Andrew W Munro

List of Publications by Year in Descending Order

192 papers	7,670 citations	50 h-index	79 g-index
198 ext. papers	8,412 ext. citations	5.1 avg, IF	5.77 L-index

#	Paper	IF	Citations
192	A new strategy for hit generation: Novel in cellulo active inhibitors of CYP121A1 from Mycobacterium tuberculosis via a combined X-ray crystallographic and phenotypic screening approach (XP screen).. *European Journal of Medicinal Chemistry*, **2022**, 230, 114105	6.8	1
191	A Promiscuous Bacterial P450: The Unparalleled Diversity of BM3 in Pharmaceutical Metabolism. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	2
190	Clobetasol Propionate Is a Heme-Mediated Selective Inhibitor of Human Cytochrome P450 3A5. *Journal of Medicinal Chemistry*, **2020**, 63, 1415-1433	8.3	16
189	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	16.4	25
188	Characterization of the structure and interactions of P450 BM3 using hybrid mass spectrometry approaches. *Journal of Biological Chemistry*, **2020**, 295, 7595-7607	5.4	5
187	MhuD from : Probing a Dual Role in Heme Storage and Degradation. *ACS Infectious Diseases*, **2019**, 5, 1855-1866	5.5	5
186	Novel insights into P450 BM3 interactions with FDA-approved antifungal azole drugs. *Scientific Reports*, **2019**, 9, 1577	4.9	11
185	Synthesis and biological evaluation of novel cYY analogues targeting Mycobacterium tuberculosis CYP121A1. *Bioorganic and Medicinal Chemistry*, **2019**, 27, 1546-1561	3.4	6
184	Design and Synthesis of Imidazole and Triazole Pyrazoles as CYP121A1 Inhibitors. *ChemistryOpen*, **2019**, 8, 995-1011	2.3	13
183	Structure-Activity Relationships of (l-Tyrosyl-l-tyrosine) Derivatives Binding to CYP121: Iodinated Analogues Promote Shift to High-Spin Adduct. *Journal of Medicinal Chemistry*, **2019**, 62, 9792-9805	8.3	8
182	P450-Catalyzed Regio- and Diastereoselective Steroid Hydroxylation: Efficient Directed Evolution Enabled by Mutability Landscaping. *ACS Catalysis*, **2018**, 8, 3395-3410	13.1	81
181	Structure and function of the cytochrome P450 peroxygenase enzymes. *Biochemical Society Transactions*, **2018**, 46, 183-196	5.1	98
180	Structural and catalytic properties of the peroxygenase P450 enzyme CYP152K6 from Bacillus methanolicus. *Journal of Inorganic Biochemistry*, **2018**, 188, 18-28	4.2	12
179	Characterization of Cytochrome P450 Enzymes and Their Applications in Synthetic Biology. *Methods in Enzymology*, **2018**, 608, 189-261	1.7	7
178	Design, synthesis and evaluation against Mycobacterium tuberculosis of azole piperazine derivatives as dicyclotyrosine (cYY) mimics. *Bioorganic and Medicinal Chemistry*, **2018**, 26, 161-176	3.4	9
177	Resonance Raman studies of Bacillus megaterium cytochrome P450 BM3 and biotechnologically important mutants. *Journal of Raman Spectroscopy*, **2018**, 49, 287-297	2.3	3
176	Cytochrome P450 1A1 opens up to new substrates. *Journal of Biological Chemistry*, **2018**, 293, 19211-19212	5.4	2

175	Catalytic Determinants of Alkene Production by the Cytochrome P450 Peroxygenase OleT. *Journal of Biological Chemistry*, **2017**, 292, 5128-5143	5.4	57
174	Production of alkenes and novel secondary products by P450 OleT using novel H O -generating fusion protein systems. *FEBS Letters*, **2017**, 591, 737-750	3.8	41
173	Fragment Profiling Approach to Inhibitors of the Orphan M. tuberculosis P450 CYP144A1. *Biochemistry*, **2017**, 56, 1559-1572	3.2	5
172	Structural Characterization and Ligand/Inhibitor Identification Provide Functional Insights into the Mycobacterium tuberculosis Cytochrome P450 CYP126A1. *Journal of Biological Chemistry*, **2017**, 292, 1310-1329	5.4	11
