

Andrew W Munro

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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|--------------------|-------------------------|----------------|-----------------|
| 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 | P450 BM3: the very model of a modern flavocytochrome. <i>Trends in Biochemical Sciences</i> , 2002 , 27, 250-7 | 10.3 | 355 |
| 191 | Roles of key active-site residues in flavocytochrome P450 BM3. <i>Biochemical Journal</i> , 1999 , 339, 371-379 | 3.8 | 231 |
| 190 | Unusual cytochrome p450 enzymes and reactions. <i>Journal of Biological Chemistry</i> , 2013 , 288, 17065-73 | 5.4 | 225 |
| 189 | Variations on a (t)heme--novel mechanisms, redox partners and catalytic functions in the cytochrome P450 superfamily. <i>Natural Product Reports</i> , 2007 , 24, 585-609 | 15.1 | 218 |
| 188 | Cytochrome P450--redox partner fusion enzymes. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2007 , 1770, 345-59 | 4 | 160 |
| 187 | What makes a P450 tick?. <i>Trends in Biochemical Sciences</i> , 2013 , 38, 140-50 | 10.3 | 153 |
| 186 | Applications of microbial cytochrome P450 enzymes in biotechnology and synthetic biology. <i>Current Opinion in Chemical Biology</i> , 2016 , 31, 136-45 | 9.7 | 152 |
| 185 | Azole antifungals are potent inhibitors of cytochrome P450 mono-oxygenases and bacterial growth in mycobacteria and streptomycetes. <i>Microbiology (United Kingdom)</i> , 2002 , 148, 2937-2949 | 2.9 | 147 |
| 184 | Determination of the redox properties of human NADPH-cytochrome P450 reductase. <i>Biochemistry</i> , 2001 , 40, 1956-63 | 3.2 | 139 |
| 183 | Bacterial cytochromes P-450. <i>Molecular Microbiology</i> , 1996 , 20, 1115-25 | 4.1 | 128 |
| 182 | Structure and biochemical properties of the alkene producing cytochrome P450 OleTJE (CYP152L1) from the <i>Jeotgalicoccus</i> sp. 8456 bacterium. <i>Journal of Biological Chemistry</i> , 2014 , 289, 6535-6550 | 5.4 | 126 |
| 181 | Expression, purification, and characterization of <i>Bacillus subtilis</i> cytochromes P450 CYP102A2 and CYP102A3: flavocytochrome homologues of P450 BM3 from <i>Bacillus megaterium</i> . <i>Biochemistry</i> , 2004 , 43, 5474-87 | 3.2 | 126 |
| 180 | Potentiometric analysis of the flavin cofactors of neuronal nitric oxide synthase. <i>Biochemistry</i> , 1999 , 38, 16413-8 | 3.2 | 117 |
| 179 | Biochemical and structural insights into bacterial organelle form and biogenesis. <i>Journal of Biological Chemistry</i> , 2008 , 283, 14366-75 | 5.4 | 115 |
| 178 | Atomic structure of <i>Mycobacterium tuberculosis</i> CYP121 to 1.06 Å reveals novel features of cytochrome P450. <i>Journal of Biological Chemistry</i> , 2003 , 278, 5141-7 | 5.4 | 113 |
| 177 | Probing electron transfer in flavocytochrome P-450 BM3 and its component domains. <i>FEBS Journal</i> , 1996 , 239, 403-9 | | 106 |
| 176 | Characterization of active site structure in CYP121. A cytochrome P450 essential for viability of <i>Mycobacterium tuberculosis</i> H37Rv. <i>Journal of Biological Chemistry</i> , 2008 , 283, 33406-16 | 5.4 | 103 |

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| 175 | Phenylalanine 393 exerts thermodynamic control over the heme of flavocytochrome P450 BM3. <i>Biochemistry</i> , 2001 , 40, 13421-9 | 3.2 | 103 |
| 174 | Structure and function of the cytochrome P450 peroxygenase enzymes. <i>Biochemical Society Transactions</i> , 2018 , 46, 183-196 | 5.1 | 98 |
| 173 | Heme sensor proteins. <i>Journal of Biological Chemistry</i> , 2013 , 288, 13194-203 | 5.4 | 96 |
| 172 | Crystal structure of the Mycobacterium tuberculosis P450 CYP121-fluconazole complex reveals new azole drug-P450 binding mode. <i>Journal of Biological Chemistry</i> , 2006 , 281, 39437-43 | 5.4 | 94 |
