Mechanism of Cu ⁺ -transporting ATPases: chaperones directly transfer Cu ⁺ to transm

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#	Article	IF	Citations
5	Cu+-ATPases Brake System. Structure, 2008, 16, 833-834.	1.6	12
6	Cellular multitasking: The dual role of human Cu-ATPases in cofactor delivery and intracellular copper balance. Archives of Biochemistry and Biophysics, 2008, 476, 22-32.	1.4	181
7	Direct Metal Transfer between Periplasmic Proteins Identifies a Bacterial Copper Chaperone. Biochemistry, 2008, 47, 11408-11414.	1.2	117
8	Structure of the Two Transmembrane Cu+ Transport Sites of the Cu+-ATPases*. Journal of Biological Chemistry, 2008, 283, 29753-29759.	1.6	90
9	Intermediate Phosphorylation Reactions in the Mechanism of ATP Utilization by the Copper ATPase (CopA) of Thermotoga maritima. Journal of Biological Chemistry, 2008, 283, 22541-22549.	1.6	32
10	Chaperone-mediated Cu+ Delivery to Cu+ Transport ATPases. Journal of Biological Chemistry, 2009, 284, 20804-20811.	1.6	52
11	Copper Transport in Mammalian Cells: Special Care for a Metal with Special Needs. Journal of Biological Chemistry, 2009, 284, 25461-25465.	1.6	134
12	Functional and Expression Analyses of the <i>cop</i> Operon, Required for Copper Resistance in <i>Agrobacterium tumefaciens</i>. Journal of Bacteriology, 2009, 191, 5159-5168.	1.0	22
13	The multi-layered regulation of copper translocating P-type ATPases. BioMetals, 2009, 22, 177-190.	1.8	64
14	Alternative periplasmic copperâ€resistance mechanisms in Gram negative bacteria. Molecular Microbiology, 2009, 73, 212-225.	1.2	101
15	CzcP is a novel efflux system contributing to transition metal resistance in<i>Cupriavidus metallidurans</i>CH34. Molecular Microbiology, 2009, 73, 601-621.	1.2	99
16	Nucleotide recognition by CopA, a Cu+-transporting P-type ATPase. EMBO Journal, 2009, 28, 1782-1791.	3.5	35
17	How do bacterial cells ensure that metalloproteins get the correct metal?. Nature Reviews Microbiology, 2009, 7, 25-35.	13.6	693
18	Structural basis for autoregulation of the zinc transporter YiiP. Nature Structural and Molecular Biology, 2009, 16, 1063-1067.	3.6	227
19	The metal efflux island of<i>Legionella pneumophila</i>is not required for survival in macrophages and amoebas. FEMS Microbiology Letters, 2009, 301, 164-170.	0.7	29
20	Dissecting the role of the Nâ€terminal metalâ€binding domains in activating the yeast copper ATPase <i>inâ€ƒvivo</i>. FEBS Journal, 2009, 276, 4483-4495.	2.2	32
21	New developments in the regulation of intestinal copper absorption. Nutrition Reviews, 2009, 67, 658-672.	2.6	130
22	Copper homeostasis. New Phytologist, 2009, 182, 799-816.	3.5	623

#	Article	IF	Citations
23	A synthetic dinuclear copper(II) hydrolase and its potential as antitumoral: Cytotoxicity, cellular uptake, and DNA cleavage. Journal of Inorganic Biochemistry, 2009, 103, 1323-1330.	1.5	48
24	Role of the N-Terminal Tail of Metal-Transporting P1B-type ATPases from Genome-Wide Analysis and Molecular Dynamics Simulations. Journal of Chemical Information and Modeling, 2009, 49, 76-83.	2.5	11
25	Structural Biology of Copper Trafficking. Chemical Reviews, 2009, 109, 4760-4779.	23.0	359
26	Human copper transporters: mechanism, role in human diseases and therapeutic potential. Future Medicinal Chemistry, 2009, 1, 1125-1142.	1.1	222
27	Copper in plants: acquisition, transport and interactions. Functional Plant Biology, 2009, 36, 409.	1.1	645
28	Coordination Chemistry of Bacterial Metal Transport and Sensing. Chemical Reviews, 2009, 109, 4644-4681.	23.0	540
