Claudia Andrea Blindauer

List of Publications by Year
in descending order

101 papers	4,149 citations	109321 35 h-index	118850 62 g-index
105 all docs	105 docs citations	105 times ranked	4930 citing authors

#	Article	IF	Citations
1	A metallothionein from an open ocean cyanobacterium removes zinc from the sensor protein controlling its transcription. Journal of Inorganic Biochemistry, 2022, 230, 111755.	3.5	2
2	Acidâ€“base properties of an antivirally active acyclic nucleoside phosphonate: (<i>S</i>)-9-[3-hydroxy-2-(phosphonomethoxy)propyl]adenine (HPMPA). New Journal of Chemistry, 2022, 46, 6484-6493.	2.8	3
3	Speciomics as a concept involving chemical speciation and omics. Journal of Proteomics, 2022, 263, 104615.	2.4	6
4	Albumin-mediated extracellular zinc speciation drives cellular zinc uptake. Chemical Communications, 2022, 58, 7384-7387.	4.1	5
5	A single sensor controls large variations in zinc quotas in a marine cyanobacterium. Nature Chemical Biology, 2022, 18, 869-877.	8.0	7
6	The Interplay between Non-Esterified Fatty Acids and Plasma Zinc and Its Influence on Thrombotic Risk in Obesity and Type 2 Diabetes. International Journal of Molecular Sciences, 2021, 22, 10140.	4.1	6
7	Albumin-mediated alteration of plasma zinc speciation by fatty acids modulates blood clotting in type-2 diabetes. Chemical Science, 2021, 12, 4079-4093.	7.4	16
8	Fatty acids may influence insulin dynamics through modulation of albuminâ€Zn²⁺ interactions. BioEssays, 2021, 43, e2100172.	2.5	5
9	Albumin Substitution in Decompensated Liver Cirrhosis: Donâ€™t Forget Zinc. Nutrients, 2021, 13, 4011.	4.1	10
10	Metal Ion-Coordinating Properties in Aqueous Solutions of the Antivirally Active Nucleotide Analogue (S)-9-[3-Hydroxy-2-(phosphonomethoxy)propyl]adenine (HPMPA) - Quantification of Complex Isomeric Equilibria. European Journal of Inorganic Chemistry, 2019, 2019, 3892-3903.	2.0	4
11	Changes in Plasma Free Fatty Acids Associated with Type-2 Diabetes. Nutrients, 2019, 11, 2022.	4.1	173
12	A metalloproteomic analysis of interactions between plasma proteins and zinc: elevated fatty acid levels affect zinc distribution. Metallomics, 2019, 11, 1805-1819.	2.4	31
13	Metalloproteomics. , 2019, , 85-100.		0
14	Crosstalk between zinc and free fatty acids in plasma. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2019, 1864, 532-542.	2.4	36
15	Metal-ion binding properties of (S)-1-[3-hydroxy-2-(phosphonomethoxy)propyl]cytosine (HPMPC,) Tj ETQq1 1 0.784314 rgBT /Overlock 472, 283-294.	2.4	5
16	Differential reactivity of closely related zinc(II)-binding metallothioneins from the plant Arabidopsis thaliana. Journal of Biological Inorganic Chemistry, 2018, 23, 137-154.	2.6	9
17	Molecular genetic and biochemical characterization of a putative family of zinc metalloproteins in Caenorhabditis elegans. Metallomics, 2018, 10, 1814-1823.	2.4	2
18	The type 4 metallothionein from <i>Brassica napus</i> seeds folds in a metal-dependent fashion and favours zinc over other metals. Metallomics, 2018, 10, 1430-1443.	2.4	20

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19	Intramolecular Ï€-stacks in mixed-ligand copper(II) complexes formed by heteroaromatic amines and antivirally active acyclic nucleotide analogs carrying a hydroxy-2-(phosphonomethoxy)propyl residue^{â€¡}. Journal of Coordination Chemistry, 2018, 71, 1910-1934.	2.2	4
20	Bacterial zinc uptake regulator proteins and their regulons. Biochemical Society Transactions, 2018, 46, 983-1001.	3.4	86
