David P Giedroc

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Coordination Chemistry of Bacterial Metal Transport and Sensing. Chemical Reviews, 2009, 109, 4644-4681.	23.0	540
2	The RNA Molecule CsrB Binds to the Global Regulatory Protein CsrA and Antagonizes Its Activity in Escherichia coli. Journal of Biological Chemistry, 1997, 272, 17502-17510.	1.6	401
3	The SmtB/ArsR family of metalloregulatory transcriptional repressors: structural insights into prokaryotic metal resistance. FEMS Microbiology Reviews, 2003, 27, 131-143.	3.9	350
4	CsoR is a novel Mycobacterium tuberculosis copper-sensing transcriptional regulator. , 2007, 3, 60-68.		291
5	Frameshifting RNA pseudoknots: Structure and mechanism. Virus Research, 2009, 139, 193-208.	1.1	262
6	Cell-free biosensors for rapid detection of water contaminants. Nature Biotechnology, 2020, 38, 1451-1459.	9.4	221
7	Structure, stability and function of RNA pseudoknots involved in stimulating ribosomal frameshifting. Journal of Molecular Biology, 2000, 298, 167-185.	2.0	220
8	Recombinant HIV-1 Nucleocapsid Protein Accelerates HIV-1 Reverse Transcriptase Catalyzed DNA Strand Transfer Reactions and Modulates RNase H Activity. Biochemistry, 1994, 33, 13817-13823.	1.2	191
9	Metal sensor proteins: nature's metalloregulated allosteric switches. Dalton Transactions, 2007, , 3107.	1.6	178
10	Gene 32 protein, the single-stranded DNA binding protein from bacteriophage T4, is a zinc metalloprotein.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 8452-8456.	3.3	156
11	Metal Response Element (MRE)-Binding Transcription Factor-1 (MTF-1): Structure, Function, and Regulation. Antioxidants and Redox Signaling, 2001, 3, 577-596.	2.5	148
12	Metalloregulatory proteins: Metal selectivity and allosteric switching. Biophysical Chemistry, 2011, 156, 103-114.	1.5	147
13	A Nickel-Cobalt-sensing ArsR-SmtB Family Repressor. Journal of Biological Chemistry, 2002, 277, 38441-38448.	1.6	134
14	Bacterial Strategies to Maintain Zinc Metallostasis at the Host-Pathogen Interface. Journal of Biological Chemistry, 2016, 291, 20858-20868.	1.6	131
15	Coronavirus N Protein N-Terminal Domain (NTD) Specifically Binds the Transcriptional Regulatory Sequence (TRS) and Melts TRS-cTRS RNA Duplexes. Journal of Molecular Biology, 2009, 394, 544-557.	2.0	130
16	Structural Determinants of Metal Selectivity in Prokaryotic Metal-responsive Transcriptional Regulators. BioMetals, 2005, 18, 413-428.	1.8	122
17	A Metalâ€“Ligand-mediated Intersubunit Allosteric Switch in Related SmtB/ArsR Zinc Sensor Proteins. Journal of Molecular Biology, 2003, 333, 683-695.	2.0	121
18	The Zinc Metalloregulatory ProteinSynechococcusPCC7942 SmtB Binds a Single Zinc Ion per Monomer with High Affinity in a Tetrahedral Coordination Geometryâ€. Biochemistry, 2000, 39, 11818-11829.	1.2	117

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19	Structural elements of metal selectivity in metal sensor proteins. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3713-3718.	3.3	114
20	Manganese acquisition and homeostasis at the host-pathogen interface. Frontiers in Cellular and Infection Microbiology, 2013, 3, 91.	1.8	111
21	Recent developments in copper and zinc homeostasis in bacterial pathogens. Current Opinion in Chemical Biology, 2014, 19, 59-66.	2.8	111
22	The Response of Acinetobacter baumannii to Zinc Starvation. Cell Host and Microbe, 2016, 19, 826-836.	5.1	108
23	Copper Transport and Trafficking at the Hostâ€“Bacterial Pathogen Interface. Accounts of Chemical Research, 2014, 47, 3605-3613.	7.6	106