29	Metallochaperones - an Overview. Current Chemical Biology, 2010, 4, 173-186.	0.2	1
30	The P-Type ATPase Superfamily. Journal of Molecular Microbiology and Biotechnology, 2010, 19, 5-104.	1.0	103
31	Cellular copper distribution: a mechanistic systems biology approach. Cellular and Molecular Life Sciences, 2010, 67, 2563-2589.	2.4	145
32	Interaction between cyanobacterial copper chaperone Atx1 and zinc homeostasis. Journal of Biological Inorganic Chemistry, 2010, 15, 77-85.	1.1	27
33	NMR structural analysis of the soluble domain of ZiaA-ATPase and the basis of selective interactions with copper metallochaperone Atx1. Journal of Biological Inorganic Chemistry, 2010, 15, 87-98.	1.1	19
34	Posttranslational regulation of copper transporters. Journal of Biological Inorganic Chemistry, 2010, 15, 37-46.	1.1	53
35	Structural organization of human Cu-transporting ATPases: learning from building blocks. Journal of Biological Inorganic Chemistry, 2010, 15, 47-59.	1.1	81
36	Smallâ€molecule reductants inhibit multicatalytic activity of AAâ€NADase from <i>Agkistrodon acutus</i> venom by reducing the disulfideâ€bonds and Cu(II) of enzyme. Biopolymers, 2010, 93, 141-149.	1.2	6
37	Structure and interactions of the Câ€terminal metal binding domain of <i>Archaeoglobus fulgidus</i> CopA. Proteins: Structure, Function and Bioinformatics, 2010, 78, 2450-2458.	1.5	18
38	Archaeal transformation of metals in the environment. FEMS Microbiology Ecology, 2010, 73, 1-16.	1.3	81
39	Distinct functional roles of homologous Cu⁺ efflux ATPases in <i>Pseudomonas aeruginosa</i>. Molecular Microbiology, 2010, 78, 1246-1258.	1.2	139
40	General Trends in Trace Element Utilization Revealed by Comparative Genomic Analyses of Co, Cu, Mo, Ni, and Se. Journal of Biological Chemistry, 2010, 285, 3393-3405.	1.6	106

#	Article	IF	Citations
41	CtpA, a Copper-translocating P-type ATPase Involved in the Biogenesis of Multiple Copper-requiring Enzymes. Journal of Biological Chemistry, 2010, 285, 19330-19337.	1.6	60
42	Visualizing the Metal-Binding Versatility of Copper Trafficking Sites,. Biochemistry, 2010, 49, 7798-7810.	1.2	27
43	Cell Biology of Copper. Plant Cell Monographs, 2010, , 55-74.	0.4	35
44	Copper Metallochaperones. Annual Review of Biochemistry, 2010, 79, 537-562.	5.0	611
45	Direct Measurement of Mercury(II) Removal from Organomercurial Lyase (MerB) by Tryptophan Fluorescence: NmerA Domain of Coevolved Î³-Proteobacterial Mercuric Ion Reductase (MerA) Is More Efficient Than MerA Catalytic Core or Glutathione,. Biochemistry, 2010, 49, 8187-8196.	1.2	15
46	Reversible Unfolding of a Thermophilic Membrane Protein in Phospholipid/Detergent Mixed Micelles. Journal of Molecular Biology, 2010, 397, 550-559.	2.0	29
47	Unification of the Copper(I) Binding Affinities of the Metallo-chaperones Atx1, Atox1, and Related Proteins. Journal of Biological Chemistry, 2011, 286, 11047-11055.	1.6	214
48	Bacterial Transition Metal P_{1B}-ATPases: Transport Mechanism and Roles in Virulence. Biochemistry, 2011, 50, 9940-9949.	1.2	101
49	Bacterial ATP-driven transporters of transition metals: physiological roles, mechanisms of action, and roles in bacterial virulence. Metallomics, 2011, 3, 1098.	1.0	101
50	A platform for copper pumps. Nature, 2011, 475, 41-42.	13.7	8
51	Mechanism of tumor resistance to cisplatin mediated by the copper transporter ATP7BThis paper is one of a selection of papers published in a Special Issue entitled CSBMCB 53rd Annual Meeting â€" Membrane Proteins in Health and Disease, and has undergone the Journalâ€™s usual peer review process.. Biochemistry and Cell Biology, 2011, 89, 138-147.	0.9	42
