

Ingrid J Pickering

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

222
papers

13,199
citations

60
h-index

109
g-index

231
ext. papers

14,105
ext. citations

6.5
avg, IF

6.02
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 222 | Mercury L α High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy: A Versatile Speciation Probe for Mercury.. <i>Inorganic Chemistry</i> , 2022 , | 5.1 | 1 |
| 221 | 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> , 2021 , 434, 167357 | 6.5 | 7 |
| 220 | Oxygen K-edge X-ray absorption spectra of liquids with minimization of window contamination. <i>Journal of Synchrotron Radiation</i> , 2021 , 28, 1845-1849 | 2.4 | 0 |
| 219 | 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 | 2.4 | |
| 218 | Hg(II) Binding to Thymine Bases in DNA. <i>Inorganic Chemistry</i> , 2021 , 60, 7442-7452 | 5.1 | 1 |
| 217 | High Energy Resolution Fluorescence Detected X-ray Absorption Spectroscopy: An Analytical Method for Selenium Speciation. <i>Analytical Chemistry</i> , 2021 , 93, 9235-9243 | 7.8 | 4 |
| 216 | Sulfur K α 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 | 3.6 | 9 |
| 215 | Reply to Comments on "Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?". <i>Environmental Science & Technology</i> , 2020 , 54, 8484-8485 | 10.3 | 1 |
| 214 | Studies of selenium and arsenic mutual protection in human HepG2 cells. <i>Chemico-Biological Interactions</i> , 2020 , 327, 109162 | 5 | 3 |
| 213 | Reply to Comments on "Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?". <i>Environmental Science & Technology</i> , 2020 , 54, 8488-8490 | 10.3 | 2 |
| 212 | Direct Observation of Methylmercury and Auranofin Binding to Selenocysteine in Thioredoxin Reductase. <i>Inorganic Chemistry</i> , 2020 , 59, 2711-2718 | 5.1 | 21 |
| 211 | The Unexpected Role of SeVI Species in Epoxidations with Benzeneseleninic Acid and Hydrogen Peroxide. <i>Angewandte Chemie</i> , 2020 , 132, 4313-4317 | 3.6 | 1 |
| 210 | Rethinking the Minamata Tragedy: What Mercury Species Was Really Responsible?. <i>Environmental Science & Technology</i> , 2020 , 54, 2726-2733 | 10.3 | 25 |
| 209 | The Unexpected Role of Se Species in Epoxidations with Benzeneseleninic Acid and Hydrogen Peroxide. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 4283-4287 | 16.4 | 13 |
| 208 | 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 | 6 | 4 |
| 207 | Structural Characterization of the Solution Chemistry of Zirconium(IV) Desferrioxamine: A Coordination Sphere Completed by Hydroxides. <i>Inorganic Chemistry</i> , 2020 , 59, 17443-17452 | 5.1 | 4 |
| 206 | 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 | 4.5 | 5 |

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|-----|--|-----|----|
| 205 | 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 | 5.1 | 5 |
| 204 | X-ray absorption spectroscopy of organic sulfoxides.. <i>RSC Advances</i> , 2020 , 10, 26229-26238 | 3.7 | 2 |
| 203 | Solution Chemistry of Copper(II) Binding to Substituted 8-Hydroxyquinolines. <i>Inorganic Chemistry</i> , 2020 , 59, 13858-13874 | 5.1 | 3 |
| 202 | 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 | 3.7 | 9 |
| 201 | Elemental characterisation of the pyramidal neuron layer within the rat and mouse hippocampus. <i>Metallomics</i> , 2019 , 11, 151-165 | 4.5 | 15 |
| 200 | Disruption of selenium transport and function is a major contributor to mercury toxicity in zebrafish larvae. <i>Metallomics</i> , 2019 , 11, 621-631 | 4.5 | 13 |
| 199 | Visualizing sulfur with X-rays: From molecules to tissues. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2019 , 194, 618-623 | 1 | 1 |
| 198 | X-ray Absorption Spectroscopy Investigations of Copper(II) Coordination in the Human Amyloid β Peptide. <i>Inorganic Chemistry</i> , 2019 , 58, 6294-6311 | 5.1 | 19 |
| 197 | Sulfur K-Edge X-ray Absorption Spectroscopy of Aryl and Aryl-Alkyl Sulfides. <i>Journal of Physical Chemistry A</i> , 2019 , 123, 2861-2866 | 2.8 | 2 |
| 196 | Wide field imaging energy dispersive X-ray absorption spectroscopy. <i>Scientific Reports</i> , 2019 , 9, 17734 | 4.9 | 4 |
| 195 | Cryoprotectants Severely Exacerbate X-ray-Induced Photoreduction. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 540-544 | 6.4 | 12 |
| 194 | X-ray spectroscopy and imaging of selenium in living systems. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2018 , 1862, 2383-2392 | 4 | 16 |
| 193 | X-ray-Induced Photoreduction of Hg(II) in Aqueous Frozen Solution Yields Nearly Monatomic Hg(0). <i>Inorganic Chemistry</i> , 2018 , 57, 8205-8210 | 5.1 | 2 |
| 192 | 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 | 2.4 | 6 |
| 191 | Ajothiolanes: 3,4-Dimethylthiolane Natural Products from Garlic (<i>Allium sativum</i>). <i>Journal of Agricultural and Food Chemistry</i> , 2018 , 66, 10193-10204 | 5.7 | 12 |
| 190 | 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 | 5.1 | 10 |
| 189 | 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 | 3.7 | 14 |
| 188 | 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 | 3.2 | 23 |

