David P Ballou

List of Publications by Year in descending order

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42 papers 1,710 citations

23 h-index 312153 41 g-index

45 all docs

45 docs citations

45 times ranked

1443 citing authors

#	Article	IF	CITATIONS
1	Protonation status and control mechanism of flavin–oxygen intermediates in the reaction of bacterial luciferase. FEBS Journal, 2021, 288, 3246-3260.	2.2	13
2	Coenzyme A Persulfide Prioritizes Sulfide over Butyrate Oxidation. FASEB Journal, 2019, 33, 633.15.	0.2	0
3	A role for glutamine 183 in the folate oxidative half-reaction of methylenetetrahydrofolate reductase from Escherichia coli. Archives of Biochemistry and Biophysics, 2018, 642, 63-74.	1.4	6
4	Unique Biochemical and Sequence Features Enable BluB To Destroy Flavin and Distinguish BluB from the Flavin Monooxygenase Superfamily. Biochemistry, 2018, 57, 1748-1757.	1.2	5
5	Characterization of a new Baeyer-Villiger monooxygenase and conversion to a solely N-or S-oxidizing enzyme by a single R292 mutation. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 1177-1187.	1.1	19
6	Oxidative hemoglobin reactions: Applications to drug metabolism. Archives of Biochemistry and Biophysics, 2016, 600, 33-46.	1.4	9
7	Kinetics of Nitrite Reduction and Peroxynitrite Formation by Ferrous Heme in Human Cystathionine β-Synthase. Journal of Biological Chemistry, 2016, 291, 8004-8013.	1.6	22
8	Rapid Kinetics of Dehalogenation Promoted by Iodotyrosine Deiodinase from Human Thyroid. Biochemistry, 2015, 54, 4487-4494.	1.2	23
9	Evidence for catalytic intermediates involved in generating the chromopyrrolic acid scaffold of rebeccamycin by RebO and RebD. Archives of Biochemistry and Biophysics, 2015, 573, 111-119.	1.4	11
10	Reaction of ferric <i>Caldariomyces fumago</i> chloroperoxidase with <i>meta</i> -chloroperoxybenzoic acid: sequential formation of compound I, compound II and regeneration of the ferric state using one reactant. Journal of Porphyrins and Phthalocyanines, 2013, 17, 63-72.	0.4	7
11	Spectroscopic studies of the oxidation of ferric CYP153A6 by peracids: Insights into P450 higher oxidation states. Archives of Biochemistry and Biophysics, 2010, 493, 184-191.	1.4	11
12	Functional Role for the Conformationally Mobile Phenylalanine 223 in the Reaction of Methylenetetrahydrofolate Reductase from <i>Escherichia coli</i> . Biochemistry, 2009, 48, 7673-7685.	1.2	19
13	Replacement of tyrosine residues by phenylalanine in cytochrome P450cam alters the formation of Cpd II-like species in reactions with artificial oxidants. Journal of Biological Inorganic Chemistry, 2008, 13, 599-611.	1.1	29
14	Crystallography gets the jump on the enzymologists. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15587-15588.	3.3	4
15	Flavin Redox Chemistry Precedes Substrate Chlorination during the Reaction of the Flavin-Dependent Halogenase RebHâ€. Biochemistry, 2006, 45, 7904-7912.	1.2	116
16	Rapid kinetics investigations of peracid oxidation of ferric cytochrome P450cam: Nature and possible function of compound ESâ ⁺ t. Journal of Inorganic Biochemistry, 2006, 100, 2034-2044.	1.5	41
17	Spectroscopic investigations of intermediates in the reaction of cytochrome P450BM3–F87G with surrogate oxygen atom donorsâ⁻†. Journal of Inorganic Biochemistry, 2006, 100, 2045-2053.	1.5	28
18	Kinetic Mechanisms of the Oxygenase from a Two-component Enzyme, p-Hydroxyphenylacetate 3-Hydroxylase from Acinetobacter baumannii. Journal of Biological Chemistry, 2006, 281, 17044-17053.	1.6	84