52	Copper Trafficking Mechanism of CXXC-Containing Domains: Insight from the pH-Dependence of Their Cu(I) Affinities. Journal of the American Chemical Society, 2011, 133, 2983-2988.	6.6	96
53	Crystal structure of a copper-transporting PIB-type ATPase. Nature, 2011, 475, 59-64.	13.7	293
54	Structural Characterization of Intramolecular Hg2+ Transfer between Flexibly Linked Domains of Mercuric Ion Reductase. Journal of Molecular Biology, 2011, 413, 639-656.	2.0	24
55	P-Type ATPases. Annual Review of Biophysics, 2011, 40, 243-266.	4.5	558
56	The Architecture of CopA from Archeaoglobus fulgidus Studied by Cryo-Electron Microscopy and Computational Docking. Structure, 2011, 19, 1219-1232.	1.6	20
57	The transport mechanism of bacterial Cu+-ATPases: distinct efflux rates adapted to different function. BioMetals, 2011, 24, 467-475.	1.8	106
58	Calcium and copper transport ATPases: analogies and diversities in transduction and signaling mechanisms. Journal of Cell Communication and Signaling, 2011, 5, 227-237.	1.8	6

#	Article	IF	Citations
59	Responses of Lactic Acid Bacteria to Heavy Metal Stress. , 2011, , 163-195.		13
60	Thermodynamics of copper and zinc distribution in the cyanobacterium <i>Synechocystis</i> PCC 6803. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13007-13012.	3.3	51
61	CopR of Sulfolobus solfataricus represents a novel class of archaeal-specific copper-responsive activators of transcription. Microbiology (United Kingdom), 2011, 157, 2808-2817.	0.7	30
62	Toward a Molecular Understanding of Metal Transport by P1B-Type ATPases. Current Topics in Membranes, 2012, 69, 113-136.	0.5	55
63	Cyanobacterial metallochaperone inhibits deleterious side reactions of copper. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 95-100.	3.3	91
64	Metal Resistance and Lithoautotrophy in the Extreme Thermoacidophile Metallosphaera sedula. Journal of Bacteriology, 2012, 194, 6856-6863.	1.0	67
65	Metal Transport across Biomembranes: Emerging Models for a Distinct Chemistry. Journal of Biological Chemistry, 2012, 287, 13510-13517.	1.6	94
66	Dynamic Multibody Protein Interactions Suggest Versatile Pathways for Copper Trafficking. Journal of the American Chemical Society, 2012, 134, 8934-8943.	6.6	27
67	Role of metal in folding and stability of copper proteins in vitro. Biochimica Et Biophysica Acta - Molecular Cell Research, 2012, 1823, 1594-1603.	1.9	76
68	The ins and outs of algal metal transport. Biochimica Et Biophysica Acta - Molecular Cell Research, 2012, 1823, 1531-1552.	1.9	173
69	A tetrahedral coordination of Zinc during transmembrane transport by P-type Zn2+-ATPases. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1374-1377.	1.4	29
70	Biogenesis of cbb3-type cytochrome c oxidase in Rhodobacter capsulatus. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 898-910.	0.5	85
71	Role in metal homeostasis of CtpD, a Co²⁺ transporting P_{1B4}â€ATPase of <i>Mycobacterium smegmatis</i>. Molecular Microbiology, 2012, 84, 1139-1149.	1.2	50
72	Copper chaperones. The concept of conformational control in the metabolism of copper. FEBS Letters, 2013, 587, 1902-1910.	1.3	81
73	Single-Molecule Dynamics and Mechanisms of Metalloregulators and Metallochaperones. Biochemistry, 2013, 52, 7170-7183.	1.2	14
74	On Allosteric Modulation of P-Type Cu+-ATPases. Journal of Molecular Biology, 2013, 425, 2299-2308.	2.0	30
75	Periplasmic response upon disruption of transmembrane Cu transport in Pseudomonas aeruginosa. Metallomics, 2013, 5, 144.	1.0	31
