Andrew W Munro

List of Publications by Year
in descending order

192 papers	8,987 citations	31976 53 h-index	51608 86 g-index
198 all docs	198 docs citations	198 times ranked	6623 citing authors

#	Article	IF	Citations
1	P450 BM3: the very model of a modern flavocytochrome. Trends in Biochemical Sciences, 2002, 27, 250-257.	7.5	385
2	Unusual Cytochrome P450 Enzymes and Reactions. Journal of Biological Chemistry, 2013, 288, 17065-17073.	3.4	275
3	Roles of key active-site residues in flavocytochrome P450 BM3. Biochemical Journal, 1999, 339, 371-379.	3.7	256
4	Variations on a (t)hemeâ€"novel mechanisms, redox partners and catalytic functions in the cytochrome P450 superfamily. Natural Product Reports, 2007, 24, 585-609.	10.3	256
5	Applications of microbial cytochrome P450 enzymes in biotechnology and synthetic biology. Current Opinion in Chemical Biology, 2016, 31, 136-145.	6.1	212
6	What makes a P450 tick?. Trends in Biochemical Sciences, 2013, 38, 140-150.	7.5	181
7	Cytochrome P450â€"redox partner fusion enzymes. Biochimica Et Biophysica Acta - General Subjects, 2007, 1770, 345-359.	2.4	180
8	Azole antifungals are potent inhibitors of cytochrome P450 mono-oxygenases and bacterial growth in mycobacteria and streptomycetes. Microbiology (United Kingdom), 2002, 148, 2937-2949.	1.8	162
9	Structure and Biochemical Properties of the Alkene Producing Cytochrome P450 OleTJE (CYP152L1) from the Jeotgalicoccus sp. 8456 Bacterium. Journal of Biological Chemistry, 2014, 289, 6535-6550.	3.4	153
10	Determination of the Redox Properties of Human NADPH-Cytochrome P450 Reductase. Biochemistry, 2001, 40, 1956-1963.	2.5	149
11	Bacterial cytochromes P-450. Molecular Microbiology, 1996, 20, 1115-1125.	2.5	145
12	Structure and function of the cytochrome P450 peroxygenase enzymes. Biochemical Society Transactions, 2018, 46, 183-196.	3.4	138
13	Expression, Purification, and Characterization ofBacillus subtilisCytochromes P450 CYP102A2 and CYP102A3:Â Flavocytochrome Homologues of P450 BM3 fromBacillus megateriumâ€. Biochemistry, 2004, 43, 5474-5487.	2.5	133
14	Biochemical and Structural Insights into Bacterial Organelle Form and Biogenesis. Journal of Biological Chemistry, 2008, 283, 14366-14375.	3.4	133
15	P450-Catalyzed Regio- and Diastereoselective Steroid Hydroxylation: Efficient Directed Evolution Enabled by Mutability Landscaping. ACS Catalysis, 2018, 8, 3395-3410.	11.2	128
16	Atomic Structure of Mycobacterium tuberculosis CYP121 to 1.06 Ã… Reveals Novel Features of Cytochrome P450. Journal of Biological Chemistry, 2003, 278, 5141-5147.	3.4	126
17	Potentiometric Analysis of the Flavin Cofactors of Neuronal Nitric Oxide Synthaseâ€. Biochemistry, 1999, 38, 16413-16418.	2.5	125
18	Heme Sensor Proteins. Journal of Biological Chemistry, 2013, 288, 13194-13203.	3.4	116

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19	Characterizion of Active Site Structure in CYP121: A Cytochrome P450 Essential for Viability of Mycobacterium Tuberculosis H37Rv*. Journal of Biological Chemistry, 2008, 283, 33406-33416.	3.4	114
20	Probing Electron Transfer in Flavocytochrome P-450 BM3 and Its Component Domains. FEBS Journal, 1996, 239, 403-409.	0.2	113
21	Single-step fermentative production of the cholesterol-lowering drug pravastatin via reprogramming of <i>Penicillium chrysogenum</i>. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2847-2852.	7.1	112
