

Alfred Baron

List of Publications by Year in descending order

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247
papers

5,364
citations

76196

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59
g-index

250
all docs

250
docs citations

250
times ranked

3959
citing authors

#	ARTICLE	IF	CITATIONS
1	The origin of antiferroelectricity in PbZrO ₃ . Nature Communications, 2013, 4, 2229.	5.8	251
2	An X-ray scattering beamline for studying dynamics. Journal of Physics and Chemistry of Solids, 2000, 61, 461-465.	1.9	237
3	Displacement-Type Ferroelectricity with Off-Center Magnetic Ions in Perovskites $\text{Sr}_{1-x}\text{Ca}_x\text{TiO}_3$. Physical Review Letters, 2011, 107, 137601.	2.9	142
4	Transverse Acoustic Excitations in Liquid Ga. Physical Review Letters, 2009, 102, 105502.	2.9	131
5	Synchrotron Mössbauer source. Physical Review B, 1997, 55, 5811-5815.	1.1	111
6	Softening of Cu-O Bond Stretching Phonons in Tetragonal HgBa ₂ CuO ₄ + δ . Physical Review Letters, 2004, 92, 197005.	2.9	84
7	Quasielastic Scattering of Synchrotron Radiation by Time Domain Interferometry. Physical Review Letters, 1997, 79, 2823-2826.	2.9	79
8	Kohn Anomaly in MgB ₂ by Inelastic X-Ray Scattering. Physical Review Letters, 2004, 92, 197004.	2.9	77
9	Silicon avalanche photodiodes for direct detection of X-rays. Journal of Synchrotron Radiation, 2006, 13, 131-142.	1.0	75
10	Transverse excitations in liquid Sn. Journal of Physics Condensed Matter, 2013, 25, 112101.	0.7	73
11	Detectors for nuclear resonant scattering experiments. , 2000, 125, 29-42.		72
12	Bond Stretching Phonon Softening and Kinks in the Angle-Resolved Photoemission Spectra of Optimally Doped $\text{Sr}_{1-x}\text{Ca}_x\text{TiO}_3$. Physical Review Letters, 2008, 100, 227002.	2.9	72
13	Sound velocity measurements in dhcp-FeH up to 70 GPa with inelastic X-ray scattering: Implications for the composition of the Earth's core. Earth and Planetary Science Letters, 2012, 313-314, 79-85.	1.8	71
14	Report on the X-ray efficiency and time response of a 1 cm ² reach through avalanche diode. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 352, 665-667.	0.7	65
15	Resonant diffraction of synchrotron radiation by a nuclear multilayer. Physical Review Letters, 1993, 71, 2489-2492.	2.9	64
16	Transverse excitations in liquid Fe, Cu and Zn. Journal of Physics Condensed Matter, 2015, 27, 194104.	0.7	62
17	Doping dependence of softening in the bond-stretching phonon mode of $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ ($0 \leq x \leq 0.29$). Physical Review B, 2005, 71, .	1.1	60
18	Nuclear Resonance Energy Analysis of Inelastic X-Ray Scattering. Physical Review Letters, 1996, 76, 4258-4261.	2.9	59

