

# Graham George

## List of Publications by Year in descending order

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300  
papers

16,564  
citations

15001

68  
h-index

25983

112  
g-index

308  
all docs

308  
docs citations

308  
times ranked

15545  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Disulfide Bonds Play a Critical Role in the Structure and Function of the Receptor-binding Domain of the SARS-CoV-2 Spike Antigen. <i>Journal of Molecular Biology</i> , 2022, 434, 167357.                                   | 2.0 | 43        |
| 2  | Mercury L <sup>1</sup> ±1 High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy: A Versatile Speciation Probe for Mercury. <i>Inorganic Chemistry</i> , 2022, 61, 5201-5214.                             | 1.9 | 7         |
| 3  | Molecular Fates of Organometallic Mercury in Human Brain. <i>ACS Chemical Neuroscience</i> , 2022, 13, 1756-1768.   | 1.7 | 12        |
| 4  | Synthesis and structural characterization of copper <sup>2+</sup> cuprizone complexes. <i>Dalton Transactions</i> , 2022, 51, 10361-10376.  | 1.6 | 3         |
| 5  | Hg(II) Binding to Thymine Bases in DNA. <i>Inorganic Chemistry</i> , 2021, 60, 7442-7452.   | 1.9 | 7         |
| 6  | Geometry of Pentaphenylantimony in Solution: Support for a Trigonal Bipyramidal Assignment from X-ray Absorption Spectroscopy and Vibrational Spectroscopic Data. <i>Inorganic Chemistry</i> , 2021, 60, 8566-8574.           | 1.9 | 4         |
| 7  | High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy: An Analytical Method for Selenium Speciation. <i>Analytical Chemistry</i> , 2021, 93, 9235-9243.  | 3.2 | 14        |
| 8  | Sulfur K <sup>1</sup> ±2 X-ray emission spectroscopy: comparison with sulfur K-edge X-ray absorption spectroscopy for speciation of organosulfur compounds. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 4500-4508. | 1.3 | 18        |
| 9  | Oxygen K-edge X-ray absorption spectra of liquids with minimization of window contamination. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 1845-1849.   | 1.0 | 2         |
| 10 | Abridged spectral matrix inversion: parametric fitting of X-ray fluorescence spectra following integrative data reduction. <i>Journal of Synchrotron Radiation</i> , 2021, 28, 1881-1890.                                     | 1.0 | 0         |
| 11 | The Unexpected Role of Se <sup>VI</sup> Species in Epoxidations with Benzeneseleninic Acid and Hydrogen Peroxide. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 4283-4287.                                     | 7.2 | 22        |
| 12 | PIN FORMED 2 Modulates the Transport of Arsenite in Arabidopsis thaliana. <i>Plant Communications</i> , 2020, 1, 100009.  | 3.6 | 17        |
| 13 | Human red blood cell uptake and sequestration of arsenite and selenite: Evidence of seleno-bis(S-glutathionyl) arsinium ion formation in human cells. <i>Biochemical Pharmacology</i> , 2020, 180, 114141.                    | 2.0 | 7         |
| 14 | Structural Characterization of the Solution Chemistry of Zirconium(IV) Desferrioxamine: A Coordination Sphere Completed by Hydroxides. <i>Inorganic Chemistry</i> , 2020, 59, 17443-17452.                                    | 1.9 | 13        |
| 15 | PBT2 acts through a different mechanism of action than other 8-hydroxyquinolines: an X-ray fluorescence imaging study. <i>Metallomics</i> , 2020, 12, 1979-1994.  | 1.0 | 13        |
| 16 | Copper(II) Binding to PBT2 Differs from That of Other 8-Hydroxyquinoline Chelators: Implications for the Treatment of Neurodegenerative Protein Misfolding Diseases. <i>Inorganic Chemistry</i> , 2020, 59, 17519-17534.      | 1.9 | 15        |
| 17 | X-ray absorption spectroscopy of organic sulfoxides. <i>RSC Advances</i> , 2020, 10, 26229-26238.   | 1.7 | 5         |
| 18 | Solution Chemistry of Copper(II) Binding to Substituted 8-Hydroxyquinolines. <i>Inorganic Chemistry</i> , 2020, 59, 13858-13874.  | 1.9 | 6         |

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|----|---|-----|-----------|
| 19 | Sample preparation with sucrose cryoprotection dramatically alters Zn distribution in the rodent hippocampus, as revealed by elemental mapping. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 2498-2508.   | 1.6 | 19        |
| 20 | Reply to Comments on "Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?" <i>Environmental Science &amp; Technology</i> , 2020, 54, 8484-8485.   | 4.6 | 3         |
| 21 | Studies of selenium and arsenic mutual protection in human HepG2 cells. <i>Chemico-Biological Interactions</i> , 2020, 327, 109162.   | 1.7 | 7         |
| 22 | Reply to Comments on "Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?" <i>Environmental Science &amp; Technology</i> , 2020, 54, 8488-8490.   | 4.6 | 5         |
| 23 | Direct Observation of Methylmercury and Auranofin Binding to Selenocysteine in Thioredoxin Reductase. <i>Inorganic Chemistry</i> , 2020, 59, 2711-2718.   | 1.9 | 43        |
| 24 | The Unexpected Role of Se VI Species in Epoxidations with Benzeneseleninic Acid and Hydrogen Peroxide. <i>Angewandte Chemie</i> , 2020, 132, 4313-4317.   | 1.6 | 1         |
| 25 | Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?. <i>Environmental Science &amp; Technology</i> , 2020, 54, 2726-2733.   | 4.6 | 40        |
| 26 | Prolonged Blood-Brain Barrier Injury Occurs After Experimental Intracerebral Hemorrhage and Is Not Acutely Associated with Additional Bleeding. <i>Translational Stroke Research</i> , 2019, 10, 287-297.                 | 2.3 | 38        |
| 27 | Bimodal Nickel-Binding Site on <i>Escherichia coli</i> [NiFe]-Hydrogenase Metallochaperone HypA. <i>Inorganic Chemistry</i> , 2019, 58, 13604-13618.  | 1.9 | 8         |
| 28 | Elemental characterisation of the pyramidal neuron layer within the rat and mouse hippocampus. <i>Metallomics</i> , 2019, 11, 151-165.  | 1.0 | 19        |
| 29 | Disruption of selenium transport and function is a major contributor to mercury toxicity in zebrafish larvae. <i>Metallomics</i> , 2019, 11, 621-631.   | 1.0 | 19        |
| 30 | Visualizing sulfur with X-rays: From molecules to tissues. Phosphorus, Sulfur and Silicon and the Related Elements, 2019, 194, 618-623.   | 0.8 | 3         |
| 31 | X-ray Absorption Spectroscopy Investigations of Copper(II) Coordination in the Human Amyloid $\beta^2$ Peptide. <i>Inorganic Chemistry</i> , 2019, 58, 6294-6311.   | 1.9 | 30        |
| 32 | Sulfur K-Edge X-ray Absorption Spectroscopy of Aryl and Aryl-Alkyl Sulfides. <i>Journal of Physical Chemistry A</i> , 2019, 123, 2861-2866.   | 1.1 | 4         |
| 33 | The effects of dietary selenomethionine on tissue-specific accumulation and toxicity of dietary arsenite in rainbow trout ( <i>Oncorhynchus mykiss</i> ) during chronic exposure. <i>Metallomics</i> , 2019, 11, 643-655. | 1.0 | 13        |
| 34 | Wide field imaging energy dispersive X-ray absorption spectroscopy. <i>Scientific Reports</i> , 2019, 9, 17734.   | 1.6 | 9         |
| 35 | Revealing the Penumbra through Imaging Elemental Markers of Cellular Metabolism in an Ischemic Stroke Model. <i>ACS Chemical Neuroscience</i> , 2018, 9, 886-893.   | 1.7 | 19        |
| 36 | Cryoprotectants Severely Exacerbate X-ray-Induced Photoreduction. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 540-544.  | 2.1 | 13        |

