List of Publications by Year in descending order

217 papers	13,259 citations	19657 61 h-index	28297 105 g-index
219 all docs	219 docs citations	219 times ranked	11930 citing authors

#	Article	IF	Citations
1	The Chemical Form of Mercury in Fish. Science, 2003, 301, 1203-1203.	12.6	1,214
2	Reduction and Coordination of Arsenic in Indian Mustard. Plant Physiology, 2000, 122, 1171-1178.	4.8	525
3	A cadmium enzyme from a marine diatom. Nature, 2005, 435, 42-42.	27.8	518
4	Dinitrogen Cleavage by Three-Coordinate Molybdenum(III) Complexes:Â Mechanistic and Structural Data1. Journal of the American Chemical Society, 1996, 118, 8623-8638.	13.7	394
5	CsoR is a novel Mycobacterium tuberculosis copper-sensing transcriptional regulator. , 2007, 3, 60-68.		291
6	Sulfur K-edge x-ray absorption spectroscopy of petroleum asphaltenes and model compounds. Journal of the American Chemical Society, 1989, 111, 3182-3186.	13.7	255
7	C-Terminal Domain of the Membrane Copper Transporter Ctr1 from Saccharomyces cerevisiae Binds Four Cu(I) Ions as a Cuprous-Thiolate Polynuclear Cluster:â€‰ Sub-femtomolar Cu(I) Affinity of Three Proteins Involved in Copper Trafficking. Journal of the American Chemical Society, 2004, 126, 3081-3090.	13.7	237
8	Elemental and Chemically Specific X-ray Fluorescence Imaging of Biological Systems. Chemical Reviews, 2014, 114, 8499-8541.	47.7	234
9	Localizing the Biochemical Transformations of Arsenate in a Hyperaccumulating Fern. Environmental Science & Technology, 2006, 40, 5010-5014.	10.0	195
10	Direct determination and quantification of sulfur forms in coals from the Argonne Premium Sample Program. Energy & Fuels, 1991, 5, 93-97.	5.1	175
11	The Chemical Nature of Mercury in Human Brain Following Poisoning or Environmental Exposure. ACS Chemical Neuroscience, 2010, 1, 810-818.	3.5	168
12	Chemical Form and Distribution of Selenium and Sulfur in the Selenium Hyperaccumulator Astragalus bisulcatus Â. Plant Physiology, 2003, 131, 1460-1467.	4.8	163
13	Molybdenum Sequestration in BrassicaSpecies. A Role for Anthocyanins?. Plant Physiology, 2001, 126, 1391-1402.	4.8	162
14	Yeast Sco1, a Protein Essential for Cytochrome cOxidase Function Is a Cu(I)-binding Protein. Journal of Biological Chemistry, 2001, 276, 42520-42526.	3.4	161
15	Structural Basis of the Antagonism between Inorganic Mercury and Selenium in Mammals. Chemical Research in Toxicology, 2000, 13, 1135-1142.	3.3	158
16	Analysis of Sulfur Biochemistry of Sulfur Bacteria Using X-ray Absorption Spectroscopy. Biochemistry, 2001, 40, 8138-8145.	2.5	153
17	Sulfur K-edge X-ray absorption spectroscopy for determining the chemical speciation of sulfur in biological systems. FEBS Letters, 1998, 441, 11-14.	2.8	150
18	Structure of the Molybdenum Site of Dimethyl Sulfoxide Reductase. Journal of the American Chemical Society, 1999, 121, 1256-1266.	13.7	149

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19	X-ray absorption spectroscopy of cuprous-thiolate clusters in proteins and model systems. Journal of the American Chemical Society, 1993, 115, 9498-9505.	13.7	148
20	Human Sco1 and Sco2 Function as Copper-binding Proteins. Journal of Biological Chemistry, 2005, 280, 34113-34122.	3.4	147
21	Yeast Cox11, a Protein Essential for Cytochrome cOxidase Assembly, Is a Cu(I)-binding Protein. Journal of Biological Chemistry, 2002, 277, 31237-31242.	3.4	143
22	X-ray-induced photo-chemistry and X-ray absorptionÂspectroscopy of biological samples. Journal of Synchrotron Radiation, 2012, 19, 875-886.	2.4	141
23	Structure of the active site of sulfite oxidase. X-ray absorption spectroscopy of the molybdenum(IV), molybdenum(V), and molybdenum(VI) oxidation states. Biochemistry, 1989, 28, 5075-5080.	2.5	132
24	A Metabolic Link between Arsenite and Selenite:Â The Seleno-bis(S-glutathionyl) Arsinium Ion. Journal of the American Chemical Society, 2000, 122, 4637-4639.	13.7	132
25	Localizing organomercury uptake and accumulation in zebrafish larvae at the tissue and cellular level. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 12108-12112.	7.1	129
26	X-ray Absorption Spectroscopy of Dimethyl Sulfoxide Reductase fromRhodobacter sphaeroides. Journal of the American Chemical Society, 1996, 118, 1113-1117.	13.7	123