#	ARTICLE	IF	CITATIONS
19	Temperature dependence of nuclear inelastic absorption of synchrotron radiation in \pm -Fe57. Physical Review B, 1996, 54, R9596-R9599.	1.1	57
20	Time Domain Study of 57Fe Diffusion using Nuclear Forward Scattering of Synchrotron Radiation. Physical Review Letters, 1996, 76, 3220-3223.	2.9	55
21	Carbon-depleted outer core revealed by sound velocity measurements of liquid iron-carbon alloy. Nature Communications, 2015, 6, 8942.	5.8	55
22	Equation of State of Liquid Iron under Extreme Conditions. Physical Review Letters, 2020, 124, 165701.	2.9	55
23	Constraints on Earth's inner core composition inferred from measurements of the sound velocity of hcp-iron in extreme conditions. Science Advances, 2016, 2, e1500802.	4.7	53
24	Seeing real-space dynamics of liquid water through inelastic x-ray scattering. Science Advances, 2017, 3, e1603079.	4.7	53
25	Time resolved detection of X-rays using large area avalanche photodiodes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 343, 517-526.	0.7	52
26	Determination of the phonon spectrum of iron in myoglobin using inelastic X-ray scattering of synchrotron radiation. European Biophysics Journal, 1997, 25, 221-224.	1.2	52
27	Lattice dynamics of the Zn-Mg-Sc icosahedral quasicrystal and its Zn-Sc periodic 1/1 approximant. Nature Materials, 2007, 6, 977-984.	13.3	52
28	High-energy-resolution x-ray optics with refractive collimators. Applied Physics Letters, 2000, 77, 31-33.	1.5	51
29	Lattice Dynamics of LaFeAsO _{1-x} F _x and PrFeAsO _{1-y} via Inelastic X-Ray Scattering and First-Principles Calculation. Journal of the Physical Society of Japan, 2008, 77, 103715.	0.7	51
30	High Frequency Dynamics in a Monatomic Glass. Physical Review Letters, 2004, 92, 025503.	2.9	46
31	Damping of the collective modes in liquid Fe. Physical Review B, 2008, 77, .	1.1	46
32	Nanoscale elastic inhomogeneity of a Pd-based metallic glass: Sound velocity from ultrasonic and inelastic x-ray scattering experiments. Physical Review B, 2007, 76, .	1.1	45
33	Anisotropic inelastic nuclear absorption. Physical Review B, 1997, 56, 10758-10761.	1.1	44
34	A compact optical design for Bragg reflections near backscattering. Journal of Synchrotron Radiation, 2001, 8, 1127-1130.	1.0	44
35	Sound velocity of hexagonal close-packed iron up to core pressures. Geophysical Research Letters, 2013, 40, 5089-5094.	1.5	44
36	Nuclear Exciton Echo Produced by Ultrasound in Forward Scattering of Synchrotron Radiation. Physical Review Letters, 1996, 77, 183-186.	2.9	43

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37	Nuclear resonance scattering of synchrotron radiation at the 21.5 keV resonance of ^{151}Eu . Europhysics Letters, 1996, 35, 671-676.	0.7	43
38	Experimental determination of the elasticity of iron at high pressure. Journal of Geophysical Research, 2008, 113, .	3.3	43
39	Angular dependence of specular resonant nuclear scattering of x rays. Physical Review B, 1994, 50, 10354-10357.	1.1	41
40	Early commissioning of the SPring-8 beamline for high resolution inelastic X-ray scattering. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 627-630.	0.7	41
41	Fast Sound in Expanded Fluid Hg Accompanying the Metal-Nonmetal Transition. Physical Review Letters, 2004, 93, 097801.	2.9	41
42	Soft-phonon-driven superconductivity in CaAlSi as seen by inelastic x-ray scattering. Physical Review B, 2008, 77, .	1.1	41
43	Ferroelectric-like metallic state in electron doped BaTiO_3 . Scientific Reports, 2015, 5, 13207.	1.6	41
44	Incommensurate Phonon Anomaly and the Nature of Charge Density Waves in Cuprates. Physical Review X, 2018, 8, .	2.8	41
45	Magnetic behavior of probe layers of ^{57}Fe in thin Fe films observed by means of nuclear resonant scattering of synchrotron radiation. Physical Review B, 1998, 58, 8590-8595.	1.1	40
46	Phonon softening in superconducting diamond. Physical Review B, 2007, 75, .	1.1	40
47	Dynamical spin-orbital correlation in the frustrated magnet $\text{Ba}_3\text{CuSb}_2\text{O}_9$. Nature Communications, 2013, 4, 2022.	5.8	39
48	Lattice dynamics and antiferroelectricity in PbZrO_3 by x-ray and Brillouin light scattering. Physical Review B, 2014, 90, .	1.1	39
49	Superradiance of an ensemble of nuclei excited by a free electron laser. Nature Physics, 2018, 14, 261-264.	6.5	39
50	Phonon softening and dispersion in EuTiO_3 by x-ray and Brillouin light scattering. Physical Review B, 2012, 86, .	1.1	38
51	Liquid iron-sulfur alloys at outer core conditions by first-principles calculations. Geophysical Research Letters, 2014, 41, 6712-6717.	1.5	38
52	Hard-Sphere-like Dynamics in a Non-Hard-Sphere Liquid. Physical Review Letters, 2005, 94, 155301.	2.9	35
53	Direct Observation of Low-Energy Sm Phonon in $\text{SmRu}_4\text{P}_{12}$. Journal of the Physical Society of Japan, 2008, 77, 033601.	0.7	35
54	Soft phonon mode coupled with antiferromagnetic order in incipient-ferroelectric Mott insulators $\text{SrMn}_2\text{Ba}_2\text{Mn}_2\text{O}_{10}$ and MnO . Physical Review B, 2008, 77, 033601.	1.1	35

