Stephen P Cramer

List of Publications by Year
in descending order

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150 papers	7,296 citations	38742 50 h-index	64796 79 g-index
155 all docs	155 docs citations	155 times ranked	5269 citing authors

#	Article	IF	Citations
1	Absence of Mn-Centered Oxidation in the S2â†' S3Transition:Â Implications for the Mechanism of Photosynthetic Water Oxidation. Journal of the American Chemical Society, 2001, 123, 7804-7820.	13.7	295
2	The molybdenum site of nitrogenase. Preliminary structural evidence from x-ray absorption spectroscopy. Journal of the American Chemical Society, 1978, 100, 3398-3407.	13.7	227
3	Determination of the nitrogen chemical structures in petroleum asphaltenes using XANES spectroscopy. Journal of the American Chemical Society, 1993, 115, 252-258.	13.7	210
4	The molybdenum site of nitrogenase. 2. A comparative study of molybdenum-iron proteins and the iron-molybdenum cofactor by x-ray absorption spectroscopy. Journal of the American Chemical Society, 1978, 100, 3814-3819.	13.7	207
5	The Electronic Structure of Mn in Oxides, Coordination Complexes, and the Oxygen-Evolving Complex of Photosystem II Studied by Resonant Inelastic X-ray Scattering. Journal of the American Chemical Society, 2004, 126, 9946-9959.	13.7	177
6	Copper L-edge spectral studies: a direct experimental probe of the ground-state covalency in the blue copper site in plastocyanin. Journal of the American Chemical Society, 1993, 115, 2968-2969.	13.7	157
7	Direct Observation of an Iron-Bound Terminal Hydride in [FeFe]-Hydrogenase by Nuclear Resonance Vibrational Spectroscopy. Journal of the American Chemical Society, 2017, 139, 4306-4309.	13.7	155
8	A Quantitative Description of the Ground-State Wave Function of CuAby X-ray Absorption Spectroscopy:Â Comparison to Plastocyanin and Relevance to Electron Transfer. Journal of the American Chemical Society, 2001, 123, 5757-5767.	13.7	153
9	[FeFe]-Hydrogenase Maturation: HydG-Catalyzed Synthesis of Carbon Monoxide. Journal of the American Chemical Society, 2010, 132, 9247-9249.	13.7	149
10	High-Yield Expression of Heterologous [FeFe] Hydrogenases in Escherichia coli. PLoS ONE, 2010, 5, e15491.	2.5	144
11	Bulk-sensitive XAS characterization of light elements: from X-ray Raman scattering to X-ray Raman spectroscopy. Microchemical Journal, 2002, 71, 221-230.	4.5	141
12	Studies of the ferric forms of cytochrome P-450 and chloroperoxidase by extended x-ray absotption fine structure. Characterization of the iron-nitrogen and iron-sulfur distances. Journal of the American Chemical Society, 1978, 100, 7282-7290.	13.7	140
13	A systematic x-ray absorption study of molybdenum complexes. The accuracy of structural information from extended x-ray absorption fine structure. Journal of the American Chemical Society, 1978, 100, 2748-2761.	13.7	138
14	X-ray magnetic circular dichroismâ€"a high energy probe of magnetic properties. Coordination Chemistry Reviews, 2005, 249, 3-30.	18.8	132
15	Synthesis of the 2Fe subcluster of the [FeFe]-hydrogenase H cluster on the HydF scaffold. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10448-10453.	7.1	129
16	Characterization of Iron Dinitrosyl Species Formed in the Reaction of Nitric Oxide with a Biological Rieske Center. Journal of the American Chemical Society, 2010, 132, 18168-18176.	13.7	126
