E Neil G Marsh

List of Publications by Year
in descending order

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151 papers	6,505 citations	46984 47 h-index	88593 70 g-index
221 all docs	221 docs citations	221 times ranked	6086 citing authors

#	Article	IF	Citations
1	Probing protein aggregation at buried interfaces: distinguishing between adsorbed protein monomers, dimers, and a monomerâ€“dimer mixture in situ. Chemical Science, 2022, 13, 975-984.	3.7	13
2	Using kinetic isotope effects to probe the mechanism of adenosylcobalamin-dependent enzymes. Methods in Enzymology, 2022, , 151-172.	0.4	2
3	Purification of the full-length, membrane-associated form of the antiviral enzyme viperin utilizing nanodiscs. Scientific Reports, 2022, 12, .	1.6	3
4	Kinetic Analysis of Transient Intermediates in the Mechanism of Prenyl-Flavin-Dependent Ferulic Acid Decarboxylase. Biochemistry, 2021, 60, 125-134.	1.2	6
5	Viperin binds STING and enhances the typeâ€I interferon response following dsDNA detection. Immunology and Cell Biology, 2021, 99, 373-391.	1.0	25
6	The Antiviral Enzyme, Viperin, Activates Protein Ubiquitination by the E3 Ubiquitin Ligase, TRAF6. Journal of the American Chemical Society, 2021, 143, 4910-4914.	6.6	9
7	Molecular Structure of the Surface-Immobilized Super Uranyl Binding Protein. Journal of Physical Chemistry B, 2021, 125, 7706-7716.	1.2	21
8	The antiviral enzyme viperin inhibits cholesterol biosynthesis. Journal of Biological Chemistry, 2021, 297, 100824.	1.6	10
9	Giving superabsorbent polymers a second life as pressure-sensitive adhesives. Nature Communications, 2021, 12, 4524.	5.8	32
10	Decarboxylation of Aromatic Carboxylic Acids by the Prenylated-FMN-dependent Enzyme Phenazine-1-carboxylic Acid Decarboxylase. ACS Catalysis, 2021, 11, 11723-11732.	5.5	6
11	New Orange Ligand-Dependent Fluorescent Reporter for Anaerobic Imaging. ACS Chemical Biology, 2021, 16, 2109-2115.	1.6	9
12	Viperinâ€”taken down with a pinch of salt. EMBO Reports, 2021, , e54258.	2.0	0
13	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
14	Imaging living obligate anaerobic bacteria with bilin-binding fluorescent proteins. Current Research in Microbial Sciences, 2020, 1, 1-6.	1.4	17
15	Viperin: An ancient radical SAM enzyme finds its place in modern cellular metabolism and innate immunity. Journal of Biological Chemistry, 2020, 295, 11513-11528.	1.6	53
16	Targeting viperin to the mitochondrion inhibits the thiolase activity of the trifunctional enzyme complex. Journal of Biological Chemistry, 2020, 295, 2839-2849.	1.6	16
17	Interactions between Viperin, Vesicle-Associated Membrane Protein A, and Hepatitis C Virus Protein NS5A Modulate Viperin Activity and NS5A Degradation. Biochemistry, 2020, 59, 780-789.	1.2	13
18	The Photoactive Excited State of the B₁₂-Based Photoreceptor CarH. Journal of Physical Chemistry B, 2020, 124, 10732-10738.	1.2	25

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19	Extending fluorescence microscopy into anaerobic environments. Current Opinion in Chemical Biology, 2019, 51, 98-104.	2.8	43
20	Metalâ€dependent assembly of a protein nanoâ€cage. Protein Science, 2019, 28, 1620-1629.	3.1	22
21	Probing Metal Ion Discrimination in a Protein Designed to Bind Uranyl Cation With Femtomolar Affinity. Frontiers in Molecular Biosciences, 2019, 6, 73.	1.6	6
22	Molecular Mechanisms of Interactions between Monolayered Transition Metal Dichalcogenides and Biological Molecules. Journal of the American Chemical Society, 2019, 141, 9980-9988.	6.6	28
