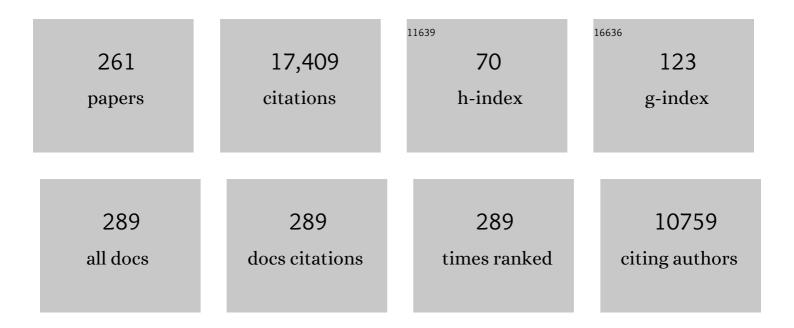
List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Protein function Kinetic Isotope Effects. , 2021, , 44-51.		0
2	Identification of Thermal Conduits That Link the Protein–Water Interface to the Active Site Loop and Catalytic Base in Enolase. Journal of the American Chemical Society, 2021, 143, 785-797.	6.6	15
3	Emerging Experimental Probes for the Spatial and Temporal Resolution of Protein Dynamics in Enzyme Catalysis. Biophysical Journal, 2021, 120, 100a.	0.2	0
4	Hydrogen–Deuterium Exchange within Adenosine Deaminase, a TIM Barrel Hydrolase, Identifies Networks for Thermal Activation of Catalysis. Journal of the American Chemical Society, 2020, 142, 19936-19949.	6.6	18
5	Biogenesis of the peptide-derived redox cofactor pyrroloquinoline quinone. Current Opinion in Chemical Biology, 2020, 59, 93-103.	2.8	23
6	Hydrogen deuterium exchange defines catalytically linked regions of protein flexibility in the catechol <i>O</i> -methyltransferase reaction. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10797-10805.	3.3	19
7	Structural Properties and Catalytic Implications of the SPASM Domain Iron–Sulfur Clusters in <i>Methylorubrum extorquens</i> PqqE. Journal of the American Chemical Society, 2020, 142, 12620-12634.	6.6	17
8	The Soybean Lipoxygenase–Substrate Complex: Correlation between the Properties of Tunneling-Ready States and ENDOR-Detected Structures of Ground States. Biochemistry, 2020, 59, 901-910.	1.2	17
9	A two-component protease in Methylorubrum extorquens with high activity toward the peptide precursor of the redox cofactor pyrroloquinoline quinone. Journal of Biological Chemistry, 2019, 294, 15025-15036.	1.6	19
10	Recommendations for performing, interpreting and reporting hydrogen deuterium exchange mass spectrometry (HDX-MS) experiments. Nature Methods, 2019, 16, 595-602.	9.0	452
11	Detecting and Characterizing the Kinetic Activation of Thermal Networks in Proteins: Thermal Transfer from a Distal, Solvent-Exposed Loop to the Active Site in Soybean Lipoxygenase. Journal of Physical Chemistry B, 2019, 123, 8662-8674.	1.2	27
12	Moving Through Barriers in Science and Life. Annual Review of Biochemistry, 2019, 88, 1-24.	5.0	10
13	Discovery of Hydroxylase Activity for PqqB Provides a Missing Link in the Pyrroloquinoline Quinone Biosynthetic Pathway. Journal of the American Chemical Society, 2019, 141, 4398-4405.	6.6	28
14	Comparative kinetic isotope effects on first- and second-order rate constants of soybean lipoxygenase variants uncover a substrate-binding network. Journal of Biological Chemistry, 2019, 294, 18069-18076.	1.6	7
15	Electron Paramagnetic Resonance Spectroscopic Identification of the Fe–S Clusters in the SPASM Domain-Containing Radical SAM Enzyme PqqE. Biochemistry, 2019, 58, 5173-5187.	1.2	16
16	Biophysical Characterization of a Disabled Double Mutant of Soybean Lipoxygenase: The "Undoing―of Precise Substrate Positioning Relative to Metal Cofactor and an Identified Dynamical Network. Journal of the American Chemical Society, 2019, 141, 1555-1567.	6.6	19
17	Hydrogen–deuterium exchange reveals long-range dynamical allostery in soybean lipoxygenase. Journal of Biological Chemistry, 2018, 293, 1138-1148.	1.6	20
18	X-ray and EPR Characterization of the Auxiliary Fe–S Clusters in the Radical SAM Enzyme PqqE. Biochemistry, 2018, 57, 1306-1315.	1.2	31