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19	Reaction of Ferric Cytochrome P450cam with Peracids. Journal of Biological Chemistry, 2005, 280, 20300-20309.	1.6	113
20	Aspartate 120 ofEscherichia coliMethylenetetrahydrofolate Reductase: Evidence for Major Roles in Folate Binding and Catalysis and a Minor Role in Flavin Reactivityâ€,‡. Biochemistry, 2005, 44, 6809-6822.	1.2	21
21	Dynamics involved in catalysis by single-component and two-component flavin-dependent aromatic hydroxylases. Biochemical and Biophysical Research Communications, 2005, 338, 590-598.	1.0	136
22	Folate Activation and Catalysis in Methylenetetrahydrofolate Reductase fromEscherichia coli: Roles for Aspartate 120 and Glutamate 28â€. Biochemistry, 2001, 40, 6216-6226.	1.2	28
23	Mechanistic Studies of Cyclohexanone Monooxygenase:  Chemical Properties of Intermediates Involved in Catalysis. Biochemistry, 2001, 40, 11156-11167.	1.2	240
24	Protein Dynamics Control Proton Transfers to the Substrate on the His72Asn Mutant of p-Hydroxybenzoate Hydroxylase. Biochemistry, 2001, 40, 3891-3899.	1.2	27
25	Synergistic Interactions of Multiple Mutations on Catalysis during the Hydroxylation Reaction of p-Hydroxybenzoate Hydroxylase:  Studies of the Lys297Met, Asn300Asp, and Tyr385Phe Mutants Reconstituted with 8-Cl-Flavin. Biochemistry, 2001, 40, 8705-8716.	1.2	11
26	Methylenetetrahydrofolate Reductase fromEscherichia coli: Elucidation of the Kinetic Mechanism by Steady-State and Rapid-Reaction Studiesâ€. Biochemistry, 2001, 40, 6205-6215.	1.2	28
27	A Rate-Limiting Conformational Change of the Flavin inp-Hydroxybenzoate Hydroxylase Is Necessary for Ligand Exchange and Catalysis: Studies with 8-Mercapto- and 8-Hydroxy-Flavinsâ€. Biochemistry, 2001, 40, 1091-1101.	1.2	11
28	Studies of the Mechanism of Phenol Hydroxylase: Mutants Tyr289Phe, Asp54Asn, and Arg281Metâ€. Biochemistry, 2001, 40, 12369-12378.	1.2	39
29	The Use of Protocatechuate Dioxygenase for Maintaining Anaerobic Conditions in Biochemical Experiments. Analytical Biochemistry, 2000, 286, 187-192.	1.1	111
30	Rearrangement of l-2-Hydroxyglutarate to l-threo-3-Methylmalate Catalyzed by Adenosylcobalamin-Dependent Glutamate Mutase. Biochemistry, 2000, 39, 10340-10346.	1.2	18
31	Substrate Recognition by "Password―in p-Hydroxybenzoate Hydroxylase. Biochemistry, 1999, 38, 1153-1158.	1.2	88
32	Use of Free Energy Relationships To Probe the Individual Steps of Hydroxylation ofp-Hydroxybenzoate Hydroxylase: Studies with a Series of 8-Substituted Flavinsâ€. Biochemistry, 1999, 38, 8124-8137.	1.2	54
33	Non-haem iron-containing oxygenases involved in the microbial biodegradation of aromatic hydrocarbons. Essays in Biochemistry, 1999, 34, 31-49.	2.1	8
34	Flavin Conformational Changes in the Catalytic Cycle ofp-Hydroxybenzoate Hydroxylase Substituted with 6-Azido- and 6-Aminoflavin Adenine Dinucleotideâ€. Biochemistry, 1997, 36, 15713-15723.	1.2	41
35	Thermodynamics and Reduction Kinetics Properties of 2-Methyl-3-hydroxypyridine-5-carboxylic Acid Oxygenaseâ€. Biochemistry, 1997, 36, 2612-2621.	1.2	37
36	Unusual Mechanism of Oxygen Atom Transfer and Product Rearrangement in the Catalytic Reaction of 2-Methyl-3-hydroxypyridine-5-carboxylic Acid Oxygenaseâ€. Biochemistry, 1997, 36, 8060-8070.	1.2	42

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37	Reaction of 2-Methyl-3-hydroxypyridine-5-carboxylic acid (MHPC) Oxygenase withN-Methyl-5-hydroxynicotinic acid: Studies on the Mode of Binding, and Protonation Status of the Substrateâ€. Biochemistry, 1997, 36, 13856-13864.	1.2	35
38	Evidence for Flavin Movement in the Function of p-Hydroxybenzoate Hydroxylase from Studies of the Mutant Arg220Lys. Biochemistry, 1996, 35, 9278-9285.	1.2	33
39	Structural characterization of the mononuclear iron site in Pseudomonas cepacia phthalate DB01 dioxygenase using X-ray absorption spectroscopy. Journal of Biological Inorganic Chemistry, 1996, 1, 24-33.	1.1	17
40	NMRD studies on phthalate dioxygenase: evidence for displacement of water on binding substrate. Journal of Biological Inorganic Chemistry, 1996, 1, 468-475.	1.1	12
41	Structure and mechanism of the ironâ€sulfur flavoprotein phthalate dioxygenase reductase. FASEB Journal, 1995, 9, 1411-1418.	0.2	81
42	Properties of partially purified liver microsomal cytochrome P -450: Acceptance of two electrons during anaerobic titration. FEBS Letters, 1974, 38, 337-340.	1.3	32