

Alfred Baron

List of Publications by Year in descending order

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247
papers

5,364
citations

76196

40
h-index

133063

59
g-index

250
all docs

250
docs citations

250
times ranked

3959
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Do electron distributions with orbital degree of freedom exhibit anisotropy?. <i>Materials Advances</i> , 2022, 3, 3192-3198. | 2.6 | 3 |
| 2 | ¹⁶¹ Dy synchrotron-radiation-based Mössbauer absorption spectroscopy. <i>Hyperfine Interactions</i> , 2022, 243, 1. | 0.2 | 2 |
| 3 | Sound Velocity Measurements of B ₂ FeNiSi Alloy Under High Pressure by Inelastic X-Ray Scattering: Implications for the Composition of Earth's Core. <i>Geophysical Research Letters</i> , 2022, 49, . | 1.5 | 2 |
| 4 | Temperature-gradient analyzers for non-resonant inelastic X-ray scattering. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 756-768. | 1.0 | 0 |
| 5 | Practical measurement of the energy resolution for meV-resolved inelastic X-ray scattering. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 804-811. | 1.0 | 3 |
| 6 | Electric field control of antiferroelectric domain pattern. <i>Physical Review B</i> , 2021, 103, . | 1.1 | 10 |
| 7 | Collective dynamics of liquid acetone investigated by inelastic X-ray scattering. <i>Journal of Molecular Liquids</i> , 2021, 332, 115825. | 2.3 | 6 |
| 8 | Physical properties of YB66 and consideration of possible use for high-resolution X-ray optics. <i>Journal of Applied Physics</i> , 2021, 130, . | 1.1 | 1 |
| 9 | Longitudinal acoustic and higher-energy excitations in the liquid phase-change material Ge ₂ Sb ₂ Te ₅ . <i>Physical Review B</i> , 2021, 104, . | 1.1 | 3 |
| 10 | Interaction of Acoustic and Quasi-Elastic Modes in Liquid Water on Nanometer Length Scales. <i>Journal of the Physical Society of Japan</i> , 2021, 90, 083602. | 0.7 | 9 |
| 11 | Low energy excitation in liquid Sb and liquid Bi observed in inelastic x-ray scattering spectra. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 475101. | 0.7 | 9 |
| 12 | Universal Two-Component Dynamics in Supercritical Fluids. <i>Journal of Physical Chemistry B</i> , 2021, , . | 1.2 | 0 |
| 13 | Elasticity of single-crystal NaCl under high-pressure: simultaneous measurement of x-ray inelastic scattering and diffraction. <i>High Pressure Research</i> , 2020, 40, 465-477. | 0.4 | 4 |
| 14 | Sound Velocity of Liquid Fe ²⁺ P at High Pressure. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2000171. | 0.7 | 5 |
| 15 | Magnetoelastic excitations in multiferroic hexagonal YMnO_3 studied by inelastic x-ray scattering. <i>Physical Review B</i> , 2020, 102, . | 1.1 | 4 |
| 16 | Sound Speed in Glassy As _x Se _{1-x} ($x = 0.4, 0.5, \text{ and } 0.6$) by Inelastic X-Ray Scattering. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2000134. | 0.7 | 0 |
| 17 | Local self-motion of water through the Van Hove function. <i>Physical Review E</i> , 2020, 102, 032604. | 0.8 | 11 |
| 18 | Spin-orbit coupling effects on spin-phonon coupling in Cd ₂ Os ₂ O ₇ . <i>Physical Review B</i> , 2020, 102, . | 1.1 | 8 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | 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 |
| 20 | Lattice dynamics in FeSe via inelastic x-ray scattering and first-principles calculations. Physical Review B, 2020, 101, . | 1.1 | 7 |
| 21 | Nematic Correlation Length in Iron-Based Superconductors Probed by Inelastic X-Ray Scattering. Physical Review Letters, 2020, 124, 157001. | 2.9 | 11 |
| 22 | Furnace for Inelastic X-Ray Scattering from Liquids up to 1600°C. Physica Status Solidi (B): Basic Research, 2020, 257, 2000093. | 0.7 | 0 |
| 23 | Equation of State of Liquid Iron under Extreme Conditions. Physical Review Letters, 2020, 124, 165701. | 2.9 | 55 |
| 24 | Two-Component Dynamics and the Liquidlike to Gaslike Crossover in Supercritical Water. Physical Review Letters, 2020, 125, 256001. | 2.9 | 9 |
| 25 | The sound velocity of wüstite at high pressures: implications for low-velocity anomalies at the base of the lower mantle. Progress in Earth and Planetary Science, 2020, 7, . | 1.1 | 4 |
| 26 | Peculiar temperature dependence of dynamical sound speed in liquid Se ₅₀ Te ₅₀ by inelastic x-ray scattering. Journal of Physics Condensed Matter, 2020, 32, 214003. | 0.7 | 1 |
| 27 | High-Resolution Inelastic X-Ray Scattering I: Context, Spectrometers, Samples, and Superconductors. , 2020, , 2131-2212. | | 0 |
| 28 | High-Resolution Inelastic X-Ray Scattering Part II: Scattering Theory, Harmonic Phonons, and Calculations. , 2020, , 2213-2250. | | 2 |
| 29 | Dynamical sound speed and structural inhomogeneity in liquid Te studied by inelastic x-ray scattering. Journal of Non-Crystalline Solids: X, 2019, 1, 100006. | 0.5 | 1 |
| 30 | Identifying Water Anion Correlated Motion in Aqueous Solutions through Van Hove Functions. Journal of Physical Chemistry Letters, 2019, 10, 7119-7125. | 2.1 | 13 |
| 31 | Momentum-resolved lattice dynamics of parent and electron-doped $\text{Sr}_{2-x}\text{K}_x\text{FeAs}_2$. Physical Review B, 2019, 100, . | | |
| 32 | Structural studies on fluid sulfur at high temperatures and high pressures: I. Atomic dynamics investigated by inelastic x-ray scattering. Journal of Non-Crystalline Solids, 2019, 522, 119571. | 1.5 | 1 |
| 33 | 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 |
| 34 | 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 |
| 35 | 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 |
| 36 | Local correlated motions in aqueous solution of sodium chloride. Physical Review Materials, 2019, 3, . | 0.9 | 16 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Compact hard x-ray split-delay system based on variable-gap channel-cut crystals. Optics Letters, 2019, 44, 2582. | 1.7 | 18 |
| 38 | High-Resolution Inelastic X-Ray Scattering Part II: Scattering Theory, Harmonic Phonons, and Calculations. , 2019, , 1-38. | | 1 |
| 39 | High-Resolution Inelastic X-Ray Scattering I: Context, Spectrometers, Samples, and Superconductors. , 2019, , 1-82. | | 1 |
| 40 | Incommensurate Phonon Anomaly and the Nature of Charge Density Waves in Cuprates. Physical Review X, 2018, 8, . | 2.8 | 41 |
| 41 | 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 |
| 42 | Superradiance of an ensemble of nuclei excited by a free electron laser. Nature Physics, 2018, 14, 261-264. | 6.5 | 39 |
| 43 | Polarization rotation associated with phonon dynamics in monoclinic C phase near morphotropic phase boundary studied by diffuse and inelastic X-ray scattering from a Ti-composition-gradient $\text{Pb}[(\text{Mg}_{1/3}\text{Nb}_{2/3})_{1-x}\text{Ti}_x]_0.3\text{O}_3$ single crystal. Ferroelectrics, 2018, 532, 100-110. | | |
| 44 | Peculiar atomic dynamics in liquid GeTe with asymmetrical bonding: Observation by inelastic x-ray scattering. Physical Review B, 2018, 97, . | 1.1 | 9 |
| 45 | Effect of B^{2-} site randomness on the antiferroelectric/relaxor nature of the ground state: Diffuse and inelastic x-ray scattering study of B^{2-} | | |

