

# Michael Hu

## List of Publications by Year in descending order

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142  
papers

5,370  
citations

70961

41  
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95083

68  
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145  
all docs

145  
docs citations

145  
times ranked

5316  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin transition of iron in magnesiowüstite in the Earth's lower mantle. <i>Nature</i> , 2005, 436, 377-380.	13.7	323
2	Phonon Density of States of Iron up to 153 Gigapascals. <i>Science</i> , 2001, 292, 914-916.	6.0	284
3	Magma redox and structural controls on iron isotope variations in Earth's mantle and crust. <i>Earth and Planetary Science Letters</i> , 2014, 398, 127-140.	1.8	214
4	Probing of bonding changes in B <sub>2</sub> O <sub>3</sub> glasses at high pressure with inelastic X-ray scattering. <i>Nature Materials</i> , 2005, 4, 851-854.	13.3	178
5	The formation of sp <sup>3</sup> bonding in compressed BN. <i>Nature Materials</i> , 2004, 3, 111-114.	13.3	162
6	A synchrotron Mössbauer spectroscopy study of (Mg,Fe)SiO <sub>3</sub> perovskite up to 120 GPa. <i>American Mineralogist</i> , 2005, 90, 199-205.	0.9	161
7	Another mechanism for the insulator-metal transition observed in Mott insulators. <i>Physical Review B</i> , 2008, 77, .	1.1	155
8	X-ray Raman scattering study of MgSiO <sub>3</sub> glass at high pressure: Implication for triclustered MgSiO <sub>3</sub> melt in Earth's mantle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7925-7929.	3.3	123
9	A general moment NRIXS approach to the determination of equilibrium Fe isotopic fractionation factors: Application to goethite and jarosite. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 94, 254-275.	1.6	109
10	Sound velocities of iron-nickel and iron-silicon alloys at high pressures. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	107
11	First-Order Isostructural Mott Transition in Highly Compressed MnO. <i>Physical Review Letters</i> , 2005, 94, 115502.	2.9	106
12	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.	1.9	105
13	Measuring velocity of sound with nuclear resonant inelastic x-ray scattering. <i>Physical Review B</i> , 2003, 67, .	1.1	102
14	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.	3.3	96
15	Phonon anharmonicity and negative thermal expansion in SnSe. <i>Physical Review B</i> , 2016, 94, .	1.1	90
16	X-ray-Induced Dissociation of H <sub>2</sub> O and Formation of an O <sub>2</sub> -H <sub>2</sub> Alloy at High Pressure. <i>Science</i> , 2006, 314, 636-638.	6.0	84
17	Electronic bonding transition in compressed SiO <sub>2</sub> glass. <i>Physical Review B</i> , 2007, 75, .	1.1	81
18	Pressure-induced electronic spin transition of iron in magnesiowüstite-(Mg,Fe)O. <i>Physical Review B</i> , 2006, 73, .	1.1	78

