

Wolfgang Buckel

List of Publications by Year in descending order

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171
papers

12,372
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28274

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318
times ranked

9336
citing authors

#	ARTICLE	IF	CITATIONS
1	Glutamate mutase and 2-methyleneglutarate mutase. <i>Methods in Enzymology</i> , 2022, 668, 285-307.	1.0	0
2	Modulations of the reduction potentials of flavin-based electron bifurcation complexes and semiquinone stabilities are key to control directional electron flow. <i>FEBS Journal</i> , 2021, 288, 1008-1026.	4.7	13
3	Rapid kinetics reveal surprising flavin chemistry in bifurcating electron transfer flavoprotein from <i>Acidaminococcus fermentans</i> . <i>Journal of Biological Chemistry</i> , 2021, 296, 100124.	3.4	9
4	Spectral deconvolution of redox species in the crotonyl-CoA-dependent NADH:ferredoxin oxidoreductase from <i>Megasphaera elsdenii</i> . A flavin-dependent bifurcating enzyme. <i>Archives of Biochemistry and Biophysics</i> , 2021, 701, 108793.	3.0	10
5	Flavins in the electron bifurcation process. <i>Archives of Biochemistry and Biophysics</i> , 2021, 701, 108796.	3.0	22
6	Energy Conservation in Fermentations of Anaerobic Bacteria. <i>Frontiers in Microbiology</i> , 2021, 12, 703525.	3.5	29
7	Kinetic Studies of a Coenzyme B12 Dependent Reaction Catalyzed by Glutamate Mutase from <i>Clostridium cochlearium</i> . <i>Advances in Enzyme Research</i> , 2021, 09, 72-90.	1.6	1
8	Physiological limits to life in anoxic subseafloor sediment. <i>FEMS Microbiology Reviews</i> , 2020, 44, 219-231.	8.6	27
9	Molecular and Low-Resolution Structural Characterization of the Na ⁺ -Translocating Glutaconyl-CoA Decarboxylase From <i>Clostridium symbiosum</i> . <i>Frontiers in Microbiology</i> , 2020, 11, 480.	3.5	4
10	Structural and Functional Characterization of an Electron Transfer Flavoprotein Involved in Toluene Degradation in Strictly Anaerobic Bacteria. <i>Journal of Bacteriology</i> , 2019, 201, .	2.2	15
11	Formation of 3-hydroxyglutaric acid in glutaric aciduria type I: in vitro participation of medium chain acyl-CoA dehydrogenase. <i>JIMD Reports</i> , 2019, 47, 30-34.	1.5	8
12	Enzymatic Reactions Involving Ketyls: From a Chemical Curiosity to a General Biochemical Mechanism. <i>Biochemistry</i> , 2019, 58, 5221-5233.	2.5	17
13	Flavin-Based Electron Bifurcation, A New Mechanism of Biological Energy Coupling. <i>Chemical Reviews</i> , 2018, 118, 3862-3886.	47.7	280
14	Flavin-Based Electron Bifurcation, Ferredoxin, Flavodoxin, and Anaerobic Respiration With Protons (Ech) or NAD ⁺ (Rnf) as Electron Acceptors: A Historical Review. <i>Frontiers in Microbiology</i> , 2018, 9, 401.	3.5	281
15	The semiquinone swing in the bifurcating electron transferring flavoprotein/butyryl-CoA dehydrogenase complex from <i>Clostridium difficile</i> . <i>Nature Communications</i> , 2017, 8, 1577.	12.8	106
16	<i>Ustilago maydis</i> produces itaconic acid via the unusual intermediate trans-aconitate. <i>Microbial Biotechnology</i> , 2016, 9, 116-126.	4.2	107
17	Complete Genome Sequence of the Amino Acid-Fermenting <i>Clostridium propionicum</i> X2 (DSM) Tj ETQq1 10.784314.18 BT / Over	0.8	18
18	Elucidating the Stereochemistry of Enzymatic Benzylsuccinate Synthesis with Chirally Labeled Toluene. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11664-11667.	13.8	12