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19	Activity-Related Microsecond Dynamics Revealed by Temperature-Jump Förster Resonance Energy Transfer Measurements on Thermophilic Alcohol Dehydrogenase. Journal of the American Chemical Society, 2018, 140, 900-903.	6.6	25
20	Methods for Expression, Purification, and Characterization of PqqE, a Radical SAM Enzyme in the PQQ Biosynthetic Pathway. Methods in Enzymology, 2018, 606, 389-420.	0.4	10
21	Understanding Biological Hydrogen Transfer Through the Lens of Temperature Dependent Kinetic Isotope Effects. Accounts of Chemical Research, 2018, 51, 1966-1974.	7.6	88
22	HOW CLOSE ARE WE TO EXPLAINING ENZYME CATALYSIS?. , 2018, , .		0
23	¹³ C ENDOR Spectroscopy of Lipoxygenase–Substrate Complexes Reveals the Structural Basis for C–H Activation by Tunneling. Journal of the American Chemical Society, 2017, 139, 1984-1997.	6.6	47
24	Nuclear Magnetic Resonance Structure and Binding Studies of PqqD, a Chaperone Required in the Biosynthesis of the Bacterial Dehydrogenase Cofactor Pyrroloquinoline Quinone. Biochemistry, 2017, 56, 2735-2746.	1.2	39
25	Enhanced Rigidification within a Double Mutant of Soybean Lipoxygenase Provides Experimental Support for Vibronically Nonadiabatic Proton-Coupled Electron Transfer Models. ACS Catalysis, 2017, 7, 3569-3574.	5.5	49
26	Hydrogen–Deuterium Exchange of Lipoxygenase Uncovers a Relationship between Distal, Solvent Exposed Protein Motions and the Thermal Activation Barrier for Catalytic Proton-Coupled Electron Tunneling. ACS Central Science, 2017, 3, 570-579.	5.3	55
27	At the confluence of ribosomally synthesized peptide modification and radical S-adenosylmethionine (SAM) enzymology. Journal of Biological Chemistry, 2017, 292, 16397-16405.	1.6	20
28	Crystal structures reveal metal-binding plasticity at the metallo-β-lactamase active site of PqqB from Pseudomonas putida. Journal of Biological Inorganic Chemistry, 2017, 22, 1089-1097.	1.1	10
29	Origins of Enzyme Catalysis: Experimental Findings for C–H Activation, New Models, and Their Relevance to Prevailing Theoretical Constructs. Journal of the American Chemical Society, 2017, 139, 18409-18427.	6.6	56
30	Convergent Mechanistic Features between the Structurally Diverse <i>N</i> - and <i>O</i> -Methyltransferases: Glycine <i>N</i> -Methyltransferase and Catechol <i>O</i> -Methyltransferase. Journal of the American Chemical Society, 2016, 138, 9158-9165.	6.6	28
31	Hydrostatic Pressure Studies Distinguish Global from Local Protein Motions in Câ~H Activation by Soybean Lipoxygenaseâ€1. Angewandte Chemie, 2016, 128, 9507-9510.	1.6	1
32	How Large Should the QM Region Be in QM/MM Calculations? The Case of Catechol <i>O</i> -Methyltransferase. Journal of Physical Chemistry B, 2016, 120, 11381-11394.	1.2	150
33	Synthesis of site-specifically 13 C labeled linoleic acids. Tetrahedron Letters, 2016, 57, 4537-4540.	0.7	9
34	1H, 13C, and 15N resonance assignments and secondary structure information for Methylobacterium extorquens PqqD and the complex of PqqD with PqqA. Biomolecular NMR Assignments, 2016, 10, 385-389.	0.4	8
35	Hydrostatic Pressure Studies Distinguish Global from Local Protein Motions in Câ~H Activation by Soybean Lipoxygenaseâ€1. Angewandte Chemie - International Edition, 2016, 55, 9361-9364.	7.2	14
36	Control of the Position of Oxygen Delivery in Soybean Lipoxygenase-1 by Amino Acid Side Chains within a Gas Migration Channel. Journal of Biological Chemistry, 2016, 291, 9052-9059.	1.6	33

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37	Demonstration That the Radical S-Adenosylmethionine (SAM) Enzyme PqqE Catalyzes de Novo Carbon-Carbon Cross-linking within a Peptide Substrate PqqA in the Presence of the Peptide Chaperone PqqD. Journal of Biological Chemistry, 2016, 291, 8877-8884.	1.6	98
38	Editorial overview: Catalysis and regulation. Current Opinion in Structural Biology, 2015, 35, iv-vi.	2.6	0
39	Temperature-Jump Fluorescence Provides Evidence for Fully Reversible Microsecond Dynamics in a Thermophilic Alcohol Dehydrogenase. Journal of the American Chemical Society, 2015, 137, 10060-10063.	6.6	19
40	Mediation of donor–acceptor distance in an enzymatic methyl transfer reaction. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 7954-7959.	3.3	65
41	Low Barrier Hydrogen Bonds: Getting Close, but Not Sharing ACS Central Science, 2015, 1, 115-116.	5.3	15
42	Kinetic Detection of Orthogonal Protein and Chemical Coordinates in Enzyme Catalysis: Double Mutants of Soybean Lipoxygenase. Biochemistry, 2015, 54, 5447-5456.	1.2	20
43	Solvent and Temperature Probes of the Long-Range Electron-Transfer Step in Tyramine β-Monooxygenase: Demonstration of a Long-Range Proton-Coupled Electron-Transfer Mechanism. Journal of the American Chemical Society, 2015, 137, 5720-5729.	6.6	12
44	High-performance liquid chromatography separation of the (S,S)- and (R,S)-forms of S-adenosyl-l-methionine. Analytical Biochemistry, 2015, 476, 81-83.	1.1	15
45	Emerging Concepts about the Role of Protein Motion in Enzyme Catalysis. Accounts of Chemical Research, 2015, 48, 899-899.	7.6	12
46	PqqD Is a Novel Peptide Chaperone That Forms a Ternary Complex with the Radical S-Adenosylmethionine Protein PqqE in the Pyrroloquinoline Quinone Biosynthetic Pathway. Journal of Biological Chemistry, 2015, 290, 12908-12918.	1.6	72
47	Oxygen-18 Kinetic Isotope Effects of Nonheme Iron Enzymes HEPD and MPnS Support Iron(III) Superoxide as the Hydrogen Abstraction Species. Journal of the American Chemical Society, 2015, 137, 10448-10451.	6.6	33
48	Irwin Rose (1926–2015). Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10568-10569.	3.3	0
49	Dynamically Achieved Active Site Precision in Enzyme Catalysis. Accounts of Chemical Research, 2015, 48, 449-456.	7.6	82
50	LOOKING IN NEW DIRECTIONS FOR THE ORIGINS OF ENZYMATIC RATE ACCELERATIONS. , 2014, , .		1
51	The power of integrating kinetic isotope effects into the formalism of the <scp>M</scp> ichaelis– <scp>M</scp> enten equation. FEBS Journal, 2014, 281, 489-497.	2.2	18
52	Evolutionary Aspects of Enzyme Dynamics. Journal of Biological Chemistry, 2014, 289, 30205-30212.	1.6	55
53	Picosecond-Resolved Fluorescence Studies of Substrate and Cofactor-Binding Domain Mutants in a Thermophilic Alcohol Dehydrogenase Uncover an Extended Network of Communication. Journal of the American Chemical Society, 2014, 136, 14821-14833.	6.6	18
54	Hydrogen Tunneling in a Prokaryotic Lipoxygenase. Biochemistry, 2014, 53, 2212-2214.	1.2	22