17	The HydG Enzyme Generates an Fe(CO) ₂ (CN) Synthon in Assembly of the FeFe Hydrogenase H-Cluster. Science, 2014, 343, 424-427.	12.6	109
18	The molybdenum site of sulfite oxidase. Structural information from x-ray absorption spectroscopy. Journal of the American Chemical Society, 1979, 101, 2772-2774.	13.7	102

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19	Characterization of the Fe Site in Ironâ^'Sulfur Cluster-Free Hydrogenase (Hmd) and of a Model Compound via Nuclear Resonance Vibrational Spectroscopy (NRVS). Inorganic Chemistry, 2008, 47, 3969-3977.	4.0	97
20	Hydride bridge in [NiFe]-hydrogenase observed by nuclear resonance vibrational spectroscopy. Nature Communications, 2015, 6, 7890.	12.8	96
21	Site-Selective EXAFS in Mixed-Valence Compounds Using High-Resolution Fluorescence Detection:â€‰ A Study of Iron in Prussian Blue. Inorganic Chemistry, 2002, 41, 3121-3127.	4.0	95
22	A Monomeric Nickelâ^'Dioxygen Adduct Derived from a Nickel(I) Complex and O2. Inorganic Chemistry, 2004, 43, 3324-3326.	4.0	95
23	Mn K-Edge XANES and KÎ² XES Studies of Two Mnâ^'Oxo Binuclear Complexes:Â Investigation of Three Different Oxidation States Relevant to the Oxygen-Evolving Complex of Photosystem II. Journal of the American Chemical Society, 2001, 123, 7031-7039.	13.7	94
24	In situx-ray absorption spectroscopic study of the Li[Ni1â^•3Co1â^•3Mn1â^•3]O2 cathode material. Journal of Applied Physics, 2005, 97, 113523.	2.5	92
25	Spin-polarized x-ray emission of3dtransition-metal ions: â€ƒA comparison viaKÎ±andKÎ²detection. Physical Review B, 1997, 56, 4553-4564.	3.2	89
26	Dioxygen Activation by a Nickel Thioether Complex:Â Characterization of a NiIII2(Î¼-O)2Core. Journal of the American Chemical Society, 2001, 123, 9194-9195.	13.7	84
27	X-ray absorption spectroscopic evidence for a unique nickel site in Clostridium thermoaceticum carbon monoxide dehydrogenase. Inorganic Chemistry, 1987, 26, 2477-2479.	4.0	81
28	Characterization of Chromodulin by X-ray Absorption and Electron Paramagnetic Resonance Spectroscopies and Magnetic Susceptibility Measurements. Journal of the American Chemical Society, 2003, 125, 774-780.	13.7	80
29	Cell-free H-cluster Synthesis and [FeFe] Hydrogenase Activation: All Five CO and CNâ^' Ligands Derive from Tyrosine. PLoS ONE, 2011, 6, e20346.	2.5	79
30	Reaction Coordinate Leading to H₂ Production in [FeFe]-Hydrogenase Identified by Nuclear Resonance Vibrational Spectroscopy and Density Functional Theory. Journal of the American Chemical Society, 2017, 139, 16894-16902.	13.7	78
31	NsrR from Streptomyces coelicolor Is a Nitric Oxide-sensing [4Fe-4S] Cluster Protein with a Specialized Regulatory Function. Journal of Biological Chemistry, 2015, 290, 12689-12704.	3.4	77
32	Molecular Structure of Nitrogen in Coal from XANES Spectroscopy. Applied Spectroscopy, 1993, 47, 1268-1275.	2.2	75
33	Normal-Mode Analysis of FeCl4-and Fe2S2Cl42-via Vibrational MÃ¶ssbauer, Resonance Raman, and FT-IR Spectroscopies. Inorganic Chemistry, 2005, 44, 5562-5570.	4.0	75
34	How Nitrogenase Shakes â^' Initial Information about Pâ^'Cluster and FeMo-cofactor Normal Modes from Nuclear Resonance Vibrational Spectroscopy (NRVS). Journal of the American Chemical Society, 2006, 128, 7608-7612.	13.7	73