23	Coiled-Coil-Mediated Assembly of an Icosahedral Protein Cage with Extremely High Thermal and Chemical Stability. Journal of the American Chemical Society, 2019, 141, 9207-9216.	6.6	51
24	Viperin interacts with the kinase IRAK1 and the E3 ubiquitin ligase TRAF6, coupling innate immune signaling to antiviral ribonucleotide synthesis. Journal of Biological Chemistry, 2019, 294, 6888-6898.	1.6	46
25	Kinetic Characterization of Prenyl-Flavin Synthase from Saccharomyces cerevisiae. Biochemistry, 2018, 57, 696-700.	1.2	16
26	Effect of immobilization site on the orientation and activity of surface-tethered enzymes. Physical Chemistry Chemical Physics, 2018, 20, 1021-1029.	1.3	43
27	Investigating the Effect of Two-Point Surface Attachment on Enzyme Stability and Activity. Journal of the American Chemical Society, 2018, 140, 16560-16569.	6.6	51
28	Simultaneous Observation of the Orientation and Activity of Surface-Immobilized Enzymes. Langmuir, 2018, 34, 9133-9140.	1.6	28
29	Elaborating a coiledâ€coilâ€assembled octahedral protein cage with additional protein domains. Protein Science, 2018, 27, 1893-1900.	3.1	13
30	A Novel Radical SAM mechanism mediated by the Interferonâ€Inducible Protein Viperin. FASEB Journal, 2018, 32, 796.7.	0.2	0
31	Viperin: A Radical SAMâ€dependent Approach in the Regulation of Farnesylpyrophosphate Synthase. FASEB Journal, 2018, 32, 526.11.	0.2	0
32	Folate binding protein: therapeutic natural nanotechnology for folic acid, methotrexate, and leucovorin. Nanoscale, 2017, 9, 2603-2615.	2.8	14
33	Engineered Surface-Immobilized Enzyme that Retains High Levels of Catalytic Activity in Air. Journal of the American Chemical Society, 2017, 139, 2872-2875.	6.6	37
34	Evaluation of de novo-designed coiled coils as off-the-shelf components for protein assembly. Molecular Systems Design and Engineering, 2017, 2, 140-148.	1.7	22
35	Symmetry-Directed Design of Protein Cages and Protein Lattices and Their Applications. Sub-Cellular Biochemistry, 2017, 83, 195-224.	1.0	6
36	Immobilized enzymes: understanding enzyme â€“ surface interactions at the molecular level. Organic and Biomolecular Chemistry, 2017, 15, 9539-9551.	1.5	134

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37	Conjugation Dependent Interaction of Folic Acid with Folate Binding Protein. Bioconjugate Chemistry, 2017, 28, 2350-2360.	1.8	13
38	Evidence for a 1,3-Dipolar Cyclo-addition Mechanism in the Decarboxylation of Phenylacrylic Acids Catalyzed by Ferulic Acid Decarboxylase. Journal of the American Chemical Society, 2017, 139, 10972-10975.	6.6	30
39	Symmetryâ€Directed Selfâ€Assembly of a Tetrahedral Protein Cage Mediated by de Novoâ€Designed Coiled Coils. ChemBioChem, 2017, 18, 1888-1892.	1.3	42
40	Effect of Surface Crowding and Surface Hydrophilicity on the Activity, Stability and Molecular Orientation of a Covalently Tethered Enzyme. Langmuir, 2017, 33, 7152-7159.	1.6	28
41	A label-free Sirtuin 1 assay based on droplet-electrospray ionization mass spectrometry. Analytical Methods, 2016, 8, 3458-3465.	1.3	19
42	An Unusual Iron-Dependent Oxidative Deformylation Reaction Providing Insight into Hydrocarbon Biosynthesis in Nature. ACS Catalysis, 2016, 6, 3293-3300.	5.5	13
43	Mechanism of the Novel Prenylated Flavin-Containing Enzyme Ferulic Acid Decarboxylase Probed by Isotope Effects and Linear Free-Energy Relationships. Biochemistry, 2016, 55, 2857-2863.	1.2	37
44	Flexible, symmetry-directed approach to assembling protein cages. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8681-8686.	3.3	91