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19	Stereochemischer Verlauf der enzymatischen Synthese von Benzylsuccinat mit chiral markiertem Toluol. <i>Angewandte Chemie</i> , 2016, 128, 11836-11839.	2.0	0
20	Reduction of Flavodoxin by Electron Bifurcation and Sodium Ion-dependent Reoxidation by NAD ⁺ Catalyzed by Ferredoxin-NAD ⁺ Reductase (Rnf). <i>Journal of Biological Chemistry</i> , 2016, 291, 11993-12002.	3.4	56
21	Chain Elongation with Reactor Microbiomes: Open-Culture Biotechnology To Produce Biochemicals. <i>Environmental Science & Technology</i> , 2016, 50, 2796-2810.	10.0	426
22	Fermentative Cyclohexane Carboxylate Formation in <i>Syntrophus aciditrophicus</i> . <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 165-179.	1.0	11
23	Anaerobic Microbial Degradation of Hydrocarbons: From Enzymatic Reactions to the Environment. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 5-28.	1.0	615
24	Structure and Function of 4-Hydroxyphenylacetate Decarboxylase and Its Cognate Activating Enzyme. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 76-91.	1.0	18
25	Structure and Function of Benzylsuccinate Synthase and Related Fumarate-Adding Glycyl Radical Enzymes. <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 29-44.	1.0	45
26	Metabolism of Hydrocarbons in <i>Alkane-Utilizing Anaerobic Bacteria</i> . <i>Journal of Molecular Microbiology and Biotechnology</i> , 2016, 26, 138-151.	1.0	86
27	On the Origin of Heterotrophy. <i>Trends in Microbiology</i> , 2016, 24, 12-25.	7.7	112
28	Reduction of ferredoxin or oxygen by flavin-based electron bifurcation in <i>Megasphaera elsdenii</i> . <i>FEBS Journal</i> , 2015, 282, 3149-3160.	4.7	52
29	Substrate-Induced Radical Formation in 4-Hydroxybutyryl Coenzyme A Dehydratase from <i>Clostridium aminobutyricum</i> . <i>Applied and Environmental Microbiology</i> , 2015, 81, 1071-1084.	3.1	13
30	Two Pathways for Glutamate Biosynthesis in the Syntrophic Bacterium <i>Syntrophus aciditrophicus</i> . <i>Applied and Environmental Microbiology</i> , 2015, 81, 8434-8444.	3.1	6
31	Molecular Dynamics Simulations and Structure-Guided Mutagenesis Provide Insight into the Architecture of the Catalytic Core of the Ectoine Hydroxylase. <i>Journal of Molecular Biology</i> , 2014, 426, 586-600.	4.2	43
32	Studies on the Mechanism of Electron Bifurcation Catalyzed by Electron Transferring Flavoprotein (Etf) and Butyryl-CoA Dehydrogenase (Bcd) of <i>Acidaminococcus fermentans</i> . <i>Journal of Biological Chemistry</i> , 2014, 289, 5145-5157.	3.4	126
33	The Benzoyl-Coenzyme A Reductase and 2-Hydroxyacyl-Coenzyme A Dehydratase Radical Enzyme Family. <i>ChemBioChem</i> , 2014, 15, 2188-2194.	2.6	40
34	High resolution crystal structure of <i>Clostridium propionicum</i> α -alanyl-CoA:ammonia lyase, a new member of the "hot dog fold" protein superfamily. <i>Proteins: Structure, Function and Bioinformatics</i> , 2014, 82, 2041-2053.	2.6	6
35	Sir John Warcup Cornforth (1917-2013). <i>Angewandte Chemie</i> , 2014, 126, 3616-3616.	2.0	0
36	Sir John Warcup Cornforth (1917-2013). <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3546-3546.	13.8	0