35	Identification of Protein-Bound Dinitrosyl Iron Complexes by Nuclear Resonance Vibrational Spectroscopy. Journal of the American Chemical Society, 2010, 132, 6914-6916.	13.7	72
36	Normal Mode Analysis ofPyrococcus furiosusRubredoxin via Nuclear Resonance Vibrational Spectroscopy (NRVS) and Resonance Raman Spectroscopy. Journal of the American Chemical Society, 2005, 127, 14596-14606.	13.7	71

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37	Characterization of a Genuine Iron(V)â^'Nitrido Species by Nuclear Resonant Vibrational Spectroscopy Coupled to Density Functional Calculations. Journal of the American Chemical Society, 2007, 129, 11053-11060.	13.7	70
38	Functional copper at the acetyl-CoA synthase active site. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3689-3694.	7.1	69
39	Spectroscopic Investigations of [FeFe] Hydrogenase Maturated with [⁵⁷Fe₂(adt)(CN)₂(CO)₄]^{2â€“}. Journal of the American Chemical Society, 2015, 137, 8998-9005.	13.7	69
40	L-Edge spectroscopy of molybdenum compounds and enzymes. Journal of the American Chemical Society, 1990, 112, 2541-2548.	13.7	68
41	Structural results relevant to the molybdenum sites in xanthine oxidase and sulfite oxidase. Crystal structures of MoO2L, L = (SCH2CH2)2NCH2CH2X with X = SCH3, N(CH3)2. Journal of the American Chemical Society, 1979, 101, 2774-2776.	13.7	67
42	X-ray absorption edge and EXAFS spectroscopic studies of molybdenum ions in aqueous solution. Journal of the American Chemical Society, 1983, 105, 799-802.	13.7	65
43	Iron L-Edge X-ray Absorption Spectroscopy of Myoglobin Complexes and Photolysis Products. Journal of the American Chemical Society, 1997, 119, 4921-4928.	13.7	65
44	Chemically Distinct Ni Sites in the A-Cluster in Subunit Î² of the Acetyl-CoA Decarbonylase/Synthase Complex fromMethanosarcinathermophila:Â Ni L-Edge Absorption and X-ray Magnetic Circular Dichroism Analyses. Journal of the American Chemical Society, 2004, 126, 88-95.	13.7	64
45	Spectroscopic and Computational Evidence that [FeFe] Hydrogenases Operate Exclusively with CO-Bridged Intermediates. Journal of the American Chemical Society, 2020, 142, 222-232.	13.7	63
46	Observation of the Feï£¿CN and Feï£¿CO Vibrations in the Active Site of [NiFe] Hydrogenase by Nuclear Resonance Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2013, 52, 724-728.	13.8	60
47	Cysteine as a ligand platform in the biosynthesis of the FeFe hydrogenase H cluster. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11455-11460.	7.1	60
48	Extended X-ray Absorption Fine Structure and Nuclear Resonance Vibrational Spectroscopy Reveal that NifB-co, a FeMo-co Precursor, Comprises a 6Fe Core with an Interstitial Light Atom. Journal of the American Chemical Society, 2008, 130, 5673-5680.	13.7	59
49	Structural Investigations of LiFePO4Electrodes by Fe X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 7046-7051.	2.6	56
50	EXAFS and NRVS Reveal a Conformational Distortion of the FeMo-cofactor in the MoFe Nitrogenase Propargyl Alcohol Complex. Journal of Inorganic Biochemistry, 2012, 112, 85-92.	3.5	50
51	A Combined NRVS and DFT Study of Fe^{IV}ï£¾O Model Complexes: A Diagnostic Method for the Elucidation of Nonâ€Heme Iron Enzyme Intermediates. Angewandte Chemie - International Edition, 2008, 47, 9071-9074.	13.8	49