24	Elucidation of Primary (Î±3N) and Vestigial (Î±5) Heavy Metal-binding Sites in Staphylococcus aureus pI258 CadC: Evolutionary Implications for Metal Ion Selectivity of ArsR/SmtB Metal Sensor Proteins. Journal of Molecular Biology, 2002, 319, 685-701.	2.0	105
25	Interplay between manganese and zinc homeostasis in the human pathogen Streptococcus pneumoniae. Metallomics, 2011, 3, 38-41.	1.0	104
26	MRE-Binding Transcription Factor-1:Â Weak Zinc-Binding Finger Domains 5 and 6 Modulate the Structure, Affinity, and Specificity of the Metal-Response Element Complexâ€. Biochemistry, 1999, 38, 12915-12925.	1.2	103
27	Metallochaperones and metalloregulation in bacteria. Essays in Biochemistry, 2017, 61, 177-200.	2.1	103
28	The <scp>CsoR</scp>â€like sulfurtransferase repressor (<scp>CstR</scp>) is a persulfide sensor in <scp><i>S</i></scp><i>taphylococcus aureus</i>. Molecular Microbiology, 2014, 94, 1343-1360.	1.2	102
29	Molecular Insights into the Metal Selectivity of the Copper(I)-Sensing Repressor CsoR from <i>Bacillus subtilis</i>. Biochemistry, 2009, 48, 3325-3334.	1.2	100
30	The CRR1 Nutritional Copper Sensor in <i>Chlamydomonas</i> Contains Two Distinct Metal-Responsive Domains Â Â. Plant Cell, 2011, 22, 4098-4113.	3.1	93
31	Spectroscopic Properties of the Metalloregulatory Cd(II) and Pb(II) Sites ofS. aureuspI258 CadCâ€. Biochemistry, 2001, 40, 4426-4436.	1.2	91
32	Structural Lability in Stemâ€“Loop 1 Drives a 5â€² UTRâ€“3â€² UTR Interaction in Coronavirus Replication. Journal of Molecular Biology, 2008, 377, 790-803.	2.0	91
33	Control of Copper Resistance and Inorganic Sulfur Metabolism by Paralogous Regulators in Staphylococcus aureus. Journal of Biological Chemistry, 2011, 286, 13522-13531.	1.6	91
34	Retroviral nucleocapsid proteins possess potent nucleic acid strand renaturation activity. Protein Science, 1993, 2, 231-243.	3.1	90
35	Energetics of a strongly pH dependent RNA tertiary structure in a frameshifting pseudoknot 1 1Edited by I. Tinoco. Journal of Molecular Biology, 2000, 296, 659-671.	2.0	87
36	A loop 2 cytidine-stem 1 minor groove interaction as a positive determinant for pseudoknot-stimulated -1 ribosomal frameshifting. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12694-12699.	3.3	86

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37	A new structural paradigm in copper resistance in Streptococcus pneumoniae. Nature Chemical Biology, 2013, 9, 177-183.	3.9	85
38	Solution Structure of a Luteoviral P1â€“P2 Frameshifting mRNA Pseudoknot. Journal of Molecular Biology, 2002, 322, 621-633.	2.0	83
39	The Metalloregulatory Zinc Site in Streptococcus pneumoniae AdcR, a Zinc-activated MarR Family Repressor. Journal of Molecular Biology, 2010, 403, 197-216.	2.0	81
40	A U-turn motif-containing stem-loop in the coronavirus 5' untranslated region plays a functional role in replication. Rna, 2007, 13, 763-780.	1.6	80
41	Crystal structure of Clostridium difficile toxin A. Nature Microbiology, 2016, 1, 15002.	5.9	79
42	Structural and Functional Heterogeneity among the Zinc Fingers of Human MRE-Binding Transcription Factor-1â€. Biochemistry, 1998, 37, 11152-11161.	1.2	78
43	Entropy redistribution controls allostery in a metalloregulatory protein. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4424-4429.	3.3	75
44	Hydrogen Sulfide and Reactive Sulfur Species Impact Proteome <i>S</i>-Sulfhydration and Global Virulence Regulation in <i>Staphylococcus aureus</i>. ACS Infectious Diseases, 2017, 3, 744-755.	1.8	73
45	Sulfide Homeostasis and Nitroxyl Intersect via Formation of Reactive Sulfur Species in Staphylococcus aureus. MSphere, 2017, 2, .	1.3	71
46	Sulfide-responsive transcriptional repressor SqrR functions as a master regulator of sulfide-dependent photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2355-2360.	3.3	68
