Hugh H Harris

List of Publications by Year
in descending order

125	5,965	76196	76769
papers	citations	40 h-index	74 g-index

131	131	131	8162
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Chemical Form of Mercury in Fish. Science, 2003, 301, 1203-1203.	6.0	1,214
2	Which form is that? The importance of selenium speciation and metabolism in the prevention and treatment of disease. Chemical Society Reviews, 2013, 42, 8870.	18.7	478
3	Production of Se-methylselenocysteine in transgenic plants expressing selenocysteine methyltransferase. BMC Plant Biology, 2004, 4, 1.	1.6	216
4	Localizing the Biochemical Transformations of Arsenate in a Hyperaccumulating Fern. Environmental Science & Technology, 2006, 40, 5010-5014.	4.6	195
5	Copper speciation and isotopic fractionation in plants: uptake and translocation mechanisms. New Phytologist, 2013, 199, 367-378.	3.5	133
6	Xâ€ray elemental mapping techniques for elucidating the ecophysiology of hyperaccumulator plants. New Phytologist, 2018, 218, 432-452.	3.5	104
7	Mercury Binding to the Chelation Therapy Agents DMSA and DMPS and the Rational Design of Custom Chelators for Mercury. Chemical Research in Toxicology, 2004, 17, 999-1006.	1.7	102
8	Redox Activity and Two-Step Valence Tautomerism in a Family of Dinuclear Cobalt Complexes with a Spiroconjugated Bis(dioxolene) Ligand. Journal of the American Chemical Society, 2013, 135, 8304-8323.	6.6	102
9	Transformation of PVP coated silver nanoparticles in a simulated wastewater treatment process and the effect on microbial communities. Chemistry Central Journal, 2013, 7, 46.	2.6	100
10	Structural Studies of the Alzheimerâ€™s Amyloid Precursor Protein Copper-binding Domain Reveal How it Binds Copper Ions. Journal of Molecular Biology, 2007, 367, 148-161.	2.0	93
11	Distinct cellular fates for KP1019 and NAMI-A determined by X-ray fluorescence imaging of single cells. Metallomics, 2012, 4, 1051.	1.0	92
12	Structures of the Cuprous-Thiolate Clusters of the Mac1 and Ace1 Transcriptional Activators. Biochemistry, 2002, 41, 6469-6476.	1.2	81
13	Chemically synthesised atomically precise gold clusters deposited and activated on titania. Part II. Physical Chemistry Chemical Physics, 2013, 15, 14806.	1.3	78
14	Nickel biopathways in tropical nickel hyperaccumulating trees from Sabah (Malaysia). Scientific Reports, 2017, 7, 41861.	1.6	77
15	Metabolism of Selenite in Human Lung Cancer Cells: X-Ray Absorption and Fluorescence Studies. Journal of the American Chemical Society, 2011, 133, 18272-18279.	6.6	73
16	Studies of Glutathione Transferase P1â€1 Bound to a Platinum(IV)â€Based Anticancer Compound Reveal the Molecular Basis of Its Activation. Chemistry - A European Journal, 2011, 17, 7806-7816.	1.7	73
17	Intracellular mapping of the distribution of metals derived from the antitumor metallocenes. Journal of Biological Inorganic Chemistry, 2005, 10, 443-452.	1.1	72
18	X-ray Absorption and EPR Spectroscopic Studies of the Biotransformations of Chromium(VI) in Mammalian Cells. Is Chromodulin an Artifact of Isolation Methods?. Journal of the American Chemical Society, 2007, 129, 1065-1075.	6.6	72

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19	Silicon nitride as a versatile growth substrate for microspectroscopic imaging and mapping of individual cells. Molecular BioSystems, 2010, 6, 1316.	2.9	72
20	Strontium Randomly Substituting for Calcium in Fish Otolith Aragonite. Analytical Chemistry, 2014, 86, 865-869.	3.2	69
21	Time-dependent uptake, distribution and biotransformation of chromium(VI) in individual and bulk human lung cells: application of synchrotron radiation techniques. Journal of Biological Inorganic Chemistry, 2005, 10, 105-118.	1.1	67