27	The Molybdenum Site of Sulfite Oxidase:Â A Comparison of Wild-Type and the Cysteine 207 to Serine Mutant Using X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 1996, 118, 8588-8592.	13.7	123
28	Spectroscopic Studies of Pyrococcus furiosus Superoxide Reductase:â€‰ Implications for Active-Site Structures and the Catalytic Mechanism. Journal of the American Chemical Society, 2002, 124, 788-805.	13.7	120
29	Copper Transfer from the Cu(I) Chaperone, CopZ, to the Repressor, Zn(II)CopY:Â Metal Coordination Environments and Protein Interactionsâ€. Biochemistry, 2002, 41, 5822-5829.	2.5	116
30	The Mitochondrial Copper Metallochaperone Cox17 Exists as an Oligomeric, Polycopper Complex. Biochemistry, 2001, 40, 743-751.	2.5	115
31	Mapping metals in Parkinson's and normal brain using rapid-scanning x-ray fluorescence. Physics in Medicine and Biology, 2009, 54, 651-663.	3.0	112
32	Characterization of the Copper Chaperone Cox17 ofSaccharomyces cerevisiaeâ€. Biochemistry, 1998, 37, 7572-7577.	2.5	111
33	Mercury Binding to the Chelation Therapy Agents DMSA and DMPS and the Rational Design of Custom Chelators for Mercury. Chemical Research in Toxicology, 2004, 17, 999-1006.	3.3	102
34	Pathogenic implications of distinct patterns of iron and zinc in chronic MS lesions. Acta Neuropathologica, 2017, 134, 45-64.	7.7	94
35	Prion protein expression level alters regional copper, iron and zinc content in the mouse brain. Metallomics, 2011, 3, 206.	2.4	91
36	X-ray Absorption Spectroscopy of the Molybdenum Site ofEscherichia coliFormate Dehydrogenase. Journal of the American Chemical Society, 1998, 120, 1267-1273.	13.7	90

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37	A Novel Protein-Bound Copperâ"Molybdenum Cluster. Journal of the American Chemical Society, 2000, 122, 8321-8322.	13.7	90
38	Studies by electron paramagnetic resonance spectroscopy of xanthine oxidase enriched with molybdenum-95 and with molybdenum-97. Biochemistry, 1988, 27, 3603-3609.	2.5	87
39	Direct determination and quantification of sulphur forms in heavy petroleum and coals. Fuel, 1990, 69, 945-949.	6.4	86
40	Nature of the Catalytically Labile Oxygen at the Active Site of Xanthine Oxidase. Journal of the American Chemical Society, 2005, 127, 4518-4522.	13.7	86
41	X-ray absorption spectroscopy of cadmium phytochelatin and model systems. BBA - Proteins and Proteomics, 1999, 1429, 351-364.	2.1	83
42	Chemical Form Matters: Differential Accumulation of Mercury Following Inorganic and Organic Mercury Exposures in Zebrafish Larvae. ACS Chemical Biology, 2012, 7, 411-420.	3.4	83
43	Polarized X-ray Absorption Spectroscopy of Cupric Chloride Dihydrate. Inorganic Chemistry, 1995, 34, 3142-3152.	4.0	82
44	The Rubredoxin fromClostridium pasteurianum:Â Mutation of the Iron Cysteinyl Ligands to Serine. Crystal and Molecular Structures of Oxidized and Dithionite-Treated Forms of the Cys42Ser Mutant. Journal of the American Chemical Society, 1998, 120, 4135-4150.	13.7	81
45	Structures of the Cuprous-Thiolate Clusters of the Mac1 and Ace1 Transcriptional Activators. Biochemistry, 2002, 41, 6469-6476.	2.5	81
46	Biliary Excretion of [(GS)2AsSe]-after Intravenous Injection of Rabbits with Arsenite and Selenate. Chemical Research in Toxicology, 2002, 15, 1466-1471.	3.3	76
47	Anthocyanins facilitate tungsten accumulation in Brassica. Physiologia Plantarum, 2002, 116, 351-358.	5.2	75
48	Fate of Selenate and Selenite Metabolized by Rhodobacter sphaeroides. Applied and Environmental Microbiology, 2000, 66, 4849-4853.	3.1	74
49	The Active Site of Arsenite Oxidase from Alcaligenes faecalis. Journal of the American Chemical Society, 2002, 124, 11276-11277.	13.7	74
50	Spectroscopic studies of molybdenum and tungsten enzymes. Coordination Chemistry Reviews, 2011, 255, 1055-1084.	18.8	74
51	Metalloprotein active site structure determination: Synergy between X-ray absorption spectroscopy and X-ray crystallography. Journal of Inorganic Biochemistry, 2012, 115, 127-137.	3.5	74
52	Diffraction anomalous fine structure: a new technique for probing local atomic environment. Journal of the American Chemical Society, 1993, 115, 6302-6311.	13.7	73
53	Nickel K-edge x-ray absorption fine structure of lithium nickel oxides. Journal of the American Chemical Society, 1993, 115, 4137-4144.	13.7	72
54	Molecular Mimicry in Mercury Toxicology. Chemical Research in Toxicology, 2006, 19, 753-759.	3.3	71

