Nigel J Robinson

List of Publications by Year
in descending order

103 papers	10,063 citations	44042 48 h-index	34964 98 g-index
111 all docs	111 docs citations	111 times ranked	8507 citing authors

#	Article	IF	Citations
1	Protein metalation in biology. Current Opinion in Chemical Biology, 2022, 66, 102095.	2.8	41
2	The requirement for cobalt in vitamin B12: A paradigm for protein metalation. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 118896.	1.9	58
3	Calculating metalation in cells reveals CobW acquires CoII for vitamin B12 biosynthesis while related proteins prefer ZnII. Nature Communications, 2021, 12, 1195.	5.8	32
4	Metalation: natureâ€™s challenge in bioinorganic chemistry. Journal of Biological Inorganic Chemistry, 2020, 25, 543-545.	1.1	13
5	Bacterial sensors define intracellular free energies for correct enzyme metalation. Nature Chemical Biology, 2019, 15, 241-249.	3.9	112
6	A unique ferredoxin acts as a player in the low-iron response of photosynthetic organisms. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12111-E12120.	3.3	28
7	A tight tunable range for Ni(II) sensing and buffering in cells. Nature Chemical Biology, 2017, 13, 409-414.	3.9	37
8	Fine control of metal concentrations is necessary for cells to discern zinc from cobalt. Nature Communications, 2017, 8, 1884.	5.8	42
9	The Effectors and Sensory Sites of Formaldehyde-responsive Regulator FrmR and Metal-sensing Variant. Journal of Biological Chemistry, 2016, 291, 19502-19516.	1.6	25
10	Generating a Metal-responsive Transcriptional Regulator to Test What Confers Metal Sensing in Cells. Journal of Biological Chemistry, 2015, 290, 19806-19822.	1.6	23
11	Trans-oligomerization of duplicated aminoacyl-tRNA synthetases maintains genetic code fidelity under stress. Nucleic Acids Research, 2015, 43, gkv1020.	6.5	17
12	Metal Preferences and Metallation. Journal of Biological Chemistry, 2014, 289, 28095-28103.	1.6	305
13	A chemical potentiator of copperâ€accumulation used to investigate the ironâ€regulons of <scp><i>S</i></scp><i>accharomyces cerevisiae</i>. Molecular Microbiology, 2014, 93, 317-330.	1.2	23
14	Metal specificity of cyanobacterial nickelâ€responsive repressor <scp>InrS</scp>: cells maintain zinc and copper below the detection threshold for <scp>InrS</scp>. Molecular Microbiology, 2014, 92, 797-812.	1.2	28
15	Co(ii)-detection does not follow Kco(ii) gradient: channelling in Co(ii)-sensing. Metallomics, 2013, 5, 352.	1.0	13
16	Bioinorganic chemistry. Dalton Transactions, 2013, 42, 3027.	1.6	7
17	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
18	Characterization of the Response to Zinc Deficiency in the Cyanobacterium Anabaena sp. Strain PCC 7120. Journal of Bacteriology, 2012, 194, 2426-2436.	1.0	77

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19	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
20	Cellular Iron Distribution in Bacillus anthracis. Journal of Bacteriology, 2012, 194, 932-940.	1.0	31
21	Cytosolic Ni(II) Sensor in Cyanobacterium. Journal of Biological Chemistry, 2012, 287, 12142-12151.	1.6	48
22	A platform for copper pumps. Nature, 2011, 475, 41-42.	13.7	8
23	Promiscuity and preferences of metallothioneins: the cell rules. BMC Biology, 2011, 9, 25.	1.7	37
24	Interaction between cyanobacterial copper chaperone Atx1 and zinc homeostasis. Journal of Biological Inorganic Chemistry, 2010, 15, 77-85.	1.1	27
25	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
26	Functional Complementation and Genetic Deletion Studies of KirBac Channels. Journal of Biological Chemistry, 2010, 285, 40754-40761.	1.6	22
27	Copper Homeostasis in Salmonella Is Atypical and Copper-CueP Is a Major Periplasmic Metal Complex. Journal of Biological Chemistry, 2010, 285, 25259-25268.	1.6	149
28	Structure and Metal Loading of a Soluble Periplasm Cuproprotein. Journal of Biological Chemistry, 2010, 285, 32504-32511.	1.6	31
29	Copper Metallochaperones. Annual Review of Biochemistry, 2010, 79, 537-562.	5.0	611
30	Metalloproteins and metal sensing. Nature, 2009, 460, 823-830.	13.7	1,031
31	How do bacterial cells ensure that metalloproteins get the correct metal?. Nature Reviews Microbiology, 2009, 7, 25-35.	13.6	693
32	Protein-folding location can regulate manganese-binding versus copper- or zinc-binding. Nature, 2008, 455, 1138-1142.	13.7	281
33	A bacterial copper metallothionein. Nature Chemical Biology, 2008, 4, 582-583.	3.9	30
34	FutA2 Is a Ferric Binding Protein from Synechocystis PCC 6803. Journal of Biological Chemistry, 2008, 283, 12520-12527.	1.6	56
35	NMR Structural Analysis of Cadmium Sensing by Winged Helix Repressor CmtR. Journal of Biological Chemistry, 2007, 282, 30181-30188.	1.6	41
36	Understanding How Cells Allocate Metals. , 2007, , 3-35.		14