45	Does Viperin Function as a Radical S-Adenosyl-l-methionine-dependent Enzyme in Regulating Farnesylpyrophosphate Synthase Expression and Activity?. Journal of Biological Chemistry, 2016, 291, 26806-26815.	1.6	31
46	Substrate-Triggered Exosite Binding: Synergistic Dendrimer/Folic Acid Action for Achieving Specific, Tight-Binding to Folate Binding Protein. Biomacromolecules, 2016, 17, 922-927.	2.6	13
47	Immobilization of enzyme on a polymer surface. Surface Science, 2016, 648, 53-59.	0.8	13
48	Molecular-Level Insights into Orientation-Dependent Changes in the Thermal Stability of Enzymes Covalently Immobilized on Surfaces. Langmuir, 2015, 31, 6145-6153.	1.6	43
49	Folate binding proteinâ€"Outlook for drug delivery applications. Chinese Chemical Letters, 2015, 26, 426-430.	4.8	12
50	Isofunctional Enzymes PAD1 and UbiX Catalyze Formation of a Novel Cofactor Required by Ferulic Acid Decarboxylase and 4-Hydroxy-3-polyprenylbenzoic Acid Decarboxylase. ACS Chemical Biology, 2015, 10, 1137-1144.	1.6	83
51	High-resolution NMR characterization of low abundance oligomers of amyloid-Î² without purification. Scientific Reports, 2015, 5, 11811.	1.6	101
52	Recent progress in hydrocarbon biofuel synthesis: Pathways and enzymes. Chinese Chemical Letters, 2015, 26, 431-434.	4.8	11
53	Effects of Peptide Immobilization Sites on the Structure and Activity of Surface-Tethered Antimicrobial Peptides. Journal of Physical Chemistry C, 2015, 119, 7146-7155.	1.5	55
54	Substrate-bound Structures of Benzylsuccinate Synthase Reveal How Toluene Is Activated in Anaerobic Hydrocarbon Degradation. Journal of Biological Chemistry, 2015, 290, 22398-22408.	1.6	35

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55	Characterization of a highly flexible selfâ€assembling protein system designed to form nanocages. Protein Science, 2014, 23, 190-199.	3.1	30
56	Insights into Substrate and Metal Binding from the Crystal Structure of Cyanobacterial Aldehyde Deformylating Oxygenase with Substrate Bound. ACS Chemical Biology, 2014, 9, 2584-2593.	1.6	32
57	Comparison of the Influence of Humidity and <scp>d</scp>-Mannitol on the Organization of Tetraethylene Glycol-Terminated Self-Assembled Monolayers and Immobilized Antimicrobial Peptides. Langmuir, 2014, 30, 7143-7151.	1.6	5
58	Role of Active Site Residues in Promoting Cobaltâ€“Carbon Bond Homolysis in Adenosylcobalamin-Dependent Mutases Revealed through Experiment and Computation. Biochemistry, 2014, 53, 169-177.	1.2	22
59	Structures of benzylsuccinate synthase elucidate roles of accessory subunits in glycyl radical enzyme activation and activity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10161-10166.	3.3	55
60	Recent Advances in Radical SAM Enzymology: New Structures and Mechanisms. ACS Chemical Biology, 2014, 9, 1929-1938.	1.6	59
61	Mechanistic Insights from Reaction of Î±-Oxiranyl-Aldehydes with Cyanobacterial Aldehyde Deformylating Oxygenase. ACS Chemical Biology, 2014, 9, 570-577.	1.6	29
62	Surface Orientation Control of Site-Specifically Immobilized Nitro-reductase (NfsB). Langmuir, 2014, 30, 5930-5938.	1.6	29
63	Solvent Isotope Effects on Alkane Formation by Cyanobacterial Aldehyde Deformylating Oxygenase and Their Mechanistic Implications. Biochemistry, 2014, 53, 5537-5543.	1.2	27
64	Fluorinated Proteins: From Design and Synthesis to Structure and Stability. Accounts of Chemical Research, 2014, 47, 2878-2886.	7.6	147
65	Using ¹⁹F NMR to Probe Biological Interactions of Proteins and Peptides. ACS Chemical Biology, 2014, 9, 1242-1250.	1.6	161
66	Design, Synthesis, and Study of Fluorinated Proteins. Methods in Molecular Biology, 2014, 1216, 89-116.	0.4	8
