, 15, 73-78.	11.8	97
28	Spin Waves in the $\epsilon$ $\rightarrow$ $0$ Limit. Physical Review Letters, 2019, 123, 077201.	8.0	96
29	Phonon density of states and heat capacity of $\text{La}_{1-x}\text{Te}_x$ . Physical Review B, 2009, 80, .	3.3	94
30	The valence-fluctuating ground state of plutonium. Science Advances, 2015, 1, e1500188.	10.9	94
31	Phonon anharmonicity and negative thermal expansion in SnSe. Physical Review B, 2016, 94, .	3.3	94
32	Nanostructured Materials and Architectures for Advanced Infrared Photodetection. Advanced Materials Technologies, 2017, 2, 1700005.	6.2	93
33	Using direct illumination CCDs as high-resolution area detectors for X-ray scattering. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 451, 596-609.	1.6	91
34	Tissue mimicking materials for imaging and therapy phantoms: a review. Physics in Medicine and Biology, 2020, 65, .	3.0	91
35	Separating the configurational and vibrational entropy contributions in metallic glasses. Nature Physics, 2017, 13, 900-905.	11.8	88
36	Spin waves and magnetic exchange interactions in insulating $\text{Rb}_{0.89}\text{Fe}_{1.58}\text{Se}_2$ . Nature Communications, 2011, 2, 580.	13.2	85

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37	Magnetic structure and crystal-field states of the pyrochlore antiferromagnet $\text{Nd}_2\text{O}_7$ . Physical Review B, 2015, 92, .	3.3	85
38	Anharmonic lattice dynamics and superionic transition in $\text{AgCrSe}_2$ . Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3930-3937.	7.6	82
39	Twisting phonons in complex crystals with quasi-one-dimensional substructures. Nature Communications, 2015, 6, 6723.	13.2	79
40	Orientational epitaxy and lateral structure of the hexagonally reconstructed Pt(001) and Au(001) surfaces. Physical Review B, 1992, 45, 9272-9291.	3.3	78
41	Neutron Scattering Studies of spin excitations in hole-doped $\text{Ba}_{0.67}\text{K}_{0.33}\text{Fe}_2\text{As}_2$ superconductor. Scientific Reports, 2011, 1, 115.	3.4	74
42	High- $T_c$ Layered Ferrielectric Crystals by Coherent Spinodal Decomposition. ACS Nano, 2015, 9, 12365-12373.	15.3	72
43	Nuclear quantum effect with pure anharmonicity and the anomalous thermal expansion of silicon. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1992-1997.	7.6	72
44	Anharmonicity and atomic distribution of SnTe and PbTe thermoelectrics. Physical Review B, 2014, 90, .	3.3	68
45	Phonon Density of States of $\text{LaFeAsO}_F$ . Physical Review Letters, 2008, 101, 157004.	8.0	66
46	Discovery of coexisting Dirac and triply degenerate magnons in a three-dimensional antiferromagnet. Nature Communications, 2018, 9, 2591.	13.2	65
47	Molecular Quantum Magnetism in $\text{LiZn}_2\text{O}_8$ . Physical Review Letters, 2014, 112, 027202.	8.0	63
48	BRCA1/2 testing in newly diagnosed breast and ovarian cancer patients without prior genetic counselling: the DNA-BONus study. European Journal of Human Genetics, 2016, 24, 881-888.	2.9	60
49	Soft anharmonic phonons and ultralow thermal conductivity in $\text{Mg}_3(\text{Sb, Bi})_2$ thermoelectrics. Science Advances, 2021, 7, .	10.9	59
50	Commensurate antiferromagnetic excitations as a signature of the pseudogap in the tetragonal high- $T_c$ cuprate $\text{HgBa}_2\text{CuO}_4$ . Nature Communications, 2016, 7, 10819.	13.2	56
51	Anisotropic and quasipropagating spin excitations in superconducting $\text{Ba}(\text{Fe, As})_2$ . Physical Review B, 2010, 82, .	3.3	55
52	Effect of Pnictogen Height on Spin Waves in Iron Pnictides. Physical Review Letters, 2014, 112, .	8.0	55
53	Phonon anharmonicity in silicon from 100 to 1500 K. Physical Review B, 2015, 91, .	3.3	52
54	Structural phase transition and phonon instability in $\text{Cu}_{12}\text{S}_{13}$ . Physical Review B, 2016, 93, .	3.3	52