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19	Element-Resolved Thermodynamics of Magnetocaloric $\text{LaFe}_{13}\text{As}_7$ . Physical Review Letters, 2015, 114, 057202.	2.9	78
20	A Combined Probe-Molecule, $\text{Mn}^{2+}$ -ssbauer, Nuclear Resonance Vibrational Spectroscopy, and Density Functional Theory Approach for Evaluation of Potential Iron Active Sites in an Oxygen Reduction Reaction Catalyst. Journal of Physical Chemistry C, 2017, 121, 16283-16290.	1.5	75
21	Inelastic nuclear resonant scattering with sub-meV energy resolution. Applied Physics Letters, 1997, 71, 2112-2114.	1.5	71
22	Nuclear Inelastic X-Ray Scattering of FeO to 48 GPa. Physical Review Letters, 2001, 87, 255501.	2.9	71
23	Microscopic Dynamics of Liquid Aluminum Oxide. Science, 2003, 299, 2047-2049.	6.0	71
24	Structural characterization of a non-heme iron active site in zeolites that hydroxylates methane. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4565-4570.	3.3	66
25	Magnetic transition in compressed $\text{Fe}_3\text{C}$ from x-ray emission spectroscopy. Physical Review B, 2004, 70, .	1.1	64
26	Spinel olivine pyroxene equilibrium iron isotopic fractionation and applications to natural peridotites. Geochimica Et Cosmochimica Acta, 2015, 169, 184-199.	1.6	63
27	Vibrational Dynamics Studies by Nuclear Resonant Inelastic X-Ray Scattering. Hyperfine Interactions, 2002, 144/145, 3-20.	0.2	62
28	Effect of isotopic composition on the lattice parameter of germanium measured by x-ray backscattering. Physical Review B, 2003, 67, .	1.1	62
29	Multiple-beam x-ray diffraction near exact backscattering in silicon. Physical Review B, 2001, 63, .	1.1	57
30	The Semireduced Mechanism for Nitric Oxide Reduction by Non-Heme Diiron Complexes: Modeling Flavodiiron Nitric Oxide Reductases. Journal of the American Chemical Society, 2018, 140, 2562-2574.	6.6	57
31	Unusual Synthetic Pathway for an $\{\text{Fe}(\text{NO})_2\}^9$ Dinitrosyl Iron Complex (DNIC) and Insight into DNIC Electronic Structure via Nuclear Resonance Vibrational Spectroscopy. Inorganic Chemistry, 2016, 55, 5485-5501.	1.9	55
32	Temperature of Earth's core constrained from melting of Fe and $\text{Fe}_{0.9}\text{Ni}_{0.1}$ at high pressures. Earth and Planetary Science Letters, 2016, 447, 72-83.	1.8	55
33	Peroxide Activation for Electrophilic Reactivity by the Binuclear Non-heme Iron Enzyme AurF. Journal of the American Chemical Society, 2017, 139, 7062-7070.	6.6	55
34	X-ray Raman scattering studies on $\text{C}_{60}$ fullerenes and multi-walled carbon nanotubes under pressure. Diamond and Related Materials, 2007, 16, 1250-1253.	1.8	53
35	Operando Phonon Studies of the Protonation Mechanism in Highly Active Hydrogen Evolution Reaction Pentlandite Catalysts. Journal of the American Chemical Society, 2017, 139, 14360-14363.	6.6	53
36	Effects of Noncovalent Interactions on High-Spin $\text{Fe}(\text{IV})$ Oxido Complexes. Journal of the American Chemical Society, 2020, 142, 11804-11817.	6.6	53

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37	Inelastic x-ray scattering of dense solid oxygen: Evidence for intermolecular bonding. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11640-11644.	3.3	51
38	Phase transition with suppression of magnetism in BiFeO <sub>3</sub> at high pressure. JETP Letters, 2005, 82, 224-227.	0.4	47
39	New Cubic Phase of Li <sub>3</sub> N: Stability of the N <sup>3-</sup> Ion to 200 GPa. Physical Review Letters, 2005, 95, 165503.	2.9	45
40	Impact of lattice dynamics on the phase stability of metamagnetic FeRh: Bulk and thin films. Physical Review B, 2016, 94, .	1.1	44
41	Experimental determination of the elasticity of iron at high pressure. Journal of Geophysical Research, 2008, 113, .	3.3	43
42	Ferric Heme-Nitrosyl Complexes: Kinetically Robust or Unstable Intermediates?. Inorganic Chemistry, 2017, 56, 10513-10528.	1.9	40
43	Reduced partition function ratios of iron and oxygen in goethite. Geochimica Et Cosmochimica Acta, 2015, 151, 19-33.	1.6	38
44	4f Delocalization in Gd: Inelastic X-Ray Scattering at Ultrahigh Pressure. Physical Review Letters, 2006, 96, 215701.	2.9	37
45	Data analysis for inelastic nuclear resonant absorption experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 428, 551-555.	0.7	36
46	Introduction to nuclear resonant scattering with synchrotron radiation. , 1998, 113, 47-58.		34
47	Moments in nuclear resonant inelastic x-ray scattering and their applications. Physical Review B, 2013, 87, .	1.1	34
48	Iron isotopic fractionation between silicate mantle and metallic core at high pressure. Nature Communications, 2017, 8, 14377.	5.8	34
49	Non-heme High-Spin {FeNO} <sup>6+</sup> Complexes: One Ligand Platform Can Do It All. Journal of the American Chemical Society, 2018, 140, 11341-11359.	6.6	34
50	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. Geochimica Et Cosmochimica Acta, 2021, 302, 18-45.	1.6	34
51	Nitrosylation of Nitric Oxide-Sensing Regulatory Proteins Containing [4Fe-4S] Clusters Gives Rise to Multiple Iron-Nitrosyl Complexes. Angewandte Chemie - International Edition, 2016, 55, 14575-14579.	7.2	33
52	NRVS Studies of the Peroxide Shunt Intermediate in a Rieske Dioxygenase and Its Relation to the Native Fe <sup>II</sup> O <sub>2</sub> Reaction. Journal of the American Chemical Society, 2018, 140, 5544-5559.	6.6	31
53	Experimental constraints on the sound velocities of cementite Fe <sub>3</sub> C to core pressures. Earth and Planetary Science Letters, 2018, 494, 164-171.	1.8	29
54	Terminal Hydride Species in [FeFe]-Hydrogenases Are Vibrationally Coupled to the Active Site Environment. Angewandte Chemie - International Edition, 2018, 57, 10605-10609.	7.2	29