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55	Extremely Elevated Room-Temperature Kinetic Isotope Effects Quantify the Critical Role of Barrier Width in Enzymatic C–H Activation. Journal of the American Chemical Society, 2014, 136, 8157-8160.	6.6	83
56	Picosecond-Resolved Fluorescent Probes at Functionally Distinct Tryptophans within a Thermophilic Alcohol Dehydrogenase: Relationship of Temperature-Dependent Changes in Fluorescence to Catalysis. Journal of Physical Chemistry B, 2014, 118, 6049-6061.	1.2	25
57	Intrigues and Intricacies of the Biosynthetic Pathways for the Enzymatic Quinocofactors: PQQ, TTQ, CTQ, TPQ, and LTQ. Chemical Reviews, 2014, 114, 4343-4365.	23.0	160
58	Structural Analysis of Aliphatic versus Aromatic Substrate Specificity in a Copper Amine Oxidase from <i>Hansenula polymorpha</i> . Biochemistry, 2013, 52, 2291-2301.	1.2	10
59	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. Natural Product Reports, 2013, 30, 108-160.	5.2	1,692
60	Multistep, Eight-Electron Oxidation Catalyzed by the Cofactorless Oxidase, PqqC: Identification of Chemical Intermediates and Their Dependence on Molecular Oxygen. Biochemistry, 2013, 52, 4667-4675.	1.2	31
61	Importance of Protein Dynamics during Enzymatic C–H Bond Cleavage Catalysis. Biochemistry, 2013, 52, 2068-2077.	1.2	56
62	Hydrogen Tunneling Links Protein Dynamics to Enzyme Catalysis. Annual Review of Biochemistry, 2013, 82, 471-496.	5.0	273
63	Interdomain Long-Range Electron Transfer Becomes Rate-Limiting in the Y216A Variant of Tyramine β-Monooxygenase. Biochemistry, 2013, 52, 1179-1191.	1.2	16
64	Structural Snapshots from the Oxidative Half-reaction of a Copper Amine Oxidase. Journal of Biological Chemistry, 2013, 288, 28409-28417.	1.6	18
65	Identification of a Long-range Protein Network That Modulates Active Site Dynamics in Extremophilic Alcohol Dehydrogenases. Journal of Biological Chemistry, 2013, 288, 14087-14097.	1.6	38
66	Active Site Hydrophobic Residues Impact Hydrogen Tunneling Differently in a Thermophilic Alcohol Dehydrogenase at Optimal versus Nonoptimal Temperatures. Biochemistry, 2012, 51, 4147-4156.	1.2	33
67	Inactivation of Met471Cys Tyramine β-Monooxygenase Results from Site-Specific Cysteic Acid Formation. Biochemistry, 2012, 51, 7488-7495.	1.2	2
68	Distribution and Properties of the Genes Encoding the Biosynthesis of the Bacterial Cofactor, Pyrroloquinoline Quinone. Biochemistry, 2012, 51, 2265-2275.	1.2	103
69	Implication for Functions of the Ectopic Adipocyte Copper Amine Oxidase (AOC3) from Purified Enzyme and Cell-Based Kinetic Studies. PLoS ONE, 2012, 7, e29270.	1.1	40
70	The precursor form of <i>Hansenula polymorpha</i> copper amine oxidase 1 in complex with Cu ^I and Co ^{II} . Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 501-510.	0.7	4
71	Investigating Inner-Sphere Reorganization via Secondary Kinetic Isotope Effects in the Câ [~] 'H Cleavage Reaction Catalyzed by Soybean Lipoxygenase: Tunneling in the Substrate Backbone as Well as the Transferred Hydrogen. Journal of the American Chemical Society, 2011, 133, 430-439.	6.6	35
72	Comparative Hydrogen–Deuterium Exchange for a Mesophilic vs Thermophilic Dihydrofolate Reductase at 25 °C: Identification of a Single Active Site Region with Enhanced Flexibility in the Mesophilic Protein. Biochemistry, 2011, 50, 8251-8260.	1.2	24

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73	Characterization of a Protein-Generated O2Binding Pocket in PqqC, a Cofactorless Oxidase Catalyzing the Final Step in PQQ Production. Biochemistry, 2011, 50, 1556-1566.	1.2	13
74	Enzymatic Methyl Transfer: Role of an Active Site Residue in Generating Active Site Compaction That Correlates with Catalytic Efficiency. Journal of the American Chemical Society, 2011, 133, 17134-17137.	6.6	78
75	Thinking Like an Enzyme. , 2011, , 95-108.		0
76	The widespread occurrence of enzymatic hydrogen tunneling, andits unique properties, lead to a new physical model for the origins of enzyme catalysis. Procedia Chemistry, 2011, 3, 291-305.	0.7	6
77	Impaired protein conformational landscapes as revealed in anomalous Arrhenius prefactors. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10520-10525.	3.3	60
78	The copper centers of tyramine β-monooxygenase and its catalytic-site methionine variants: an X-ray absorption study. Journal of Biological Inorganic Chemistry, 2010, 15, 1195-1207.	1.1	24
79	A new model for the origin of kinetic hydrogen isotope effects. Journal of Physical Organic Chemistry, 2010, 23, 606-612.	0.9	44
80	Structural studies of mutant forms of the PQQâ€forming enzyme PqqC in the presence of product and substrate. Proteins: Structure, Function and Bioinformatics, 2010, 78, 2554-2562.	1.5	7
81	Control of active-site compression. Nature Chemistry, 2010, 2, 907-909.	6.6	20
82	Temperature dependence of protein motions in a thermophilic dihydrofolate reductase and its relationship to catalytic efficiency. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10074-10079.	3.3	37
83	An Active-Site Phenylalanine Directs Substrate Binding and Câ^'H Cleavage in the α-Ketoglutarate-Dependent Dioxygenase TauD. Journal of the American Chemical Society, 2010, 132, 5114-5120.	6.6	25
84	Update 1 of: Tunneling and Dynamics in Enzymatic Hydride Transfer. Chemical Reviews, 2010, 110, PR41-PR67.	23.0	108
85	Mutation at a Strictly Conserved, Active Site Tyrosine in the Copper Amine Oxidase Leads to Uncontrolled Oxygenase Activity. Biochemistry, 2010, 49, 7393-7402.	1.2	16
86	Kinetic and Structural Analysis of Substrate Specificity in Two Copper Amine Oxidases from <i>Hansenula polymorpha</i> . Biochemistry, 2010, 49, 2540-2550.	1.2	36
87	Interaction of PqqE and PqqD in the pyrroloquinoline quinone (PQQ) biosynthetic pathway links PqqD to the radical SAM superfamily. Chemical Communications, 2010, 46, 7031.	2.2	43
88	Modular behavior of tauD provides insight into the origin of specificity in α-ketoglutarate-dependent nonheme iron oxygenases. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19791-19795.	3.3	29
89	Facile synthesis of 1,1-[2H2]-2-methylaminoethane-1-sulfonic acid as a substrate for taurine α ketoglutarate dioxygenase (TauD). Tetrahedron Letters, 2009, 50, 611-613.	0.7	5
90	A 21st century revisionist's view at a turning point in enzymology. Nature Chemical Biology, 2009, 5, 543-550.	3.9	269