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|----|---|-----|-----------|
| 55 | 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 |
| 56 | Single crystal elasticity of gold up to ~ 20 GPa: Bulk modulus anomaly and implication for a primary pressure scale. Japanese Journal of Applied Physics, 2017, 56, 095801. | 0.8 | 14 |
| 57 | Seeing real-space dynamics of liquid water through inelastic x-ray scattering. Science Advances, 2017, 3, e1603079. | 4.7 | 53 |
| 58 | Lattice and Magnetic Effects on a d -Excitation in NiO Using a 25 meV Resolution X-ray Spectrometer. Journal of the Physical Society of Japan, 2017, 86, 093706. | 0.7 | 4 |
| 59 | Dispersion relations of the acoustic modes in divalent liquid metals. EPJ Web of Conferences, 2017, 151, 06002. | 0.1 | 0 |
| 60 | Asymmetrical bonding in liquid Bi disentangled by inelastic X-ray scattering. EPJ Web of Conferences, 2017, 151, 06001. | 0.1 | 1 |
| 61 | Toward operation of series IDs at BL43LXU of SPring-8. AIP Conference Proceedings, 2016, , . | 0.3 | 2 |
| 62 | Effect of cation substitution on bridgmanite elasticity: A key to interpret seismic anomalies in the lower mantle. Scientific Reports, 2016, 6, 33337. | 1.6 | 15 |
| 63 | Structure and collective dynamics of hydrated anti-freeze protein type III from 180 K to 298 K by X-ray diffraction and inelastic X-ray scattering. Journal of Chemical Physics, 2016, 144, 134505. | 1.2 | 4 |
| 64 | 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 |
| 65 | High-Resolution Inelastic X-Ray Scattering II: Scattering Theory, Harmonic Phonons, and Calculations. , 2016, , 1721-1757. | | 2 |
| 66 | High-Resolution Inelastic X-Ray Scattering I: Context, Spectrometers, Samples, and Superconductors. , 2016, , 1643-1719. | | 23 |
| 67 | Effect of magnetism on lattice dynamics in SrFe ₂ As ₂ using high-resolution inelastic x-ray scattering. Physical Review B, 2016, 93, . | 1.1 | 12 |
| 68 | Chemical and orbital fluctuations in $BaMnO_3$. Physical Review B, 2016, 93, . | 1.1 | 20 |
| 69 | Low-energy optical phonon modes in the caged compound $LaRuO_2$. Physical Review B, 2016, 93, . | | |
| 70 | Inelastic X-ray Scattering Investigation of Proper Ferroelastic Transition in $LiNH_4ClH_4O_6 \cdot H_2O$. Journal of the Physical Society of Japan, 2016, 85, 014602. | 0.7 | 1 |
| 71 | Signature of a polymorphic transition in the THz spectrum of vitreous GeO ₂ . Scientific Reports, 2015, 5, 14996. | 1.6 | 6 |
| 72 | Ferroelectric-like metallic state in electron doped BaTiO ₃ . Scientific Reports, 2015, 5, 13207. | 1.6 | 41 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Microscopic Elastic Properties of Polycrystalline Mg ₈₅ Zn ₆ Y ₉ Alloy with Long-Period Stacking Ordered 18R Phase Investigated by Inelastic X-ray Scattering. Materials Transactions, 2015, 56, 914-916. | 0.4 | 4 |
| 74 | Interplay between low-energy optical phonon modes and structural transition in Pr ₂ Zn ₂₀ (Pr= Ru and Ir). Journal of Physics: Conference Series, 2015, 592, 012024. | 0.3 | 10 |
| 75 | Transverse excitations in liquid Fe, Cu and Zn. Journal of Physics Condensed Matter, 2015, 27, 194104. | 0.7 | 62 |
| 76 | Carbon-depleted outer core revealed by sound velocity measurements of liquid iron-carbon alloy. Nature Communications, 2015, 6, 8942. | 5.8 | 55 |
| 77 | Anomalous dispersion of the acoustic mode in liquid Bi. Physical Review B, 2015, 92, . | 1.1 | 13 |
| 78 | Inelastic X-ray scattering with 0.75 meV resolution at 25.7 keV using a temperature-gradient analyzer. Journal of Synchrotron Radiation, 2015, 22, 3-9. | 1.0 | 20 |
| 79 | 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 |
| 80 | 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 |
| 81 | High-Resolution Inelastic X-Ray Scattering I: Context, Spectrometers, Samples, and Superconductors. , 2015, , 1-68. | | 8 |
| 82 | High-Resolution Inelastic X-Ray Scattering II: Scattering Theory, Harmonic Phonons, and Calculations. , 2015, , 1-32. | | 3 |
| 83 | Liquid iron-sulfur alloys at outer core conditions by first-principles calculations. Geophysical Research Letters, 2014, 41, 6712-6717. | 1.5 | 38 |
