David P Ballou

List of Publications by Year
in descending order

42 papers	1,710 citations	279778 23 h-index	276858 41 g-index
45 all docs	45 docs citations	45 times ranked	1284 citing authors

#	Article	IF	Citations
1	Protonation status and control mechanism of flavinâ€“oxygen intermediates in the reaction of bacterial luciferase. FEBS Journal, 2021, 288, 3246-3260.	4.7	13
2	Coenzyme A Persulfide Prioritizes Sulfide over Butyrate Oxidation. FASEB Journal, 2019, 33, 633.15.	0.5	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.	3.0	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.	2.5	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.	2.3	19
6	Oxidative hemoglobin reactions: Applications to drug metabolism. Archives of Biochemistry and Biophysics, 2016, 600, 33-46.	3.0	9
7	Kinetics of Nitrite Reduction and Peroxynitrite Formation by Ferrous Heme in Human Cystathionine Î²-Synthase. Journal of Biological Chemistry, 2016, 291, 8004-8013.	3.4	22
8	Rapid Kinetics of Dehalogenation Promoted by Iodotyrosine Deiodinase from Human Thyroid. Biochemistry, 2015, 54, 4487-4494.	2.5	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.	3.0	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.	0.8	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.	3.0	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.	2.5	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.	2.6	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.	7.1	4
15	Flavin Redox Chemistry Precedes Substrate Chlorination during the Reaction of the Flavin-Dependent Halogenase RebHâ€. Biochemistry, 2006, 45, 7904-7912.	2.5	116
16	Rapid kinetics investigations of peracid oxidation of ferric cytochrome P450cam: Nature and possible function of compound ESâ˜†. Journal of Inorganic Biochemistry, 2006, 100, 2034-2044.	3.5	41
17	Spectroscopic investigations of intermediates in the reaction of cytochrome P450BM3â€“F87G with surrogate oxygen atom donorsâ˜†. Journal of Inorganic Biochemistry, 2006, 100, 2045-2053.	3.5	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.	3.4	84

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19	Reaction of Ferric Cytochrome P450cam with Peracids. Journal of Biological Chemistry, 2005, 280, 20300-20309.	3.4	113
20	Aspartate 120 ofEscherichia coliMethylenetetrahydrofolate Reductase:Â Evidence for Major Roles in Folate Binding and Catalysis and a Minor Role in Flavin Reactivityâ€,â€¡. Biochemistry, 2005, 44, 6809-6822.	2.5	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.	2.1	136
22	Folate Activation and Catalysis in Methylenetetrahydrofolate Reductase fromEscherichia coli:Â Roles for Aspartate 120 and Glutamate 28â€. Biochemistry, 2001, 40, 6216-6226.	2.5	28
23	Mechanistic Studies of Cyclohexanone Monooxygenase:â€‰ Chemical Properties of Intermediates Involved in Catalysis. Biochemistry, 2001, 40, 11156-11167.	2.5	240
24	Protein Dynamics Control Proton Transfers to the Substrate on the His72Asn Mutant of p-Hydroxybenzoate Hydroxylase. Biochemistry, 2001, 40, 3891-3899.	2.5	27
25	Synergistic Interactions of Multiple Mutations on Catalysis during the Hydroxylation Reaction of p-Hydroxybenzoate Hydroxylase:â€‰ Studies of the Lys297Met, Asn300Asp, and Tyr385Phe Mutants Reconstituted with 8-Cl-Flavin. Biochemistry, 2001, 40, 8705-8716.	2.5	11
26	Methylenetetrahydrofolate Reductase fromEscherichia coli:Â Elucidation of the Kinetic Mechanism by Steady-State and Rapid-Reaction Studiesâ€. Biochemistry, 2001, 40, 6205-6215.	2.5	28
27	A Rate-Limiting Conformational Change of the Flavin inp-Hydroxybenzoate Hydroxylase Is Necessary for Ligand Exchange and Catalysis:Â Studies with 8-Mercapto- and 8-Hydroxy-Flavinsâ€. Biochemistry, 2001, 40, 1091-1101.	2.5	11
28	Studies of the Mechanism of Phenol Hydroxylase:Â Mutants Tyr289Phe, Asp54Asn, and Arg281Metâ€. Biochemistry, 2001, 40, 12369-12378.	2.5	39
29	The Use of Protocatechuate Dioxygenase for Maintaining Anaerobic Conditions in Biochemical Experiments. Analytical Biochemistry, 2000, 286, 187-192.	2.4	111
30	Rearrangement of l-2-Hydroxyglutarate to l-threo-3-Methylmalate Catalyzed by Adenosylcobalamin-Dependent Glutamate Mutase. Biochemistry, 2000, 39, 10340-10346.	2.5	18
31	Substrate Recognition by â€œPasswordâ€•in p-Hydroxybenzoate Hydroxylase. Biochemistry, 1999, 38, 1153-1158.	2.5	88
32	Use of Free Energy Relationships To Probe the Individual Steps of Hydroxylation ofp-Hydroxybenzoate Hydroxylase:Â Studies with a Series of 8-Substituted Flavinsâ€. Biochemistry, 1999, 38, 8124-8137.	2.5	54
33	Non-haem iron-containing oxygenases involved in the microbial biodegradation of aromatic hydrocarbons. Essays in Biochemistry, 1999, 34, 31-49.	4.7	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.	2.5	41
35	Thermodynamics and Reduction Kinetics Properties of 2-Methyl-3-hydroxypyridine-5-carboxylic Acid Oxygenaseâ€. Biochemistry, 1997, 36, 2612-2621.	2.5	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.	2.5	42

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37	Reaction of 2-Methyl-3-hydroxypyridine-5-carboxylic acid (MHPC) Oxygenase withN-Methyl-5-hydroxynicotinic acid:Â Studies on the Mode of Binding, and Protonation Status of the Substrateâ€. Biochemistry, 1997, 36, 13856-13864.	2.5	35
38	Evidence for Flavin Movement in the Function of p-Hydroxybenzoate Hydroxylase from Studies of the Mutant Arg220Lys. Biochemistry, 1996, 35, 9278-9285.	2.5	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.	2.6	17
40	NMRD studies on phthalate dioxygenase: evidence for displacement of water on binding substrate. Journal of Biological Inorganic Chemistry, 1996, 1, 468-475.	2.6	12
41	Structure and mechanism of the ironâ€sulfur flavoprotein phthalate dioxygenase reductase. FASEB Journal, 1995, 9, 1411-1418.	0.5	81
42	Properties of partially purified liver microsomal cytochrome P -450: Acceptance of two electrons during anaerobic titration. FEBS Letters, 1974, 38, 337-340.	2.8	32