| 171 | The Structure of Mycobacterium tuberculosis CYP125: molecular basis for cholesterol binding in a P450 needed for host infection. <i>Journal of Biological Chemistry</i> , 2009 , 284, 35524-33 | 5.4 | 90 |
| 170 | The dimeric form of flavocytochrome P450 BM3 is catalytically functional as a fatty acid hydroxylase. <i>FEBS Letters</i> , 2005 , 579, 5582-8 | 3.8 | 90 |
| 169 | Roles of key active-site residues in flavocytochrome P450 BM3. <i>Biochemical Journal</i> , 1999 , 339, 371 | 3.8 | 90 |
| 168 | Rational re-design of the substrate binding site of flavocytochrome P450 BM3. <i>FEBS Letters</i> , 2000 , 486, 173-7 | 3.8 | 88 |
| 167 | Structural and biochemical characterization of Mycobacterium tuberculosis CYP142: evidence for multiple cholesterol 27-hydroxylase activities in a human pathogen. <i>Journal of Biological Chemistry</i> , 2010 , 285, 38270-82 | 5.4 | 85 |
| 166 | Expression, purification and spectroscopic characterization of the cytochrome P450 CYP121 from Mycobacterium tuberculosis. <i>Journal of Inorganic Biochemistry</i> , 2002 , 91, 527-41 | 4.2 | 84 |
| 165 | Single-step fermentative production of the cholesterol-lowering drug pravastatin via reprogramming of Penicillium chrysogenum. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 2847-52 | 11.5 | 82 |
| 164 | P450-Catalyzed Regio- and Diastereoselective Steroid Hydroxylation: Efficient Directed Evolution Enabled by Mutability Landscaping. <i>ACS Catalysis</i> , 2018 , 8, 3395-3410 | 13.1 | 81 |
| 163 | Activation of potassium channels during metabolite detoxification in Escherichia coli. <i>Molecular Microbiology</i> , 1993 , 9, 1297-303 | 4.1 | 81 |
| 162 | Characterisation of flavodoxin NADP+ oxidoreductase and flavodoxin; key components of electron transfer in Escherichia coli. <i>FEBS Journal</i> , 1998 , 257, 577-85 | | 78 |
| 161 | Biophysical characterization of the sterol demethylase P450 from Mycobacterium tuberculosis, its cognate ferredoxin, and their interactions. <i>Biochemistry</i> , 2006 , 45, 8427-43 | 3.2 | 71 |
| 160 | Expression and characterization of the two flavodoxin proteins of Bacillus subtilis, YkuN and YkuP: biophysical properties and interactions with cytochrome P450 Biol. <i>Biochemistry</i> , 2004 , 43, 12390-409 | 3.2 | 71 |
| 159 | Redox and spectroscopic properties of human indoleamine 2,3-dioxygenase and a His303Ala variant: implications for catalysis. <i>Biochemistry</i> , 2005 , 44, 14318-28 | 3.2 | 70 |
| 158 | Kinetic and structural basis of reactivity of pentaerythritol tetranitrate reductase with NADPH, 2-cyclohexenone, nitroesters, and nitroaromatic explosives. <i>Journal of Biological Chemistry</i> , 2002 , 277, 21906-12 | 5.4 | 69 |

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| 157 | Bacterial flavodoxins support nitric oxide production by <i>Bacillus subtilis</i> nitric-oxide synthase. <i>Journal of Biological Chemistry</i> , 2007 , 282, 2196-202 | 5.4 | 68 |
| 156 | Application of fragment screening and merging to the discovery of inhibitors of the <i>Mycobacterium tuberculosis</i> cytochrome P450 CYP121. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 9311-6 | 16.4 | 64 |
| 155 | How do azoles inhibit cytochrome P450 enzymes? A density functional study. <i>Journal of Physical Chemistry A</i> , 2008 , 112, 12911-8 | 2.8 | 62 |
| 154 | Flavocytochrome P450 BM3 mutant A264E undergoes substrate-dependent formation of a novel heme iron ligand set. <i>Journal of Biological Chemistry</i> , 2004 , 279, 23274-86 | 5.4 | 62 |