21	Ischemia-modified albumin: Crosstalk between fatty acid and cobalt binding. Prostaglandins Leukotrienes and Essential Fatty Acids, 2018, 135, 147-157.	2.2	39
22	Native electrospray mass spectrometry approaches to probe the interaction between zinc and an anti-angiogenic peptide from histidine-rich glycoprotein. Scientific Reports, 2018, 8, 8646.	3.3	25
23	Sediment Metal Contamination in the Kafue River of Zambia and Ecological Risk Assessment. Bulletin of Environmental Contamination and Toxicology, 2017, 99, 108-116.	2.7	19
24	The potent anti-cancer activity of Dioclea lasiocarpa lectin. Journal of Inorganic Biochemistry, 2017, 175, 179-189.	3.5	34
25	Metallothionein from Wild Populations of the African Catfish Clarias gariepinus: From Sequence, Protein Expression and Metal Binding Properties to Transcriptional Biomarker of Metal Pollution. International Journal of Molecular Sciences, 2017, 18, 1548.	4.1	22
26	Earthworm Lumbricus rubellus MT-2: Metal Binding and Protein Folding of a True Cadmium-MT. International Journal of Molecular Sciences, 2016, 17, 65.	4.1	17
27	Circulatory zinc transport is controlled by distinct interdomain sites on mammalian albumins. Chemical Science, 2016, 7, 6635-6648.	7.4	67
28	O₂â€independent demethylation of trimethylamine <i>N</i>â€oxide by Tdm of <i>Methylocella silvestris</i>. FEBS Journal, 2016, 283, 3979-3993.	4.7	7
29	Biophysical characterization of a protein for structure comparison: methods for identifying insulin structural changes. Analytical Methods, 2016, 8, 7460-7471.	2.7	13
30	Stability Enhancing <i>N</i>-Terminal PEGylation of Oxytocin Exploiting Different Polymer Architectures and Conjugation Approaches. Biomacromolecules, 2016, 17, 2755-2766.	5.4	13
31	Reconstruction of diaminopimelic acid biosynthesis allows characterisation of Mycobacterium tuberculosis N-succinyl-L,L-diaminopimelic acid desuccinylase. Scientific Reports, 2016, 6, 23191.	3.3	10
32	Unexpected Interactions of the Cyanobacterial Metallothionein SmtA with Uranium. Inorganic Chemistry, 2016, 55, 1505-1515.	4.0	28
33	Extent of intramolecular Ï€ stacks in aqueous solution in mixed-ligand copper(II) complexes formed by heteroaromatic amines and the anticancer and antivirally active 9-[2-(phosphonomethoxy)ethyl]guanine (PMEG). A comparison with related acyclic nucleotide analogues. Polyhedron, 2016, 103, 248-260.	2.2	5
34	Fatty Acid-Mediated Inhibition of Metal Binding to the Multi-Metal Site on Serum Albumin: Implications for Cardiovascular Disease. Current Topics in Medicinal Chemistry, 2016, 16, 3021-3032.	2.1	27
35	Plasma free fatty acid levels influence Zn2+â€dependent histidineâ€rich glycoproteinâ€“heparin interactions via an allosteric switch on serum albumin. Journal of Thrombosis and Haemostasis, 2015, 13, 101-110.	3.8	38
36	The reduced Co²⁺â€binding ability of ischaemiaâ€modified albumin is unlikely to be because of oxidative modification of the Nâ€terminus. Liver International, 2015, 35, 2622-2623.	3.9	1

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37	3 Bacterial Metallothioneins. , 2015, , 51-82.		0
38	Characterization of Folding Cores in the Cyclophilin A-Cyclosporin A Complex. Biophysical Journal, 2015, 108, 1739-1746.	0.5	4
39	Advances in the molecular understanding of biological zinc transport. Chemical Communications, 2015, 51, 4544-4563.	4.1	85