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55	Tracing Copperâ^'Thiomolybdate Complexes in a Prospective Treatment for Wilsonâ€™s Disease. Biochemistry, 2009, 48, 891-897.	2.5	70
56	Aldehyde ferredoxin oxidoreductase from the hyperthermophilic archaebacterium Pyrococcus furiosus contains a tungsten oxo-thiolate center. Journal of the American Chemical Society, 1992, 114, 3521-3523.	13.7	69
57	Mercury Speciation in Piscivorous Fish from Mining-Impacted Reservoirs. Environmental Science & Technology, 2007, 41, 2745-2749.	10.0	69
58	Thermal reactivity of sulphur forms in coal. Fuel, 1991, 70, 396-402.	6.4	67
59	Characterization and thermal reactivity of oxidized organic sulphur forms in coals. Fuel, 1992, 71, 1255-1264.	6.4	66
60	X-ray absorption spectroscopy of selenium-containing amino acids. Journal of Biological Inorganic Chemistry, 1999, 4, 791-794.	2.6	66
61	Chemical Form of Selenium in Naturally Selenium-Rich Lentils (Lens culinarisL.) from Saskatchewan. Journal of Agricultural and Food Chemistry, 2007, 55, 7337-7341.	5.2	64
62	Alteration of Axial Coordination by Protein Engineering in Myoglobin. Journal of Biological Chemistry, 1995, 270, 15993-16001.	3.4	63
63	X-ray Absorption Spectroscopy of Chicken Sulfite Oxidase Crystals. Inorganic Chemistry, 1999, 38, 2539-2540.	4.0	63
64	The Seleno Bis(S-glutathionyl) Arsinium Ion Is Assembled in Erythrocyte Lysate. Chemical Research in Toxicology, 2006, 19, 601-607.	3.3	62
65	X-ray Absorption Spectroscopy at the Sulfur K-Edge: A New Tool to Investigate the Biochemical Mechanisms of Neurodegeneration. ACS Chemical Neuroscience, 2012, 3, 178-185.	3.5	61
66	Tetrathiomolybdate Causes Formation of Hepatic Copperâ^'Molybdenum Clusters in an Animal Model of Wilson's Disease. Journal of the American Chemical Society, 2003, 125, 1704-1705.	13.7	59
67	Selenium Biotransformations in an Insect Ecosystem:Â Effects of Insects on Phytoremediation. Environmental Science & Technology, 2004, 38, 3581-3586.	10.0	59
68	Electronic Structure Description of thecis-MoOS Unit in Models for Molybdenum Hydroxylases. Journal of the American Chemical Society, 2008, 130, 55-65.	13.7	58
69	Recombinant Rhodobacter capsulatus Xanthine Dehydrogenase, a Useful Model System for the Characterization of Protein Variants Leading to Xanthinuria I in Humans. Journal of Biological Chemistry, 2003, 278, 20802-20811.	3.4	57
70	Models for the Molybdenum Hydroxylases:Â Synthesis, Characterization and Reactivity ofcis-Oxosulfido-Mo(VI) Complexes. Journal of the American Chemical Society, 2006, 128, 305-316.	13.7	57
71	Chemistry of organically bound sulphur forms during the mild oxidation of coal. Fuel, 1990, 69, 1065-1067.	6.4	56
72	Mixed Cu+ and Zn2+ Coordination in the DNA-Binding Domain of the AMT1 Transcription Factor from Candida glabrata. Biochemistry, 1994, 33, 9566-9577.	2.5	55

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73	Characterization of the Cytochrome c Oxidase Assembly Factor Cox19 of Saccharomyces cerevisiae. Journal of Biological Chemistry, 2007, 282, 10233-10242.	3.4	55
74	Presence of a Copper(I)â^'Thiolate Regulatory Domain in the Copper-Activated Transcription Factor Amt1â€. Biochemistry, 1996, 35, 14583-14589.	2.5	53
75	XAS and microscopy studies of the uptake and bio-transformation of copper in Larrea tridentata (creosote bush). Microchemical Journal, 2000, 65, 227-236.	4.5	53
76	X-Ray Absorption Spectroscopy as a Probe of Microbial Sulfur Biochemistry: the Nature of Bacterial Sulfur Globules Revisited. Journal of Bacteriology, 2008, 190, 6376-6383.	2.2	53
77	Observation of Ligand-Based Redox Chemistry at the Active Site of a Molybdenum Enzyme. Journal of the American Chemical Society, 1999, 121, 2625-2626.	13.7	52
78	Structural basis of enzymatic benzene ring reduction. Nature Chemical Biology, 2015, 11, 586-591.	8.0	52
79	Stoichiometry of Complex Formation between Copper(I) and the N-Terminal Domain of the Menkes Proteinâ€. Biochemistry, 2000, 39, 6857-6863.	2.5	49
80	Fluorine Encapsulation and Stabilization of Biologically Relevant Low-Valence Copper-Oxo Cores. Inorganic Chemistry, 2001, 40, 4812-4813.	4.0	47
81	Unraveling the Substrateâ^'Metal Binding Site of Ferrochelatase:â€‰ An X-ray Absorption Spectroscopic Study. Biochemistry, 2002, 41, 4809-4818.	2.5	47