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| 187 | Pathogenic implications of distinct patterns of iron and zinc in chronic MS lesions. <i>Acta Neuropathologica</i> , 2017 , 134, 45-64 | 14.3 | 67 |
| 186 | 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 | 4.5 | 26 |
| 185 | Photochemically Generated Thiyl Free Radicals Observed by X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 2017 , 139, 11519-11526 | 16.4 | 15 |
| 184 | X-ray Absorption Spectroscopy of Aliphatic Organic Sulfides. <i>Journal of Physical Chemistry A</i> , 2017 , 121, 6256-6261 | 2.8 | 8 |
| 183 | A Multimodal Spectroscopic Imaging Method To Characterize the Metal and Macromolecular Content of Proteinaceous Aggregates ("Amyloid Plaques"). <i>Biochemistry</i> , 2017 , 56, 4107-4116 | 3.2 | 37 |
| 182 | Arsenic transfer and biotransformation in a fully characterized freshwater food web. <i>Coordination Chemistry Reviews</i> , 2016 , 306, 558-565 | 23.2 | 8 |
| 181 | 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, 6929-33 | 2.8 | 8 |
| 180 | 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 | 7.8 | 15 |
| 179 | Chemical basis for the detoxification of cisplatin-derived hydrolysis products by sodium thiosulfate. <i>Journal of Inorganic Biochemistry</i> , 2016 , 162, 96-101 | 4.2 | 12 |
| 178 | Confocal x-ray Fluorescence Imaging Facilitates High-Resolution Elemental Mapping in Fragile Archaeological Bone. <i>Archaeometry</i> , 2016 , 58, 207-217 | 1.6 | 13 |
| 177 | Observation of the seleno bis-(S-glutathionyl) arsinium anion in rat bile. <i>Journal of Inorganic Biochemistry</i> , 2016 , 158, 24-29 | 4.2 | 11 |
| 176 | Chemical Biology in the Embryo: In Situ Imaging of Sulfur Biochemistry in Normal and Proteoglycan-Deficient Cartilage Matrix. <i>Biochemistry</i> , 2016 , 55, 2441-51 | 3.2 | 12 |
| 175 | Distribution of selenium in zebrafish larvae after exposure to organic and inorganic selenium forms. <i>Metallomics</i> , 2016 , 8, 305-12 | 4.5 | 23 |
| 174 | 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 & Technology</i> , 2016 , 50, 10343-10350 | 10.3 | 21 |
| 173 | Effects of inorganic mercury on the olfactory pits of zebrafish larvae. <i>Metallomics</i> , 2016 , 8, 514-7 | 4.5 | 7 |
| 172 | Chemical Sensitivity of the Sulfur K-Edge X-ray Absorption Spectra of Organic Disulfides. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 7279-86 | 2.8 | 9 |
| 171 | Tuning the metabolism of the anticancer drug cisplatin with chemoprotective agents to improve its safety and efficacy. <i>Metallomics</i> , 2016 , 8, 1170-1176 | 4.5 | 21 |
| 170 | Phenylthiourea alters toxicity of mercury compounds in zebrafish larvae. <i>Journal of Inorganic Biochemistry</i> , 2015 , 151, 10-7 | 4.2 | 9 |

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| 169 | 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 | 2.5 | 10 |
| 168 | Interaction of mercury and selenium in the larval stage zebrafish vertebrate model. <i>Metallomics</i> , 2015 , 7, 1247-55 | 4.5 | 28 |
| 167 | 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 | 2.9 | 11 |
| 166 | Selenium biofortification of broccoli and carrots grown in soil amended with Se-enriched hyperaccumulator <i>Stanleya pinnata</i> . <i>Food Chemistry</i> , 2015 , 166, 603-608 | 8.5 | 111 |
| 165 | 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, 806-18 | 7.8 | 24 |
| 164 | In situ biospectroscopic investigation of rapid ischemic and postmortem induced biochemical alterations in the rat brain. <i>ACS Chemical Neuroscience</i> , 2015 , 6, 226-38 | 5.7 | 37 |
| 163 | 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 | 3.7 | 13 |
| 162 | Selenium preferentially accumulates in the eye lens following embryonic exposure: a confocal X-ray fluorescence imaging study. <i>Environmental Science & Technology</i> , 2015 , 49, 2255-61 | 10.3 | 33 |
| 161 | Synchrotron studies of selenium interactions with heavy elements 2015 , 43-44 | | |
| 160 | The chemical form of selenium in dietary supplements 2015 , 193-194 | | |
| 159 | The solution structure of the copper clioquinol complex. <i>Journal of Inorganic Biochemistry</i> , 2014 , 133, 50-6 | 4.2 | 26 |
| 158 | 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, 465-75 | 4.5 | 21 |
| 157 | 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, 7796-802 | 2.8 | 26 |
| 156 | Elemental and chemically specific X-ray fluorescence imaging of biological systems. <i>Chemical Reviews</i> , 2014 , 114, 8499-541 | 68.1 | 183 |
| 155 | Laminar-specific distribution of zinc: evidence for presence of layer IV in forelimb motor cortex in the rat. <i>NeuroImage</i> , 2014 , 103, 502-510 | 7.9 | 10 |
| 154 | EVIDENCE FOR BIOGENIC COPPER (HEMOCYANIN) IN THE MIDDLE CAMBRIAN ARTHROPOD MARRELLA FROM THE BURGESS SHALE. <i>Palaio</i> , 2014 , 29, 512-524 | 1.6 | 13 |
| 153 | Integrative assessment of selenium speciation, biogeochemistry, and distribution in a northern coldwater ecosystem. <i>Integrated Environmental Assessment and Management</i> , 2014 , 10, 543-54 | 2.5 | 37 |
| 152 | Synchrotron X-ray absorption spectroscopy analysis of arsenic chemical speciation in human nail clippings. <i>Environmental Chemistry</i> , 2014 , 11, 632 | 3.2 | 7 |