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|----|---|-----|-----------|
| 37 | X-ray spectroscopy and imaging of selenium in living systems. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018, 1862, 2383-2392.  | 1.1 | 16        |
| 38 | A comparison of parametric and integrative approaches for X-ray fluorescence analysis applied to a Stroke model. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 1780-1789.   | 1.0 | 11        |
| 39 | Ajothiolanes: 3,4-Dimethylthiolane Natural Products from Garlic ( <i>Allium sativum</i> ). <i>Journal of Agricultural and Food Chemistry</i> , 2018, 66, 10193-10204.   | 2.4 | 19        |
| 40 | A Photochemically Generated Selenyl Free Radical Observed by High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy. <i>Inorganic Chemistry</i> , 2018, 57, 10867-10872.  | 1.9 | 14        |
| 41 | X-ray-Induced Photoreduction of Hg(II) in Aqueous Frozen Solution Yields Nearly Monatomic Hg(0). <i>Inorganic Chemistry</i> , 2018, 57, 8205-8210.  | 1.9 | 3         |
| 42 | X-ray Absorption Spectroscopy of Metals in Biology. , 2018, , 1-7.  |     | 0         |
| 43 | X-ray Fluorescence Imaging: Elemental and Chemical Speciation Mapping of Biological Systems. , 2018, , 1-6.   |     | 0         |
| 44 | Superior spatial resolution in confocal X-ray techniques using collimating channel array optics: elemental mapping and speciation in archaeological human bone. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 527-537. | 1.6 | 21        |
| 45 | Mononuclear Sulfido-Tungsten(V) Complexes: Completing the Tp*MEXY (M = Mo, W; E = O, S) Series. <i>Inorganic Chemistry</i> , 2017, 56, 5189-5202.   | 1.9 | 6         |
| 46 | The active site structure and catalytic mechanism of arsenite oxidase. <i>Scientific Reports</i> , 2017, 7, 1757.   | 1.6 | 25        |
| 47 | Binding of Copper and Cisplatin to Atox1 Is Mediated by Glutathione through the Formation of Metal-Sulfur Clusters. <i>Biochemistry</i> , 2017, 56, 3129-3141.  | 1.2 | 27        |
| 48 | Optimization of overexpression of a chaperone protein of steroid C25 dehydrogenase for biochemical and biophysical characterization. <i>Protein Expression and Purification</i> , 2017, 134, 47-62.                                   | 0.6 | 5         |
| 49 | Pathogenic implications of distinct patterns of iron and zinc in chronic MS lesions. <i>Acta Neuropathologica</i> , 2017, 134, 45-64.   | 3.9 | 94        |
| 50 | Selenium-mediated arsenic excretion in mammals: a synchrotron-based study of whole-body distribution and tissue-specific chemistry. <i>Metallomics</i> , 2017, 9, 1585-1595.  | 1.0 | 34        |
| 51 | Biological iron-sulfur storage in a thioferrate-protein nanoparticle. <i>Nature Communications</i> , 2017, 8, 16110.  | 5.8 | 20        |
| 52 | Photochemically Generated Thiyl Free Radicals Observed by X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017, 139, 11519-11526.  | 6.6 | 23        |
| 53 | X-ray Absorption Spectroscopy of Aliphatic Organic Sulfides. <i>Journal of Physical Chemistry A</i> , 2017, 121, 6256-6261.   | 1.1 | 11        |
| 54 | Remarkable differences in the biochemical fate of Cd <sup>2+</sup> , Hg <sup>2+</sup> , CH <sub>3</sub> Hg <sup>+</sup> and thimerosal in red blood cell lysate. <i>Metallomics</i> , 2017, 9, 1060-1072.                             | 1.0 | 26        |

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|----|---|-----|-----------|
| 55 | A Multimodal Spectroscopic Imaging Method To Characterize the Metal and Macromolecular Content of Proteinaceous Aggregates (â€œAmyloid Plaquesâ€). <i>Biochemistry</i> , 2017, 56, 4107-4116.   | 1.2 | 55        |
| 56 | Multi-modal spectroscopic imaging with synchrotron light to study mechanisms of brain disease. <i>Proceedings of SPIE</i> , 2017, , .   | 0.8 | 0         |
| 57 | Effects of inorganic mercury on the olfactory pits of zebrafish larvae. <i>Metallomics</i> , 2016, 8, 514-517.  | 1.0 | 8         |
| 58 | Chemical Sensitivity of the Sulfur K-Edge X-ray Absorption Spectra of Organic Disulfides. <i>Journal of Physical Chemistry A</i> , 2016, 120, 7279-7286.  | 1.1 | 13        |
| 59 | Tuning the metabolism of the anticancer drug cisplatin with chemoprotective agents to improve its safety and efficacy. <i>Metallomics</i> , 2016, 8, 1170-1176.   | 1.0 | 27        |
| 60 | Insights into the Nature of the Chemical Bonding in Thiophene-2-thiol from X-ray Absorption Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2016, 120, 6929-6933.  | 1.1 | 11        |
| 61 | Trifluoroselenomethionine: A New Unnatural Amino Acid. <i>ChemBioChem</i> , 2016, 17, 1738-1751.  | 1.3 | 27        |
| 62 | Imaging Taurine in the Central Nervous System Using Chemically Specific X-ray Fluorescence Imaging at the Sulfur K-Edge. <i>Analytical Chemistry</i> , 2016, 88, 10916-10924.   | 3.2 | 19        |
| 63 | Chemical basis for the detoxification of cisplatin-derived hydrolysis products by sodium thiosulfate. <i>Journal of Inorganic Biochemistry</i> , 2016, 162, 96-101.   | 1.5 | 14        |
| 64 | Confocal x-ray Fluorescence Imaging Facilitates High-resolution Elemental Mapping in Fragile Archaeological Bone. <i>Archaeometry</i> , 2016, 58, 207-217.  | 0.6 | 19        |
| 65 | Observation of the seleno bis-(S-glutathionyl) arsinium anion in rat bile. <i>Journal of Inorganic Biochemistry</i> , 2016, 158, 24-29.   | 1.5 | 17        |
| 66 | Chemical Biology in the Embryo: <i>In Situ</i> Imaging of Sulfur Biochemistry in Normal and Proteoglycan-Deficient Cartilage Matrix. <i>Biochemistry</i> , 2016, 55, 2441-2451.   | 1.2 | 13        |
| 67 | Distribution of selenium in zebrafish larvae after exposure to organic and inorganic selenium forms. <i>Metallomics</i> , 2016, 8, 305-312.   | 1.0 | 36        |
| 68 | Multispecies Biofilms Transform Selenium Oxyanions into Elemental Selenium Particles: Studies Using Combined Synchrotron X-ray Fluorescence Imaging and Scanning Transmission X-ray Microscopy. <i>Environmental Science &amp; Technology</i> , 2016, 50, 10343-10350.    | 4.6 | 24        |
| 69 | Arsenic transfer and biotransformation in a fully characterized freshwater food web. <i>Coordination Chemistry Reviews</i> , 2016, 306, 558-565.  | 9.5 | 9         |
| 70 | CHAPTER 4. X-Ray Absorption Spectroscopy of Molybdenum and Tungsten Enzymes. <i>2-Oxoglutarate-Dependent Oxygenases</i> , 2016, , 121-167.  | 0.8 | 2         |
| 71 | 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. <i>Free Radical Biology and Medicine</i> , 2015, 89, 806-818. | 1.3 | 24        |
| 72 | In Situ Biospectroscopic Investigation of Rapid Ischemic and Postmortem Induced Biochemical Alterations in the Rat Brain. <i>ACS Chemical Neuroscience</i> , 2015, 6, 226-238.  | 1.7 | 41        |