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91	An integrated model for enzyme catalysis emerges from studies of hydrogen tunneling. Chemical Physics Letters, 2009, 471, 179-193.	1.2	114
92	Galactose Oxidase as a Model for Reactivity at a Copper Superoxide Center. Journal of the American Chemical Society, 2009, 131, 4657-4663.	6.6	61
93	Pyrroloquinoline Quinone Biogenesis: Demonstration That PqqE from <i>Klebsiella pneumoniae</i> Is a Radical <i>S</i> -Adenosyl- <scp>I</scp> -methionine Enzyme. Biochemistry, 2009, 48, 10151-10161.	1.2	84
94	Synthesis of linoleic acids combinatorially labeled at the vinylic positions as substrates for lipoxygenases. Tetrahedron Letters, 2008, 49, 3600-3603.	0.7	11
95	Experimental Evidence for Hydrogen Tunneling when the Isotopic Arrhenius Prefactor (AH/AD) is Unity. Journal of the American Chemical Society, 2008, 130, 17632-17633.	6.6	32
96	¹⁸ O Kinetic Isotope Effects in Non-Heme Iron Enzymes: Probing the Nature of Fe/O ₂ Intermediates. Journal of the American Chemical Society, 2008, 130, 8122-8123.	6.6	51
97	Hydroxylase Activity of Met471Cys Tyramine β-Monooxygenase. Journal of the American Chemical Society, 2008, 130, 11939-11944.	6.6	29
98	Enzyme structure and dynamics affect hydrogen tunneling: The impact of a remote side chain (I553) in soybean lipoxygenase-1. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1146-1151.	3.3	151
99	Mechanism of the Insect Enzyme, Tyramine β-Monooxygenase, Reveals Differences from the Mammalian Enzyme, Dopamine β-Monooxygenase. Journal of Biological Chemistry, 2008, 283, 3042-3049.	1.6	28
100	The nature of O ₂ activation by the ethylene-forming enzyme 1-aminocyclopropane-1-carboxylic acid oxidase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1814-1819.	3.3	85
101	How Do Enzymes Activate Oxygen without Inactivating Themselves?. Accounts of Chemical Research, 2007, 40, 325-333.	7.6	136
102	Exploring Molecular Oxygen Pathways in Hansenula polymorpha Copper-containing Amine Oxidase. Journal of Biological Chemistry, 2007, 282, 17767-17776.	1.6	76
103	Pyrroloquinoline Quinone Biogenesis:  Characterization of PqqC and Its H84N and H84A Active Site Variants. Biochemistry, 2007, 46, 7174-7186.	1.2	19
104	Partial Conversion of Hansenula polymorpha Amine Oxidase into a "Plant―Amine Oxidase:  Implications for Copper Chemistry and Mechanism. Biochemistry, 2007, 46, 10817-10827.	1.2	29
105	Linking Protein Dynamics to Function. FASEB Journal, 2007, 21, A645.	0.2	3
106	Quinoproteins and Cofactors: Expecting the Unexpected. FASEB Journal, 2007, 21, A42.	0.2	0
107	Tunneling and Dynamics in Enzymatic Hydride Transfer. Chemical Reviews, 2006, 106, 3095-3118.	23.0	299
108	The role of tunneling in enzyme catalysis of C–H activation. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 981-987.	0.5	62

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109	The Catalytic Role of the Copper Ligand H172 of Peptidylglycine α-Hydroxylating Monooxygenase: A Kinetic Study of the H172A Mutantâ€. Biochemistry, 2006, 45, 15419-15429.	1.2	38
110	Pathway for the StereocontrolledZandEProduction of α,α-Difluorine-Substituted Phenyl Butenoates. Journal of Organic Chemistry, 2006, 71, 8618-8621.	1.7	30
111	Mechanism of O2Activation by Cytochrome P450cam Studied by Isotope Effects and Transient State Kineticsâ€. Biochemistry, 2006, 45, 15793-15806.	1.2	26
112	Kinetic Isotope Effects in Enzymology. Advances in Enzymology and Related Areas of Molecular Biology, 2006, 46, 415-494.	1.3	26
113	Linking protein structure and dynamics to catalysis: the role of hydrogen tunnelling. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1323-1331.	1.8	74
114	The Copper-Enzyme Family of Dopamine β-Monooxygenase and Peptidylglycine α-Hydroxylating Monooxygenase: Resolving the Chemical Pathway for Substrate Hydroxylation. Journal of Biological Chemistry, 2006, 281, 3013-3016.	1.6	336
115	Investigation of cu(I)-dependent 2,4,5-Trihydroxyphenylalanine Quinone Biogenesis in Hansenula polymorpha Amine Oxidase. Journal of Biological Chemistry, 2006, 281, 21114-21118.	1.6	14
116	Modeling temperature dependent kinetic isotope effects for hydrogen transfer in a series of soybean lipoxygenase mutants: The effect of anharmonicity upon transfer distance. Chemical Physics, 2005, 319, 283-296.	0.9	79
117	2,4,5-Trihydroxyphenylalanine Quinone Biogenesis in the Copper Amine Oxidase fromHansenula polymorphawith the Alternate Metal Nickelâ€. Biochemistry, 2005, 44, 14308-14317.	1.2	26
118	Mechanism of post-translational quinone formation in copper amine oxidases and its relationship to the catalytic turnover. Archives of Biochemistry and Biophysics, 2005, 433, 255-265.	1.4	75
119	Cloning and characterization of histamine dehydrogenase from Nocardioides simplex. Archives of Biochemistry and Biophysics, 2005, 436, 8-22.	1.4	24
120	Structure and Hydride Transfer Mechanism of a Moderate Thermophilic Dihydrofolate Reductase from Bacillus stearothermophilus and Comparison to Its Mesophilic and Hyperthermophilic Homologues,. Biochemistry, 2005, 44, 11428-11439.	1.2	44
121	Methods for Characterizing TPQ-Containing Proteins. Methods in Enzymology, 2004, 378, 17-31.	0.4	6
122	Thermal-activated protein mobility and its correlation with catalysis in thermophilic alcohol dehydrogenase. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 9556-9561.	3.3	134
123	Quinone biogenesis: Structure and mechanism of PqqC, the final catalyst in the production of pyrroloquinoline quinone. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7913-7918.	3.3	74
124	Oxygen Isotope Effects on Electron Transfer to O2Probed Using Chemically Modified Flavins Bound to Glucose Oxidase. Journal of the American Chemical Society, 2004, 126, 15120-15131.	6.6	101
125	The Structure of a Biosynthetic Intermediate of Pyrroloquinoline Quinone (PQQ) and Elucidation of the Final Step of PQQ Biosynthesis. Journal of the American Chemical Society, 2004, 126, 5342-5343.	6.6	50
126	Impact of Protein Flexibility on Hydride-Transfer Parameters in Thermophilic and Psychrophilic Alcohol Dehydrogenases. Journal of the American Chemical Society, 2004, 126, 9500-9501.	6.6	47