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55	<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.	1.0	29
56	Heating events in the nascent solar system recorded by rare earth element isotopic fractionation in refractory inclusions. <i>Science Advances</i> , 2021, 7, .	4.7	28
57	Phonon density of states in epitaxial Fe/Cr(0 0 1) superlattices. , 2000, 126, 363-366.		27
58	Structure and vibrational dynamics of interfacial Sn layers in Sn/Si multilayers. <i>Physical Review B</i> , 2001, 64, .	1.1	27
59	Absence of Magnetism in Hcp Iron-Nickel at 11 K. <i>Physical Review Letters</i> , 2006, 97, 087202.	2.9	27
60	Pressure-induced valence change in $\text{YbAl}_3$ . A combined high-pressure inelastic x-ray scattering and theoretical investigation. <i>Physical Review B</i> , 2008, 78, .	1.1	27
61	Comprehensive Fe <sup>II</sup> Ligand Vibration Identification in {FeNO} <sup>6+</sup> Hemes. <i>Journal of the American Chemical Society</i> , 2014, 136, 18100-18110.	6.6	26
62	Operando NRIXS and XAFS Investigation of Segregation Phenomena in Fe <sub>2</sub> Cu and FeAg Nanoparticle Catalysts during CO <sub>2</sub> Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22667-22674.	7.2	26
63	Pressure-induced electron spin transition in the paramagnetic phase of the GdFe <sub>3</sub> (BO <sub>3</sub> ) <sub>4</sub> Heisenberg magnet. <i>JETP Letters</i> , 2007, 84, 518-523.	0.4	24
64	Phonon density of states of self-assembled isolated Fe-rich Fe-Pt alloy nanoclusters. <i>Physical Review B</i> , 2009, 80, .	1.1	22
65	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.	1.6	22
66	Crystal monochromator with a resolution beyond 108. <i>Journal of Synchrotron Radiation</i> , 2001, 8, 1082-1086.	1.0	21
67	Four-reflection $\pi$ -meV-monochromators for 20-30keV synchrotron radiation. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 557, 670-675.	0.7	21
68	X-ray Raman Spectroscopic Study of Benzene at High Pressure. <i>Journal of Physical Chemistry B</i> , 2007, 111, 11635-11637.	1.2	21
69	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.	1.9	21
70	Phonon density of states of Sn in textured SnO under high pressure: Comparison of nuclear inelastic x-ray scattering spectra to a shell model. <i>Physical Review B</i> , 2006, 74, .	1.1	19
71	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.	1.9	19
72	Electronic Structures of an [Fe(NNR <sub>2</sub> ) <sub>2</sub> ] <sup>+</sup> Redox Series: Ligand Noninnocence and Implications for Catalytic Nitrogen Fixation. <i>Inorganic Chemistry</i> , 2019, 58, 3535-3549.	1.9	19

