# J Y Y Lin

List of Publications by Year
in descending order



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|---|---|---|---|
| 59 papers | 2,181 citations | 430874<br>18 h-index | 223800<br>46 g-index |
| 60 all docs | 60 docs citations | 60 times ranked | 2171 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Mechanism for linear and nonlinear optical effects inÎ²â<sup>ˆ’</sup>BaB2O4crystals. Physical Review B, 1999, 60, 13380-13389. | 3.2 | 465 |
| 2 | Computer-Assisted Search for Nonlinear Optical Crystals. Advanced Materials, 1999, 11, 1071-1078. | 21.0 | 273 |
| 3 | Design and operation of the wide angular-range chopper spectrometer ARCS at the Spallation Neutron Source. Review of Scientific Instruments, 2012, 83, 015114. | 1.3 | 210 |
| 4 | Erosion by an Alpine glacier. Science, 2015, 350, 193-195. | 12.6 | 138 |
| 5 | Mechanism for linear and nonlinear optical effects inLiB3O5,CsB3O5,andCsLiB6O10crystals. Physical Review B, 2000, 62, 1757-1764. | 3.2 | 101 |
| 6 | Phonons in aluminum at high temperatures studied by inelastic neutron scattering. Physical Review B, 2008, 77, . | 3.2 | 96 |
| 7 | Separating the configurational and vibrational entropy contributions in metallic glasses. Nature Physics, 2017, 13, 900-905. | 16.7 | 83 |
| 8 | 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. | 7.1 | 68 |
| 9 | Theoretical calculations and predictions of the nonlinear optical coefficients of borate crystals. Journal of Physics Condensed Matter, 2001, 13, R369-R384. | 1.8 | 66 |
| 10 | Neutron scattering measurements of phonons in nickel at elevated temperatures. Physical Review B, 2007, 75, . | 3.2 | 66 |
| 11 | Phonon Density of States of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>LaFeAsO</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>âˆ’</mml:mo><mml:mi>x</m mathvariant="normal">F</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:math>. Physical Review Letters, 2008, 101, 157004. | 7.8 | 65 |
| 12 | MCViNE â€" 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 | 51 |
| 13 | Determination of the nonlinear optical coefficients of YCa_4O(BO_3)_3 crystal. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 566. | 2.1 | 49 |
| 14 | Extended anharmonic collapse of phonon dispersions in SnS and SnSe. Nature Communications, 2020, 11, 4430. | 12.8 | 46 |
| 15 | Electron-phonon interactions and high-temperature thermodynamics of vanadium and its alloys. Physical Review B, 2008, 77, . | 3.2 | 36 |
| 16 | Characterization of Crystallographic Structures Using Bragg-Edge Neutron Imaging at the Spallation Neutron Source. Journal of Imaging, 2017, 3, 65. | 3.0 | 31 |
| 17 | Antichiral spin order, its soft modes, and their hybridization with phonons in the topological semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>Mn</mml:mi></mml:mrow><mml:mn>3</m Physical Review B, 2020, 102, . | 3.2 | 29 |
| 18 | Recent developments of MCViNE and its applications at SNS. Journal of Physics Communications, 2019, 3, 085005. | 1.2 | 27 |

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|---|---|---|---|
| 19 | Using Monte Carlo ray tracing simulations to model the quantum harmonic oscillator modes observed in uranium nitride. Physical Review B, 2014, 89, . | 3.2 | 18 |
| 20 | Temperature-dependent phonon lifetimes and thermal conductivity of silicon by inelastic neutron scattering and <i>ab initio</i> calculations. Physical Review B, 2020, 102, . | 3.2 | 18 |
| 21 | Multiphonon: Phonon Density of States tools for Inelastic Neutron Scattering Powder Data. Journal of Open Source Software, 2018, 3, 440. | 4.6 | 17 |
| 22 | Damped Dirac magnon in the metallic kagome antiferromagnet FeSn. Physical Review B, 2022, 105, . | 3.2 | 15 |
| 23 | Characterization of the HEFT CdZnTe pixel detectors. , 2004, , . | | 13 |
| 24 | Design and operating characteristic of a vacuum furnace for time-of-flight inelastic neutron scattering measurements. Review of Scientific Instruments, 2017, 88, 105116. | 1.3 | 13 |
| 25 | Conceptual design of CHESS, a new direct-geometry inelastic neutron spectrometer dedicated to studying small samples. Journal of Applied Crystallography, 2018, 51, 282-293. | 4.5 | 13 |
| 26 | Energy dependence of the flux and elastic resolution for the ARCS neutron spectrometer. Physica B: Condensed Matter, 2019, 562, 26-30. | 2.7 | 13 |
| 27 | Vacancy-driven variations in the phonon density of states of fast neutron irradiated nuclear graphite. Carbon, 2020, 168, 42-54. | 10.3 | 13 |
| 28 | Characterization of a large-format, fine-pitch CdZnTe pixel detector for the HEFT balloon-Borne experiment. IEEE Transactions on Nuclear Science, 2004, 51, 2472-2477. | 2.0 | 10 |
| 29 | A concept of a broadband inverted geometry spectrometer for the Second Target Station at the Spallation Neutron Source. Review of Scientific Instruments, 2022, 93, 045101. | 1.3 | 10 |
| 30 | Super-resolution energy spectra from neutron direct-geometry spectrometers. Review of Scientific Instruments, 2019, 90, 105109. | 1.3 | 9 |
| 31 | CHESS: The future direct geometry spectrometer at the second target station. Review of Scientific Instruments, 2022, 93, . | 1.3 | 9 |
| 32 | Ferrimagnetic spin waves in honeycomb and triangular layers of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Mn</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Si</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Te</mml:mi><mml:mn>6</mml:mn></mml:msub></mml:math>. Physical Review B, 2022, 105, . | 3.2 | 9 |
| 33 | CENTAURâ€"The small- and wide-angle neutron scattering diffractometer/spectrometer for the Second Target Station of the Spallation Neutron Source. Review of Scientific Instruments, 2022, 93, . | 1.3 | 9 |
| 34 | Controlling phonon lifetimes via sublattice disordering in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Ag</mml:mi><mml:mi>Bi</mml:mi><mml:msub><mml:m Physical Review Materials, 2020, 4, . | 2.4 | 8 |
| 35 | PIONEER, a high-resolution single-crystal polarized neutron diffractometer. Review of Scientific Instruments, 2022, 93, . | 1.3 | 7 |
| 36 | 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 |