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127	Crystal Structure and Amide H/D Exchange of Binary Complexes of Alcohol Dehydrogenase fromBacillus stearothermophilus: Insight into Thermostability and Cofactor Bindingâ€,‡. Biochemistry, 2004, 43, 5266-5277.	1.2	69
128	Investigation of the Pathway for Inter-Copper Electron Transfer in Peptidylglycine α-Amidating Monooxygenase. Journal of the American Chemical Society, 2004, 126, 13168-13169.	6.6	58
129	Evidence for Increased Local Flexibility in Psychrophilic Alcohol Dehydrogenase Relative to Its Thermophilic Homologue. Biochemistry, 2004, 43, 14676-14683.	1.2	62
130	De Novo design and utilization of photolabile caged substrates as probes of hydrogen tunneling with horse liver alcohol dehydrogenase at sub-zero temperatures: a cautionary note. Bioorganic Chemistry, 2003, 31, 172-190.	2.0	21
131	The multi-functional topa-quinone copper amine oxidases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2003, 1647, 131-137.	1.1	78
132	Oxygen and Hydrogen Isotope Effects in an Active Site Tyrosine to Phenylalanine Mutant of Peptidylglycine α-Hydroxylating Monooxygenase: Mechanistic Implicationsâ€. Biochemistry, 2003, 42, 1813-1819.	1.2	67
133	Kinetic Studies of Oxygen Reactivity in Soybean Lipoxygenase-1. Biochemistry, 2003, 42, 11466-11475.	1.2	112
134	Catalysis of electron transfer during activation of O2 by the flavoprotein glucose oxidase. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 62-67.	3.3	169
135	Synthesis and Characterization of Model Compounds of the Lysine Tyrosyl Quinone Cofactor of Lysyl Oxidase. Journal of the American Chemical Society, 2003, 125, 6113-6125.	6.6	59
136	Evidence That Dioxygen and Substrate Activation Are Tightly Coupled in Dopamine β-Monooxygenase. Journal of Biological Chemistry, 2003, 278, 49691-49698.	1.6	162
137	Hydrogen Tunneling in Peptidylglycine α-Hydroxylating Monooxygenase. Journal of the American Chemical Society, 2002, 124, 8194-8195.	6.6	122
138	Mechanistic Comparison of the Cobalt-Substituted and Wild-Type Copper Amine Oxidase from Hansenula polymorpha. Biochemistry, 2002, 41, 10577-10584.	1.2	61
139	Binding of Dioxygen to Non-Metal Sites in Proteins:  Exploration of the Importance of Binding Site Size versus Hydrophobicity in the Copper Amine Oxidase from Hansenula polymorpha. Biochemistry, 2002, 41, 13637-13643.	1.2	49
140	Catalytic Mechanism of the Topa Quinone Containing Copper Amine Oxidasesâ€. Biochemistry, 2002, 41, 9269-9278.	1.2	229
141	Comparison of Rates and Kinetic Isotope Effects Using PEG-Modified Variants and Clycoforms of Glucose Oxidase:  The Relationship of Modification of the Protein Envelope to Câ^'H Activation and Tunneling. Biochemistry, 2002, 41, 8747-8758.	1.2	47
142	Temperature-Dependent Isotope Effects in Soybean Lipoxygenase-1:Â Correlating Hydrogen Tunneling with Protein Dynamics. Journal of the American Chemical Society, 2002, 124, 3865-3874.	6.6	466
143	Environmentally coupled hydrogen tunneling. FEBS Journal, 2002, 269, 3113-3121.	0.2	261
144	The Role of Copper in Topa Quinone Biogenesis and Catalysis, as Probed by Azide Inhibition of a Copper Amine Oxidase from Yeastâ€. Biochemistry, 2001, 40, 2954-2963.	1.2	71

