

# Esen E Alp

## List of Publications by Year in descending order

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171  
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176  
docs citations

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times ranked

7436  
citing authors

#	ARTICLE	IF	CITATIONS
1	Operando Analysis of NiFe and Fe Oxyhydroxide Electrocatalysts for Water Oxidation: Detection of Fe <sup>4+</sup> by Mössbauer Spectroscopy. <i>Journal of the American Chemical Society</i> , 2015, 137, 15090-15093.	13.7	684
2	Phonon Density of States Measured by Inelastic Nuclear Resonant Scattering. <i>Physical Review Letters</i> , 1995, 74, 3832-3835.	7.8	442
3	High-valence metals improve oxygen evolution reaction performance by modulating 3d metal oxidation cycle energetics. <i>Nature Catalysis</i> , 2020, 3, 985-992.	34.4	390
4	Phonon Density of States of Iron up to 153 Gigapascals. <i>Science</i> , 2001, 292, 914-916.	12.6	284
5	Identification of the Electronic and Structural Dynamics of Catalytic Centers in Single-Fe-Atom Material. <i>CheM</i> , 2020, 6, 3440-3454.	11.7	231
6	Structure of Copper Microclusters Isolated in Solid Argon. <i>Physical Review Letters</i> , 1986, 56, 2076-2079.	7.8	230
7	Elucidation of the Fe(IV)=O intermediate in the catalytic cycle of the halogenase SyrB2. <i>Nature</i> , 2013, 499, 320-323.	27.8	192
8	Phonons in Nanocrystalline Fe. <i>Physical Review Letters</i> , 1997, 79, 937-940.	7.8	180
9	New Insights into the Performance Degradation of Fe-Based Layered Oxides in Sodium-Ion Batteries: Instability of Fe <sup>3+</sup> /Fe <sup>4+</sup> Redox in NaFeO <sub>2</sub> . <i>Chemistry of Materials</i> , 2015, 27, 6755-6764.	6.7	162
10	Enabling the high capacity of lithium-rich anti-fluorite lithium iron oxide by simultaneous anionic and cationic redox. <i>Nature Energy</i> , 2017, 2, 963-971.	39.5	140
11	Intermediate-spin ferrous iron in lowermost mantle post-perovskite and perovskite. <i>Nature Geoscience</i> , 2008, 1, 688-691.	12.9	131
12	Quantitative Vibrational Dynamics of Iron in Nitrosyl Porphyrins. <i>Journal of the American Chemical Society</i> , 2004, 126, 4211-4227.	13.7	114
13	Nuclear resonance vibrational spectroscopy of a protein active-site mimic. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 7707-7722.	1.8	113
14	Long-Range Reactive Dynamics in Myoglobin. <i>Physical Review Letters</i> , 2001, 86, 4966-4969.	7.8	106
15	Electronic Structure and Biologically Relevant Reactivity of Low-Spin {FeNO} <sup>8+</sup> Porphyrin Model Complexes: New Insight from a Bis-Picket Fence Porphyrin. <i>Inorganic Chemistry</i> , 2013, 52, 7766-7780.	4.0	105
16	Measuring velocity of sound with nuclear resonant inelastic x-ray scattering. <i>Physical Review B</i> , 2003, 67, .	3.2	102
17	Hidden carbon in Earth's inner core revealed by shear softening in dense Fe <sub>7</sub> C <sub>3</sub> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 17755-17758.	7.1	96
18	Anharmonic motions of Kr in the clathrate hydrate. <i>Nature Materials</i> , 2005, 4, 917-921.	27.5	92