| 153 | The human apoptosis-inducing protein AMID is an oxidoreductase with a modified flavin cofactor and DNA binding activity. <i>Journal of Biological Chemistry</i> , 2005 , 280, 30735-40 | 5.4 | 61 |
| 152 | Structure, function and drug targeting in <i>Mycobacterium tuberculosis</i> cytochrome P450 systems. <i>Archives of Biochemistry and Biophysics</i> , 2007 , 464, 228-40 | 4.1 | 59 |
| 151 | The preponderance of P450s in the <i>Mycobacterium tuberculosis</i> genome. <i>Trends in Microbiology</i> , 2006 , 14, 220-8 | 12.4 | 59 |
| 150 | Catalytic Determinants of Alkene Production by the Cytochrome P450 Peroxygenase OleT. <i>Journal of Biological Chemistry</i> , 2017 , 292, 5128-5143 | 5.4 | 57 |
| 149 | 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. <i>Journal of Biological Chemistry</i> , 2007 , 282, 564-72 | 5.4 | 55 |
| 148 | Thermodynamic and biophysical characterization of cytochrome P450 BioI from <i>Bacillus subtilis</i> . <i>Biochemistry</i> , 2004 , 43, 12410-26 | 3.2 | 55 |
| 147 | A single mutation in cytochrome P450 BM3 induces the conformational rearrangement seen upon substrate binding in the wild-type enzyme. <i>Journal of Biological Chemistry</i> , 2004 , 279, 23287-93 | 5.4 | 53 |
| 146 | Key mutations alter the cytochrome P450 BM3 conformational landscape and remove inherent substrate bias. <i>Journal of Biological Chemistry</i> , 2013 , 288, 25387-25399 | 5.4 | 51 |
| 145 | Protein engineering of cytochromes P-450. <i>BBA - Proteins and Proteomics</i> , 2000 , 1543, 383-407 | | 51 |
| 144 | Conformational and thermodynamic control of electron transfer in neuronal nitric oxide synthase. <i>Biochemistry</i> , 2007 , 46, 5018-29 | 3.2 | 50 |
| 143 | Interflavin electron transfer in human cytochrome P450 reductase is enhanced by coenzyme binding. Relaxation kinetic studies with coenzyme analogues. <i>FEBS Journal</i> , 2003 , 270, 2612-21 | | 50 |
| 142 | Molecular dissection of human methionine synthase reductase: determination of the flavin redox potentials in full-length enzyme and isolated flavin-binding domains. <i>Biochemistry</i> , 2003 , 42, 3911-20 | 3.2 | 50 |
| 141 | Structural and spectroscopic analysis of the F393H mutant of flavocytochrome P450 BM3. <i>Biochemistry</i> , 2001 , 40, 13430-8 | 3.2 | 50 |
| 140 | Heme: The most versatile redox centre in biology?. <i>Structure and Bonding</i> , 1997 , 39-70 | 0.9 | 49 |

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| 139 | The pH dependence of kinetic isotope effects in monoamine oxidase A indicates stabilization of the neutral amine in the enzyme-substrate complex. <i>FEBS Journal</i> , 2008 , 275, 3850-8 | 5.7 | 49 |
| 138 | Switching pyridine nucleotide specificity in P450 BM3: mechanistic analysis of the W1046H and W1046A enzymes. <i>Journal of Biological Chemistry</i> , 2005 , 280, 17634-44 | 5.4 | 48 |
| 137 | Identification and characterization of a novel vitamin B12 (cobalamin) biosynthetic enzyme (CobZ) from <i>Rhodobacter capsulatus</i> , containing flavin, heme, and Fe-S cofactors. <i>Journal of Biological Chemistry</i> , 2005 , 280, 1086-94 | 5.4 | 47 |
| 136 | Characterization of the cobaltochelatase CbiXL: evidence for a 4Fe-4S center housed within an MXCXXC motif. <i>Journal of Biological Chemistry</i> , 2003 , 278, 41900-7 | 5.4 | 45 |
| 135 | Rapid P450 heme iron reduction by laser photoexcitation of <i>Mycobacterium tuberculosis</i> CYP121 and CYP51B1. Analysis of CO complexation reactions and reversibility of the P450/P420 equilibrium. <i>Journal of Biological Chemistry</i> , 2007 , 282, 24816-24 | 5.4 | 44 |
| 134 | Expression, purification and characterization of cytochrome P450 Biol: a novel P450 involved in biotin synthesis in <i>Bacillus subtilis</i> . <i>Journal of Biological Inorganic Chemistry</i> , 2001 , 6, 523-33 | 3.7 | 43 |