82	Chemical Forms of Mercury and Selenium in Fish Following Digestion with Simulated Gastric Fluid. Chemical Research in Toxicology, 2008, 21, 2106-2110.	3.3	47
83	Molybdenum and tungsten oxygen transferases â€“ structural and functional diversity within a common active site motif. Metallomics, 2014, 6, 15-24.	2.4	47
84	Structural and Biological Analysis of the Metal Sites of Escherichia coli Hydrogenase Accessory Protein HypB. Biochemistry, 2008, 47, 11981-11991.	2.5	45
85	Reaction of arsenite ions with the molybdenum center of milk xanthine oxidase. Biochemistry, 1983, 22, 1013-1021.	2.5	43
86	Localizing the Chemical Forms of Sulfur in Vivo Using X-ray Fluorescence Spectroscopic Imaging: Application to Onion (Allium cepa) Tissues. Biochemistry, 2009, 48, 6846-6853.	2.5	43
87	Direct Observation of Methylmercury and Auranofin Binding to Selenocysteine in Thioredoxin Reductase. Inorganic Chemistry, 2020, 59, 2711-2718.	4.0	43
88	The Sulfur Chemistry of Shiitake Mushroom. Journal of the American Chemical Society, 2004, 126, 458-459.	13.7	42
89	An edge with XAS. Nature Structural Biology, 1998, 5, 645-647.	9.7	41
90	In Situ Biospectroscopic Investigation of Rapid Ischemic and Postmortem Induced Biochemical Alterations in the Rat Brain. ACS Chemical Neuroscience, 2015, 6, 226-238.	3.5	41

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91	Methylmercury Targets Photoreceptor Outer Segments. ACS Chemical Biology, 2013, 8, 2256-2263.	3.4	40
92	Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?. Environmental Science & Technology, 2020, 54, 2726-2733.	10.0	40
93	Structural Changes Induced by Catalytic Turnover at the Molybdenum Site of Arabidopsis Nitrate Reductase. Journal of the American Chemical Society, 1999, 121, 9730-9731.	13.7	39
94	Probing the coordination behavior of Hg2+, CH3Hg+, and Cd2+ towards mixtures of two biological thiols by HPLC-ICP-AES. Journal of Inorganic Biochemistry, 2011, 105, 375-381.	3.5	39
95	Interaction of Arsenate with the Molybdenum Site of Sulfite Oxidase. Journal of the American Chemical Society, 1998, 120, 4522-4523.	13.7	38
96	High-Resolution EXAFS of the Active Site of Human Sulfite Oxidase:Â Comparison with Density Functional Theory and X-ray Crystallographic Results. Inorganic Chemistry, 2006, 45, 493-495.	4.0	38
97	Prolonged Blood-Brain Barrier Injury Occurs After Experimental Intracerebral Hemorrhage and Is Not Acutely Associated with Additional Bleeding. Translational Stroke Research, 2019, 10, 287-297.	4.2	38
98	Reversed-phase high-performance liquid chromatographic separation of inorganic mercury and methylmercury driven by their different coordination chemistry towards thiols. Journal of Chromatography A, 2007, 1156, 331-339.	3.7	37
99	The chemical form of mitochondrial iron in Friedreichâ€™s ataxia. Journal of Inorganic Biochemistry, 2007, 101, 957-966.	3.5	36
100	X-ray absorption spectroscopy of oriented cytochrome oxidase. Biochimica Et Biophysica Acta - Bioenergetics, 1993, 1142, 240-252.	1.0	35
101	X-ray Absorption Spectroscopy of Selenate Reductase. Inorganic Chemistry, 2004, 43, 402-404.	4.0	35
102	Selenium Preferentially Accumulates in the Eye Lens Following Embryonic Exposure: A Confocal X-ray Fluorescence Imaging Study. Environmental Science & Technology, 2015, 49, 2255-2261.	10.0	35
103	Interaction of mercury and selenium in the larval stage zebrafish vertebrate model. Metallomics, 2015, 7, 1247-1255.	2.4	34
104	Selenium-mediated arsenic excretion in mammals: a synchrotron-based study of whole-body distribution and tissue-specific chemistry. Metallomics, 2017, 9, 1585-1595.	2.4	34
105	Structure of the Molybdenum Site of Rhodobacter sphaeroides Biotin Sulfoxide Reductase. Biochemistry, 2000, 39, 4046-4052.	2.5	33
106	In situ observation of the generation of isothiocyanates from sinigrin in horseradish and wasabi. Biochimica Et Biophysica Acta - General Subjects, 2001, 1527, 156-160.	2.4	33
107	Structure of the Molybdenum Site of Escherichia coli Trimethylamine N-Oxide Reductase. Inorganic Chemistry, 2008, 47, 1074-1078.	4.0	33
108	Coordination Chemistry at the Molybdenum Site of Sulfite Oxidase: Redox-Induced Structural Changes in the Cysteine 207 to Serine Mutant. Inorganic Chemistry, 2004, 43, 8456-8460.	4.0	31

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109	Using softer X-ray absorption spectroscopy to probe biological systems. Journal of Synchrotron Radiation, 2005, 12, 392-401.	2.4	31