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|-----|---|------|-----|
| 151 | Structural characterization of Cd ²⁺ complexes in solution with DMSA and DMPS. <i>Journal of Inorganic Biochemistry</i> , 2014 , 136, 99-106 | 4.2 | 11 |
| 150 | An in situ assessment of selenium bioaccumulation from water-, sediment-, and dietary-exposure pathways using caged <i>Chironomus dilutus</i> larvae. <i>Environmental Toxicology and Chemistry</i> , 2013 , 32, 2836-48 | 3.8 | 6 |
| 149 | Methylmercury targets photoreceptor outer segments. <i>ACS Chemical Biology</i> , 2013 , 8, 2256-63 | 4.9 | 31 |
| 148 | Selenium biotransformations in an engineered aquatic ecosystem for bioremediation of agricultural wastewater via brine shrimp production. <i>Environmental Science & Technology</i> , 2013 , 47, 5057-65 | 10.3 | 11 |
| 147 | Bioavailability, toxicity and biotransformation of selenium in midge (<i>Chironomus dilutus</i>) larvae exposed via water or diet to elemental selenium particles, selenite, or selenized algae. <i>Environmental Science & Technology</i> , 2013 , 47, 584-92 | 10.3 | 23 |
| 146 | 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, 1071-80 | 5.7 | 30 |
| 145 | The fictile coordination chemistry of cuprous-thiolate sites in copper chaperones. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012 , 1817, 938-47 | 4.6 | 24 |
| 144 | Chemical form matters: differential accumulation of mercury following inorganic and organic mercury exposures in zebrafish larvae. <i>ACS Chemical Biology</i> , 2012 , 7, 411-20 | 4.9 | 73 |
| 143 | Quantification, localization, and speciation of selenium in seeds of canola and two mustard species compared to seed-meals produced by hydraulic press. <i>Analytical Chemistry</i> , 2012 , 84, 6024-30 | 7.8 | 22 |
| 142 | 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, 178-85 | 5.7 | 56 |
| 141 | Biofortified, selenium enriched, fruit and cladode from three <i>Opuntia</i> Cactus pear cultivars grown on agricultural drainage sediment for use in nutraceutical foods. <i>Food Chemistry</i> , 2012 , 135, 9-16 | 8.5 | 34 |
| 140 | X-ray-induced photo-chemistry and X-ray absorption spectroscopy of biological samples. <i>Journal of Synchrotron Radiation</i> , 2012 , 19, 875-86 | 2.4 | 124 |
| 139 | X-ray absorption spectroscopy at a protein crystallography facility: the Canadian Light Source beamline 08B1-1. <i>Journal of Synchrotron Radiation</i> , 2012 , 19, 887-91 | 2.4 | 2 |
| 138 | Metalloprotein active site structure determination: synergy between X-ray absorption spectroscopy and X-ray crystallography. <i>Journal of Inorganic Biochemistry</i> , 2012 , 115, 127-37 | 4.2 | 62 |
| 137 | Selenium speciation and localization in chironomids from lakes receiving treated metal mine effluent. <i>Chemosphere</i> , 2012 , 89, 274-9 | 8.4 | 11 |
| 136 | Biogeochemical mechanisms of selenium exchange between water and sediments in two contrasting lentic environments. <i>Environmental Science & Technology</i> , 2011 , 45, 2605-12 | 10.3 | 29 |
| 135 | Selenium uptake and speciation in wild and caged fish downstream of a metal mining and milling discharge. <i>Ecotoxicology and Environmental Safety</i> , 2011 , 74, 1139-50 | 7 | 32 |
| 134 | Evaluating the trophic transfer of selenium in aquatic ecosystems using caged fish, X-ray absorption spectroscopy and stable isotope analysis. <i>Ecotoxicology and Environmental Safety</i> , 2011 , 74, 1855-63 | 7 | 17 |

