

Carol A Fierke

List of Publications by Year in descending order

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173
papers

10,320
citations

26610

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42364

92
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178
all docs

178
docs citations

178
times ranked

8612
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure-based prediction of HDAC6 substrates validated by enzymatic assay reveals determinants of promiscuity and detects new potential substrates. <i>Scientific Reports</i> , 2022, 12, 1788.	1.6	7
2	A Quick Route to Multiple Highly Potent SARS-CoV-2 Main Protease Inhibitors**. <i>ChemMedChem</i> , 2021, 16, 942-948.	1.6	92
3	Combining Active Carbonic Anhydrase with Nanogels: Enzyme Protection and Zinc Sensing. <i>International Journal of Nanomedicine</i> , 2021, Volume 16, 6645-6660.	3.3	2
4	Disease-associated mutations in mitochondrial precursor tRNAs affect binding, m1R9 methylation, and tRNA processing by mtRNase P. <i>Rna</i> , 2021, 27, 420-432.	1.6	9
5	Structural Interaction of Apolipoprotein A-I Mimetic Peptide with Amyloid- β^2 Generates Toxic Hetero-oligomers. <i>Journal of Molecular Biology</i> , 2020, 432, 1020-1034.	2.0	25
6	Unexpected specificity within dynamic transcriptional protein-protein complexes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 27346-27353.	3.3	30
7	Pentatricopeptide repeats of protein-only RNase P use a distinct mode to recognize conserved bases and structural elements of pre-tRNA. <i>Nucleic Acids Research</i> , 2020, 48, 11815-11826.	6.5	26
8	Mutations in RABL3 alter KRAS prenylation and are associated with hereditary pancreatic cancer. <i>Nature Genetics</i> , 2019, 51, 1308-1314.	9.4	47
9	Interplay between substrate recognition, 5' end tRNA processing and methylation activity of human mitochondrial RNase P. <i>Rna</i> , 2019, 25, 1646-1660.	1.6	21
10	Phosphorylation of Histone Deacetylase 8: Structural and Mechanistic Analysis of the Phosphomimetic S39E Mutant. <i>Biochemistry</i> , 2019, 58, 4480-4493.	1.2	8
11	The chaperone SmgGDS-607 has a dual role, both activating and inhibiting farnesylation of small GTPases. <i>Journal of Biological Chemistry</i> , 2019, 294, 11793-11804.	1.6	13
12	SmgGDS-607 Regulation of RhoA GTPase Prenylation Is Nucleotide-Dependent. <i>Biochemistry</i> , 2018, 57, 4289-4298.	1.2	10
13	Conservation of coactivator engagement mechanism enables small-molecule allosteric modulators. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8960-8965.	3.3	23
14	Ion mobility-mass spectrometry reveals evidence of specific complex formation between human histone deacetylase 8 and poly-r(C)-binding protein 1. <i>International Journal of Mass Spectrometry</i> , 2017, 420, 9-15.	0.7	2
15	HDAC8 Substrates Identified by Genetically Encoded Active Site Photocrosslinking. <i>Journal of the American Chemical Society</i> , 2017, 139, 16222-16227.	6.6	25
16	Active Site Metal Identity Alters Histone Deacetylase 8 Substrate Selectivity: A Potential Novel Regulatory Mechanism. <i>Biochemistry</i> , 2017, 56, 5663-5670.	1.2	11
17	Molecular recognition of pre-tRNA by <i>Arabidopsis</i> protein-only Ribonuclease P. <i>Rna</i> , 2017, 23, 1860-1873.	1.6	16
18	Inner-Sphere Coordination of Divalent Metal Ion with Nucleobase in Catalytic RNA. <i>Journal of the American Chemical Society</i> , 2017, 139, 17457-17463.	6.6	14