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|----|--|------|-----------|
| 73 | Application of a spoked channel array to confocal X-ray fluorescence imaging and X-ray absorption spectroscopy of medieval stained glass. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 759-766.  | 1.6  | 13        |
| 74 | Selenium Preferentially Accumulates in the Eye Lens Following Embryonic Exposure: A Confocal X-ray Fluorescence Imaging Study. <i>Environmental Science &amp; Technology</i> , 2015, 49, 2255-2261.  | 4.6  | 35        |
| 75 | <sup>1</sup> Oxosulfido-Mo(V) Compounds: First Isolation and Unambiguous Characterization of an Extended Series. <i>Inorganic Chemistry</i> , 2015, 54, 6386-6396.   | 1.9  | 11        |
| 76 | Phenylthiourea alters toxicity of mercury compounds in zebrafish larvae. <i>Journal of Inorganic Biochemistry</i> , 2015, 151, 10-17.  | 1.5  | 18        |
| 77 | Soft tissue measurement of arsenic and selenium in an animal model using portable X-ray fluorescence. <i>Radiation Physics and Chemistry</i> , 2015, 116, 241-247.   | 1.4  | 11        |
| 78 | Interaction of mercury and selenium in the larval stage zebrafish vertebrate model. <i>Metallomics</i> , 2015, 7, 1247-1255.   | 1.0  | 34        |
| 79 | Structural basis of enzymatic benzene ring reduction. <i>Nature Chemical Biology</i> , 2015, 11, 586-591.  | 3.9  | 52        |
| 80 | Synchrotron X-ray fluorescence imaging evidence of biogenic mercury identified in a burial in colonial Antigua. <i>Journal of Archaeological Science</i> , 2015, 58, 26-30.  | 1.2  | 12        |
| 81 | High Affinity Binding of Indium and Ruthenium Ions by Gastrins. <i>PLoS ONE</i> , 2015, 10, e0140126.  | 1.1  | 5         |
| 82 | EVIDENCE FOR BIOGENIC COPPER (HEMOCYANIN) IN THE MIDDLE CAMBRIAN ARTHROPOD MARRELLA FROM THE BURGESS SHALE. <i>Palaios</i> , 2014, 29, 512-524.  | 0.6  | 16        |
| 83 | Synchrotron X-ray absorption spectroscopy analysis of arsenic chemical speciation in human nail clippings. <i>Environmental Chemistry</i> , 2014, 11, 632.   | 0.7  | 9         |
| 84 | Structural characterization of Cd <sup>2+</sup> complexes in solution with DMSA and DMPS. <i>Journal of Inorganic Biochemistry</i> , 2014, 136, 99-106.  | 1.5  | 12        |
| 85 | The solution structure of the copper clioquinol complex. <i>Journal of Inorganic Biochemistry</i> , 2014, 133, 50-56.  | 1.5  | 26        |
| 86 | Molybdenum and tungsten oxygen transferases – structural and functional diversity within a common active site motif. <i>Metallomics</i> , 2014, 6, 15-24.  | 1.0  | 47        |
| 87 | Combined EXAFS and DFT Structure Calculations Provide Structural Insights into the 1:1 Multi-Histidine Complexes of Cu <sup>II</sup> , Cu <sup>I</sup> , and Zn <sup>II</sup> with the Tandem Octarepeats of the Mammalian Prion Protein. <i>Chemistry - A European Journal</i> , 2014, 20, 9770-9783. | 1.7  | 21        |
| 88 | Proteomics of <i>Desulfovibrio desulfuricans</i> and X-ray absorption spectroscopy to investigate mercury methylation in the presence of selenium. <i>Metallomics</i> , 2014, 6, 465.  | 1.0  | 25        |
| 89 | Long-Range Chemical Sensitivity in the Sulfur K-Edge X-ray Absorption Spectra of Substituted Thiophenes. <i>Journal of Physical Chemistry A</i> , 2014, 118, 7796-7802.  | 1.1  | 31        |
| 90 | Elemental and Chemically Specific X-ray Fluorescence Imaging of Biological Systems. <i>Chemical Reviews</i> , 2014, 114, 8499-8541.  | 23.0 | 234       |

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|-----|--|-----|-----------|
| 91  | Methylmercury Targets Photoreceptor Outer Segments. <i>ACS Chemical Biology</i> , 2013, 8, 2256-2263.  | 1.6 | 40        |
| 92  | 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. <i>Journal of Physical Chemistry B</i> , 2013, 117, 13822-13841. | 1.2 | 21        |
| 93  | X-ray Absorption Spectroscopy of a Quantitatively Mo(V) Dimethyl Sulfoxide Reductase Species. <i>Inorganic Chemistry</i> , 2013, 52, 2830-2837.  | 1.9 | 26        |
| 94  | Subcellular Biochemical Investigation of Purkinje Neurons Using Synchrotron Radiation Fourier Transform Infrared Spectroscopic Imaging with a Focal Plane Array Detector. <i>ACS Chemical Neuroscience</i> , 2013, 4, 1071-1080.         | 1.7 | 35        |
| 95  | Copper chaperone Atox1 interacts with the metal-binding domain of Wilson's disease protein in cisplatin detoxification. <i>Biochemical Journal</i> , 2013, 454, 147-156.   | 1.7 | 53        |
| 96  | X-Ray Absorption Spectroscopy of Metals in Biology. , 2013, , 2762-2767.   |     | 1         |
| 97  | Chemical Form Matters: Differential Accumulation of Mercury Following Inorganic and Organic Mercury Exposures in Zebrafish Larvae. <i>ACS Chemical Biology</i> , 2012, 7, 411-420.   | 1.6 | 83        |
| 98  | X-ray Absorption Spectroscopy at the Sulfur K-Edge: A New Tool to Investigate the Biochemical Mechanisms of Neurodegeneration. <i>ACS Chemical Neuroscience</i> , 2012, 3, 178-185.  | 1.7 | 61        |
| 99  | X-ray-induced photo-chemistry and X-ray absorption spectroscopy of biological samples. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 875-886.  | 1.0 | 141       |
| 100 | X-ray absorption spectroscopy at a protein crystallography facility: the Canadian Light Source beamline 08B1-1. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 887-891.   | 1.0 | 3         |
| 101 | International Workshop on Improving Data Quality and Quantity for XAFS Experiments (Q2XAFS 2011). <i>Journal of Synchrotron Radiation</i> , 2012, 19, 849-850.   | 1.0 | 7         |
| 102 | Metalloprotein active site structure determination: Synergy between X-ray absorption spectroscopy and X-ray crystallography. <i>Journal of Inorganic Biochemistry</i> , 2012, 115, 127-137.  | 1.5 | 74        |
| 103 | Knocking Out ACR2 Does Not Affect Arsenic Redox Status in <i>Arabidopsis thaliana</i> : Implications for As Detoxification and Accumulation in Plants. <i>PLoS ONE</i> , 2012, 7, e42408.  | 1.1 | 34        |
| 104 | The fictile coordination chemistry of cuprous-thiolate sites in copper chaperones. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 938-947.   | 0.5 | 27        |
| 105 | The chemical forms of mercury and selenium in whale skeletal muscle. <i>Metallomics</i> , 2011, 3, 1232.   | 1.0 | 25        |
| 106 | Prion protein expression level alters regional copper, iron and zinc content in the mouse brain. <i>Metallomics</i> , 2011, 3, 206.  | 1.0 | 91        |
| 107 | Molybdenum Speciation in Uranium Mine Tailings Using X-Ray Absorption Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2011, 45, 455-460.   | 4.6 | 47        |
| 108 | Molybdenum Site Structure of <i>Escherichia coli</i> YedY, a Novel Bacterial Oxidoreductase. <i>Inorganic Chemistry</i> , 2011, 50, 732-740.   | 1.9 | 21        |