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|-----|--|------|-----|
| 133 | Selenium accumulation in flowers and its effects on pollination. <i>New Phytologist</i> , 2011 , 192, 727-37 | 9.8 | 93 |
| 132 | The use of field-based mesocosm systems to assess the effects of uranium milling effluent on fathead minnow (<i>Pimephales promelas</i>) reproduction. <i>Ecotoxicology</i> , 2011 , 20, 1209-24 | 2.9 | 10 |
| 131 | Towards a custom chelator for mercury: evaluation of coordination environments by molecular modeling. <i>Journal of Biological Inorganic Chemistry</i> , 2011 , 16, 15-24 | 3.7 | 15 |
| 130 | Use of Soller slits to remove reference foil fluorescence from transmission spectra. <i>Journal of Synchrotron Radiation</i> , 2011 , 18, 527-9 | 2.4 | 5 |
| 129 | Selenium bioaccumulation and speciation in <i>Chironomus dilutus</i> exposed to water-borne selenate, selenite, or seleno-DL-methionine. <i>Environmental Toxicology and Chemistry</i> , 2011 , 30, 2292-9 | 3.8 | 28 |
| 128 | The chemical forms of mercury and selenium in whale skeletal muscle. <i>Metallomics</i> , 2011 , 3, 1232-7 | 4.5 | 19 |
| 127 | Prion protein expression level alters regional copper, iron and zinc content in the mouse brain. <i>Metallomics</i> , 2011 , 3, 206-14 | 4.5 | 81 |
| 126 | Molybdenum speciation in uranium mine tailings using X-ray absorption spectroscopy. <i>Environmental Science & Technology</i> , 2011 , 45, 455-60 | 10.3 | 45 |
| 125 | Selenium accumulation, distribution, and speciation in spineless prickly pear cactus: a drought- and salt-tolerant, selenium-enriched nutraceutical fruit crop for biofortified foods. <i>Plant Physiology</i> , 2011 , 155, 315-27 | 6.6 | 58 |
| 124 | Biotransformation of selenium and arsenic in multi-species biofilm. <i>Environmental Chemistry</i> , 2011 , 8, 543 | 3.2 | 27 |
| 123 | The chemical nature of mercury in human brain following poisoning or environmental exposure. <i>ACS Chemical Neuroscience</i> , 2010 , 1, 810-8 | 5.7 | 135 |
| 122 | Selenium speciation in whole sediment using X-ray absorption spectroscopy and micro X-ray fluorescence imaging. <i>Environmental Science & Technology</i> , 2010 , 44, 5389-94 | 10.3 | 33 |
| 121 | The chemical forms of mercury in human hair: a study using X-ray absorption spectroscopy. <i>Journal of Biological Inorganic Chemistry</i> , 2010 , 15, 709-15 | 3.7 | 25 |
| 120 | Dynamic accumulation and redistribution of methylmercury in the lens of developing zebrafish embryos and larvae. <i>Journal of Biological Inorganic Chemistry</i> , 2010 , 15, 1137-45 | 3.7 | 26 |
| 119 | Mapping metals in Parkinson [®] and normal brain using rapid-scanning x-ray fluorescence. <i>Physics in Medicine and Biology</i> , 2009 , 54, 651-63 | 3.8 | 96 |
| 118 | Arsenic K-edge X-ray absorption spectroscopy of arsenic in seafood. <i>Molecular Nutrition and Food Research</i> , 2009 , 53, 552-7 | 5.9 | 11 |
| 117 | The Ni(II)-binding properties of the metallochaperone SlyD. <i>Journal of the American Chemical Society</i> , 2009 , 131, 18489-500 | 16.4 | 35 |
| 116 | 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, 6846-53 | 3.2 | 40 |