22	Crystal Structure of the Mycobacterium tuberculosis P450 CYP121-Fluconazole Complex Reveals New Azole Drug-P450 Binding Mode. Journal of Biological Chemistry, 2006, 281, 39437-39443.	3.4	109
23	The dimeric form of flavocytochrome P450 BM3 is catalytically functional as a fatty acid hydroxylase. FEBS Letters, 2005, 579, 5582-5588.	2.8	107
24	Phenylalanine 393 Exerts Thermodynamic Control over the Heme of Flavocytochrome P450 BM3â€. Biochemistry, 2001, 40, 13421-13429.	2.5	106
25	Structural and Biochemical Characterization of Mycobacterium tuberculosis CYP142. Journal of Biological Chemistry, 2010, 285, 38270-38282.	3.4	104
26	The Structure of Mycobacterium tuberculosis CYP125. Journal of Biological Chemistry, 2009, 284, 35524-35533.	3.4	102
27	Rational re-design of the substrate binding site of flavocytochrome P450 BM3. FEBS Letters, 2000, 486, 173-177.	2.8	98
28	Activation of potassium channels during metabolite detoxification in Escherichia coli. Molecular Microbiology, 1993, 9, 1297-1303.	2.5	93
29	Roles of key active-site residues in flavocytochrome P450 BM3. Biochemical Journal, 1999, 339, 371.	3.7	91
30	Characterisation of flavodoxin NADP+ oxidoreductase and flavodoxin; key components of electron transfer in Escherichia coli. FEBS Journal, 1998, 257, 577-585.	0.2	90
31	Expression, purification and spectroscopic characterization of the cytochrome P450 CYP121 from Mycobacterium tuberculosis. Journal of Inorganic Biochemistry, 2002, 91, 527-541.	3.5	89
32	Biophysical Characterization of the Sterol Demethylase P450 from Mycobacterium tuberculosis, Its Cognate Ferredoxin, and Their Interactions. Biochemistry, 2006, 45, 8427-8443.	2.5	85
33	Bacterial Flavodoxins Support Nitric Oxide Production by Bacillus subtilis Nitric-oxide Synthase. Journal of Biological Chemistry, 2007, 282, 2196-2202.	3.4	83
34	The Human Apoptosis-inducing Protein AMID Is an Oxidoreductase with a Modified Flavin Cofactor and DNA Binding Activity. Journal of Biological Chemistry, 2005, 280, 30735-30740.	3.4	82
35	Kinetic and Structural Basis of Reactivity of Pentaerythritol Tetranitrate Reductase with NADPH, 2-Cyclohexenone, Nitroesters, and Nitroaromatic Explosives. Journal of Biological Chemistry, 2002, 277, 21906-21912.	3.4	79
36	Redox and Spectroscopic Properties of Human Indoleamine 2,3-Dioxygenase and A His303Ala Variant:Â Implications for Catalysisâ€. Biochemistry, 2005, 44, 14318-14328.	2.5	79

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37	Expression and Characterization of the Two Flavodoxin Proteins ofBacillus subtilis, YkuN and YkuP:Â Biophysical Properties and Interactions with Cytochrome P450 BioIâ€. Biochemistry, 2004, 43, 12390-12409.	2.5	77
38	How Do Azoles Inhibit Cytochrome P450 Enzymes? A Density Functional Study. Journal of Physical Chemistry A, 2008, 112, 12911-12918.	2.5	76
39	Catalytic Determinants of Alkene Production by the Cytochrome P450 Peroxygenase OleTJE. Journal of Biological Chemistry, 2017, 292, 5128-5143.	3.4	73
40	Application of Fragment Screening and Merging to the Discovery of Inhibitors of the <i>Mycobacterium tuberculosis</i> Cytochromeâ€…P450 CYP121. Angewandte Chemie - International Edition, 2012, 51, 9311-9316.	13.8	69