110	Long-Range Chemical Sensitivity in the Sulfur K-Edge X-ray Absorption Spectra of Substituted Thiophenes. Journal of Physical Chemistry A, 2014, 118, 7796-7802.	2.5	31
111	X-ray absorption spectroscopy of molybdenum enzymes. Journal of Biological Inorganic Chemistry, 1997, 2, 790-796.	2.6	30
112	Modified Active Site Coordination in a Clinical Mutant of Sulfite Oxidase. Journal of the American Chemical Society, 2007, 129, 9421-9428.	13.7	30
113	The chemical forms of mercury in human hair: a study using X-ray absorption spectroscopy. Journal of Biological Inorganic Chemistry, 2010, 15, 709-715.	2.6	30
114	Dynamic accumulation and redistribution of methylmercury in the lens of developing zebrafish embryos and larvae. Journal of Biological Inorganic Chemistry, 2010, 15, 1137-1145.	2.6	30
115	X-ray Absorption Spectroscopy Investigations of Copper(II) Coordination in the Human Amyloid Î² Peptide. Inorganic Chemistry, 2019, 58, 6294-6311.	4.0	30
116	Synthesis, Characterization, and Electrochemistry of cis-Oxothio- and cis-Bis(thio)tungsten(VI) Complexes of Hydrotris(3,5-dimethylpyrazol-1-yl)borate. Inorganic Chemistry, 2001, 40, 4563-4573.	4.0	29
117	Synthesis, Characterization, and Biomimetic Chemistry of cis-Oxosulfidomolybdenum(VI) Complexes Stabilized by an Intramolecular Mo(O)SÂ·Â·Â·S Interaction. Inorganic Chemistry, 2007, 46, 939-948.	4.0	29
118	Mo^V Electron Paramagnetic Resonance of Sulfite Oxidase Revisited: The Low-pH Chloride Signal. Inorganic Chemistry, 2008, 47, 2033-2038.	4.0	28
119	Synthesis, Purification, and Structural Characterization of the Dimethyldiselenoarsinate Anion. Inorganic Chemistry, 2002, 41, 5426-5432.	4.0	27
120	The fictile coordination chemistry of cuprous-thiolate sites in copper chaperones. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 938-947.	1.0	27
121	Binding of Copper and Cisplatin to Atox1 Is Mediated by Glutathione through the Formation of Metalâ€“Sulfur Clusters. Biochemistry, 2017, 56, 3129-3141.	2.5	27
122	The Structures of the C185S and C185A Mutants of Sulfite Oxidase Reveal Rearrangement of the Active Site. Biochemistry, 2010, 49, 3989-4000.	2.5	26
123	X-ray Absorption Spectroscopy of a Quantitatively Mo(V) Dimethyl Sulfoxide Reductase Species. Inorganic Chemistry, 2013, 52, 2830-2837.	4.0	26
124	The solution structure of the copper clioquinol complex. Journal of Inorganic Biochemistry, 2014, 133, 50-56.	3.5	26
125	Remarkable differences in the biochemical fate of Cd²⁺, Hg²⁺, CH₃Hg⁺ and thimerosal in red blood cell lysate. Metallomics, 2017, 9, 1060-1072.	2.4	26
126	Thioredoxinï¿½h overexpressed in barley seeds enhances selenite resistance and uptake during germination and early seedling development. Planta, 2003, 218, 186-191.	3.2	25

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127	Characterization of a modified nitrogenase Fe protein from Klebsiella pneumoniae in which the 4Fe4S cluster has been replaced by a 4Fe4Se cluster. Journal of Biological Inorganic Chemistry, 2009, 14, 673-682.	2.6	25
128	Molybdenum Induces the Expression of a Protein Containing a New Heterometallic Mo-Fe Cluster in Desulfovibrio alaskensis. Biochemistry, 2009, 48, 873-882.	2.5	25
129	The chemical forms of mercury and selenium in whale skeletal muscle. Metallomics, 2011, 3, 1232.	2.4	25
130	The active site structure and catalytic mechanism of arsenite oxidase. Scientific Reports, 2017, 7, 1757.	3.3	25
131	Structure of the Active Site of Sulfite Dehydrogenase from Starkeya novella. Inorganic Chemistry, 2006, 45, 7488-7492.	4.0	24
132	Sulfur X-ray Absorption Spectroscopy of Living Mammalian Cells:â€‰ An Enabling Tool for Sulfur Metabolomics. In Situ Observation of Uptake of Taurine into MDCK Cells. Biochemistry, 2007, 46, 14735-14741.	2.5	24
133	X-ray Absorption Spectroscopic Characterization of the Molybdenum Site ofEscherichia coliDimethyl Sulfoxide Reductase. Inorganic Chemistry, 2007, 46, 2-4.	4.0	24
134	Novel bio-spectroscopic imaging reveals disturbed protein homeostasis and thiol redox with protein aggregation prior to hippocampal CA1 pyramidal neuron death induced by global brain ischemia in the rat. Free Radical Biology and Medicine, 2015, 89, 806-818.	2.9	24