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|-----|--|-----|-----------|
| 109 | Nature of Halide Binding to the Molybdenum Site of Sulfite Oxidase. <i>Inorganic Chemistry</i> , 2011, 50, 9406-9413.  | 1.9 | 8         |
| 110 | Towards a custom chelator for mercury: evaluation of coordination environments by molecular modeling. <i>Journal of Biological Inorganic Chemistry</i> , 2011, 16, 15-24.  | 1.1 | 16        |
| 111 | Use of Soller slits to remove reference foil fluorescence from transmission spectra. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 527-529.  | 1.0 | 5         |
| 112 | Spectroscopic studies of molybdenum and tungsten enzymes. <i>Coordination Chemistry Reviews</i> , 2011, 255, 1055-1084.  | 9.5 | 74        |
| 113 | Probing the coordination behavior of Hg <sup>2+</sup> , CH <sub>3</sub> Hg <sup>+</sup> , and Cd <sup>2+</sup> towards mixtures of two biological thiols by HPLC-ICP-AES. <i>Journal of Inorganic Biochemistry</i> , 2011, 105, 375-381. | 1.5 | 39        |
| 114 | The chemical forms of mercury in human hair: a study using X-ray absorption spectroscopy. <i>Journal of Biological Inorganic Chemistry</i> , 2010, 15, 709-715.  | 1.1 | 30        |
| 115 | Dynamic accumulation and redistribution of methylmercury in the lens of developing zebrafish embryos and larvae. <i>Journal of Biological Inorganic Chemistry</i> , 2010, 15, 1137-1145.   | 1.1 | 30        |
| 116 | The Chemical Nature of Mercury in Human Brain Following Poisoning or Environmental Exposure. <i>ACS Chemical Neuroscience</i> , 2010, 1, 810-818.  | 1.7 | 168       |
| 117 | The Structures of the C185S and C185A Mutants of Sulfite Oxidase Reveal Rearrangement of the Active Site. <i>Biochemistry</i> , 2010, 49, 3989-4000.   | 1.2 | 26        |
| 118 | Active-Site Dynamics and Large-Scale Domain Motions of Sulfite Oxidase: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2010, 114, 3266-3275.   | 1.2 | 25        |
| 119 | Mapping metals in Parkinson's and normal brain using rapid-scanning x-ray fluorescence. <i>Physics in Medicine and Biology</i> , 2009, 54, 651-663.  | 1.6 | 112       |
| 120 | Arsenic K-edge X-ray absorption spectroscopy of arsenic in seafood. <i>Molecular Nutrition and Food Research</i> , 2009, 53, 552-557.  | 1.5 | 14        |
| 121 | Characterization of a modified nitrogenase Fe protein from <i>Klebsiella pneumoniae</i> in which the 4Fe4S cluster has been replaced by a 4Fe4Se cluster. <i>Journal of Biological Inorganic Chemistry</i> , 2009, 14, 673-682.          | 1.1 | 25        |
| 122 | Molybdenum X-ray absorption edges from 200 to 20,000eV: The benefits of soft X-ray spectroscopy for chemical speciation. <i>Journal of Inorganic Biochemistry</i> , 2009, 103, 157-167.  | 1.5 | 40        |
| 123 | Molybdenum Induces the Expression of a Protein Containing a New Heterometallic Mo-Fe Cluster in <i>Desulfovibrio alaskensis</i> . <i>Biochemistry</i> , 2009, 48, 873-882.   | 1.2 | 25        |
| 124 | Unnatural Amino Acid Substitution as a Probe of the Allosteric Coupling Pathway in a Mycobacterial Cu(I) Sensor. <i>Journal of the American Chemical Society</i> , 2009, 131, 18044-18045.   | 6.6 | 54        |
| 125 | Localizing the Chemical Forms of Sulfur in Vivo Using X-ray Fluorescence Spectroscopic Imaging: Application to Onion ( <i>Allium cepa</i> ) Tissues. <i>Biochemistry</i> , 2009, 48, 6846-6853.  | 1.2 | 43        |
| 126 | Tracing Copper <sup>2+</sup> Thiomolybdate Complexes in a Prospective Treatment for Wilson's Disease. <i>Biochemistry</i> , 2009, 48, 891-897.   | 1.2 | 70        |