22	Reactivity and Speciation of Anti-Diabetic Vanadium Complexes in Whole Blood and Its Components: The Important Role of Red Blood Cells. Inorganic Chemistry, 2015, 54, 7753-7766.	1.9	67
23	Multiple protective activities of neuroglobin in cultured neuronal cells exposed to hypoxia reâ€oxygenation injury. Journal of Neurochemistry, 2009, 108, 1143-1154.	2.1	63
24	Photoreduction Kinetics of Sodium Tetrachloroaurate under Synchrotron Soft X-ray Exposure. Langmuir, 2011, 27, 8099-8104.	1.6	63
25	Selenium Metabolism in Cancer Cells: The Combined Application of XAS and XFM Techniques to the Problem of Selenium Speciation in Biological Systems. Nutrients, 2013, 5, 1734-1756.	1.7	60
26	Tetrathiomolybdate Causes Formation of Hepatic Copperâ^'Molybdenum Clusters in an Animal Model of Wilson's Disease. Journal of the American Chemical Society, 2003, 125, 1704-1705.	6.6	59
27	Electronic Structure Description of thecis-MoOS Unit in Models for Molybdenum Hydroxylases. Journal of the American Chemical Society, 2008, 130, 55-65.	6.6	58
28	X-Ray fluorescence imaging and other analyses identify selenium and GPX1 as important in female reproductive function. Metallomics, 2015, 7, 71-82.	1.0	55
29	A Multimodal Spectroscopic Imaging Method To Characterize the Metal and Macromolecular Content of Proteinaceous Aggregates (â€œAmyloid Plaquesâ€). Biochemistry, 2017, 56, 4107-4116.	1.2	55
30	Carcinogenic Chromium(VI) Compounds Formed by Intracellular Oxidation of Chromium(III) Dietary Supplements by Adipocytes. Angewandte Chemie - International Edition, 2016, 55, 1742-1745.	7.2	54
31	A Two-Step Valence Tautomeric Transition in a Dinuclear Cobalt Complex. Inorganic Chemistry, 2012, 51, 3944-3946.	1.9	53
32	Potent Inhibition of Thioredoxin Reductase by the Rh Derivatives of Anticancer M(arene/Cp*)(NHC)Cl₂Complexes. Inorganic Chemistry, 2020, 59, 3281-3289.	1.9	53
33	Uptake, Distribution, and Speciation of Selenoamino Acids by Human Cancer Cells: X-ray Absorption and Fluorescence Methods. Biochemistry, 2011, 50, 1641-1650.	1.2	50
34	Binding of chromium(VI) to histones: implications for chromium(VI)-induced genotoxicity. Journal of Biological Inorganic Chemistry, 2006, 11, 225-234.	1.1	49
35	Microprobe XRF Mapping and XAS Investigations of the Intracellular Metabolism of Arsenic for Understanding Arsenic-Induced Toxicity. Chemical Research in Toxicology, 2008, 21, 1760-1769.	1.7	49
36	Charge Distribution in Chromium and Vanadium Catecholato Complexes:â€‰ X-ray Absorption Spectroscopic and Computational Studies. Inorganic Chemistry, 2006, 45, 4743-4754.	1.9	45

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37	Selective Aggregation of a Platinumâ€“Gadolinium Complex Within a Tumorâ€Cell Nucleus. Angewandte Chemie - International Edition, 2010, 49, 1231-1233.	7.2	44
38	Localizing the Chemical Forms of Sulfur in Vivo Using X-ray Fluorescence Spectroscopic Imaging: Application to Onion (Allium cepa) Tissues. Biochemistry, 2009, 48, 6846-6853.	1.2	43
39	The Sulfur Chemistry of Shiitake Mushroom. Journal of the American Chemical Society, 2004, 126, 458-459.	6.6	42
40	Selenium Inhibits Renal Oxidation and Inflammation But Not Acute Kidney Injury in an Animal Model of Rhabdomyolysis. Antioxidants and Redox Signaling, 2013, 18, 756-769.	2.5	42
41	Simultaneous hyperaccumulation of nickel and cobalt in the tree Glochidion cf. sericeum (Phyllanthaceae): elemental distribution and chemical speciation. Scientific Reports, 2018, 8, 9683.	1.6	42