135	Multispecies Biofilms Transform Selenium Oxyanions into Elemental Selenium Particles: Studies Using Combined Synchrotron X-ray Fluorescence Imaging and Scanning Transmission X-ray Microscopy. Environmental Science & Technology, 2016, 50, 10343-10350.	10.0	24
136	Human Cytosolic Iron Regulatory Protein 1 Contains a Linear Ironâ^'Sulfur Cluster. Journal of the American Chemical Society, 2001, 123, 10121-10122.	13.7	23
137	Photochemically Generated Thiyl Free Radicals Observed by X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2017, 139, 11519-11526.	13.7	23
138	Oxotungsten(VI) Chemistry of Hydrotris(3,5-dimethylpyrazol-1-yl)borate:Â Hydroxodioxotungsten(VI), Trioxotungsten(VI), and (Î¼-Oxo)bis[dioxotungsten(VI)] Complexes. Inorganic Chemistry, 1997, 36, 472-479.	4.0	22
139	High-Resolution X-ray Emission Spectroscopy of Molybdenum Compounds. Inorganic Chemistry, 2005, 44, 2579-2581.	4.0	22
140	Strong poison revisited. Journal of Inorganic Biochemistry, 2007, 101, 1891-1893.	3.5	22
141	Interaction of Product Analogues with the Active Site ofRhodobacterSphaeroidesDimethyl Sulfoxide Reductase. Inorganic Chemistry, 2007, 46, 3097-3104.	4.0	21
142	Molybdenum Site Structure of Escherichia coli YedY, a Novel Bacterial Oxidoreductase. Inorganic Chemistry, 2011, 50, 732-740.	4.0	21
143	New Insights into Metal Interactions with the Prion Protein: EXAFS Analysis and Structure Calculations of Copper Binding to a Single Octarepeat from the Prion Protein. Journal of Physical Chemistry B, 2013, 117, 13822-13841.	2.6	21
144	Combined EXAFS and DFT Structure Calculations Provide Structural Insights into the 1:1 Multiâ€Histidine Complexes of Cu^{II}, Cu^I, and Zn^{II} with the Tandem Octarepeats of the Mammalian Prion Protein. Chemistry - A European Journal, 2014, 20, 9770-9783.	3.3	21

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145	Formation of the inhibitory complex of p-mercuribenzoate with xanthine oxidase, evaluation of hyperfine and quadrupole couplings of mercury to molybdenum(V) from the electron paramagnetic resonance spectrum, and structure of the complex. Biochemistry, 1983, 22, 5443-5452.	2.5	20
146	Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (S-glutathionyl) arsinium anion from selenide, arsenite and glutathione. Journal of Organometallic Chemistry, 2002, 650, 108-113.	1.8	20
147	Biological iron-sulfur storage in a thioferrate-protein nanoparticle. Nature Communications, 2017, 8, 16110.	12.8	20
148	X-ray crystallography and the spectroscopic imperative: The story of the [3Fe-4S] clusters. Trends in Biochemical Sciences, 1988, 13, 369-370.	7.5	19
149	Removal of a cysteine ligand from rubredoxin: assembly of Fe2S2 and Fe(S-Cys)3(OH) centres. Journal of Biological Inorganic Chemistry, 2002, 7, 781-790.	2.6	19
150	Imaging of selenium in plants using tapered metal monocapillary optics. Journal of Synchrotron Radiation, 2003, 10, 289-290.	2.4	19
151	Xâ€Ray Absorption Spectroscopy of Cuprousâ€Thiolate Clusters in Saccharomyces cerevisiae Metallothionein. Chemistry and Biodiversity, 2008, 5, 2042-2049.	2.1	19
152	The Chemical Forms of Mercury in Aged and Fresh Dental Amalgam Surfaces. Chemical Research in Toxicology, 2009, 22, 1761-1764.	3.3	19
153	Imaging Taurine in the Central Nervous System Using Chemically Specific X-ray Fluorescence Imaging at the Sulfur K-Edge. Analytical Chemistry, 2016, 88, 10916-10924.	6.5	19
154	Revealing the Penumbra through Imaging Elemental Markers of Cellular Metabolism in an Ischemic Stroke Model. ACS Chemical Neuroscience, 2018, 9, 886-893.	3.5	19
155	Disruption of selenium transport and function is a major contributor to mercury toxicity in zebrafish larvae. Metallomics, 2019, 11, 621-631.	2.4	19
156	Phenylthiourea alters toxicity of mercury compounds in zebrafish larvae. Journal of Inorganic Biochemistry, 2015, 151, 10-17.	3.5	18
157	Sulfur KÎ² X-ray emission spectroscopy: comparison with sulfur K-edge X-ray absorption spectroscopy for speciation of organosulfur compounds. Physical Chemistry Chemical Physics, 2021, 23, 4500-4508.	2.8	18
158	Redox Interplay of Oxoâˆ’Thioâˆ’Tungsten Centers with Sulfur-Donor Co-Ligands. Inorganic Chemistry, 2003, 42, 5909-5916.	4.0	17
159	Observation of the seleno bis-(S-glutathionyl) arsinium anion in rat bile. Journal of Inorganic Biochemistry, 2016, 158, 24-29.	3.5	17