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37	Bacterial Methanogenesis Proceeds by a Radical Mechanism. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8507-8509.	13.8	6
38	An Electron-bifurcating Caffeoyl-CoA Reductase. <i>Journal of Biological Chemistry</i> , 2013, 288, 11304-11311.	3.4	86
39	Identification and Characterization of <i>Rei</i> -Citrate Synthase in <i>Syntrophus aciditrophicus</i> . <i>Journal of Bacteriology</i> , 2013, 195, 1689-1696.	2.2	12
40	Energy conservation via electron bifurcating ferredoxin reduction and proton/Na ⁺ translocating ferredoxin oxidation. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2013, 1827, 94-113.	1.0	663
41	Engineering <i>Escherichia coli</i> with acrylate pathway genes for propionic acid synthesis and its impact on mixed-acid fermentation. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 1191-1200.	3.6	45
42	Phenylalanine catabolism in <i>Archaeoglobus fulgidus</i> VC-16. <i>Archives of Microbiology</i> , 2013, 195, 781-797.	2.2	9
43	Caffeate Respiration in the Acetogenic Bacterium <i>Acetobacterium woodii</i> : a Coenzyme A Loop Saves Energy for Caffeate Activation. <i>Applied and Environmental Microbiology</i> , 2013, 79, 1942-1947.	3.1	30
44	Effect of an Oxygen-Tolerant Bifurcating Butyryl Coenzyme A Dehydrogenase/Electron-Transferring Flavoprotein Complex from <i>Clostridium difficile</i> on Butyrate Production in <i>Escherichia coli</i> . <i>Journal of Bacteriology</i> , 2013, 195, 3704-3713.	2.2	66
45	Enzymatic assay for quantitative analysis of (d)-2-hydroxyglutarate. <i>Acta Neuropathologica</i> , 2012, 124, 883-891.	7.7	58
46	Experimental Study of Hydrogen Bonding Potentially Stabilizing the 5'-Deoxyadenosyl Radical from Coenzyme B ₁₂ . <i>Chemistry - A European Journal</i> , 2012, 18, 16114-16122.	3.3	16
47	Development of a satisfactory and general continuous assay for aminotransferases by coupling with (R)-2-hydroxyglutarate dehydrogenase. <i>Analytical Biochemistry</i> , 2012, 431, 127-131.	2.4	15
48	Hydrogen Bonds Guide the Short-Lived 5'-Deoxyadenosyl Radical to the Place of Action. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9974-9976.	13.8	17
49	Chemistry and Bioactivity of an Artificial Adenosylpeptide B ₁₂ Cofactor. <i>ChemBioChem</i> , 2012, 13, 2052-2055.	2.6	18
50	The single NqrB and NqrC subunits in the Na ⁺ -translocating NADH: Quinone oxidoreductase (Na ⁺ -NQR) from <i>Vibrio cholerae</i> each carry one covalently attached FMN. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 1817-1822.	1.0	25
51	Enzyme catalyzed radical dehydrations of hydroxy acids. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2012, 1824, 1278-1290.	2.3	25
52	On the ATP-Dependent Activation of the Radical Enzyme (<i>R</i>)-2-Hydroxyisocaproyl-CoA Dehydratase. <i>Biochemistry</i> , 2012, 51, 6609-6622.	2.5	20
53	Stereochemical Investigations Reveal the Mechanism of the Bacterial Activation of <i>n</i> -Alkanes without Oxygen. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1334-1338.	13.8	63
54	Crystal structure of the complex between 4-hydroxybutyrate CoA-transferase from <i>Clostridium aminobutyricum</i> and CoA. <i>Archives of Microbiology</i> , 2012, 194, 157-166.	2.2	3