76	Prokaryotic assembly factors for the attachment of flavin to complex II. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 637-647.	0.5	21

#	Article	IF	Citations
77	The copper supply pathway to a <i><scp>S</scp>almonella</i><scp>C</scp>u,<scp>Z</scp>nâ€superoxide dismutase (<scp>SodCII</scp>) involves <scp>P</scp>₁<scp>_B</scp>â€type <scp>ATPase</scp> copper efflux and periplasmic <scp>CueP</scp>. Molecular Microbiology, 2013, 87, 466-477.	1.2	96
78	The influence of protein folding on the copper affinities of trafficking and target sites. Dalton Transactions, 2013, 42, 3233-3239.	1.6	9
79	A new structural paradigm in copper resistance in Streptococcus pneumoniae. Nature Chemical Biology, 2013, 9, 177-183.	3.9	85
80	An Expanding Range of Functions for the Copper Chaperone/Antioxidant Protein Atox1. Antioxidants and Redox Signaling, 2013, 19, 945-957.	2.5	65
81	The Copper Metallome in Prokaryotic Cells. Metal Ions in Life Sciences, 2013, 12, 417-450.	2.8	64
82	Transition metals in plant photosynthesis. Metallomics, 2013, 5, 1090.	1.0	206
83	Small pH and Salt Variations Radically Alter the Thermal Stability of Metal-Binding Domains in the Copper Transporter, Wilson Disease Protein. Journal of Physical Chemistry B, 2013, 117, 13038-13050.	1.2	15
84	Copper chaperone Atox1 interacts with the metal-binding domain of Wilson's disease protein in cisplatin detoxification. Biochemical Journal, 2013, 454, 147-156.	1.7	53
85	The Mechanism of Cu+ Transport ATPases. Journal of Biological Chemistry, 2013, 288, 69-78.	1.6	67
86	Common trace elements alleviate pain in an experimental mouse model. Journal of Neuroscience Research, 2013, 91, 554-561.	1.3	18
87	Responding to toxic compounds: a genomic and functional overview of Archaea. Frontiers in Bioscience - Landmark, 2013, 18, 165.	3.0	31
88	Metallochaperones Regulate Intracellular Copper Levels. PLoS Computational Biology, 2013, 9, e1002880.	1.5	26
89	Mechanisms of copper homeostasis in bacteria. Frontiers in Cellular and Infection Microbiology, 2013, 3, 73.	1.8	193
90	Evolution of a plant-specific copper chaperone family for chloroplast copper homeostasis. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E5480-7.	3.3	57
91	Functional diversity of five homologous Cu+-ATPases present in Sinorhizobium meliloti. Microbiology (United Kingdom), 2014, 160, 1237-1251.	0.7	21
92	Biochemical characterization of P-type copper ATPases. Biochemical Journal, 2014, 463, 167-176.	1.7	44
93	Mechanism of ATPase-mediated Cu+ Export and Delivery to Periplasmic Chaperones. Journal of Biological Chemistry, 2014, 289, 20492-20501.	1.6	73
94	Copper Transport and Trafficking at the Hostâ€"Bacterial Pathogen Interface. Accounts of Chemical Research, 2014, 47, 3605-3613.	7.6	106

#	Article	IF	Citations
95	Role of an Archaeal PitA Transporter in the Copper and Arsenic Resistance of Metallosphaera sedula, an Extreme Thermoacidophile. Journal of Bacteriology, 2014, 196, 3562-3570.	1.0	49
96	Lysosome-related Organelles as Mediators of Metal Homeostasis. Journal of Biological Chemistry, 2014, 289, 28129-28136.	1.6	114
97	Copper tolerance in Frankia sp. strain EuI1c involves surface binding and copper transport. Applied Microbiology and Biotechnology, 2014, 98, 8005-8015.	1.7	29
98	Structure and mechanism of Zn2+-transporting P-type ATPases. Nature, 2014, 514, 518-522.	13.7	107
99	Unresolved questions in human copper pump mechanisms. Quarterly Reviews of Biophysics, 2015, 48, 471-478.	2.4	14
100	Assessing the genetic diversity of Cu resistance in mine tailings through high-throughput recovery of full-length copA genes. Scientific Reports, 2015, 5, 13258.	1.6	27