160	PIN FORMED 2 Modulates the Transport of Arsenite in Arabidopsis thaliana. Plant Communications, 2020, 1, 100009.	7.7	17
161	X-ray absorption spectroscopy of light elements in biological systems. Current Opinion in Structural Biology, 1993, 3, 780-784.	5.7	16
162	Towards a custom chelator for mercury: evaluation of coordination environments by molecular modeling. Journal of Biological Inorganic Chemistry, 2011, 16, 15-24.	2.6	16

#	Article	IF	Citations
163	X-ray spectroscopy and imaging of selenium in living systems. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 2383-2392.	2.4	16
164	Generation and biomimetic chemistry of tungstenâ€“dithiolene complexes containing the hydrotris(3,5-dimethylpyrazol-1-yl)borate ligand. Journal of Inorganic Biochemistry, 1999, 76, 39-45.	3.5	15
165	Copper(II) Binding to PBT2 Differs from That of Other 8-Hydroxyquinoline Chelators: Implications for the Treatment of Neurodegenerative Protein Misfolding Diseases. Inorganic Chemistry, 2020, 59, 17519-17534.	4.0	15
166	Arsenic Kâ€edge Xâ€ray absorption spectroscopy of arsenic in seafood. Molecular Nutrition and Food Research, 2009, 53, 552-557.	3.3	14
167	Chemical basis for the detoxification of cisplatin-derived hydrolysis products by sodium thiosulfate. Journal of Inorganic Biochemistry, 2016, 162, 96-101.	3.5	14
168	A Photochemically Generated Selenyl Free Radical Observed by High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy. Inorganic Chemistry, 2018, 57, 10867-10872.	4.0	14
169	High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy: An Analytical Method for Selenium Speciation. Analytical Chemistry, 2021, 93, 9235-9243.	6.5	14
170	X-RAY ABSORPTION SPECTROSCOPY IN BIOLOGY AND CHEMISTRY. , 2007, , 97-119.		14
171	Oriented x-ray absorption spectroscopy of membrane bound metalloproteins. Physica B: Condensed Matter, 1989, 158, 81-83.	2.7	13
172	Application of a spoked channel array to confocal X-ray fluorescence imaging and X-ray absorption spectroscopy of medieval stained glass. Journal of Analytical Atomic Spectrometry, 2015, 30, 759-766.	3.0	13
173	Chemical Sensitivity of the Sulfur K-Edge X-ray Absorption Spectra of Organic Disulfides. Journal of Physical Chemistry A, 2016, 120, 7279-7286.	2.5	13
174	Chemical Biology in the Embryo: In Situ Imaging of Sulfur Biochemistry in Normal and Proteoglycan-Deficient Cartilage Matrix. Biochemistry, 2016, 55, 2441-2451.	2.5	13
175	Cryoprotectants Severely Exacerbate X-ray-Induced Photoreduction. Journal of Physical Chemistry Letters, 2018, 9, 540-544.	4.6	13
176	Structural Characterization of the Solution Chemistry of Zirconium(IV) Desferrioxamine: A Coordination Sphere Completed by Hydroxides. Inorganic Chemistry, 2020, 59, 17443-17452.	4.0	13
177	PBT2 acts through a different mechanism of action than other 8-hydroxyquinolines: an X-ray fluorescence imaging study. Metallomics, 2020, 12, 1979-1994.	2.4	13
178	XANES evidence for selective organic sulfur removal from Illinois No. 6 coal. Energy & Fuels, 1991, 5, 771-773.	5.1	12
179	Structural characterization of Cd2+ complexes in solution with DMSA and DMPS. Journal of Inorganic Biochemistry, 2014, 136, 99-106.	3.5	12
180	Synchrotron X-ray fluorescence imaging evidence of biogenic mercury identified in a burial in colonial Antigua. Journal of Archaeological Science, 2015, 58, 26-30.	2.4	12

#	Article	IF	Citations
181	Molecular Fates of Organometallic Mercury in Human Brain. ACS Chemical Neuroscience, 2022, 13, 1756-1768.	3.5	12
182	Solution structural studies of molybdateâ€“nucleotide polyanions. Journal of Inorganic Biochemistry, 2002, 88, 274-283.	3.5	11
183	d¹ Oxosulfido-Mo(V) Compounds: First Isolation and Unambiguous Characterization of an Extended Series. Inorganic Chemistry, 2015, 54, 6386-6396.	4.0	11
184	Soft tissue measurement of arsenic and selenium in an animal model using portable X-ray fluorescence. Radiation Physics and Chemistry, 2015, 116, 241-247.	2.8	11
185	Insights into the Nature of the Chemical Bonding in Thiophene-2-thiol from X-ray Absorption Spectroscopy. Journal of Physical Chemistry A, 2016, 120, 6929-6933.	2.5	11
186	X-ray Absorption Spectroscopy of Aliphatic Organic Sulfides. Journal of Physical Chemistry A, 2017, 121, 6256-6261.	2.5	11
187	A comparison of parametric and integrative approaches for X-ray fluorescence analysis appliedÂto a Stroke model. Journal of Synchrotron Radiation, 2018, 25, 1780-1789.	2.4	11