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|-----|---|-----|-----------|
| 127 | Mechanisms of gold biomineralization in the bacterium <i>Cupriavidus metallidurans</i> . Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17757-17762.   | 3.3 | 283       |
| 128 | The Chemical Forms of Mercury in Aged and Fresh Dental Amalgam Surfaces. Chemical Research in Toxicology, 2009, 22, 1761-1764.  | 1.7 | 19        |
| 129 | Insect excretes unusual six-coordinate pentavalent arsenic species. Environmental Chemistry, 2009, 6, 298.  | 0.7 | 8         |
| 130 | A possible molecular link between the toxicological effects of arsenic, selenium and methylmercury: methylmercury(II) seleno bis(S-glutathionyl) arsenic(III). Journal of Biological Inorganic Chemistry, 2008, 13, 461-470.                            | 1.1 | 30        |
| 131 | A new type of metal-binding site in cobalt- and zinc-containing adenylate kinases isolated from sulfate-reducers <i>Desulfovibrio gigas</i> and <i>Desulfovibrio desulfuricans</i> ATCC 27774. Journal of Inorganic Biochemistry, 2008, 102, 1380-1395. | 1.5 | 16        |
| 132 | X-Ray Absorption Spectroscopy of Cuprous Sulfide Clusters in <i>Saccharomyces cerevisiae</i> Metallothionein. Chemistry and Biodiversity, 2008, 5, 2042-2049.   | 1.0 | 19        |
| 133 | Structure of the Molybdenum Site of <i>Escherichia coli</i> Trimethylamine N-Oxide Reductase. Inorganic Chemistry, 2008, 47, 1074-1078.   | 1.9 | 33        |
| 134 | Mo <sup>V</sup> Electron Paramagnetic Resonance of Sulfite Oxidase Revisited: The Low-pH Chloride Signal. Inorganic Chemistry, 2008, 47, 2033-2038.   | 1.9 | 28        |
| 135 | Electronic Structure Description of the cis-MoOS Unit in Models for Molybdenum Hydroxylases. Journal of the American Chemical Society, 2008, 130, 55-65.  | 6.6 | 58        |
| 136 | A High-Affinity Metal-Binding Peptide from <i>Escherichia coli</i> HypB. Journal of the American Chemical Society, 2008, 130, 14056-14057.  | 6.6 | 37        |
| 137 | Structural and Biological Analysis of the Metal Sites of <i>Escherichia coli</i> Hydrogenase Accessory Protein HypB. Biochemistry, 2008, 47, 11981-11991.   | 1.2 | 45        |
| 138 | Chemical Forms of Mercury and Selenium in Fish Following Digestion with Simulated Gastric Fluid. Chemical Research in Toxicology, 2008, 21, 2106-2110.  | 1.7 | 47        |
| 139 | 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.   | 3.3 | 129       |
| 140 | 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.  | 1.0 | 53        |
| 141 | Chapter 5 Inorganic Molecular Toxicology and Chelation Therapy of Heavy Metals and Metalloids. Advances in Molecular Toxicology, 2008, 2, 123-152.  | 0.4 | 9         |
| 142 | Copper sensing function of <i>Drosophila</i> metal-responsive transcription factor-1 is mediated by a tetranuclear Cu(I) cluster. Nucleic Acids Research, 2008, 36, 3128-3138.  | 6.5 | 40        |
| 143 | Insights into the Chemical Biology of Selenium. Phosphorus, Sulfur and Silicon and the Related Elements, 2008, 183, 924-930.  | 0.8 | 8         |
| 144 | Development of a combined K-edge subtraction and fluorescence subtraction imaging system for small animals. Review of Scientific Instruments, 2008, 79, 085102.   | 0.6 | 5         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | The Characterization and Role of Zinc Binding in Yeast Cox4. <i>Journal of Biological Chemistry</i> , 2007, 282, 8926-8934.   | 1.6 | 35        |
| 146 | Characterization of the Cytochrome c Oxidase Assembly Factor Cox19 of <i>Saccharomyces cerevisiae</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 10233-10242.  | 1.6 | 55        |
| 147 | X-Ray Absorption Spectroscopy Imaging of Biological Tissues. <i>AIP Conference Proceedings</i> , 2007, , .  | 0.3 | 6         |
| 148 | Mercury Speciation in Piscivorous Fish from Mining-Impacted Reservoirs. <i>Environmental Science &amp; Technology</i> , 2007, 41, 2745-2749.  | 4.6 | 69        |
| 149 | Interaction of Product Analogues with the Active Site of <i>Rhodobacter Sphaeroides</i> Dimethyl Sulfoxide Reductase. <i>Inorganic Chemistry</i> , 2007, 46, 3097-3104.   | 1.9 | 21        |
| 150 | Sulfur X-ray Absorption Spectroscopy of Living Mammalian Cells: An Enabling Tool for Sulfur Metabolomics. In Situ Observation of Uptake of Taurine into MDCK Cells. <i>Biochemistry</i> , 2007, 46, 14735-14741.                    | 1.2 | 24        |
| 151 | Modified Active Site Coordination in a Clinical Mutant of Sulfite Oxidase. <i>Journal of the American Chemical Society</i> , 2007, 129, 9421-9428.  | 6.6 | 30        |
| 152 | Synthesis, Characterization, and Biomimetic Chemistry of cis-Oxosulfidomolybdenum(VI) Complexes Stabilized by an Intramolecular Mo(O)S <sub>2</sub> S Interaction. <i>Inorganic Chemistry</i> , 2007, 46, 939-948.                  | 1.9 | 29        |
| 153 | X-ray Absorption Spectroscopic Characterization of the Molybdenum Site of <i>Escherichia coli</i> Dimethyl Sulfoxide Reductase. <i>Inorganic Chemistry</i> , 2007, 46, 2-4.   | 1.9 | 24        |
| 154 | Chemical Form of Selenium in Naturally Selenium-Rich Lentils ( <i>Lens culinaris</i> L.) from Saskatchewan. <i>Journal of Agricultural and Food Chemistry</i> , 2007, 55, 7337-7341.  | 2.4 | 64        |
| 155 | Reversed-phase high-performance liquid chromatographic separation of inorganic mercury and methylmercury driven by their different coordination chemistry towards thiols. <i>Journal of Chromatography A</i> , 2007, 1156, 331-339. | 1.8 | 37        |
| 156 | Strong poison revisited. <i>Journal of Inorganic Biochemistry</i> , 2007, 101, 1891-1893.   | 1.5 | 22        |
| 157 | CsoR is a novel <i>Mycobacterium tuberculosis</i> copper-sensing transcriptional regulator. , 2007, 3, 60-68.   |     | 291       |
| 158 | The chemical form of mitochondrial iron in Friedreich's ataxia. <i>Journal of Inorganic Biochemistry</i> , 2007, 101, 957-966.  | 1.5 | 36        |
| 159 | X-RAY ABSORPTION SPECTROSCOPY IN BIOLOGY AND CHEMISTRY. , 2007, , 97-119.   |     | 14        |
| 160 | Models for the Molybdenum Hydroxylases: Synthesis, Characterization and Reactivity of cis-Oxosulfido-Mo(VI) Complexes. <i>Journal of the American Chemical Society</i> , 2006, 128, 305-316.  | 6.6 | 57        |
| 161 | More on Molecular Mimicry in Mercury Toxicology. <i>Chemical Research in Toxicology</i> , 2006, 19, 1118-1120.  | 1.7 | 8         |
| 162 | Localizing the Biochemical Transformations of Arsenate in a Hyperaccumulating Fern. <i>Environmental Science &amp; Technology</i> , 2006, 40, 5010-5014.  | 4.6 | 195       |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 163 | The Seleno Bis(S-glutathionyl) Arsinium Ion Is Assembled in Erythrocyte Lysate. <i>Chemical Research in Toxicology</i> , 2006, 19, 601-607.   | 1.7  | 62        |
| 164 | Structure of the Active Site of Sulfite Dehydrogenase from <i>Starkeya novella</i> . <i>Inorganic Chemistry</i> , 2006, 45, 7488-7492.  | 1.9  | 24        |
| 165 | Molecular Mimicry in Mercury Toxicology. <i>Chemical Research in Toxicology</i> , 2006, 19, 753-759.  | 1.7  | 71        |
| 166 | High-Resolution EXAFS of the Active Site of Human Sulfite Oxidase: A Comparison with Density Functional Theory and X-ray Crystallographic Results. <i>Inorganic Chemistry</i> , 2006, 45, 493-495.  | 1.9  | 38        |
| 167 | A cadmium enzyme from a marine diatom. <i>Nature</i> , 2005, 435, 42-42.  | 13.7 | 518       |
| 168 | High-Resolution X-Ray Emission Spectroscopy of Molybdenum Compounds. <i>ChemInform</i> , 2005, 36, no.  | 0.1  | 0         |
| 169 | Using softer X-ray absorption spectroscopy to probe biological systems. <i>Journal of Synchrotron Radiation</i> , 2005, 12, 392-401.  | 1.0  | 31        |
| 170 | Human Sco1 and Sco2 Function as Copper-binding Proteins. <i>Journal of Biological Chemistry</i> , 2005, 280, 34113-34122.   | 1.6  | 147       |
