Paul F Fitzpatrick

List of Publications by Year
in descending order

142 papers	5,829 citations	76294 40 h-index	95218 68 g-index
143 all docs	143 docs citations	143 times ranked	4259 citing authors

#	Article	IF	Citations
1	Tetrahydropterin-Dependent Amino Acid Hydroxylases. Annual Review of Biochemistry, 1999, 68, 355-381.	5.0	473
2	Crystal structure of tyrosine hydroxylase at 2.3 Ã… and its implications for inherited neurodegenerative diseases. Nature Structural Biology, 1997, 4, 578-585.	9.7	244
3	Mechanism of Aromatic Amino Acid Hydroxylationâ€. Biochemistry, 2003, 42, 14083-14091.	1.2	244
4	Oxidation of amines by flavoproteins. Archives of Biochemistry and Biophysics, 2010, 493, 13-25.	1.4	189
5	Thermal profiling reveals phenylalanine hydroxylase as an off-target of panobinostat. Nature Chemical Biology, 2016, 12, 908-910.	3.9	189
6	Structures and mechanism of the monoamine oxidase family. Biomolecular Concepts, 2011, 2, 365-377.	1.0	166
7	Direct Spectroscopic Evidence for a High-Spin Fe(IV) Intermediate in Tyrosine Hydroxylase. Journal of the American Chemical Society, 2007, 129, 11334-11335.	6.6	164
8	Characterization of the Active Site Iron in Tyrosine Hydroxylase. Journal of Biological Chemistry, 1996, 271, 24395-24400.	1.6	107
9	Steady-state kinetic mechanism of rat tyrosine hydroxylase. Biochemistry, 1991, 30, 3658-3662.	1.2	104
10	Domain Movements upon Activation of Phenylalanine Hydroxylase Characterized by Crystallography and Chromatography-Coupled Small-Angle X-ray Scattering. Journal of the American Chemical Society, 2016, 138, 6506-6516.	6.6	100
11	Substrate Dehydrogenation by Flavoproteins. Accounts of Chemical Research, 2001, 34, 299-307.	7.6	98
12	A Mechanism for Hydroxylation by Tyrosine Hydroxylase Based on Partitioning of Substituted Phenylalanines. Biochemistry, 1996, 35, 6969-6975.	1.2	90
13	Carbanion versus hydride transfer mechanisms in flavoprotein-catalyzed dehydrogenations. Bioorganic Chemistry, 2004, 32, 125-139.	2.0	77
14	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
15	Effects of Phosphorylation of Serine 40 of Tyrosine Hydroxylase on Binding of Catecholamines:Â Evidence for a Novel Regulatory Mechanismâ€. Biochemistry, 1998, 37, 8980-8986.	1.2	75
16	Expression and characterization of catalytic and regulatory domains of rat tyrosine hydroxylase. Protein Science, 1993, 2, 1452-1460.	3.1	74
17	Insights into the Mechanism of Flavoprotein-Catalyzed Amine Oxidation from Nitrogen Isotope Effects on the Reaction of N-Methyltryptophan Oxidase. Biochemistry, 2007, 46, 7655-7664.	1.2	69
18	Differential quantum tunneling contributions in nitroalkane oxidase catalyzed and the uncatalyzed proton transfer reaction. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20734-20739.	3.3	69

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19	Nitrogen Isotope Effects As Probes of the Mechanism ofd-Amino Acid Oxidase. Journal of the American Chemical Society, 2000, 122, 12896-12897.	6.6	68
20	Mechanisms of tryptophan and tyrosine hydroxylase. IUBMB Life, 2013, 65, 350-357.	1.5	67
21	The Aromatic Amino Acid Hydroxylases. Advances in Enzymology and Related Areas of Molecular Biology, 2006, 74, 235-294.	1.3	66
22	Characterization of Chimeric Pterin-Dependent Hydroxylases:Â Contributions of the Regulatory Domains of Tyrosine and Phenylalanine Hydroxylase to Substrate Specificityâ€. Biochemistry, 1997, 36, 11574-11582.	1.2	65