101	A sulfurâ€based transport pathway in Cu ⁺ â€•<scp>ATP</scp> ases. EMBO Reports, 2015, 16, 728-740.	2.0	41
102	The Confluence of Heavy Metal Biooxidation and Heavy Metal Resistance: Implications for Bioleaching by Extreme Thermoacidophiles. Minerals (Basel, Switzerland), 2015, 5, 397-451.	0.8	73
103	Enthalpy-entropy compensation at play in human copper ion transfer. Scientific Reports, 2015, 5, 10518.	1.6	18
104	Metal Response in Cupriavidus metallidurans. Springer Briefs in Molecular Science, 2015, , .	0.1	2
105	Structure and Function of Cu(I)- and Zn(II)-ATPases. Biochemistry, 2015, 54, 5673-5683.	1.2	43
106	Distinct functions of serial metalâ€binding domains in the <scp><i>E</i></scp><i>scherichia coli</i>â€…<scp>P</scp>₁<scp>_B</scp>â€<scp>ATP</scp>ase <scp>CopA</scp>. Molecular Microbiology, 2015, 97, 423-438.	1.2	28
107	Metalâ€“Polycyclic Aromatic Hydrocarbon Mixture Toxicity in <i>Hyalella azteca</i>. 2. Metal Accumulation and Oxidative Stress as Interactive Co-toxic Mechanisms. Environmental Science & Technology, 2015, 49, 11780-11788.	4.6	28
108	NMR backbone resonance assignments of the N, P domains of CopA, a copper-transporting ATPase, in the apo and ligand bound states. Biomolecular NMR Assignments, 2015, 9, 129-133.	0.4	2
109	The Role of Copper Chaperone Atox1 in Coupling Redox Homeostasis to Intracellular Copper Distribution. Antioxidants, 2016, 5, 25.	2.2	89
110	Copper Delivery to Chloroplast Proteins and its Regulation. Frontiers in Plant Science, 2015, 6, 1250.	1.7	41
111	Transition Metal Transport in Plants and Associated Endosymbionts: Arbuscular Mycorrhizal Fungi and Rhizobia. Frontiers in Plant Science, 2016, 7, 1088.	1.7	131
112	Uncovering the Transmembrane Metal Binding Site of the Novel Bacterial Major Facilitator Superfamily-Type Copper Importer CcoA. MBio, 2016, 7, e01981-15.	1.8	16

#	Article	IF	Citations
113	Cooperation between two periplasmic copper chaperones is required for full activity of the <i>cbb</i>₃â€type cytochrome <i>c</i> oxidase and copper homeostasis in <i>Rhodobacter capsulatus</i>. Molecular Microbiology, 2016, 100, 345-361.	1.2	39
114	Membrane Anchoring and Ion-Entry Dynamics in P-type ATPase Copper Transport. Biophysical Journal, 2016, 111, 2417-2429.	0.2	16
115	The promiscuous phosphomonoestearase activity of Archaeoglobus fulgidus CopA, a thermophilic Cu + transport ATPase. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 1471-1478.	1.4	6
116	Identification of Two Conserved Residues Involved in Copper Release from Chloroplast PIB-1-ATPases. Journal of Biological Chemistry, 2016, 291, 20136-20148.	1.6	7
118	A Copper Story: From Protein Folding and Metal Transport to Cancer. Israel Journal of Chemistry, 2016, 56, 671-681.	1.0	6
119	Bacterial Cu⁺-ATPases: models for molecular structureâ€“function studies. Metallomics, 2016, 8, 906-914.	1.0	24
120	Extended functional repertoire for human copper chaperones. Biomolecular Concepts, 2016, 7, 29-39.	1.0	33
121	Evaluation of employing poly-lysine tags versus poly-histidine tags for purification and characterization of recombinant copper-binding proteins. Journal of Inorganic Biochemistry, 2016, 162, 286-294.	1.5	13
122	P-Type ATPases. Methods in Molecular Biology, 2016, , .	0.4	4
123	The S2 Cu(<scp>i</scp>) site in CupA from Streptococcus pneumoniae is required for cellular copper resistance. Metallomics, 2016, 8, 61-70.	1.0	18
124	Copper ATPase CopA from <i>Escherichia coli</i>: Quantitative Correlation between ATPase Activity and Vectorial Copper Transport. Journal of the American Chemical Society, 2017, 139, 4266-4269.	6.6	14