67	Molecular Orientation of Enzymes Attached to Surfaces through Defined Chemical Linkages at the Solidâ€“Liquid Interface. Journal of the American Chemical Society, 2013, 135, 12660-12669.	6.6	73
68	Aldehydeâ€forming fatty acylâ€<scp>C</scp>o<scp>A</scp> reductase from cyanobacteria: expression, purification and characterization of the recombinant enzyme. FEBS Journal, 2013, 280, 4773-4781.	2.2	36
69	Resolution of Oligomeric Species during the Aggregation of Aβ_{1â€“40} Using ¹⁹F NMR. Biochemistry, 2013, 52, 1903-1912.	1.2	97
70	Perfluoroâ€tertâ€butylâ€homoserine as a sensitive ¹⁹F NMR reporter for peptideâ€“membrane interactions in solution. Journal of Peptide Science, 2013, 19, 308-314.	0.8	26
71	Probing the Mechanism of Cyanobacterial Aldehyde Decarbonylase Using a Cyclopropyl Aldehyde. Journal of the American Chemical Society, 2013, 135, 5234-5237.	6.6	62
72	Production of Propane and Other Shortâ€Chain Alkanes by Structureâ€Based Engineering of Ligand Specificity in Aldehydeâ€Deformylating Oxygenase. ChemBioChem, 2013, 14, 1204-1208.	1.3	85

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73	Aldehyde Decarbonylases: Enigmatic Enzymes of Hydrocarbon Biosynthesis. ACS Catalysis, 2013, 3, 2515-2521.	5.5	56
74	Structural basis for the enhanced stability of highly fluorinated proteins. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4810-4815.	3.3	79
75	Comparison of the structures and stabilities of coiledâ€coil proteins containing hexafluoroleucine and tâ€butylalanine provides insight into the stabilizing effects of highly fluorinated amino acid sideâ€chains. Protein Science, 2012, 21, 1705-1715.	3.1	14
76	Influence of Fluorination on the Thermodynamics of Protein Folding. Journal of the American Chemical Society, 2012, 134, 13027-13034.	6.6	38
77	Alternative Pathways of Human Islet Amyloid Polypeptide Aggregation Distinguished by ¹⁹F Nuclear Magnetic Resonance-Detected Kinetics of Monomer Consumption. Biochemistry, 2012, 51, 8154-8162.	1.2	118
78	Adenosylcobalamin enzymes: Theory and experiment begin to converge. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 1154-1164.	1.1	51
79	Fluorine: A new element in protein design. Protein Science, 2012, 21, 453-462.	3.1	79
80	Evaluation of a symmetry-based strategy for assembling protein complexes. RSC Advances, 2011, 1, 1004.	1.7	36
81	Using Fluorine Nuclear Magnetic Resonance To Probe Changes in the Structure and Dynamics of Membrane-Active Peptides Interacting with Lipid Bilayers. Biochemistry, 2011, 50, 5979-5987.	1.2	30
82	Oxygen-Independent Alkane Formation by Non-Heme Iron-Dependent Cyanobacterial Aldehyde Decarbonylase: Investigation of Kinetics and Requirement for an External Electron Donor. Biochemistry, 2011, 50, 10743-10750.	1.2	70
83	Oxygenâ€independent Decarbonylation of Aldehydes by Cyanobacterial Aldehyde Decarbonylase: A New Reaction of Diiron Enzymes. Angewandte Chemie - International Edition, 2011, 50, 7148-7152.	7.2	98
84	Adenosyl Radical: Reagent and Catalyst in Enzyme Reactions. ChemBioChem, 2010, 11, 604-621.	1.3	95
85	Using Fluorine Nuclear Magnetic Resonance To Probe the Interaction of Membrane-Active Peptides with the Lipid Bilayer. Biochemistry, 2010, 49, 5760-5765.	1.2	55
86	Hydrogen Tunneling in Adenosylcobalamin-Dependent Glutamate Mutase: Evidence from Intrinsic Kinetic Isotope Effects Measured by Intramolecular Competition. Biochemistry, 2010, 49, 3168-3173.	1.2	17
87	Conversion of (3S,4R)-Tetrahydrodaidzein to (3S)-Equol by THD Reductase: Proposed Mechanism Involving a Radical Intermediate. Biochemistry, 2010, 49, 5582-5587.	1.2	35
