Stephen W Ragsdale

List of Publications by Year
in descending order

179 papers	13,868 citations	26610 56 h-index	22808 112 g-index
191 all docs	191 docs citations	191 times ranked	11854 citing authors

#	Article	IF	Citations
1	Regulation of protein function and degradation by heme, heme responsive motifs, and CO. Critical Reviews in Biochemistry and Molecular Biology, 2022, 57, 16-47.	2.3	8
2	Not a â€œtheyâ€•but a â€œweâ€: The microbiome helps promote our well-being. Journal of Biological Chemistry, 2022, 298, 101511.	1.6	0
3	Heme oxygenase-2 (HO-2) binds and buffers labile ferric heme in human embryonic kidney cells. Journal of Biological Chemistry, 2022, 298, 101549.	1.6	10
4	XFEL serial crystallography reveals the room temperature structure of methyl-coenzyme M reductase. Journal of Inorganic Biochemistry, 2022, 230, 111768.	1.5	6
5	Efficient, Light-Driven Reduction of CO₂ to CO by a Carbon Monoxide Dehydrogenaseâ€“CdSe/CdS Nanorod Photosystem. Journal of Physical Chemistry Letters, 2022, 13, 5553-5556.	2.1	4
6	Negative-Stain Electron Microscopy Reveals Dramatic Structural Rearrangements in Ni-Fe-S-Dependent Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase. Structure, 2021, 29, 43-49.e3.	1.6	9
7	Nickelâ€“Sulfonate Mode of Substrate Binding for Forward and Reverse Reactions of Methyl-SCoM Reductase Suggest a Radical Mechanism Involving Long-Range Electron Transfer. Journal of the American Chemical Society, 2021, 143, 5481-5496.	6.6	12
8	Ferric heme as a CO/NO sensor in the nuclear receptor Rev-ErbÃŸ by coupling gas binding to electron transfer. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	19
9	Crystallographic Characterization of the Carbonylated A-Cluster in Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase. ACS Catalysis, 2020, 10, 9741-9746.	5.5	19
10	¹³C Electron Nuclear Double Resonance Spectroscopy Shows Acetyl-CoA Synthase Binds Two Substrate CO in Multiple Binding Modes and Reveals the Importance of a CO-Binding â€œAlcoveâ€. Journal of the American Chemical Society, 2020, 142, 15362-15370.	6.6	9
11	Heme oxygenase-2 is post-translationally regulated by heme occupancy in the catalytic site. Journal of Biological Chemistry, 2020, 295, 17227-17240.	1.6	24
12	Structure determination of the HgcAB complex using metagenome sequence data: insights into microbial mercury methylation. Communications Biology, 2020, 3, 320.	2.0	30
13	The heme-regulatory motifs of heme oxygenase-2 contribute to the transfer of heme to the catalytic site for degradation. Journal of Biological Chemistry, 2020, 295, 5177-5191.	1.6	16
14	Elusive microbe that consumes ethane found under the sea. Nature, 2019, 568, 40-41.	13.7	3
15	Oxygen and Conformation Dependent Protein Oxidation and Aggregation by Porphyrins in Hepatocytes and Light-Exposed Cells. Cellular and Molecular Gastroenterology and Hepatology, 2019, 8, 659-682.e1.	2.3	19
16	Kinetics of Enzymatic Mercury Methylation at Nanomolar Concentrations Catalyzed by HgcAB. Applied and Environmental Microbiology, 2019, 85, .	1.4	20
17	Dynamic and structural differences between heme oxygenase-1 and -2 are due to differences in their C-terminal regions. Journal of Biological Chemistry, 2019, 294, 8259-8272.	1.6	17
18	Fast and Selective Photoreduction of CO₂ to CO Catalyzed by a Complex of Carbon Monoxide Dehydrogenase, TiO₂, and Ag Nanoclusters. ACS Catalysis, 2018, 8, 2789-2795.	5.5	82

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19	Stealth reactions driving carbon fixation. Science, 2018, 359, 517-518.	6.0	10
20	Binding site for coenzyme A revealed in the structure of pyruvate:ferredoxin oxidoreductase from <i>Moorella thermoacetica</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3846-3851.	3.3	19