41	Flavocytochrome P450 BM3 Mutant A264E Undergoes Substrate-dependent Formation of a Novel Heme Iron Ligand Set. Journal of Biological Chemistry, 2004, 279, 23274-23286.	3.4	67
42	The preponderance of P450s in the Mycobacterium tuberculosis genome. Trends in Microbiology, 2006, 14, 220-228.	7.7	67
43	Structure, function and drug targeting in Mycobacterium tuberculosis cytochrome P450 systems. Archives of Biochemistry and Biophysics, 2007, 464, 228-240.	3.0	66
44	Heme: The most versatile redox centre in biology?. Structure and Bonding, 1997, , 39-70.	1.0	65
45	Structural and Spectroscopic Characterization of P450 BM3 Mutants with Unprecedented P450 Heme Iron Ligand Sets. Journal of Biological Chemistry, 2007, 282, 564-572.	3.4	64
46	Key Mutations Alter the Cytochrome P450 BM3 Conformational Landscape and Remove Inherent Substrate Bias. Journal of Biological Chemistry, 2013, 288, 25387-25399.	3.4	62
47	A Single Mutation in Cytochrome P450 BM3 Induces the Conformational Rearrangement Seen upon Substrate Binding in the Wild-type Enzyme. Journal of Biological Chemistry, 2004, 279, 23287-23293.	3.4	59
48	Production of alkenes and novel secondary products by P450 Ole<scp>T_{JE}</scp> using novel H₂O₂â€generating fusion protein systems. FEBS Letters, 2017, 591, 737-750.	2.8	58
49	Protein engineering of cytochromes P-450. BBA - Proteins and Proteomics, 2000, 1543, 383-407.	2.1	57
50	Thermodynamic and Biophysical Characterization of Cytochrome P450 BioI fromBacillus subtilisâ€. Biochemistry, 2004, 43, 12410-12426.	2.5	57
51	The pH dependence of kinetic isotope effects in monoamine oxidase A indicates stabilization of the neutral amine in the enzymeâ€“substrate complex. FEBS Journal, 2008, 275, 3850-3858.	4.7	57
52	Catalytic Mechanism of Aromatic Nitration by Cytochrome P450 TxtE: Involvement of a Ferric-Peroxynitrite Intermediate. Journal of the American Chemical Society, 2020, 142, 15764-15779.	13.7	55
53	Structural and Spectroscopic Analysis of the F393H Mutant of Flavocytochrome P450 BM3â€. Biochemistry, 2001, 40, 13430-13438.	2.5	54
54	Molecular Dissection of Human Methionine Synthase Reductase:â€‰ Determination of the Flavin Redox Potentials in Full-Length Enzyme and Isolated Flavin-Binding Domains. Biochemistry, 2003, 42, 3911-3920.	2.5	54

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55	Conformational and Thermodynamic Control of Electron Transfer in Neuronal Nitric Oxide Synthase. Biochemistry, 2007, 46, 5018-5029.	2.5	53
56	Identification and Characterization of a Novel Vitamin B12 (Cobalamin) Biosynthetic Enzyme (CobZ) from Rhodobacter capsulatus, Containing Flavin, Heme, and Fe-S Cofactors. Journal of Biological Chemistry, 2005, 280, 1086-1094.	3.4	52
57	Interflavin electron transfer in human cytochrome P450 reductase is enhanced by coenzyme binding. Relaxation kinetic studies with coenzyme analogues. FEBS Journal, 2003, 270, 2612-2621.	0.2	51
58	Switching Pyridine Nucleotide Specificity in P450 BM3. Journal of Biological Chemistry, 2005, 280, 17634-17644.	3.4	51
59	Cholesterol, an essential molecule: diverse roles involving cytochrome P450 enzymes. Biochemical Society Transactions, 2012, 40, 587-593.	3.4	51
60	Expression, purification and characterisation of a Bacillus subtilis ferredoxin: a potential electron transfer donor to cytochrome P450 BioI. Journal of Inorganic Biochemistry, 2003, 93, 92-99.	3.5	50