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|-----|---|------|-----|
| 115 | Tracing copper-thiomolybdate complexes in a prospective treatment for Wilson's disease. <i>Biochemistry</i> , 2009 , 48, 891-7 | 3.2 | 61 |
| 114 | The chemical forms of mercury in aged and fresh dental amalgam surfaces. <i>Chemical Research in Toxicology</i> , 2009 , 22, 1761-4 | 4 | 17 |
| 113 | Insect excretes unusual six-coordinate pentavalent arsenic species. <i>Environmental Chemistry</i> , 2009 , 6, 298 | 3.2 | 7 |
| 112 | A high-affinity metal-binding peptide from Escherichia coli HypB. <i>Journal of the American Chemical Society</i> , 2008 , 130, 14056-7 | 16.4 | 34 |
| 111 | Structural and biological analysis of the metal sites of Escherichia coli hydrogenase accessory protein HypB. <i>Biochemistry</i> , 2008 , 47, 11981-91 | 3.2 | 44 |
| 110 | Chemical forms of mercury and selenium in fish following digestion with simulated gastric fluid. <i>Chemical Research in Toxicology</i> , 2008 , 21, 2106-10 | 4 | 42 |
| 109 | Localizing organomercury uptake and accumulation in zebrafish larvae at the tissue and cellular level. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 12108-12 | 11.5 | 109 |
| 108 | X-ray absorption spectroscopy as a probe of microbial sulfur biochemistry: the nature of bacterial sulfur globules revisited. <i>Journal of Bacteriology</i> , 2008 , 190, 6376-83 | 3.5 | 46 |
| 107 | Chapter 5 Inorganic Molecular Toxicology and Chelation Therapy of Heavy Metals and Metalloids. <i>Advances in Molecular Toxicology</i> , 2008 , 2, 123-152 | 0.4 | 7 |
| 106 | Insights into the Chemical Biology of Selenium. <i>Phosphorus, Sulfur and Silicon and the Related Elements</i> , 2008 , 183, 924-930 | 1 | 6 |
| 105 | Development of a combined K-edge subtraction and fluorescence subtraction imaging system for small animals. <i>Review of Scientific Instruments</i> , 2008 , 79, 085102 | 1.7 | 3 |
| 104 | Arsenic accumulation, biotransformation and localisation in bertha armyworm moths. <i>Environmental Chemistry</i> , 2008 , 5, 413 | 3.2 | 26 |
| 103 | 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. <i>Journal of Inorganic Biochemistry</i> , 2008 , 102, 1380-95 | 4.2 | 16 |
| 102 | Comparison of iodine K-edge subtraction and fluorescence subtraction imaging in an animal system. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2008 , 594, 283-291 | 1.2 | 3 |
| 101 | X-ray absorption spectroscopy of cuprous-thiolate clusters in <i>Saccharomyces cerevisiae</i> metallothionein. <i>Chemistry and Biodiversity</i> , 2008 , 5, 2042-9 | 2.5 | 16 |
| 100 | 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, 14735-41 | 3.2 | 23 |
| 99 | Speciation of selenium in stream insects using X-ray absorption spectroscopy. <i>Environmental Science & Technology</i> , 2007 , 41, 7683-7 | 10.3 | 53 |
| 98 | 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, 7337-41 | 5.7 | 58 |

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|----|--|------|-----|
| 97 | Strong poison revisited. <i>Journal of Inorganic Biochemistry</i> , 2007 , 101, 1891-3 | 4.2 | 22 |
| 96 | The chemical form of mitochondrial iron in Friedreich's ataxia. <i>Journal of Inorganic Biochemistry</i> , 2007 , 101, 957-66 | 4.2 | 30 |
| 95 | X-Ray Absorption Spectroscopy Imaging of Biological Tissues. <i>AIP Conference Proceedings</i> , 2007 , | 0 | 6 |
| 94 | Mercury speciation in piscivorous fish from mining-impacted reservoirs. <i>Environmental Science & Technology</i> , 2007 , 41, 2745-9 | 10.3 | 61 |
| 93 | X-RAY ABSORPTION SPECTROSCOPY IN BIOLOGY AND CHEMISTRY 2007 , 97-119 | | 12 |
| 92 | More on Molecular Mimicry in Mercury Toxicology. <i>Chemical Research in Toxicology</i> , 2006 , 19, 1118-1120 | 4 | 7 |
| 91 | Localizing the biochemical transformations of arsenate in a hyperaccumulating fern. <i>Environmental Science & Technology</i> , 2006 , 40, 5010-4 | 10.3 | 168 |
| 90 | The seleno bis(S-glutathionyl) arsinium ion is assembled in erythrocyte lysate. <i>Chemical Research in Toxicology</i> , 2006 , 19, 601-7 | 4 | 56 |
| 89 | A novel arsenate reductase from the arsenic hyperaccumulating fern <i>Pteris vittata</i> . <i>Plant Physiology</i> , 2006 , 141, 1544-54 | 6.6 | 192 |
| 88 | Molecular mimicry in mercury toxicology. <i>Chemical Research in Toxicology</i> , 2006 , 19, 753-9 | 4 | 62 |
| 87 | Analysis of sulfur and selenium assimilation in <i>Astragalus</i> plants with varying capacities to accumulate selenium. <i>Plant Journal</i> , 2005 , 42, 785-97 | 6.9 | 154 |
| 86 | Biochemistry: a cadmium enzyme from a marine diatom. <i>Nature</i> , 2005 , 435, 42 | 50.4 | 439 |
| 85 | Using softer X-ray absorption spectroscopy to probe biological systems. <i>Journal of Synchrotron Radiation</i> , 2005 , 12, 392-401 | 2.4 | 26 |
| 84 | Increased glutathione biosynthesis plays a role in nickel tolerance in thlaspi nickel hyperaccumulators. <i>Plant Cell</i> , 2004 , 16, 2176-91 | 11.6 | 377 |
| 83 | Production of Se-methylselenocysteine in transgenic plants expressing selenocysteine methyltransferase. <i>BMC Plant Biology</i> , 2004 , 4, 1 | 5.3 | 166 |
| 82 | X-ray absorption spectroscopy of selenate reductase. <i>Inorganic Chemistry</i> , 2004 , 43, 402-4 | 5.1 | 30 |
| 81 | The sulfur chemistry of shiitake mushroom. <i>Journal of the American Chemical Society</i> , 2004 , 126, 458-9 | 16.4 | 33 |
| 80 | Selenium biotransformations in an insect ecosystem: effects of insects on phytoremediation. <i>Environmental Science & Technology</i> , 2004 , 38, 3581-6 | 10.3 | 54 |