| 84 | Lattice dynamics and antiferroelectricity in PbZrO_3 by x-ray and Brillouin light scattering. Physical Review B, 2014, 90, . | | 19 |
| 85 | The sound velocity measurements of Fe ₃ S. American Mineralogist, 2014, 99, 98-101. | 0.9 | 21 |
| 86 | Universality of Anharmonic Motion of Heavy Rare-Earth Atoms in Hexaborides. Journal of the Physical Society of Japan, 2014, 83, 094604. | 0.7 | 16 |
| 87 | Multi-spin-state dynamics during insulator-metal crossover in LaCoO_3 . Physical Review B, 2014, 90, . | 1.1 | 22 |
| 88 | Elastic anisotropy of experimental analogues of perovskite and post-perovskite help to interpret D^2 diversity. Nature Communications, 2014, 5, 3453. | 5.8 | 15 |
| 89 | X-ray study of the structural distortion in EuTiO ₃ . Physica B: Condensed Matter, 2014, 442, 34-38. | 1.3 | 21 |
| 90 | Atomic Dynamics and Structural Transitions in Caged Compounds $\text{RRu}_2\text{Zn}_{20}$ (R= La and Pr). , 2014, , . | | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Anharmonic Pr Guest Modes in Pr(Os _{1-x} Ru _x) ₄ Sb ₁₂ Investigated by Inelastic X-ray Scattering. , 2014, , . | | 0 |
| 92 | The origin of antiferroelectricity in PbZrO ₃ . Nature Communications, 2013, 4, 2229. | 5.8 | 251 |
| 93 | Sound velocity of hexagonal close-packed iron up to core pressures. Geophysical Research Letters, 2013, 40, 5089-5094. | 1.5 | 44 |
| 94 | Transverse excitations in liquid Sn. Journal of Physics Condensed Matter, 2013, 25, 112101. | 0.7 | 73 |
| 95 | Dynamical spin-orbital correlation in the frustrated magnet Ba ₃ CuSb ₂ O ₉ . Nature Communications, 2013, 4, 2022. | 5.8 | 39 |
| 96 | Inelastic X-ray Scattering of a Transition-Metal Complex (FeCl ₄ ²⁻): Vibrational Spectroscopy for All Normal Modes. Inorganic Chemistry, 2013, 52, 6767-6769. | 1.9 | 7 |
| 97 | Communication: Collective dynamics of room-temperature ionic liquids and their Li ion solutions studied by high-resolution inelastic X-ray scattering. Journal of Chemical Physics, 2013, 138, 151101. | 1.2 | 15 |
| 98 | Difference in elastic properties of CrB ₂ determined by microscopic and macroscopic measurements. Materials Research Society Symposia Proceedings, 2013, 1528, 1. | 0.1 | 0 |
| 99 | Compound focusing for hard-x-ray inelastic scattering. Proceedings of SPIE, 2013, , . | 0.8 | 16 |
| 100 | Large-aperture refractive lenses for momentum-resolved spectroscopy with hard X-rays. Journal of Synchrotron Radiation, 2013, 20, 591-595. | 1.0 | 4 |
| 101 | A compact system for generating extreme pressures and temperatures: An application of laser-heated diamond anvil cell to inelastic X-ray scattering. Review of Scientific Instruments, 2013, 84, 113902. | 0.6 | 14 |
| 102 | XNAP: a hybrid pixel detector with nanosecond resolution for time resolved synchrotron radiation studies. Journal of Physics: Conference Series, 2013, 425, 062005. | 0.3 | 5 |
| 103 | Toward Sub-meV, Momentum-Resolved, Inelastic X-Ray Scattering Using a Nuclear Analyzer. Journal of the Physical Society of Japan, 2013, 82, SA029. | 0.7 | 4 |
| 104 | Transverse excitations in liquid metals. AIP Conference Proceedings, 2013, , . | 0.3 | 10 |
| 105 | Renormalized Motion of Dysprosium Atoms Filling Boron Cages of DyB ₆ . Journal of the Physical Society of Japan, 2012, 81, 113601. | 0.7 | 15 |
| 106 | Atomic dynamics of low-lying rare-earth guest modes in heavy fermion filled skutterudites $\text{Os}_{1-x}\text{Ru}_x\text{Sb}_{12}$. Inelastic X-ray Scattering of Heavy Fermion Compounds $\text{Os}_{1-x}\text{Ru}_x\text{Sb}_{12}$ (<i>R</i> : Light Rare-Earth). Journal of Physics: Conference Series, 2012, 391, 012074. | 1.1 | 26 |
| 107 | Inelastic X-ray Scattering of Heavy Fermion Compounds $\text{Os}_{1-x}\text{Ru}_x\text{Sb}_{12}$ (<i>R</i> : Light Rare-Earth). Journal of Physics: Conference Series, 2012, 391, 012074. | 0.3 | 4 |
| 108 | Lattice dynamics calculations for ferropericlase with internally consistent LDA+ <i>U</i> method. Journal of Geophysical Research, 2012, 117, . | 3.3 | 25 |