61	Rapid P450 Heme Iron Reduction by Laser Photoexcitation of Mycobacterium tuberculosis CYP121 and CYP51B1. Journal of Biological Chemistry, 2007, 282, 24816-24824.	3.4	50
62	Characterization of the Cobaltochelatase CbiXL. Journal of Biological Chemistry, 2003, 278, 41900-41907.	3.4	49
63	Biological Diversity of Cytochrome P450 Redox Partner Systems. Advances in Experimental Medicine and Biology, 2015, 851, 299-317.	1.6	49
64	Expression, purification and characterization of cytochrome P450 Biol: a novel P450 involved in biotin synthesis in Bacillus subtilis. Journal of Biological Inorganic Chemistry, 2001, 6, 523-533.	2.6	48
65	FdC1, a Novel Ferredoxin Protein Capable of Alternative Electron Partitioning, Increases in Conditions of Acceptor Limitation at Photosystem I. Journal of Biological Chemistry, 2011, 286, 50-59.	3.4	47
66	Fragment-Based Approaches to the Development of <i>Mycobacterium tuberculosis</i> CYP121 Inhibitors. Journal of Medicinal Chemistry, 2016, 59, 3272-3302.	6.4	47
67	Structural and enzymological analysis of the interaction of isolated domains of cytochromeP-450 BM3. FEBS Letters, 1994, 343, 70-74.	2.8	46
68	Interaction of Nitric Oxide with Cytochrome P450 BM3â€. Biochemistry, 2004, 43, 16416-16431.	2.5	46
69	Electron Transfer Partners of Cytochrome P450. , 2005, , 115-148.		46
70	Analysis of the structural stability of the multidomain enzyme flavocytochrome P-450 BM3. BBA - Proteins and Proteomics, 1996, 1296, 127-137.	2.1	45
71	A Stable Tyrosyl Radical in Monoamine Oxidase A. Journal of Biological Chemistry, 2005, 280, 4627-4631.	3.4	45
72	Flexibility and stability of the structure of cytochromes P450â€ƒ3A4 and BM-3. FEBS Journal, 2000, 267, 2916-2920.	0.2	44

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73	Electron Transfer in Flavocytochrome P450 BM3:Â Kinetics of Flavin Reduction and Oxidation, the Role of Cysteine 999, and Relationships with Mammalian Cytochrome P450 Reductaseâ€. Biochemistry, 2003, 42, 10809-10821.	2.5	44
74	Kinetic and Thermodynamic Characterization of the Common Polymorphic Variants of Human Methionine Synthase Reductase. Biochemistry, 2004, 43, 1988-1997.	2.5	44
75	Kinetic, spectroscopic and thermodynamic characterization of the Mycobacterium tuberculosis adrenodoxin reductase homologue FprA. Biochemical Journal, 2003, 372, 317-327.	3.7	43
76	Identification and Characterization of the Terminal Enzyme of Siroheme Biosynthesis from Arabidopsis thaliana. Journal of Biological Chemistry, 2005, 280, 4713-4721.	3.4	42
77	Structural Biology and Biochemistry of Cytochrome P450 Systems in<i>Mycobacterium tuberculosis</i>. Drug Metabolism Reviews, 2008, 40, 427-446.	3.6	42
78	The crystal structure of the FAD/NADPHâ€binding domain of flavocytochromeâ€ƒP450â€ƒBM3. FEBS Journal, 2012, 279, 1694-1706.	4.7	42
79	Atomic Resolution Structures and Solution Behavior of Enzyme-Substrate Complexes of Enterobacter cloacae PB2 Pentaerythritol Tetranitrate Reductase. Journal of Biological Chemistry, 2004, 279, 30563-30572.	3.4	41
80	Determination of the redox potentials and electron transfer properties of the FAD- and FMN-binding domains of the human oxidoreductase NR1. FEBS Journal, 2003, 270, 1164-1175.	0.2	39