40	Prion infection in cells is abolished by a mutated manganese transporter but shows no relation to zinc. Molecular and Cellular Neurosciences, 2015, 68, 186-193.	2.2	7
41	A Canonical EFâ€Loop Directs Ca²⁺â€Sensitivity in Phospholipase Câ€Î2. Journal of Cellular Biochemistry, 2014, 115, 557-565.	2.6	12
42	Identification of major zinc-binding proteins from a marine cyanobacterium: insight into metal uptake in oligotrophic environments. Metallomics, 2014, 6, 1254-1268.	2.4	17
43	Effects of Ligand Binding on the Rigidity and Mobility of Proteins: An Experimental and Computational Approach. Biophysical Journal, 2014, 106, 658a.	0.5	1
44	Metallothioneins. 2-Oxoglutarate-Dependent Oxygenases, 2014, , 606-665.	0.8	13
45	Protein Disulfide-Isomerase Interacts with a Substrate Protein at All Stages along Its Folding Pathway. PLoS ONE, 2014, 9, e82511.	2.5	45
46	Allosteric modulation of zinc speciation by fatty acids. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 5456-5464.	2.4	60
47	Resolution of a paradox by native mass spectrometry: facile occupation of all four metal binding sites in the dimeric zinc sensor SmtB. Chemical Communications, 2013, 49, 813-815.	4.1	10
48	Elemental composition of natural populations of key microbial groups in <scp>A</scp>tlantic waters. Environmental Microbiology, 2013, 15, 3054-3064.	3.8	22
49	Diversity and distribution of plant metallothioneins: a review of structure, properties and functions. Metallomics, 2013, 5, 1146.	2.4	171
50	Lessons on the critical interplay between zinc binding and protein structure and dynamics. Journal of Inorganic Biochemistry, 2013, 121, 145-155.	3.5	26
51	Extent of Intramolecular Ï€ Stacks in Aqueous Solution in Mixedâ€Ligand Copper(II) Complexes Formed by Heteroaromatic Amines and 1â€[2â€(Phosphonomethoxy)ethyl]cytosine (PMEC), a Relative of Antivirally Active Acyclic Nucleotide Analogues (Part 72)^[1, 2]. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 1661-1673.	1.2	6
52	Direct Peptide Bioconjugation/PEGylation at Tyrosine with Linear and Branched Polymeric Diazonium Salts. Journal of the American Chemical Society, 2012, 134, 7406-7413.	13.7	122
53	A Molecular Mechanism for Modulating Plasma Zn Speciation by Fatty Acids. Journal of the American Chemical Society, 2012, 134, 1454-1457.	13.7	48
54	Extent of Intramolecular <i>Ï€</i>â€Stacks in Aqueous Solution in Mixedâ€Ligand Copper(II) Complexes Formed by Heteroaromatic Amines and Several 2â€Aminopurine Derivatives of the Antivirally Active Nucleotide Analog 9â€[2â€(Phosphonomethoxy)ethyl]adenine (PMEA). Chemistry and Biodiversity, 2012, 9, 2008-2034.	2.1	12

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55	In support of the BMRB. Nature Structural and Molecular Biology, 2012, 19, 854-860.	8.2	6
56	Allosteric Inhibition of Cobalt Binding to Albumin by Fatty Acids: Implications for the Detection of Myocardial Ischemia. Journal of Medicinal Chemistry, 2012, 55, 4425-4430.	6.4	30
57	Mining Genomes of Marine Cyanobacteria for Elements of Zinc Homeostasis. Frontiers in Microbiology, 2012, 3, 142.	3.5	51
58	Fractionation and identification of metalloproteins from a marine cyanobacterium. Analytical and Bioanalytical Chemistry, 2012, 402, 3371-3377.	3.7	30
59	Protein fractionation and detection for metalloproteomics: challenges and approaches. Analytical and Bioanalytical Chemistry, 2012, 402, 3311-3322.	3.7	60
60	Homoeostasis and distribution of essential metals in cells: Principles and molecular mechanisms. Biochemist, 2012, 34, 4-13.	0.5	5