171	Effect of DMSO on Protein Structure and Interactions Assessed by Collision-Induced Dissociation and Unfolding. *Analytical Chemistry*, **2017**, 89, 9976-9983	7.8	22
170	Expression, Purification, and Biochemical Characterization of the Flavocytochrome P450 CYP505A30 from. *ACS Omega*, **2017**, 2, 4705-4724	3.9	16
169	Novel Aryl Substituted Pyrazoles as Small Molecule Inhibitors of Cytochrome P450 CYP121A1: Synthesis and Antimycobacterial Evaluation. *Journal of Medicinal Chemistry*, **2017**, 60, 10257-10267	8.3	21
168	Drug targeting of heme proteins in Mycobacterium tuberculosis. *Drug Discovery Today*, **2017**, 22, 566-575	6.8	9
167	Analysis of Heme Iron Coordination in DGCR8: The Heme-Binding Component of the Microprocessor Complex. *Biochemistry*, **2016**, 55, 5073-83	3.2	7
166	Structural characterization of CYP144A1 - a cytochrome P450 enzyme expressed from alternative transcripts in Mycobacterium tuberculosis. *Scientific Reports*, **2016**, 6, 26628	4.9	6
165	Substrate Fragmentation for the Design of M. tuberculosis CYP121 Inhibitors. *ChemMedChem*, **2016** , 11, 1924-35	3.7	13
164	An oxidative N-demethylase reveals PAS transition from ubiquitous sensor to enzyme. *Nature*, **2016** , 539, 593-597	50.4	15
163	Applications of microbial cytochrome P450 enzymes in biotechnology and synthetic biology. *Current Opinion in Chemical Biology*, **2016**, 31, 136-45	9.7	152
162	Fragment-Based Approaches to the Development of Mycobacterium tuberculosis CYP121 Inhibitors. *Journal of Medicinal Chemistry*, **2016**, 59, 3272-302	8.3	41
161	Azole-class antibiotics for tuberculosis **2016**, 72-88		
160	Microbial Cytochromes P450 **2015**, 261-407		8
159	Single-step fermentative production of the cholesterol-lowering drug pravastatin via reprogramming of Penicillium chrysogenum. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2847-52	11.5	82
158	Biological diversity of cytochrome P450 redox partner systems. *Advances in Experimental Medicine and Biology*, **2015**, 851, 299-317	3.6	37

157	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	5.4	126
156	The structure, function and properties of sirohaem decarboxylase--an enzyme with structural homology to a transcription factor family that is part of the alternative haem biosynthesis pathway. *Molecular Microbiology*, **2014**, 93, 247-61	4.1	14
155	Strength of axial water ligation in substrate-free cytochrome P450s is isoform dependent. *Biochemistry*, **2014**, 53, 1428-34	3.2	22
154	Human P450-like oxidation of diverse proton pump inhibitor drugs by 'gatekeeper' mutants of flavocytochrome P450 BM3. *Biochemical Journal*, **2014**, 460, 247-59	3.8	19
153	Biofragments: an approach towards predicting protein function using biologically related fragments and its application to Mycobacterium tuberculosis CYP126. *ChemBioChem*, **2014**, 15, 549-55	3.8	6
152	Electron transfer reactions, cyanide and O2 binding of truncated hemoglobin from Bacillus subtilis. *Electrochimica Acta*, **2013**, 110, 86-93	6.7	15
151	What makes a P450 tick?. *Trends in Biochemical Sciences*, **2013**, 38, 140-50	10.3	153
150	Nanoelectrospray ionization mass spectrometric study of Mycobacterium tuberculosis CYP121-ligand interactions. *Analytical Chemistry*, **2013**, 85, 5707-14	7.8	12
149	Overcoming the limitations of fragment merging: rescuing a strained merged fragment series targeting Mycobacterium tuberculosis CYP121. *ChemMedChem*, **2013**, 8, 1451-6	3.7	25
148	Key mutations alter the cytochrome P450 BM3 conformational landscape and remove inherent substrate bias. *Journal of Biological Chemistry*, **2013**, 288, 25387-25399	5.4	51
147	Heme sensor proteins. *Journal of Biological Chemistry*, **2013**, 288, 13194-203	5.4	96