21	Redox Regulation of Heme Oxygenase-2 and the Transcription Factor, Rev-Erb, Through Heme Regulatory Motifs. Antioxidants and Redox Signaling, 2018, 29, 1841-1857.	2.5	23
22	An unlikely heme chaperone confirmed at last. Journal of Biological Chemistry, 2018, 293, 14569-14570.	1.6	8
23	Production and properties of enzymes that activate and produce carbon monoxide. Methods in Enzymology, 2018, 613, 297-324.	0.4	7
24	X-ray Absorption Spectroscopy Reveals an Organometallic Niâ€œC Bond in the CO-Treated Form of Acetyl-CoA Synthase. Biochemistry, 2017, 56, 1248-1260.	1.2	25
25	Properties of Intermediates in the Catalytic Cycle of Oxalate Oxidoreductase and Its Suicide Inactivation by Pyruvate. Biochemistry, 2017, 56, 2824-2835.	1.2	5
26	The heme-regulatory motif of nuclear receptor Rev-erbÎ² is a key mediator of heme and redox signaling in circadian rhythm maintenance and metabolism. Journal of Biological Chemistry, 2017, 292, 11280-11299.	1.6	33
27	Exploring Hydrogenotrophic Methanogenesis: a Genome Scale Metabolic Reconstruction of Methanococcus maripaludis. Journal of Bacteriology, 2016, 198, 3379-3390.	1.0	48
28	Targeting methanogenesis with a nitrooxypropanol bullet. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6100-6101.	3.3	3
29	The radical mechanism of biological methane synthesis by methyl-coenzyme M reductase. Science, 2016, 352, 953-958.	6.0	129
30	Deep-sea secrets of butane metabolism. Nature, 2016, 539, 367-368.	13.7	1
31	Protonation of the Hydroperoxo Intermediate of Cytochrome P450 2B4 Is Slower in the Presence of Cytochrome P450 Reductase Than in the Presence of Cytochrome b5. Biochemistry, 2016, 55, 6558-6567.	1.2	18
32	High Affinity Heme Binding to a Heme Regulatory Motif on the Nuclear Receptor Rev-erbÎ² Leads to Its Degradation and Indirectly Regulates Its Interaction with Nuclear Receptor Corepressor. Journal of Biological Chemistry, 2016, 291, 2196-2222.	1.6	45
33	One-carbon chemistry of oxalate oxidoreductase captured by X-ray crystallography. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 320-325.	3.3	13
34	Comparison of the Mechanisms of Heme Hydroxylation by Heme Oxygenases-1 and -2: Kinetic and Cryoreduction Studies. Biochemistry, 2016, 55, 62-68.	1.2	9
35	3 Evidence for Organometallic Intermediates in Bacterial Methane Formation Involving the Nickel Coenzyme F₄₃₀. , 2015, , 71-110.		0
36	Investigations by Protein Film Electrochemistry of Alternative Reactions of Nickel-Containing Carbon Monoxide Dehydrogenase. Journal of Physical Chemistry B, 2015, 119, 13690-13697.	1.2	30

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37	The C-Terminal Heme Regulatory Motifs of Heme Oxygenase-2 Are Redox-Regulated Heme Binding Sites. Biochemistry, 2015, 54, 2709-2718.	1.2	26
38	The Structure of an Oxalate Oxidoreductase Provides Insight into Microbial 2-Oxoacid Metabolism. Biochemistry, 2015, 54, 4112-4120.	1.2	15
39	Spectroscopic Studies Reveal That the Heme Regulatory Motifs of Heme Oxygenase-2 Are Dynamically Disordered and Exhibit Redox-Dependent Interaction with Heme. Biochemistry, 2015, 54, 2693-2708.	1.2	15
40	The Reaction Mechanism of Methyl-Coenzyme M Reductase. Journal of Biological Chemistry, 2015, 290, 9322-9334.	1.6	52
41	Dramatic Conformational Flexibility of Carbon Monoxide Dehydrogenase/Acetylâ€CoA Synthase Revealed by Electron Microscopy. FASEB Journal, 2015, 29, 573.37.	0.2	0
42	Investigations of the Efficient Electrocatalytic Interconversions of Carbon Dioxide and Carbon Monoxide by Nickel-Containing Carbon Monoxide Dehydrogenases. Metal Ions in Life Sciences, 2014, 14, 71-97.	2.8	13