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|-----|---|-----|-----------|
| 109 | Phonon softening and dispersion in EuTiO_3 . Physical Review B, 2012, 86, . | 1.1 | 38 |
| 110 | The APA pixel readout ASIC for an APD based fast 2D X-ray hybrid pixel detector. , 2012, , . | | 0 |
| 111 | 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 |
| 112 | Growth and Characterization of EuTiO_3 Single Crystals. Ferroelectrics, 2012, 441, 42-47. Soft phonon mode coupled with antiferromagnetic order in incipient ferroelectric Mott insulators | 0.3 | 4 |
| 113 | $\text{Sr}_{1-x}\text{Ba}_x\text{MnO}_3$ and MnO | | |
| 114 | Emergent phenomena in perovskite-type manganites. Physica B: Condensed Matter, 2012, 407, 1685-1688. | 1.3 | 5 |
| 115 | Preparing for the Future: Twelfth APS/ESRF/SPring-8 Three-Way Meeting. Synchrotron Radiation News, 2011, 24, 12-15. | 0.2 | 0 |
| 116 | Displacement-Type Ferroelectricity with Off-Center Magnetic Ions in Perovskite $\text{Sr}_{1-x}\text{Ba}_x\text{MnO}_3$. Physical Review Letters, 2011, 107, 137601. | 2.9 | 142 |
| 117 | Static heterogeneity in metallic glasses and its correlation to physical properties. Journal of Non-Crystalline Solids, 2011, 357, 494-500. | 1.5 | 19 |
| 118 | Static and dynamical inhomogeneity at liquid - liquid phase transition of Se-Te mixtures. EPJ Web of Conferences, 2011, 15, 02002. | 0.1 | 1 |
| 119 | Sm Atomic and Charge Dynamics in a Heavy Fermion Compound $\text{SmOs}_4\text{Sb}_{12}$. Journal of the Physical Society of Japan, 2011, 80, SA036. | 0.7 | 1 |
| 120 | Transverse excitations in liquid Ga. European Physical Journal: Special Topics, 2011, 196, 85-93. | 1.2 | 19 |
| 121 | Inelastic x-ray scattering measurements of dynamical cross-over in liquid As_2Se_3 at high temperature and high pressure. European Physical Journal: Special Topics, 2011, 196, 167-174. | 1.2 | 5 |
| 122 | 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 |
| 123 | Synchrotron X-ray Study of Lattice Vibrations in CdCr_2O_4 . Journal of the Physical Society of Japan, 2011, 80, 073603. | 0.7 | 5 |
| 124 | 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 |
| 125 | Soft and isotropic phonons in PrFeAsO . Physical Review B, 2011, 84, . | 1.1 | 19 |
| 126 | Softening of bond-stretching phonon mode in $\text{Ba}_{1-x}\text{K}_x\text{BiO}_3$ at the metal-insulator transition. Physical Review B, 2011, 83, . | 1.1 | 12 |