47	Metal site occupancy and allosteric switching in bacterial metal sensor proteins. Archives of Biochemistry and Biophysics, 2012, 519, 210-222.	1.4	66
48	Spectroscopic characterization of Co(II)-, Ni(II)-, and Cd(II)-substituted wild-type and non-native retroviral-type zinc finger peptides. Journal of Biological Inorganic Chemistry, 2000, 5, 93-101.	1.1	63
49	<i>Staphylococcus aureus</i> CstB Is a Novel Multidomain Persulfide Dioxygenase-Sulfurtransferase Involved in Hydrogen Sulfide Detoxification. Biochemistry, 2015, 54, 4542-4554.	1.2	63
50	Solution structure of a paradigm ArsR family zinc sensor in the DNA-bound state. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18177-18182.	3.3	62
51	Multi-metal Restriction by Calprotectin Impacts De Novo Flavin Biosynthesis in Acinetobacter baumannii. Cell Chemical Biology, 2019, 26, 745-755.e7.	2.5	61
52	An Acinetobacter baumannii, Zinc-Regulated Peptidase Maintains Cell Wall Integrity during Immune-Mediated Nutrient Sequestration. Cell Reports, 2019, 26, 2009-2018.e6.	2.9	61
53	The function of zinc in gene 32 protein from T4. Biochemistry, 1987, 26, 5251-5259.	1.2	60
54	Ratiometric Pulsed Alkylation/Mass Spectrometry of the Cysteine Pairs in Individual Zinc Fingers of MRE-Binding Transcription Factor-1 (MTF-1) as a Probe of Zinc Chelate Stability. Biochemistry, 2001, 40, 15164-15175.	1.2	60

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55	Structure of the Autoregulatory Pseudoknot within the Gene32Messenger RNA of Bacteriophages T2 and T6:Â A Model for a Possible Family of Structurally Related RNA Pseudoknotsâ€. Biochemistry, 1996, 35, 4187-4198.	1.2	59
56	Structural and Functional Characterization of Mycobacterium tuberculosis CmtR, a PbII/CdII-Sensing SmtB/ArsR Metalloregulatory Repressor. Biochemistry, 2005, 44, 8976-8988.	1.2	59
57	A Zinc(II)/Lead(II)/Cadmium(II)-Inducible Operon from the CyanobacteriumAnabaenaIs Regulated by AztR, an Î±3N ArsR/SmtB Metalloregulatorâ€. Biochemistry, 2005, 44, 8673-8683.	1.2	59
58	Crystal Structure of the Zinc-Dependent MarR Family Transcriptional Regulator AdcR in the Zn(II)-Bound State. Journal of the American Chemical Society, 2011, 133, 19614-19617.	6.6	59
59	Perturbation of manganese metabolism disrupts cell division in <i>Streptococcus pneumoniae</i>. Molecular Microbiology, 2017, 104, 334-348.	1.2	58
60	Biological and Chemical Adaptation to Endogenous Hydrogen Peroxide Production in Streptococcus pneumoniae D39. MSphere, 2017, 2, .	1.3	58
61	Allosteric Negative Regulation ofsmtO/P Binding of the Zinc Sensor, SmtB, by Metal Ions:Â A Coupled Equilibrium Analysisâ€. Biochemistry, 2002, 41, 9776-9786.	1.2	57
62	Individual Metal Ligands Play Distinct Functional Roles in the Zinc Sensor Staphylococcus aureus CzrA. Journal of Molecular Biology, 2006, 356, 1124-1136.	2.0	57
63	Structural Characterization of Distinct Î±3N and Î±5 Metal Sites in the Cyanobacterial Zinc Sensor SmtBâ€. Biochemistry, 2002, 41, 9765-9775.	1.2	55
64	A Novel Cyanobacterial SmtB/ArsR Family Repressor Regulates the Expression of a CPx-ATPase and a Metallothionein in Response to Both Cu(I)/Ag(I) and Zn(II)/Cd(II). Journal of Biological Chemistry, 2004, 279, 17810-17818.	1.6	54
65	Unnatural Amino Acid Substitution as a Probe of the Allosteric Coupling Pathway in a Mycobacterial Cu(I) Sensor. Journal of the American Chemical Society, 2009, 131, 18044-18045.	6.6	54
66	Simulating RNA Folding Kinetics on Approximated Energy Landscapes. Journal of Molecular Biology, 2008, 381, 1055-1067.	2.0	53