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|----|--|------|------|
| 79 | 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 | 4 | 94 |
| 78 | Chemical form and distribution of selenium and sulfur in the selenium hyperaccumulator <i>Astragalus bisulcatus</i> . <i>Plant Physiology</i> , 2003 , 131, 1460-7 | 6.6 | 140 |
| 77 | The chemical form of mercury in fish. <i>Science</i> , 2003 , 301, 1203 | 33.3 | 1081 |
| 76 | Thioredoxin h overexpressed in barley seeds enhances selenite resistance and uptake during germination and early seedling development. <i>Planta</i> , 2003 , 218, 186-91 | 4.7 | 20 |
| 75 | Rapid microalgal metabolism of selenate to volatile dimethylselenide. <i>Plant, Cell and Environment</i> , 2003 , 26, 897-905 | 8.4 | 80 |
| 74 | Imaging of selenium in plants using tapered metal monocapillary optics. <i>Journal of Synchrotron Radiation</i> , 2003 , 10, 289-90 | 2.4 | 17 |
| 73 | Structure of frataxin iron cores: an X-ray absorption spectroscopic study. <i>Biochemistry</i> , 2003 , 42, 5971-6 | 3.2 | 65 |
| 72 | 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, 1704-5 | 16.4 | 55 |
| 71 | Evaluation of the macroalga, muskgrass, for the phytoremediation of selenium-contaminated agricultural drainage water by microcosms. <i>Journal of Environmental Quality</i> , 2002 , 31, 2104-10 | 3.4 | 20 |
| 70 | Anthocyanins facilitate tungsten accumulation in Brassica. <i>Physiologia Plantarum</i> , 2002 , 116, 351-358 | 4.6 | 52 |
| 69 | 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 | 2.3 | 19 |
| 68 | Chemical speciation of accumulated metals in plants: evidence from X-ray absorption spectroscopy. <i>Microchemical Journal</i> , 2002 , 71, 255-259 | 4.8 | 81 |
| 67 | Biliary excretion of [(GS) ₂ AsSe] ⁽⁻⁾ after intravenous injection of rabbits with arsenite and selenate. <i>Chemical Research in Toxicology</i> , 2002 , 15, 1466-71 | 4 | 69 |
| 66 | Selenium assimilation and volatilization from selenocyanate-treated Indian mustard and muskgrass. <i>Plant Physiology</i> , 2002 , 128, 625-33 | 6.6 | 43 |
| 65 | The active site of arsenite oxidase from <i>Alcaligenes faecalis</i> . <i>Journal of the American Chemical Society</i> , 2002 , 124, 11276-7 | 16.4 | 62 |
| 64 | Structure of Titania Sol-Gel Films: A Study by X-Ray Absorption Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2002 , 106, 1153-1160 | 3.4 | 59 |
| 63 | Structures of the cuprous-thiolate clusters of the Mac1 and Ace1 transcriptional activators. <i>Biochemistry</i> , 2002 , 41, 6469-76 | 3.2 | 73 |
| 62 | Synthesis, purification, and structural characterization of the dimethyldiselenoarsinate anion. <i>Inorganic Chemistry</i> , 2002 , 41, 5426-32 | 5.1 | 22 |

| | | | |
|----|--|------|-----|
| 61 | Pb EXAFS studies on DNA quadruplexes: identification of metal ion binding site. <i>Biochemistry</i> , 2002 , 41, 12133-9 | 3.2 | 85 |
| 60 | Managing selenium-contaminated agricultural drainage water by the integrated on-farm drainage management system: role of selenium volatilization. <i>Water Research</i> , 2002 , 36, 3150-60 | 12.5 | 30 |
| 59 | X-ray absorption spectroscopy of bacterial sulfur globules. <i>Microbiology (United Kingdom)</i> , 2002 , 148, 2267-2268 | 2.9 | 11 |
| 58 | X-ray absorption spectroscopy study shows that the rapid selenium volatilizer, pickleweed (<i>Salicornia bigelovii</i> Torr.), reduces selenate to organic forms without the aid of microbes. <i>Planta</i> , 2001 , 213, 977-80 | 4.7 | 16 |
| 57 | Identification and characterization of bacteria in a selenium-contaminated hypersaline evaporation pond. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 3785-94 | 4.8 | 70 |
| 56 | Molybdenum sequestration in Brassica species. A role for anthocyanins?. <i>Plant Physiology</i> , 2001 , 126, 1391-402 | 6.6 | 135 |
| 55 | Deep desulfurization of extensively hydrodesulfurized middle distillate oil by <i>Rhodococcus</i> sp. strain ECRD-1. <i>Applied and Environmental Microbiology</i> , 2001 , 67, 1949-52 | 4.8 | 64 |
| 54 | In situ observation of the generation of isothiocyanates from sinigrin in horseradish and wasabi. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2001 , 1527, 156-60 | 4 | 29 |
| 53 | Analysis of sulfur biochemistry of sulfur bacteria using X-ray absorption spectroscopy. <i>Biochemistry</i> , 2001 , 40, 8138-45 | 3.2 | 141 |
| 52 | Human cytosolic iron regulatory protein 1 contains a linear iron-sulfur cluster. <i>Journal of the American Chemical Society</i> , 2001 , 123, 10121-2 | 16.4 | 21 |
| 51 | 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 | 4.8 | 47 |
| 50 | 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, 10717-22 | 11.5 | 146 |
| 49 | Reduction and coordination of arsenic in Indian mustard. <i>Plant Physiology</i> , 2000 , 122, 1171-7 | 6.6 | 491 |
| 48 | Layer perfection in ultrathin InAs quantum wells in GaAs(001). <i>Physical Review B</i> , 2000 , 61, 2073-2084 | 3.3 | 14 |
| 47 | Fate of selenate and selenite metabolized by <i>Rhodobacter sphaeroides</i> . <i>Applied and Environmental Microbiology</i> , 2000 , 66, 4849-53 | 4.8 | 62 |
| 46 | Subcellular localization and speciation of nickel in hyperaccumulator and non-accumulator <i>Thlaspi</i> species. <i>Plant Physiology</i> , 2000 , 122, 1343-53 | 6.6 | 401 |
| 45 | A Novel Protein-Bound Copper-Molybdenum Cluster. <i>Journal of the American Chemical Society</i> , 2000 , 122, 8321-8322 | 16.4 | 84 |
| 44 | 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 | 16.4 | 125 |