88	Role of Zinc in Human Islet Amyloid Polypeptide Aggregation. Journal of the American Chemical Society, 2010, 132, 8973-8983.	6.6	212
89	Fluorineâ€”a new element in the design of membrane-active peptides. Molecular BioSystems, 2009, 5, 1143.	2.9	60
90	Engineering Protein Stability and Specificity Using Fluorous Amino Acids: The Importance of Packing Effects. Biochemistry, 2009, 48, 10810-10817.	1.2	43

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91	Subunit Structure of Benzylsuccinate Synthase. Biochemistry, 2009, 48, 1284-1292.	1.2	31
92	Insights into the mechanisms of adenosylcobalamin (coenzyme B12)-dependent enzymes from rapid chemical quench experiments. Biochemical Society Transactions, 2009, 37, 336-342.	1.6	12
93	Using Fluorous Amino Acids to Modulate the Biological Activity of an Antimicrobial Peptide. ChemBioChem, 2008, 9, 370-373.	1.3	109
94	Covalent Metalâ^'Peptide Framework Compounds That Extend in One and Two Dimensions. Crystal Growth and Design, 2008, 8, 296-303.	1.4	50
95	Using Fluorous Amino Acids To Probe the Effects of Changing Hydrophobicity on the Physical and Biological Properties of the Î²-Hairpin Antimicrobial Peptide Protegrin-1. Biochemistry, 2008, 47, 9243-9250.	1.2	80
96	The Fluorous Effect in Proteins: Properties of Î±4F6, a 4-Î±-Helix Bundle Protein with a Fluorocarbon Core. Biochemistry, 2008, 47, 4484-4490.	1.2	46
97	Changes in the free energy profile of glutamate mutase imparted by the mutation of an active site arginine residue to lysine. Archives of Biochemistry and Biophysics, 2007, 461, 194-199.	1.4	4
98	Toward an Improved Understanding of the Glutamate Mutase System. Journal of the American Chemical Society, 2007, 129, 1623-1633.	6.6	20
99	Evidence for Coupled Motion and Hydrogen Tunneling of the Reaction Catalyzed by Glutamate Mutaseâ€. Biochemistry, 2007, 46, 883-889.	1.2	22
100	Intrinsic Deuterium Kinetic Isotope Effects in Glutamate Mutase Measured by an Intramolecular Competition Experiment. Angewandte Chemie - International Edition, 2007, 46, 8455-8459.	7.2	16
101	Synthesis of mono- and di-deuterated (2S,3S)-3-methylaspartic acids to facilitate measurement of intrinsic kinetic isotope effects in enzymes. Tetrahedron, 2007, 63, 4663-4668.	1.0	8
102	Reaction of Adenosylcobalamin-Dependent Glutamate Mutase with 2-Thiolglutarateâ€. Biochemistry, 2006, 45, 11650-11657.	1.2	10
103	Mechanism of Benzylsuccinate Synthase Probed by Substrate and Isotope Exchange. Journal of the American Chemical Society, 2006, 128, 16056-16057.	6.6	34
104	Deuterium Isotope Effects in the Unusual Addition of Toluene to Fumarate Catalyzed by Benzylsuccinate Synthaseâ€. Biochemistry, 2006, 45, 13932-13938.	1.2	28
105	Modulating Protein Structure with Fluorous Amino Acids:Â Increased Stability and Native-like Structure Conferred on a 4-Helix Bundle Protein by Hexafluoroleucine. Journal of the American Chemical Society, 2006, 128, 337-343.	6.6	98
106	Using Nonnatural Amino Acids to Control Metal-Coordination Number in Three-Stranded Coiled Coils. Angewandte Chemie - International Edition, 2006, 45, 2864-2868.	7.2	63
107	Isotope Effects for Deuterium Transfer between Substrate and Coenzyme in Adenosylcobalamin-Dependent Glutamate Mutaseâ€. Biochemistry, 2005, 44, 2686-2691.	1.2	27
108	Mechanism of Benzylsuccinate Synthase:Â Stereochemistry of Toluene Addition to Fumarate and Maleate. Journal of the American Chemical Society, 2005, 127, 8608-8609.	6.6	44

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109	Electronic Structure Studies of the Adenosylcobalamin Cofactor in Glutamate Mutaseâ€. Biochemistry, 2005, 44, 15167-15181.	1.2	28