146	Unusual cytochrome p450 enzymes and reactions. *Journal of Biological Chemistry*, **2013**, 288, 17065-73	5.4	225
145	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, 2218-32	3	13
144	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	3.7	16
143	The crystal structure of the FAD/NADPH-binding domain of flavocytochrome P450 BM3. *FEBS Journal*, **2012**, 279, 1694-706	5.7	34
142	AFM study of cytochrome CYP102A1 oligomeric state. *Soft Matter*, **2012**, 8, 4602	3.6	24
141	Application of Fragment Screening and Merging to the Discovery of Inhibitors of the Mycobacterium tuberculosis Cytochrome P450 CYP121. *Angewandte Chemie*, **2012**, 124, 9445-9450	3.6	8
140	Application of fragment screening and merging to the discovery of inhibitors of the Mycobacterium tuberculosis cytochrome P450 CYP121. *Angewandte Chemie - International Edition*, **2012**, 51, 9311-6	16.4	64

139	Cholesterol, an essential molecule: diverse roles involving cytochrome P450 enzymes. *Biochemical Society Transactions*, **2012**, 40, 587-93	5.1	30
138	Mycobacterium tuberculosis cytochrome P450 enzymes: a cohort of novel TB drug targets. *Biochemical Society Transactions*, **2012**, 40, 573-9	5.1	22
137	Unusual spectroscopic and ligand binding properties of the cytochrome P450-flavodoxin fusion enzyme XplA. *Journal of Biological Chemistry*, **2012**, 287, 19699-714	5.4	23
136	Characterization of Cupriavidus metallidurans CYP116B1--a thiocarbamate herbicide oxygenating P450-phthalate dioxygenase reductase fusion protein. *FEBS Journal*, **2012**, 279, 1675-93	5.7	33
135	A novel intermediate in the reaction of seleno CYP119 with m-chloroperbenzoic acid. *Biochemistry*, **2011**, 50, 3014-24	3.2	17
134	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	4.1	36
133	Analysis of the oxidation of short chain alkynes by flavocytochrome P450 BM3. *Metallomics*, **2011**, 3, 369-78	4.5	5
132	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, 50-9	5.4	35
131	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	4	21
130	Structural and biochemical characterization of Mycobacterium tuberculosis CYP142: evidence for multiple cholesterol 27-hydroxylase activities in a human pathogen. *Journal of Biological Chemistry*, **2010**, 285, 38270-82	5.4	85
129	Glutamate-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, 455-66	3.8	12
128	The Mycobacterium tuberculosis cytochromes P450: physiology, biochemistry & molecular intervention. *Future Medicinal Chemistry*, **2010**, 2, 1339-53	4.1	25
127	Tyrosyl radical formation and propagation in flavin dependent monoamine oxidases. *ChemBioChem*, **2010**, 11, 1228-31	3.8	22
126	Characterisation of PduS, the pdu metabolosome corrin reductase, and evidence of substructural organisation within the bacterial microcompartment. *PLoS ONE*, **2010**, 5, e14009	3.7	32
125	The Structure of Mycobacterium tuberculosis CYP125: molecular basis for cholesterol binding in a P450 needed for host infection. *Journal of Biological Chemistry*, **2009**, 284, 35524-33	5.4	90
124	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, 4796-805	5.4	15
123	Probing the molecular determinants of coenzyme selectivity in the P450 BM3 FAD/NADPH domain. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2009**, 1794, 1181-9	4	8
122	Internal electron transfer in multi-site redox enzymes is accessed by laser excitation of thiouredopyrene-3,6,8-trisulfonate (TUPS). *Chemical Communications*, **2009**, 1124-6	5.8	9

121	Characterization of coenzyme binding and selectivity determinants in Mycobacterium tuberculosis flavoprotein reductase A: analysis of Arg(199) and Arg(200) mutants at the NADP(H) 2′-phosphate binding site. *Biochemical Journal*, **2009**, 417, 103-12	3.8	8