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19	Structural and Electronic Characterization of Non-Heme Fe(II) Nitrosyls as Biomimetic Models of the Fe Center of Bacterial Nitric Oxide Reductase. <i>Journal of the American Chemical Society</i> , 2011, 133, 16714-16717.	13.7	88
20	Vibrational dynamics of myoglobin determined by the phonon-assisted Mössbauer effect. <i>Physical Review E</i> , 2002, 65, 051916.	2.1	87
21	Determination of the local structure in Ba <sub>1-x</sub> K <sub>x</sub> BiO <sub>3</sub> by x-ray-absorption spectroscopy. <i>Physical Review B</i> , 1991, 43, 5511-5515.	3.2	79
22	Element-Resolved Thermodynamics of Magnetocaloric LaFe <sub>13</sub> Al <sub>3</sub> . <i>Physical Review Letters</i> , 2015, 114, 057202.	7.8	78
23	Magnetic ordering of Gd and Cu in superconducting and nonsuperconducting GdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> . <i>Physical Review B</i> , 1988, 37, 592-594.	3.2	76
24	Melting of compressed iron by monitoring atomic dynamics. <i>Earth and Planetary Science Letters</i> , 2013, 362, 143-150.	4.4	75
25	A Combined Probe-Molecule, Mössbauer, Nuclear Resonance Vibrational Spectroscopy, and Density Functional Theory Approach for Evaluation of Potential Iron Active Sites in an Oxygen Reduction Reaction Catalyst. <i>Journal of Physical Chemistry C</i> , 2017, 121, 16283-16290.	3.1	75
26	Inelastic nuclear resonant scattering with sub-meV energy resolution. <i>Applied Physics Letters</i> , 1997, 71, 2112-2114.	3.3	71
27	Nuclear Inelastic X-Ray Scattering of FeO to 48 GPa. <i>Physical Review Letters</i> , 2001, 87, 255501.	7.8	71
28	Microscopic Dynamics of Liquid Aluminum Oxide. <i>Science</i> , 2003, 299, 2047-2049.	12.6	71
29	$\hat{\nu}^3$ -Ray Wavelength Standard for Atomic Scales. <i>Physical Review Letters</i> , 2000, 85, 495-498.	7.8	67
30	Effect of Ce doping on the Cu charge in the electron superconductor Nd <sub>2-x</sub> Ce <sub>x</sub> CuO <sub>4</sub> . <i>Physical Review B</i> , 1989, 40, 2617-2619.	3.2	66
31	Oriented Single-Crystal Nuclear Resonance Vibrational Spectroscopy of [Fe(TPP)(M)(NO)]: Quantitative Assessment of the <i>trans</i> Effect of NO. <i>Inorganic Chemistry</i> , 2010, 49, 7197-7215.	4.0	66
32	Structural characterization of a non-heme iron active site in zeolites that hydroxylates methane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4565-4570.	7.1	66
33	Spinel-olivine-pyroxene equilibrium iron isotopic fractionation and applications to natural peridotites. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 169, 184-199.	3.9	63
34	Nuclear Resonance Vibrational Spectroscopy on the Fe <sup>IV</sup> S <sub>4</sub> O <sub>2</sub> Non-Heme Site in TMG <sub>3</sub> tren: Experimentally Calibrated Insights into Reactivity. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3215-3218.	13.8	62
35	Observation of Pure Nuclear Diffraction from a Fe/Cr Antiferromagnetic Multilayer. <i>Physical Review Letters</i> , 1995, 74, 3475-3478.	7.8	59
36	Direct Probe of Iron Vibrations Elucidates NO Activation of Heme Proteins. <i>Journal of the American Chemical Society</i> , 2005, 127, 11200-11201.	13.7	59