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55	Transverse X-Ray Coherence in Nuclear Scattering of Synchrotron Radiation. Physical Review Letters, 1996, 77, 4808-4811.	2.9	33
56	An X-ray monochromator with 1.65 meV energy resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 383, 642-644.	0.7	32
57	Single-nucleus quantum beats excited by synchrotron radiation. Europhysics Letters, 1996, 34, 331-336.	0.7	32
58	Stable top-up operation at SPring-8. Journal of Synchrotron Radiation, 2006, 13, 378-391.	1.0	32
59	Sound velocity of liquid Fe at high pressure. Journal of Geophysical Research: Solid Earth, 2017, 122, 3624-3634.	1.4	32
60	A fast, convenient, X-ray detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1997, 400, 124-132.	0.7	31
61	Phonon spectra in pure and carbon doped MgB ₂ by inelastic X-ray scattering. Physica C: Superconductivity and Its Applications, 2007, 456, 83-91.	0.6	31
62	Low-energy optical phonon modes in the caged compound LaRu_2Mn_2 . Physical Review B, 2016, 93, .	1.1	31
63	Nuclear Scattering of Synchrotron Radiation by ¹⁸¹ Ta. Physical Review Letters, 1995, 75, 549-552.	2.9	30
64	Sub-picosecond dynamics in liquid Si. Journal of Physics Condensed Matter, 2003, 15, L623-L629.	0.7	29
65	Precise determination of elastic constants by high-resolution inelastic X-ray scattering. Journal of Synchrotron Radiation, 2008, 15, 618-623.	1.0	28
66	Motion of the guest ion as precursor to the first-order phase transition in the cage system GdB ₆ . Physical Review B, 2011, 84, .	1.1	28
67	Collective dynamics of supercritical water. Journal of Physics and Chemistry of Solids, 2005, 66, 2246-2249.	1.9	27
68	Two-phonon contributions to the inelastic x-ray scattering spectra of MgB ₂ . Physical Review B, 2007, 75, .	1.1	26
69	First study of the B _{1g} buckling phonon mode in optimally doped, de-twinned, YBa ₂ Cu ₃ O _{7-δ} by inelastic X-ray scattering. Journal of Physics and Chemistry of Solids, 2008, 69, 3100-3102.	1.9	26
70	Atomic dynamics of low-lying rare-earth guest modes in heavy fermion filled skutterudites $\text{Os}_4\text{Sb}_3\text{Ru}_4\text{S}_{13}$. Physical Review B, 2011, 84, .	1.1	26
71	Coherent Dynamic Scattering Law of Divalent Liquid Mg. Journal of the Physical Society of Japan, 2003, 72, 1603-1606.	0.7	25
72	Lattice dynamics calculations for ferropericlasite with internally consistent LDA+U method. Journal of Geophysical Research, 2012, 117, .	3.3	25