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73	A high-resolution monochromator for inelastic nuclear resonant scattering experiments using. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1999, 430, 271-276.	0.7	18
74	Atomic form-factor measurements in the low-momentum transfer region for Li, Be, and Al by inelastic x-ray scattering. Physical Review B, 2008, 77, .	1.1	18
75	<sup>161</sup> Dy Time-Resolved Domain Synchrotron Mössbauer Spectroscopy for Investigating Single-Molecule Magnets Incorporating Dy Ions. Angewandte Chemie - International Edition, 2019, 58, 3444-3449.	7.2	18
76	Magnetism of europium under extreme pressures. Physical Review B, 2016, 93, .	1.1	17
77	Mechanism of selective benzene hydroxylation catalyzed by iron-containing zeolites. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12124-12129.	3.3	17
78	Iron isotopic fractionation in mineral phases from Earth's lower mantle: Did terrestrial magma ocean crystallization fractionate iron isotopes?. Earth and Planetary Science Letters, 2019, 506, 113-122.	1.8	17
79	High-energy-resolution monochromator for <sup>83</sup> Kr nuclear resonant scattering. Review of Scientific Instruments, 2002, 73, 1608-1610.	0.6	16
80	Synchrotron Mossbauer spectroscopic study of ferropericlasite at high pressures and temperatures. American Mineralogist, 2009, 94, 594-599.	0.9	16
81	Seismic parameters of hcp-Fe alloyed with Ni and Si in the Earth's inner core. Journal of Geophysical Research: Solid Earth, 2016, 121, 610-623.	1.4	16
82	A compact membrane-driven diamond anvil cell and cryostat system for nuclear resonant scattering at high pressure and low temperature. Review of Scientific Instruments, 2017, 88, 125109.	0.6	16
83	Influence of hydrogenation on the vibrational density of states of magnetocaloric $\text{LaFe}_2\text{Si}_2\text{H}$ . Physical Review B, 2020, 101, 114407.	1.1	15
84	Atom clusters and vibrational excitations in chemically-disordered Pt <sub>35</sub> Fe. Physical Review B, 2000, 61, 14517-14522.	1.1	14
85	Nuclear resonant inelastic X-ray scattering at high pressure and low temperature. Journal of Synchrotron Radiation, 2015, 22, 760-765.	1.0	14
86	Momentum-Volume Coupling in $\text{LaFe}_{1-x}\text{Si}_x$ . Physica Status Solidi (B): Basic Research, 2018, 255, 1700465.	0.7	14
87	Nuclear Resonance Vibrational Spectroscopy Definition of $\text{O}_2$ Intermediates in an Extradial Dioxygenase: Correlation to Crystallography and Reactivity. Journal of the American Chemical Society, 2018, 140, 16495-16513.	6.6	14
88	Determining the vibrational entropy change in the giant magnetocaloric material $\text{LaFe}_{1-x}\text{Si}_x$ by nuclear resonant inelastic x-ray scattering. Physical Review B, 2018, 98, .	1.1	14
89	Elastic and magnetic properties of Fe <sub>3</sub> P up to core pressures: Phosphorus in the Earth's core. Earth and Planetary Science Letters, 2020, 531, 115974.	1.8	14
90	Hard x-ray radiation induced dissociation of N <sub>2</sub> and O <sub>2</sub> molecules and the formation of ionic nitrogen oxide phases under pressure. Physical Review B, 2006, 74, .	1.1	13