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37	Electronic spin states of ferric and ferrous iron in the lower-mantle silicate perovskite. <i>American Mineralogist</i> , 2012, 97, 592-597.	1.9	58
38	The Semireduced Mechanism for Nitric Oxide Reduction by Non-Heme Diiron Complexes: Modeling Flavodiiron Nitric Oxide Reductases. <i>Journal of the American Chemical Society</i> , 2018, 140, 2562-2574.	13.7	57
39	Time resolved nuclear resonant scattering from Sn <sup>119</sup> nuclei using synchrotron radiation. <i>Physical Review Letters</i> , 1993, 70, 3351-3354.	7.8	56
40	Polarizer/analyzer filter for nuclear resonant scattering of synchrotron radiation. <i>Applied Physics Letters</i> , 1995, 67, 1993-1995.	3.3	56
41	Unusual Synthetic Pathway for an {Fe(NO) <sub>2</sub> } <sup>9+</sup> Dinitrosyl Iron Complex (DNIC) and Insight into DNIC Electronic Structure via Nuclear Resonance Vibrational Spectroscopy. <i>Inorganic Chemistry</i> , 2016, 55, 5485-5501.	4.0	55
42	Temperature of Earth's core constrained from melting of Fe and Fe <sub>0.9</sub> Ni <sub>0.1</sub> at high pressures. <i>Earth and Planetary Science Letters</i> , 2016, 447, 72-83.	4.4	55
43	Iron Normal Mode Dynamics in (Nitrosyl)iron(II)tetraphenylporphyrin from X-ray Nuclear Resonance Data. <i>Biophysical Journal</i> , 2002, 82, 2951-2963.	0.5	53
44	<i>Operando</i> Phonon Studies of the Protonation Mechanism in Highly Active Hydrogen Evolution Reaction Pentlandite Catalysts. <i>Journal of the American Chemical Society</i> , 2017, 139, 14360-14363.	13.7	53
45	Effects of Noncovalent Interactions on High-Spin Fe(IV)â€œOxido Complexes. <i>Journal of the American Chemical Society</i> , 2020, 142, 11804-11817.	13.7	53
46	Direct Determination of the Complete Set of Iron Normal Modes in a Porphyrin-Imidazole Model for Carbonmonoxy-heme Proteins: [Fe(TPP)(CO)(1-Melm)]. <i>Journal of the American Chemical Society</i> , 2003, 125, 6927-6936.	13.7	51
47	Stability of ferrous-iron-rich bridgmanite under reducing midmantle conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 6468-6473.	7.1	51
48	Phonon damping in thin films of Fe. <i>Journal of Applied Physics</i> , 1999, 86, 584-587.	2.5	49
49	Quantitative Vibrational Dynamics of Iron in Carbonyl Porphyrins. <i>Biophysical Journal</i> , 2007, 92, 3764-3783.	0.5	49
50	Charge distributions and valency in copper oxide crystals related to superconductivity. <i>Journal of Chemical Physics</i> , 1989, 91, 2983-2992.	3.0	48
51	Coherent Resonant X-Ray Scattering from a Rotating Medium. <i>Physical Review Letters</i> , 2000, 84, 1007-1010.	7.8	46
52	Theoretical calculations of x-ray-absorption spectra of copper in La <sub>2</sub> CuO <sub>4</sub> and related oxide compounds. <i>Physical Review B</i> , 1990, 41, 82-95.	3.2	44
53	Interplay of Structure and Vibrational Dynamics in Six-Coordinate Heme Nitrosyls. <i>Journal of the American Chemical Society</i> , 2007, 129, 2200-2201.	13.7	44
54	Effect of temperature on sound velocities of compressed Fe <sub>3</sub> C, a candidate component of the Earth's inner core. <i>Earth and Planetary Science Letters</i> , 2011, 309, 213-220.	4.4	43