52	Observation of 17O effects on MoV EPR spectra in sulfite oxidase; xanthine dehydrogenase, and MoO(SC6H5)4â^'. Biochemical and Biophysical Research Communications, 1979, 91, 434-439.	2.1	47
53	Nitrogen chemistry of kerogens and bitumens from x-ray absorption near-edge structure spectroscopy. Energy & Fuels, 1993, 7, 1128-1134.	5.1	47
54	Site-Selective XANES and EXAFS: A Demonstration with Manganese Mixtures and Mixed-Valence Complexes. Journal of the American Chemical Society, 1995, 117, 5895-5896.	13.7	46

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55	The Radical SAM Enzyme HydG Requires Cysteine and a Dangler Iron for Generating an Organometallic Precursor to the [FeFe]-Hydrogenase H-Cluster. Journal of the American Chemical Society, 2016, 138, 1146-1149.	13.7	46
56	High-resolution X-ray spectroscopy of rare events: a different look at local structure and chemistry. Journal of Synchrotron Radiation, 2001, 8, 199-203.	2.4	45
57	The A-Cluster in Subunit Î² of the Acetyl-CoA Decarbonylase/Synthase Complex from Methanosarcina thermophila: Ni and Fe K-Edge XANES and EXAFS Analyses. Journal of the American Chemical Society, 2003, 125, 15343-15351.	13.7	44
58	Observation of Feâˆ'H/D Modes by Nuclear Resonant Vibrational Spectroscopy. Journal of the American Chemical Society, 2003, 125, 4016-4017.	13.7	43
59	A Stable Monomeric Nickel Borohydride. Inorganic Chemistry, 2003, 42, 7945-7950.	4.0	43
60	New fluorescence detection system for xâ€ray absorption spectroscopy. Review of Scientific Instruments, 1981, 52, 395-399.	1.3	42
61	Inner-Shell Excitation Spectroscopy of Fused-Ring Aromatic Molecules by Electron Energy Loss and X-ray Raman Techniques. Journal of Physical Chemistry A, 2003, 107, 8512-8520.	2.5	42
62	In Situ X-Ray Absorption Spectroscopic Study of Li[sub 1.05]Ni[sub 0.35]Co[sub 0.25]Mn[sub 0.4]O[sub 2] Cathode Material Coated with LiCoO[sub 2]. Journal of the Electrochemical Society, 2007, 154, A534.	2.9	42
63	Photolysis of Hiâ€CO Nitrogenase â€“ Observation of a Plethora of Distinct CO Species Using Infrared Spectroscopy. European Journal of Inorganic Chemistry, 2011, 2011, 2064-2074.	2.0	42
64	Characterization of [4Fe-4S] Cluster Vibrations and Structure in Nitrogenase Fe Protein at Three Oxidation Levels via Combined NRVS, EXAFS, and DFT Analyses. Journal of the American Chemical Society, 2013, 135, 2530-2543.	13.7	41
65	Molybdenum X-ray absorption edges from 200 to 20,000eV: The benefits of soft X-ray spectroscopy for chemical speciation. Journal of Inorganic Biochemistry, 2009, 103, 157-167.	3.5	40
66	IRâ€Monitored Photolysis of COâ€Inhibited Nitrogenase: A Major EPRâ€Silent Species with Coupled Terminal CO Ligands. Chemistry - A European Journal, 2012, 18, 16349-16357.	3.3	40
67	Structural Characterization of CO-Inhibited Mo-Nitrogenase by Combined Application of Nuclear Resonance Vibrational Spectroscopy, Extended X-ray Absorption Fine Structure, and Density Functional Theory: New Insights into the Effects of CO Binding and the Role of the Interstitial Atom. Journal of the American Chemical Society, 2014, 136, 15942-15954.	13.7	40