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55	Structural Basis for Reductive Radical Formation and Electron Recycling in (<i>R</i>)-2-Hydroxyisocaproyl-CoA Dehydratase. Journal of the American Chemical Society, 2011, 133, 4342-4347.	13.7	51
56	Structural Basis for a Kolbe-Type Decarboxylation Catalyzed by a Glycyl Radical Enzyme. Journal of the American Chemical Society, 2011, 133, 14666-14674.	13.7	56
57	Substrate Specificity of 2-Hydroxyglutaryl-CoA Dehydratase from <i>Clostridium symbiosum</i> : Toward a Bio-Based Production of Adipic Acid. Biochemistry, 2011, 50, 3540-3550.	2.5	40
58	Dual Role of S-Adenosylmethionine (SAM) in the Methylation of sp ² -Hybridized Electrophilic Carbons. Angewandte Chemie - International Edition, 2011, 50, 10492-10494.	13.8	17
59	Production of Glutaconic Acid in a Recombinant <i>Escherichia coli</i> Strain. Applied and Environmental Microbiology, 2011, 77, 320-322.	3.1	37
60	A Complex of 2-Hydroxyisocaproyl-Coenzyme A Dehydratase and its Activator from <i>Clostridium difficile</i> Stabilized by Aluminium Tetrafluoride-Adenosine Diphosphate. ChemPhysChem, 2010, 11, 1307-1312.	2.1	10
61	On the thermodynamic equilibrium between (<i>R</i>)-2-hydroxyacyl-CoA and 2-enoyl-CoA. FEBS Journal, 2010, 277, 1738-1746.	4.7	24
62	An Asymmetric Model for Na ⁺ -translocating Glutaconyl-CoA Decarboxylases. Journal of Biological Chemistry, 2009, 284, 28401-28409.	3.4	12
63	Crystal structure of 4-hydroxybutyrate CoA-transferase from <i>Clostridium aminobutyricum</i> . Biological Chemistry, 2009, 390, 1251-1263.	2.5	14
64	Radical and Electron Recycling in Catalysis. Angewandte Chemie - International Edition, 2009, 48, 6779-6787.	13.8	50
65	Crystal Structure and Putative Mechanism of 3-Methylitaconate- ¹³ C-isomerase from <i>Eubacterium barkeri</i> . Journal of Molecular Biology, 2009, 391, 609-620.	4.2	12
66	Spectroscopic evidence for an all-ferrous [4Fe-4S]0 cluster in the superreduced activator of 2-hydroxyglutaryl-CoA dehydratase from <i>Acidaminococcus fermentans</i> . Journal of Biological Inorganic Chemistry, 2008, 13, 563-574.	2.6	47
67	The Complete Stereochemistry of the Enzymatic Dehydration of 4-Hydroxybutyryl Coenzyme A to Crotonyl Coenzyme A. Angewandte Chemie - International Edition, 2008, 47, 3254-3257.	13.8	20
68	An allylic ketyl radical intermediate in clostridial amino-acid fermentation. Nature, 2008, 452, 239-242.	27.8	63
69	Methanogenic archaea: ecologically relevant differences in energy conservation. Nature Reviews Microbiology, 2008, 6, 579-591.	28.6	1,674
70	Response to Comment on "A 3-Hydroxypropionate/4-Hydroxybutyrate Autotrophic Carbon Dioxide Assimilation Pathway in Archaea". Science, 2008, 321, 342-342.	12.6	5
71	The genome of <i>Clostridium kluyveri</i> , a strict anaerobe with unique metabolic features. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2128-2133.	7.1	409
72	Energy Conservation via Electron-Transferring Flavoprotein in Anaerobic Bacteria. Journal of Bacteriology, 2008, 190, 784-791.	2.2	369