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55	Characterization of the Bridged Hyponitrite Complex $\{[\text{Fe}(\text{OEP})]_2(\mu_4\text{-N}_2\text{O}_2)\}$ : Reactivity of Hyponitrite Complexes and Biological Relevance. <i>Inorganic Chemistry</i> , 2014, 53, 6398-6414.	4.0	42
56	Ferric Heme-Nitrosyl Complexes: Kinetically Robust or Unstable Intermediates?. <i>Inorganic Chemistry</i> , 2017, 56, 10513-10528.	4.0	40
57	Magnetic isolation of Gd in superconducting $\text{GdBa}_2\text{Cu}_3\text{O}_{7-x}$ . <i>Physical Review B</i> , 1987, 36, 8910-8913.	3.2	38
58	High-Pressure Geophysical Properties of <i>Fcc</i> Phase $\text{FeH}_x$ . <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 305-314.	2.5	37
59	Nuclear resonant scattering beamline at the Advanced Photon Source. <i>Hyperfine Interactions</i> , 1994, 90, 323-334.	0.5	36
60	Local Chemical Environments and the Phonon Partial Densities of States of $^{57}\text{Fe}$ in $^{57}\text{Fe}_3\text{Al}$ . <i>Physical Review Letters</i> , 1998, 80, 3304-3307.	7.8	36
61	A classical Hanbury Brown-Twiss experiment with hard X-rays. <i>Journal of Synchrotron Radiation</i> , 1999, 6, 1065-1066.	2.4	36
62	Valence and spin states of iron are invisible in Earth's lower mantle. <i>Nature Communications</i> , 2018, 9, 1284.	12.8	35
63	Geometric and Electronic Structure of the Mn(IV)Fe(III) Cofactor in Class Ic Ribonucleotide Reductase: Correlation to the Class Ia Binuclear Non-Heme Iron Enzyme. <i>Journal of the American Chemical Society</i> , 2013, 135, 17573-17584.	13.7	34
64	Moments in nuclear resonant inelastic x-ray scattering and their applications. <i>Physical Review B</i> , 2013, 87, .	3.2	34
65	Non-heme High-Spin $\{\text{FeNO}\}^6$ Complexes: One Ligand Platform Can Do It All. <i>Journal of the American Chemical Society</i> , 2018, 140, 11341-11359.	13.7	34
66	Iron, magnesium, and titanium isotopic fractionations between garnet, ilmenite, fayalite, biotite, and tourmaline: Results from NRIXS, ab initio, and study of mineral separates from the Moosilauke metapelite. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 302, 18-45.	3.9	34
67	Resilience of the Iron Environment in Heme Proteins. <i>Biophysical Journal</i> , 2008, 95, 5874-5889.	0.5	31
68	Heme-protein vibrational couplings in cytochrome <i>c</i> provide a dynamic link that connects the heme-iron and the protein surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 8896-8900.	7.1	31
69	Phonon Density of States and Compression Behavior in Iron Sulfide under Pressure. <i>Physical Review Letters</i> , 2004, 93, 195503.	7.8	30
70	Multistep synthesis of the $\text{SrFeO}_2\text{F}$ perovskite oxyfluoride via the $\text{SrFeO}_2$ infinite-layer intermediate. <i>Journal of Fluorine Chemistry</i> , 2014, 159, 8-14.	1.7	30
71	Sound velocities of compressed $\text{Fe}_3\text{C}$ from simultaneous synchrotron X-ray diffraction and nuclear resonant scattering measurements. <i>Journal of Synchrotron Radiation</i> , 2009, 16, 714-722.	2.4	29
72	Observation of phonons with resonant inelastic x-ray scattering. <i>Journal of Physics Condensed Matter</i> , 2010, 22, 485601.	1.8	29