#	ARTICLE	IF	CITATIONS
55	MCVINE " An object oriented Monte Carlo neutron ray tracing simulation package. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 810, 86-99.	1.6	52
56	Dynamics and correlations in magnetic colloidal systems studied by X-ray photon correlation spectroscopy. European Physical Journal E, 2001, 4, 263-271.	1.7	50
57	Coherent x-ray diffraction imaging of silicon oxide growth. Physical Review B, 1999, 60, 9965-9972.	3.3	49
58	Fast Na diffusion and anharmonic phonon dynamics in superionic Na <sub>3</sub> PS <sub>4</sub> . Energy and Environmental Science, 2021, 14, 6554-6563.	32.2	49
59	Stripe Antiferromagnetic Spin Fluctuations in $\text{SrCo}_2\text{As}_2$ . Physical Review Letters, 2013, 111, 157001.	8.0	48
60	Magnetic Field Effect on Topological Spin Excitations in $\text{CrI}_3$ . Physical Review X, 2021, 11, .	9.1	48
61	Phonon density of states and anharmonicity of $\text{UO}_2$ . Physical Review B, 2014, 89, .	3.3	46
62	Stabilization of Polar Nanoregions in Pb-free Ferroelectrics. Physical Review Letters, 2018, 120, 207603.	8.0	46
63	Uncovering design principles for amorphous-like heat conduction using two-channel lattice dynamics. Materials Today Physics, 2021, 18, 100344.	6.3	46
64	Orientational epitaxy of the hexagonally reconstructed Pt(001) surface. Physical Review Letters, 1991, 67, 3117-3120.	8.0	45
65	Inelastic Neutron Scattering Study of a Nonmagnetic Collapsed Tetragonal Phase in Nonsuperconducting $\text{CaFe}_2\text{As}_2$ . Evidence of the Impact of Spin Fluctuations on Superconductivity in the Iron-Arsenide Compounds. Physical Review Letters, 2013, 111, 227002.	8.0	44
66	Symmetry-breaking dynamical pattern and localization observed in the equilibrium vibrational spectrum of NaI. Scientific Reports, 2011, 1, 4.	3.4	43
67	Direct observation of dynamic charge stripes in $\text{La}_{1-x}\text{Sr}_x\text{NiO}_4$ . Nature Communications, 2014, 5, 3467.	13.2	42
68	Reconstruction of the (111) and (001) surfaces of Au and Pt: thermal behavior. Surface Science, 1993, 283, 260-276.	2.0	40
69	Dynamics of dense, charge-stabilized suspensions of colloidal silica studied by correlation spectroscopy with coherent X-rays. Journal of Applied Crystallography, 2000, 33, 424-427.	4.9	39
70	Examining the Planarity of Poly(3,4-ethylenedioxythiophene): Consideration of Self-Rigidification, Electronic, and Geometric Effects. Journal of Physical Chemistry A, 2010, 114, 1023-1028.	2.6	39
71	qDependence of the Growth-Oscillation Period of X-Ray Reflectivity in Heteroepitaxy: Ho/W(110). Physical Review Letters, 1997, 79, 3954-3957.	8.0	38
72	Photon correlation spectroscopy: X rays versus visible light. Physical Review E, 2000, 61, 1676-1680.	2.1	38