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73	Coupled Ferredoxin and Crotonyl Coenzyme A (CoA) Reduction with NADH Catalyzed by the Butyryl-CoA Dehydrogenase/Etf Complex from <i>Clostridium kluyveri</i> . Journal of Bacteriology, 2008, 190, 843-850.	2.2	379
74	Dissection of the Caffeate Respiratory Chain in the Acetogen <i>Acetobacterium woodii</i> : Identification of an Rnf-Type NADH Dehydrogenase as a Potential Coupling Site. Journal of Bacteriology, 2007, 189, 8145-8153.	2.2	65
75	A 3-Hydroxypropionate/4-Hydroxybutyrate Autotrophic Carbon Dioxide Assimilation Pathway in Archaea. Science, 2007, 318, 1782-1786.	12.6	534
76	ATP- and redox-induced conformational changes in the activator of the radical enzyme 2-hydroxyisocaproyl-CoA dehydratase. Comptes Rendus Chimie, 2007, 10, 742-747.	0.5	12
77	Radical Enzymes in Anaerobes. Annual Review of Microbiology, 2006, 60, 27-49.	7.3	170
78	Biochemical characterization of human 3-methylglutaconyl-CoA hydratase and its role in leucine metabolism. FEBS Journal, 2006, 273, 2012-2022.	4.7	36
79	3-Methylglutaconyl-CoA hydratase from <i>Acinetobacter</i> sp. Archives of Microbiology, 2006, 185, 297-306.	2.2	7
80	Stabilisation of Methylene Radicals by Cob(II)alamin in Coenzyme B12 Dependent Mutases. Chemistry - A European Journal, 2006, 12, 352-362.	3.3	67
81	Mechanism-Based Inactivation of Coenzyme B12-Dependent 2-Methyleneglutarate Mutase by (Z)-Glutaconate and Buta-1,3-diene-2,3-dicarboxylate. European Journal of Inorganic Chemistry, 2006, 2006, 3622-3626.	2.0	9
82	Characterization of (R)-2-Hydroxyisocaproate Dehydrogenase and a Family III Coenzyme A Transferase Involved in Reduction of l-Leucine to Isocaproate by <i>Clostridium difficile</i> . Applied and Environmental Microbiology, 2006, 72, 6062-6069.	3.1	77
83	Structural basis for stereospecific catalysis in NAD ⁺ -dependent (R)-2-hydroxyglutarate dehydrogenase from <i>Acidaminococcus fermentans</i> . FEBS Journal, 2005, 272, 269-281.	4.7	23
84	On the Road to Bioremediation of Dioxin. Chemistry and Biology, 2005, 12, 723-724.	6.0	4
85	Synthesis of 13C-labeled Î ³ -hydroxybutyrates for EPR studies with 4-hydroxybutyryl-CoA dehydratase. Bioorganic Chemistry, 2005, 33, 53-66.	4.1	19
86	2-Hydroxyisocaproyl-CoA dehydratase and its activator from <i>Clostridium difficile</i> . FEBS Journal, 2005, 272, 550-561.	4.7	61
87	Two beta-alanyl-CoA:ammonia lyases in <i>Clostridium propionicum</i> . FEBS Journal, 2005, 272, 813-821.	4.7	33
88	Sodium Ion Pumps and Hydrogen Production in Glutamate Fermenting Anaerobic Bacteria. Journal of Molecular Microbiology and Biotechnology, 2005, 10, 105-119.	1.0	85
89	Highlight: Radicals in Enzymatic Catalysis. Biological Chemistry, 2005, 386, 949-950.	2.5	2
90	Radical-mediated dehydration reactions in anaerobic bacteria. Biological Chemistry, 2005, 386, 951-959.	2.5	21