42	Cellular Fates of Manganese(II) Pentaazamacrocyclic Superoxide Dismutase (SOD) Mimetics: Fluorescently Labeled MnSOD Mimetics, X-ray Absorption Spectroscopy, and X-ray Fluorescence Microscopy Studies. Inorganic Chemistry, 2017, 56, 6076-6093.	1.9	41
43	High-Resolution EXAFS of the Active Site of Human Sulfite Oxidase:Â Comparison with Density Functional Theory and X-ray Crystallographic Results. Inorganic Chemistry, 2006, 45, 493-495.	1.9	38
44	Migration of mercury from dental amalgam through human teeth. Journal of Synchrotron Radiation, 2008, 15, 123-128.	1.0	37
45	Comparison of KP1019 and NAMI-A in tumour-mimetic environments. Metallomics, 2016, 8, 762-773.	1.0	37
46	The Geometric and Electronic Structures of Niobium Carbon Clusters. Journal of Physical Chemistry A, 2001, 105, 3340-3358.	1.1	36
47	Selenite-mediated production of superoxide radical anions in A549 cancer cells is accompanied by a selective increase in SOD1 concentration, enhanced apoptosis and Seâ€“Cu bonding. Journal of Biological Inorganic Chemistry, 2014, 19, 813-828.	1.1	36
48	Speciation of copper in a range of food types by X-ray absorption spectroscopy. Food Chemistry, 2014, 164, 50-54.	4.2	36
49	A link between copper and dental caries in human teeth identified by X-ray fluorescence elemental mapping. Journal of Biological Inorganic Chemistry, 2008, 13, 303-306.	1.1	35
50	Biomedical applications of X-ray absorption and vibrational spectroscopic microscopies in obtaining structural information from complex systems. Radiation Physics and Chemistry, 2010, 79, 176-184.	1.4	34
51	In situ analysis of foliar zinc absorption and short-distance movement in fresh and hydrated leaves of tomato and citrus using synchrotron-based X-ray fluorescence microscopy. Annals of Botany, 2015, 115, 41-53.	1.4	34
52	Characterisation and hydrometallurgical processing of nickel from tropical agromined bio-ore. Hydrometallurgy, 2017, 169, 346-355.	1.8	34
53	Influence of Cationic Surfactants on the Formation and Surface Oxidation States of Gold Nanoparticles Produced via Laser Ablation. Langmuir, 2013, 29, 12452-12462.	1.6	32
54	High mitochondrial accumulation of new gadolinium(<scp>iii</scp>) agents within tumour cells. Chemical Communications, 2014, 50, 2252-2254.	2.2	31

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55	Long-Range Chemical Sensitivity in the Sulfur K-Edge X-ray Absorption Spectra of Substituted Thiophenes. Journal of Physical Chemistry A, 2014, 118, 7796-7802.	1.1	31
56	Intracellular distribution and stability of a luminescent rhenium(<scp>i</scp>) tricarbonyl tetrazolato complex using epifluorescence microscopy in conjunction with X-ray fluorescence imaging. Metallomics, 2017, 9, 382-390.	1.0	31
57	XAS and XFM studies of selenium and copper speciation and distribution in the kidneys of selenite-supplemented rats. Metallomics, 2014, 6, 1602-1615.	1.0	30
58	Trace Elements in Ovaries: Measurement and Physiology1. Biology of Reproduction, 2016, 94, 86.	1.2	29
59	Synthesis, Purification, and Structural Characterization of the Dimethyldiselenoarsinate Anion. Inorganic Chemistry, 2002, 41, 5426-5432.	1.9	27
60	Identification of an arsenic tolerant double mutant with a thiol-mediated component and increased arsenic tolerance in phyA mutants. Plant Journal, 2007, 49, 1064-1075.	2.8	26
61	Methylselenocysteine Treatment Leads to Diselenide Formation in Human Cancer Cells: Evidence from X-ray Absorption Spectroscopy Studies. Biochemistry, 2012, 51, 736-738.	1.2	25
62	Distribution and speciation of bromine in mammalian tissue and fluids by X-ray fluorescence imaging and X-ray absorption spectroscopy. Metallomics, 2015, 7, 756-765.	1.0	25
