J?rgen G Gailer

List of Publications by Year in descending order

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75 papers	2,545 citations	185998 28 h-index	205818 48 g-index
78 all docs	78 docs citations	78 times ranked	2362 citing authors

#	Article	IF	Citations
1	Structural Basis of the Antagonism between Inorganic Mercury and Selenium in Mammals. Chemical Research in Toxicology, 2000, 13, 1135-1142.	1.7	158
2	Arsenicâ€“selenium and mercuryâ€“selenium bonds in biology. Coordination Chemistry Reviews, 2007, 251, 234-254.	9.5	155
3	A Metabolic Link between Arsenite and Selenite:Â The Seleno-bis(S-glutathionyl) Arsinium Ion. Journal of the American Chemical Society, 2000, 122, 4637-4639.	6.6	132
4	A set of highly water-soluble tetraethyleneglycol-substituted Zn(<scp>ii</scp>) phthalocyanines: synthesis, photochemical and photophysical properties, interaction with plasma proteins and in vitro phototoxicity. Dalton Transactions, 2011, 40, 4067-4079.	1.6	124
5	Arsenobetaine and other arsenic species in mushrooms. Applied Organometallic Chemistry, 1995, 9, 305-313.	1.7	115
6	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
7	Metabolism of arsenic compounds by the blue musselmytilus edulis after accumulation from seawater spiked with arsenic compounds. Applied Organometallic Chemistry, 1995, 9, 341-355.	1.7	86
8	Biliary Excretion of [(GS)2AsSe]-after Intravenous Injection of Rabbits with Arsenite and Selenate. Chemical Research in Toxicology, 2002, 15, 1466-1471.	1.7	76
9	Comparative hydrolysis and plasma protein binding of cis-platin and carboplatin in human plasma in vitro. Metallomics, 2011, 3, 49-55.	1.0	71
10	The Seleno Bis(S-glutathionyl) Arsinium Ion Is Assembled in Erythrocyte Lysate. Chemical Research in Toxicology, 2006, 19, 601-607.	1.7	62
11	Simultaneous Cu-, Fe-, and Zn-specific detection of metalloproteins contained in rabbit plasma by size-exclusion chromatographyâ€“inductively coupled plasma atomic emission spectroscopy. Journal of Biological Inorganic Chemistry, 2009, 14, 61-74.	1.1	62
12	The Ion-chromatographic behavior of arsenite, arsenate, methylarsonic acid and dimethylarsinic acid on the hamilton PRP-X100 anion-exchange column. Applied Organometallic Chemistry, 1994, 8, 129-140.	1.7	59
13	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
14	Review: Reactive selenium metabolites as targets of toxic metals/metalloids in mammals: a molecular toxicological perspective. Applied Organometallic Chemistry, 2002, 16, 701-707.	1.7	54
15	Chronic toxicity of AsIII in mammals: The role of (GS)2AsSeâ^'â~†. Biochimie, 2009, 91, 1268-1272.	1.3	51
16	Liquid chromatography-inductively coupled plasma-based metallomic approaches to probe health-relevant interactions between xenobiotics and mammalian organisms. Metallomics, 2011, 3, 566.	1.0	43
17	Analysis of the plasma metalloproteome by SECâ€“ICP-AES: bridging proteomics and metabolomics. Expert Review of Proteomics, 2009, 6, 251-265.	1.3	41
18	Probing the coordination behavior of Hg2+, CH3Hg+, and Cd2+ towards mixtures of two biological thiols by HPLC-ICP-AES. Journal of Inorganic Biochemistry, 2011, 105, 375-381.	1.5	39