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73	Magnon spectrum of the helimagnetic insulator Cu <sub>2</sub> OSeO <sub>3</sub> . Nature Communications, 2016, 7, 10725.	13.2	38
74	Positive Vibrational Entropy of Chemical Ordering in FeV. Physical Review Letters, 2011, 107, 115501.	8.0	37
75	Strongly Anharmonic Phonons and Their Role in Superionic Diffusion and Ultralow Thermal Conductivity of Cu <sub>7</sub> PSe <sub>6</sub> . Advanced Energy Materials, 2022, 12, .	22.2	37
76	Observation and explanation of one-dimensional x-ray speckle patterns from synthetic multilayers. Physical Review B, 1995, 52, 9917-9924.	3.3	36
77	Structure and dynamics of surfactant-stabilized aggregates of palladium nanoparticles under dilute and semidilute conditions: Static and dynamic x-ray scattering. Physical Review E, 1999, 59, 642-649.	2.1	36
78	Ant1 mutant mice bridge the mitochondrial and serotonergic dysfunctions in bipolar disorder. Molecular Psychiatry, 2018, 23, 2039-2049.	8.2	34
79	Strain relaxation of boron nitride thin films on silicon. Applied Physics Letters, 1998, 73, 777-779.	3.2	33
80	Study of pharmacogenomic information in FDA-approved drug labeling to facilitate application of precision medicine. Drug Discovery Today, 2020, 25, 813-820.	6.6	33
81	Thermal roughness of a close-packed metal surface: Pt(001). Physical Review Letters, 1992, 69, 941-944.	8.0	32
82	Critical behavior at chiral melting: Disorder of the Si(113)-(3Å <sup>-1</sup> ) reconstruction. Physical Review Letters, 1993, 71, 750-753.	8.0	32
83	Magnetic Splitting of Valence States in Ferromagnetic and Antiferromagnetic Lanthanide Metals. Physical Review Letters, 2000, 84, 5624-5627.	8.0	32
84	Heavy-impurity resonance, hybridization, and phonon spectral functions in $\text{mml:math}$		

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91	Asymmetrically cut crystals as optical elements for highly collimated x-ray beams. Review of Scientific Instruments, 1995, 66, 1506-1509.	1.4	27
92	Effect of Li-deficiency impurities on the electron-overdoped LiFeAs superconductor. Physical Review B, 2012, 86, . Crystallography and physical properties of	3.3	27
93	$\text{BaCo}_2\text{As}_2$ Anharmonic lattice dynamics of	3.3	27
94	$\text{Ag}_2\text{O}$ by inelastic neutron scattering and first-principles molecular dynamics simulations. Physical Review B, 2014, 89, .	3.3	27
95	Hourglass Dispersion and Resonance of Magnetic Excitations in the Superconducting State of the Single-Layer Cuprate $\text{HgBa}_2\text{CuO}_4$ Near O. Physical Review Letters, 2016, 117, 277002.	8.0	27
96	Effective One-Dimensional Coupling in the Highly Frustrated Square-Lattice Itinerant Magnet $\text{CaCo}_2\text{O}_7$ Physical Review Letters, 2017, 119, 147201.	8.0	27
97	Recent developments of MCViNE and its applications at SNS. Journal of Physics Communications, 2019, 3, 085005.	1.2	27
98	Electron-Phonon Coupling in the Conventional Superconductor $\text{YNi}_2\text{B}_2\text{C}$ at High Phonon Energies Studied by Time-of-Flight Neutron Spectroscopy. Physical Review Letters, 2012, 109, 057001.	8.0	26
99	Magnetically driven phonon instability enables the metal-insulator transition in h-FeS. Nature Physics, 2020, 16, 669-675.	11.8	26
100	A new x-ray diffraction method for structural investigations of solid-liquid interfaces. Review of Scientific Instruments, 1997, 68, 4169-4176.	1.4	25
101	Integrable systems with BMS3 Poisson structure and the dynamics of locally flat spacetimes. Journal of High Energy Physics, 2018, 2018, 1.	4.8	25
102	Glassy Phonon Heralds a Strain Glass State in a Shape Memory Alloy. Physical Review Letters, 2018, 120, 245701.	8.0	25
103	Coexistence of Ferromagnetic and Stripe Antiferromagnetic Spin Fluctuations in $\text{SrCo}_2\text{O}_7$ Physical Review Letters, 2019, 122, 117204.	8.0	25
104	The magnetic structure of orthorhombic ErNi <sub>2</sub> B <sub>2</sub> C. Europhysics Letters, 1999, 47, 352-357.	2.0	24
105	Resonant magnetic X-ray scattering from ultrathin Ho metal films down to a few atomic layers. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 953-957.	1.8	24
106	Bose-Einstein condensation in liquid $\text{He}_4$ near the liquid-solid transition line. Physical Review B, 2012, 85, .	3.3	23
107	First experimental demonstration of VMAT combined with MLC tracking for single and multi fraction lung SBRT on an MR-linac. Radiotherapy and Oncology, 2022, 174, 149-157.	0.6	23
108	The Spallation Neutron Source: A Powerful Tool for Materials Research. AIP Conference Proceedings, 2005, , .	1.0	22