63	The Maia Detector and Event Mode. Synchrotron Radiation News, 2018, 31, 21-27.	0.2	24
64	X-Ray fluorescence microscopy reveals that rhenium(<scp>i</scp>) tricarbonyl isonitrile complexes remain intact in vitro. Chemical Communications, 2020, 56, 6515-6518.	2.2	24
65	Redox Stability Controls the Cellular Uptake and Activity of Ruthenium‐Based Inhibitors of the Mitochondrial Calcium Uniporter (MCU). Angewandte Chemie - International Edition, 2020, 59, 6482-6491.	7.2	24
66	Distribution and chemical form of selenium in Neptunia amplexicaulis from Central Queensland, Australia. Metallomics, 2020, 12, 514-527.	1.0	23
67	Elemental distribution and chemical speciation of copper and cobalt in three metallophytes from the copper–cobalt belt in Northern Zambia. Metallomics, 2020, 12, 682-701.	1.0	23
68	Synthesis and Biological Evaluation of a Class of Mitochondrially‐Targeted Gadolinium(III) Agents. Chemistry - A European Journal, 2014, 20, 16602-16612.	1.7	22
69	Interaction of Product Analogues with the Active Site ofRhodobacterSphaeroidesDimethyl Sulfoxide Reductase. Inorganic Chemistry, 2007, 46, 3097-3104.	1.9	21
70	The crystal structure of auracyanin A at 1.85ÅÃ... resolution: the structures and functions of auracyanins A and B, two almost identical “blue”copper proteins, in the photosynthetic bacterium Chloroflexus aurantiacus. Journal of Biological Inorganic Chemistry, 2009, 14, 329-345.	1.1	21
71	X-ray fluorescence imaging of single human cancer cells reveals that the N-heterocyclic ligands of iodinated analogues of ruthenium anticancer drugs remain coordinated after cellular uptake. Journal of Biological Inorganic Chemistry, 2013, 18, 845-853.	1.1	21
72	Tools for the Discovery of Hyperaccumulator Plant Species and Understanding Their Ecophysiology. Mineral Resource Reviews, 2018, , 117-133.	1.5	21

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73	The Endothelium-Derived Hyperpolarizing Factor, H2O2, Promotes Metal-Ion Efflux in Aortic Endothelial Cells:â€‰ Elemental Mapping by a Hard X-ray Microprobe. Biochemistry, 2006, 45, 12500-12509.	1.2	20
74	Glutathione transferase P1â€1 as an arsenic drugâ€sequestering enzyme. Protein Science, 2017, 26, 317-326.	3.1	20
75	Confocal Volumetric Î¼XRF and Fluorescence Computed Î¼-Tomography Reveals Arsenic Three-Dimensional Distribution within Intact Pteris vittata Fronds. Environmental Science & Technology, 2020, 54, 745-757.	4.6	19
76	Abnormal concentrations of Cuâ€“Co in Haumaniastrum katangense, Haumaniastrum robertii and Aeolanthus biformifolius: contamination or hyperaccumulation?. Metallomics, 2019, 11, 586-596.	1.0	17
77	Ironâ€“carbon clusters: Geometric structures and interconversions. Polyhedron, 2007, 26, 250-265.	1.0	16
78	Synchrotron radiation induced X-ray emission studies of the antioxidant mechanism of the organoselenium drug ebselen. Journal of Biological Inorganic Chemistry, 2012, 17, 589-598.	1.1	16
79	XAS studies of Se speciation in selenite-fed rats. Metallomics, 2014, 6, 2193-2203.	1.0	16
80	Nuclear localization of dirhodium(<scp>ii</scp>) complexes in breast cancer cells by X-ray fluorescence microscopy. Chemical Communications, 2019, 55, 8223-8226.	2.2	16
81	Copper(II) Binding to PBT2 Differs from That of Other 8-Hydroxyquinoline Chelators: Implications for the Treatment of Neurodegenerative Protein Misfolding Diseases. Inorganic Chemistry, 2020, 59, 17519-17534.	1.9	15
82	Silver in biology and medicine: opportunities for metallomics researchers. Metallomics, 2021, 13, .	1.0	15