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145	Probes of Hydrogen Tunneling with Horse Liver Alcohol Dehydrogenase at Subzero Temperatures. Biochemistry, 2001, 40, 2303-2311.	1.2	46
146	Steric Control of Oxygenation Regiochemistry in Soybean Lipoxygenase-1. Journal of the American Chemical Society, 2001, 123, 2931-2932.	6.6	103
147	Steady-State Kinetics of Substrate Binding and Iron Release in Tomato ACC Oxidaseâ€. Biochemistry, 2001, 40, 9717-9724.	1.2	38
148	Trihydroxyphenylalanine quinone (TPQ) from copper amine oxidases and lysyl tyrosylquinone (LTQ) from lysyl oxidase. Advances in Protein Chemistry, 2001, 58, 141-174.	4.4	39
149	Life as aerobes: are there simple rules for activation of dioxygen by enzymes?. Journal of Biological Inorganic Chemistry, 2001, 6, 1-13.	1.1	75
150	The Catalytic Function of Bovine Lysyl Oxidase in the Absence of Copper. Journal of Biological Chemistry, 2001, 276, 30575-30578.	1.6	40
151	Oxygen Kinetic Isotope Effects in Soluble Methane Monooxygenase. Journal of Biological Chemistry, 2001, 276, 4549-4553.	1.6	38
152	Whence topa? Models for the biogenesis of topa quinone in copper amine oxidases. Journal of Molecular Catalysis B: Enzymatic, 2000, 8, 95-101.	1.8	21
153	Protein Flexibility Correlates with Degree of Hydrogen Tunneling in Thermophilic and Mesophilic Alcohol Dehydrogenases. Journal of the American Chemical Society, 2000, 122, 10738-10739.	6.6	86
154	Evidence Against Reduction of Cu2+to Cu+during Dioxygen Activation in a Copper Amine Oxidase from Yeast. Journal of the American Chemical Society, 2000, 122, 9897-9904.	6.6	84
155	Crystal Structure at 2.5 Ã Resolution of Zinc-Substituted Copper Amine Oxidase of Hansenula polymorpha Expressed in Escherichia coli,. Biochemistry, 2000, 39, 9709-9717.	1.2	49
156	Kinetic Analysis of Oxygen Utilization during Cofactor Biogenesis in a Copper-Containing Amine Oxidase from Yeast. Biochemistry, 2000, 39, 3699-3707.	1.2	73
157	Investigation of Spectroscopic Intermediates during Copper-Binding and TPQ Formation in Wild-Type and Active-Site Mutants of a Copper-Containing Amine Oxidase from Yeast. Biochemistry, 2000, 39, 3690-3698.	1.2	74
158	Hydrogen tunneling in biology. Chemistry and Biology, 1999, 6, R191-R198.	6.2	210
159	Enzyme dynamics and hydrogen tunnelling in a thermophilic alcohol dehydrogenase. Nature, 1999, 399, 496-499.	13.7	568
160	Nature of Oxygen Activation in Glucose Oxidase fromAspergillus niger:Â The Importance of Electrostatic Stabilization in Superoxide Formationâ€. Biochemistry, 1999, 38, 8572-8581.	1.2	85
161	Nature of Hydrogen Transfer in Soybean Lipoxygenase 1:Â Separation of Primary and Secondary Isotope Effectsâ€. Biochemistry, 1999, 38, 12218-12228.	1.2	180
162	Mutation of a Strictly Conserved, Active-Site Residue Alters Substrate Specificity and Cofactor Biogenesis in a Copper Amine Oxidaseâ€. Biochemistry, 1999, 38, 3683-3693.	1.2	52

#	Article	IF	CITATIONS
163	Computational Study of Tunneling and Coupled Motion in Alcohol Dehydrogenase-Catalyzed Reactions:Â Implication for Measured Hydrogen and Carbon Isotope Effects. Journal of the American Chemical Society, 1999, 121, 1997-2006.	6.6	71
164	Copper amine oxidase from Hansenula polymorpha: the crystal structure determined at 2.4 å resolution reveals the active conformation. Structure, 1998, 6, 293-307.	1.6	191
165	Kinetic Mechanism and Intrinsic Isotope Effects for the Peptidylglycine α-Amidating Enzyme Reactionâ€. Biochemistry, 1998, 37, 8244-8252.	1.2	84
166	Oxygen-18 Kinetic Isotope Effect Studies of the Tyrosine Hydroxylase Reaction:Â Evidence of Rate Limiting Oxygen Activation. Journal of the American Chemical Society, 1998, 120, 4057-4062.	6.6	75
167	Enzyme Catalysis:  Beyond Classical Paradigms. Accounts of Chemical Research, 1998, 31, 397-404.	7.6	360
168	Relationship between Conserved Consensus Site Residues and the Productive Conformation for the TPQ Cofactor in a Copper-Containing Amine Oxidase from Yeast. Biochemistry, 1998, 37, 16591-16600.	1.2	41
169	Probing the Mechanism of Proton Coupled Electron Transfer to Dioxygen: the Oxidative Half-Reaction of Bovine Serum Amine Oxidaseâ€. Biochemistry, 1998, 37, 12513-12525.	1.2	141
170	Effect of Metal on 2,4,5-Trihydroxyphenylalanine (Topa) Quinone Biogenesis in the Hansenula polymorpha Copper Amine Oxidase. Journal of Biological Chemistry, 1997, 272, 19277-19281.	1.6	30
171	Characterization of the Native Lysine Tyrosylquinone Cofactor in Lysyl Oxidase by Raman Spectroscopy. Journal of Biological Chemistry, 1997, 272, 28841-28844.	1.6	47
172	Effects of enzyme glycosylation on the chemical step of catalysis, as probed by hydrogen tunneling and enthalpy of activation. Techniques in Protein Chemistry, 1997, , 311-319.	0.3	3
173	Effects of Protein Glycosylation on Catalysis:Â Changes in Hydrogen Tunneling and Enthalpy of Activation in the Glucose Oxidase Reactionâ€. Biochemistry, 1997, 36, 2603-2611.	1.2	102
174	Comparative Study of17O and18O Isotope Effects As a Probe for Dioxygen Activation:Â Application to the Soybean Lipoxygenase Reaction#. Journal of the American Chemical Society, 1997, 119, 11357-11361.	6.6	26
175	Lipoxygenase Reaction Mechanism:Â Demonstration That Hydrogen Abstraction from Substrate Precedes Dioxygen Binding during Catalytic Turnoverâ€. Biochemistry, 1996, 35, 12882-12892.	1.2	139
176	Mechanisms Whereby Mononuclear Copper Proteins Functionalize Organic Substrates. Chemical Reviews, 1996, 96, 2541-2562.	23.0	831
177	Experimental Evidence for Extensive Tunneling of Hydrogen in the Lipoxygenase Reaction:Â Implications for Enzyme Catalysis. Journal of the American Chemical Society, 1996, 118, 10319-10320.	6.6	180
178	Identification of the quinone cofactor in a lysyl oxidase fromPichia pastoris. FEBS Letters, 1996, 398, 231-234.	1.3	22
179	New Quinocofactors in Eukaryotes. Journal of Biological Chemistry, 1996, 271, 27189-27192.	1.6	86
180	[2] Isolation of 2,4,5-trihydroxyphenylalanine quinone (topa quinone) from copper amine oxidases. Methods in Enzymology, 1995, 258, 20-34.	0.4	22