110	Time-Resolved Measurements of the Photolysis and Recombination of Adenosylcobalamin Bound to Glutamate Mutase. Journal of Physical Chemistry B, 2005, 109, 18146-18152.	1.2	65
111	Cation-Ï€ interactions studied in a model coiled-coil peptide. Protein Science, 2004, 13, 2244-2251.	3.1	37
112	S-Adenosylmethionine radical enzymes. Bioorganic Chemistry, 2004, 32, 326-340.	2.0	53
113	Photolysis and Recombination of Adenosylcobalamin Bound to Glutamate Mutase. Journal of the American Chemical Society, 2004, 126, 1598-1599.	6.6	58
114	Fluorous Effect in Proteins:ÂDe NovoDesign and Characterization of a Four-Î±-Helix Bundle Protein Containing Hexafluoroleucineâ€. Biochemistry, 2004, 43, 16277-16284.	1.2	93
115	Pre-Steady-State Measurement of Intrinsic Secondary Tritium Isotope Effects Associated with the Homolysis of Adenosylcobalamin and the Formation of 5â€˜-Deoxyadensosine in Glutamate Mutaseâ€. Biochemistry, 2004, 43, 2155-2158.	1.2	22
116	Control of Metal Coordination Number in de Novo Designed Peptides through Subtle Sequence Modifications. Journal of the American Chemical Society, 2004, 126, 9178-9179.	6.6	52
117	Role of Arg100 in the Active Site of Adenosylcobalamin-Dependent Glutamate Mutaseâ€. Biochemistry, 2004, 43, 3238-3245.	1.2	14
118	The structure of ActVA-Orf6, a novel type of monooxygenase involved in actinorhodin biosynthesis. EMBO Journal, 2003, 22, 205-215.	3.5	150
119	Adenosylcobalamin-Dependent Glutamate Mutase: Pre-Steady-State Kinetic Methods for Investigating Reaction Mechanism. Methods in Enzymology, 2002, 354, 380-399.	0.4	5
120	Noncovalent self-assembly of a heterotetrameric diiron protein. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5150-5154.	3.3	65
121	Pre-Steady-State Kinetic Studies on the Glu171Gln Active Site Mutant of Adenosylcobalamin-Dependent Glutamate Mutaseâ€. Biochemistry, 2002, 41, 15803-15809.	1.2	13
122	A Novel Reaction between Adenosylcobalamin and 2-Methyleneglutarate Catalyzed by Glutamate Mutase. Biochemistry, 2002, 41, 3200-3206.	1.2	29
123	A Short and Efficient Synthesis ofl-5,5,5,5â€˜,5â€˜,5â€˜-hexafluoroleucine fromN-Cbz-l-Serine. Organic Letters, 2002, 4, 4281-4283.	2.4	37
124	The B12-Binding Subunit of Glutamate Mutase from Clostridium tetanomorphum Traps the Nucleotide Moiety of Coenzyme B12. Journal of Molecular Biology, 2001, 309, 777-791.	2.0	33
125	Tritium Partitioning and Isotope Effects in Adenosylcobalamin-Dependent Glutamate Mutaseâ€. Biochemistry, 2001, 40, 13060-13067.	1.2	29
126	Proteinâ€'coenzyme interactions in adenosylcobalamin-dependent glutamate mutase. Biochemical Journal, 2001, 355, 131.	1.7	25

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127	Proteinâ€“coenzyme interactions in adenosylcobalamin-dependent glutamate mutase. Biochemical Journal, 2001, 355, 131-137.	1.7	40
128	Adenosylcobalamin-dependent isomerases: new insights into structure and mechanism. Current Opinion in Chemical Biology, 2001, 5, 499-505.	2.8	102
129	The role of the active site glutamate in the rearrangement of glutamate to 3-methylaspartate catalyzed by adenosylcobalamin-dependent glutamate mutase. Chemistry and Biology, 2001, 8, 1143-1149.	6.2	19
130	A Protein Pre-Organized to Trap the Nucleotide Moiety of Coenzyme B12: Refined Solution Structure of the B12-Binding Subunit of Glutamate Mutase from Clostridium tetanomorphum. ChemBioChem, 2001, 2, 643-655.	1.3	9
131	Review Article Coenzyme-B12-Dependent Glutamate Mutase. Bioorganic Chemistry, 2000, 28, 176-189.	2.0	54