67	Functional Determinants of Metal Ion Transport and Selectivity in Paralogous Cation Diffusion Facilitator Transporters CzcD and MntE in Streptococcus pneumoniae. Journal of Bacteriology, 2016, 198, 1066-1076.	1.0	53
68	Non-nearest neighbor effects on the thermodynamics of unfolding of a model mRNA pseudoknot. Journal of Molecular Biology, 1998, 279, 545-564.	2.0	52
69	Cu(I)-mediated Allosteric Switching in a Copper-sensing Operon Repressor (CsoR). Journal of Biological Chemistry, 2014, 289, 19204-19217.	1.6	50
70	A Novel Cysteine Cluster in Human Metal-responsive Transcription Factor 1 Is Required for Heavy Metal-induced Transcriptional Activation in Vivo. Journal of Biological Chemistry, 2004, 279, 4515-4522.	1.6	48
71	<i>Staphylococcus aureus sqr</i> Encodes a Type II Sulfide:Quinone Oxidoreductase and Impacts Reactive Sulfur Speciation in Cells. Biochemistry, 2016, 55, 6524-6534.	1.2	48
72	A Cu^I-Sensing ArsR Family Metal Sensor Protein with a Relaxed Metal Selectivity Profile. Biochemistry, 2008, 47, 10564-10575.	1.2	47

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73	Base-pairings within the RNA pseudoknot associated with the simian retrovirus-1 gag-pro frameshift site. Journal of Molecular Biology, 1997, 270, 464-470.	2.0	45
74	Equilibrium Unfolding (Folding) Pathway of a Model H-type Pseudoknotted RNA:Â The Role of Magnesium Ions in Stabilityâ€. Biochemistry, 1998, 37, 16116-16129.	1.2	44
75	Putative cis -Acting Stem-Loops in the 5â€² Untranslated Region of the Severe Acute Respiratory Syndrome Coronavirus Can Substitute for Their Mouse Hepatitis Virus Counterparts. Journal of Virology, 2006, 80, 10600-10614.	1.5	44
76	Insights into Protein Allostery in the CsoR/RcnR Family of Transcriptional Repressors. Chemistry Letters, 2014, 43, 20-25.	0.7	44
77	Structural and functional differences between the two intrinsic zinc ions of Escherichia coli RNA polymerase. Biochemistry, 1986, 25, 4969-4978.	1.2	43
78	H2S and reactive sulfur signaling at the host-bacterial pathogen interface. Journal of Biological Chemistry, 2020, 295, 13150-13168.	1.6	43
79	Spectroscopic Studies of the AppA BLUF Domain from <i>Rhodobacter sphaeroides</i>: Addressing Movement of Tryptophan 104 in the Signaling State. Biochemistry, 2009, 48, 9969-9979.	1.2	42
80	Solution Structure of <i>Mycobacterium tuberculosis</i> NmtR in the Apo State: Insights into Ni(II)-Mediated Allostery. Biochemistry, 2012, 51, 2619-2629.	1.2	42
81	Simulations of Allosteric Motions in the Zinc Sensor CzrA. Journal of the American Chemical Society, 2012, 134, 3367-3376.	6.6	42
82	Identification of .beta.-endorphin residues 14-25 as a region involved in the inhibition of calmodulin-stimulated phosphodiesterase activity. Biochemistry, 1983, 22, 5584-5591.	1.2	41
83	Physical Characterization of the Manganese-Sensing Pneumococcal Surface Antigen Repressor from <i>Streptococcus pneumoniae</i>. Biochemistry, 2013, 52, 7689-7701.	1.2	41
84	Copper sensing function of Drosophila metal-responsive transcription factor-1 is mediated by a tetranuclear Cu(I) cluster. Nucleic Acids Research, 2008, 36, 3128-3138.	6.5	40
85	Mouse Hepatitis Virus Stem-Loop 2 Adopts a uYNMG(U)a-Like Tetraloop Structure That Is Highly Functionally Tolerant of Base Substitutions. Journal of Virology, 2009, 83, 12084-12093.	1.5	40
86	Mouse Hepatitis Virus Stem-Loop 4 Functions as a Spacer Element Required To Drive Subgenomic RNA Synthesis. Journal of Virology, 2011, 85, 9199-9209.	1.5	40
87	Functional Transcriptional Regulatory Sequence (TRS) RNA Binding and Helix Destabilizing Determinants of Murine Hepatitis Virus (MHV) Nucleocapsid (N) Protein. Journal of Biological Chemistry, 2012, 287, 7063-7073.	1.6	40