| 133 | Kinetic, spectroscopic and thermodynamic characterization of the <i>Mycobacterium tuberculosis</i> adrenodoxin reductase homologue FprA. <i>Biochemical Journal</i> , 2003 , 372, 317-27 | 3.8 | 42 |
| 132 | Structural and enzymological analysis of the interaction of isolated domains of cytochrome P-450 BM3. <i>FEBS Letters</i> , 1994 , 343, 70-4 | 3.8 | 42 |
| 131 | Production of alkenes and novel secondary products by P450 OleT using novel H ₂ O ₂ -generating fusion protein systems. <i>FEBS Letters</i> , 2017 , 591, 737-750 | 3.8 | 41 |
| 130 | Fragment-Based Approaches to the Development of <i>Mycobacterium tuberculosis</i> CYP121 Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2016 , 59, 3272-302 | 8.3 | 41 |
| 129 | Expression, purification and characterisation of a <i>Bacillus subtilis</i> ferredoxin: a potential electron transfer donor to cytochrome P450 Biol. <i>Journal of Inorganic Biochemistry</i> , 2003 , 93, 92-9 | 4.2 | 41 |
| 128 | Electron transfer in flavocytochrome P450 BM3: kinetics of flavin reduction and oxidation, the role of cysteine 999, and relationships with mammalian cytochrome P450 reductase. <i>Biochemistry</i> , 2003 , 42, 10809-21 | 3.2 | 41 |
| 127 | Flexibility and stability of the structure of cytochromes P450 3A4 and BM-3. <i>FEBS Journal</i> , 2000 , 267, 2916-20 | | 41 |
| 126 | A stable tyrosyl radical in monoamine oxidase A. <i>Journal of Biological Chemistry</i> , 2005 , 280, 4627-31 | 5.4 | 40 |
| 125 | Structural biology and biochemistry of cytochrome P450 systems in <i>Mycobacterium tuberculosis</i> . <i>Drug Metabolism Reviews</i> , 2008 , 40, 427-46 | 7 | 39 |
| 124 | Interaction of nitric oxide with cytochrome P450 BM3. <i>Biochemistry</i> , 2004 , 43, 16416-31 | 3.2 | 39 |
| 123 | Kinetic and thermodynamic characterization of the common polymorphic variants of human methionine synthase reductase. <i>Biochemistry</i> , 2004 , 43, 1988-97 | 3.2 | 38 |
| 122 | Biological diversity of cytochrome P450 redox partner systems. <i>Advances in Experimental Medicine and Biology</i> , 2015 , 851, 299-317 | 3.6 | 37 |

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| 121 | Atomic resolution structures and solution behavior of enzyme-substrate complexes of <i>Enterobacter cloacae</i> PB2 pentaerythritol tetranitrate reductase. Multiple conformational states and implications for the mechanism of nitroaromatic explosive degradation. <i>Journal of Biological Chemistry</i> , 2004 , 279, 30563-72 | 5.4 | 37 |
| 120 | Analysis of the structural stability of the multidomain enzyme flavocytochrome P-450 BM3. <i>BBA - Proteins and Proteomics</i> , 1996 , 1296, 127-37 | | 37 |
| 119 | Flavocytochrome P450 BM3 mutant W1046A is a NADH-dependent fatty acid hydroxylase: implications for the mechanism of electron transfer in the P450 BM3 dimer. <i>Archives of Biochemistry and Biophysics</i> , 2011 , 507, 75-85 | 4.1 | 36 |
| 118 | Inter-flavin electron transfer in cytochrome P450 reductase - effects of solvent and pH identify hidden complexity in mechanism. <i>FEBS Journal</i> , 2008 , 275, 4540-57 | 5.7 | 36 |
| 117 | Identification and characterization of the terminal enzyme of siroheme biosynthesis from <i>Arabidopsis thaliana</i> : a plastid-located sirohydrochlorin ferrochelatase containing a 2FE-2S center. <i>Journal of Biological Chemistry</i> , 2005 , 280, 4713-21 | 5.4 | 36 |
| 116 | FdC1, a novel ferredoxin protein capable of alternative electron partitioning, increases in conditions of acceptor limitation at photosystem I. <i>Journal of Biological Chemistry</i> , 2011 , 286, 50-9 | 5.4 | 35 |