| 171 | High-Resolution X-ray Emission Spectroscopy of Molybdenum Compounds. <i>Inorganic Chemistry</i> , 2005, 44, 2579-2581.  | 1.9  | 22        |
| 172 | Nature of the Catalytically Labile Oxygen at the Active Site of Xanthine Oxidase. <i>Journal of the American Chemical Society</i> , 2005, 127, 4518-4522.   | 6.6  | 86        |
| 173 | X-ray Absorption Spectroscopy of Selenate Reductase. <i>Inorganic Chemistry</i> , 2004, 43, 402-404.  | 1.9  | 35        |
| 174 | The Sulfur Chemistry of Shiitake Mushroom. <i>Journal of the American Chemical Society</i> , 2004, 126, 458-459.  | 6.6  | 42        |
| 175 | Selenium Biotransformations in an Insect Ecosystem: Effects of Insects on Phytoremediation. <i>Environmental Science &amp; Technology</i> , 2004, 38, 3581-3586.  | 4.6  | 59        |
| 176 | C-Terminal Domain of the Membrane Copper Transporter Ctr1 from <i>Saccharomyces cerevisiae</i> Binds Four Cu(I) Ions as a Cuprous-Thiolate Polynuclear Cluster: A Sub-femtomolar Cu(I) Affinity of Three Proteins Involved in Copper Trafficking. <i>Journal of the American Chemical Society</i> , 2004, 126, 3081-3090. | 6.6  | 237       |
| 177 | Coordination Chemistry at the Molybdenum Site of Sulfite Oxidase: Redox-Induced Structural Changes in the Cysteine 207 to Serine Mutant. <i>Inorganic Chemistry</i> , 2004, 43, 8456-8460.  | 1.9  | 31        |
| 178 | Mercury Binding to the Chelation Therapy Agents DMSA and DMPS and the Rational Design of Custom Chelators for Mercury. <i>Chemical Research in Toxicology</i> , 2004, 17, 999-1006.   | 1.7  | 102       |
| 179 | The Chemical Form of Mercury in Fish. <i>Science</i> , 2003, 301, 1203-1203.  | 6.0  | 1,214     |
| 180 | Thioredoxin <sub>2</sub> overexpressed in barley seeds enhances selenite resistance and uptake during germination and early seedling development. <i>Planta</i> , 2003, 218, 186-191.   | 1.6  | 25        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 181 | Imaging of selenium in plants using tapered metal monocapillary optics. <i>Journal of Synchrotron Radiation</i> , 2003, 10, 289-290.  | 1.0 | 19        |
| 182 | Structure of Frataxin Iron Cores: An X-ray Absorption Spectroscopic Study. <i>Biochemistry</i> , 2003, 42, 5971-5976.   | 1.2 | 68        |
| 183 | Tetrathiomolybdate Causes Formation of Hepatic Copper-Molybdenum Clusters in an Animal Model of Wilson's Disease. <i>Journal of the American Chemical Society</i> , 2003, 125, 1704-1705.   | 6.6 | 59        |
| 184 | Redox Interplay of Oxo-Thio-Tungsten Centers with Sulfur-Donor Co-Ligands. <i>Inorganic Chemistry</i> , 2003, 42, 5909-5916.  | 1.9 | 17        |
| 185 | Chemical Form and Distribution of Selenium and Sulfur in the Selenium Hyperaccumulator <i>Astragalus bisulcatus</i> . <i>Plant Physiology</i> , 2003, 131, 1460-1467.   | 2.3 | 163       |
| 186 | Recombinant <i>Rhodobacter capsulatus</i> Xanthine Dehydrogenase, a Useful Model System for the Characterization of Protein Variants Leading to Xanthinuria I in Humans. <i>Journal of Biological Chemistry</i> , 2003, 278, 20802-20811. | 1.6 | 57        |
| 187 | Yeast Cox11, a Protein Essential for Cytochrome cOxidase Assembly, Is a Cu(I)-binding Protein. <i>Journal of Biological Chemistry</i> , 2002, 277, 31237-31242.   | 1.6 | 143       |
| 188 | Biliary Excretion of [(GS) <sub>2</sub> AsSe]-after Intravenous Injection of Rabbits with Arsenite and Selenate. <i>Chemical Research in Toxicology</i> , 2002, 15, 1466-1471.  | 1.7 | 76        |
| 189 | The Active Site of Arsenite Oxidase from <i>Alcaligenes faecalis</i> . <i>Journal of the American Chemical Society</i> , 2002, 124, 11276-11277.  | 6.6 | 74        |
| 190 | Unraveling the Substrate-Metal Binding Site of Ferrochelatase: An X-ray Absorption Spectroscopic Study. <i>Biochemistry</i> , 2002, 41, 4809-4818.  | 1.2 | 47        |
| 191 | Structures of the Cuprous-Thiolate Clusters of the Mac1 and Ace1 Transcriptional Activators. <i>Biochemistry</i> , 2002, 41, 6469-6476.   | 1.2 | 81        |
| 192 | Synthesis, Purification, and Structural Characterization of the Dimethyldiselenoarsinate Anion. <i>Inorganic Chemistry</i> , 2002, 41, 5426-5432.   | 1.9 | 27        |
| 193 | Copper Transfer from the Cu(I) Chaperone, CopZ, to the Repressor, Zn(II)CopY: Metal Coordination Environments and Protein Interactions. <i>Biochemistry</i> , 2002, 41, 5822-5829.  | 1.2 | 116       |
| 194 | Spectroscopic Studies of <i>Pyrococcus furiosus</i> Superoxide Reductase: Implications for Active-Site Structures and the Catalytic Mechanism. <i>Journal of the American Chemical Society</i> , 2002, 124, 788-805.                      | 6.6 | 120       |
| 195 | Anthocyanins facilitate tungsten accumulation in Brassica. <i>Physiologia Plantarum</i> , 2002, 116, 351-358.   | 2.6 | 75        |
| 196 | Solution structural studies of molybdate-nucleotide polyanions. <i>Journal of Inorganic Biochemistry</i> , 2002, 88, 274-283.   | 1.5 | 11        |
| 197 | Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (S-glutathionyl) arsinium anion from selenide, arsenite and glutathione. <i>Journal of Organometallic Chemistry</i> , 2002, 650, 108-113.                     | 0.8 | 20        |
| 198 | Removal of a cysteine ligand from rubredoxin: assembly of Fe <sub>2</sub> S <sub>2</sub> and Fe(S-Cys) <sub>3</sub> (OH) centres. <i>Journal of Biological Inorganic Chemistry</i> , 2002, 7, 781-790.                                    | 1.1 | 19        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 199 | X-ray absorption spectroscopy of bacterial sulfur globules. <i>Microbiology (United Kingdom)</i> , 2002, 148, 2267-2268.  | 0.7 | 11        |
| 200 | In situ observation of the generation of isothiocyanates from sinigrin in horseradish and wasabi. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2001, 1527, 156-160.                                  | 1.1 | 33        |
| 201 | Fluorine Encapsulation and Stabilization of Biologically Relevant Low-Valence Copper-Oxo Cores. <i>Inorganic Chemistry</i> , 2001, 40, 4812-4813.   | 1.9 | 47        |
| 202 | Analysis of Sulfur Biochemistry of Sulfur Bacteria Using X-ray Absorption Spectroscopy. <i>Biochemistry</i> , 2001, 40, 8138-8145.  | 1.2 | 153       |
| 203 | Synthesis, Characterization, and Electrochemistry of cis-Oxothio- and cis-Bis(thio)tungsten(VI) Complexes of Hydrotris(3,5-dimethylpyrazol-1-yl)borate. <i>Inorganic Chemistry</i> , 2001, 40, 4563-4573.         | 1.9 | 29        |
| 204 | The Mitochondrial Copper Metallochaperone Cox17 Exists as an Oligomeric, Polycopper Complex. <i>Biochemistry</i> , 2001, 40, 743-751.   | 1.2 | 115       |
| 205 | Human Cytosolic Iron Regulatory Protein 1 Contains a Linear Iron-Sulfur Cluster. <i>Journal of the American Chemical Society</i> , 2001, 123, 10121-10122.  | 6.6 | 23        |
| 206 | Yeast Sco1, a Protein Essential for Cytochrome cOxidase Function Is a Cu(I)-binding Protein. <i>Journal of Biological Chemistry</i> , 2001, 276, 42520-42526.   | 1.6 | 161       |
| 207 | Molybdenum Sequestration in Brassica Species. A Role for Anthocyanins?. <i>Plant Physiology</i> , 2001, 126, 1391-1402.   | 2.3 | 162       |
| 208 | Deep Desulfurization of Extensively Hydrodesulfurized Middle Distillate Oil by <i>Rhodococcus</i> sp. Strain ECRD-1. <i>Applied and Environmental Microbiology</i> , 2001, 67, 1949-1952.                         | 1.4 | 72        |
| 209 | XAS and microscopy studies of the uptake and bio-transformation of copper in <i>Larrea tridentata</i> (creosote bush). <i>Microchemical Journal</i> , 2000, 65, 227-236.  | 2.3 | 53        |
| 210 | Quantitative, chemically specific imaging of selenium transformation in plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000, 97, 10717-10722.                   | 3.3 | 168       |
| 211 | Reduction and Coordination of Arsenic in Indian Mustard. <i>Plant Physiology</i> , 2000, 122, 1171-1178.  | 2.3 | 525       |