120	Novel haem co-ordination variants of flavocytochrome P450BM3. *Biochemical Journal*, **2009**, 417, 65-76	3.8	24
119	Enzyme mechanisms: fast reaction and computational approaches. *Biochemical Society Transactions*, **2009**, 37, 333-5	5.1	1
118	Heme and Hemoproteins **2009**, 160-183		18
117	Structural biology and biochemistry of cytochrome P450 systems in Mycobacterium tuberculosis. *Drug Metabolism Reviews*, **2008**, 40, 427-46	7	39
116	Identification, characterization, and structure/function analysis of a corrin reductase involved in adenosylcobalamin biosynthesis. *Journal of Biological Chemistry*, **2008**, 283, 10813-21	5.4	26
115	Characterization of active site structure in CYP121. A cytochrome P450 essential for viability of Mycobacterium tuberculosis H37Rv. *Journal of Biological Chemistry*, **2008**, 283, 33406-16	5.4	103
114	Trp(359) regulates flavin thermodynamics and coenzyme selectivity in Mycobacterium tuberculosis FprA. *Biochemical Journal*, **2008**, 411, 563-70	3.8	4
113	Biochemical and structural insights into bacterial organelle form and biogenesis. *Journal of Biological Chemistry*, **2008**, 283, 14366-75	5.4	115
112	How do azoles inhibit cytochrome P450 enzymes? A density functional study. *Journal of Physical Chemistry A*, **2008**, 112, 12911-8	2.8	62
111	The pH dependence of kinetic isotope effects in monoamine oxidase A indicates stabilization of the neutral amine in the enzyme-substrate complex. *FEBS Journal*, **2008**, 275, 3850-8	5.7	49
110	Inter-flavin electron transfer in cytochrome P450 reductase - effects of solvent and pH identify hidden complexity in mechanism. *FEBS Journal*, **2008**, 275, 4540-57	5.7	36
109	Conformational dynamics of the cytochrome P450 BM3/N-palmitoylglycine complex: the proposed "proximal-distal" transition probed by temperature-jump spectroscopy. *Journal of Physical Chemistry B*, **2007**, 111, 7879-86	3.4	15
108	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, 6647-53	16.4	14
107	The redox properties of ascorbate peroxidase. *Biochemistry*, **2007**, 46, 8017-23	3.2	30
106	Conformational and thermodynamic control of electron transfer in neuronal nitric oxide synthase. *Biochemistry*, **2007**, 46, 5018-29	3.2	50
105	Variations on a (t)heme--novel mechanisms, redox partners and catalytic functions in the cytochrome P450 superfamily. *Natural Product Reports*, **2007**, 24, 585-609	15.1	218
104	Interactions of Cytochrome P450 with Nitric Oxide and Related Ligands **2007**, 285-317		

103	Rapid P450 heme iron reduction by laser photoexcitation of Mycobacterium tuberculosis CYP121 and CYP51B1. Analysis of CO complexation reactions and reversibility of the P450/P420 equilibrium. *Journal of Biological Chemistry*, **2007**, 282, 24816-24	5.4	44
102	Structural and spectroscopic characterization of P450 BM3 mutants with unprecedented P450 heme iron ligand sets. New heme ligation states influence conformational equilibria in P450 BM3. *Journal of Biological Chemistry*, **2007**, 282, 564-72	5.4	55
101	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, 30331-40	5.4	24
100	Cytochrome P450/redox partner fusion enzymes: biotechnological and toxicological prospects. *Expert Opinion on Drug Metabolism and Toxicology*, **2007**, 3, 847-63	5.5	24
99	Bacterial flavodoxins support nitric oxide production by Bacillus subtilis nitric-oxide synthase. *Journal of Biological Chemistry*, **2007**, 282, 2196-202	5.4	68
98	Structure, function and drug targeting in Mycobacterium tuberculosis cytochrome P450 systems. *Archives of Biochemistry and Biophysics*, **2007**, 464, 228-40	4.1	59
97	Cytochrome P450--redox partner fusion enzymes. *Biochimica Et Biophysica Acta - General Subjects*, **2007**, 1770, 345-59	4	160