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73	Viscosity and real-space molecular motion of water: Observation with inelastic x-ray scattering. <i>Physical Review E</i> , 2018, 98, 022604.	0.8	25
74	Examination of Bragg backscattering from crystalline quartz. <i>Journal of Physics and Chemistry of Solids</i> , 2005, 66, 2306-2309.	1.9	24
75	Nearly perfect large-area quartz: 4â€...meV resolution for 10â€...keV photons over 10â€...cm ² . <i>Journal of Synchrotron Radiation</i> , 2006, 13, 278-280.	1.0	24
76	A refractive collimator for synchrotron radiation. <i>Applied Physics Letters</i> , 1999, 74, 1492-1494.	1.5	23
77	High-Resolution Inelastic X-Ray Scattering I: Context, Spectrometers, Samples, and Superconductors. , 2016, , 1643-1719.		23
78	Nuclear resonant scattering of synchrotron radiation by gaseous krypton. <i>Physical Review B</i> , 1995, 51, 16384-16387.	1.1	22
79	Collective dynamics of sub- and supercritical methanol by inelastic X-ray scattering. <i>Chemical Physics Letters</i> , 2007, 440, 210-214.	1.2	22
80	Intrinsic ferroelectric instability in PbTiO_3 . <i>Physical Review Letters</i> , 2010, 105, 177701.	1.1	22
81	Multi-spin state dynamics during insulator-metal crossover in LaCoO_3 . <i>Physical Review B</i> , 2014, 90, 114407.	1.1	22
82	Temperature dependent inelastic X-ray scattering of synchrotron radiation on myoglobin analyzed by the Mössbauer effect. <i>European Biophysics Journal</i> , 1996, 25, 43-46.	1.2	21
83	Radiation trapping in nuclear resonant scattering of x rays. <i>Physical Review B</i> , 1997, 56, R8455-R8458.	1.1	21
84	The sound velocity measurements of Fe ₃ S. <i>American Mineralogist</i> , 2014, 99, 98-101.	0.9	21
85	X-ray study of the structural distortion in EuTiO ₃ . <i>Physica B: Condensed Matter</i> , 2014, 442, 34-38.	1.3	21
86	Inelastic X-ray scattering with 0.75â€...meV resolution at 25.7â€...keV using a temperature-gradient analyzer. <i>Journal of Synchrotron Radiation</i> , 2015, 22, 3-9.	1.0	20
87	Chemical and orbital fluctuations in Ba_3O_9 . <i>Physical Review B</i> , 2016, 93, 114407.	1.1	20
88	Nuclear resonance small-angle scattering of x rays. <i>Physical Review B</i> , 1996, 54, 14942-14945.	1.1	19
89	Investigation of the Anharmonic Guest Modes in Filled Skutterudites Using Inelastic X-ray Scattering Techniques. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 257-259.	0.7	19
90	Static heterogeneity in metallic glasses and its correlation to physical properties. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 494-500.	1.5	19