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37	A Periplasmic Iron-binding Protein Contributes toward Inward Copper Supply. Journal of Biological Chemistry, 2007, 282, 3837-3846.	1.6	46
38	Mycobacterial Cells Have Dual Nickel-Cobalt Sensors. Journal of Biological Chemistry, 2007, 282, 32298-32310.	1.6	91
39	A more discerning zinc exporter. Nature Chemical Biology, 2007, 3, 692-693.	3.9	15
40	Predicting metals sensed by ArsR-SmtB repressors: allosteric interference by a non-effector metal. Molecular Microbiology, 2006, 59, 1341-1356.	1.2	40
41	Understanding How Cells Allocate Metals Using Metal Sensors and Metallochaperones. ChemInform, 2006, 37, no.	0.1	1
42	The delivery of copper for thylakoid import observed by NMR. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8320-8325.	3.3	55
43	BACE1 Cytoplasmic Domain Interacts with the Copper Chaperone for Superoxide Dismutase-1 and Binds Copper*. Journal of Biological Chemistry, 2005, 280, 17930-17937.	1.6	111
44	Understanding How Cells Allocate Metals Using Metal Sensors and Metallochaperones. Accounts of Chemical Research, 2005, 38, 775-783.	7.6	161
45	Solution Structures of a Cyanobacterial Metallochaperone. Journal of Biological Chemistry, 2004, 279, 27502-27510.	1.6	50
46	Chimeras of P1-type ATPases and their transcriptional regulators: contributions of a cytosolic amino-terminal domain to metal specificity. Molecular Microbiology, 2004, 53, 217-227.	1.2	39
47	A novel copper site in a cyanobacterial metallochaperone. Biochemical Journal, 2004, 378, 293-297.	1.7	29
48	Zn, Cu and Co in cyanobacteria: selective control of metal availability. FEMS Microbiology Reviews, 2003, 27, 165-181.	3.9	181
49	Inert Site in a Protein Zinc Cluster: Isotope Exchange by High Resolution Mass Spectrometry. Journal of the American Chemical Society, 2003, 125, 3226-3227.	6.6	39
50	Characterization of the Cobaltochelatase CbiXL. Journal of Biological Chemistry, 2003, 278, 41900-41907.	1.6	49
51	A Cadmium-Lead-sensing ArsR-SmtB Repressor with Novel Sensory Sites. Journal of Biological Chemistry, 2003, 278, 44560-44566.	1.6	74
52	A Copper Metallochaperone for Photosynthesis and Respiration Reveals Metal-specific Targets, Interaction with an Importer, and Alternative Sites for Copper Acquisition. Journal of Biological Chemistry, 2002, 277, 5490-5497.	1.6	91
53	Surplus Zinc Is Handled by Zym1 Metallothionein and Zhf Endoplasmic Reticulum Transporter in Schizosaccharomyces pombe. Journal of Biological Chemistry, 2002, 277, 30394-30400.	1.6	63
54	A Nickel-Cobalt-sensing ArsR-SmtB Family Repressor. Journal of Biological Chemistry, 2002, 277, 38441-38448.	1.6	134