81	Interâ€flavin electron transfer in cytochrome P450 reductase â€“ effects of solvent and pH identify hidden complexity in mechanism. FEBS Journal, 2008, 275, 4540-4557.	4.7	39
82	Flavocytochrome P450 BM3 mutant W1046A is a NADH-dependent fatty acid hydroxylase: Implications for the mechanism of electron transfer in the P450 BM3 dimer. Archives of Biochemistry and Biophysics, 2011, 507, 75-85.	3.0	38
83	Characterization of <i>Cupriavidusâ€ƒmetallidurans</i> CYP116B1 â€“ A thiocarbamate herbicide oxygenating P450â€“phthalate dioxygenase reductase fusion protein. FEBS Journal, 2012, 279, 1675-1693.	4.7	37
84	DNA Binding Suppresses Human AIF-M2 Activity and Provides a Connection between Redox Chemistry, Reactive Oxygen Species, and Apoptosis. Journal of Biological Chemistry, 2007, 282, 30331-30340.	3.4	36
85	Characterisation of PduS, the pdu Metabolosome Corrin Reductase, and Evidence of Substructural Organisation within the Bacterial Microcompartment. PLoS ONE, 2010, 5, e14009.	2.5	36
86	Effect of DMSO on Protein Structure and Interactions Assessed by Collision-Induced Dissociation and Unfolding. Analytical Chemistry, 2017, 89, 9976-9983.	6.5	34
87	The Redox Properties of Ascorbate Peroxidase. Biochemistry, 2007, 46, 8017-8023.	2.5	33
88	AFM study of cytochrome CYP102A1 oligomeric state. Soft Matter, 2012, 8, 4602.	2.7	33
89	Novel haem co-ordination variants of flavocytochrome P450 BM3. Biochemical Journal, 2009, 417, 65-80.	3.7	32
90	Î±Arg-237 in Methylophilus methylotrophus (sp. W3A1) Electron-transferring Flavoprotein Affords â^¼200-Millivolt Stabilization of the FAD Anionic Semiquinone and a Kinetic Block on Full Reduction to the Dihydroquinone. Journal of Biological Chemistry, 2001, 276, 20190-20196.	3.4	31

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91	Human P450-like oxidation of diverse proton pump inhibitor drugs by â€˜gatekeeperâ€™ mutants of flavocytochrome P450 BM3. Biochemical Journal, 2014, 460, 247-259.	3.7	31
92	Fluorescence Analysis of Flavoproteins. , 1999, 131, 25-48.		30
93	Cytochrome P450/redox partner fusion enzymes: biotechnological and toxicological prospects. Expert Opinion on Drug Metabolism and Toxicology, 2007, 3, 847-863.	3.3	29
94	Identification, Characterization, and Structure/Function Analysis of a Corrin Reductase Involved in Adenosylcobalamin Biosynthesis. Journal of Biological Chemistry, 2008, 283, 10813-10821.	3.4	29
95	The <i>Mycobacterium tuberculosis</i> cytochromes P450: physiology, biochemistry & molecular intervention. Future Medicinal Chemistry, 2010, 2, 1339-1353.	2.3	29
96	Proton transfer in the oxidative half-reaction of pentaerythritol tetranitrate reductase. Structure of the reduced enzyme-progesterone complex and the roles of residues Tyr186, His181 and His184. FEBS Journal, 2005, 272, 4660-4671.	4.7	28
97	Overcoming the Limitations of Fragment Merging: Rescuing a Strained Merged Fragment Series Targeting <i>Mycobacterium tuberculosis</i> CYP121. ChemMedChem, 2013, 8, 1451-1456.	3.2	28
98	Clobetasol Propionate Is a Heme-Mediated Selective Inhibitor of Human Cytochrome P450 3A5. Journal of Medicinal Chemistry, 2020, 63, 1415-1433.	6.4	28
99	Unusual Spectroscopic and Ligand Binding Properties of the Cytochrome P450-Flavodoxin Fusion Enzyme XplA. Journal of Biological Chemistry, 2012, 287, 19699-19714.	3.4	27