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19	HDAC8 substrate selectivity is determined by long- and short-range interactions leading to enhanced reactivity for full-length histone substrates compared with peptides. <i>Journal of Biological Chemistry</i> , 2017, 292, 21568-21577.	1.6	30
20	Fluorescence-Based Real-Time Activity Assays to Identify RNase P Inhibitors. <i>Methods in Molecular Biology</i> , 2017, 1520, 201-225.	0.4	1
21	Measuring and Imaging Metal Ions With Fluorescence-Based Biosensors. <i>Methods in Enzymology</i> , 2017, 589, 281-299.	0.4	4
22	The Diversity of Ribonuclease P: Protein and RNA Catalysts with Analogous Biological Functions. <i>Biomolecules</i> , 2016, 6, 27.	1.8	62
23	The Tumor-suppressive Small GTPase DiRas1 Binds the Noncanonical Guanine Nucleotide Exchange Factor SmgGDS and Antagonizes SmgGDS Interactions with Oncogenic Small GTPases. <i>Journal of Biological Chemistry</i> , 2016, 291, 6534-6545.	1.6	24
24	Structure-Based Identification of HDAC8 Non-histone Substrates. <i>Structure</i> , 2016, 24, 458-468.	1.6	42
25	Exploration of GGTase-I substrate requirements. Part 1: Synthesis and biochemical evaluation of novel aryl-modified geranylgeranyl diphosphate analogs. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 3499-3502.	1.0	1
26	Synthesis of Non-natural, Frame-Shifted Isoprenoid Diphosphate Analogues. <i>Organic Letters</i> , 2016, 18, 6038-6041.	2.4	4
27	Exploration of GGTase-I substrate requirements. Part 2: Synthesis and biochemical analysis of novel saturated geranylgeranyl diphosphate analogs. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 3503-3507.	1.0	10
28	Nuclear Protein-Only Ribonuclease P2 Structure and Biochemical Characterization Provide Insight into the Conserved Properties of tRNA 5' End Processing Enzymes. <i>Journal of Molecular Biology</i> , 2016, 428, 26-40.	2.0	31
29	Analogues of farnesyl diphosphate alter CaaX substrate specificity and reactions rates of protein farnesyltransferase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016, 26, 1333-1336.	1.0	12
30	General Base-General Acid Catalysis in Human Histone Deacetylase 8. <i>Biochemistry</i> , 2016, 55, 820-832.	1.2	61
31	Metal-dependent Deacetylases: Cancer and Epigenetic Regulators. <i>ACS Chemical Biology</i> , 2016, 11, 706-716.	1.6	31
32	Differential substrate recognition by isozymes of plant protein-only Ribonuclease P. <i>Rna</i> , 2016, 22, 782-792.	1.6	26
33	Influence of a curcumin derivative on hIAPP aggregation in the absence and presence of lipid membranes. <i>Chemical Communications</i> , 2016, 52, 942-945.	2.2	63
34	Kinetics and thermodynamics of metal binding to histone deacetylase 8. <i>Protein Science</i> , 2015, 24, 354-365.	3.1	15
35	Dual-Mode HDAC Prodrug for Covalent Modification and Subsequent Inhibitor Release. <i>Journal of Medicinal Chemistry</i> , 2015, 58, 4812-4821.	2.9	36
36	Self-Assembly of a Nine-Residue Amyloid-Forming Peptide Fragment of SARS Corona Virus E-Protein: Mechanism of Self Aggregation and Amyloid-Inhibition of hIAPP. <i>Biochemistry</i> , 2015, 54, 2249-2261.	1.2	50