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91	Mechanisms for pressure-induced crystal-crystal transition, amorphization, and devitrification of Sn <sub>4</sub> . Journal of Chemical Physics, 2015, 143, 164508.	1.2	13
92	Fast temperature spectrometer for samples under extreme conditions. Review of Scientific Instruments, 2015, 86, 013105.	0.6	12
93	Exploring the Vibrational Side of Spin-Phonon Coupling in Single-Molecule Magnets via <sup>161</sup> Dy Nuclear Resonance Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 8818-8822.	7.2	12
94	Valence Band X-Ray Emission Spectra of Compressed Germanium. Physical Review Letters, 2006, 96, 137402.	2.9	11
95	Influence of interfaces on the phonon density of states of nanoscale metallic multilayers: Phonon confinement and localization. Physical Review B, 2018, 98, .	1.1	11
96	Synthetic Model Complex of the Key Intermediate in Cytochrome P450 Nitric Oxide Reductase. Inorganic Chemistry, 2019, 58, 1398-1413.	1.9	11
97	The influence of phonon softening on the superconducting critical temperature of Sn nanostructures. Scientific Reports, 2020, 10, 5729.	1.6	11
98	Structural, redox and isotopic behaviors of iron in geological silicate glasses: A NRIXS study of Lamb-Mössbauer factors and force constants. Geochimica Et Cosmochimica Acta, 2022, 321, 184-205.	1.6	11
99	Partial phonon densities of states of Fe <sup>57</sup> in Fe-Cr: Analysis by a local-order cluster expansion. Physical Review B, 2007, 75, .	1.1	10
100	Probing Heme Vibrational Anisotropy: An Imidazole Orientation Effect?. Inorganic Chemistry, 2013, 52, 11361-11369.	1.9	10
101	Experimental observation of electron-phonon coupling enhancement in Sn nanowires caused by phonon confinement effects. Physical Review B, 2019, 99, .	1.1	10
102	Exploring the Limits of Dative Boratrane Bonding: Iron as a Strong Lewis Base in Low-Valent Non-Heme Iron-Nitrosyl Complexes. Inorganic Chemistry, 2020, 59, 14967-14982.	1.9	10
103	Distortion of the [FeNO] <sub>2</sub> Core in Flavodiiron Nitric Oxide Reductase Models Inhibits N≡N Bond Formation and Promotes Formation of Unusual Dinitrosyl Iron Complexes: Implications for Catalysis and Reactivity. Journal of the American Chemical Society, 2022, 144, 3804-3820.	6.6	10
104	Theoretical and experimental study of $\sqrt{3}\times\sqrt{3}$ -Sn deposited on CdTe(001). Physical Review B, 2003, 67, .	1.1	9
105	Bonding changes in single wall carbon nanotubes (SWCNT) on Ti and TiH <sub>2</sub> addition probed by X-ray Raman scattering. Diamond and Related Materials, 2007, 16, 1136-1139.	1.8	9
106	Development of an integrated four-channel fast avalanche-photodiode detector system with nanosecond time resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 870, 43-49.	0.7	9
107	Pressure-induced loss of electronic interlayer state and metallization in the ionic solid $\text{Li}^+\text{MnO}_2$ . Experiment and theory. Physical Review B, 2008, 78, .	1.1	8
108	Phonon Density of States and Elastic Properties of Fe-based Materials under Compression. Hyperfine Interactions, 2004, 153, 3-15.	0.2	7

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109	Effects of vacancies on phonon entropy of $\text{FeAl}$ . Physical Review B, 2009, 80, .	1.1	7
110	Interplay between lattice dynamics and superconductivity in Nb <sub>3</sub> Sn thin films. Physical Review B, 2013, 88, .	1.1	7
111	Lattice dynamics and elasticity in thermoelectric $\text{Mg}_2\text{Sb}$ . Physical Review Materials, 2019, 3, .	0.2	6
112	Partial Phonon Density of States of Dysprosium and its Compounds Measured Using Inelastic Nuclear Resonance Scattering. Hyperfine Interactions, 2004, 153, 17-24.	1.9	6
113	Quantitative Vibrational Dynamics of the Metal Site in a Tin Porphyrin: An IR, NRVs, and DFT Study. Inorganic Chemistry, 2013, 52, 9948-9953.	1.9	6
114	Anisotropic Iron Motion in Nitrosyl Iron Porphyrinates: Natural and Synthetic Hemes. Inorganic Chemistry, 2014, 53, 2582-2590.	0.2	6
115	Some notes on data analysis for nuclear resonant inelastic x-ray scattering. Hyperfine Interactions, 2016, 237, 1.	1.3	6
116	Vibrational dynamics (IR, Raman, NRVs) and a DFT study of a new antitumor tetranuclearstannoxane cluster, Sn(IV)-oxo-{di-o-vanillin} dimethyl dichloride. Physical Chemistry Chemical Physics, 2016, 18, 17805-17809.	1.1	6
117	Lattice dynamics in Sn nanoislands and cluster-assembled films. Physical Review B, 2017, 95, .	1.9	6
118	How Does a Heme Carbene Differ from Diatomic Ligated (NO, CO, and CN <sup>≡</sup> ) Analogues in the Axial Bond?. Inorganic Chemistry, 2018, 57, 8788-8795.	5	5
119	Relaxation experiments with synchrotron radiation. , 1998, 113, 81-95.	1.6	5
120	Iron force constants of bridgmanite at high pressure: Implications for iron isotope fractionation in the deep mantle. Geochimica Et Cosmochimica Acta, 2021, 294, 215-231.	1.1	5
121	Onset of anharmonicity and thermal conductivity in SnSe. Physical Review B, 2021, 104, .	1.0	4
122	Vibrational dynamics of the host framework in Sn clathrates. Physical Review B, 2014, 90, .	1.7	4
123	Ultra-stable sub-meV monochromator for hard X-rays. Journal of Synchrotron Radiation, 2015, 22, 1155-1162.	1.6	4
124	3D Motions of Iron in Six-coordinate {FeNO} <sub>7</sub> Hemes by Nuclear Resonance Vibration Spectroscopy. Chemistry - A European Journal, 2016, 22, 6323-6332.	1.6	4
125	Terminal Hydride Species in [FeFe]-Hydrogenases Are Vibrationally Coupled to the Active Site Environment. Angewandte Chemie, 2018, 130, 10765-10769.	1.6	4
126	161 Dy Time-Domain Synchrotron Mössbauer Spectroscopy for Investigating Single-Molecule Magnets Incorporating Dy Ions. Angewandte Chemie, 2019, 131, 3482-3487.		