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|-----|---|-----|-----------|
| 127 | Phonon Spectra of PrFeAsO _{1-y} via Inelastic X-ray Scattering. Journal of the Physical Society of Japan, 2011, 80, SB015. | 0.7 | 1 |
| 128 | Effect of B-site Randomness on the Antiferroelectric/Relaxor Nature of the Ground State: Inelastic X-ray Scattering Study of Pb(In _{1/2} Nb _{1/2})O ₃ . Journal of the Korean Physical Society, 2011, 59, 2509-2514. | 0.3 | 3 |
| 129 | Rare-earth atom motions in R ₄ Sb ₁₂ (R = La, Pr, Nd, Sm). Journal of Physics: Conference Series, 2010, 200, 012213. | 0.3 | 5 |
| 130 | Effect of K Doping on Phonons in Ba _{1-x} K _x Fe ₂ As ₂ . Journal of the Physical Society of Japan, 2010, 79, 014714. | 0.7 | 13 |
| 131 | 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 |
| 132 | Phonon properties in the simplest cuprate compound SrCuO ₂ . Physica C: Superconductivity and Its Applications, 2010, 470, S151-S152. | 0.6 | 0 |
| 133 | Magnetic structure and phonon spectra of iron-based superconductors: A first-principle study. Physica C: Superconductivity and Its Applications, 2010, 470, S430-S432. | 0.6 | 1 |
| 134 | Phonon softening in La _{1.74} Eu _{0.1} Sr _{0.16} CuO ₄ studied by inelastic X-ray scattering. Physica C: Superconductivity and Its Applications, 2010, 470, S51-S52. | 0.6 | 1 |
| 135 | Preparation of infinite-layer cuprate compounds (Sr _{1-x} La _x)CuO ₂ and detailed phonon properties in x = 0. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 173, 41-43. | 1.7 | 0 |
| 136 | Temperature gradient analyzers for compact high-resolution X-ray spectrometers. Journal of Synchrotron Radiation, 2010, 17, 12-24. | 1.0 | 10 |
| 137 | Elastic inhomogeneity and acoustic phonons in Pd-, Pt-, and Zr-based metallic glasses. Physical Review B, 2010, 81, . | 1.1 | 15 |
| 138 | Effects of anisotropic charge on transverse optical phonons in NiO: Inelastic x-ray scattering spectroscopy study. Physical Review B, 2010, 81, . | 1.1 | 18 |
| 139 | Collective dynamics of hydrated β -lactoglobulin by inelastic x-ray scattering. Journal of Chemical Physics, 2010, 133, 134501. | 1.2 | 17 |
| 140 | Compressional behavior of solid NeHe ₂ up to 90 GPa. Journal of Physics Condensed Matter, 2010, 22, 095401. | 0.7 | 7 |
| 141 | Atomic Dynamics in Extreme Environments via Inelastic X-Ray Scattering at SPring-8. Synchrotron Radiation News, 2010, 23, 17-25. | 0.2 | 1 |
| 142 | Transverse Acoustic Excitations in Liquid Ga. Physical Review Letters, 2009, 102, 105502. | 2.9 | 131 |
| 143 | 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 |
| 144 | Acoustic Phonons in Molten NaI. Electrochemistry, 2009, 77, 608-610. | 0.6 | 9 |