43	Biochemistry of Methyl-Coenzyme M Reductase: The Nickel Metalloenzyme that Catalyzes the Final Step in Synthesis and the First Step in Anaerobic Oxidation of the Greenhouse Gas Methane. Metal Ions in Life Sciences, 2014, 14, 125-145.	2.8	30
44	Structure, Function, and Mechanism of the Nickel Metalloenzymes, CO Dehydrogenase, and Acetyl-CoA Synthase. Chemical Reviews, 2014, 114, 4149-4174.	23.0	470
45	Protein/Protein Interactions in the Mammalian Heme Degradation Pathway. Journal of Biological Chemistry, 2014, 289, 29836-29858.	1.6	29
46	Selective Visible-Light-Driven CO₂ Reduction on a p-Type Dye-Sensitized NiO Photocathode. Journal of the American Chemical Society, 2014, 136, 13518-13521.	6.6	97
47	Modulation of nuclear receptor function by cellular redox poise. Journal of Inorganic Biochemistry, 2014, 133, 92-103.	1.5	23
48	How Light-Harvesting Semiconductors Can Alter the Bias of Reversible Electrocatalysts in Favor of H₂ Production and CO₂ Reduction. Journal of the American Chemical Society, 2013, 135, 15026-15032.	6.6	77
49	Frontiers, Opportunities, and Challenges in Biochemical and Chemical Catalysis of CO₂ Fixation. Chemical Reviews, 2013, 113, 6621-6658.	23.0	1,786
50	A Unified Electrocatalytic Description of the Action of Inhibitors of Nickel Carbon Monoxide Dehydrogenase. Journal of the American Chemical Society, 2013, 135, 2198-2206.	6.6	60
51	Thiol/Disulfide Redox Switches as a Regulatory Mechanism in Heme-binding Proteins. Handbook of Porphyrin Science, 2013, , 31-54.	0.3	0
52	Investigations of Two Bidirectional Carbon Monoxide Dehydrogenases from <i>Carboxydothermus hydrogenoformans</i> by Protein Film Electrochemistry. ChemBioChem, 2013, 14, 1845-1851.	1.3	37
53	In vivo activation of methyl-coenzyme M reductase by carbon monoxide. Frontiers in Microbiology, 2013, 4, 69.	1.5	19
54	Crystallographic snapshots of metalloenzyme complexes involved in biological carbon dioxide sequestration. FASEB Journal, 2013, 27, 98.3.	0.2	0

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55	Conformational changes of the carbonâ€fixing enzyme CODH/ACS revealed by electron microscopy. FASEB Journal, 2013, 27, lb236.	0.2	0
56	Redox, haem and CO in enzymatic catalysis and regulation. Biochemical Society Transactions, 2012, 40, 501-507.	1.6	13
57	Visible light-driven CO₂reduction by enzyme coupled CdS nanocrystals. Chemical Communications, 2012, 48, 58-60.	2.2	184
58	Transient B₁₂-Dependent Methyltransferase Complexes Revealed by Small-Angle X-ray Scattering. Journal of the American Chemical Society, 2012, 134, 17945-17954.	6.6	18
59	Radical reactions of thiamin pyrophosphate in 2-oxoacid oxidoreductases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 1291-1298.	1.1	19
60	Visualizing molecular juggling within a B12-dependent methyltransferase complex. Nature, 2012, 484, 265-269.	13.7	77
61	Structural Analysis of a Ni-Methyl Species in Methyl-Coenzyme M Reductase from <i>Methanothermobacter marburgensis</i>. Journal of the American Chemical Society, 2011, 133, 5626-5628.	6.6	44
62	Evidence That Ferredoxin Interfaces with an Internal Redox Shuttle in Acetyl-CoA Synthase during Reductive Activation and Catalysis. Biochemistry, 2011, 50, 276-286.	1.2	26
63	CO2 photoreduction at enzyme-modified metal oxide nanoparticles. Energy and Environmental Science, 2011, 4, 2393.	15.6	155
64	Metal centers in the anaerobic microbial metabolism of CO and CO2. Metallomics, 2011, 3, 797.	1.0	67
65	How two amino acids become one. Nature, 2011, 471, 583-584.	13.7	5
66	Pseudo-4D triple resonance experiments to resolve HN overlap in the backbone assignment of unfolded proteins. Journal of Biomolecular NMR, 2011, 49, 69-74.	1.6	12