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127	Orbital energy mismatch engenders high-spin ground states in heterobimetallic complexes. <i>Chemical Science</i> , 2020, 11, 9971-9977.	3.7	4
128	Untersuchung von Schwingungen in Bezug auf Spin-Phonon-Kopplung in Einzelmolekülmagneten mittels nuklearer inelastischer Streuung am <sup>161</sup> Dy-Kern. <i>Angewandte Chemie</i> , 2020, 132, 8902-8907.	1.6	4
129	<sup>57</sup> Fe Mössbauer isomer shift of pure iron and iron oxides at high pressure—An experimental and theoretical study. <i>Journal of Chemical Physics</i> , 2021, 154, 214104.	1.2	4
130	Interface-related magnetic and vibrational properties in Fe/MgO heterostructures from nuclear resonant spectroscopy and first-principles calculations. <i>Physical Review Materials</i> , 2020, 4, .	0.9	4
131	Changes in vibrational entropy during the early stages of chemical unmixing in fcc Cu-6% Fe. <i>Acta Materialia</i> , 2013, 61, 7466-7472.	3.8	2
132	Publisher's Note: Interplay between lattice dynamics and superconductivity in Nb <sub>3</sub> Sn thin films [Phys. Rev. B 88, 045437 (2013)]. <i>Physical Review B</i> , 2013, 88, .	1.1	2
133	Confined lattice dynamics of single and quadruple SnSe bilayers in [(SnSe) <sub>1.04</sub> ] <sub>m</sub> [MoSe <sub>2</sub> ] <sub>n</sub> heterocrystals. <i>Nanoscale</i> , 2016, 8, 856-861.	2.8	2
134	Microscopic phase diagram of LaFeAsO single crystals under pressure. <i>Physical Review B</i> , 2018, 98, .	1.1	2
135	Operando NRIXS and XAFS Investigation of Segregation Phenomena in Fe-Cu and Fe-Ag Nanoparticle Catalysts during CO <sub>2</sub> Electroreduction. <i>Angewandte Chemie</i> , 2020, 132, 22856-22863.	1.6	2
136	<title>High-resolution monochromator for inelastic scattering studies of high-energy phonons using undulator radiation at the Advanced Photon Source</title>. , 1997, 3151, 271.		1
137	Phase Transitions in Multiferroic BiFeO <sub>3</sub> . <i>Materials Research Society Symposia Proceedings</i> , 2006, 987, 1.	0.1	1
138	Influence of ligand substitution on magnetic hyperfine interaction in Dy <sup>6+</sup> -based single-molecule magnets/toroics. <i>Hyperfine Interactions</i> , 2019, 240, 1.	0.2	1
139	Synchrotron Moessbauer Spectroscopy and Resistivity Studies of Iron Oxide Under High Pressure. <i>Materials Research Society Symposia Proceedings</i> , 2006, 987, 1.	0.1	0
140	Microfocusing options for the inelastic X-ray scattering beamline at sector 3 of the Advanced Photon Source. <i>Journal of Synchrotron Radiation</i> , 2014, 21, 488-496.	1.0	0
141	Rücktitelbild: <sup>161</sup> Dy Time-Domain Synchrotron Mössbauer Spectroscopy for Investigating Single-Molecule Magnets Incorporating Dy Ions ( <i>Angew. Chem.</i> 11/2019). <i>Angewandte Chemie</i> , 2019, 131, 3690-3690.	1.6	0
142	High-throughput nuclear resonance time domain interferometry using annular slits. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 677-686.	1.0	0