125	Mechanisms of charge transfer in human copper ATPases ATP7A and ATP7B. IUBMB Life, 2017, 69, 218-225.	1.5	26
126	Copper(II) and iron(III) ions inhibit respiration and increase free radical-mediated phospholipid peroxidation in rat liver mitochondria: Effect of antioxidants. Journal of Inorganic Biochemistry, 2017, 172, 94-99.	1.5	22
127	Molecular features of copper binding proteins involved in copper homeostasis. IUBMB Life, 2017, 69, 211-217.	1.5	70
128	A comprehensive phylogenetic analysis of copper transporting P_{1B} ATPases from bacteria of the <i>Rhizobiales</i> order uncovers multiplicity, diversity and novel taxonomic subtypes. MicrobiologyOpen, 2017, 6, e00452.	1.2	10
129	Effect of cisplatin on the transport activity of P_{II}-type ATPases. Metallomics, 2017, 9, 960-968.	1.0	12
130	Dynamics of the metal binding domains and regulation of the human copper transporters ATP7B and ATP7A. IUBMB Life, 2017, 69, 226-235.	1.5	32
131	One gene, two proteins: coordinated production of a copper chaperone by differential transcript formation andÂtranslational frameshifting in <i>Escherichia coli</i>. Molecular Microbiology, 2017, 106, 635-645.	1.2	10

#	Article	IF	Citations
132	The metal chaperone Atox1 regulates the activity of the human copper transporter ATP7B by modulating domain dynamics. Journal of Biological Chemistry, 2017, 292, 18169-18177.	1.6	45
133	Copper homeostasis networks in the bacterium Pseudomonas aeruginosa. Journal of Biological Chemistry, 2017, 292, 15691-15704.	1.6	100
134	Orchestration of dynamic copper navigation â€“ new and missing pieces. Metallomics, 2017, 9, 1204-1229.	1.0	50
135	Probing functional roles of Wilson disease protein (ATP7B) copper-binding domains in yeast. Metallomics, 2017, 9, 981-988.	1.0	12
136	Disease-causing point-mutations in metal-binding domains of Wilson disease protein decrease stability and increase structural dynamics. BioMetals, 2017, 30, 27-35.	1.8	13
137	Human copper transporter ATP7B (Wilson disease protein) forms stable dimers in vitro and in cells. Journal of Biological Chemistry, 2017, 292, 18760-18774.	1.6	34
138	Folding of copper proteins: role of the metal?. Quarterly Reviews of Biophysics, 2018, 51, e4.	2.4	23
139	Studies of Electrode Reactions and Coordination Geometries of Cu(I) and Cu(II) Complexes with Bicinchoninic Acid. Electroanalysis, 2018, 30, 479-485.	1.5	2
140	The N-terminal domains of Bacillus subtilis CopA do not form a stable complex in the absence of their inter-domain linker. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 275-282.	1.1	5
141	Heavy Metal Pumps in Plants: Structure, Function and Origin. Advances in Botanical Research, 2018, , 57-89.	0.5	11
142	Rhizobium-Legume Symbioses: Heavy Metal Effects and Principal Approaches for Bioremediation of Contaminated Soil. , 2018, , 205-233.		10
143	Modulating Chemosensitivity of Tumors to Platinum-Based Antitumor Drugs by Transcriptional Regulation of Copper Homeostasis. International Journal of Molecular Sciences, 2018, 19, 1486.	1.8	37
144	OsATX1 Interacts with Heavy Metal P1B-Type ATPases and Affects Copper Transport and Distribution. Plant Physiology, 2018, 178, 329-344.	2.3	96
145	Enhancement of Metallosphaera sedula Bioleaching by Targeted Recombination and Adaptive Laboratory Evolution. Advances in Applied Microbiology, 2018, 104, 135-165.	1.3	13
146	Interactions of a Bacterial Cu(I)-ATPase with a Complex Lipid Environment. Biochemistry, 2018, 57, 4063-4073.	1.2	6