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55	Multiple bacteria encode metallothioneins and SmtA-like zinc fingers. Molecular Microbiology, 2002, 45, 1421-1432.	1.2	162
56	Microbial metallothioneins. Advances in Microbial Physiology, 2001, 44, 183-213.	1.0	87
57	Two Menkes-type ATPases Supply Copper for Photosynthesis inSynechocystis PCC 6803. Journal of Biological Chemistry, 2001, 276, 19999-20004.	1.6	139
58	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.	3.3	172
59	Metal Metabolism and Toxicity: Repetitive DNA. , 2000, , 443-463.		3
60	Cobalt-dependent Transcriptional Switching by a Dual-effector MerR-like Protein Regulates a Cobalt-exporting Variant CPx-type ATPase. Journal of Biological Chemistry, 1999, 274, 25827-25832.	1.6	113
61	A ferric-chelate reductase for iron uptake from soils. Nature, 1999, 397, 694-697.	13.7	1,161
62	Metallothionein-like Genes and Phytochelatins in Higher Plants. , 1998, , 398-430.		7
63	A Carboxyl-terminal Cys2/His2-type Zinc-finger Motif in DNA Primase Influences DNA Content inSynechococcus PCC 7942. Journal of Biological Chemistry, 1998, 273, 21246-21252.	1.6	18
64	Coordination of Zn2+ (and Cd2+) by Prokaryotic Metallothionein. Journal of Biological Chemistry, 1998, 273, 22957-22961.	1.6	67
65	An SmtB-like repressor from Synechocystis PCC 6803 regulates a zinc exporter. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 10728-10733.	3.3	171
66	Metallothionein Gene Regulation in Cyanobacteria. , 1998, , 372-397.		4
67	GUS expression in Arabidopsis directed by 5' regions of the pea metallothionein-like gene PsMTA. Plant Molecular Biology, 1997, 34, 659-668.	2.0	38
68	The froh gene family from Arabidopsis thaliana: Putative iron-chelate reductases. Plant and Soil, 1997, 196, 245-248.	1.8	37
69	Accumulation of metallothionein transcripts in response to iron, copper and zinc: Metallothionein and metal-chelate reductase. Acta Physiologiae Plantarum, 1997, 19, 451-457.	1.0	7
70	HIP1 propagates in cyanobacterial DNA via nucleotide substitutions but promotes excision at similar frequencies in Escherichia coli and Synechococcus PCC 7942. Molecular Microbiology, 1997, 24, 181-189.	1.2	27
71	Metal-gene-interactions in roots: metallothionein-like genes and iron reductases. , 1997, , 117-130.		6
72	The froh gene family from Arabidopsis thaliana: Putative iron-chelate reductases. , 1997, , 191-194.		7