88	The zinc efflux activator <scp>S</scp>cz<scp>A</scp> protects <scp><i>S</i></scp><i>treptococcus pneumoniae</i> serotype 2 <scp>D</scp>39 from intracellular zinc toxicity. Molecular Microbiology, 2017, 104, 636-651.	1.2	40
89	A Mn-sensing riboswitch activates expression of a Mn2+/Ca2+ ATPase transporter in Streptococcus. Nucleic Acids Research, 2019, 47, 6885-6899.	6.5	40
90	NMR spectroscopy of cadmium-113(II) substituted gene 32 protein. Biochemistry, 1989, 28, 2410-2418.	1.2	39

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91	Contribution of the intercalated adenosine at the helical junction to the stability of the gag-pro frameshifting pseudoknot from mouse mammary tumor virus. Rna, 2000, 6, 409-421.	1.6	39
92	Zn-regulated GTPase metalloprotein activator 1 modulates vertebrate zinc homeostasis. Cell, 2022, 185, 2148-2163.e27.	13.5	39
93	Dual Functions of Single-stranded DNA-binding Protein in Helicase Loading at the Bacteriophage T4 DNA Replication Fork. Journal of Biological Chemistry, 2004, 279, 19035-19045.	1.6	38
94	Energetics of Allosteric Negative Coupling in the Zinc Sensor <i>S. aureus</i> CzrA. Journal of the American Chemical Society, 2009, 131, 17860-17870.	6.6	38
95	Predicting loopâ€"helix tertiary structural contacts in RNA pseudoknots. Rna, 2010, 16, 538-552.	1.6	38
96	Thermodynamic Analysis of Conserved Loopâ˘'Stem Interactions in P1â˘'P2 Frameshifting RNA Pseudoknots from Plant Luteoviridae. Biochemistry, 2002, 41, 10665-10674.	1.2	37
97	Detection of Scalar Couplings Involving 2â€˜-Hydroxyl Protons Across Hydrogen Bonds in a Frameshifting mRNA Pseudoknot. Journal of the American Chemical Society, 2003, 125, 4676-4677.	6.6	37
98	Hydrogen Sulfide Sensing through Reactive Sulfur Species (RSS) and Nitroxyl (HNO) in <i>Enterococcus faecalis</i>. ACS Chemical Biology, 2018, 13, 1610-1620.	1.6	37
99	Thermodynamics of Folding of the RNA Pseudoknot of the T4 Gene32Autoregulatory Messenger RNAâ€. Biochemistry, 1996, 35, 4176-4186.	1.2	36
100	Equilibrium unfolding pathway of an H-type RNA pseudoknot which promotes programmed â˘'1 ribosomal frameshifting 1 1Edited by D. E. Draper. Journal of Molecular Biology, 1999, 289, 1283-1299.	2.0	36
101	The solution structure of coronaviral stem-loop 2 (SL2) reveals a canonical CUYG tetraloop fold. FEBS Letters, 2011, 585, 1049-1053.	1.3	36
102	Conformational Analysis and Chemical Reactivity of the Multidomain Sulfurtransferase, <i>Staphylococcus aureus</i> CstA. Biochemistry, 2015, 54, 2385-2398.	1.2	36
103	Clostridioides difficile Senses and Hijacks Host Heme for Incorporation into an Oxidative Stress Defense System. Cell Host and Microbe, 2020, 28, 411-421.e6.	5.1	36
104	<i>Mycobacterium tuberculosis</i> NmtR Harbors a Nickel Sensing Site with Parallels to <i>Escherichia coli</i> RcnR. Biochemistry, 2011, 50, 7941-7952.	1.2	35
105	Allosteric Inhibition of a Zinc-Sensing Transcriptional Repressor: Insights into the Arsenic Repressor (ArsR) Family. Journal of Molecular Biology, 2013, 425, 1143-1157.	2.0	35
106	Structure of the Large Extracellular Loop of FtsX and Its Interaction with the Essential Peptidoglycan Hydrolase PcsB in Streptococcus pneumoniae. MBio, 2019, 10, .	1.8	35
107	Functional properties of covalent .beta.-endorphin peptide/calmodulin complexes. Chlorpromazine binding and phosphodiesterase activation. Biochemistry, 1985, 24, 1203-1211.	1.2	34
108	Zinc Site Redesign in T4 Gene 32 Protein:â€‰ Structure and Stability of Cobalt(II) Complexes Formed by Wild-Type and Metal Ligand Substitution Mutants. Biochemistry, 1997, 36, 730-742.	1.2	34