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73	Experimental constraints on the sound velocities of cementite Fe <sub>3</sub> C to core pressures. <i>Earth and Planetary Science Letters</i> , 2018, 494, 164-171.	4.4	29
74	Terminal Hydride Species in [FeFe]-Hydrogenases Are Vibrationally Coupled to the Active Site Environment. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10605-10609.	13.8	29
75	<i>SciPhon</i> : a data analysis software for nuclear resonant inelastic X-ray scattering with applications to Fe, Kr, Sn, Eu and Dy. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1581-1599.	2.4	29
76	Fe Vibrational Spectroscopy of Myoglobin and Cytochrome f. <i>Journal of Physical Chemistry B</i> , 2006, 110, 530-536.	2.6	28
77	Vibrational Dynamics of Iron in Cytochrome c. <i>Journal of Physical Chemistry B</i> , 2009, 113, 2193-2200.	2.6	27
78	Synchrotron-Derived Vibrational Data Confirm Unprotonated Oxo Ligand in Myoglobin Compound II. <i>Journal of the American Chemical Society</i> , 2008, 130, 1816-1817.	13.7	26
79	Comprehensive Fe-Ligand Vibration Identification in {FeNO} <sup>6+</sup> Hemes. <i>Journal of the American Chemical Society</i> , 2014, 136, 18100-18110.	13.7	26
80	High-energy phonon confinement in nanoscale metallic multilayers. <i>Physical Review B</i> , 2008, 77, .	3.2	25
81	Structure and phonon density of states of supported size-selected F <sub>57</sub> FeAu nanoclusters: A nuclear resonant inelastic x-ray scattering study. <i>Applied Physics Letters</i> , 2009, 95, 143103.	3.3	25
82	Nature of empty states in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> . <i>Physical Review B</i> , 1989, 40, 9385-9388.	3.2	23
83	Nuclear resonant forward scattering of synchrotron radiation from <sup>121</sup> Sb at 37.13 keV. <i>Europhysics Letters</i> , 2006, 74, 170-176.	2.0	23
84	The possibility of transverse excitation modes in liquid Ga. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 114107.	1.8	22
85	Experimentally determined effects of olivine crystallization and melt titanium content on iron isotopic fractionation in planetary basalts. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 238, 580-598.	3.9	22
86	Electron emission from Fe <sup>57</sup> nuclei excited with synchrotron radiation. <i>Physical Review B</i> , 1996, 53, 171-175.	3.2	21
87	Crystal monochromator with a resolution beyond 108. <i>Journal of Synchrotron Radiation</i> , 2001, 8, 1082-1086.	2.4	21
88	New Perspectives on Iron-Ligand Vibrations of Oxyheme Complexes. <i>Chemistry - A European Journal</i> , 2011, 17, 11178-11185.	3.3	21
89	Inelastic X-ray Scattering Studies of the Short-Time Collective Vibrational Motions in Hydrated Lysozyme Powders and Their Possible Relation to Enzymatic Function. <i>Journal of Physical Chemistry B</i> , 2013, 117, 1186-1195.	2.6	21
90	Recent Advances in Biosynthetic Modeling of Nitric Oxide Reductases and Insights Gained from Nuclear Resonance Vibrational and Other Spectroscopic Studies. <i>Inorganic Chemistry</i> , 2015, 54, 9317-9329.	4.0	21