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91	Transverse excitations in liquid Ga. European Physical Journal: Special Topics, 2011, 196, 85-93.	1.2	19
92	Soft and isotropic phonons in PrFeAsO $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \text{ /} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle \hat{\sim} \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle y \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. Physical Review B, 2011, 84, .	1.1	19
93	Currents and fields reveal the propagation of nuclear polaritons through a resonant target. Physical Review A, 2007, 76, .	1.0	18
94	Relaxation in the spin ice Dy ₂ Ti ₂ O ₇ studied using nuclear forward scattering. Physical Review B, 2007, 75, .	1.1	18
95	Effects of anisotropic charge on transverse optical phonons in NiO: Inelastic x-ray scattering spectroscopy study. Physical Review B, 2010, 81, .	1.1	18
96	Compact hard x-ray split-delay system based on variable-gap channel-cut crystals. Optics Letters, 2019, 44, 2582.	1.7	18
97	Dynamical inhomogeneity of liquid Te near the melting temperature proved by inelastic x-ray scattering measurements. Journal of Physics Condensed Matter, 2008, 20, 494244.	0.7	17
98	Unconventional Ferroelectric Transition in the Multiferroic Compound TbMnO ₃ Revealed by the Absence of an Anomaly in Polarized Phonon Dispersion. Physical Review Letters, 2009, 102, 247602.	2.9	17
99	Collective dynamics of hydrated β -lactoglobulin by inelastic x-ray scattering. Journal of Chemical Physics, 2010, 133, 134501.	1.2	17
100	Sound velocity measurements of hcp Fe-Si alloy at high pressure and high temperature by inelastic X-ray scattering. American Mineralogist, 2018, 103, 85-90.	0.9	17
101	Refractive X-ray lens for high pressure experiments at SPring-8. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 962-965.	0.7	16
102	Acoustic Phonon Dynamics in Liquid CCl ₄ . Journal of the Physical Society of Japan, 2004, 73, 1615-1618.	0.7	16
103	q-Dependence of the giant bond-stretching phonon anomaly in the stripe compound La _{1.48} Nd _{0.4} Sr _{0.12} CuO ₄ measured by IXS. Journal of Physics and Chemistry of Solids, 2008, 69, 3103-3107.	1.9	16
104	Compound focusing for hard-x-ray inelastic scattering. Proceedings of SPIE, 2013, , .	0.8	16
105	Universality of Anharmonic Motion of Heavy Rare-Earth Atoms in Hexaborides. Journal of the Physical Society of Japan, 2014, 83, 094604.	0.7	16
106	Local correlated motions in aqueous solution of sodium chloride. Physical Review Materials, 2019, 3, .	0.9	16
107	Elastic inhomogeneity and acoustic phonons in Pd-, Pt-, and Zr-based metallic glasses. Physical Review B, 2010, 81, .	1.1	15
108	Renormalized Motion of Dysprosium Atoms Filling Boron Cages of DyB ₆ . Journal of the Physical Society of Japan, 2012, 81, 113601.	0.7	15

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109	Communication: Collective dynamics of room-temperature ionic liquids and their Li ion solutions studied by high-resolution inelastic X-ray scattering. <i>Journal of Chemical Physics</i> , 2013, 138, 151101.	1.2	15
110	Elastic anisotropy of experimental analogues of perovskite and post-perovskite help to interpret D^2 diversity. <i>Nature Communications</i> , 2014, 5, 3453.	5.8	15
111	Effect of cation substitution on bridgmanite elasticity: A key to interpret seismic anomalies in the lower mantle. <i>Scientific Reports</i> , 2016, 6, 33337.	1.6	15
112	A compact system for generating extreme pressures and temperatures: An application of laser-heated diamond anvil cell to inelastic X-ray scattering. <i>Review of Scientific Instruments</i> , 2013, 84, 113902.	0.6	14
113	Inelastic X-ray scattering on liquid benzene analyzed using a generalized Langevin equation. <i>Chemical Physics Letters</i> , 2017, 680, 1-5.	1.2	14
114	New materials for high-energy-resolution x-ray optics. <i>MRS Bulletin</i> , 2017, 42, 424-429.	1.7	14
115	Single crystal elasticity of gold up to ~ 1420 GPa: Bulk modulus anomaly and implication for a primary pressure scale. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 095801.	0.8	14
116	Effect of K Doping on Phonons in $Ba_{1-x}K_xFe_2As_2$. <i>Journal of the Physical Society of Japan</i> , 2010, 79, 014714.	0.7	13
117	Anomalous dispersion of the acoustic mode in liquid Bi. <i>Physical Review B</i> , 2015, 92, .	1.1	13
118	Identifying Water's Anion Correlated Motion in Aqueous Solutions through Van Hove Functions. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7119-7125.	2.1	13
119	Beryllium and aluminium refractive collimators for synchrotron radiation. <i>Journal of Synchrotron Radiation</i> , 1999, 6, 953-956.	1.0	12
120	Search for orbitons in $LaMnO_3$, $YTiO_3$ and $KCuF_3$ using high-resolution inelastic x-ray scattering. <i>New Journal of Physics</i> , 2004, 6, 161-161.	1.2	12
121	Viscoelastic narrowing of a collective mode in molten CsCl observed by inelastic x-ray scattering. <i>Journal of Physics Condensed Matter</i> , 2007, 19, 466110.	0.7	12
122	Softening of bond-stretching phonon mode in $Ba_{1-x}K_xBiO_3$ at the metal-insulator transition. <i>Physical Review B</i> , 2011, 83, .	1.1	12
123	Effect of magnetism on lattice dynamics in $SrFe_2As_2$ using high-resolution inelastic x-ray scattering. <i>Physical Review B</i> , 2016, 93, .	1.1	12
124	Growth, Characterization and Application of Single-Crystal $La_{2-x}Sr_xCuO_4$ Having a Gradient in Sr Concentration. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 1594-1601.	0.8	11
125	Local self-motion of water through the Van Hove function. <i>Physical Review E</i> , 2020, 102, 032604.	0.8	11
126	Nematic Correlation Length in Iron-Based Superconductors Probed by Inelastic X-Ray Scattering. <i>Physical Review Letters</i> , 2020, 124, 157001.	2.9	11