23	Expression and Characterization of the Catalytic Core of Tryptophan Hydroxylase. Journal of Biological Chemistry, 1998, 273, 12259-12266.	1.6	62
24	On the Catalytic Mechanism of Tryptophan Hydroxylase. Journal of the American Chemical Society, 2000, 122, 4535-4541.	6.6	62
25	Allosteric regulation of phenylalanine hydroxylase. Archives of Biochemistry and Biophysics, 2012, 519, 194-201.	1.4	61
26	The metal requirement of rat tyrosine hydroxylase. Biochemical and Biophysical Research Communications, 1989, 161, 211-215.	1.0	60
27	Identification of the Naturally Occurring Flavin of Nitroalkane Oxidase from Fusarium oxysporum as a 5-Nitrobutyl-FAD and Conversion of the Enzyme to the Active FAD-containing Form. Journal of Biological Chemistry, 1997, 272, 5563-5570.	1.6	56
28	Identification of iron ligands in tyrosine hydroxylase by mutagenesis of conserved histidinyl residues. Protein Science, 1995, 4, 2082-2086.	3.1	50
29	Identification of tyrosine hydroxylase as a physiological substrate for Cdk5. Journal of Neurochemistry, 2004, 91, 374-384.	2.1	50
30	Nitroalkane oxidase, a carbanion-forming flavoprotein homologous to acyl-CoA dehydrogenase. Archives of Biochemistry and Biophysics, 2005, 433, 157-165.	1.4	50
31	Kinetic Isotope Effects on Hydroxylation of Ring-Deuterated Phenylalanines by Tyrosine Hydroxylase Provide Evidence against Partitioning of an Arene Oxide Intermediate. Journal of the American Chemical Society, 1994, 116, 1133-1134.	6.6	48
32	Spectroscopy and Kinetics of Wild-Type and Mutant Tyrosine Hydroxylase: Mechanistic Insight into O₂ Activation. Journal of the American Chemical Society, 2009, 131, 7685-7698.	6.6	48
33	Mechanistic Studies of the Flavoenzyme Tryptophan 2-Monooxygenase:Â Deuterium and15N Kinetic Isotope Effects on Alanine Oxidation by anl-Amino Acid Oxidaseâ€. Biochemistry, 2006, 45, 15844-15852.	1.2	47
34	The Solution Structure of the Regulatory Domain of Tyrosine Hydroxylase. Journal of Molecular Biology, 2014, 426, 1483-1497.	2.0	47
35	Mechanism-based inhibitors of dopamine Î²-hydroxylase. Archives of Biochemistry and Biophysics, 1987, 257, 231-250.	1.4	45
36	Effects of Phosphorylation on Binding of Catecholamines to Tyrosine Hydroxylase:â€‰ Specificity and Thermodynamics. Biochemistry, 2000, 39, 773-778.	1.2	45

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37	Reversing the Substrate Specificities of Phenylalanine and Tyrosine Hydroxylase:â€‰ Aspartate 425 of Tyrosine Hydroxylase Is Essential for l-DOPA Formation. Biochemistry, 2000, 39, 9652-9661.	1.2	45
38	Solvent and Primary Deuterium Isotope Effects Show That Lactate CH and OH Bond Cleavages Are Concerted in Y254F Flavocytochromeb2, Consistent with a Hydride Transfer Mechanismâ€. Biochemistry, 2003, 42, 15208-15214.	1.2	45
39	Insights into the Catalytic Mechanisms of Phenylalanine and Tryptophan Hydroxylase from Kinetic Isotope Effects on Aromatic Hydroxylationâ€. Biochemistry, 2006, 45, 11030-11037.	1.2	43
40	Limited Proteolysis of Tyrosine Hydroxylase Identifies Residues 33â€"50 as Conformationally Sensitive to Phosphorylation State and Dopamine Binding. Archives of Biochemistry and Biophysics, 1999, 367, 143-145.	1.4	41
41	Crystal Structures of Nitroalkane Oxidase:â€‰ Insights into the Reaction Mechanism from a Covalent Complex of the Flavoenzyme Trapped during Turnover. Biochemistry, 2006, 45, 1138-1150.	1.2	40
42	Regulation of Phenylalanine Hydroxylase: Conformational Changes Upon Phenylalanine Binding Detected by Hydrogen/Deuterium Exchange and Mass Spectrometry. Biochemistry, 2010, 49, 3327-3335.	1.2	40