61	C. elegans metallothioneins: response to and defence against ROS toxicity. Molecular BioSystems, 2011, 7, 2397.	2.9	98
62	The Tat protein export pathway and its role in cyanobacterial metalloprotein biosynthesis. FEMS Microbiology Letters, 2011, 325, 1-9.	1.8	14
63	Bacterial metallothioneins: past, present, and questions for the future. Journal of Biological Inorganic Chemistry, 2011, 16, 1011-1024.	2.6	138
64	Tools for metal ion sorting: in vitro evidence for partitioning of zinc and cadmium in C. elegans metallothionein isoforms. Chemical Communications, 2011, 47, 448-450.	4.1	22
65	The two <i>Caenorhabditisâ€ƒelegans</i> metallothioneins (CeMTâ€•1 and CeMTâ€•2) discriminate between essential zinc and toxic cadmium. FEBS Journal, 2010, 277, 2531-2542.	4.7	56
66	Metallothioneins: unparalleled diversity in structures and functions for metal ion homeostasis and more. Natural Product Reports, 2010, 27, 720.	10.3	194
67	Cytosolic metal handling in plants: determinants for zinc specificity in metal transporters and metallothioneins. Metallomics, 2010, 2, 510.	2.4	71
68	Zinc transfer from the embryo-specific metallothionein EC from wheat: a case study. Physical Chemistry Chemical Physics, 2010, 12, 13408.	2.8	29
69	The isolated Cys2His2 site in EC metallothionein mediates metal-specific protein folding. Molecular BioSystems, 2010, 6, 1592.	2.9	38
70	Structure, Properties, and Engineering of the Major Zinc Binding Site on Human Albumin. Journal of Biological Chemistry, 2009, 284, 23116-23124.	3.4	122
71	Site-specific N-terminus conjugation of poly(mPEG1100) methacrylates to salmon calcitonin: synthesis and preliminary biological evaluation. Soft Matter, 2009, 5, 3038.	2.7	26
72	Plasma fatty acid levels may regulate the Zn2+-dependent activities of histidine-rich glycoprotein. Biochimie, 2009, 91, 1518-1522.	2.6	21

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73	Bacterial Metallothioneins. Metal Ions in Life Sciences, 2009, , 51-81.	1.0	12
74	Zincâ€Handling in Cyanobacteria: An Update. Chemistry and Biodiversity, 2008, 5, 1990-2013.	2.1	71
75	Metallothioneins with unusual residues: Histidines as modulators of zinc affinity and reactivity. Journal of Inorganic Biochemistry, 2008, 102, 507-521.	3.5	79
76	Albumin as a zinc carrier: properties of its high-affinity zinc-binding site. Biochemical Society Transactions, 2008, 36, 1317-1321.	3.4	203
77	Differential reactivity of individual zinc ions in clusters from bacterial metallothioneins. Inorganica Chimica Acta, 2007, 360, 3-13.	2.4	27
78	Toward a property/function relationship for metallothioneins: Histidine coordination and unusual cluster composition in a zinc-metallothionein from plants. Proteins: Structure, Function and Bioinformatics, 2007, 68, 922-935.	2.6	52
79	Histidine ligands in bacterial metallothionein enhance cluster stability. Journal of Biological Inorganic Chemistry, 2007, 12, 393-405.	2.6	41
80	Evidence for a <i>gem</i>-Diol Reaction Intermediate in Bacterial Câˆ'C Hydrolase Enzymes BphD and MhpC from ¹³C NMR Spectroscopy. Biochemistry, 2006, 45, 12461-12469.	2.5	26
81	Metal complexes of N,N,Nâ€²,Nâ€²-tetrakis(2-pyridylmethyl)ethylenediamine (TPEN): Variable coordination numbers and geometries. Polyhedron, 2006, 25, 513-520.	2.2	44
82	Probing the substrate specificities of human PHOSPHO1 and PHOSPHO2. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1752, 73-82.	2.3	32