| 212 | Fate of Selenate and Selenite Metabolized by <i>Rhodobacter sphaeroides</i> . <i>Applied and Environmental Microbiology</i> , 2000, 66, 4849-4853.  | 1.4 | 74        |
| 213 | Stoichiometry of Complex Formation between Copper(I) and the N-Terminal Domain of the Menkes Protein. <i>Biochemistry</i> , 2000, 39, 6857-6863.  | 1.2 | 49        |
| 214 | A Novel Protein-Bound Copper-Molybdenum Cluster. <i>Journal of the American Chemical Society</i> , 2000, 122, 8321-8322.  | 6.6 | 90        |
| 215 | A Metabolic Link between Arsenite and Selenite: The Seleno-bis(S-glutathionyl) Arsinium Ion. <i>Journal of the American Chemical Society</i> , 2000, 122, 4637-4639.  | 6.6 | 132       |
| 216 | Toward a Total Model for the Molybdenum Hydroxylases: Synthesis, Redox, and Biomimetic Chemistry of Oxo-thio-Mo(VI) and -Mo(V) Complexes. <i>Journal of the American Chemical Society</i> , 2000, 122, 2946-2947. | 6.6 | 44        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Structural Basis of the Antagonism between Inorganic Mercury and Selenium in Mammals. <i>Chemical Research in Toxicology</i> , 2000, 13, 1135-1142.   | 1.7 | 158       |
| 218 | The Active Site Structure of <i>Thalassiosira weissflogii</i> Carbonic Anhydrase 1. <i>Biochemistry</i> , 2000, 39, 12128-12130.  | 1.2 | 117       |
| 219 | Structure of the Molybdenum Site of <i>Rhodobacter sphaeroides</i> Biotin Sulfoxide Reductase. <i>Biochemistry</i> , 2000, 39, 4046-4052.   | 1.2 | 33        |
| 220 | Microbial Desulfurization of a Crude Oil Middle-Distillate Fraction: Analysis of the Extent of Sulfur Removal and the Effect of Removal on Remaining Sulfur. <i>Applied and Environmental Microbiology</i> , 1999, 65, 181-188.   | 1.4 | 96        |
| 221 | Generation and biomimetic chemistry of tungsten dithiolene complexes containing the hydrotris(3,5-dimethylpyrazol-1-yl)borate ligand. <i>Journal of Inorganic Biochemistry</i> , 1999, 76, 39-45.   | 1.5 | 15        |
| 222 | X-ray absorption spectroscopy of selenium-containing amino acids. <i>Journal of Biological Inorganic Chemistry</i> , 1999, 4, 791-794.  | 1.1 | 66        |
| 223 | X-ray absorption spectroscopy of cadmium phytochelatin and model systems. <i>BBA - Proteins and Proteomics</i> , 1999, 1429, 351-364.   | 2.1 | 83        |
| 224 | Structure of the Molybdenum Site of Dimethyl Sulfoxide Reductase. <i>Journal of the American Chemical Society</i> , 1999, 121, 1256-1266.   | 6.6 | 149       |
| 225 | Structural Changes Induced by Catalytic Turnover at the Molybdenum Site of <i>Arabidopsis</i> Nitrate Reductase. <i>Journal of the American Chemical Society</i> , 1999, 121, 9730-9731.  | 6.6 | 39        |
| 226 | Observation of Ligand-Based Redox Chemistry at the Active Site of a Molybdenum Enzyme. <i>Journal of the American Chemical Society</i> , 1999, 121, 2625-2626.  | 6.6 | 52        |
| 227 | X-ray Absorption Spectroscopy of Chicken Sulfite Oxidase Crystals. <i>Inorganic Chemistry</i> , 1999, 38, 2539-2540.  | 1.9 | 63        |
| 228 | Microbial Desulfurization of a Crude Oil Middle-Distillate Fraction: Analysis of the Extent of Sulfur Removal and the Effect of Removal on Remaining Sulfur. <i>Applied and Environmental Microbiology</i> , 1999, 65, 3264-3264.   | 1.4 | 8         |
| 229 | An edge with XAS. <i>Nature Structural Biology</i> , 1998, 5, 645-647.  | 9.7 | 41        |
| 230 | Sulfur K-edge X-ray absorption spectroscopy for determining the chemical speciation of sulfur in biological systems. <i>FEBS Letters</i> , 1998, 441, 11-14.  | 1.3 | 150       |
| 231 | The Rubredoxin from <i>Clostridium pasteurianum</i> : A Mutation of the Iron Cysteinylic Ligands to Serine. Crystal and Molecular Structures of Oxidized and Dithionite-Treated Forms of the Cys42Ser Mutant. <i>Journal of the American Chemical Society</i> , 1998, 120, 4135-4150. | 6.6 | 81        |
| 232 | X-ray Absorption Spectroscopy of the Molybdenum Site of <i>Escherichia coli</i> Formate Dehydrogenase. <i>Journal of the American Chemical Society</i> , 1998, 120, 1267-1273.  | 6.6 | 90        |
| 233 | Characterization of the Copper Chaperone Cox17 of <i>Saccharomyces cerevisiae</i> . <i>Biochemistry</i> , 1998, 37, 7572-7577.  | 1.2 | 111       |
| 234 | ATP Sulfurylases from Sulfate-Reducing Bacteria of the Genus <i>Desulfovibrio</i> . A Novel Metalloprotein Containing Cobalt and Zinc. <i>Biochemistry</i> , 1998, 37, 16225-16232.   | 1.2 | 76        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 235 | Interaction of Arsenate with the Molybdenum Site of Sulfite Oxidase. <i>Journal of the American Chemical Society</i> , 1998, 120, 4522-4523.   | 6.6 | 38        |
| 236 | Oxotungsten(VI) Chemistry of Hydrotris(3,5-dimethylpyrazol-1-yl)borate: A Hydroxodioxotungsten(VI), Trioxotungsten(VI), and (1/4-Oxo)bis[dioxotungsten(VI)] Complexes. <i>Inorganic Chemistry</i> , 1997, 36, 472-479. | 1.9 | 22        |
| 237 | The remarkable complexity of hydroxylamine oxidoreductase. <i>Nature Structural Biology</i> , 1997, 4, 247-250.  | 9.7 | 19        |
| 238 | X-ray absorption spectroscopy of molybdenum enzymes. <i>Journal of Biological Inorganic Chemistry</i> , 1997, 2, 790-796.  | 1.1 | 30        |
| 239 | Presence of a Copper(I)-Thiolate Regulatory Domain in the Copper-Activated Transcription Factor Amt1. <i>Biochemistry</i> , 1996, 35, 14583-14589.   | 1.2 | 53        |
| 240 | Electron Paramagnetic Resonance Spectroscopy of the Iron-Molybdenum Cofactor of <i>Clostridium pasteurianum</i> Nitrogenase. <i>Inorganic Chemistry</i> , 1996, 35, 434-438.   | 1.9 | 23        |
| 241 | X-ray Absorption Spectroscopy of Dimethyl Sulfoxide Reductase from <i>Rhodobacter sphaeroides</i> . <i>Journal of the American Chemical Society</i> , 1996, 118, 1113-1117.  | 6.6 | 123       |
| 242 | Dinitrogen Cleavage by Three-Coordinate Molybdenum(III) Complexes: A Mechanistic and Structural Data. <i>Journal of the American Chemical Society</i> , 1996, 118, 8623-8638.  | 6.6 | 394       |
| 243 | X-ray absorption spectroscopy of <i>Pyrococcus furiosus</i> rubredoxin. <i>Journal of Biological Chemistry</i> , 1996, 1, 226-230.   | 1.1 | 20        |
| 244 | The Molybdenum Site of Sulfite Oxidase: A Comparison of Wild-Type and the Cysteine 207 to Serine Mutant Using X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 1996, 118, 8588-8592.   | 6.6 | 123       |
| 245 | Cytochrome f revealed. <i>Trends in Biochemical Sciences</i> , 1995, 20, 217-218.  | 3.7 | 20        |
| 246 | Alteration of Axial Coordination by Protein Engineering in Myoglobin. <i>Journal of Biological Chemistry</i> , 1995, 270, 15993-16001.   | 1.6 | 63        |
| 247 | Polarized X-ray Absorption Spectroscopy of Cupric Chloride Dihydrate. <i>Inorganic Chemistry</i> , 1995, 34, 3142-3152.  | 1.9 | 82        |
| 248 | Mixed Cu <sup>+</sup> and Zn <sup>2+</sup> Coordination in the DNA-Binding Domain of the AMT1 Transcription Factor from <i>Candida glabrata</i> . <i>Biochemistry</i> , 1994, 33, 9566-9577.                           | 1.2 | 55        |
| 249 | Diffraction anomalous fine structure: a new technique for probing local atomic environment. <i>Journal of the American Chemical Society</i> , 1993, 115, 6302-6311.  | 6.6 | 73        |
| 250 | X-ray absorption spectroscopy of oriented cytochrome oxidase. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1993, 1142, 240-252.  | 0.5 | 35        |
| 251 | X-ray absorption spectroscopy of light elements in biological systems. <i>Current Opinion in Structural Biology</i> , 1993, 3, 780-784.  | 2.6 | 16        |
| 252 | Nickel K-edge x-ray absorption fine structure of lithium nickel oxides. <i>Journal of the American Chemical Society</i> , 1993, 115, 4137-4144.  | 6.6 | 72        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 253 | Direct observation of bis-sulfur ligation to the heme of bacterioferritin. Journal of the American Chemical Society, 1993, 115, 7716-7718.  | 6.6 | 30        |