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|-----|---|-----|-----------|
| 145 | q-Dependence of the giant bond-stretching phonon anomaly in the stripe compound La _{1.48} Nd _{0.48} Sr _{0.12} CuO ₄ measured by IXS. Journal of Physics and Chemistry of Solids, 2008, 69, 3103-3107. | 1.9 | 16 |
| 146 | Precise determination of elastic constants by high-resolution inelastic X-ray scattering. Journal of Synchrotron Radiation, 2008, 15, 618-623. | 1.0 | 28 |
| 147 | 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 |
| 148 | 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 |
| 149 | Atomic dynamics of i-ScZnMg and its 1/1 approximant phase: Experiment and simulation. Philosophical Magazine, 2008, 88, 2311-2318. | 0.7 | 8 |
| 150 | Intrinsic ferroelectric instability in $PbTiO_3$. Physical Review Letters, 2008, 100, 227602. | 1.1 | 22 |
| 151 | Low-energy excitation in As ₂ S ₃ glass studied by inelastic X-ray scattering. Journal of Non-Crystalline Solids, 2008, 354, 2669-2672. | 1.5 | 1 |
| 152 | Experimental determination of the elasticity of iron at high pressure. Journal of Geophysical Research, 2008, 113, . | 3.3 | 43 |
| 153 | Bond Stretching Phonon Softening and Kinks in the Angle-Resolved Photoemission Spectra of Optimally Doped Bi_2O_2S . Physical Review Letters, 2008, 100, 227602. | 1.1 | 72 |
| 154 | Damping of the collective modes in liquid Fe. Physical Review B, 2008, 77, . | 1.1 | 46 |
| 155 | Lattice Dynamics of LaFeAsO _{1-x} F _x and PrFeAsO _{1-x} via Inelastic X-Ray Scattering and First-Principles Calculation. Journal of the Physical Society of Japan, 2008, 77, 103715. | 1.5 | 4 |
| 156 | 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 | 51 |
| 157 | Direct Observation of Low-Energy Sm Phonon in SmRu ₄ P ₁₂ . Journal of the Physical Society of Japan, 2008, 77, 033601. | 0.7 | 35 |
| 159 | Collective dynamics and de Gennes narrowing in polymeric liquid Se: High-resolution inelastic x-ray scattering. Physical Review B, 2008, 77, . | 1.1 | 8 |
| 160 | Soft-phonon-driven superconductivity in CaAlSi as seen by inelastic x-ray scattering. Physical Review B, 2008, 77, . | 1.1 | 41 |
| 161 | Collective dynamics of liquid Fe. Journal of Physics: Conference Series, 2008, 98, 022004. | 0.3 | 4 |
| 162 | Investigation of the Anharmonic Guest Modes in Filled Skutterudites Using Inelastic X-ray Scattering Techniques. Journal of the Physical Society of Japan, 2008, 77, 257-259. | 0.7 | 19 |