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37	Fibroblasts From Long-Lived Rodent Species Exclude Cadmium. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2015, 70, 10-19.	1.7	12
38	Mechanistic Studies Reveal Similar Catalytic Strategies for Phosphodiester Bond Hydrolysis by Protein-only and RNA-dependent Ribonuclease P. <i>Journal of Biological Chemistry</i> , 2015, 290, 13454-13464.	1.6	35
39	Dissecting allosteric effects of activator-coactivator complexes using a covalent small molecule ligand. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 12061-12066.	3.3	34
40	A real-time fluorescence polarization activity assay to screen for inhibitors of bacterial ribonuclease P. <i>Nucleic Acids Research</i> , 2014, 42, e159-e159.	6.5	35
41	An Unbiased Approach To Identify Endogenous Substrates of Histone Deacetylase 8. <i>ACS Chemical Biology</i> , 2014, 9, 2210-2216.	1.6	72
42	Fluorescence lifetime imaging of physiological free Cu(ii) levels in live cells with a Cu(ii)-selective carbonic anhydrase-based biosensor. <i>Metallomics</i> , 2014, 6, 1034.	1.0	35
43	Ligand Concentration Regulates the Pathways of Coupled Protein Folding and Binding. <i>Journal of the American Chemical Society</i> , 2014, 136, 822-825.	6.6	60
44	An enzyme-coupled assay measuring acetate production for profiling histone deacetylase specificity. <i>Analytical Biochemistry</i> , 2014, 456, 61-69.	1.1	19
45	Discovering RNA-Protein Interactome by Using Chemical Context Profiling of the RNA-Protein Interface. <i>Cell Reports</i> , 2013, 3, 1703-1713.	2.9	23
46	HDAC8 substrates: Histones and beyond. <i>Biopolymers</i> , 2013, 99, 112-126.	1.2	70
47	Long Wavelength Fluorescence Ratiometric Zinc Biosensor. <i>Journal of Fluorescence</i> , 2013, 23, 375-379.	1.3	6
48	RNase P enzymes. <i>RNA Biology</i> , 2013, 10, 909-914.	1.5	36
49	Expansion of Protein Farnesyltransferase Specificity Using Tunable Active Site Interactions. <i>Journal of Biological Chemistry</i> , 2012, 287, 38090-38100.	1.6	15
50	Mitochondrial ribonuclease P structure provides insight into the evolution of catalytic strategies for precursor-tRNA 5' processing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 16149-16154.	3.3	110
51	Recent advances in protein prenyltransferases: substrate identification, regulation, and disease interventions. <i>Current Opinion in Chemical Biology</i> , 2012, 16, 544-552.	2.8	44
52	Insights into the Mechanistic Dichotomy of the Protein Farnesyltransferase Peptide Substrates CVIM and CVLS. <i>Journal of the American Chemical Society</i> , 2012, 134, 820-823.	6.6	15
53	Farnesyl Diphosphate Analogues with Aryl Moieties Are Efficient Alternate Substrates for Protein Farnesyltransferase. <i>Biochemistry</i> , 2012, 51, 8307-8319.	1.2	14
54	ZntR-mediated transcription of zntA responds to nanomolar intracellular free zinc. <i>Journal of Inorganic Biochemistry</i> , 2012, 111, 173-181.	1.5	95

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55	Improving upon Nature: Active Site Remodeling Produces Highly Efficient Aldolase Activity toward Hydrophobic Electrophilic Substrates. <i>Biochemistry</i> , 2012, 51, 1658-1668.	1.2	22
56	Quantitative imaging of mitochondrial and cytosolic free zinc levels in an in vitro model of ischemia/reperfusion. <i>Journal of Bioenergetics and Biomembranes</i> , 2012, 44, 253-263.	1.0	57
57	Global Identification of Protein Prenyltransferase Substrates. <i>The Enzymes</i> , 2011, 29, 207-234.	0.7	6
58	Directed evolution of a pyruvate aldolase to recognize a long chain acyl substrate. <i>Bioorganic and Medicinal Chemistry</i> , 2011, 19, 6447-6453.	1.4	21
59	Understanding protein palmitoylation: Biological significance and enzymology. <i>Science China Chemistry</i> , 2011, 54, 1888-1897.	4.2	57
60	On the function of the internal cavity of histone deacetylase protein 8: R37 is a crucial residue for catalysis. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 2129-2132.	1.0	36
61	Transient-state Kinetic Analysis of Transcriptional Activator-DNA Complexes Interacting with a Key Coactivator. <i>Journal of Biological Chemistry</i> , 2011, 286, 16238-16245.	1.6	15
62	Binding and cleavage of unstructured RNA by nuclear RNase P. <i>Rna</i> , 2011, 17, 1429-1440.	1.6	17
63	The RNR motif of <i>B. subtilis</i> RNase P protein interacts with both PRNA and pre-tRNA to stabilize an active conformer. <i>Rna</i> , 2011, 17, 1225-1235.	1.6	12
64	Identification of a Novel Class of Farnesylation Targets by Structure-Based Modeling of Binding Specificity. <i>PLoS Computational Biology</i> , 2011, 7, e1002170.	1.5	58
65	Genetically encoded ratiometric biosensors to measure intracellular exchangeable zinc in <i>Escherichia coli</i> . <i>Journal of Biomedical Optics</i> , 2011, 16, 087011.	1.4	50
66	NMR and XAS reveal an inner-sphere metal binding site in the P4 helix of the metallo-ribozyme ribonuclease P. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 2479-2484.	3.3	31
67	Carbonic anhydrase II-based metal ion sensing: Advances and new perspectives. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2010, 1804, 393-403.	1.1	46
68	Synthesis and screening of a CaaL peptide library versus FTase reveals a surprising number of substrates. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2010, 20, 767-770.	1.0	26
69	Activation and Inhibition of Histone Deacetylase 8 by Monovalent Cations. <i>Journal of Biological Chemistry</i> , 2010, 285, 6036-6043.	1.6	72
70	Active Site Metal Ion in UDP-3-O-((R)-3-Hydroxymyristoyl)-N-acetylglucosamine Deacetylase (LpxC) Switches between Fe(II) and Zn(II) Depending on Cellular Conditions*. <i>Journal of Biological Chemistry</i> , 2010, 285, 33788-33796.	1.6	37
71	Activation of <i>Escherichia coli</i> UDP-3-O-[(R)-3-hydroxymyristoyl]-N-acetylglucosamine Deacetylase by Fe ²⁺ Yields a More Efficient Enzyme with Altered Ligand Affinity. <i>Biochemistry</i> , 2010, 49, 2246-2255.	1.2	32
72	Identification of Novel Peptide Substrates for Protein Farnesyltransferase Reveals Two Substrate Classes with Distinct Sequence Selectivities. <i>Journal of Molecular Biology</i> , 2010, 395, 176-190.	2.0	60