| | | | |
|----|--|------|-----|
| 43 | Structural basis of the antagonism between inorganic mercury and selenium in mammals. <i>Chemical Research in Toxicology</i> , 2000 , 13, 1135-42 | 4 | 140 |
| 42 | The active site structure of <i>Thalassiosira weissflogii</i> carbonic anhydrase 1. <i>Biochemistry</i> , 2000 , 39, 12128-30 | 3.0 | 108 |
| 41 | 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, 181-8 | 4.8 | 86 |
| 40 | X-ray absorption spectroscopy of selenium-containing amino acids. <i>Journal of Biological Inorganic Chemistry</i> , 1999 , 4, 791-4 | 3.7 | 60 |
| 39 | X-ray absorption spectroscopy of cadmium phytochelatin and model systems. <i>BBA - Proteins and Proteomics</i> , 1999 , 1429, 351-64 | | 73 |
| 38 | X-ray Absorption Spectroscopy of Chicken Sulfite Oxidase Crystals. <i>Inorganic Chemistry</i> , 1999 , 38, 2539-2540 | 5.0 | 50 |
| 37 | Zinc Ligands in the Metal Hyperaccumulator <i>Thlaspi caerulescens</i> As Determined Using X-ray Absorption Spectroscopy. <i>Environmental Science & Technology</i> , 1999 , 33, 713-717 | 10.3 | 347 |
| 36 | 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 | 4.8 | 7 |
| 35 | Photooxidation of Crude Oils. <i>Environmental Science & Technology</i> , 1998 , 32, 3719-3723 | 10.3 | 206 |
| 34 | Sulfur K-edge X-ray absorption spectroscopy for determining the chemical speciation of sulfur in biological systems. <i>FEBS Letters</i> , 1998 , 441, 11-4 | 3.8 | 135 |
| 33 | Brassica Plants to Provide Enhanced Human Mineral Nutrition: Selenium Phytoenrichment and Metabolic Transformation. <i>Journal of Medicinal Food</i> , 1998 , 1, 253-261 | 2.8 | 32 |
| 32 | Selenium Redox Reactions and Transport between Ponded Waters and Sediments. <i>Environmental Science & Technology</i> , 1997 , 31, 1419-1425 | 10.3 | 52 |
| 31 | Metal Accumulation by Aquacultured Seedlings of Indian Mustard. <i>Environmental Science & Technology</i> , 1997 , 31, 1636-1644 | 10.3 | 168 |
| 30 | Presence of a copper(I)-thiolate regulatory domain in the copper-activated transcription factor Amt1. <i>Biochemistry</i> , 1996 , 35, 14583-9 | 3.2 | 50 |
| 29 | Dinitrogen Cleavage by Three-Coordinate Molybdenum(III) Complexes: Mechanistic and Structural Data1. <i>Journal of the American Chemical Society</i> , 1996 , 118, 8623-8638 | 16.4 | 345 |
| 28 | Selenium Transformations in Ponded Sediments. <i>Soil Science Society of America Journal</i> , 1996 , 60, 781-790 | 5.0 | 82 |
| 27 | X-ray absorption spectroscopy of <i>Pyrococcus furiosus</i> rubredoxin. <i>Journal of Biological Inorganic Chemistry</i> , 1996 , 1, 226-230 | 3.7 | 19 |
| 26 | New opportunities in 10 keV spectroscopy. <i>Physica B: Condensed Matter</i> , 1995 , 208-209, 220-222 | 2.8 | 19 |