96	Analysis of the interactions of cytochrome b5 with flavocytochrome P450 BM3 and its domains. *Drug Metabolism Reviews*, **2007**, 39, 599-617	7	13
95	Introduction. Quantum catalysis in enzymes: beyond the transition state theory paradigm. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2006**, 361, 1293-1294	5.8	18
94	Lys-D48 is required for charge stabilization, rapid flavin reduction, and internal electron transfer in the catalytic cycle of dihydroorotate dehydrogenase B of Lactococcus lactis. *Journal of Biological Chemistry*, **2006**, 281, 17977-88	5.4	3
93	Crystal structure of the Mycobacterium tuberculosis P450 CYP121-fluconazole complex reveals new azole drug-P450 binding mode. *Journal of Biological Chemistry*, **2006**, 281, 39437-43	5.4	94
92	Biophysical characterization of the sterol demethylase P450 from Mycobacterium tuberculosis, its cognate ferredoxin, and their interactions. *Biochemistry*, **2006**, 45, 8427-43	3.2	71
91	The preponderance of P450s in the Mycobacterium tuberculosis genome. *Trends in Microbiology*, **2006**, 14, 220-8	12.4	59
90	Cytochrome P450s: creating novel ligand sets. *Dalton Transactions*, **2005**, 3419-26	4.3	1
89	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, 27103-10	5.4	22
88	Reaction of morphinone reductase with 2-cyclohexen-1-one and 1-nitrocyclohexene: proton donation, ligand binding, and the role of residues Histidine 186 and Asparagine 189. *Journal of Biological Chemistry*, **2005**, 280, 10695-709	5.4	22
87	Redox and spectroscopic properties of human indoleamine 2,3-dioxygenase and a His303Ala variant: implications for catalysis. *Biochemistry*, **2005**, 44, 14318-28	3.2	70
86	The dimeric form of flavocytochrome P450 BM3 is catalytically functional as a fatty acid hydroxylase. *FEBS Letters*, **2005**, 579, 5582-8	3.8	90

85	Electron Transfer Partners of Cytochrome P450 **2005**, 115-148		33
84	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, His184. *FEBS Journal*, **2005**, 272, 4660-71	5.7	27
83	The human apoptosis-inducing protein AMID is an oxidoreductase with a modified flavin cofactor and DNA binding activity. *Journal of Biological Chemistry*, **2005**, 280, 30735-40	5.4	61
82	Identification and characterization of the terminal enzyme of siroheme biosynthesis from Arabidopsis thaliana: a plastid-located sirohydrochlorin ferrochelatase containing a 2FE-2S center. *Journal of Biological Chemistry*, **2005**, 280, 4713-21	5.4	36
81	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, 1086-94	5.4	47
80	Switching pyridine nucleotide specificity in P450 BM3: mechanistic analysis of the W1046H and W1046A enzymes. *Journal of Biological Chemistry*, **2005**, 280, 17634-44	5.4	48
79	A stable tyrosyl radical in monoamine oxidase A. *Journal of Biological Chemistry*, **2005**, 280, 4627-31	5.4	40
78	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, 23287-93	5.4	53
77	Flavocytochrome P450 BM3 mutant A264E undergoes substrate-dependent formation of a novel heme iron ligand set. *Journal of Biological Chemistry*, **2004**, 279, 23274-86	5.4	62
76	Atomic resolution structures and solution behavior of enzyme-substrate complexes of Enterobacter cloacae PB2 pentaerythritol tetranitrate reductase. Multiple conformational states and implications for the mechanism of nitroaromatic explosive degradation. *Journal of Biological Chemistry*, **2004**, 279, 30563-72	5.4	37
75	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, 2548-60		22
74	Thermodynamic and biophysical characterization of cytochrome P450 BioI from Bacillus subtilis. *Biochemistry*, **2004**, 43, 12410-26	3.2	55