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91	Persistent polyamorphism in the chiton tooth: From a new biomineral to inks for additive manufacturing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	21
92	Evidence for an Instability Near Twice the Fermi Wave Vector in the Low Electronic Density Liquid MetalLi(NH <sub>3</sub> ) <sub>4</sub> . <i>Physical Review Letters</i> , 2001, 86, 2357-2360.	7.8	20
93	Determination of the Complete Set of Iron Normal Modes in the Heme Model Compound FeIII(OEP)Cl from Nuclear Resonance Vibrational Spectroscopic Data. <i>Journal of Physical Chemistry B</i> , 2003, 107, 11170-11177.	2.6	19
94	Stable Ferrous Mononitroxyl {FeNO} <sub>8</sub> Complex with a Hindered Hydrotris(pyrazolyl)borate Coligand: Structure, Spectroscopic Characterization, and Reactivity Toward NO and O <sub>2</sub> . <i>Inorganic Chemistry</i> , 2019, 58, 4059-4062.	4.0	19
95	Electronic Structures of an [Fe(NNR <sub>2</sub> )] <sup>+/0</sup> Redox Series: Ligand Noninnocence and Implications for Catalytic Nitrogen Fixation. <i>Inorganic Chemistry</i> , 2019, 58, 3535-3549.	4.0	19
96	A new approach to determining the charge distribution in copper compounds. <i>Journal of Physics Condensed Matter</i> , 1989, 1, 6463-6468.	1.8	18
97	Experimental demonstration of time-integrated synchrotron-radiation spectroscopy with crossed polarizer and analyzer. <i>Physical Review B</i> , 2000, 61, 4181-4185.	3.2	18
98	Synchrotron Mössbauer spectroscopy using high-speed shutters. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 183-188.	2.4	18
99	The Diagnostic Vibrational Signature of Pentacoordination in Heme Carbonyls. <i>Journal of the American Chemical Society</i> , 2014, 136, 9818-9821.	13.7	18
100	Orientations of oxygen hole states and ionicity of bismuth atoms in Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>8</sub> . <i>Physical Review B</i> , 1994, 50, 6370-6374.	3.2	17
101	Nuclear forward scattering of synchrotron radiation by deoxymyoglobin. <i>European Biophysics Journal</i> , 2000, 29, 146-152.	2.2	17
102	Vibrational Spectroscopy and Normal-Mode Analysis of Fe(II) Octaethylporphyrin. <i>Journal of Physical Chemistry B</i> , 2006, 110, 13277-13282.	2.6	17
103	Mechanism of selective benzene hydroxylation catalyzed by iron-containing zeolites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 12124-12129.	7.1	17
104	Iron isotopic fractionation in mineral phases from Earth's lower mantle: Did terrestrial magma ocean crystallization fractionate iron isotopes?. <i>Earth and Planetary Science Letters</i> , 2019, 506, 113-122.	4.4	17
105	High-energy-resolution monochromator for <sup>83</sup> Kr nuclear resonant scattering. <i>Review of Scientific Instruments</i> , 2002, 73, 1608-1610.	1.3	16
106	A compact membrane-driven diamond anvil cell and cryostat system for nuclear resonant scattering at high pressure and low temperature. <i>Review of Scientific Instruments</i> , 2017, 88, 125109.	1.3	16
107	Influence of hydrogenation on the vibrational density of states of magnetocaloric $\text{LaFeSi}_2\text{H}$ . <i>Physical Review B</i> , 2020,	3.2	15
108	Polarized copper K-edge x-ray-absorption spectra in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> . <i>Physical Review B</i> , 1990, 42, 251-265.	3.2	14

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109	Atom clusters and vibrational excitations in chemically-disorderedPt357Fe. Physical Review B, 2000, 61, 14517-14522.	3.2	14
110	Vibrational dynamics of biological molecules: Multi-quantum contributions. Journal of Physics and Chemistry of Solids, 2005, 66, 2250-2256.	4.0	14
111	Exploration of synchrotron Mössbauer microscopy with micrometer resolution: forward and a new backscattering modality on natural samples. Journal of Synchrotron Radiation, 2012, 19, 814-820.	2.4	14
112	Nuclear resonant inelastic X-ray scattering at high pressure and low temperature. Journal of Synchrotron Radiation, 2015, 22, 760-765.	2.4	14
113	Momentâ€Volume Coupling in La(Fe<sub>1-x</sub>Si<sub>x</sub>)<sub>13</sub>. Physica Status Solidi (B): Basic Research, 2018, 255, 1700465.	1.5	14
114	Nuclear Resonance Vibrational Spectroscopy Definition of O<sub>2</sub> Intermediates in an Extradiol Dioxygenase: Correlation to Crystallography and Reactivity. Journal of the American Chemical Society, 2018, 140, 16495-16513.	13.7	14
115	Determining the vibrational entropy change in the giant magnetocaloric material $\text{LaFe}_{11.6}\text{Si}_{1.4}$ by nuclear resonant inelastic x-ray scattering. Physical Review B, 2018, 98, 014407.	1.4	14
116	Elastic and magnetic properties of Fe3P up to core pressures: Phosphorus in the Earth's core. Earth and Planetary Science Letters, 2020, 531, 115974.	4.4	14
117	Loss and Isotopic Fractionation of Alkali Elements during Diffusion-Limited Evaporation from Molten Silicate: Theory and Experiments. ACS Earth and Space Chemistry, 2021, 5, 755-784.	2.7	14
118	Timeâ€sliced Mössbauer absorption spectroscopy using synchrotron radiation and a resonant Bragg monochromator. Journal of Applied Physics, 1996, 79, 3686-3690.	2.5	13
119	Imaging the temporal evolution of nuclear resonant x-ray scattering. Applied Physics Letters, 2001, 78, 2970-2972.	3.3	13
120	Atomic vibrational density of states in crystalline and amorphous Tb1â€Fexalloy thin films studied by nuclear resonant inelastic x-ray scattering (NRIXS). Journal of Physics Condensed Matter, 2004, 16, S379-S393.	1.8	13
121	Nuclear Resonance Vibrational Spectra of Five-Coordinate Imidazole-Ligated Iron(II) Porphyrinates. Inorganic Chemistry, 2012, 51, 1359-1370.	4.0	13
122	Vibrational Probes and Determinants of the $S = 0 \rightleftharpoons S = 2$ Spin Crossover in Five-Coordinate [Fe(TPP)(CN)] <sup>+</sup> . Inorganic Chemistry, 2012, 51, 11769-11778.	4.0	13
123	Mechanisms for pressure-induced crystal-crystal transition, amorphization, and devitrification of SnI4. Journal of Chemical Physics, 2015, 143, 164508.	3.0	13
124	Lattice Dynamics and Inelastic Nuclear Resonant X-Ray Scattering. Hyperfine Interactions, 2001, 135, 295-310.	0.5	12
125	Nuclear resonance vibrational spectroscopic and computational study of high-valent diiron complexes relevant to enzyme intermediates. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6275-6280.	7.1	12
126	Exploring the Vibrational Side of Spinâ€Phonon Coupling in Singleâ€Molecule Magnets via <sup>161</sup> Dy Nuclear Resonance Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 8818-8822.	13.8	12