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73	Proteinâ€“Precursor tRNA Contact Leads to Sequence-Specific Recognition of 5â€² Leaders by Bacterial Ribonuclease P. <i>Journal of Molecular Biology</i> , 2010, 396, 195-208.	2.0	37
74	A Divalent Cation Stabilizes the Active Conformation of the <i>B. subtilis</i> RNase Pâˆ“Pre-tRNA Complex: A Role for an Inner-Sphere Metal Ion in RNase P. <i>Journal of Molecular Biology</i> , 2010, 400, 38-51.	2.0	28
75	Structures of Metal-Substituted Human Histone Deacetylase 8 Provide Mechanistic Inferences on Biological Function., <i>Biochemistry</i> , 2010, 49, 5048-5056.	1.2	71
76	Kinetic Mechanism of Bacterial RNase P. , 2010, , 93-111.		1
77	Investigating the catalytic mechanism of the yeast palmitoyltransferase Akr1p. <i>FASEB Journal</i> , 2010, 24, 904.3.	0.2	0
78	Pre-tRNA turnover catalyzed by the yeast nuclear RNase P holoenzyme is limited by product release. <i>Rna</i> , 2009, 15, 224-234.	1.6	28
79	Conformational change in the <i>Bacillus subtilis</i> RNase P holoenzymeâˆ“pre-tRNA complex enhances substrate affinity and limits cleavage rate. <i>Rna</i> , 2009, 15, 1565-1577.	1.6	45
80	Getting a handle on protein prenylation. <i>Nature Chemical Biology</i> , 2009, 5, 197-198.	3.9	13
81	Context-Dependent Substrate Recognition by Protein Farnesyltransferase. <i>Biochemistry</i> , 2009, 48, 1691-1701.	1.2	38
82	Characterization and crystal structure of <i>Escherichia coli</i> KDPGal aldolase. <i>Bioorganic and Medicinal Chemistry</i> , 2008, 16, 710-720.	1.4	22
83	Structural Studies of Human Histone Deacetylase 8 and Its Site-Specific Variants Complexed with Substrate and Inhibitors[,]. <i>Biochemistry</i> , 2008, 47, 13554-13563.	1.2	180
84	Residue Ionization in LpxC Directly Observed by ⁶⁷Zn NMR Spectroscopy. <i>Journal of the American Chemical Society</i> , 2008, 130, 12671-12679.	6.6	20
85	Chapter 14 Determination of Zinc Using Carbonic Anhydrase-Based Fluorescence Biosensors. <i>Methods in Enzymology</i> , 2008, 450, 287-309.	0.4	32
86	Catalytic metal ion switching in zincâ€“dependent deacetylases. <i>FASEB Journal</i> , 2008, 22, 611.14.	0.2	0
87	Probing the architecture of the <i>B. subtilis</i> RNase P holoenzyme active site by cross-linking and affinity cleavage. <i>Rna</i> , 2007, 13, 521-535.	1.6	32
88	Combinatorial Modulation of Protein Prenylation. <i>ACS Chemical Biology</i> , 2007, 2, 385-389.	1.6	41
89	Importance of RNAâˆ“protein interactions in bacterial ribonuclease P structure and catalysis. <i>Biopolymers</i> , 2007, 87, 329-338.	1.2	40
90	Evaluation of protein farnesyltransferase substrate specificity using synthetic peptide libraries. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2007, 17, 5548-5551.	1.0	21