147	Copper relay path through the N-terminus of Wilson disease protein, ATP7B. Metallomics, 2019, 11, 1472-1480.	1.0	19
148	Soluble and membrane-bound protein carrier mediate direct copper transport to the ethylene receptor family. Scientific Reports, 2019, 9, 10715.	1.6	14
149	Metal ligands in micronutrient acquisition and homeostasis. Plant, Cell and Environment, 2019, 42, 2902-2912.	2.8	87

#	Article	IF	Citations
150	Wilson disease missense mutations in ATP7B affect metal-binding domain structural dynamics. BioMetals, 2019, 32, 875-885.	1.8	8
151	Mycorrhizal symbiosis: an effective tool for metal bioremediation. , 2019, , 113-128.		7
152	Homology modeling and<i>in vivo</i>functional characterization of the zinc permeation pathway in a heavy metal P-type ATPase. Journal of Experimental Botany, 2019, 70, 329-341.	2.4	25
153	The Cu chaperone CopZ is required for Cu homeostasis in Rhodobacter capsulatus and influences cytochrome cbb 3 oxidase assembly. Molecular Microbiology, 2019, 111, 764-783.	1.2	22
154	Mass spectrometric studies of Cu(I)-binding to the N-terminal domains of B. subtilis CopA and influence of bacillithiol. Journal of Inorganic Biochemistry, 2019, 190, 24-30.	1.5	7
155	Expression and copper binding properties of the N-terminal domain of copper P-type ATPases of African trypanosomes. Molecular and Biochemical Parasitology, 2020, 235, 111245.	0.5	9
156	Characterization of the copper resistance mechanism and bioremediation potential of an Acinetobacter calcoaceticus strain isolated from copper mine sludge. Environmental Science and Pollution Research, 2020, 27, 7922-7933.	2.7	18
157	From economy to luxury: Copper homeostasis in Chlamydomonas and other algae. Biochimica Et Biophysica Acta - Molecular Cell Research, 2020, 1867, 118822.	1.9	35
158	Genome wide transcriptomic analysis of the soil ammonia oxidizing archaeon <i>Nitrososphaera viennensis</i> upon exposure to copper limitation. ISME Journal, 2020, 14, 2659-2674.	4.4	33
159	Low-molecular-weight ligands in plants: role in metal homeostasis and hyperaccumulation. Photosynthesis Research, 2021, 150, 51-96.	1.6	37
160	Leveraging computational genomics to understand the molecular basis of metal homeostasis. New Phytologist, 2020, 228, 1472-1489.	3.5	4
161	Cu Homeostasis in Bacteria: The Ins and Outs. Membranes, 2020, 10, 242.	1.4	60
162	A novel 3D-printed centrifugal ultrafiltration method reveals <i>in vivo</i> glycation of human serum albumin decreases its binding affinity for zinc. Metallomics, 2020, 12, 1036-1043.	1.0	8
163	Copper limiting threshold in the terrestrial ammonia oxidizing archaeon Nitrososphaera viennensis. Research in Microbiology, 2020, 171, 134-142.	1.0	12
164	Transporter proteins and its implication in human diseases. Advances in Protein Chemistry and Structural Biology, 2021, 124, 1-21.	1.0	4
166	The transferred translocases: An old wine in a new bottle. Biotechnology and Applied Biochemistry, 2022, 69, 1587-1610.	1.4	1
167	The Multi-Elemental Composition of the Aqueous Humor of Patients Undergoing Cataract Surgery, Suffering from Coexisting Diabetes, Hypertension, or Diabetic Retinopathy. International Journal of Molecular Sciences, 2021, 22, 9413.	1.8	7
168	The molecular and cellular basis of copper dysregulation and its relationship with human pathologies. FASEB Journal, 2021, 35, e21810.	0.2	50

#	Article	IF	Citations
169	Maturation of Rhodobacter capsulatus Multicopper Oxidase CutO Depends on the CopA Copper Efflux Pathway and Requires the cutF Product. Frontiers in Microbiology, 2021, 12, 720644.	1.5	8