68	Caught in the H inact : Crystal Structure and Spectroscopy Reveal a Sulfur Bound to the Active Site of an O 2 â€stable State of [FeFe] Hydrogenase. Angewandte Chemie - International Edition, 2020, 59, 16786-16794.	13.8	40
69	Dynamics of the [4Fe-4S] Cluster in Pyrococcus furiosus D14C Ferredoxin via Nuclear Resonance Vibrational and Resonance Raman Spectroscopies, Force Field Simulations, and Density Functional Theory Calculations. Biochemistry, 2011, 50, 5220-5235.	2.5	38
70	Electronic Structure of Chemically-Prepared LixMn2O4Determined by Mn X-ray Absorption and Emission Spectroscopies. Journal of Physical Chemistry B, 2000, 104, 9587-9596.	2.6	36
71	Structure diversity of F430 from Methanobacterium thermoautotrophicum. A nickel x-ray absorption spectroscopic study. Journal of the American Chemical Society, 1986, 108, 3120-3121.	13.7	34
72	Dynamics ofRhodobacter capsulatus[2Fe-2S] Ferredoxin VI andAquifex aeolicusFerredoxin 5 via Nuclear Resonance Vibrational Spectroscopy (NRVS) and Resonance Raman Spectroscopyâ€. Biochemistry, 2008, 47, 6612-6627.	2.5	34

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73	Dynamics of an [Fe4S4(SPh)4]2? cluster explored via IR, Raman, and nuclear resonance vibrational spectroscopy (NRVS)-analysis using 36S substitution, DFT calculations, and empirical force fields. Dalton Transactions, 2006, , 2192.	3.3	33
74	Nuclear Resonance Vibrational Spectroscopy and Electron Paramagnetic Resonance Spectroscopy of ⁵⁷Fe-Enriched [FeFe] Hydrogenase Indicate Stepwise Assembly of the H-Cluster. Biochemistry, 2013, 52, 818-826.	2.5	33
75	Nitrosylation of Nitricâ€Oxideâ€Sensing Regulatory Proteins Containing [4Feâ€4S] Clusters Gives Rise to Multiple Ironâ€“Nitrosyl Complexes. Angewandte Chemie - International Edition, 2016, 55, 14575-14579.	13.8	33
76	Reactions of molybdenum trisulfide, tungsten trisulfide, tungsten triselenide, and niobium triselenide with lithium. Metal cluster rearrangement revealed by EXAFS. Inorganic Chemistry, 1986, 25, 1461-1466.	4.0	32
77	Spin-polarized and site-selective X-ray absorption. Demonstration with Fe porphyrins and KÎ² detection. Chemical Physics Letters, 1995, 243, 469-473.	2.6	31
78	Electronic Structure of Ni Complexes by X-ray Resonance Raman Spectroscopy (Resonant Inelastic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	13.7	31
79	Resonant inelastic X-ray scattering (RIXS) spectroscopy at the Mn K absorption pre-edgeâ€”a direct probe of the 3d orbitals. Journal of Physics and Chemistry of Solids, 2005, 66, 2163-2167.	4.0	31
80	X-ray photochemistry in iron complexes from Fe(0) to Fe(IV) â€“ Can a bug become a feature?. Inorganica Chimica Acta, 2008, 361, 1157-1165.	2.4	31
81	Î±-Hydroxy coordination of mononuclear vanadyl citrate, malate and S-citramalate with N-heterocycle ligand, implying a new protonation pathway of ironâ€“vanadium cofactor in nitrogenase. Journal of Inorganic Biochemistry, 2014, 141, 114-120.	3.5	31
82	Oxo-molybdenum(V) complexes with sulfide and hydrogensulfide ligands: models for the molybdenum(V) centers of xanthine oxidase and xanthine dehydrogenase. Inorganic Chemistry, 1989, 28, 8-10.	4.0	30
83	Feâ€“H/D stretching and bending modes in nuclear resonant vibrational, Raman and infrared spectroscopies: Comparisons of density functional theory and experiment. Faraday Discussions, 2011, 148, 409-420.	3.2	29