67	Preface. Methods in Enzymology, 2011, 495, xv-xvi.	0.4	0
68	Thiol-disulfide Redox Dependence of Heme Binding and Heme Ligand Switching in Nuclear Hormone Receptor Rev-erbÎ². Journal of Biological Chemistry, 2011, 286, 4392-4403.	1.6	85
69	Thiol/Disulfide Redox Switches in the Regulation of Heme Binding to Proteins. Antioxidants and Redox Signaling, 2011, 14, 1039-1047.	2.5	45
70	Metalâ€"carbon bonds in enzymes and cofactors. Coordination Chemistry Reviews, 2010, 254, 1948-1949.	9.5	3
71	Spectroscopic insights into axial ligation and active-site H-bonding in substrate-bound human heme oxygenase-2. Journal of Biological Inorganic Chemistry, 2010, 15, 1117-1127.	1.1	12
72	Expanding the Biological Periodic Table. Chemistry and Biology, 2010, 17, 793-794.	6.2	2

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73	Identification and Characterization of Oxalate Oxidoreductase, a Novel Thiamine Pyrophosphate-dependent 2-Oxoacid Oxidoreductase That Enables Anaerobic Growth on Oxalate. Journal of Biological Chemistry, 2010, 285, 40515-40524.	1.6	18
74	Identification of a Thiol/Disulfide Redox Switch in the Human BK Channel That Controls Its Affinity for Heme and CO. Journal of Biological Chemistry, 2010, 285, 20117-20127.	1.6	72
75	Infrared and EPR Spectroscopic Characterization of a Ni(I) Species Formed by Photolysis of a Catalytically Competent Ni(I)-CO Intermediate in the Acetyl-CoA Synthase Reaction. Biochemistry, 2010, 49, 7516-7523.	1.2	41
76	Efficient and Clean Photoreduction of CO₂ to CO by Enzyme-Modified TiO₂ Nanoparticles Using Visible Light. Journal of the American Chemical Society, 2010, 132, 2132-2133.	6.6	392
77	Structural Insight into Methyl-Coenzyme M Reductase Chemistry Using Coenzyme B Analogues,. Biochemistry, 2010, 49, 7683-7693.	1.2	55
78	Observation of Organometallic and Radical Intermediates Formed during the Reaction of Methyl-Coenzyme M Reductase with Bromoethanesulfonate. Biochemistry, 2010, 49, 6866-6876.	1.2	18
79	Detection of Organometallic and Radical Intermediates in the Catalytic Mechanism of Methyl-Coenzyme M Reductase Using the Natural Substrate Methyl-Coenzyme M and a Coenzyme B Substrate Analogue. Biochemistry, 2010, 49, 10902-10911.	1.2	43
80	Evidence for Organometallic Intermediates in Bacterial Methane Formation Involving the Nickel Coenzyme F430. Metal Ions in Life Sciences, 2010, , 71-110.	1.0	6
81	Catalysis by Microsomal Cytochrome P450 2B4 Proceeds via a â€œStable Hydroperoxoâ€•Intermediate Identified by Freeze Quench EPR. FASEB Journal, 2010, 24, 512.8.	0.2	0
82	Heme Regulatory Motifs in Heme Oxygenase-2 Form a Thiol/Disulfide Redox Switch That Responds to the Cellular Redox State. Journal of Biological Chemistry, 2009, 284, 20556-20561.	1.6	68
83	Waterâˆ'Gas Shift Reaction Catalyzed by Redox Enzymes on Conducting Graphite Platelets. Journal of the American Chemical Society, 2009, 131, 14154-14155.	6.6	55
84	Geometric and Electronic Structures of the Ni^I and Methylâˆ'Ni^{III} Intermediates of Methyl-Coenzyme M Reductase. Biochemistry, 2009, 48, 3146-3156.	1.2	47
85	Nickel-based Enzyme Systems. Journal of Biological Chemistry, 2009, 284, 18571-18575.	1.6	288
86	Crystallographic Snapshots of Cyanide- and Water-Bound C-Clusters from Bifunctional Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase,. Biochemistry, 2009, 48, 7432-7440.	1.2	70
87	Acetogenesis and the Woodâ€“Ljungdahl pathway of CO2 fixation. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2008, 1784, 1873-1898.	1.1	971
88	<i>Enzymology of the Woodâ€“Ljungdahl Pathway of Acetogenesis</i>. Annals of the New York Academy of Sciences, 2008, 1125, 129-136.	1.8	285