170	The CopA2-Type P1B-Type ATPase CcoI Serves as Central Hub for cbb3-Type Cytochrome Oxidase Biogenesis. Frontiers in Microbiology, 2021, 12, 712465.	1.5	2
172	Assay of Copper Transfer and Binding to P1B-ATPases. Methods in Molecular Biology, 2016, 1377, 267-277.	0.4	5
173	Copper in Prokaryotes. 2-Oxoglutarate-Dependent Oxygenases, 2014, , 461-499.	0.8	2
174	Copper in Eukaryotes. 2-Oxoglutarate-Dependent Oxygenases, 2014, , 524-555.	0.8	3
176	Transmembrane Cu(i) P-type ATPase pumps are electrogenic uniporters. Dalton Transactions, 2020, 49, 16082-16094.	1.6	9
178	Essential and Toxic Metal Transport in the Liver. , 2010, , 79-112.		1
179	Large Scale Identification and Categorization of Protein Sequences Using Structured Logistic Regression. PLoS ONE, 2014, 9, e85139.	1.1	12
181	Metal Response in Cupriavidus metallidurans: Insights into the Structure-Function Relationship of Proteins. Springer Briefs in Molecular Science, 2015, , 1-70.	0.1	0
182	Magnesium, Copper and Cobalt. , 2017, , 81-94.		0
183	Functional characterization of Legionella pneumophila Cu+ transport ATPase. The activation by Cu+ and ATP. Biochimica Et Biophysica Acta - Biomembranes, 2022, 1864, 183822.	1.4	4
184	Acquisition of ionic copper by the bacterial outer membrane protein OprC through a novel binding site. PLoS Biology, 2021, 19, e3001446.	2.6	14
185	The Redox Active [2Fe-2S] Clusters: Key-Components of a Plethora of Enzymatic Reactionsâ€”Part I: Archaea. Inorganics, 2022, 10, 14.	1.2	1
187	Cu(I) Binding to Designed Proteins Reveals a Putative Copper Binding Site of the Human Line1 Retrotransposon Protein ORF1p. Inorganic Chemistry, 2022, 61, 5084-5091.	1.9	2
190	Structure and ion-release mechanism of PIB-4-type ATPases. ELife, 2021, 10, .	2.8	8
191	Multifunctional Nanoprobe for Real-Time In Vivo Monitoring of T Cell Activation. SSRN Electronic Journal, 0, , .	0.4	0
192	Zng1 is a GTP-dependent zinc transferase needed for activation of methionine aminopeptidase. Cell Reports, 2022, 39, 110834.	2.9	20
193	On the role of citrate in 12-molybdophosphoric-acid methods for quantification of phosphate in the presence of ATP. New Journal of Chemistry, 2022, 46, 12401-12409.	1.4	3

#	Article	IF	Citations
194	Unique underlying principles shaping copper homeostasis networks. Journal of Biological Inorganic Chemistry, 0, , .	1.1	10
195	Identification of novel salt tolerance-associated proteins from the secretome of Enterococcus faecalis. World Journal of Microbiology and Biotechnology, 2022, 38, .	1.7	4
196	Copper binding leads to increased dynamics in the regulatory N-terminal domain of full-length human copper transporter ATP7B. PLoS Computational Biology, 2022, 18, e1010074.	1.5	3
198	Composition and niche-specific characteristics of microbial consortia colonizing Marsberg copper mine in the Rhenish Massif. Biogeosciences, 2022, 19, 4883-4902.	1.3	3
199	The mitochondrial Cu+ transporter PiC2 (SLC25A3) is a target of MTF1 and contributes to the development of skeletal muscle in vitro. Frontiers in Molecular Biosciences, 0, 9, .	1.6	6
200	Sequence-based Functional Metagenomics Reveals Novel Natural Diversity of Functioning CopA in Environmental Microbiomes. Genomics, Proteomics and Bioinformatics, 2022, , .	3.0	7
201	The Extracellular Electron Transport Pathway Reduces Copper for Sensing by the CopRS Two-Component System under Anaerobic Conditions in Listeria monocytogenes. Journal of Bacteriology, 0, , .	1.0	1
203	Oxygen Nanobubble-Loaded Biochars Mitigate Copper Transfer from Copper-Contaminated Soil to Rice and Improve Rice Growth. ACS Sustainable Chemistry and Engineering, 2023, 11, 5032-5044.	3.2	1