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109	Effects of composition, temperature, and magnetism on phonons in bcc Fe-V alloys. Physical Review B, 2010, 82, .	3.3	22
110	Effects of temperature and pressure on phonons in FeSi $\langle \text{math display="inline">\sqrt{1-x} \rangle$ . Physical Review B, 2013, 87, .	3.3	22
111	Lattice dynamics and thermal transport in multiferroic $\langle \text{math display="inline">\text{CuCrO}_2 \rangle$ . Physical Review B, 2017, 95, .	3.3	22
112	Dynamic crystallography reveals spontaneous anisotropy in cubic GeTe. Nature Materials, 2023, 22, 311-315.	26.6	22
113	Lattice vibrations boost demagnetization entropy in a shape-memory alloy. Physical Review B, 2015, 92, .	3.3	21
114	Muon spin relaxation and inelastic neutron scattering investigations of the all-in/all-out antiferromagnet $\langle \text{math display="inline">\text{Nd}_2\text{O}_7 \rangle$ . Physical Review B, 2017, 95, .	3.3	21
115	Observation of High-Frequency Transverse Phonons in Metallic Glasses. Physical Review Letters, 2020, 124, 225902.	8.0	21
116	Spiral Spin Liquid on a Honeycomb Lattice. Physical Review Letters, 2022, 128, .	8.0	21
117	Temperature-dependent phonon lifetimes and thermal conductivity of silicon by inelastic neutron scattering and <i>ab initio</i> calculations. Physical Review B, 2020, 102, .	3.3	20
118	Electron-phonon coupling and thermal transport in the thermoelectric compound $\langle \text{math display="inline">\text{Mo}_3\text{Sb}_7 \rangle$ . Physical Review B, 2015, 92, .	3.3	19
119	Characterization of plastic and boron carbide additive manufactured neutron collimators. Review of Scientific Instruments, 2017, 88, 123102.	1.4	19
120	Role of magnetic exchange energy on charge ordering in $\langle \text{math display="inline">\text{R}_3\text{FeO}_7 \rangle$ . Physical Review B, 2011, 84, .	3.3	18
121	$\langle \text{math display="inline">\text{FeO} \rangle$ $\langle \text{math display="inline">0.82 \rangle$ . Physical Review B, 2011, 84, .	3.3	18
122	Using Monte Carlo ray tracing simulations to model the quantum harmonic oscillator modes observed in uranium nitride. Physical Review B, 2014, 89, .	3.3	18
123	Energy dependence of the spin excitation anisotropy in uniaxial-strained $\text{BaFe}_{1.9}\text{Ni}_{0.1}\text{As}_2$ . Physical Review B, 2015, 92, .	3.3	18
124	Pseudo-Goldstone Magnons in the Frustrated Heisenberg Helimagnet $\langle \text{math display="inline">\text{S}_3 \rangle$ . Physical Review X, 2017, 7, .	9.1	18
125	Nonlinear propagating modes beyond the phonons in fluorite-structured crystals. Communications Physics, 2020, 3, .	5.3	18
126	Charge neutralisation of microparticles by pulsing a low-pressure shielded spatial plasma afterglow. Plasma Sources Science and Technology, 2021, 30, 045016.	3.2	18