100	<i>Mycobacterium tuberculosis</i> cytochrome P450 enzymes: a cohort of novel TB drug targets. Biochemical Society Transactions, 2012, 40, 573-579.	3.4	26
101	Novel Aryl Substituted Pyrazoles as Small Molecule Inhibitors of Cytochrome P450 CYP121A1: Synthesis and Antimycobacterial Evaluation. Journal of Medicinal Chemistry, 2017, 60, 10257-10267.	6.4	26
102	Tyrosyl Radical Formation and Propagation in Flavin Dependent Monoamine Oxidases. ChemBioChem, 2010, 11, 1228-1231.	2.6	25
103	Thermodynamic and kinetic analysis of the isolated FAD domain of rat neuronal nitric oxide synthase altered in the region of the FAD shielding residue Phe1395. FEBS Journal, 2004, 271, 2548-2560.	0.2	24
104	Role of Active Site Residues and Solvent in Proton Transfer and the Modulation of Flavin Reduction Potential in Bacterial Morphinone Reductase. Journal of Biological Chemistry, 2005, 280, 27103-27110.	3.4	24
105	Strength of Axial Water Ligation in Substrate-Free Cytochrome P450s Is Isoform Dependent. Biochemistry, 2014, 53, 1428-1434.	2.5	24
106	Structural Similarities and Differences of the Heme Pockets of Various P450 Isoforms as Revealed by Resonance Raman Spectroscopy. Archives of Biochemistry and Biophysics, 2000, 383, 70-78.	3.0	23
107	Reaction of Morphinone Reductase with 2-Cyclohexen-1-one and 1-Nitrocyclohexene. Journal of Biological Chemistry, 2005, 280, 10695-10709.	3.4	23
108	Expression and characterization of Mycobacterium tuberculosis CYP144: Common themes and lessons learned in the M. tuberculosis P450 enzyme family. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 76-87.	2.3	23

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109	Catalytically functional flavocytochrome chimeras of P450 BM3 and nitric oxide synthase. Journal of Inorganic Biochemistry, 2002, 91, 515-526.	3.5	22
110	An oxidative N-demethylase reveals PAS transition from ubiquitous sensor to enzyme. Nature, 2016, 539, 593-597.	27.8	21
111	Expression, Purification, and Biochemical Characterization of the Flavocytochrome P450 CYP505A30 from <i>Myceliophthora thermophila</i>. ACS Omega, 2017, 2, 4705-4724.	3.5	21
112	Heme and Hemoproteins. , 2009, , 160-183.		21
113	Drug targeting of heme proteins in Mycobacterium tuberculosis. Drug Discovery Today, 2017, 22, 566-575.	6.4	20
114	Bacillus megaterium Has Both a Functional BluB Protein Required for DMB Synthesis and a Related Flavoprotein That Forms a Stable Radical Species. PLoS ONE, 2013, 8, e55708.	2.5	20
115	Thermodynamic Basis of Electron Transfer in Dihydroorotate Dehydrogenase B fromLactococcus lactis:Â Analysis by Potentiometry, EPR Spectroscopy, and ENDOR Spectroscopyâ€. Biochemistry, 2004, 43, 6498-6510.	2.5	19
116	Introduction. Quantum catalysis in enzymes: beyond the transition state theory paradigm. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1293-1294.	4.0	19
117	Design and Synthesis of Imidazole and Triazole Pyrazoles as <i>Mycobacterium Tuberculosis</i> CYP121A1 Inhibitors. ChemistryOpen, 2019, 8, 995-1011.	1.9	19
118	Structureâ€"Activity Relationships of <i>cyclo</i>(<scp>l</scp>-Tyrosyl-<scp>l</scp>-tyrosine) Derivatives Binding to <i>Mycobacterium tuberculosis</i> CYP121: Iodinated Analogues Promote Shift to High-Spin Adduct. Journal of Medicinal Chemistry, 2019, 62, 9792-9805.	6.4	19
119	Structural and catalytic properties of the peroxygenase P450 enzyme CYP152K6 from Bacillus methanolicus. Journal of Inorganic Biochemistry, 2018, 188, 18-28.	3.5	18