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73	Phenylalanyl-tRNA synthetase gene,pheT, fromSynechococcus PCC 7942. Journal of Applied Phycology, 1996, 8, 81-82.	1.5	1
74	rbohA, a rice homologue of the mammalian gp91phox respiratory burst oxidase gene. Plant Journal, 1996, 10, 515-522.	2.8	294
75	Expression of the type 2 metallothionein-like gene MT2 from Arabidopsis thaliana in Zn2+-metallothionein-deficient Synechococcus PCC 7942: putative role for MT2 in Zn2+ metabolism. Plant Molecular Biology, 1996, 30, 1169-1179.	2.0	60
76	Zn2+-sensing by the cyanobacterial metallothionein repressor SmtB: different motifs mediate metal-induced protein-DNA dissociation. Nucleic Acids Research, 1996, 24, 3714-3721.	6.5	85
77	Characterization of two cDNAs and identification of two proteins that accumulate in response to cadmium in cadmium-tolerantDatura innoxia(Mill.) cells. Journal of Experimental Botany, 1996, 47, 1019-1024.	2.4	6
78	Cyanobacterial metallothioneins: Biochemistry and molecular genetics. Journal of Industrial Microbiology, 1995, 14, 119-125.	0.9	94
79	Construction of Zn2+/Cd2+-tolerant cynadobacteria with a modified metallothionein divergon: Further analysis of the function and regulation ofsmt. Journal of Industrial Microbiology, 1995, 14, 259-264.	0.9	24
80	Tabulation of thirty-one putative new genes from cyanobacteria. Plant Molecular Biology, 1995, 29, 617-620.	2.0	2
81	Singular over-representation of an octameric palindrome, HIP1, in DNA from many cyanobacteria. Nucleic Acids Research, 1995, 23, 729-735.	6.5	78
82	Isolation of a prokaryotic metallothionein locus and analysis of transcriptional control by trace metal ions. Molecular Microbiology, 1993, 7, 177-187.	1.2	216
83	Deletion within the metallothionein locus of cadmium-tolerant Synechococcus PCC 6301 involving a highly iterated palindrome (HIP1). Molecular Microbiology, 1993, 7, 189-195.	1.2	77
84	SmtB is a metal-dependent repressor of the cyanobacterial metallothionein genesmtA: identification of a Zn inhibited DNA-protein complex. Nucleic Acids Research, 1993, 21, 921-925.	6.5	165
85	Amplification and rearrangement of a prokaryotic metallothionein locus smt in Synechococcus PCC 6301 selected for tolerance to cadmium. Proceedings of the Royal Society B: Biological Sciences, 1992, 248, 273-281.	1.2	47
86	Cyanobacterial metallothionein gene expressed inEscherichia coliMetal‐binding properties of the expressed protein. FEBS Letters, 1992, 303, 159-163.	1.3	63
87	Genes with similarity to metallothionein genes and copper, zinc ligands in Pisum sativum L.. Plant and Soil, 1992, 146, 291-298.	1.8	21
88	Expression of the pea metallothionein-like gene PsMT A in Escherichia coli and Arabidopsis thaliana and analysis of trace metal ion accumulation: Implications for PsMT A function. Plant Molecular Biology, 1992, 20, 1019-1028.	2.0	190
89	Expression of the pea genePsMTAinE. coliMetal‐binding properties of the expressed protein. FEBS Letters, 1991, 292, 48-52.	1.3	116
90	Low molecular weight metal complexes in the freshwater moss Rhynchostegium riparioides exposed to elevated concentrations of Zn, Cu, Cd and Pb in the laboratory and field. Environmental and Experimental Botany, 1991, 31, 359-366.	2.0	32

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91	Prokaryotic metallothionein gene characterization and expression: chromosome crawling by ligation-mediated PCR. Proceedings of the Royal Society B: Biological Sciences, 1990, 242, 241-247.	1.2	79
92	A gene from pea (Pisum sativum L.) with homology to metallothionein genes. FEBS Letters, 1990, 262, 29-32.	1.3	114
93	Mechanisms of Trace Metal Tolerance in Plants. , 1990, , 231-255.		30
94	Poly(Î³-glutamylcysteinyl)glycine Synthesis in Datura innoxia and Binding with Cadmium. Plant Physiology, 1989, 89, 700-706.	2.3	116
95	Inhibition of NaCl-Induced Proline Biosynthesis by Exogenous Proline in HalophilicDistichlis spicataSuspension Cultures. Journal of Experimental Botany, 1989, 40, 225-232.	2.4	16
96	Effects of cadmium on gene expression in cadmium-tolerant and cadmium-sensitiveDatura innoxia cells. Plant Molecular Biology, 1989, 12, 487-497.	2.0	27
97	Algal metallothioneins: secondary metabolites and proteins. Journal of Applied Phycology, 1989, 1, 5-18.	1.5	91
98	Biosynthesis of poly(Î³-glutamylcysteinyl)glycines in cadmium-tolerant Datura innoxia (Mill.) cells. Plant Science, 1988, 56, 197-204.	1.7	51
99	Poly(gamma-glutamylcysteinyl)glycine: its role in cadmium resistance in plant cells.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 6619-6623.	3.3	112
100	Characterization of Metal Binding Peptides from Cadmium Resistant Plant Cells. Exs, 1987, 52, 323-327.	1.4	8
101	Involvement of a metallothionein-like copper complex in the mechanism of copper tolerance in Mimulus guttatus. Proceedings of the Royal Society of London Series B, Containing Papers of A Biological Character, 1986, 227, 493-501.	1.8	29
102	Isolation of a copper complex and its rate of appearance in roots of Mimulus guttatus. Planta, 1986, 169, 192-197.	1.6	20
103	"Metallothionein-like" metal complexes in angiosperms; their structure and function. Physiologia Plantarum, 1986, 67, 499-506.	2.6	92