43	A lysine conserved in the monoamine oxidase family is involved in oxidation of the reduced flavin in mouse polyamine oxidase. Archives of Biochemistry and Biophysics, 2010, 498, 83-88.	1.4	40
44	Mechanistic studies of the flavoprotein tryptophan 2-monooxygenase. 2. pH and kinetic isotope effects. Biochemistry, 1995, 34, 3716-3723.	1.2	38
45	Substrate Specificity of a Nitroalkane-Oxidizing Enzyme. Archives of Biochemistry and Biophysics, 1999, 363, 309-313.	1.4	38
46	Effects of phosphorylation by protein kinase A on binding of catecholamines to the human tyrosine hydroxylase isoforms. Journal of Neurochemistry, 2004, 90, 970-978.	2.1	38
47	pH Dependence of a Mammalian Polyamine Oxidase: Insights into Substrate Specificity and the Role of Lysine 315. Biochemistry, 2009, 48, 1508-1516.	1.2	38
48	STRENDA DB: enabling the validation and sharing of enzyme kinetics data. FEBS Journal, 2018, 285, 2193-2204.	2.2	38
49	Intrinsic Primary, Secondary, and Solvent Kinetic Isotope Effects on the Reductive Half-Reaction of D-Amino Acid Oxidase: Evidence against a Concerted Mechanism. Biochemistry, 1994, 33, 4001-4007.	1.2	37
50	Comparison of Enzymatic and Non-Enzymatic Nitroethane Anion Formation:Â Thermodynamics and Contribution of Tunneling. Journal of the American Chemical Society, 2004, 126, 6244-6245.	6.6	37
51	Direct evidence for a phenylalanine site in the regulatory domain of phenylalanine hydroxylase. Archives of Biochemistry and Biophysics, 2011, 505, 250-255.	1.4	37
52	Expression and Characterization of the Catalytic Domain of Human Phenylalanine Hydroxylase. Archives of Biochemistry and Biophysics, 1997, 348, 295-302.	1.4	36
53	Cloning of nitroalkane oxidase from Fusarium oxysporum identifies a new member of the acyl-CoA dehydrogenase superfamily. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2702-2707.	3.3	36
54	Mechanistic studies of the flavoprotein tryptophan 2-monooxygenase. 1. Kinetic mechanism. Biochemistry, 1995, 34, 3710-3715.	1.2	35

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55	Effects of Substitution at Serine 40 of Tyrosine Hydroxylase on Catecholamine Bindingâ€. Biochemistry, 2001, 40, 7273-7278.	1.2	34
56	Combining solvent isotope effects with substrate isotope effects in mechanistic studies of alcohol and amine oxidation by enzymes. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1746-1755.	1.1	34
57	Establishing the Kinetic Competency of the Cationic Imine Intermediate in Nitroalkane Oxidase. Journal of the American Chemical Society, 2005, 127, 2062-2066.	6.6	33
58	Mechanism-based inhibitors of dopamine .beta.-hydroxylase containing acetylenic or cyclopropyl groups. Journal of the American Chemical Society, 1985, 107, 5022-5023.	6.6	32
59	Kinetic Mechanism and Substrate Specificity of Nitroalkane Oxidase. Biochemical and Biophysical Research Communications, 1996, 225, 6-10.	1.0	32
60	Use of pH and Kinetic Isotope Effects to Dissect the Effects of Substrate Size on Binding and Catalysis by Nitroalkane Oxidase. Archives of Biochemistry and Biophysics, 2000, 382, 138-144.	1.4	31
61	pH and kinetic isotope effects on the reductive half-reaction of D-amino acid oxidase. Biochemistry, 1992, 31, 8207-8215.	1.2	30
62	Probing the Relative Timing of Hydrogen Abstraction Steps in the Flavocytochromeb2Reaction with Primary and Solvent Deuterium Isotope Effects and Mutant Enzymesâ€. Biochemistry, 2001, 40, 994-1001.	1.2	29