84	Terminal Hydride Species in [FeFe]â€Hydrogenases Are Vibrationally Coupled to the Active Site Environment. Angewandte Chemie - International Edition, 2018, 57, 10605-10609.	13.8	29
85	Nuclear resonance vibrational spectroscopy reveals the FeS cluster composition and active site vibrational properties of an O₂-tolerant NAD⁺-reducing [NiFe] hydrogenase. Chemical Science, 2015, 6, 1055-1060.	7.4	27
86	Structural Investigations of Li[sub 1.5+x]Na[sub 0.5]MnO[sub 2.85]I[sub 0.12] Electrodes by Mn X-Ray Absorption Near Edge Spectroscopy. Journal of the Electrochemical Society, 2000, 147, 395.	2.9	24
87	A Practical Guide for Nuclear Resonance Vibrational Spectroscopy (NRVS) of Biochemical Samples and Model Compounds. Methods in Molecular Biology, 2014, 1122, 125-137.	0.9	23
88	High-Resolution X-ray Emission Spectroscopy of Molybdenum Compounds. Inorganic Chemistry, 2005, 44, 2579-2581.	4.0	22
89	Asymmetry in the Ligand Coordination Sphere of the [FeFe] Hydrogenase Active Site Is Reflected in the Magnetic Spin Interactions of the Aza-propanedithiolate Ligand. Journal of Physical Chemistry Letters, 2019, 10, 6794-6799.	4.6	22
90	Docking and Migration of Carbon Monoxide in Nitrogenase: The Case for Gated Pockets from Infrared Spectroscopy and Molecular Dynamics. Biochemistry, 2015, 54, 3314-3319.	2.5	21

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91	Sterically Stabilized Terminal Hydride of a Diiron Dithiolate. Inorganic Chemistry, 2018, 57, 1988-2001.	4.0	21
92	The large subunit of the regulatory [NiFe]-hydrogenase fromRalstonia eutrophaâ€“ a minimal hydrogenase?. Chemical Science, 2020, 11, 5453-5465.	7.4	20
93	Bioinorganic applications of X-ray multiplets â€” The impact of Theo Tholes's work. Journal of Electron Spectroscopy and Related Phenomena, 1997, 86, 175-183.	1.7	19
94	Structure and spectroscopy of a bidentate bis-homocitrate dioxo-molybdenum(VI) complex: Insights relevant to the structure and properties of the FeMo-cofactor in nitrogenase. Journal of Inorganic Biochemistry, 2013, 118, 100-106.	3.5	19
95	In situ anomalous small angle X-ray scattering and absorption on an operating rechargeable lithium ion battery cell. Electrochemistry Communications, 2001, 3, 136-141.	4.7	17
96	Identification of a Moâ^'Feâ^'S Cluster on NifEN by Mo K-Edge Extended X-ray Absorption Fine Structure. Journal of the American Chemical Society, 2007, 129, 3060-3061.	13.7	17
97	Observation of terahertz vibrations in Pyrococcus furiosus rubredoxin via impulsive coherent vibrational spectroscopy and nuclear resonance vibrational spectroscopy â€“ interpretation by molecular mechanics. Journal of Inorganic Biochemistry, 2007, 101, 375-384.	3.5	17
98	Hydroxy-bridged resting states of a [NiFe]-hydrogenase unraveled by cryogenic vibrational spectroscopy and DFT computations. Chemical Science, 2021, 12, 2189-2197.	7.4	17
99	Characterization of a synthetic peroxodiiron(iii) protein model complex by nuclear resonance vibrational spectroscopy. Chemical Communications, 2011, 47, 10945.	4.1	15
100	Exploring Structure and Function of Redox Intermediates in [NiFe]â€Hydrogenases by an Advanced Experimental Approach for Solvated, Lyophilized and Crystallized Metalloenzymes. Angewandte Chemie - International Edition, 2021, 60, 15854-15862.	13.8	15