83	Phase and valence transitions in Ba2LnSnxSb1â^'xO6â^'Î´ (Ln=Pr and Tb). Journal of Solid State Chemistry, 2008, 181, 2941-2952.	1.4	14
84	Structural approaches to probing metal interaction with proteins. Journal of Inorganic Biochemistry, 2012, 115, 138-147.	1.5	14
85	PBT2 acts through a different mechanism of action than other 8-hydroxyquinolines: an X-ray fluorescence imaging study. Metallomics, 2020, 12, 1979-1994.	1.0	13
86	Simultaneous observation of the metabolism of cisplatin and NAMI-A in human plasma in vitro by SEC-ICP-AES. Journal of Biological Inorganic Chemistry, 2014, 19, 1049-1053.	1.1	12
87	Localization of the Trace Elements Iron, Zinc and Selenium in Relation to Anatomical Structures in Bovine Ovaries by X-Ray Fluorescence Imaging. Microscopy and Microanalysis, 2015, 21, 695-705.	0.2	12
88	Measurement of labile arsenic speciation in water and soil using diffusive gradients in thin films (DGT) and X-ray absorption near edge spectroscopy (XANES). Environmental Chemistry, 2015, 12, 102.	0.7	12
89	Quantitative elemental analysis of bovine ovarian follicles using X-ray fluorescence imaging. Metallomics, 2015, 7, 828-836.	1.0	11
90	X-ray fluorescence elemental mapping of roots, stems and leaves of the nickel hyperaccumulators Rinorea cf. bengalensis and Rinorea cf. javanica (Violaceae) from Sabah (Malaysia), Borneo. Plant and Soil, 2020, 448, 15-36.	1.8	11

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91	The biochemical fate of Ag+ ions in Staphylococcus aureus, Escherichia coli, and biological media. Journal of Inorganic Biochemistry, 2021, 225, 111598.	1.5	11
92	Uptake and Distribution of a Platinum(II)-Carborane Complex Within a Tumour Cell Using Synchrotron XRF Imaging. Australian Journal of Chemistry, 2011, 64, 253.	0.5	10
93	Synchrotron X-ray fluorescence studies of a bromine-labelled cyclic RGD peptide interacting with individual tumor cells. Journal of Synchrotron Radiation, 2013, 20, 226-233.	1.0	10
94	Application of X-ray absorption and X-ray fluorescence techniques to the study of metallodrug action. Current Opinion in Chemical Biology, 2021, 61, 135-142.	2.8	10
95	Photochemistry and in vitro anticancer activity of Pt(<scp>iv</scp>)Re(<scp>i</scp>) conjugates. Chemical Communications, 2021, 57, 11189-11192.	2.2	10
96	Relationship of arsenic speciation and bioavailability in mine wastes for human health risk assessment. Environmental Chemistry, 2016, 13, 641.	0.7	9
97	Tumor cell uptake and selectivity of gadolinium(III)-phosphonium complexes: The role of delocalisation at the phosphonium centre. Journal of Inorganic Biochemistry, 2017, 177, 313-321.	1.5	9
98	Synchrotron ÂµXRF imaging of live seedlings of Berkheya coddii and Odontarrhena muralis during germination and seedling growth. Plant and Soil, 2020, 453, 487-501.	1.8	9
99	Thiourea-Derived Chelating Ligands and Their Organometallic Compounds: Investigations into Their Anticancer Activity. Molecules, 2020, 25, 3661.	1.7	9
100	Redox Stability Controls the Cellular Uptake and Activity of Rutheniumâ€Based Inhibitors of the Mitochondrial Calcium Uniporter (MCU). Angewandte Chemie, 2020, 132, 6544-6553.	1.6	8
101	Carcinogenic Chromium(VI) Compounds Formed by Intracellular Oxidation of Chromium(III) Dietary Supplements by Adipocytes. Angewandte Chemie, 2016, 128, 1774-1777.	1.6	7
102	Investigation into the intracellular fates, speciation and mode of action of selenium-containing neuroprotective agents using XAS and XFM. Biochimica Et Biophysica Acta - General Subjects, 2018, 1862, 2393-2404.	1.1	7
103	Triazolylâ€Functionalized N â€Heterocyclic Carbene Halfâ€Sandwich Compounds: Coordination Mode, Reactivity and inâ€…vitro Anticancer Activity. ChemMedChem, 2021, 16, 3017-3026.	1.6	7