63	Phenylalanine Binding Is Linked to Dimerization of the Regulatory Domain of Phenylalanine Hydroxylase. Biochemistry, 2014, 53, 6625-6627.	1.2	29
64	Uncoupled Forms of Tyrosine Hydroxylase Unmask Kinetic Isotope Effects on Chemical Steps. Journal of the American Chemical Society, 2003, 125, 16190-16191.	6.6	28
65	Effects of mutations in tyrosine hydroxylase associated with progressive dystonia on the activity and stability of the protein. Proteins: Structure, Function and Bioinformatics, 2004, 58, 14-21.	1.5	28
66	Intrinsic Isotope Effects on Benzylic Hydroxylation by the Aromatic Amino Acid Hydroxylases:Â Evidence for Hydrogen Tunneling, Coupled Motion, and Similar Reactivities. Journal of the American Chemical Society, 2005, 127, 16414-16415.	6.6	28
67	Mutation of regulatory serines of rat tyrosine hydroxylase to glutamate: effects on enzyme stability and activity. Archives of Biochemistry and Biophysics, 2005, 434, 266-274.	1.4	28
68	Mechanistic Studies of Human Spermine Oxidase: Kinetic Mechanism and pH Effects. Biochemistry, 2010, 49, 386-392.	1.2	28
69	Isotope Effects Suggest a Stepwise Mechanism for Berberine Bridge Enzyme. Biochemistry, 2012, 51, 7342-7347.	1.2	28
70	pH and Secondary Kinetic Isotope Effects on the Reaction ofd-Amino Acid Oxidase with Nitroalkane Anions:Â Evidence for Direct Attack on the Flavin by Carbanions. Journal of the American Chemical Society, 1997, 119, 1155-1156.	6.6	27
71	Mechanism of Nitroalkane Oxidase:Â 2. pH and Kinetic Isotope Effectsâ€. Biochemistry, 2000, 39, 1406-1410.	1.2	27
72	A Continuous Fluorescence Assay for Tryptophan Hydroxylase. Analytical Biochemistry, 1999, 266, 148-152.	1.1	26

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73	Analysis of the Role of the Active Site Residue Arg98 in the Flavoprotein Tryptophan 2-Monooxygenase, a Member of the l-Amino Oxidase Family. Biochemistry, 2003, 42, 13826-13832.	1.2	26
74	Structure of the Flavoprotein Tryptophan 2-Monooxygenase, a Key Enzyme in the Formation of Galls in Plants. Biochemistry, 2013, 52, 2620-2626.	1.2	26
75	Structural insights into the regulation of aromatic amino acid hydroxylation. Current Opinion in Structural Biology, 2015, 35, 1-6.	2.6	26
76	Intrinsic Deuterium Isotope Effects on Benzylic Hydroxylation by Tyrosine Hydroxylase. Journal of the American Chemical Society, 2002, 124, 4202-4203.	6.6	25
77	Reductive Half-Reaction of Nitroalkane Oxidase:Â Effect of Mutation of the Active Site Aspartate to Glutamateâ€,â€¡. Biochemistry, 2003, 42, 5850-5856.	1.2	25
78	Crystal Structures of Intermediates in the Nitroalkane Oxidase Reaction. Biochemistry, 2009, 48, 3407-3416.	1.2	25
79	Measurement of Intrinsic Rate Constants in the Tyrosine Hydroxylase Reaction. Biochemistry, 2010, 49, 645-652.	1.2	25
80	Identification of the Allosteric Site for Phenylalanine in Rat Phenylalanine Hydroxylase. Journal of Biological Chemistry, 2016, 291, 7418-7425.	1.6	25
81	Identification by Hydrogen/Deuterium Exchange of Structural Changes in Tyrosine Hydroxylase Associated with Regulation. Biochemistry, 2009, 48, 4972-4979.	1.2	24
82	Kinetic Mechanism of Phenylalanine Hydroxylase: Intrinsic Binding and Rate Constants from Single-Turnover Experiments. Biochemistry, 2013, 52, 1062-1073.	1.2	24
83	Metal dependence and branched RNA cocrystal structures of the RNA lariat debranching enzyme Dbr1. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14727-14732.	3.3	24
84	Structural and enzymatic insights into species-specific resistance to schistosome parasite drug therapy. Journal of Biological Chemistry, 2017, 292, 11154-11164.	1.6	24