89	The complete genome sequence of<i>Moorella thermoacetica</i>(f.<i>Clostridium) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 10	1.8	256
90	Catalysis of Methyl Group Transfers Involving Tetrahydrofolate and B12. Vitamins and Hormones, 2008, 79, 293-324.	0.7	52

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91	¹³C NMR Characterization of an Exchange Reaction between CO and CO₂ Catalyzed by Carbon Monoxide Dehydrogenase. Biochemistry, 2008, 47, 6770-6781.	1.2	52
92	Characterization of the Thioether Product Formed from the Thiolytic Cleavage of the Alkylâˆ'Nickel Bond in Methyl-Coenzyme M Reductase. Biochemistry, 2008, 47, 2661-2667.	1.2	26
93	Dual Roles of an Essential Cysteine Residue in Activity of a Redox-regulated Bacterial Transcriptional Activator. Journal of Biological Chemistry, 2008, 283, 28721-28728.	1.6	13
94	Pulse-Chase Studies of the Synthesis of Acetyl-CoA by Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase. Journal of Biological Chemistry, 2008, 283, 8384-8394.	1.6	50
95	Xenon in and at the End of the Tunnel of Bifunctional Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase[,]. Biochemistry, 2008, 47, 3474-3483.	1.2	116
96	Comparison of Apo- and Heme-bound Crystal Structures of a Truncated Human Heme Oxygenase-2. Journal of Biological Chemistry, 2007, 282, 37624-37631.	1.6	56
97	Evidence That the Heme Regulatory Motifs in Heme Oxygenase-2 Serve as a Thiol/Disulfide Redox Switch Regulating Heme Binding*. Journal of Biological Chemistry, 2007, 282, 21056-21067.	1.6	74
98	Structural and Kinetic Evidence for an Extended Hydrogen-bonding Network in Catalysis of Methyl Group Transfer. Journal of Biological Chemistry, 2007, 282, 6609-6618.	1.6	39
99	Characterization of Alkyl-Nickel Adducts Generated by Reaction of Methyl-Coenzyme M Reductase with Brominated Acids. Biochemistry, 2007, 46, 11969-11978.	1.2	35
100	Biochemical and Spectroscopic Studies of the Electronic Structure and Reactivity of a Methylâˆ'Ni Species Formed on Methyl-Coenzyme M Reductase. Journal of the American Chemical Society, 2007, 129, 11030-11032.	6.6	65
101	Nickel and the carbon cycle. Journal of Inorganic Biochemistry, 2007, 101, 1657-1666.	1.5	153
102	Rapid and Efficient Electrocatalytic CO₂/CO Interconversions by <i>Carboxydothermus </i><i>hydrogenoformans</i> CO Dehydrogenase I on an Electrode. Journal of the American Chemical Society, 2007, 129, 10328-10329.	6.6	181
103	Metals and Their Scaffolds To Promote Difficult Enzymatic Reactions. Chemical Reviews, 2006, 106, 3317-3337.	23.0	177
104	Spectroscopic Studies of the Corrinoid/Ironâ€"Sulfur Protein fromMoorella thermoacetica. Journal of the American Chemical Society, 2006, 128, 5010-5020.	6.6	51
105	Spectroscopic and Computational Studies of Reduction of the Metal versus the Tetrapyrrole Ring of Coenzyme F430from Methyl-Coenzyme M Reductaseâ€. Biochemistry, 2006, 45, 11915-11933.	1.2	10
106	Pulsed Electron Paramagnetic Resonance Experiments Identify the Paramagnetic Intermediates in the Pyruvate Ferredoxin Oxidoreductase Catalytic Cycle. Journal of the American Chemical Society, 2006, 128, 3888-3889.	6.6	35
107	EPR Spectroscopic and Computational Characterization of the Hydroxyethylidene-Thiamine Pyrophosphate Radical Intermediate of Pyruvate:Ferredoxin Oxidoreductaseâ€. Biochemistry, 2006, 45, 7122-7131.	1.2	66
108	CprK Crystal Structures Reveal Mechanism for Transcriptional Control of Halorespiration. Journal of Biological Chemistry, 2006, 281, 28318-28325.	1.6	30