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91	Mutagenesis of the phosphate-binding pocket of KDPG aldolase enhances selectivity for hydrophobic substrates. <i>Protein Science</i> , 2007, 16, 2368-2377.	3.1	33
92	Investigating the functional basis for specificity in protein farnesyltransferase. <i>FASEB Journal</i> , 2007, 21, A1015.	0.2	1
93	Fluorescent Metal Ion Biosensing: A Tool for Measuring Zn(II) at The Molecular Level. <i>FASEB Journal</i> , 2007, 21, A999.	0.2	0
94	Measurement of kinetic isotope effects to probe the reaction mechanism catalyzed by mammalian protein farnesyltransferase. <i>FASEB Journal</i> , 2007, 21, A275.	0.2	1
95	Catalytic Activity and Inhibition of Human Histone Deacetylase 8 Is Dependent on the Identity of the Active Site Metal Ion. <i>Biochemistry</i> , 2006, 45, 6170-6178.	1.2	138
96	Measuring Picomolar Intracellular Exchangeable Zinc in PC-12 Cells Using a Ratiometric Fluorescence Biosensor. <i>ACS Chemical Biology</i> , 2006, 1, 103-111.	1.6	223
97	Catalytic Mechanism and Molecular Recognition of <i>E. coli</i> UDP-3-O-(R-3-Hydroxymyristoyl)-N-acetylglucosamine Deacetylase Probed by Mutagenesis. <i>Biochemistry</i> , 2006, 45, 15240-15248.	1.2	33
98	Measurement of the δ -Secondary Kinetic Isotope Effect for the Reaction Catalyzed by Mammalian Protein Farnesyltransferase. <i>Journal of the American Chemical Society</i> , 2006, 128, 15086-15087.	6.6	29
99	DsRed as a highly sensitive, selective, and reversible fluorescence-based biosensor for both Cu ⁺ and Cu ²⁺ ions. <i>Biosensors and Bioelectronics</i> , 2006, 21, 1302-1308.	5.3	62
100	Mechanism of the Class I KDPG aldolase. <i>Bioorganic and Medicinal Chemistry</i> , 2006, 14, 3002-3010.	1.4	53
101	Cu ⁺ - and Cu ²⁺ -sensitive PEBBLE fluorescent nanosensors using DsRed as the recognition element. <i>Sensors and Actuators B: Chemical</i> , 2006, 113, 760-767.	4.0	65
102	Mechanistic Inferences from the Binding of Ligands to LpxC, a Metal-Dependent Deacetylase. <i>Biochemistry</i> , 2006, 45, 7940-7948.	1.2	53
103	Structural plasticity and Mg ²⁺ binding properties of RNase P P4 from combined analysis of NMR residual dipolar couplings and motionally decoupled spin relaxation. <i>Rna</i> , 2006, 13, 251-266.	1.6	43
104	A continuous fluorescent assay for protein prenyltransferases measuring diphosphate release. <i>Analytical Biochemistry</i> , 2005, 345, 302-311.	1.1	26
105	UDP-3-O-((R)-3-hydroxymyristoyl)-N-acetylglucosamine Deacetylase Functions through a General Acid-Base Catalyst Pair Mechanism. <i>Journal of Biological Chemistry</i> , 2005, 280, 16969-16978.	1.6	62
106	Interplay of Isoprenoid and Peptide Substrate Specificity in Protein Farnesyltransferase. <i>Biochemistry</i> , 2005, 44, 11214-11223.	1.2	25
107	The 5' Leader of Precursor tRNA ^{asp} Bound to the <i>Bacillus subtilis</i> RNase P Holoenzyme Has an Extended Conformation. <i>Biochemistry</i> , 2005, 44, 16130-16139.	1.2	59
108	Peptide Specificity of Protein Prenyltransferases Is Determined Mainly by Reactivity Rather than Binding Affinity. <i>Biochemistry</i> , 2005, 44, 15314-15324.	1.2	46