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|-----|---|------|-----------|
| 163 | Dynamical structure in liquid Te using inelastic x-ray scattering: from semiconductor-metal transition to metallic regime. Journal of Physics: Conference Series, 2008, 98, 022001. | 0.3 | 1 |
| 164 | Low-Energy Collective Excitations in Glassy and Supercooled Liquid Silica Probed by Inelastic X-ray Scattering. AIP Conference Proceedings, 2008, , . | 0.3 | 1 |
| 165 | Viscoelastic narrowing of a collective mode in molten CsCl observed by inelastic x-ray scattering. Journal of Physics Condensed Matter, 2007, 19, 466110. | 0.7 | 12 |
| 166 | Currents and fields reveal the propagation of nuclear polaritons through a resonant target. Physical Review A, 2007, 76, . | 1.0 | 18 |
| 167 | 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 |
| 168 | Two-phonon contributions to the inelastic x-ray scattering spectra of MgB ₂ . Physical Review B, 2007, 75, . | 1.1 | 26 |
| 169 | Relaxation in the spin ice Dy ₂ Ti ₂ O ₇ studied using nuclear forward scattering. Physical Review B, 2007, 75, . | 1.1 | 18 |
| 170 | Phonon dispersion of metallic glass CuZr ₂ . Journal of Physics: Conference Series, 2007, 92, 012136. | 0.3 | 8 |
| 171 | High-resolution inelastic X-ray scattering measurements of an Al ₇₂ Pd ₂₀ Mn ₈ alloy above the melting point. Journal of Non-Crystalline Solids, 2007, 353, 3174-3176. | 1.5 | 0 |
| 172 | An inelastic X-ray scattering study on the collective dynamics in the "non-simple" liquid metal Si. Journal of Non-Crystalline Solids, 2007, 353, 3149-3153. | 1.5 | 2 |
| 173 | Phonon softening in superconducting diamond. Physical Review B, 2007, 75, . | 1.1 | 40 |
| 174 | Inelastic X-ray Scattering of Sub- and Supercritical Methanol. Journal of the Physical Society of Japan, 2007, 76, 11-12. | 0.7 | 1 |
| 175 | Heavy Particle Dynamics in Liquid Se: Inelastic X-ray Scattering. Journal of the Physical Society of Japan, 2007, 76, 053601. | 0.7 | 7 |
| 176 | Collective dynamics of sub- and supercritical methanol by inelastic X-ray scattering. Chemical Physics Letters, 2007, 440, 210-214. | 1.2 | 22 |
| 177 | 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 |
| 178 | Inelastic X-ray scattering of Sm-filled Skutterudite compounds. Journal of Magnetism and Magnetic Materials, 2007, 310, 241-242. | 1.0 | 2 |
| 179 | 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 |
| 180 | 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 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | Silicon avalanche photodiodes for direct detection of X-rays. Journal of Synchrotron Radiation, 2006, 13, 131-142. | 1.0 | 75 |
| 182 | Nearly perfect large-area quartz: 4â€...meV resolution for 10â€...keV photons over 10â€...cm ² . Journal of Synchrotron Radiation, 2006, 13, 278-280. | 1.0 | 24 |
| 183 | Stable top-up operation at SPring-8. Journal of Synchrotron Radiation, 2006, 13, 378-391. | 1.0 | 32 |
| 184 | Phonon softening in HgBa ₂ CuO ₄ +Î´ and MgB ₂ . Journal of Physics and Chemistry of Solids, 2006, 67, 294-297. | 1.9 | 0 |
| 185 | Growth, Characterization and Application of Single-Crystal La _{2-x} Sr _x CuO ₄ Having a Gradient in Sr Concentration. Japanese Journal of Applied Physics, 2006, 45, 1594-1601. | 0.8 | 11 |
| 186 | Observation of fast sound in metalâ€“nonmetal transition in liquid Hg. Journal of Physics and Chemistry of Solids, 2005, 66, 2223-2229. | 1.9 | 10 |
| 187 | Examination of Bragg backscattering from crystalline quartz. Journal of Physics and Chemistry of Solids, 2005, 66, 2306-2309. | 1.9 | 24 |
| 188 | Phonon density of states on determined by ¹⁶¹ Dy nuclear resonant inelastic scattering. Physica B: Condensed Matter, 2005, 359-361, 974-976. | 1.3 | 4 |
| 189 | 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 |
| 190 | Collective dynamics of supercritical water. Journal of Physics and Chemistry of Solids, 2005, 66, 2246-2249. | 1.9 | 27 |
| 191 | Nuclear resonant scattering from the subnanosecond lifetime excited state of Hg ₂₀₁ . Physical Review B, 2005, 72, . | 1.1 | 7 |
| 192 | Scopigno et al. Reply. Physical Review Letters, 2005, 95, . | 2.9 | 4 |
| 193 | Doping dependence of softening in the bond-stretching phonon mode of La _{2-x} Sr _x CuO ₄ (0â€½xâ€½0.29). Physical Review B, 2005, 71, . | 1.1 | 60 |
| 194 | Hard-Sphere-like Dynamics in a Non-Hard-Sphere Liquid. Physical Review Letters, 2005, 94, 155301. | 2.9 | 35 |
| 195 | High Frequency Dynamics in a Monatomic Glass. Physical Review Letters, 2004, 92, 025503. | 2.9 | 46 |
| 196 | Softening of Cu-O Bond Stretching Phonons in Tetragonal HgBa ₂ CuO ₄ +Î´. Physical Review Letters, 2004, 92, 197005. | 2.9 | 84 |
| 197 | Kohn Anomaly in MgB ₂ by Inelastic X-Ray Scattering. Physical Review Letters, 2004, 92, 197004. | 2.9 | 77 |
| 198 | Phonon softening in HgBa ₂ CuO ₄ +Î´ observed by inelastic X-ray scattering. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 3130-3133. | 0.8 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Localized dynamics in network glasses. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004, 1, 2871-2874. | 0.8 | 0 |
| 200 | Fast Sound in Expanded Fluid Hg Accompanying the Metal-Nonmetal Transition. <i>Physical Review Letters</i> , 2004, 93, 097801. | 2.9 | 41 |
| 201 | Collective dynamics in dense Hg vapour. <i>Journal of Physics Condensed Matter</i> , 2004, 16, L45-L50. | 0.7 | 9 |
| 202 | Experimental study of the dynamics of icosahedral phases. <i>Journal of Non-Crystalline Solids</i> , 2004, 334-335, 303-307. | 1.5 | 4 |
| 203 | Experimental Study of Phonon Dynamics in the Icosahedral i-CdYb Phase and its 1/1 Periodic Approximant. <i>Ferroelectrics</i> , 2004, 305, 235-238. | 0.3 | 2 |