188	Chapter 5 Inorganic Molecular Toxicology and Chelation Therapy of Heavy Metals and Metalloids. Advances in Molecular Toxicology, 2008, 2, 123-152.	0.4	9
189	Synchrotron X-ray absorption spectroscopy analysis of arsenic chemical speciation in human nail clippings. Environmental Chemistry, 2014, 11, 632.	1.5	9
190	Arsenic transfer and biotransformation in a fully characterized freshwater food web. Coordination Chemistry Reviews, 2016, 306, 558-565.	18.8	9
191	More on Molecular Mimicry in Mercury Toxicology. Chemical Research in Toxicology, 2006, 19, 1118-1120.	3.3	8
192	Insights into the Chemical Biology of Selenium. Phosphorus, Sulfur and Silicon and the Related Elements, 2008, 183, 924-930.	1.6	8
193	Insect excretes unusual six-coordinate pentavalent arsenic species. Environmental Chemistry, 2009, 6, 298.	1.5	8
194	Nature of Halide Binding to the Molybdenum Site of Sulfite Oxidase. Inorganic Chemistry, 2011, 50, 9406-9413.	4.0	8
195	Effects of inorganic mercury on the olfactory pits of zebrafish larvae. Metallomics, 2016, 8, 514-517.	2.4	8
196	Human red blood cell uptake and sequestration of arsenite and selenite: Evidence of seleno-bis(S-glutathionyl) arsinium ion formation in human cells. Biochemical Pharmacology, 2020, 180, 114141.	4.4	7
197	Studies of selenium and arsenic mutual protection in human HepG2 cells. Chemico-Biological Interactions, 2020, 327, 109162.	4.0	7
198	Hg(II) Binding to Thymine Bases in DNA. Inorganic Chemistry, 2021, 60, 7442-7452.	4.0	7

#	Article	IF	Citations
199	Mercury LÎ±1 High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy: A Versatile Speciation Probe for Mercury. Inorganic Chemistry, 2022, 61, 5201-5214.	4.0	7
200	X-Ray Absorption Spectroscopy Imaging of Biological Tissues. AIP Conference Proceedings, 2007, , .	0.4	6
201	Mononuclear Sulfido-Tungsten(V) Complexes: Completing the Tp*MEXY (M = Mo, W; E = O, S) Series. Inorganic Chemistry, 2017, 56, 5189-5202.	4.0	6
202	Solution Chemistry of Copper(II) Binding to Substituted 8-Hydroxyquinolines. Inorganic Chemistry, 2020, 59, 13858-13874.	4.0	6
203	Development of a combined K-edge subtraction and fluorescence subtraction imaging system for small animals. Review of Scientific Instruments, 2008, 79, 085102.	1.3	5
204	Use of Soller slits to remove reference foil fluorescence from transmission spectra. Journal of Synchrotron Radiation, 2011, 18, 527-529.	2.4	5
205	Optimization of overexpression of a chaperone protein of steroid C25 dehydrogenase for biochemical and biophysical characterization. Protein Expression and Purification, 2017, 134, 47-62.	1.3	5
206	X-ray absorption spectroscopy of organic sulfoxides. RSC Advances, 2020, 10, 26229-26238.	3.6	5
207	Reply to Comments on â€œRethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?â€• Environmental Science & Technology, 2020, 54, 8488-8490.	10.0	5
208	High Affinity Binding of Indium and Ruthenium Ions by Gastrins. PLoS ONE, 2015, 10, e0140126.	2.5	5
209	Sulfur K-Edge X-ray Absorption Spectroscopy of Petroleum Asphaltenes and Model Compounds. ACS Symposium Series, 1990, , 220-230.	0.5	4
210	Sulfur K-Edge X-ray Absorption Spectroscopy of Aryl and Arylâ€“Alkyl Sulfides. Journal of Physical Chemistry A, 2019, 123, 2861-2866.	2.5	4
211	X-ray absorption spectroscopy at a protein crystallography facility: the Canadian Light Source beamline 08B1-1. Journal of Synchrotron Radiation, 2012, 19, 887-891.	2.4	3
212	X-ray-Induced Photoreduction of Hg(II) in Aqueous Frozen Solution Yields Nearly Monatomic Hg(0). Inorganic Chemistry, 2018, 57, 8205-8210.	4.0	3
213	Visualizing sulfur with X-rays: From molecules to tissues. Phosphorus, Sulfur and Silicon and the Related Elements, 2019, 194, 618-623.	1.6	3
214	Oxygen K-edge X-ray absorption spectra of liquids with minimization of window contamination. Journal of Synchrotron Radiation, 2021, 28, 1845-1849.	2.4	2
215	X-ray Absorption Spectroscopy of Metals in Biology. , 2018, , 1-7.		0
216	X-ray Fluorescence Imaging: Elemental and Chemical Speciation Mapping of Biological Systems. , 2018, , 1-6.		0

#	Article	IF	Citations
217	Abridged spectral matrix inversion: parametric fitting of X-ray fluorescence spectra following integrative data reduction. Journal of Synchrotron Radiation, 2021, 28, 1881-1890.	2.4	0