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19	The effect of sodium thiosulfate on the metabolism of cis-platin in human plasma in vitro. Metallomics, 2012, 4, 960.	1.0	39
20	Remarkable effect of mobile phase buffer on the SEC-ICP-AES derived Cu, Fe and Zn-metalloproteome pattern of rabbit blood plasma. Metallomics, 2010, 2, 460.	1.0	38
21	Optical sensor for on-line determination of solvent mixtures based on a fluorescent solvent polarity probe. Sensors and Actuators B: Chemical, 1991, 3, 267-272.	4.0	37
22	Reversed-phase high-performance liquid chromatographic separation of inorganic mercury and methylmercury driven by their different coordination chemistry towards thiols. Journal of Chromatography A, 2007, 1156, 331-339.	1.8	37
23	Identification of [(GS)2AsSe]? in rabbit bile by size-exclusion chromatography and simultaneous multielement-specific detection by inductively coupled plasma atomic emission spectroscopy. Applied Organometallic Chemistry, 2002, 16, 72-75.	1.7	34
24	Selenium-mediated arsenic excretion in mammals: a synchrotron-based study of whole-body distribution and tissue-specific chemistry. Metallomics, 2017, 9, 1585-1595.	1.0	34
25	Organ damage by toxic metals is critically determined by the bloodstream. Coordination Chemistry Reviews, 2018, 374, 376-386.	9.5	34
26	The separation of dimethylarsinic acid, methylarsonous acid, methylarsonic acid, arsenate and dimethylarsinous acid on the Hamilton PRP-X100 anion-exchange column. Applied Organometallic Chemistry, 1999, 13, 837-843.	1.7	31
27	Removal of Fe3+ and Zn2+ from plasma metalloproteins by iron chelating therapeutics depicted with SEC-ICP-AES. Dalton Transactions, 2010, 39, 7466.	1.6	31
28	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
29	Retention behavior of arsenobetaine, arsenocholine, trimethylarsine oxide and tetramethylarsonium iodide on a styrene-divinylbenzene column with benzenesulfonates as ion-pairing reagents. Journal of Chromatography A, 1996, 730, 219-229.	1.8	28
30	Synthesis, Purification, and Structural Characterization of the Dimethyldiselenoarsinate Anion. Inorganic Chemistry, 2002, 41, 5426-5432.	1.9	27
31	Tuning the metabolism of the anticancer drug cisplatin with chemoprotective agents to improve its safety and efficacy. Metallomics, 2016, 8, 1170-1176.	1.0	27
32	Probing bioinorganic chemistry processes in the bloodstream to gain new insights into the origin of human diseases. Dalton Transactions, 2010, 39, 329-336.	1.6	26
33	Remarkable differences in the biochemical fate of Cd²⁺, Hg²⁺, CH₃Hg⁺ and thimerosal in red blood cell lysate. Metallomics, 2017, 9, 1060-1072.	1.0	26
34	The cisplatin/serum albumin system: A reappraisal. Inorganica Chimica Acta, 2019, 495, 118983.	1.2	26
35	Simultaneous multielement-specific detection of a novel glutathione-arsenic-selenium ion [(GS)2AsSe]? by ICP AES after micellar size- exclusion chromatography. Applied Organometallic Chemistry, 2000, 14, 355-363.	1.7	25
36	Probing the bioinorganic chemistry of toxic metals in the mammalian bloodstream to advance human health. Journal of Inorganic Biochemistry, 2012, 108, 128-132.	1.5	25

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37	Human Cytosolic Iron Regulatory Protein 1 Contains a Linear Ironâ^'Sulfur Cluster. Journal of the American Chemical Society, 2001, 123, 10121-10122.	6.6	23
38	Fortification of blood plasma from cancer patients with human serum albumin decreases the concentration of cisplatin-derived toxic hydrolysis products in vitro. Metallomics, 2014, 6, 2034-2041.	1.0	23
39	Strong poison revisited. Journal of Inorganic Biochemistry, 2007, 101, 1891-1893.	1.5	22
40	Chemoprotection by<scp>d</scp>-methionine against cisplatin-induced side-effects: insight from in vitro studies using human plasma. Metallomics, 2014, 6, 532-541.	1.0	22
41	Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (S-glutathionyl) arsinium anion from selenide, arsenite and glutathione. Journal of Organometallic Chemistry, 2002, 650, 108-113.	0.8	20
42	Probing the interaction of arsenobetaine with blood plasma constituents in vitro: an SEC-ICP-AES study. Metallomics, 2009, 1, 403.	1.0	20
43	Hg2+ and Cd2+ interact differently with biomimetic erythrocyte membranes. BioMetals, 2009, 22, 261-274.	1.8	19
44	Hg- and Cd-induced modulation of lipid packing and monolayer fluidity in biomimetic erythrocyte model systems. Chemistry and Physics of Lipids, 2013, 170-171, 46-54.	1.5	19
45	N-Acetyl-l-cysteine modulates the metabolism of cis-platin in human plasma in vitro. Metallomics, 2013, 5, 197.	1.0	19
46	Use of elemental and molecular-mass spectrometry to assess the toxicological effects of inorganic mercury in the mouse Mus musculus. Analytical and Bioanalytical Chemistry, 2014, 406, 5853-5865.	1.9	19
47	Mobilization of exogenous and endogenous selenium to bile after the intravenous administration of environmentally relevant doses of arsenite to rabbits. Applied Organometallic Chemistry, 2004, 18, 670-675.	1.7	18
48	Methylated Trivalent Arsenic-Glutathione Complexes are More Stable than their Arsenite Analog. Bioinorganic Chemistry and Applications, 2008, 2008, 1-8.	1.8	17
49	Observation of the seleno bis-(S-glutathionyl) arsinium anion in rat bile. Journal of Inorganic Biochemistry, 2016, 158, 24-29.	1.5	17
50	Environmentally relevant concentrations of aminopolycarboxylate chelating agents mobilize Cd from humic acid. Journal of Environmental Sciences, 2017, 57, 249-257.	3.2	16
51	Linking molecular targets of Cd in the bloodstream to organ-based adverse health effects. Journal of Inorganic Biochemistry, 2021, 216, 111279.	1.5	16
52	Identification of a haptoglobin-hemoglobin complex in human blood plasma. Journal of Inorganic Biochemistry, 2019, 201, 110802.	1.5	15
53	Chemical basis for the detoxification of cisplatin-derived hydrolysis products by sodium thiosulfate. Journal of Inorganic Biochemistry, 2016, 162, 96-101.	1.5	14
54	Manduca sexta IRP1: molecular characterization and in vivo response to iron. Insect Biochemistry and Molecular Biology, 2001, 32, 85-96.	1.2	13