85	Mechanistic Studies of Mouse Polyamine Oxidase with N1,N12-Bisethylspermine as a Substrateâ€. Biochemistry, 2005, 44, 7079-7084.	1.2	23
86	Influence of Steric Bulk and Electrostatics on the Hydroxylation Regiospecificity of Tryptophan Hydroxylase:Â Characterization of Methyltryptophans and Azatryptophans as Substratesâ€. Biochemistry, 1999, 38, 16283-16289.	1.2	22
87	Iso-Mechanism of Nitroalkane Oxidase:Â 1. Inhibition Studies and Activation by Imidazoleâ€. Biochemistry, 2000, 39, 1400-1405.	1.2	22
88	Activation of Phenylalanine Hydroxylase by Phenylalanine Does Not Require Binding in the Active Site. Biochemistry, 2014, 53, 7846-7853.	1.2	22
89	Inactivation of Nitroalkane Oxidase upon Mutation of the Active Site Base and Rescue with a Deprotonated Substrate. Journal of the American Chemical Society, 2003, 125, 8738-8739.	6.6	21
90	pH and Kinetic Isotope Effects on Sarcosine Oxidation byN-Methyltryptophan Oxidaseâ€. Biochemistry, 2005, 44, 3074-3081.	1.2	21

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91	Insights into the mechanisms of flavoprotein oxidases from kinetic isotope effects. Journal of Labelled Compounds and Radiopharmaceuticals, 2007, 50, 1016-1025.	0.5	21
92	Effects of Ligands on the Mobility of an Active-Site Loop in Tyrosine Hydroxylase as Monitored by Fluorescence Anisotropyâ€. Biochemistry, 2006, 45, 9632-9638.	1.2	20
93	Single Turnover Kinetics of Tryptophan Hydroxylase: Evidence for a New Intermediate in the Reaction of the Aromatic Amino Acid Hydroxylases. Biochemistry, 2010, 49, 7563-7571.	1.2	19
94	Pulsed EPR Study of Amino Acid and Tetrahydropterin Binding in a Tyrosine Hydroxylase Nitric Oxide Complex: Evidence for Substrate Rearrangements in the Formation of the Oxygen-Reactive Complex. Biochemistry, 2013, 52, 8430-8441.	1.2	19
95	An empirical analysis of enzyme function reporting for experimental reproducibility: Missing/incomplete information in published papers. Biophysical Chemistry, 2018, 242, 22-27.	1.5	19
96	Role of Tryptophan Hydroxylase Phe313 in Determining Substrate Specificity. Biochemical and Biophysical Research Communications, 2002, 292, 639-641.	1.0	18
97	Characterization of Metal Ligand Mutants of Tyrosine Hydroxylase:Â Insights into the Plasticity of a 2-Histidine-1-Carboxylate Triadâ€. Biochemistry, 2003, 42, 2081-2088.	1.2	18
98	The enzymes of microbial nicotine metabolism. Beilstein Journal of Organic Chemistry, 2018, 14, 2295-2307.	1.3	18
99	A Flexible Loop in Tyrosine Hydroxylase Controls Coupling of Amino Acid Hydroxylation to Tetrahydropterin Oxidation. Journal of Molecular Biology, 2006, 359, 299-307.	2.0	17
100	Mechanism of the Flavoprotein <scp>l</scp>-Hydroxynicotine Oxidase: Kinetic Mechanism, Substrate Specificity, Reaction Product, and Roles of Active-Site Residues. Biochemistry, 2016, 55, 697-703.	1.2	17
101	Nitroalkane oxidase: Structure and mechanism. Archives of Biochemistry and Biophysics, 2017, 632, 41-46.	1.4	17
102	Solvent isotope and viscosity effects on the steadyâ€state kinetics of the flavoprotein nitroalkane oxidase. FEBS Letters, 2013, 587, 2785-2789.	1.3	16
103	Identification of Native Flavin Adducts fromFusarium oxysporumUsing Accurate Mass Matrix-Assisted Laser Desorption/Ionization Time-of-Flight Mass Spectrometry. Analytical Chemistry, 1997, 69, 2862-2865.	3.2	15
104	Use of alternate substrates to probe the order of substrate addition to dopamine Î²-hydroxylase. Archives of Biochemistry and Biophysics, 1986, 249, 70-75.	1.4	14