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109	Upstream Polybasic Region in Peptides Enhances Dual Specificity for Prenylation by Both Farnesyltransferase and Geranylgeranyltransferase Type I. <i>Biochemistry</i> , 2005, 44, 15325-15333.	1.2	26
110	Zinc hydrolases: the mechanisms of zinc-dependent deacetylases. <i>Archives of Biochemistry and Biophysics</i> , 2005, 433, 71-84.	1.4	169
111	Ionic interactions between PRNA and P protein in <i>Bacillus subtilis</i> RNase P characterized using a magnetocapture-based assay. <i>Rna</i> , 2004, 10, 1595-1608.	1.6	25
112	Lysine 2311 of Protein Geranylgeranyltransferase Type I Partially Replaces Magnesium. <i>Journal of Biological Chemistry</i> , 2004, 279, 30546-30553.	1.6	23
113	Roles of protein subunits in RNA-protein complexes: Lessons from ribonuclease P. <i>Biopolymers</i> , 2004, 73, 79-89.	1.2	71
114	A bacterial selection for the directed evolution of pyruvate aldolases. <i>Bioorganic and Medicinal Chemistry</i> , 2004, 12, 4067-4074.	1.4	29
115	Probing Determinants of the Metal Ion Selectivity in Carbonic Anhydrase Using Mutagenesis. <i>Biochemistry</i> , 2004, 43, 3979-3986.	1.2	69
116	Positively Charged Side Chains in Protein Farnesyltransferase Enhance Catalysis by Stabilizing the Formation of the Diphosphate Leaving Group. <i>Biochemistry</i> , 2004, 43, 5256-5265.	1.2	38
117	EXAFS studies of the zinc sites of UDP-(3-O-acyl)-N-acetylglucosamine deacetylase (LpxC). <i>Journal of Inorganic Biochemistry</i> , 2003, 94, 78-85.	1.5	36
118	Structural Characterization of the Zinc Site in Protein Farnesyltransferase. <i>Journal of the American Chemical Society</i> , 2003, 125, 9962-9969.	6.6	67
119	Kinetic Studies of Protein Farnesyltransferase Mutants Establish Active Substrate Conformation. <i>Biochemistry</i> , 2003, 42, 9741-9748.	1.2	55
120	Real-Time Determination of Picomolar Free Cu(II) in Seawater Using a Fluorescence-Based Fiber Optic Biosensor. <i>Analytical Chemistry</i> , 2003, 75, 6807-6812.	3.2	95
121	Crystal structure of LpxC, a zinc-dependent deacetylase essential for endotoxin biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 8146-8150.	3.3	162
122	Excitation ratiometric fluorescent biosensor for zinc ion at picomolar levels. <i>Journal of Biomedical Optics</i> , 2002, 7, 555.	1.4	42
123	Specific phosphorothioate substitutions probe the active site of <i>Bacillus subtilis</i> ribonuclease P. <i>Rna</i> , 2002, 8, 933-947.	1.6	50
124	Photoaffinity Analogues of Farnesyl Pyrophosphate Transferable by Protein Farnesyl Transferase. <i>Journal of the American Chemical Society</i> , 2002, 124, 8206-8219.	6.6	56
125	Inhibition of the Antibacterial Target UDP-(3-O-acyl)-N-acetylglucosamine Deacetylase (LpxC): Isoxazoline Zinc Amidase Inhibitors Bearing Diverse Metal Binding Groups. <i>Journal of Medicinal Chemistry</i> , 2002, 45, 4359-4370.	2.9	104
126	Eukaryotic Ribonuclease P: A Plurality of Ribonucleoprotein Enzymes. <i>Annual Review of Biochemistry</i> , 2002, 71, 165-189.	5.0	127