73	Interaction of nitric oxide with cytochrome P450 BM3. *Biochemistry*, **2004**, 43, 16416-31	3.2	39
72	Kinetic and thermodynamic characterization of the common polymorphic variants of human methionine synthase reductase. *Biochemistry*, **2004**, 43, 1988-97	3.2	38
71	Expression, purification, and characterization of Bacillus subtilis cytochromes P450 CYP102A2 and CYP102A3: flavocytochrome homologues of P450 BM3 from Bacillus megaterium. *Biochemistry*, **2004**, 43, 5474-87	3.2	126
70	Thermodynamic basis of electron transfer in dihydroorotate dehydrogenase B from Lactococcus lactis: analysis by potentiometry, EPR spectroscopy, and ENDOR spectroscopy. *Biochemistry*, **2004**, 43, 6498-510	3.2	16
69	Expression and characterization of the two flavodoxin proteins of Bacillus subtilis, YkuN and YkuP: biophysical properties and interactions with cytochrome P450 BioI. *Biochemistry*, **2004**, 43, 12390-409	3.2	71
68	Kinetic, spectroscopic and thermodynamic characterization of the Mycobacterium tuberculosis adrenodoxin reductase homologue FprA. *Biochemical Journal*, **2003**, 372, 317-27	3.8	42

67	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, 1164-75		33
66	Interflavin electron transfer in human cytochrome P450 reductase is enhanced by coenzyme binding. Relaxation kinetic studies with coenzyme analogues. *FEBS Journal*, **2003**, 270, 2612-21		50
65	Expression, purification and characterisation of a Bacillus subtilis ferredoxin: a potential electron transfer donor to cytochrome P450 BioI. *Journal of Inorganic Biochemistry*, **2003**, 93, 92-9	4.2	41
64	Electron transfer in flavocytochrome P450 BM3: kinetics of flavin reduction and oxidation, the role of cysteine 999, and relationships with mammalian cytochrome P450 reductase. *Biochemistry*, **2003**, 42, 10809-21	3.2	41
63	Molecular dissection of human methionine synthase reductase: determination of the flavin redox potentials in full-length enzyme and isolated flavin-binding domains. *Biochemistry*, **2003**, 42, 3911-20	3.2	50
62	Atomic structure of Mycobacterium tuberculosis CYP121 to 1.06 A reveals novel features of cytochrome P450. *Journal of Biological Chemistry*, **2003**, 278, 5141-7	5.4	113
61	Characterization of the cobaltochelatase CbiXL: evidence for a 4Fe-4S center housed within an MXCXXC motif. *Journal of Biological Chemistry*, **2003**, 278, 41900-7	5.4	45
60	P450 BM3: the very model of a modern flavocytochrome. *Trends in Biochemical Sciences*, **2002**, 27, 250-7	10.3	355
59	Crystallization and preliminary crystallographic analysis of a novel cytochrome P450 from Mycobacterium tuberculosis. *Acta Crystallographica Section D: Biological Crystallography*, **2002**, 58, 704-5		5
58	Catalytically functional flavocytochrome chimeras of P450 BM3 and nitric oxide synthase. *Journal of Inorganic Biochemistry*, **2002**, 91, 515-26	4.2	22
57	Expression, purification and spectroscopic characterization of the cytochrome P450 CYP121 from Mycobacterium tuberculosis. *Journal of Inorganic Biochemistry*, **2002**, 91, 527-41	4.2	84
56	Azole antifungals are potent inhibitors of cytochrome P450 mono-oxygenases and bacterial growth in mycobacteria and streptomycetes. *Microbiology (United Kingdom)*, **2002**, 148, 2937-2949	2.9	147
55	Kinetic and structural basis of reactivity of pentaerythritol tetranitrate reductase with NADPH, 2-cyclohexenone, nitroesters, and nitroaromatic explosives. *Journal of Biological Chemistry*, **2002**, 277, 21906-12	5.4	69
54	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, 315-23	3.8	10
53	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	3.8	15
52	Cytochromes P450 as drug targets in Mycobacterium tuberculosis. *Biochemical Society Transactions*, **2001**, 29, A33-A33	5.1	