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127	Standing waves and Kossel line patterns in structure determination. Solid State Communications, 1998, 105, 685-687.	0.9	10
128	Observation of fast sound in metal–nonmetal transition in liquid Hg. Journal of Physics and Chemistry of Solids, 2005, 66, 2223-2229.	1.9	10
129	Collective dynamics of supercritical water probed by inelastic X-ray scattering. Nuclear Instruments & Methods in Physics Research B, 2005, 238, 146-149.	0.6	10
130	Temperature gradient analyzers for compact high-resolution X-ray spectrometers. Journal of Synchrotron Radiation, 2010, 17, 12-24.	1.0	10
131	Interplay between low-energy optical phonon modes and structural transition in Pr ₂ Zn ₂₀ (T = Ru and Ir). Journal of Physics: Conference Series, 2015, 592, 012024.	0.3	10
132	Elastic constants of single-crystal Pt measured up to 20 GPa based on inelastic X-ray scattering: Implication for the establishment of an equation of state. Comptes Rendus - Geoscience, 2019, 351, 236-242.	0.4	10
133	Silicon-Depleted Present-Day Earth's Outer Core Revealed by Sound Velocity Measurements of Liquid Fe-Si Alloy. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019399.	1.4	10
134	Electric field control of antiferroelectric domain pattern. Physical Review B, 2021, 103, .	1.1	10
135	Transverse excitations in liquid metals. AIP Conference Proceedings, 2013, , .	0.3	10
136	Collective dynamics in dense Hg vapour. Journal of Physics Condensed Matter, 2004, 16, L45-L50.	0.7	9
137	Acoustic Phonons in Molten NaI. Electrochemistry, 2009, 77, 608-610.	0.6	9
138	Peculiar atomic dynamics in liquid GeTe with asymmetrical bonding: Observation by inelastic x-ray scattering. Physical Review B, 2018, 97, .	1.1	9
139	Auxiliary optics for meV-resolved inelastic x-ray scattering at SPring-8: Microfocus, analyzer masks, Soller slit, soller screen, and beam position monitor. AIP Conference Proceedings, 2019, , .	0.3	9
140	Sound velocity of Fe ₃ C at high pressure and high temperature determined by inelastic X-ray scattering. Comptes Rendus - Geoscience, 2019, 351, 190-196.	0.4	9
141	Interaction of Acoustic and Quasi-Elastic Modes in Liquid Water on Nanometer Length Scales. Journal of the Physical Society of Japan, 2021, 90, 083602.	0.7	9
142	Low energy excitation in liquid Sb and liquid Bi observed in inelastic x-ray scattering spectra. Journal of Physics Condensed Matter, 2021, 33, 475101.	0.7	9
143	Two-Component Dynamics and the Liquidlike to Gaslike Crossover in Supercritical Water. Physical Review Letters, 2020, 125, 256001.	2.9	9
144	Phase shift of a rotated quantum state observed in an x-ray scattering experiment. Physical Review Letters, 1992, 69, 699-702.	2.9	8