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127	The Affinity of Magnesium Binding Sites in the <i>Bacillus subtilis</i> RNase P \cdot Pre-tRNA Complex Is Enhanced by the Protein Subunit. <i>Biochemistry</i> , 2002, 41, 9545-9558.	1.2	87
128	Cloning, isolation and characterization of the <i>Thermotoga maritima</i> KDPG aldolase. <i>Bioorganic and Medicinal Chemistry</i> , 2002, 10, 545-550.	1.4	34
129	Site-Directed Mutagenesis of the Bacterial Metalloamidase UDP-(3-O-acyl)-N-acetylglucosamine Deacetylase (LpxC). Identification of the Zinc Binding Site. <i>Biochemistry</i> , 2001, 40, 514-523.	1.2	56
130	Linked Folding and Anion Binding of the <i>Bacillus subtilis</i> Ribonuclease P Protein. <i>Biochemistry</i> , 2001, 40, 2777-2789.	1.2	87
131	Thermodynamics of Metal Ion Binding. 1. Metal Ion Binding by Wild-Type Carbonic Anhydrase. <i>Biochemistry</i> , 2001, 40, 5338-5344.	1.2	71
132	Thermodynamics of Metal Ion Binding. 2. Metal Ion Binding by Carbonic Anhydrase Variants. <i>Biochemistry</i> , 2001, 40, 5345-5351.	1.2	42
133	The <i>Bacillus subtilis</i> RNase P holoenzyme contains two RNase P RNA and two RNase P protein subunits. <i>Rna</i> , 2001, 7, 233-241.	1.6	54
134	Fluorescence-based biosensing of zinc using carbonic anhydrase. <i>BioMetals</i> , 2001, 14, 205-222.	1.8	81
135	Directed Evolution of a New Catalytic Site in 2-Keto-3-Deoxy-6-Phosphogluconate Aldolase from <i>Escherichia coli</i> . <i>Structure</i> , 2001, 9, 1-9.	1.6	70
136	Function and Mechanism of Zinc Metalloenzymes. <i>Journal of Nutrition</i> , 2000, 130, 1437S-1446S.	1.3	828
137	Colorimetric and Fluorimetric Assays to Quantitate Micromolar Concentrations of Transition Metals. <i>Analytical Biochemistry</i> , 2000, 284, 307-315.	1.1	129
138	Ribonuclease P: a ribonucleoprotein enzyme. <i>Current Opinion in Chemical Biology</i> , 2000, 4, 553-558.	2.8	70
139	Fluorescence microscopy of stimulated Zn(II) release from organotypic cultures of mammalian hippocampus using a carbonic anhydrase-based biosensor system. <i>Journal of Neuroscience Methods</i> , 2000, 96, 35-45.	1.3	85
140	Mechanistic Studies of Rat Protein Farnesyltransferase Indicate an Associative Transition State. <i>Biochemistry</i> , 2000, 39, 2593-2602.	1.2	85
141	Contribution of Fluorine to Protein \cdot Ligand Affinity in the Binding of Fluoroaromatic Inhibitors to Carbonic Anhydrase II. <i>Journal of the American Chemical Society</i> , 2000, 122, 12125-12134.	6.6	136
142	Antibacterial Agents That Target Lipid A Biosynthesis in Gram-negative Bacteria. <i>Journal of Biological Chemistry</i> , 2000, 275, 11002-11009.	1.6	167
143	Role of Metals in the Reaction Catalyzed by Protein Farnesyltransferase. <i>Biochemistry</i> , 2000, 39, 12398-12405.	1.2	62
144	Conversion of Tyr361 \rightarrow Leu in Mammalian Protein Farnesyltransferase Impairs Product Release but Not Substrate Recognition. <i>Biochemistry</i> , 2000, 39, 13651-13659.	1.2	11