120	Inhibitor/fatty acid interactions with cytochrome P-450 BM3. FEBS Letters, 1996, 396, 196-200.	2.8	17
121	The genome sequence ofMycobacterium tuberculosis reveals cytochromes P450 as novel anti-TB drug targets. Journal of Chemical Technology and Biotechnology, 2000, 75, 933-941.	3.2	17
122	A Novel Intermediate in the Reaction of Seleno CYP119 with <i>m</i>-Chloroperbenzoic Acid. Biochemistry, 2011, 50, 3014-3024.	2.5	17
123	Microbial Cytochromes P450. , 2015, , 261-407.		17
124	Novel insights into P450 BM3 interactions with FDA-approved antifungal azole drugs. Scientific Reports, 2019, 9, 1577.	3.3	17
125	Conformational Dynamics of the Cytochrome P450 BM3/N-Palmitoylglycine Complex:â€‰ The Proposed â€œProximalâ^'Distalâ€• Transition Probed by Temperature-Jump Spectroscopy. Journal of Physical Chemistry B, 2007, 111, 7879-7886.	2.6	16
126	Laser Photoexcitation of NAD(P)H Induces Reduction of P450 BM3 Heme Domain on the Microsecond Time Scale. Journal of the American Chemical Society, 2007, 129, 6647-6653.	13.7	16

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127	Demonstration That CobG, the Monooxygenase Associated with the Ring Contraction Process of the Aerobic Cobalamin (Vitamin B12) Biosynthetic Pathway, Contains an Fe-S Center and a Mononuclear Non-heme Iron Center. Journal of Biological Chemistry, 2009, 284, 4796-4805.	3.4	16
128	Electron transfer reactions, cyanide and O2 binding of truncated hemoglobin from Bacillus subtilis. Electrochimica Acta, 2013, 110, 86-93.	5.2	16
129	Spectral Properties of the Oxyferrous Complex of the Heme Domain of Cytochrome P450 BM-3 (CYP102). Biochemical and Biophysical Research Communications, 1999, 266, 187-189.	2.1	15
130	Effects of environment on flavin reactivity in morphinone reductase: analysis of enzymes displaying differential charge near the N-1 atom and C-2 carbonyl region of the active-site flavin. Biochemical Journal, 2001, 359, 315-323.	3.7	15
131	Overview on Theoretical Studies Discriminating the Two-Oxidant Versus Two-State-Reactivity Models for Substrate Monoxygenation by Cytochrome P450 Enzymes. Current Topics in Medicinal Chemistry, 2013, 13, 2218-2232.	2.1	15
132	Substrate Fragmentation for the Design of <i>M.â€…tuberculosis</i> CYP121 Inhibitors. ChemMedChem, 2016, 11, 1924-1935.	3.2	15
133	Probing the NADPH-binding site of Escherichia coli flavodoxin oxidoreductase. Biochemical Journal, 2000, 352, 257-266.	3.7	15
134	Structures of redox enzymes. Current Opinion in Biotechnology, 2000, 11, 369-376.	6.6	14
135	Role of the Conserved Phenylalanine 181 of NADPHâˆ’Cytochrome P450 Oxidoreductase in FMN Binding and Catalytic Activityâ€. Biochemistry, 2001, 40, 13439-13447.	2.5	14
136	The structure, function and properties of sirohaem decarboxylase â€“ an enzyme with structural homology to a transcription factor family that is part of the alternative haem biosynthesis pathway. Molecular Microbiology, 2014, 93, 247-261.	2.5	14
137	Characterization of Cytochrome P450 Enzymes and Their Applications in Synthetic Biology. Methods in Enzymology, 2018, 608, 189-261.	1.0	14
138	Synthesis and biological evaluation of novel cYY analogues targeting Mycobacterium tuberculosis CYP121A1. Bioorganic and Medicinal Chemistry, 2019, 27, 1546-1561.	3.0	14