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91	Searching for Intermediates in the Carbon Skeleton Rearrangement of 2-Methyleneglutarate to (R)-3-Methylitaconate Catalyzed by Coenzyme B12-Dependent 2-Methyleneglutarate Mutase from <i>Eubacterium barkeri</i> . <i>Biochemistry</i> , 2005, 44, 10541-10551.	2.5	21
92	Poster Summaries. , 2005, , 95-107.		0
93	Crystal structure of 4-hydroxybutyryl-CoA dehydratase: Radical catalysis involving a [4Fe-4S] cluster and flavin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 15645-15649.	7.1	80
94	On the mechanism of action of the antifungal agent propionate. <i>FEBS Journal</i> , 2004, 271, 3227-3241.	0.2	163
95	Dehydration of (<i>R</i>)-2-hydroxyacyl-CoA to enoyl-CoA in the fermentation of \pm -amino acids by anaerobic bacteria. <i>FEMS Microbiology Reviews</i> , 2004, 28, 455-468.	8.6	92
96	ATP-driven electron transfer in enzymatic radical reactions. <i>Current Opinion in Chemical Biology</i> , 2004, 8, 462-467.	6.1	52
97	Stereochemistry of hydrogen removal from the ϵ -unactivated C-3 position of 4-hydroxybutyryl-CoA catalysed by 4-hydroxybutyryl-CoA dehydratase. <i>Chemical Communications</i> , 2004, , 1210-1211.	4.1	13
98	Coenzyme B12-dependent enzymatic dehydration of 1,2-diols: simple reaction, complex mechanism!. <i>Journal of Porphyrins and Phthalocyanines</i> , 2004, 08, 290-300.	0.8	16
99	A two [4Fe-4S]-cluster-containing ferredoxin as an alternative electron donor for 2-hydroxyglutaryl-CoA dehydratase from <i>Acidaminococcus fermentans</i> . <i>Archives of Microbiology</i> , 2003, 179, 197-204.	2.2	35
100	Deprotonierung von Enoxy-Radikalen: theoretische Bestätigung eines 50 Jahre alten Mechanismusvorschlags. <i>Angewandte Chemie</i> , 2003, 115, 1911-1915.	2.0	8
101	Deprotonation of Enoxy Radicals: Theoretical Validation of a 50 Year Old Mechanistic Proposal. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 1867-1870.	13.8	56
102	Acryloyl-CoA reductase from <i>Clostridium propionicum</i> . <i>FEBS Journal</i> , 2003, 270, 902-910.	0.2	111
103	Crystal structure of the carboxyltransferase subunit of the bacterial sodium ion pump glutaconyl-coenzyme A decarboxylase. <i>EMBO Journal</i> , 2003, 22, 3493-3502.	7.8	32
104	Rotation of the exo-Methylene Group of (R)-3-Methylitaconate Catalyzed by Coenzyme B12-Dependent 2-Methyleneglutarate Mutase from <i>Eubacterium barkeri</i> . <i>Journal of the American Chemical Society</i> , 2002, 124, 14039-14048.	13.7	16
105	Adenosine Triphosphate-Induced Electron Transfer in 2-Hydroxyglutaryl-CoA Dehydratase from <i>Acidaminococcus fermentans</i> . <i>Biochemistry</i> , 2002, 41, 5873-5882.	2.5	44
106	Molecular characterization of phenyllactate dehydratase and its initiator from <i>Clostridium sporogenes</i> . <i>Molecular Microbiology</i> , 2002, 44, 49-60.	2.5	50
107	Oxidation of propionate to pyruvate in <i>Escherichia coli</i> . <i>FEBS Journal</i> , 2002, 269, 6184-6194.	0.2	105
108	Crystal structure of the <i>Acidaminococcus fermentans</i> 2-hydroxyglutaryl-CoA dehydratase component A. <i>Journal of Molecular Biology</i> , 2001, 307, 297-308.	4.2	70