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109	Ratiometric Pulsed Alkylation Mass Spectrometry as a Probe of Thiolate Reactivity in Different Metalloderivatives ofStaphylococcus aureuspI258 CadCâ€,â€¡. Biochemistry, 2004, 43, 3824-3834.	1.2	34
110	Thermal denaturation of T4 gene 32 protein: effects of zinc removal and substitution. Biochemistry, 1988, 27, 5240-5245.	1.2	33
111	A conserved RNA pseudoknot in a putative molecular switch domain of the 3â€²-untranslated region of coronaviruses is only marginally stable. Rna, 2011, 17, 1747-1759.	1.6	33
112	Solution Structure of Mouse Hepatitis Virus (MHV) nsp3a and Determinants of the Interaction with MHV Nucleocapsid (N) Protein. Journal of Virology, 2013, 87, 3502-3515.	1.5	33
113	The Response of <i>Acinetobacter baumannii</i> to Hydrogen Sulfide Reveals Two Independent Persulfide-Sensing Systems and a Connection to Biofilm Regulation. MBio, 2020, 11, .	1.8	33
114	Zinc(II) coordination domain mutants of T4 gene 32 protein. Biochemistry, 1992, 31, 765-774.	1.2	32
115	Conformational Heterogeneity in the C-terminal Zinc Fingers of Human MTF-1. Journal of Biological Chemistry, 2001, 276, 42322-42332.	1.6	32
116	Characterization of a metalloregulatory bismuth(III) site in Staphylococcus aureus pI258 CadC repressor. Journal of Biological Inorganic Chemistry, 2002, 7, 551-559.	1.1	32
117	The global structures of a wild-type and poorly functional plant luteoviral mRNA pseudoknot are essentially identical. Rna, 2006, 12, 1959-1969.	1.6	32
118	Molecular Evolution of Transition Metal Bioavailability at the Hostâ€“Pathogen Interface. Trends in Microbiology, 2021, 29, 441-457.	3.5	32
119	Calcium effects on calmodulin lysine reactivities. Archives of Biochemistry and Biophysics, 1987, 252, 136-144.	1.4	31
120	Solution structure and backbone dynamics of Masonâ€Pfizer monkey virus (MPMV) nucleocapsid protein. Protein Science, 1998, 7, 2265-2280.	3.1	31
121	Structure of<i>Thermotoga maritima</i>TM0439: implications for the mechanism of bacterial GntR transcription regulators with Zn²⁺-binding FCD domains. Acta Crystallographica Section D: Biological Crystallography, 2009, 65, 356-365.	2.5	31
122	SHAPE analysis of the RNA secondary structure of the Mouse Hepatitis Virus 5â€™ untranslated region and N-terminal nsp1 coding sequences. Virology, 2015, 475, 15-27.	1.1	30
123	Coâ€ordinate synthesis and protein localization in a bacterial organelle by the action of a penicillinâ€bindingâ€protein. Molecular Microbiology, 2013, 90, 1162-1177.	1.2	27
124	Metal-dependent allosteric activation and inhibition on the same molecular scaffold: theÂcopper sensor CopY from <i>Streptococcus pneumoniae</i>. Chemical Science, 2018, 9, 105-118.	3.7	27
125	Functional Role of Solvent Entropy and Conformational Entropy of Metal Binding in a Dynamically Driven Allosteric System. Journal of the American Chemical Society, 2018, 140, 9108-9119.	6.6	26
126	Mechanistic Insights into the Metal-Dependent Activation of Zn^{II}-Dependent Metallochaperones. Inorganic Chemistry, 2019, 58, 13661-13672.	1.9	26

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127	Multi-metal nutrient restriction and crosstalk in metallostasis systems in microbial pathogens. Current Opinion in Microbiology, 2020, 55, 17-25.	2.3	26
128	Tuning site-specific dynamics to drive allosteric activation in a pneumococcal zinc uptake regulator. ELife, 2018, 7, .	2.8	26
129	Energetics of Zinc-Mediated Interactions in the Allosteric Pathways of Metal Sensor Proteins. Journal of the American Chemical Society, 2013, 135, 30-33.	6.6	24
130	Structural basis for persulfide-sensing specificity in a transcriptional regulator. Nature Chemical Biology, 2021, 17, 65-70.	3.9	24