| 204 | Acoustic Phonon Dynamics in Liquid CCl ₄ . <i>Journal of the Physical Society of Japan</i> , 2004, 73, 1615-1618. | 0.7 | 16 |
| 205 | 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 |
| 206 | Sub-picosecond dynamics in liquid Si. <i>Journal of Physics Condensed Matter</i> , 2003, 15, L623-L629. | 0.7 | 29 |
| 207 | Coherent Dynamic Scattering Law of Divalent Liquid Mg. <i>Journal of the Physical Society of Japan</i> , 2003, 72, 1603-1606. | 0.7 | 25 |
| 208 | Dynamics of a light aircraft in spin. <i>Aircraft Engineering and Aerospace Technology</i> , 2002, 74, 237-251. | 0.8 | 3 |
| 209 | Early commissioning of the SPring-8 beamline for high resolution inelastic X-ray scattering. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2001, 467-468, 627-630. | 0.7 | 41 |
| 210 | Refractive X-ray lens for high pressure experiments at SPring-8. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2001, 467-468, 962-965. | 0.7 | 16 |
| 211 | A compact optical design for Bragg reflections near backscattering. <i>Journal of Synchrotron Radiation</i> , 2001, 8, 1127-1130. | 1.0 | 44 |
| 212 | An X-ray scattering beamline for studying dynamics. <i>Journal of Physics and Chemistry of Solids</i> , 2000, 61, 461-465. | 1.9 | 237 |
| 213 | Detectors for nuclear resonant scattering experiments. , 2000, 125, 29-42. | | 72 |
| 214 | High-energy-resolution x-ray optics with refractive collimators. <i>Applied Physics Letters</i> , 2000, 77, 31-33. | 1.5 | 51 |
| 215 | A refractive collimator for synchrotron radiation. <i>Applied Physics Letters</i> , 1999, 74, 1492-1494. | 1.5 | 23 |
| 216 | Beryllium and aluminium refractive collimators for synchrotron radiation. <i>Journal of Synchrotron Radiation</i> , 1999, 6, 953-956. | 1.0 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 217 | Transverse coherence in nuclear resonant scattering of synchrotron radiation. , 1999, 123/124, 667-680. | | 4 |
| 218 | Standing waves and Kossel line patterns in structure determination. Solid State Communications, 1998, 105, 685-687. | 0.9 | 10 |
| 219 | 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 |
| 220 | <title>Silicon avalanche photodiodes (APDs) for time-resolved x-ray measurements</title>. , 1998, , . | | 1 |
| 221 | Spatial Distribution of Magnetic and Nonmagnetic Phases in Nuclear Forward Scattering of Synchrotron Radiation. Australian Journal of Physics, 1998, 51, 453. | 0.6 | 5 |
| 222 | Radiation trapping in nuclear resonant scattering of x rays. Physical Review B, 1997, 56, R8455-R8458. | 1.1 | 21 |
| 223 | Quasielastic Scattering of Synchrotron Radiation by Time Domain Interferometry. Physical Review Letters, 1997, 79, 2823-2826. | 2.9 | 79 |
| 224 | Anisotropic inelastic nuclear absorption. Physical Review B, 1997, 56, 10758-10761. | 1.1 | 44 |
| 225 | <title>X-ray optics for nuclear inelastic scattering</title>. , 1997, , . | | 5 |
| 226 | Synchrotron Mössbauer source. Physical Review B, 1997, 55, 5811-5815. | 1.1 | 111 |
| 227 | 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 |
| 228 | 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 |
| 229 | Temperature dependent inelastic X-ray scattering of synchrotron radiation on myoglobin analyzed by the Mössbauer effect. European Biophysics Journal, 1996, 25, 43-46. | 1.2 | 21 |
| 230 | 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 |
| 231 | Transverse X-Ray Coherence in Nuclear Scattering of Synchrotron Radiation. Physical Review Letters, 1996, 77, 4808-4811. | 2.9 | 33 |
| 232 | Nuclear Resonance Energy Analysis of Inelastic X-Ray Scattering. Physical Review Letters, 1996, 76, 4258-4261. | 2.9 | 59 |
| 233 | Nuclear Exciton Echo Produced by Ultrasound in Forward Scattering of Synchrotron Radiation. Physical Review Letters, 1996, 77, 183-186. | 2.9 | 43 |
| 234 | Temperature dependence of nuclear inelastic absorption of synchrotron radiation in ^{57}Fe . Physical Review B, 1996, 54, R9596-R9599. | 1.1 | 57 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 235 | Nuclear resonance small-angle scattering of x rays. Physical Review B, 1996, 54, 14942-14945. | 1.1 | 19 |
| 236 | Time Domain Study of ^{57}Fe Diffusion using Nuclear Forward Scattering of Synchrotron Radiation. Physical Review Letters, 1996, 76, 3220-3223. | 2.9 | 55 |
| 237 | Single-nucleus quantum beats excited by synchrotron radiation. Europhysics Letters, 1996, 34, 331-336. | 0.7 | 32 |
| 238 | Nuclear resonance scattering of synchrotron radiation at the 21.5 keV resonance of ^{151}Eu . Europhysics Letters, 1996, 35, 671-676. | 0.7 | 43 |
| 239 | 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 |
| 240 | Nuclear resonant scattering of synchrotron radiation by gaseous krypton. Physical Review B, 1995, 51, 16384-16387. | 1.1 | 22 |
| 241 | Nuclear Scattering of Synchrotron Radiation by ^{181}Ta . Physical Review Letters, 1995, 75, 549-552. | 2.9 | 30 |
| 242 | Angular dependence of specular resonant nuclear scattering of x rays. Physical Review B, 1994, 50, 10354-10357. | 1.1 | 41 |
| 243 | 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 |
| 244 | Resonant diffraction of synchrotron radiation by a nuclear multilayer. Physical Review Letters, 1993, 71, 2489-2492. | 2.9 | 64 |
| 245 | Phase shift of a rotated quantum state observed in an x-ray scattering experiment. Physical Review Letters, 1992, 69, 699-702. | 2.9 | 8 |
| 246 | Multilayer monochromator for synchrotron radiation angiography. , 1991, , . | | 0 |
| 247 | Phonon Excitations in $\text{Pd}_{40}\text{Ni}_{40}\text{P}_{20}$ Bulk Metallic Glass by Inelastic X-Ray Scattering. Materials Science Forum, 0, 879, 767-772. | 0.3 | 4 |