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55	Physiologically relevant plasma d , l -homocysteine concentrations mobilize Cd from human serum albumin. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2016, 1027, 181-186.	1.2	13
56	Structural characterization of Cd2+ complexes in solution with DMSA and DMPS. Journal of Inorganic Biochemistry, 2014, 136, 99-106.	1.5	12
57	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
58	Probing the interaction of bisintercalating (2,2â€²:6â€²,2â€³-terpyridine)platinum(II) complexes with glutathione and rabbit plasma. Journal of Inorganic Biochemistry, 2016, 163, 95-102.	1.5	11
59	Toxic Metal Species and â€˜Endogenousâ€™ Metalloproteins at the Bloodâ€“Organ Interface: Analytical and Bioinorganic Aspects. Molecules, 2021, 26, 3408.	1.7	11
60	Mobilization of Cd from human serum albumin by small molecular weight thiols. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2014, 958, 16-21.	1.2	10
61	Improving the safety of metal-based drugs by tuning their metabolism with chemoprotective agents. Journal of Inorganic Biochemistry, 2018, 179, 154-157.	1.5	9
62	Physiologically relevant hCys concentrations mobilize MeHg from rabbit serum albumin to form MeHgâ€“hCys complexes. Metallomics, 2022, 14, .	1.0	9
63	Insights into the Chemical Biology of Selenium. Phosphorus, Sulfur and Silicon and the Related Elements, 2008, 183, 924-930.	0.8	8
64	Modulation of the metabolism of cis-platin in blood plasma by glutathione. Canadian Journal of Chemistry, 2016, 94, 360-366.	0.6	8
65	In vitro assessment of chelating agents with regard to their abstraction efficiency of Cd2+ bound to plasma proteins. Metallomics, 2012, 4, 995.	1.0	7
66	Metal Species in Biology: Bottom-Up and Top-Down LC Approaches in Applied Toxicological Research. ISRN Chromatography, 2013, 2013, 1-21.	0.6	7
67	Sample preparation of blood plasma enables baseline separation of iron metalloproteins by SEC-GFAAS. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1147, 122147.	1.2	7
68	Application of a Novel Metallomics Tool to Probe the Fate of Metal-Based Anticancer Drugs in Blood Plasma: Potential, Challenges and Prospects. Current Topics in Medicinal Chemistry, 2021, 21, 48-58.	1.0	7
69	Quantification of human plasma metalloproteins in multiple sclerosis, ischemic stroke and healthy controls reveals an association of haptoglobin-hemoglobin complexes with age. PLoS ONE, 2022, 17, e0262160.	1.1	7
70	Simultaneous arsenic- and selenium-specific detection of the dimethyldiselenoarsinate anion by high-performance liquid chromatography-inductively coupled plasma atomic emission spectrometry. Applied Organometallic Chemistry, 2003, 17, 570-574.	1.7	6
71	Improved RP-HPLC separation of Hg²⁺and CH₃Hg⁺using a mixture of thiol-based mobile phase additives. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2012, 47, 149-154.	0.9	6
72	SEC hyphenated to a multielement-specific detector unravels the degradation pathway of a bimetallic anticancer complex in human plasma. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2020, 1145, 122093.	1.2	5

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73	Advanced LC-analysis of human plasma for metallodrug metabolites. Drug Discovery Today: Technologies, 2015, 16, 24-30.	4.0	4
74	Improved selectivity of ZnNa3DTPA vs. Na5DTPA to abstract Cd2+ from plasma proteins in vitro. Metallomics, 2013, 5, 615.	1.0	2
75	Detection of equimolar EDTA and DTPA in spiked wastewater effluents. International Journal of Environmental Analytical Chemistry, 2019, 99, 541-556.	1.8	1