101	Refinement of a Model for the Nitrogenase Moï£¿Fe Cluster Using Single-Crystal Mo and Fe EXAFS. Angewandte Chemie International Edition in English, 1993, 32, 1592-1594.	4.4	14
102	X-ray absorption spectroscopy of biological photolysis products: kilohertz photolysis and soft X-ray applications. Journal of Electron Spectroscopy and Related Phenomena, 2005, 143, 1-7.	1.7	14
103	Exploration of synchrotron MÃ¶ssbauer microscopy with micrometer resolution: forward and a new backscattering modality on natural samples. Journal of Synchrotron Radiation, 2012, 19, 814-820.	2.4	14
104	Synchrotron-based Nickel MÃ¶ssbauer Spectroscopy. Inorganic Chemistry, 2016, 55, 6866-6872.	4.0	14
105	Enzymatic and spectroscopic properties of a thermostable [NiFe]â€hydrogenase performing H2-driven NAD+-reduction in the presence of O2. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 8-18.	1.0	14
106	Highâ€Frequency Feâ€“H Vibrations in a Bridging Hydride Complex Characterized by NRVS and DFT. Angewandte Chemie - International Edition, 2018, 57, 9367-9371.	13.8	14
107	Oriented x-ray absorption spectroscopy of membrane bound metalloproteins. Physica B: Condensed Matter, 1989, 158, 81-83.	2.7	13
108	X-ray Magnetic Circular Dichroism ofPseudomonasaeruginosaNickel(II) Azurin. Journal of the American Chemical Society, 2004, 126, 5859-5866.	13.7	13

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109	Redox, haem and CO in enzymatic catalysis and regulation. Biochemical Society Transactions, 2012, 40, 501-507.	3.4	13
110	Low frequency dynamics of the nitrogenase MoFe protein via femtosecond pump probe spectroscopy â€" Observation of a candidate promoting vibration. Journal of Inorganic Biochemistry, 2015, 153, 128-135.	3.5	13
111	Preliminary Assignment of Protonated and Deprotonated Homocitrates in Extracted FeMo-Cofactors by Comparisons with Molybdenum(IV) Lactates and Oxidovanadium Glycolates. Inorganic Chemistry, 2019, 58, 2523-2532.	4.0	13
112	In Vitro Assembly as a Tool to Investigate Catalytic Intermediates of [NiFe]-Hydrogenase. ACS Catalysis, 2020, 10, 13890-13894.	11.2	13
113	NRVS for Fe in Biology: Experiment and Basic Interpretation. Methods in Enzymology, 2018, 599, 409-425.	1.0	12
114	Vibrational characterization of a diiron bridging hydride complex â€" a model for hydrogen catalysis. Chemical Science, 2020, 11, 5487-5493.	7.4	12
115	Effect of cyanide binding on the copper sites of cytochrome c oxidase: an x-ray absorption spectroscopic study. Journal of Inorganic Biochemistry, 1985, 23, 199-205.	3.5	11
116	Requirements for x-ray magnetic circular dichroism on paramagnetic biological systems and model compounds. Review of Scientific Instruments, 2002, 73, 1649-1651.	1.3	11
117	Cluster-Dependent Charge-Transfer Dynamics in Ironâ€"Sulfur Proteins. Biochemistry, 2018, 57, 978-990.	2.5	11
118	Observation of Terahertz Vibrations in the Nitrogenase FeMo Cofactor by Femtosecond Pumpâ€"Probe Spectroscopy. Angewandte Chemie - International Edition, 2010, 49, 3912-3915.	13.8	10
119	Real sample temperature: a critical issue in the experiments of nuclear resonant vibrational spectroscopyÂon biological samples. Journal of Synchrotron Radiation, 2012, 19, 257-263.	2.4	10
120	Nuclear resonance vibrational spectroscopy (NRVS) of rubredoxin and MoFe protein crystals. Hyperfine Interactions, 2013, 222, 77-90.	0.5	10