105	Identification of an Essential Tyrosine Residue in Nitroalkane Oxidase by Modification with Tetranitromethaneâ€. Biochemistry, 2000, 39, 1162-1168.	1.2	14
106	Mechanistic Studies of <i>para</i>-Substituted <i>N</i>,<i>N</i>â€²-Dibenzyl-1,4-diaminobutanes as Substrates for a Mammalian Polyamine Oxidase. Biochemistry, 2009, 48, 12305-12313.	1.2	14
107	Identification of a Hypothetical Protein from <i>Podospora anserina</i> as a Nitroalkane Oxidase. Biochemistry, 2010, 49, 5035-5041.	1.2	14
108	Fluorescence Spectroscopy as a Probe of the Effect of Phosphorylation at Serine 40 of Tyrosine Hydroxylase on the Conformation of Its Regulatory Domain. Biochemistry, 2011, 50, 2364-2370.	1.2	14

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109	HYSCORE Analysis of the Effects of Substrates on Coordination of Water to the Active Site Iron in Tyrosine Hydroxylase. Biochemistry, 2015, 54, 3759-3771.	1.2	14
110	The Amino Acid Specificity for Activation of Phenylalanine Hydroxylase Matches the Specificity for Stabilization of Regulatory Domain Dimers. Biochemistry, 2015, 54, 5167-5174.	1.2	14
111	Role of gangliosides in gonadotropin and cholera enterotoxin stimulated steroidogenesis in isolated rat ovarian cells. Biochemical and Biophysical Research Communications, 1978, 83, 493-500.	1.0	13
112	Characterization of Unstable Products of Flavin- and Pterin-Dependent Enzymes by Continuous-Flow Mass Spectrometry. Biochemistry, 2014, 53, 2672-2679.	1.2	13
113	Identification of a Cysteine Residue in the Active Site of Nitroalkane Oxidase by Modification withN-Ethylmaleimide. Journal of Biological Chemistry, 2000, 275, 31891-31895.	1.6	12
114	Analysis of the roles of amino acid residues in the flavoprotein tryptophan 2-monooxygenase modified by 2-oxo-3-pentynoate: characterization of His338, Cys339, and Cys511 mutant enzymes. Archives of Biochemistry and Biophysics, 2002, 402, 24-30.	1.4	12
115	Mechanistic and Structural Analyses of the Roles of Arg409 and Asp402 in the Reaction of the Flavoprotein Nitroalkane Oxidase[,]. Biochemistry, 2007, 46, 13800-13808.	1.2	11
116	Demonstration of a Peroxide Shunt in the Tetrahydropterin-Dependent Aromatic Amino Acid Monooxygenases. Journal of the American Chemical Society, 2009, 131, 4582-4583.	6.6	11
117	Crystallization and preliminary analysis of active nitroalkane oxidase in three crystal forms. Acta Crystallographica Section D: Biological Crystallography, 2004, 60, 1456-1460.	2.5	10
118	Regulation of phenylalanine hydroxylase: Conformational changes upon phosphorylation detected by H/D exchange and mass spectrometry. Archives of Biochemistry and Biophysics, 2013, 535, 115-119.	1.4	10
119	C-terminal COOH of Integrin Î²1 Is Necessary for Î²1 Association with the Kindlin-2 Adapter Protein. Journal of Biological Chemistry, 2014, 289, 11183-11193.	1.6	10
120	Mechanism of Flavoprotein <scp>l</scp>-6-Hydroxynicotine Oxidase: pH and Solvent Isotope Effects and Identification of Key Active Site Residues. Biochemistry, 2017, 56, 869-875.	1.2	10
121	Measurement of the Intramolecular Isotope Effect on Aliphatic Hydroxylation by Chromobacterium violaceum Phenylalanine Hydroxylase. Journal of the American Chemical Society, 2010, 132, 5584-5585.	6.6	9
122	Mutagenesis of a Specificity-Determining Residue in Tyrosine Hydroxylase Establishes That the Enzyme Is a Robust Phenylalanine Hydroxylase but a Fragile Tyrosine Hydroxylase. Biochemistry, 2013, 52, 1446-1455.	1.2	9