| 254 | X-ray absorption spectroscopy of cuprous-thiolate clusters in proteins and model systems. Journal of the American Chemical Society, 1993, 115, 9498-9505.   | 6.6 | 148       |
| 255 | Distinct metal binding configurations in ACE1. Biochemistry, 1993, 32, 7294-7301.   | 1.2 | 35        |
| 256 | Site-Specific X-ray Absorption Spectroscopy Using DIFFRAXAFS. Japanese Journal of Applied Physics, 1993, 32, 206.   | 0.8 | 11        |
| 257 | Cuprous-Thiolate Polymetallic Clusters in Biology. , 1993, , 110-123.   |     | 11        |
| 258 | Aldehyde ferredoxin oxidoreductase from the hyperthermophilic archaeobacterium Pyrococcus furiosus contains a tungsten oxo-thiolate center. Journal of the American Chemical Society, 1992, 114, 3521-3523. | 6.6 | 69        |
| 259 | Characterization and thermal reactivity of oxidized organic sulphur forms in coals. Fuel, 1992, 71, 1255-1264.  | 3.4 | 66        |
| 260 | Coordination structure of the ferric heme iron in engineered distal histidine myoglobin mutants. Journal of Biological Chemistry, 1992, 267, 22843-52.  | 1.6 | 85        |
| 261 | Surface composition of iron and inorganic sulfur forms in Argonne Premium coals by x-ray photoelectron spectroscopy. Energy & Fuels, 1991, 5, 720-723.  | 2.5 | 19        |
| 262 | XANES evidence for selective organic sulfur removal from Illinois No. 6 coal. Energy & Fuels, 1991, 5, 771-773.   | 2.5 | 12        |
| 263 | Direct determination and quantification of sulfur forms in coals from the Argonne Premium Sample Program. Energy & Fuels, 1991, 5, 93-97.   | 2.5 | 175       |
| 264 | A copper-thiolate polynuclear cluster in the ACE1 transcription factor.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 6127-6131.                              | 3.3 | 119       |
| 265 | Thermal reactivity of sulphur forms in coal. Fuel, 1991, 70, 396-402.   | 3.4 | 67        |
| 266 | Direct Determination and Quantification of Sulfur Forms in Heavy Petroleum and Coal. ACS Symposium Series, 1991, , 127-136.   | 0.5 | 5         |
| 267 | COMPARISON OF PYROLYTIC AND X-RAY SPECTROSCOPIC METHODS FOR DETERMINING ORGANIC SULFUR SPECIES IN COAL. , 1991, , 985-988.  |     | 3         |
| 268 | Direct determination and quantification of sulphur forms in heavy petroleum and coals. Fuel, 1990, 69, 945-949.   | 3.4 | 86        |
| 269 | Chemistry of organically bound sulphur forms during the mild oxidation of coal. Fuel, 1990, 69, 1065-1067.  | 3.4 | 56        |
| 270 | L-Edge spectroscopy of molybdenum compounds and enzymes. Journal of the American Chemical Society, 1990, 112, 2541-2548.  | 6.6 | 68        |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 271 | Tryptophan radicals. Trends in Biochemical Sciences, 1990, 15, 170-172.   | 3.7 | 31        |
| 272 | Sulfur K-Edge X-ray Absorption Spectroscopy of Petroleum Asphaltenes and Model Compounds. ACS Symposium Series, 1990, , 220-230.  | 0.5 | 4         |
| 273 | The Manganese Cluster of the Water-Splitting Enzyme. , 1990, , 685-692.   |     | 2         |
| 274 | Oriented x-ray absorption spectroscopy of membrane bound metalloproteins. Physica B: Condensed Matter, 1989, 158, 81-83.  | 1.3 | 13        |
| 275 | 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.                            | 1.2 | 132       |
| 276 | The manganese site of the photosynthetic water-splitting enzyme. Science, 1989, 243, 789-791.   | 6.0 | 210       |
| 277 | 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.                         | 1.9 | 30        |
| 278 | EXAFS analysis of xanthine oxidase complexes with alloxanthine, violapterin, and 6-pteridylaldehyde. Inorganic Chemistry, 1989, 28, 4018-4022.  | 1.9 | 74        |
| 279 | Sulfur K-edge x-ray absorption spectroscopy of petroleum asphaltenes and model compounds. Journal of the American Chemical Society, 1989, 111, 3182-3186.   | 6.6 | 255       |
| 280 | X-ray-absorption and electron-paramagnetic-resonance spectroscopic studies of the environment of molybdenum in high-pH and low-pH forms of Escherichia coli nitrate reductase. Biochemical Journal, 1989, 259, 693-700. | 1.7 | 49        |
| 281 | E.p.r.-spectroscopic studies on the molybdenum-iron site of nitrogenase from <i>Clostridium pasteurianum</i> . Biochemical Journal, 1989, 262, 349-352.   | 1.7 | 7         |
| 282 | X-ray-absorption-spectroscopic evidence for a novel iron cluster in hydrogenase II from <i>Clostridium pasteurianum</i> . Biochemical Journal, 1989, 259, 597-600.  | 1.7 | 21        |
| 283 | Spectroscopic properties of the hydroxylase of methane monooxygenase. BBA - Proteins and Proteomics, 1988, 952, 220-229.  | 2.1 | 44        |
| 284 | Studies by electron paramagnetic resonance spectroscopy of xanthine oxidase enriched with molybdenum-95 and with molybdenum-97. Biochemistry, 1988, 27, 3603-3609.  | 1.2 | 87        |
| 285 | X-ray crystallography and the spectroscopic imperative: The story of the [3Fe-4S] clusters. Trends in Biochemical Sciences, 1988, 13, 369-370.  | 3.7 | 19        |
| 286 | The nature of the phosphate complex of sulphite oxidase from electron-paramagnetic-resonance studies. Biochemical Journal, 1988, 256, 307-309.  | 1.7 | 36        |
| 287 | X-ray absorption studies of yeast copper metallothionein.. Journal of Biological Chemistry, 1988, 263, 8199-8203.   | 1.6 | 74        |
| 288 | X-ray absorption studies of yeast copper metallothionein. Journal of Biological Chemistry, 1988, 263, 8199-203.   | 1.6 | 58        |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 289 | Extended X-ray absorption fine structure studies of transient species during xanthine oxidase turnover by using rapid freezing. <i>Biochemical Society Transactions</i> , 1986, 14, 651-652.   | 1.6 | 24        |
| 290 | X-ray absorption studies of the copper-beta domain of rat liver metallothionein. <i>Journal of Inorganic Biochemistry</i> , 1986, 27, 213-220.   | 1.5 | 40        |
| 291 | Electron-paramagnetic-resonance studies using pre-steady-state kinetics and substitution with stable isotopes on the mechanism of action of molybdoenzymes. <i>Biochemical Society Transactions</i> , 1985, 13, 560-567.   | 1.6 | 84        |
| 292 | Complexes with halide and other anions of the molybdenum centre of nitrate reductase from <i>Escherichia coli</i> . <i>Biochemical Journal</i> , 1985, 227, 925-931.   | 1.7 | 64        |
| 293 | The proton spin-flip lines of Mo(V) EPR signals from sulfite oxidase and xanthine oxidase. <i>Journal of Magnetic Resonance</i> , 1985, 64, 384-394.   | 0.5 | 4         |
| 294 | The structure of the inhibitory complex of alloxanthine (1H-pyrazolo[3,4-d]pyrimidine-4,6-diol) with the molybdenum centre of xanthine oxidase from electron-paramagnetic-resonance spectroscopy. <i>Biochemical Journal</i> , 1984, 218, 961-968.                                       | 1.7 | 63        |
| 295 | Formamide as a substrate of xanthine oxidase. <i>Biochemical Journal</i> , 1984, 220, 235-242.   | 1.7 | 32        |
| 296 | Electron-paramagnetic-resonance spectroscopy studies on the dissimilatory nitrate reductase from <i>Pseudomonas aeruginosa</i> . <i>Biochemical Journal</i> , 1984, 224, 601-608.  | 1.7 | 30        |
| 297 | 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. <i>Biochemistry</i> , 1983, 22, 5443-5452. | 1.2 | 20        |
| 298 | Reaction of arsenite ions with the molybdenum center of milk xanthine oxidase. <i>Biochemistry</i> , 1983, 22, 1013-1021.  | 1.2 | 43        |
| 299 | Studies by electron-paramagnetic-resonance spectroscopy of the molybdenum centre of aldehyde oxidase. <i>Biochemical Journal</i> , 1982, 203, 263-267.   | 1.7 | 23        |
| 300 | Coupling of [ <sup>33</sup> S]sulphur to molybdenum(V) in different reduced forms of xanthine oxidase. <i>Biochemical Journal</i> , 1981, 199, 629-637.  | 1.7 | 36        |