139	Fatty Acid-Induced Alteration of the Porphyrin Macrocycle of Cytochrome P450 BM3. Biophysical Journal, 1998, 74, 3241-3249.	0.5	13
140	Analysis of the Interactions of Cytochrome<i>b</i>₅with Flavocytochrome P450 BM3 and its Domains. Drug Metabolism Reviews, 2007, 39, 599-617.	3.6	13
141	Glutamateâ€“haem ester bond formation is disfavoured in flavocytochrome P450 BM3: characterization of glutamate substitution mutants at the haem site of P450 BM3. Biochemical Journal, 2010, 427, 455-466.	3.7	13
142	Structural Characterization and Ligand/Inhibitor Identification Provide Functional Insights into the Mycobacterium tuberculosis Cytochrome P450 CYP126A1. Journal of Biological Chemistry, 2017, 292, 1310-1329.	3.4	13
143	Design, synthesis and evaluation against Mycobacterium tuberculosis of azole piperazine derivatives as dicyclotyrosine (cYY) mimics. Bioorganic and Medicinal Chemistry, 2018, 26, 161-176.	3.0	13
144	Use of high pressure to study elementary steps in P450 and nitric oxide synthase. Journal of Inorganic Biochemistry, 2001, 87, 191-195.	3.5	12

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145	Nanoelectrospray Ionization Mass Spectrometric Study of Mycobacterium tuberculosis CYP121â€“Ligand Interactions. Analytical Chemistry, 2013, 85, 5707-5714.	6.5	12
146	A Promiscuous Bacterial P450: The Unparalleled Diversity of BM3 in Pharmaceutical Metabolism. International Journal of Molecular Sciences, 2021, 22, 11380.	4.1	12
147	The K⁺-efflux system, KefC, in<i>Escherichia coli</i>. Molecular Membrane Biology, 1994, 11, 55-61.	2.0	11
148	Internal electron transfer in multi-site redox enzymes is accessed by laser excitation of thiouredopyrene-3,6,8-trisulfonate (TUPS). Chemical Communications, 2009, , 1124.	4.1	11
149	Analysis of Heme Iron Coordination in DGCR8: The Heme-Binding Component of the Microprocessor Complex. Biochemistry, 2016, 55, 5073-5083.	2.5	11
150	Catalytically Self-Sufficient P450 CYP102 (Cytochrome P450 BM-3): Resonance Raman Spectral Characterization of the Heme Domain and of the Holoenzyme. Biochemical and Biophysical Research Communications, 1998, 243, 811-815.	2.1	10
151	Effects of environment on flavin reactivity in morphinone reductase: analysis of enzymes displaying differential charge near the N-1 atom and C-2 carbonyl region of the active-site flavin. Biochemical Journal, 2001, 359, 315.	3.7	10
152	NADPH oxidase activity of cytochrome P-450 BM3 and its constituent reductase domain. Biochimica Et Biophysica Acta - Bioenergetics, 1995, 1231, 255-264.	1.0	9
153	Changing the heme ligation in flavocytochrome b 2: substitution of histidine-66 by cysteine. Journal of Biological Inorganic Chemistry, 2000, 5, 584-592.	2.6	9
154	Characterization of coenzyme binding and selectivity determinants in <i>Mycobacterium tuberculosis</i> flavoprotein reductase A: analysis of Arg199 and Arg200 mutants at the NADP(H) 2â€²-phosphate binding site. Biochemical Journal, 2009, 417, 103-114.	3.7	9
155	ALKANE METABOLISM BY CYTOCHROME P450 BM3. Biochemical Society Transactions, 1993, 21, 412S-412S.	3.4	8
156	Probing the molecular determinants of coenzyme selectivity in the P450 BM3 FAD/NADPH domain. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2009, 1794, 1181-1189.	2.3	8
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