#	Article	IF	CITATIONS
181	[8] Cloning of mammalian topa quinone-containing enzymes. Methods in Enzymology, 1995, 258, 114-122.	0.4	1
182	[14] Hydrogen tunneling in enzyme catalysis. Methods in Enzymology, 1995, 249, 373-397.	0.4	79
183	[4] Model studies of topa quinone: Synthesis and characterization of topa quinone derivatives. Methods in Enzymology, 1995, 258, 39-52.	0.4	15
184	Model Studies of Topaquinone-Dependent Amine Oxidases. 2. Characterization of Reaction Intermediates and Mechanism. Journal of the American Chemical Society, 1995, 117, 8707-8718.	6.6	119
185	Nature of Rate-Limiting Steps in the Soybean Lipoxygenase-1 Reaction. Biochemistry, 1995, 34, 14077-14092.	1.2	172
186	Model Studies of Topaquinone-Dependent Amine Oxidases. 1. Oxidation of Benzylamine by Topaquinone Analogs. Journal of the American Chemical Society, 1995, 117, 8698-8706.	6.6	107
187	Quinoenzymes in Biology. Annual Review of Biochemistry, 1994, 63, 299-344.	5.0	328
188	Copper Amine Oxidase: Heterologous Expression, Purification, and Characterization of An Active Enzyme in Saccharomyces cerevisiae. Biochemistry, 1994, 33, 7647-7653.	1.2	113
189	Oxygen-18 kinetic isotope effects in the dopamine .betamonooxygenase reaction: Evidence for a new chemical mechanism in non-heme, metallomonooxygenase. Biochemistry, 1994, 33, 226-234.	1.2	123
190	Hydrogen tunneling in the flavoenzyme monoamine oxidase B. Biochemistry, 1994, 33, 14871-14878.	1.2	85
191	Extremely Large Isotope Effects in the Soybean Lipoxygenase-Linoleic Acid Reaction. Journal of the American Chemical Society, 1994, 116, 793-794.	6.6	156
192	Unmasking of hydrogen tunneling in the horse liver alcohol dehydrogenase reaction by site-directed mutagenesis. Biochemistry, 1993, 32, 5503-5507.	1.2	153
193	Discrimination between 16O and 18O in oxygen binding to the reversible oxygen carriers hemoglobin, myoglobin, hemerythrin, and hemocyanin: a new probe for oxygen binding and reductive activation by proteins. Journal of the American Chemical Society, 1993, 115, 8891-8897.	6.6	64
194	Synthesis and spectroscopic characterization of model compounds for the active site cofactor in copper amine oxidases. Journal of the American Chemical Society, 1993, 115, 7117-7127.	6.6	145
195	New probes of oxygen binding and activation: Application to dopamine β-hydroxylase. Journal of Inorganic Biochemistry, 1992, 47, 18.	1.5	Ο
196	Exponential relationships among multiple hydrogen isotope effects as probes of hydrogen tunneling. Bioorganic Chemistry, 1992, 20, 1-7.	2.0	27
197	Reductive trapping of substrate to methylamine oxidase from Arthrobacter P1. FEBS Letters, 1990, 261, 441-444.	1.3	19
198	Evidence that both protium and deuterium undergo significant tunneling in the reaction catalyzed by bovine serum amine oxidase. Biochemistry, 1989, 28, 6597-6605.	1.2	131

5

#	Article	IF	CITATIONS
199	Rapid freeze and chemical-quench studies of dopamine .betamonooxygenase: comparison of pre-steady-state and steady-state parameters. Biochemistry, 1989, 28, 4656-4664.	1.2	47
200	Correlation of copper valency with product formation in single turnovers of dopamine .betamonooxygenase. Biochemistry, 1989, 28, 4664-4670.	1.2	69
201	Dopamine Beta-Hydroxylase of Adrenal Chromaffin Granules: Structure and Function. Annual Review of Biochemistry, 1988, 57, 551-590.	5.0	241
202	Liver Alcohol Dehydrogenas. Critical Reviews in Biochemistry, 1986, 21, 349-389.	7.5	79
203	Calculation of substrate dissociation constants from steady-state isotope effects in enzyme-catalyzed reactions. Journal of the American Chemical Society, 1985, 107, 1058-1060.	6.6	64
204	Mechanism of modulation of dopamine .betamonooxygenase by pH and fumarate as deduced from initial rate and primary deuterium isotope effect studies. Biochemistry, 1983, 22, 3096-3106.	1.2	86
205	Magnitude of intrinsic isotope effects in the dopamine .betamonooxygenase reaction. Biochemistry, 1983, 22, 3091-3096.	1.2	67
206	[34] Deduction of kinetic mechanisms from primary Hydrogen isotope effects: Dopamine β-monooxygenase —A case history. Methods in Enzymology, 1982, 87, 711-732.	0.4	13
207	Transition-state structure in the yeast alcohol dehydrogenase reaction: the magnitude of solvent and .alphasecondary hydrogen isotope effects. Biochemistry, 1980, 19, 2005-2016.	1.2	66
208	Stereochemistry and kinetic isotope effects in the bovine plasma amine oxidase catalyzed oxidation of dopamine. Biochemistry, 1979, 18, 1969-1979.	1.2	43
209	Primary Hydrogen Isotope Effects. , 1978, , 165-200.		3
210	lsotope effects and structure-reactivity correlations in the yeast alcohol dehydrogenase reaction. A study of the enzyme-catalyzed oxidation of aromatic alcohols. Biochemistry, 1976, 15, 2018-2026.	1.2	99
211	The zinc content of yeast alcohol dehydrogenase. Biochemical and Biophysical Research Communications, 1976, 70, 878-884.	1.0	44
212	The magnitude of enzyme transition state analog binding constants. Biochemical and Biophysical Research Communications, 1974, 57, 641-648.	1.0	18
213	The Mechanism of Enzyme-catalyzed Reduced Nicotinamide Adenine Dinucleotide-dependent Reductions. Journal of Biological Chemistry, 1972, 247, 7977-7987.	1.6	109
214	Mechanism of the aconitate isomerase reaction. Biochemistry, 1971, 10, 2259-2266.	1.2	30
215	Stereochemistry of the interconversions of citrate and acetate catalyzed by citrate synthase, adenosine triphosphate citrate lyase, and citrate lyase. Biochemistry, 1971, 10, 2267-2272.	1.2	27