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109	Spectroscopic and Kinetic Studies of the Reaction of Bromopropanesulfonate with Methyl-coenzyme M Reductase. Journal of Biological Chemistry, 2006, 281, 34663-34676.	1.6	30
110	Transcriptional Activation of Dehalorespiration. Journal of Biological Chemistry, 2006, 281, 26382-26390.	1.6	28
111	EPR and Infrared Spectroscopic Evidence That a Kinetically Competent Paramagnetic Intermediate is Formed When Acetyl-Coenzyme A Synthase Reacts with CO. Journal of the American Chemical Society, 2005, 127, 13500-13501.	6.6	60
112	Mechanism of 4-(Î²-D-Ribofuranosyl)aminobenzene 5â€²-Phosphate Synthase, a Key Enzyme in the Methanopterin Biosynthetic Pathway. Journal of Biological Chemistry, 2004, 279, 39389-39395.	1.6	19
113	Regulation of Anaerobic Dehalorespiration by the Transcriptional Activator CprK. Journal of Biological Chemistry, 2004, 279, 49910-49918.	1.6	41
114	Life with Carbon Monoxide. Critical Reviews in Biochemistry and Molecular Biology, 2004, 39, 165-195.	2.3	346
115	Spectroscopic and computational characterization of the nickel-containing F430 cofactor of methyl-coenzyme M reductase. Journal of Biological Inorganic Chemistry, 2004, 9, 77-89.	1.1	26
116	The metalloclusters of carbon monoxide dehydrogenase/acetyl-CoA synthase: a story in pictures. Journal of Biological Inorganic Chemistry, 2004, 9, 511-515.	1.1	112
117	Evidence That NiNi Acetyl-CoA Synthase Is Active and That the CuNi Enzyme Is Notâ€. Biochemistry, 2004, 43, 3944-3955.	1.2	83
118	Nickel Oxidation States of F430Cofactor in Methyl-Coenzyme M Reductase. Journal of the American Chemical Society, 2004, 126, 4068-4069.	6.6	53
119	Pyruvate Ferredoxin Oxidoreductase and Its Radical Intermediate. Chemical Reviews, 2003, 103, 2333-2346.	23.0	205
120	Rapid Ligand Exchange in the MCRred1 Form of Methyl-coenzyme M Reductase. Journal of the American Chemical Society, 2003, 125, 2436-2443.	6.6	14
121	The Many Faces of Vitamin B12: Catalysis by Cobalamin-Dependent Enzymes. Annual Review of Biochemistry, 2003, 72, 209-247.	5.0	672
122	Infrared Studies of Carbon Monoxide Binding to Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase from Moorella thermoacetica. Biochemistry, 2003, 42, 14822-14830.	1.2	51
123	Functional copper at the acetyl-CoA synthase active site. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3689-3694.	3.3	69
124	Targeting Methanopterin Biosynthesis ToInhibitMethanogenesis. Applied and Environmental Microbiology, 2003, 69, 7236-7241.	1.4	27
125	Rapid Kinetic Studies of Acetyl-CoA Synthesis:Â Evidence Supporting the Catalytic Intermediacy of a Paramagnetic NiFeC Species in the Autotrophic Woodâˆ'Ljungdahl Pathwayâ€. Biochemistry, 2002, 41, 1807-1819.	1.2	89
126	A Ni-Fe-Cu Center in a Bifunctional Carbon Monoxide Dehydrogenase/ Acetyl-CoA Synthase. Science, 2002, 298, 567-572.	6.0	519

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127	The Roles of Coenzyme A in the Pyruvate:Ferredoxin Oxidoreductase Reaction Mechanism:Â Rate Enhancement of Electron Transfer from a Radical Intermediate to an Ironâˆ'Sulfur Clusterâ€. Biochemistry, 2002, 41, 9921-9937.	1.2	50
128	X-ray Absorption and Resonance Raman Studies of Methyl-Coenzyme M Reductase Indicating That Ligand Exchange and Macrocycle Reduction Accompany Reductive Activationâ€. Journal of the American Chemical Society, 2002, 124, 13242-13256.	6.6	48
129	Acetyl Coenzyme A Synthesis from Unnatural Methylated Corrinoids:Â Requirement for â€œBase-Offâ€• Coordination at Cobalt. Journal of the American Chemical Society, 2001, 123, 1786-1787.	6.6	28
130	Cryoreduction of Methyl-Coenzyme M Reductase:Â EPR Characterization of Forms, MCRox1and MCRred1. Journal of the American Chemical Society, 2001, 123, 5853-5860.	6.6	61