104	Metal Cyanide Ions Mx(CN)y]+,-in the Gas Phase:Â M = Fe, Co, Ni, Zn, Cd, Hg, Fe + Ag, Co + Ag. Inorganic Chemistry, 2002, 41, 3560-3569.	1.9	6
105	Towards Rational Syntheses of the Elusive Metallocarbohedrenes: Density Functional Prescriptions for Electronic and Geometric Structures. Chemistry - A European Journal, 2002, 8, 3497.	1.7	6
106	Solution Chemistry of Copper(II) Binding to Substituted 8-Hydroxyquinolines. Inorganic Chemistry, 2020, 59, 13858-13874.	1.9	6
107	Multimodal synchrotron X-ray fluorescence imaging reveals elemental distribution in seeds and seedlings of the Znâ€“Cdâ€“Ni hyperaccumulatorNoccaea caerulescens. Metallomics, 2022, 14, .	1.0	5
108	Using Synchrotron-based X-ray Absorption Spectrometry to Identify the Arsenic Chemical Forms in Mine Waste Materials. AIP Conference Proceedings, 2007, , .	0.3	4

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109	X-ray Absorption and EPR Spectroscopic Studies of the Biotransformations of Chromium(VI) in Mammalian Cells. Is Chromodulin an Artifact of Isolation Methods? [J. Am. Chem. Soc.2007,129, 1065â^'1075].. Journal of the American Chemical Society, 2007, 129, 9832-9832.	6.6	4
110	Consistent Chemical Form of Cd in Liver and Kidney Tissues in Rats Dosed with a Range of Cd Treatments: XAS of Intact Tissues. Chemical Research in Toxicology, 2010, 23, 1647-1649.	1.7	4
111	Methods for Visualizing Elemental Distribution in Hyperaccumulator Plants. Mineral Resource Reviews, 2021, , 197-214.	1.5	4
112	Coordination and Dehydrogenation of PH3by 23 Transition Metal Ions in the Gas Phase:Â FTICR Experiments and Density Functional Interpretations. Inorganic Chemistry, 2001, 40, 6972-6982.	1.9	3
113	The H.G. Smith Award Article: Fluorescent Analogues of NAMI-A: Synthesis, Characterisation, Fluorescent Properties, and Preliminary Biological Studies in Human Lung Cancer Cells. Australian Journal of Chemistry, 2014, 67, 1711.	0.5	2
114	Phytometallomics. Metallomics, 2020, 12, 324-325.	1.0	2
115	Cellular-level distribution of manganese in Macadamia integrifolia, M. ternifolia, and M. tetraphylla from Australia. Metallomics, 2022, 14, .	1.0	2
116	Response to Guzzi & Pigatto'sComments onMigration of mercury from dental amalgam through human teethby H. H. Harriset al.(2008).J. Synchrotron Rad.15, 123â€“128. Journal of Synchrotron Radiation, 2009, 16, 437-438.	1.0	1
117	Direct examination of cadmium bonding in rat tissues dosed with mine wastes and cadmium-containing solutions. , 2010, , .		1
118	Monomeric TpPrMoVOSR complexes via the chemical reduction of TpPrMoVIOSR. Journal of Inorganic Biochemistry, 2003, 96, 202.	1.5	0
119	Cadmium Chemical Form in Mine Waste Materials by X-ray Absorption Spectroscopy. , 2010, , .		0
120	Identification of lead chemical form in mine waste materials by X-ray absorption spectroscopy. , 2010, , .		0
121	Decision Process for Comparison of Partial and Complete XANES Spectra. , 2010, , .		0
122	X-ray Microscopy and Spectroscopy Combine to Probe Selenium Biology.. Microscopy and Microanalysis, 2019, 25, 1068-1069.	0.2	0
123	Arsenic fate following mining of sulfide ore at mine sites and significance of the reduced state. Arsenic in the Environment Proceedings, 2016, , 189-190.	0.0	0
124	Multi-modal spectroscopic imaging with synchrotron light to study mechanisms of brain disease. Proceedings of SPIE, 2017, , .	0.8	0
125	Contrasting patterns of nickel distribution in the hyperaccumulatorsPhyllanthus balgooyiandPhyllanthus rufuschaneyifrom Malaysian Borneo. Metallomics, 2022, 14, .	1.0	0