123	Kinetic Mechanism and Intrinsic Rate Constants for the Reaction of a Bacterial Phenylalanine Hydroxylase. Biochemistry, 2016, 55, 6848-6857.	1.2	9
124	Phosphorylation of Phenylalanine Hydroxylase Increases the Rate Constant for Formation of the Activated Conformation of the Enzyme. Biochemistry, 2018, 57, 6274-6277.	1.2	9
125	Specificity of the MAP kinase ERK2 for phosphorylation of tyrosine hydroxylase. Archives of Biochemistry and Biophysics, 2004, 423, 247-252.	1.4	8
126	Characterization of metal ligand mutants of phenylalanine hydroxylase: Insights into the plasticity of a 2-histidine-1-carboxylate triad. Archives of Biochemistry and Biophysics, 2008, 475, 164-168.	1.4	8

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127	Mechanistic Studies of an Amine Oxidase Derived from d-Amino Acid Oxidase. Biochemistry, 2017, 56, 2024-2030.	1.2	8
128	The phenylketonuria-associated substitution R68S converts phenylalanine hydroxylase to a constitutively active enzyme but reduces its stability. Journal of Biological Chemistry, 2019, 294, 4359-4367.	1.6	8
129	Mechanistic studies of the role of a conserved histidine in a mammalian polyamine oxidase. Archives of Biochemistry and Biophysics, 2012, 528, 45-49.	1.4	7
130	The amino acid substrate of bovine tyrosine hydroxylase. Neurochemistry International, 1992, 21, 191-196.	1.9	6
131	The regulatory domain of human tryptophan hydroxylase 1 forms a stable dimer. Biochemical and Biophysical Research Communications, 2016, 476, 457-461.	1.0	6
132	13C kinetic isotope effects on the reaction of a flavin amine oxidase determined from whole molecule isotope effects. Archives of Biochemistry and Biophysics, 2016, 612, 115-119.	1.4	6
133	Use of a tyrosine hydroxylase mutant enzyme with reduced metal affinity allows detection of activity with cobalt in place of iron. Archives of Biochemistry and Biophysics, 2002, 408, 305-307.	1.4	5
134	Mutagenesis of an Active-Site Loop in Tryptophan Hydroxylase Dramatically Slows the Formation of an Early Intermediate in Catalysis. Journal of the American Chemical Society, 2018, 140, 5185-5192.	6.6	5
135	Evidence for an Essential Arginine in the Flavoprotein Nitroalkane Oxidase. Journal of Enzyme Inhibition and Medicinal Chemistry, 2001, 16, 157-163.	0.5	3
136	Characterization of active site residues of nitroalkane oxidase. Bioorganic Chemistry, 2010, 38, 115-119.	2.0	3
137	Contrasting Values of Commitment Factors Measured from Viscosity, pH, and Kinetic Isotope Effects: Evidence for Slow Conformational Changes in theD-Amino Acid Oxidase Reaction. Bioorganic Chemistry, 1997, 25, 100-109.	2.0	2
138	Measurement of Kinetic Isotope Effects in an Enzyme-Catalyzed Reaction by Continuous-Flow Mass Spectrometry. Methods in Enzymology, 2017, 596, 149-161.	0.4	2
139	pH and deuterium isotope effects on the reaction of trimethylamine dehydrogenase with dimethylamine. Archives of Biochemistry and Biophysics, 2019, 676, 108136.	1.4	2
140	Mechanism of the Flavoprotein d-6-Hydroxynicotine Oxidase: Substrate Specificity, pH and Solvent Isotope Effects, and Roles of Key Active-Site Residues. Biochemistry, 2019, 58, 2534-2541.	1.2	2
141	Effects of phosphorylation by protein kinase A on binding of catecholamines to the human tyrosine hydroxylase isoforms. Journal of Neurochemistry, 2004, 90, 1280-1280.	2.1	0
142	Highlight issue: Enzymology of drug metabolism and toxicology. Archives of Biochemistry and Biophysics, 2007, 464, 153-154.	1.4	0