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127	Effect of magnetic impurities on high-temperature superconductivity in La <sub>1.85</sub> Sr <sub>0.15</sub> CuO <sub>4</sub> . <i>Physical Review B</i> , 1987, 36, 5258-5262.	3.2	11
128	X-ray dichroism and Faraday effect studies in ordered and disordered Fe <sub>3</sub> Pt. <i>Review of Scientific Instruments</i> , 1992, 63, 1221-1224.	1.3	11
129	Phonon-like excitation in secondary and tertiary structure of hydrated protein powders. <i>Soft Matter</i> , 2011, 7, 9848.	2.7	11
130	Influence of interfaces on the phonon density of states of nanoscale metallic multilayers: Phonon confinement and localization. <i>Physical Review B</i> , 2018, 98, .	3.2	11
131	Synthetic Model Complex of the Key Intermediate in Cytochrome P450 Nitric Oxide Reductase. <i>Inorganic Chemistry</i> , 2019, 58, 1398-1413.	4.0	11
132	Structural, redox and isotopic behaviors of iron in geological silicate glasses: A NRIXS study of Lamb-Mössbauer factors and force constants. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 321, 184-205.	3.9	11
133	Probing Heme Vibrational Anisotropy: An Imidazole Orientation Effect?. <i>Inorganic Chemistry</i> , 2013, 52, 11361-11369.	4.0	10
134	Synthesis and electrochemical properties of novel LiFeTiO <sub>4</sub> and Li <sub>2</sub> FeTiO <sub>4</sub> polymorphs with the CaFe <sub>2</sub> O <sub>4</sub> -type structures. <i>Journal of Power Sources</i> , 2015, 273, 396-403.	7.8	10
135	Exploring the Limits of Dative Boratrane Bonding: Iron as a Strong Lewis Base in Low-Valent Non-Heme Iron-Nitrosyl Complexes. <i>Inorganic Chemistry</i> , 2020, 59, 14967-14982.	4.0	10
136	The Water-Fe-Pressure dependent single-crystal elastic properties of wadsleyite: Implications for the seismic anisotropy in the upper Mantle Transition Zone. <i>Earth and Planetary Science Letters</i> , 2021, 565, 116955.	4.4	10
137	Precision white-beam slit design for high power-density x-ray undulator beamlines at the Advanced Photon Source. <i>Review of Scientific Instruments</i> , 1995, 66, 1789-1791.	1.3	9
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