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|---|---|---|---|
| 37 | An interactive web-based tool to guide the preparation of neutron imaging experiments at oak ridge national laboratory. Journal of Physics Communications, 2019, 3, 103003. | 1.2 | 6 |
| 38 | VERDI: VERsatile DIffractometer with wide-angle polarization analysis for magnetic structure studies in powders and single crystals. Review of Scientific Instruments, 2022, 93, . | 1.3 | 6 |
| 39 | Light atom quantum oscillations in UC and US. Physical Review B, 2016, 93, . | 3.2 | 5 |
| 40 | A super-resolution technique to analyze single-crystal inelastic neutron scattering measurements using direct-geometry chopper spectrometers. Review of Scientific Instruments, 2022, 93, 025101. | 1.3 | 5 |
| 41 | Intensities of MÃ¶ssbauer diffractions from polycrystalline bcc57Fe. Physical Review B, 2001, 65, . | 3.2 | 4 |
| 42 | MÃ¶ssbauer diffractometry on polycrystalline57Fe3Al. Physical Review B, 2002, 65, . | 3.2 | 4 |
| 43 | Computational optimization of a 3D printed collimator. Journal of Neutron Research, 2020, 22, 155-168. | 1.1 | 4 |
| 44 | Neutron thermalization in nuclear graphite: A modern story of a classic moderator. Annals of Nuclear Energy, 2021, 161, 108437. | 1.8 | 4 |
| 45 | MENUSâ€"Materials engineering by neutron scattering. Review of Scientific Instruments, 2022, 93, 053911. | 1.3 | 4 |
| 46 | EWALD: A macromolecular diffractometer for the second target station. Review of Scientific Instruments, 2022, 93, . | 1.3 | 4 |
| 47 | EXPANSE: A time-of-flight EXPanded Angle Neutron Spin Echo spectrometer at the Second Target Station of the Spallation Neutron Source. Review of Scientific Instruments, 2022, 93, . | 1.3 | 4 |
| 48 | <title>Computer-assisted design for nonlinear optical crystals</title>. , 1998, , . | | 3 |
| 49 | Site-specific long-range order in57Fe3Al measured by MÃ¶ssbauer diffractometry. Philosophical Magazine, 2003, 83, 2621-2640. | 1.6 | 3 |
| 50 | Neutron imaging analysis using jupyter Python notebook. Journal of Physics Communications, 2019, 3, 083001. | 1.2 | 3 |
| 51 | Design of a radial collimator for the SEQUOIA direct geometry chopper spectrometer. Physica B: Condensed Matter, 2019, 564, 17-21. | 2.7 | 3 |
| 52 | Spatial periodicities of defect environments in 57Fe3Al studied by MÃ¶ssbauer powder diffractometry. Zeitschrift Fur Kristallographie - Crystalline Materials, 2004, 219, . | 0.8 | 2 |
| 53 | bem: modeling for neutron Bragg-edge imaging. Journal of Open Source Software, 2018, 3, 973. | 4.6 | 2 |
| 54 | Polarization Factors for 57Fe MÃ¶ssbauer Diffractions from Polycrystals. Hyperfine Interactions, 2001, 136/137, 663-672. | 0.5 | 1 |

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|---|---|---|---|
| 55 | MÃ¶ssbauer Diffractometry on Chemical Sites of 57Fe in Fe3Al. Hyperfine Interactions, 2002, 141/142, 145-150. | 0.5 | 1 |
| 56 | AtomSim: web-deployed atomistic dynamics simulator. Journal of Applied Crystallography, 2010, 43, 1553-1559. | 4.5 | 1 |
| 57 | Neutron Radiography and Computed Tomography of Biological Systems at the Oak Ridge National Laboratory's High Flux Isotope Reactor. Journal of Visualized Experiments, 2021, , . | 0.3 | 1 |
| 58 | Mutual spin-phonon driving effects and phonon eigenvector renormalization in nickel (II) oxide. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, . | 7.1 | 1 |
| 59 | MÃ¶ssbauer Diffractometry. , 2003, , 285-295. | | 0 |