216 Variational Transition State Theory in the Treatment of Hydrogen Transfer Reactions. , 0, , 833-874.

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0

#	Article	IF	CITATIONS
217	Proton Dynamics in Hydrogen-bonded Crystals. , 0, , 273-299.		7
218	The Extraordinary Dynamic Behavior and Reactivity of Dihydrogen and Hydride in the Coordination Sphere of Transition Metals. , 0, , 603-637.		2
219	Proton Conduction in Fuel Cells. , 0, , 709-736.		2
220	Theoretical Simulations of Free Energy Relationships in Proton Transfer. , 0, , 583-602.		0
221	Hydrogen Motion in Metals. , 0, , 787-829.		3
222	Model Studies of Hydride-Transfer Reactions. , 0, , 1037-1077.		1
223	Further Titles of Interest. , 0, , 1560-1560.		1
224	Dihydrogen Transfer and Symmetry: The Role of Symmetry in the Chemistry of Dihydrogen Transfer in the Light of NMR Spectroscopy. , 0, , 639-682.		7
225	Proton Diffusion in Ice Bilayers. , 0, , 737-750.		0
226	Hydrogen Transfer on Metal Surfaces. , 0, , 751-786.		2
227	Quantum Mechanical Tunneling of Hydrogen Atoms in Some Simple Chemical Systems. , 0, , 875-893.		1
228	Multiple Proton Transfer: From Stepwise to Concerted. , 0, , 895-945.		3
229	Proton Transfer to and from Carbon in Model Reactions. , 0, , 949-973.		0
230	General Acid–Base Catalysis in Model Systems. , 0, , 975-1012.		0
231	Hydrogen Atom Transfer in Model Reactions. , 0, , 1013-1035.		2
232	Acid–Base Catalysis in Designed Peptides. , 0, , 1079-1103.		0
233	Multiple Hydrogen Transfers in Enzyme Action. , 0, , 1139-1170.		0

234 Computer Simulations of Proton Transfer in Proteins and Solutions. , 0, , 1171-1205.

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#	Article	IF	CITATIONS
235	The Quantum Kramers Approach to Enzymatic Hydrogen Transfer– Protein Dynamics as it Couples to Catalysis. , 0, , 1209-1239.		0
236	Proton Transfer at the Protein/Water Interface. , 0, , 1499-1526.		0
237	Hydrogen Atom Transfers in B12 Enzymes. , 0, , 1473-1495.		1
238	Proton Transfer during Catalysis by Hydrolases. , 0, , 1455-1472.		1
239	Current Issues in Enzymatic Hydrogen Transfer from Carbon: Tunneling and Coupled Motion from Kinetic Isotope Effect Studies. , 0, , 1311-1340.		4
240	Multiple-Isotope Probes of Hydrogen Tunneling. , 0, , 1285-1309.		0
241	Hydrogen Tunneling in Enzyme-Catalyzed Hydrogen Transfer: Aspects from Flavoprotein Catalysed Reactions. , 0, , 1341-1359.		Ο
242	Spectroscopic Probes of Hydride Transfer Activation by Enzymes. , 0, , 1393-1415.		0
243	Hydrogen Transfer in the Action of Thiamin Diphosphate Enzymes. , 0, , 1419-1438.		0
244	Intra- and Intermolecular Proton Transfer and Related Processes in Confined Cyclodextrin Nanostructures. , 0, , 223-244.		0
245	Single and Multiple Hydrogen/Deuterium Transfer Reactions in Liquids and Solids. , 0, , 135-221.		2
246	Proton Transfer from Alkane Radical Cations to Alkanes. , 0, , 107-133.		0
247	Laser-driven Ultrafast Hydrogen Transfer Dynamics. , 0, , 79-103.		1
248	Gas Phase Vibrational Spectroscopy of Strong Hydrogen Bonds. , 0, , 53-78.		1
249	Coherent Proton Tunneling in Hydrogen Bonds of Isolated Molecules: Carboxylic Dimers. , 0, , 33-51.		1
250	Coherent Proton Tunneling in Hydrogen Bonds of Isolated Molecules: Malonaldehyde and Tropolone. , 0, , 3-31.		3
251	Theoretical Aspects of Proton Transfer Reactions in a Polar Environment. , 0, , 303-348.		4
252	Tautomerization in Porphycenes. , 0, , 245-271.		2

#	Article	IF	CITATIONS
253	Bimolecular Proton Transfer in Solution. , 0, , 443-458.		1
254	Design and Implementation of"Super―Photoacids. , 0, , 417-439.		0
255	Proton-Coupled Electron Transfer: Theoretical Formulation and Applications. , 0, , 479-502.		1
256	Coherent Low-frequency Motions in Condensed Phase Hydrogen Bonding and Transfer. , 0, , 459-477.		0
257	Formation of Hydrogen-bonded Carbanions as Intermediates in Hydron Transfer between Carbon and Oxygen. , 0, , 565-582.		0
258	Enzymatic Catalysis of Proton Transfer at Carbon Atoms. , 0, , 1107-1137.		0
259	The Relation between Hydrogen Atom Transfer and Proton-coupled Electron Transfer in Model Systems. , 0, , 503-562.		8
260	Hydrogen Exchange Measurements in Proteins. , 0, , 1361-1391.		0
261	Dihydrofolate Reductase: Hydrogen Tunneling and Protein Motion. , 0, , 1439-1454.		2