| | | | |
|----|--|-------|-----|
| 25 | Alteration of axial coordination by protein engineering in myoglobin. Bisimidazole ligation in the His64-->Val/Val68-->His double mutant. <i>Journal of Biological Chemistry</i> , 1995 , 270, 15993-6001 | 5.4 | 55 |
| 24 | Polarized X-ray Absorption Spectroscopy of Cupric Chloride Dihydrate. <i>Inorganic Chemistry</i> , 1995 , 34, 3142-3152 | 5.1 | 70 |
| 23 | Quantitative Speciation of Selenium in Soils Using X-ray Absorption Spectroscopy. <i>Environmental Science & Technology</i> , 1995 , 29, 2456-9 | 10.3 | 146 |
| 22 | Mechanisms of Cadmium Mobility and Accumulation in Indian Mustard. <i>Plant Physiology</i> , 1995 , 109, 1427-1433 | 14.33 | 797 |
| 21 | SSRL workshops on x-ray absorption spectroscopy. <i>Synchrotron Radiation News</i> , 1994 , 7, 17-17 | 0.6 | |
| 20 | New opportunities in XAFS investigation in the 10 keV region. <i>Solid State Communications</i> , 1994 , 92, 559-562 | 1.6 | 62 |
| 19 | Mixed Cu ⁺ and Zn ²⁺ coordination in the DNA-binding domain of the AMT1 transcription factor from <i>Candida glabrata</i> . <i>Biochemistry</i> , 1994 , 33, 9566-77 | 3.2 | 54 |
| 18 | Nickel K-edge x-ray absorption fine structure of lithium nickel oxides. <i>Journal of the American Chemical Society</i> , 1993 , 115, 4137-4144 | 16.4 | 62 |
| 17 | X-ray absorption spectroscopy of cuprous-thiolate clusters in proteins and model systems. <i>Journal of the American Chemical Society</i> , 1993 , 115, 9498-9505 | 16.4 | 135 |
| 16 | Diffraction anomalous fine structure: A new technique for Probing Local Atomic Environment. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 307, 15 | | 0 |
| 15 | Site-Specific X-ray Absorption Spectroscopy Using DIFFRAXAFS. <i>Japanese Journal of Applied Physics</i> , 1993 , 32, 206 | 1.4 | 11 |
| 14 | Diffraction anomalous fine structure: a new technique for probing local atomic environment. <i>Journal of the American Chemical Society</i> , 1993 , 115, 6302-6311 | 16.4 | 67 |
| 13 | Time-resolved in situ x-ray diffraction studies of a lithium nickel oxide catalyst during the oxidative coupling of methane. <i>Chemistry of Materials</i> , 1992 , 4, 994-999 | 9.6 | 7 |
| 12 | Transition metal framework substitutions in sodalites. <i>Solid State Ionics</i> , 1992 , 53-56, 1282-1291 | 3.3 | 16 |
| 11 | A neutron powder diffraction study of the ordering in Li _x Ni _{1-x} O. <i>Solid State Ionics</i> , 1992 , 53-56, 405-412 | 3.3 | 21 |
| 10 | Hydrothermal synthesis of calcium - niobium and tantalum oxides with the pyrochlore structure. <i>Materials Research Bulletin</i> , 1992 , 27, 981-988 | 5.1 | 39 |
| 9 | Coordination structure of the ferric heme iron in engineered distal histidine myoglobin mutants. <i>Journal of Biological Chemistry</i> , 1992 , 267, 22843-52 | 5.4 | 80 |
| 8 | Gas/Solid interactions studied by quantitative powder X-ray diffraction analysis. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1991 , 87, 3063-3066 | | |

| | | | |
|---|---|-----|----------------|
| 7 | Quantitative studies of gas/solid reactions by powder X-ray diffraction: stoichiometric and catalytic conversion of CO to CO ₂ over YBa ₂ Cu ₃ O _{6+x} . <i>Journal of the Chemical Society, Faraday Transactions</i> , 1991 , 87, 3067-3075 | | 15 |
| 6 | A neutron powder diffraction analysis of potassium-exchanged ferrierite. <i>Journal of Catalysis</i> , 1989 , 119, 261-265 | 7·3 | 4 ¹ |
| 5 | Probing changes in the structure and performance of a lithium nickel oxide catalyst by in situ X-ray diffraction during the high temperature oxidative coupling of methane. <i>Advanced Materials</i> , 1989 , 1, 194-196 | 2·4 | 1 |
| 4 | Probing Changes in the Structure and Performance of a Lithium Nickel Oxide Catalyst by in situ X-Ray Diffraction During the High-Temperature Oxidative Coupling of Methane. <i>Angewandte Chemie International Edition in English</i> , 1989 , 28, 808-810 | | 6 |
| 3 | Identification of lithium atoms in solid oxides: A high-resolution electron microscopic study of LiMn ₂ O ₄ . <i>Journal of Solid State Chemistry</i> , 1989 , 79, 112-118 | 3·3 | 2 |
| 2 | Metal oxides as heterogeneous catalysts for oxygen evolution under photochemical conditions. <i>Journal of the Chemical Society Faraday Transactions I</i> , 1988 , 84, 2795 | | 473 |
| 1 | Spike protein disulfide disruption as a potential treatment for SARS-CoV-2 | | 3 |