51	Use of high pressure to study elementary steps in P450 and nitric oxide synthase. *Journal of Inorganic Biochemistry*, **2001**, 87, 191-5	4.2	12
50	Expression, purification and characterization of cytochrome P450 BioI: a novel P450 involved in biotin synthesis in Bacillus subtilis. *Journal of Biological Inorganic Chemistry*, **2001**, 6, 523-33	3.7	43

49	alpha Arg-237 in Methylophilus methylotrophus (sp. W3A1) electron-transferring flavoprotein affords approximately 200-millivolt stabilization of the FAD anionic semiquinone and a kinetic block on full reduction to the dihydroquinone. *Journal of Biological Chemistry*, **2001**, 276, 20190-6	5.4	27
48	Role of the conserved phenylalanine 181 of NADPH-cytochrome P450 oxidoreductase in FMN binding and catalytic activity. *Biochemistry*, **2001**, 40, 13439-47	3.2	12
47	Phenylalanine 393 exerts thermodynamic control over the heme of flavocytochrome P450 BM3. *Biochemistry*, **2001**, 40, 13421-9	3.2	103
46	Determination of the redox properties of human NADPH-cytochrome P450 reductase. *Biochemistry* , **2001**, 40, 1956-63	3.2	139
45	Structural and spectroscopic analysis of the F393H mutant of flavocytochrome P450 BM3. *Biochemistry*, **2001**, 40, 13430-8	3.2	50
44	Probing the NADPH-binding site of Escherichia coli flavodoxin oxidoreductase. *Biochemical Journal*, **2000**, 352, 257	3.8	6
43	The genome sequence of Mycobacterium tuberculosis reveals cytochromes P450 as novel anti-TB drug targets. *Journal of Chemical Technology and Biotechnology*, **2000**, 75, 933-941	3.5	16
42	Flexibility and stability of the structure of cytochromes P450 3A4 and BM-3. *FEBS Journal*, **2000**, 267, 2916-20		41
41	Structures of redox enzymes. *Current Opinion in Biotechnology*, **2000**, 11, 369-76	11.4	12
40	Protein engineering of cytochromes P-450. *BBA - Proteins and Proteomics*, **2000**, 1543, 383-407		51
39	Changing the heme ligation in flavocytochrome b2: substitution of histidine-66 by cysteine. *Journal of Biological Inorganic Chemistry*, **2000**, 5, 584-92	3.7	9
38	Flavocytochrome P450 BM3 substrate selectivity and electron transfer in a model cytochrome P450. *Sub-Cellular Biochemistry*, **2000**, 35, 297-315	5.5	2
37	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, 70-8	4.1	23
36	Rational re-design of the substrate binding site of flavocytochrome P450 BM3. *FEBS Letters*, **2000**, 486, 173-7	3.8	88
35	Probing the NADPH-binding site of Escherichia coli flavodoxin oxidoreductase. *Biochemical Journal*, **2000**, 352, 257-266	3.8	14
34	The genome sequence of Mycobacterium tuberculosis reveals cytochromes P450 as novel anti-TB drug targets **2000**, 75, 933		4
33	Fluorescence analysis of flavoproteins. *Methods in Molecular Biology*, **1999**, 131, 25-48	1.4	26
32	Potentiometric analysis of the flavin cofactors of neuronal nitric oxide synthase. *Biochemistry*, **1999** , 38, 16413-8	3.2	117

31	Spectral properties of the oxyferrous complex of the heme domain of cytochrome P450 BM-3 (CYP102). *Biochemical and Biophysical Research Communications*, **1999**, 266, 187-9	3.4	15
30	Bio I: Is it a Cytochrome P-450?. *Biochemical Society Transactions*, **1999**, 27, A44-A44	5.1	
29	Characterisation of ferredoxin (flavodoxin) NADP+ reductase and flavodoxin; key components of electron transfer in Escherichia coli. *Biochemical Society Transactions*, **1999**, 27, A56-A56	5.1	
28	Expression and characterisation of B. subtilis P450 Biol. *Biochemical Society Transactions*, **1999**, 27, A108-A108	5.1	
27	Electron transfer in a P450 BM3/cytochrome b5 complex. *Biochemical Society Transactions*, **1999**, 27, A108-A108	5.1	
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