132	Crystallization and preliminary X-ray diffraction studies of a monooxygenase fromStreptomyces coelicolorA3(2) involved in the biosynthesis of the polyketide actinorhodin. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 481-483.	2.5	8
133	Adenosylcobalamin-Dependent Enzymes. Sub-Cellular Biochemistry, 2000, 35, 351-403.	1.0	4
134	Mechanism of Glutamate Mutase:Â Identification and Kinetic Competence of Acrylate and Glycyl Radical as Intermediates in the Rearrangement of Glutamate to Methylaspartate. Journal of the American Chemical Society, 2000, 122, 10732-10733.	6.6	49
135	Rearrangement of l-2-Hydroxyglutarate to l-threo-3-Methylmalate Catalyzed by Adenosylcobalamin-Dependent Glutamate Mutase. Biochemistry, 2000, 39, 10340-10346.	1.2	18
136	The Reaction of the Substrate Analog 2-Ketoglutarate with Adenosylcobalamin-dependent Glutamate Mutase. Journal of Biological Chemistry, 1999, 274, 11619-11622.	1.6	20
137	Pre-Steady-State Kinetic Investigation of Intermediates in the Reaction Catalyzed by Adenosylcobalamin-Dependent Glutamate Mutaseâ€. Biochemistry, 1999, 38, 13684-13691.	1.2	44
138	How a protein prepares for B12 binding: structure and dynamics of the B12-binding subunit of glutamate mutase from Clostridium tetanomorphum. Structure, 1998, 6, 1021-1033.	1.6	72
139	Coupling of Cobaltâ”Carbon Bond Homolysis and Hydrogen Atom Abstraction in Adenosylcobalamin-Dependent Glutamate Mutaseâ€. Biochemistry, 1998, 37, 11864-11872.	1.2	139
140	How Enzymes Control the Reactivity of Adenosylcobalamin:Â Effect on Coenzyme Binding and Catalysis of Mutations in the Conserved Histidine-Aspartate Pair of Glutamate Mutase. Biochemistry, 1997, 36, 7884-7889.	1.2	58
141	Adenosylcobalamin-Dependent Glutamate Mutase:Â Examination of Substrate and Coenzyme Binding in an Engineered Fusion Protein Possessing Simplified Subunit Structure and Kinetic Propertiesâ€. Biochemistry, 1997, 36, 14939-14945.	1.2	50
142	Adenosylcobalamin-dependent glutamate mutase: properties of a fusion protein in which the cobalamin-binding subunit is linked to the catalytic subunit. Biochemical Journal, 1996, 320, 825-830.	1.7	7
143	Carboxymethylation of MutS-Cysteine-15 Specifically Inactivates Adenosylcobalamin-dependent Glutamate Mutase. Journal of Biological Chemistry, 1996, 271, 29121-29125.	1.6	2
144	A radical approach to enzyme catalysis. BioEssays, 1995, 17, 431-441.	1.2	53

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145	Identification of a Flavin:NADH Oxidoreductase Involved in the Biosynthesis of Actinorhodin. Journal of Biological Chemistry, 1995, 270, 17339-17343.	1.6	71
146	Tritium isotope effects in adenosylcobalamin-dependent glutamate mutase: Implications for the mechanism. Biochemistry, 1995, 34, 7542-7547.	1.2	40
147	Cloning and sequencing of glutamate mutase component E fromClostridium tetanomorphum. FEBS Letters, 1993, 317, 44-48.	1.3	22
148	Two isozymes of clavaminate synthase central to clavulanic acid formation: cloning and sequencing of both genes from Streptomyces clavuligerus. Biochemistry, 1992, 31, 12648-12657.	1.2	92
149	Cloning and sequencing of glutamate mutase component S fromClostridium tetanomorphumHomologies with other cobalamin-dependent enzymes. FEBS Letters, 1992, 310, 167-170.	1.3	124
150	Purification and characterization of clavaminate synthase from Streptomyces clavuligerus: an unusual oxidative enzyme in natural product biosynthesis. Biochemistry, 1990, 29, 6499-6508.	1.2	134
151	Crystallization and preliminary diffraction data for adenosylcobalamin-dependent methylmalonyl-CoA mutase from Propionibacterium shermanii. Journal of Molecular Biology, 1988, 200, 421-422.	2.0	19