131	Mechanistic Studies of Methane Biogenesis by Methyl-Coenzyme M Reductase:Â Evidence that Coenzyme B Participates in Cleaving the Câˆ'S Bond of Methyl-Coenzyme Mâ€. Biochemistry, 2001, 40, 12875-12885.	1.2	64
132	Redox Centers of 4-Hydroxybenzoyl-CoA Reductase, a Member of the Xanthine Oxidase Family of Molybdenum-containing Enzymes. Journal of Biological Chemistry, 2001, 276, 47853-47862.	1.6	37
133	Characterization of the Intramolecular Electron Transfer Pathway from 2-Hydroxyphenazine to the Heterodisulfide Reductase fromMethanosarcina thermophila. Journal of Biological Chemistry, 2001, 276, 2432-2439.	1.6	31
134	Characterization of the B12- and Iron-Sulfur-containing Reductive Dehalogenase fromDesulfitobacterium chlororespirans. Journal of Biological Chemistry, 2001, 276, 40991-40997.	1.6	77
135	Characterization of a Three-Component Vanillate O -Demethylase from Moorella thermoacetica. Journal of Bacteriology, 2001, 183, 3276-3281.	1.0	89
136	Evidence for Intersubunit Communication during Acetyl-CoA Cleavage by the Multienzyme CO Dehydrogenase/Acetyl-CoA Synthase Complex from Methanosarcina thermophila. Journal of Biological Chemistry, 2000, 275, 4699-4707.	1.6	23
137	Crystal structure of a methyltetrahydrofolate- and corrinoid-dependent methyltransferase. Structure, 2000, 8, 817-830.	1.6	76
138	The Role of Pyruvate Ferredoxin Oxidoreductase in Pyruvate Synthesis during Autotrophic Growth by the Wood-Ljungdahl Pathway. Journal of Biological Chemistry, 2000, 275, 28494-28499.	1.6	162
139	Channeling of Carbon Monoxide during Anaerobic Carbon Dioxide Fixationâ€. Biochemistry, 2000, 39, 1274-1277.	1.2	89
140	On the Assignment of Nickel Oxidation States of the Ox1, Ox2 Forms of Methylâˆ'Coenzyme M Reductase. Journal of the American Chemical Society, 2000, 122, 182-183.	6.6	64
141	The Role of an Iron-Sulfur Cluster in an Enzymatic Methylation Reaction. Journal of Biological Chemistry, 1999, 274, 11513-11518.	1.6	63
142	ENDOR Studies of Pyruvate:Ferredoxin Oxidoreductase Reaction Intermediates. Journal of the American Chemical Society, 1999, 121, 3724-3729.	6.6	10
143	Binding of (6R,S)-Methyltetrahydrofolate to Methyltransferase fromClostridium thermoaceticum:Â Role of Protonation of Methyltetrahydrofolate in the Mechanism of Methyl Transferâ€. Biochemistry, 1999, 38, 5736-5745.	1.2	22
144	Mechanism of Transfer of the Methyl Group from (6S)-Methyltetrahydrofolate to the Corrinoid/Ironâˆ'Sulfur Protein Catalyzed by the Methyltransferase fromClostridium thermoaceticum:Â A Key Step in the Woodâˆ'Ljungdahl Pathway of Acetyl-CoA Synthesisâ€. Biochemistry, 1999, 38, 5728-5735.	1.2	34

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145	Nickelâ€"Ironâ€"Sulfur Active Sites: Hydrogenase and Co Dehydrogenase. Advances in Inorganic Chemistry, 1999, 47, 283-333.	0.4	55
146	Nitrate-Dependent Regulation of Acetate Biosynthesis and Nitrate Respiration by <i>Clostridium thermoaceticum</i>. Journal of Bacteriology, 1999, 181, 1489-1495.	1.0	34
147	Nickel biochemistry. Current Opinion in Chemical Biology, 1998, 2, 208-215.	2.8	109
148	The F420H2:heterodisulfide oxidoreductase system fromMethanosarcinaspecies. FEBS Letters, 1998, 428, 295-298.	1.3	41
149	Activation of Methyl-SCoM Reductase to High Specific Activity after Treatment of Whole Cells with Sodium Sulfideâ€. Biochemistry, 1998, 37, 2639-2647.	1.2	63
150	Role of the [4Fe-4S] Cluster in Reductive Activation of the Cobalt Center of the Corrinoid Ironâ˜'Sulfur Protein from Clostridium thermoaceticum during Acetate Biosynthesis. Biochemistry, 1998, 37, 5689-5698.	1.2	66
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