121	Spectroscopic and Computational Investigations of Ligand Binding to IspH: Discovery of Nonâ€diphosphate Inhibitors. ChemBioChem, 2017, 18, 914-920.	2.6	10
122	Nuclear Resonance Vibrational Spectroscopy: A Modern Tool to Pinpoint Site-Specific Cooperative Processes. Crystals, 2021, 11, 909.	2.2	10
123	Verfeinerung eines Modells fÃ¼r den Nitrogenase-Mo-Fe-Cluster mit Einkristall-Mo- und -Fe-EXAFS. Angewandte Chemie, 1993, 105, 1661-1663.	2.0	9
124	High-resolution monochromator for iron nuclear resonance vibrational spectroscopy of biological samples. Japanese Journal of Applied Physics, 2016, 55, 122401.	1.5	9
125	Temperature and radiation effects at the fluorine K-edge in LiF. Journal of Electron Spectroscopy and Related Phenomena, 2017, 218, 30-34.	1.7	9
126	Enantioselective Synthesis of Isotopically Labeled Homocitric Acid Lactone. Organic Letters, 2013, 15, 5615-5617.	4.6	8

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127	Characterization of the [3Feâ€“4S]^{0/1+}cluster from the D14C variant of Pyrococcus furiosus ferredoxin via combined NRVS and DFT analyses. Dalton Transactions, 2016, 45, 7215-7219.	3.3	8
128	Asymmetric Synthesis of Homocitric Acid Lactone. Journal of Organic Chemistry, 2016, 81, 11404-11408.	3.2	8
129	Inelastic X-ray Scattering of a Transition-Metal Complex (FeCl₄^{â€“}): Vibrational Spectroscopy for All Normal Modes. Inorganic Chemistry, 2013, 52, 6767-6769.	4.0	7
130	Soft X-ray absorption spectroscopy and resonant inelastic X-ray scattering spectroscopy below 100â€…eV: probing first-row transition-metalM-edges in chemical complexes. Journal of Synchrotron Radiation, 2013, 20, 614-619.	2.4	7
131	X-Ray magnetic circular dichroism at temperatures <1 K: demonstration with the blue copper site in plastocyanin. Inorganica Chimica Acta, 1996, 243, 229-232.	2.4	6
132	Kristallstruktur und Spektroskopie offenbaren einen Schwefelâ€Liganden am aktiven Zentrum einer O 2 â€stabilen [FeFe]â€Hydrogenase. Angewandte Chemie, 2020, 132, 16930.	2.0	6
133	X-ray magnetic circular dichroism spectra and distortions at Fe2+ L2,3 edges. Journal of Electron Spectroscopy and Related Phenomena, 1996, 78, 337-340.	1.7	5
134	Ultrafast Charge-Transfer Dynamics in the Ironâ€“Sulfur Complex of Rhodobacter capsulatus Ferredoxin VI. Journal of Physical Chemistry Letters, 2017, 8, 4498-4503.	4.6	5
135	Insights from 125Te and 57Fe nuclear resonance vibrational spectroscopy: a [4Feâ€“4Te] cluster from two points of view. Chemical Science, 2019, 10, 7535-7541.	7.4	5
136	Nitrosylation of Nitricâ€Oxideâ€Sensing Regulatory Proteins Containing [4Feâ€4S] Clusters Gives Rise to Multiple Ironâ€“Nitrosyl Complexes. Angewandte Chemie, 2016, 128, 14795-14799.	2.0	4
137	Terminal Hydride Species in [FeFe]â€Hydrogenases Are Vibrationally Coupled to the Active Site Environment. Angewandte Chemie, 2018, 130, 10765-10769.	2.0	4
138	From inert gas to fertilizer, fuel and fine chemicals: N2 reduction and fixation. Catalysis Today, 2022, 387, 186-196.	4.4	4
139	Vibrational Perturbation of the [FeFe] Hydrogenase H-Cluster Revealed by ¹³C²H-ADT Labeling. Journal of the American Chemical Society, 2021, 143, 8237-8243.	13.7	4
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