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127	Quantum oscillations of nitrogen atoms in uranium nitride. Nature Communications, 2012, 3, 1124.	13.2	17
128	Neutron Scattering Measurements of Spatially Anisotropic Magnetic Exchange Interactions in Semiconducting $K\text{Mn}_2\text{P}_2\text{O}_{11}$ . Physical Review Letters, 2014, 112, 177002.	8.0	17
129	Phonon quaticity induced by changes in phonon-tracked hybridization during lattice expansion and its stabilization of rutile $\text{TiO}_2$ . Physical Review B, 2015, 92, .	3.3	17
130	Experimental determination of the temperature-dependent Van Hove function in a $\text{Zr}_{80}\text{Pt}_{20}$ liquid. Journal of Chemical Physics, 2020, 152, 074506.	3.1	17
131	Role of the third dimension in searching for Majorana fermions in $\text{Bi}_2\text{Te}_3$ via phonons. Physical Review Research, 2022, 4, .	1.7	17
132	Electronic structure and vibrational entropies of fcc Au-Fe alloys. Physical Review B, 2013, 87, .	3.3	16
133	Electron doping evolution of the magnetic excitations in $\text{NaFe}_3\text{S}_2$ . Weak coupling of pseudoacoustic phonons and magnon dynamics in the incommensurate spin-ladder compound $\text{Sr}_2\text{RuO}_4$ .	3.3	16
134	Low-Temperature Competing Magnetic Energy Scales in the Topological Ferrimagnet $\text{TbMn}_6\text{Si}_6$ .	9.1	16
135	Physical Review X, 2022, 12, .		
136	<title>Diffraction and correlation spectroscopy with coherent x rays</title>. , 1997, , .		15
137	Evidence for a Common Physical Origin of the Landau and BEC Theories of Superfluidity. Physical Review Letters, 2014, 113, 215302.	8.0	15
138	Design and operating characteristic of a vacuum furnace for time-of-flight inelastic neutron scattering measurements. Review of Scientific Instruments, 2017, 88, 105116.	1.4	15
139	Supersonic propagation of lattice energy by phasons in fersnoite. Nature Communications, 2018, 9, 1823.	13.2	15
140	Anharmonic Origin of the Giant Thermal Expansion of NaBr. Physical Review Letters, 2020, 125, 085504.	8.0	15
141	Impact of anharmonicity on the vibrational entropy and specific heat of $\text{UO}_2$ . Physical Review Materials, 2019, 3, .	1.5	15
142	Competing magnetic phases and itinerant magnetic frustration in $\text{SrCo}_2\text{As}_2$ . Physical Review B, 2019, 100, .	1.4	15
143	Faceting of stepped silicon (113) surfaces: Self assembly of nanoscale gratings. Physica B: Condensed Matter, 1996, 221, 105-125.	2.8	13
144	Spin excitations in $\text{BaFe}_2\text{As}_2$ observed by inelastic neutron scattering. Physical Review B, 2009, 80, .	3.3	13

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145	Effects of chemical composition and B2 order on phonons in bcc Fe-Co alloys. Journal of Applied Physics, 2010, 108, .	2.3	13

146 Phonon scattering rates and atomic ordering in  $\text{Ag}_x\text{Fe}_{1-x}$

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163	Robust antiferromagnetic spin waves across the metal-insulator transition in hole-doped $\text{BaMnO}_2$ . Physical Review B, 2017, 95, .	3.3	9
164	Super-resolution energy spectra from neutron direct-geometry spectrometers. Review of Scientific Instruments, 2019, 90, 105109.	1.4	9
165	Lattice dynamics of the hybrid improper ferroelectrics $\text{CaO}$ . Physical Review B, 2019, 100, .	3.3	9
166	Phonon spectrum of underdoped $\text{HgBa}_2\text{O}_7$ investigated by neutron scattering. Physical Review B, 2020, 101, .	3.3	9
167	Quasiparticle twist dynamics in non-symmorphic materials. Materials Today Physics, 2021, 21, 100548.	6.3	9
168	Temperature dependence of phonons in $\text{FeGe}$ . Physical Review Materials, 2018, 2, .	2.5	8
169	Controlling phonon lifetimes via sublattice disordering in $\text{AgBi}_2\text{S}_6$ . Physical Review Materials, 2020, 4, .	2.5	8
170	Validating first-principles phonon lifetimes via inelastic neutron scattering. Physical Review B, 2022, 106, .	3.3	9
171	High-Q-resolution X-ray diffraction of ordered $\text{FeAl}$ single crystals. Acta Crystallographica Section A: Foundations and Advances, 1995, 51, 746-753.	0.5	8
172	Speckle Structure in Small-Angle Coherent X-ray Scattering. Journal of Applied Crystallography, 1997, 30, 828-832.	4.9	8
173	Extracting source parameters from beam monitors on a chopper spectrometer. EPJ Web of Conferences, 2015, 83, 03001.	0.3	8
174	Neutron scattering studies of spin-phonon hybridization and superconducting spin gaps in the high-temperature superconductor $\text{LaFeAsO}$ . Physical Review B, 2016, 93, .	3.3	8
175	The Barnacle & Balanus improvisus as a Marine Model - Culturing and Gene Expression. Journal of Visualized Experiments, 2018, .	0.3	8
176	Frustrated magnetic interactions in an $\text{S}_{\text{Bi}_3\text{Mn}_3\text{O}_{12}}$ bilayer honeycomb lattice compound. Physical Review B, 2019, 100, .	3.3	8
177	Real-Time Prediction Model of Coal and Gas Outburst. Mathematical Problems in Engineering, 2020, 2020, 1-5.	1.2	8
178	Temporally decoherent and spatially coherent vibrations in metal halide perovskites. Physical Review B, 2020, 102, .	3.3	8
179	Temperature-dependent lattice dynamics in iridium. Physical Review Materials, 2020, 4, .	2.5	8
180	Real-Space Local Dynamics of Molten Inorganic Salts Using Van Hove Correlation Function. Journal of Physical Chemistry Letters, 2022, 13, 5956-5962.	4.9	8