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109	Sodium ion-translocating decarboxylases. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2001, 1505, 15-27.	1.0	82
110	2-Methylisocitrate lyases from the bacterium <i>Escherichia coli</i> and the filamentous fungus <i>Aspergillus nidulans</i> . <i>FEBS Journal</i> , 2001, 268, 3577-3586.	0.2	60
111	Stereochemistry of the Methyl Group in (R)-3-Methylitaconate Derived by Rearrangement of 2-Methylidene-glutarate Catalysed by a Coenzyme B12-Dependent Mutase. <i>Helvetica Chimica Acta</i> , 2000, 83, 2550-2561.	1.6	5
112	The involvement of coenzyme A esters in the dehydration of (R)-phenyllactate to (E)-cinnamate by <i>Clostridium sporogenes</i> . <i>FEBS Journal</i> , 2000, 267, 3874-3884.	0.2	62
113	The iron-sulfur clusters in 2-hydroxyglutaryl-CoA dehydratase from <i>Acidaminococcus fermentans</i> . <i>FEBS Journal</i> , 2000, 267, 7082-7093.	0.2	42
114	Elucidation of the coenzyme binding mode of further B12-dependent enzymes using a base-off analogue of coenzyme B12. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2000, 10, 345-350.	1.8	15
115	Fermentation of 4-aminobutyrate by <i>Clostridium aminobutyricum</i> : cloning of two genes involved in the formation and dehydration of 4-hydroxybutyryl-CoA. <i>Archives of Microbiology</i> , 2000, 174, 189-199.	2.2	61
116	Oxygen Exchange between Acetate and the Catalytic Glutamate Residue in Glutaconate CoA-transferase from <i>Acidaminococcus fermentans</i> . <i>Journal of Biological Chemistry</i> , 1999, 274, 20772-20778.	3.4	45
117	2-Hydroxyglutaryl-CoA dehydratase from <i>Clostridium symbiosum</i> . <i>FEBS Journal</i> , 1999, 265, 404-414.	0.2	47
118	The sodium ion translocating glutaconyl-CoA decarboxylase from <i>Acidaminococcus fermentans</i> : cloning and function of the genes forming a second operon. <i>Molecular Microbiology</i> , 1999, 31, 473-487.	2.5	32
119	Structure and dynamics of the B12-binding subunit of glutamate mutase from <i>Clostridium cochlearium</i> . <i>FEBS Journal</i> , 1999, 263, 178-188.	0.2	29
120	Radical species in the catalytic pathways of enzymes from anaerobes. <i>FEMS Microbiology Reviews</i> , 1998, 22, 523-541.	8.6	59
121	Identification of the 4-Glutamyl Radical as an Intermediate in the Carbon Skeleton Rearrangement Catalyzed by Coenzyme B12-Dependent Glutamate Mutase from <i>Clostridium cochlearium</i> . <i>Biochemistry</i> , 1998, 37, 4105-4113.	2.5	102
122	Electron-Nuclear Double Resonance Spectroscopy. Investigation of 4-Hydroxybutyryl-CoA Dehydratase from <i>Clostridium aminobutyricum</i> : Comparison with Other Flavin Radical Enzymes. <i>Biological Chemistry</i> , 1997, 378, 843-9.	2.5	29
123	Conversion of glutaconate CoA-transferase from <i>Acidaminococcus fermentans</i> into an acyl-CoA hydrolase by site-directed mutagenesis. <i>FEBS Letters</i> , 1997, 405, 209-212.	2.8	23
124	Mossbauer Study of 4-Hydroxybutyryl-CoA Dehydratase Probing the Role of an Iron-Sulfur Cluster in an Overall Non-Redox Reaction. <i>FEBS Journal</i> , 1997, 248, 380-384.	0.2	20
125	4-Hydroxybutyryl-CoA Dehydratase from <i>Clostridium aminobutyricum</i> : Characterization of FAD and Iron-Sulfur Clusters Involved in an Overall Non-Redox Reaction. <i>Biochemistry</i> , 1996, 35, 11710-11718.	2.5	48
126	Unusual Dehydrations in anaerobic bacteria: considering ketyls (radical anions) as reactive intermediates in enzymatic reactions. <i>FEBS Letters</i> , 1996, 389, 20-24.	2.8	56

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127	Glutamate and 2-methyleneglutarate mutase: from microbial curiosities to paradigms for coenzyme B12-dependent enzymes. <i>Chemical Society Reviews</i> , 1996, 25, 329.	38.1	142
128	Enzyme-Catalyzed Formation of Carboxybiotin as Proved by the Measurement of ^{15}N , ^{13}C and ^{13}C , ^{13}C Spin-Spin Coupling. <i>Angewandte Chemie International Edition in English</i> , 1996, 35, 2132-2133.	4.4	9
129	Einelektronen-Redoxreaktionen von Coenzym-B12-Estern in anaeroben Bakterien – ein Vorschlag für einen neuen Mechanismus. <i>Angewandte Chemie</i> , 1995, 107, 1595-1598.	2.0	24
130	Hinweise auf einen Fragmentierungsmechanismus bei Coenzym-B12-abhängigen Umlagerungen des Kohlenstoffgerüsts. <i>Angewandte Chemie</i> , 1995, 107, 2573-2576.	2.0	19
131	One-Electron Redox Reactions of CoASH Esters in Anaerobic Bacteria – A Mechanistic Proposal. <i>Angewandte Chemie International Edition in English</i> , 1995, 34, 1502-1506.	4.4	70
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