83	Role of Tyr84 in controlling the reactivity of Cys34 of human albumin. FEBS Journal, 2005, 272, 353-362.	4.7	97
84	How to Hide Zinc in a Small Protein. ChemInform, 2005, 36, no.	0.0	0
85	How to Hide Zinc in a Small Protein. Accounts of Chemical Research, 2005, 38, 62-69.	15.6	52
86	A novel copper site in a cyanobacterial metallochaperone. Biochemical Journal, 2004, 378, 293-297.	3.7	29
87	Structural control of copper and zinc exchange dynamics in bacterial transport and storage proteins. Journal of Inorganic Biochemistry, 2003, 96, 102.	3.5	1
88	Inert Site in a Protein Zinc Cluster: Isotope Exchange by High Resolution Mass Spectrometry. Journal of the American Chemical Society, 2003, 125, 3226-3227.	13.7	39
89	Comparative modelling of human PHOSPHO1 reveals a new group of phosphatases within the haloacid dehalogenase superfamily. Protein Engineering, Design and Selection, 2003, 16, 889-895.	2.1	42
90	Interdomain zinc site on human albumin. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3701-3706.	7.1	167

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91	Structure and Dynamics of Metallomacrocycles:Â Recognition of Zinc Xylyl-Bicyclam by an HIV Coreceptor. Journal of the American Chemical Society, 2002, 124, 9105-9112.	13.7	141
92	Multiple bacteria encode metallothioneins and SmtA-like zinc fingers. Molecular Microbiology, 2002, 45, 1421-1432.	2.5	162
93	A metallothionein containing a zinc finger within a four-metal cluster protects a bacterium from zinc toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 9593-9598.	7.1	172
94	Metal Ion-Binding Properties of the Nucleotide Analogue 1-[2-(Phosphonomethoxy)ethyl]cytosine (PMEC) in Aqueous Solution. Collection of Czechoslovak Chemical Communications, 1999, 64, 613-632.	1.0	26
95	Aspects of the co-ordination chemistry of the antiviral nucleotide analogue, 9-[2-(phosphonomethoxy)ethyl]-2,6-diaminopurine (PMEDAP). Journal of the Chemical Society Dalton Transactions, 1999, , 3661-3671.	1.1	30
96	Why is the antiviral nucleotide analogue 9-[2-(phosphonomethoxy)ethyl]adenine in its diphosphorylated form (PMEApp4â˘') initially a better substrate for polymerases than (2â€²-deoxy)adenosine 5â€²-triphosphate (dATP4â˘'/ATP4â˘')? Considerations on the mechanism of nucleic acid polymerases. Chemical Communications, 1999, , 743-744.	4.1	22
97	Magnesium complexes of the antiviral 9-[2-(phosphonomethoxy)ethyl]adenine (PMEA) and of its 1-, 3-, and 7-deaza analogues in aqueous solution. Journal of Biological Inorganic Chemistry, 1998, 3, 423-433.	2.6	19
98	Facilitation of the copper(II)-promoted dephosphorylation of adenosine 5â€²-triphosphate (ATP4â˘') by the antiviral nucleotide analogue, 9-[2-(phosphonomethoxy)ethyl]adenine (PMEA)â€¡. Chemical Communications, 1998, , 1219-1220.	4.1	6
99	Solution properties of antiviral adenine-nucleotide analogues. The acidâ€"base properties of 9-[2-(phosphonomethoxy)ethyl]adenine (PMEA)â€Šâ€ and of its N1, N3 and N7 deaza derivatives in aqueous solution. Journal of the Chemical Society Perkin Transactions II, 1997, , 2353-2364.	0.9	36
100	Complex Formation of the Antiviral 9â€[2â€(Phosphonomethoxy)Ethyl]Adenine (PMEA) and of Its N 1, N 3, and N 7 Deaza Derivatives with Copper(II) in Aqueous Solution. Chemistry - A European Journal, 1997, 3, 1526-1536.	3.3	53
101	Metal ion complexes of the antiviral (S)-9-[3-hydroxy-2-(phosphonomethoxy)propyl]adenine (HPMPA) in solution. Journal of Inorganic Biochemistry, 1995, 59, 140.	3.5	0