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145	Phonon dispersion of metallic glass CuZr ₂ . Journal of Physics: Conference Series, 2007, 92, 012136.	0.3	8
146	Atomic dynamics of i-ScZnMg and its 1/1 approximant phase: Experiment and simulation. Philosophical Magazine, 2008, 88, 2311-2318.	0.7	8
147	Collective dynamics and de Gennes narrowing in polymeric liquid Se: High-resolution inelastic x-ray scattering. Physical Review B, 2008, 77, .	1.1	8
148	Spin-orbit coupling effects on spin-phonon coupling in Cd ₂ Os ₂ O ₇ . Physical Review B, 2020, 102, .	1.1	8
149	High-Resolution Inelastic X-Ray Scattering I: Context, Spectrometers, Samples, and Superconductors. , 2015, , 1-68.		8
150	Nuclear resonant scattering from the subnanosecond lifetime excited state of Hg ₂₀₁ . Physical Review B, 2005, 72, .	1.1	7
151	Heavy Particle Dynamics in Liquid Se: Inelastic X-ray Scattering. Journal of the Physical Society of Japan, 2007, 76, 053601.	0.7	7
152	Compressional behavior of solid NeHe ₂ up to 90 GPa. Journal of Physics Condensed Matter, 2010, 22, 095401.	0.7	7
153	Inelastic X-ray Scattering of a Transition-Metal Complex (FeCl ₄ ^{â€“}): Vibrational Spectroscopy for All Normal Modes. Inorganic Chemistry, 2013, 52, 6767-6769.	1.9	7
154	Sound velocity measurement by inelastic X-ray scattering at high pressure and temperature by resistive heating diamond anvil cell. Russian Geology and Geophysics, 2015, 56, 190-195.	0.3	7
155	Temperature dependence of the velocity-density relation for liquid metals under high pressure: Implications for the Earth's outer core. American Mineralogist, 2015, 100, 2602-2609.	0.9	7
156	Impurity effects in the microscopic elastic properties of polycrystalline Mg-Zn-Y alloys with a synchronized long-period stacking ordered phase. Journal of Alloys and Compounds, 2017, 695, 426-432.	2.8	7
157	Investigation of collective dynamics of solvent molecules in nanofluids by inelastic x-ray scattering. Journal of Molecular Liquids, 2017, 248, 468-472.	2.3	7
158	Momentum-resolved lattice dynamics of parent and electron-doped $\text{Sr}_{2-x}\text{K}_x\text{BiO}_3$. Physical Review B, 2019, 100, .		
159	Lattice dynamics in FeSe via inelastic x-ray scattering and first-principles calculations. Physical Review B, 2020, 101, .	1.1	7
160	Dynamics in the melt of an icosahedral Al ₇₂ Pd ₂₀ Mn ₈ quasicrystal. Journal of Physics Condensed Matter, 2006, 18, L613-L618.	0.7	6
161	Observation of phonon softening in a Ti-Fe alloy by inelastic X-ray scattering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 481-482, 254-257.	2.6	6
162	Softening of Bond Stretching Phonon Mode in Ba _{1-x} K _x BiO ₃ Superconductor. Journal of Superconductivity and Novel Magnetism, 2010, 23, 1385-1389.	0.8	6

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163	Pixel readout ASIC for an APD based 2D X-ray hybrid pixel detector with sub-nanosecond resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 628, 461-464.	0.7	6
164	Signature of a polyamorphic transition in the THz spectrum of vitreous GeO ₂ . Scientific Reports, 2015, 5, 14996.	1.6	6
165	Pressure dependence of transverse acoustic phonon energy in ferropericlae across the spin transition. Journal of Physics Condensed Matter, 2017, 29, 245401.	0.7	6
166	Pressure-mediated structural transitions in bulk EuTiO_3 . Physical Review B, 2018, 98, .	0.3	6
167	Collective dynamics of liquid acetone investigated by inelastic X-ray scattering. Journal of Molecular Liquids, 2021, 332, 115825.	2.3	6
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