131	Mechanism-based inhibitors of dopamine .beta.-hydroxylase: inhibition by 2-bromo-3-(p-hydroxyphenyl)-1-propene. Biochemistry, 1984, 23, 3590-3598.	1.2	23
132	Energetics of arginine-4 substitution mutants in the N-terminal cooperativity domain of T4 gene 32 protein. Biochemistry, 1993, 32, 11235-11246.	1.2	22
133	Mutational analysis of domain IIÎ² of bacteriophage Mu transposase: domains IIÎ± and IIÎ² belongs to different catalytic complementation groups 1 1Edited by J. H. Miller. Journal of Molecular Biology, 1998, 275, 221-232.	2.0	22
134	Solution NMR refinement of a metal ion bound protein using metal ion inclusive restrained molecular dynamics methods. Journal of Biomolecular NMR, 2013, 56, 125-137.	1.6	22
135	Proton NMR studies of T4 gene 32 protein: effects of zinc removal and reconstitution. Biochemistry, 1989, 28, 8828-8832.	1.2	21
136	Selenite and tellurite form mixed seleno- and tellurotrisulfides with CstR from Staphylococcus aureus. Metallomics, 2013, 5, 335.	1.0	21
137	Cysteine Sulfur Chemistry in Transcriptional Regulators at the Hostâ€"Bacterial Pathogen Interface. Biochemistry, 2015, 54, 3235-3249.	1.2	21
138	Zinc metalloproteins involved in replication and transcription. Journal of Inorganic Biochemistry, 1986, 28, 155-169.	1.5	20
139	Site-specific 1,N6-ethenoadenylated single-stranded oligonucleotides as structural probes for the T4 gene 32 protein-ssDNA complex. Biochemistry, 1991, 30, 8230-8242.	1.2	20
140	Multiple Metal Binding Domains Enhance the Zn(II) Selectivity of the Divalent Metal Ion Transporter AztA. Biochemistry, 2007, 46, 11057-11068.	1.2	20
141	Thioredoxin Profiling of Multiple Thioredoxin-Like Proteins in Staphylococcus aureus. Frontiers in Microbiology, 2018, 9, 2385.	1.5	20
142	Hydrogen peroxide sensing in <i>Bacillus subtilis</i>: it is all about the (metallo)regulator. Molecular Microbiology, 2009, 73, 1-4.	1.2	19
143	Ratiometric Pulseâ€"Chase Amidination Mass Spectrometry as a Probe of Biomolecular Complex Formation. Analytical Chemistry, 2011, 83, 9092-9099.	3.2	19
144	Interaction of retroviral nucleocapsid proteins with transfer RNAPhe: a lead ribozyme and 1H NMR study. Nucleic Acids Research, 1996, 24, 3568-3575.	6.5	18

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145	Thermodynamics of stabilization of RNA pseudoknots by cobalt(III) hexaammine. , 1999, 50, 443-458.		18
146	Structural Insights into Homo- and Heterotropic Allosteric Coupling in the Zinc SensorS. aureusCzrA from Covalently Fused Dimers. Journal of the American Chemical Society, 2006, 128, 1937-1947.	6.6	18
147	Kinetics of metal binding by the toxic metal-sensing transcriptional repressor Staphylococcus aureus pI258 CadC. Journal of Inorganic Biochemistry, 2006, 100, 1024-1034.	1.5	18
148	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
149	X-ray and Visible Absorption Spectroscopy of Wild-Type and Mutant T4 Gene 32 Proteins: His64, not His81, Is the Non-Thiolate Zinc Ligand. Journal of the American Chemical Society, 1995, 117, 9437-9440.	6.6	17
150	A Q63E <i>Rhodobacter sphaeroides</i> AppA BLUF Domain Mutant Is Locked in a Pseudo-Light-Excited Signaling State. Biochemistry, 2010, 49, 10682-10690.	1.2	17
151	Elucidation of the Functional Metal Binding Profile of a Cd^{II}/Pb^{II} Sensor CmtR^{Sc} from <i>Streptomyces coelicolor</i>. Biochemistry, 2010, 49, 6617-6626.	1.2	17
152	A new player in bacterial sulfideâ€inducible transcriptional regulation. Molecular Microbiology, 2017, 105, 347-352.	1.2	17
153	Iron Acquisition by Bacterial Pathogens: Beyond Trisâ€Catecholate Complexes. ChemBioChem, 2020, 21, 1955-1967.	1.3	17
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