#	ARTICLE	IF	CITATIONS
145	Structural Influence of Hydrophobic Core Residues on Metal Binding and Specificity in Carbonic Anhydrase II. <i>Biochemistry</i> , 2000, 39, 13687-13694.	1.2	50
146	Effects of 5' Leader and 3' Trailer Structures on Pre-tRNA Processing by Nuclear RNase P. <i>Biochemistry</i> , 2000, 39, 9909-9916.	1.2	38
147	Balanced biosynthesis of major membrane components through regulated degradation of the committed enzyme of lipid A biosynthesis by the AAA protease FtsH (HflB) in <i>Escherichia coli</i> . <i>Molecular Microbiology</i> , 1999, 31, 833-844.	1.2	234
148	Selectivity and Sensitivity of Fluorescence Lifetime-Based Metal Ion Biosensing Using a Carbonic Anhydrase Transducer. <i>Analytical Biochemistry</i> , 1999, 267, 185-195.	1.1	43
149	Metal Binding Specificity in Carbonic Anhydrase Is Influenced by Conserved Hydrophobic Core Residues. <i>Biochemistry</i> , 1999, 38, 9054-9062.	1.2	113
150	UDP-3-O-(R-3-Hydroxymyristoyl)-N-acetylglucosamine Deacetylase of <i>Escherichia coli</i> Is a Zinc Metalloenzyme. <i>Biochemistry</i> , 1999, 38, 1902-1911.	1.2	132
151	Determination of Picomolar Concentrations of Metal Ions Using Fluorescence Anisotropy: A Biosensing with a Reagentless Enzyme Transducer. <i>Analytical Chemistry</i> , 1998, 70, 4717-4723.	3.2	86
152	Recognition of a Pre-tRNA Substrate by the <i>Bacillus subtilis</i> RNase P Holoenzyme. <i>Biochemistry</i> , 1998, 37, 15466-15473.	1.2	68
153	H-Ras Peptide and Protein Substrates Bind Protein Farnesyltransferase as an Ionized Thiolate. <i>Biochemistry</i> , 1998, 37, 15555-15562.	1.2	99
154	The Protein Component of <i>Bacillus subtilis</i> Ribonuclease P Increases Catalytic Efficiency by Enhancing Interactions with the 5' Leader Sequence of Pre-tRNA ^{Asp} . <i>Biochemistry</i> , 1998, 37, 9409-9416.	1.2	129
155	Protein Component of <i>Bacillus subtilis</i> RNase P Specifically Enhances the Affinity for Precursor-tRNA ^{Asp} . <i>Biochemistry</i> , 1998, 37, 2393-2400.	1.2	158
156	High-Level Expression of Rat Farnesyl:Protein Transferase in <i>Escherichia coli</i> as a Translationally Coupled Heterodimer. <i>Protein Expression and Purification</i> , 1998, 14, 395-402.	0.6	27
157	Expanded Dynamic Range of Free Zinc Ion Determination by Fluorescence Anisotropy. <i>Analytical Chemistry</i> , 1998, 70, 1749-1754.	3.2	62
158	Ribonuclease P Protein Structure: Evolutionary Origins in the Translational Apparatus. <i>Science</i> , 1998, 280, 752-755.	6.0	159
159	Determination of metal ions by fluorescence anisotropy exhibits a broad dynamic range. , 1998, , .		1
160	Selection of Carbonic Anhydrase Variants Displayed on Phage. <i>Journal of Biological Chemistry</i> , 1997, 272, 20364-20372.	1.6	59
161	Histidine α ' Carboxamide Ligand Substitutions in the Zinc Binding Site of Carbonic Anhydrase II Alter Metal Coordination Geometry but Retain Catalytic Activity. <i>Biochemistry</i> , 1997, 36, 15780-15791.	1.2	96
162	Reversal of the Hydrogen Bond to Zinc Ligand Histidine-119 Dramatically Diminishes Catalysis and Enhances Metal Equilibration Kinetics in Carbonic Anhydrase II. <i>Biochemistry</i> , 1996, 35, 3439-3446.	1.2	108

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163	Magnesium Ions Are Required by <i>Bacillus subtilis</i> Ribonuclease P RNA for both Binding and Cleaving Precursor tRNA ^{Asp} . <i>Biochemistry</i> , 1996, 35, 10493-10505.	1.2	121
164	Carbonic Anhydrase: Evolution of the Zinc Binding Site by Nature and by Design. <i>Accounts of Chemical Research</i> , 1996, 29, 331-339.	7.6	471
165	Fiber optic biosensor for Co(II) and Cu(II) based on fluorescence energy transfer with an enzyme transducer. <i>Biosensors and Bioelectronics</i> , 1996, 11, 557-564.	5.3	53
166	Hydrogen bond network in the metal binding site of carbonic anhydrase enhances zinc affinity and catalytic efficiency. <i>Journal of the American Chemical Society</i> , 1995, 117, 6831-6837.	6.6	182
167	Structural basis of inhibitor affinity to variants of human carbonic anhydrase II. <i>Biochemistry</i> , 1995, 34, 3981-3989.	1.2	77
168	A Kinetic Mechanism for Cleavage of Precursor tRNA ^{Asp} Catalyzed by the RNA Component of <i>Bacillus subtilis</i> Ribonuclease P. <i>Biochemistry</i> , 1994, 33, 10294-10304.	1.2	149
169	Functional Characterization of Human Carbonic Anhydrase II Variants with Altered Zinc Binding Sites. <i>Biochemistry</i> , 1994, 33, 15233-15240.	1.2	134
170	Engineering a cysteine ligand into the zinc binding site of human carbonic anhydrase II. <i>Biochemistry</i> , 1993, 32, 9896-9900.	1.2	68
171	Engineering the zinc binding site of human carbonic anhydrase II: Structure of the His-94. <i>Journal of the American Chemical Society</i> , 1993, 115, 12581-12582.	1.2	72
172	Redesigning the zinc binding site of human carbonic anhydrase II: structure of a His ² Asp-Zn ²⁺ metal coordination polyhedron. <i>Journal of the American Chemical Society</i> , 1993, 115, 12581-12582.	6.6	47
173	Insights into Enzymic Catalysis from Studies on Dihydrofolate Reductases. <i>Pteridines</i> , 1989, 1, 37-43.	0.5	3