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181	One-step fabrication of 3D hierarchical Ni-incorporated $\text{I}^2\text{-Co(OH)}_2$ assembled by 2D center disk and 1D length-tunable brush. RSC Advances, 2013, 3, 2604.	3.7	7
182	The ARCS radial collimator. EPJ Web of Conferences, 2015, 83, 03014.	0.3	7
183	Spin excitations used to probe the nature of exchange coupling in the magnetically ordered ground state of $\text{Pr}_2\text{Mn}_2\text{O}_7$ . Physical Review B, 2016, 94, .	3.3	7
184	Plaquette instability competing with bicollinear ground state in detwinned FeTe. Physical Review B, 2019, 100, .	3.3	7
185	Spin dynamics in antiferromagnetic oxypnictides and fluoropnictides: $\text{LaMnAsO}$ , $\text{LaMnSbO}$ , and $\text{BaMnAsF}$ . Physical Review B, 2020, 101, .	3.3	7
186	The first pectoral and forelimb material assigned to the lagerpetid Lagerpeton chanarensis (Archosauria: Dinosauriformes) from the upper portion of the Chañares Formation, Late Triassic. Palaeodiversity, 2021, 14, .	1.1	7
187	Thermal neutron scattering measurements and modeling of yttrium-hydrides for high temperature moderator applications. Annals of Nuclear Energy, 2021, 157, 108224.	1.8	7
188	Magnetic molecular orbitals in MnSi. Science Advances, 2023, 9, .	10.9	7
189	Remanence on microscopic and macroscopic scales in the reentrant spin glass $\text{EuSr}_{1-x}\text{S}$ . Physical Review B, 1987, 36, 3956-3959.	3.3	6
190	Small angle X-ray scattering from dynamic processes. Current Opinion in Colloid and Interface Science, 1998, 3, 305-311.	8.0	6
191	Agents assisted software project management. , 2008, , .		6
192	Inelastic neutron scattering study of phonon density of states in nanostructured $\text{Si}_x\text{Ge}_{1-x}$ . Physical Review B, 2012, 86, .	3.3	6
193	Taxonomy versus phylogeny: evolutionary history of marsh rabbits without hopping to conclusions. Diversity and Distributions, 2013, 19, 120-133.	4.1	6
194	Modified magnetism within the coherence volume of superconducting $\text{FeSeTe}$ . Physical Review B, 2014, 89, .	3.3	6
195	Momentum and energy dependent resolution function of the ARCS neutron chopper spectrometer at high momentum transfer: Comparing simulation and experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 835, 34-41.	1.6	6
196	Predictive value of CHADS2 and CHA2DS2-VASc scores for acute myocardial infarction in patients with atrial fibrillation. Scientific Reports, 2017, 7, 4730.	3.4	6
197	Vibrational properties of uranium fluorides. Physica B: Condensed Matter, 2019, 570, 194-205.	2.8	6
198	Human heart shifts from IGF-1 production to utilization with chronic heart failure. Endocrine, 2019, 65, 714-716.	2.3	6

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