| 115 | The crystal structure of the FAD/NADPH-binding domain of flavocytochrome P450 BM3. <i>FEBS Journal</i> , 2012 , 279, 1694-706 | 5.7 | 34 |
| 114 | Characterization of <i>Cupriavidus metallidurans</i> CYP116B1--a thiocarbamate herbicide oxygenating P450-phthalate dioxygenase reductase fusion protein. <i>FEBS Journal</i> , 2012 , 279, 1675-93 | 5.7 | 33 |
| 113 | Electron Transfer Partners of Cytochrome P450 2005 , 115-148 | | 33 |
| 112 | Determination of the redox potentials and electron transfer properties of the FAD- and FMN-binding domains of the human oxidoreductase NR1. <i>FEBS Journal</i> , 2003 , 270, 1164-75 | | 33 |
| 111 | Characterisation of PduS, the pdu metabolosome corrin reductase, and evidence of substructural organisation within the bacterial microcompartment. <i>PLoS ONE</i> , 2010 , 5, e14009 | 3.7 | 32 |
| 110 | Cholesterol, an essential molecule: diverse roles involving cytochrome P450 enzymes. <i>Biochemical Society Transactions</i> , 2012 , 40, 587-93 | 5.1 | 30 |
| 109 | The redox properties of ascorbate peroxidase. <i>Biochemistry</i> , 2007 , 46, 8017-23 | 3.2 | 30 |
| 108 | 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. <i>FEBS Journal</i> , 2005 , 272, 4660-71 | 5.7 | 27 |
| 107 | alpha Arg-237 in <i>Methylophilus methylotrophus</i> (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. <i>Journal of Biological Chemistry</i> , 2001 , 276, 20190-6 | 5.4 | 27 |
| 106 | Identification, characterization, and structure/function analysis of a corrin reductase involved in adenosylcobalamin biosynthesis. <i>Journal of Biological Chemistry</i> , 2008 , 283, 10813-21 | 5.4 | 26 |
| 105 | Fluorescence analysis of flavoproteins. <i>Methods in Molecular Biology</i> , 1999 , 131, 25-48 | 1.4 | 26 |
| 104 | Overcoming the limitations of fragment merging: rescuing a strained merged fragment series targeting <i>Mycobacterium tuberculosis</i> CYP121. <i>ChemMedChem</i> , 2013 , 8, 1451-6 | 3.7 | 25 |

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| 103 | The Mycobacterium tuberculosis cytochromes P450: physiology, biochemistry & molecular intervention. <i>Future Medicinal Chemistry</i> , 2010 , 2, 1339-53 | 4.1 | 25 |
| 102 | Catalytic Mechanism of Aromatic Nitration by Cytochrome P450 TxtE: Involvement of a Ferric-Peroxynitrite Intermediate. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15764-15779 | 16.4 | 25 |
| 101 | AFM study of cytochrome CYP102A1 oligomeric state. <i>Soft Matter</i> , 2012 , 8, 4602 | 3.6 | 24 |
| 100 | Novel haem co-ordination variants of flavocytochrome P450BM3. <i>Biochemical Journal</i> , 2009 , 417, 65-76 | 3.8 | 24 |
| 99 | DNA binding suppresses human AIF-M2 activity and provides a connection between redox chemistry, reactive oxygen species, and apoptosis. <i>Journal of Biological Chemistry</i> , 2007 , 282, 30331-40 | 5.4 | 24 |
| 98 | Cytochrome P450/redox partner fusion enzymes: biotechnological and toxicological prospects. <i>Expert Opinion on Drug Metabolism and Toxicology</i> , 2007 , 3, 847-63 | 5.5 | 24 |
| 97 | Unusual spectroscopic and ligand binding properties of the cytochrome P450-flavodoxin fusion enzyme XplA. <i>Journal of Biological Chemistry</i> , 2012 , 287, 19699-714 | 5.4 | 23 |
| 96 | Structural similarities and differences of the heme pockets of various P450 isoforms as revealed by resonance Raman spectroscopy. <i>Archives of Biochemistry and Biophysics</i> , 2000 , 383, 70-8 | 4.1 | 23 |
| 95 | Strength of axial water ligation in substrate-free cytochrome P450s is isoform dependent. <i>Biochemistry</i> , 2014 , 53, 1428-34 | 3.2 | 22 |
| 94 | Effect of DMSO on Protein Structure and Interactions Assessed by Collision-Induced Dissociation and Unfolding. <i>Analytical Chemistry</i> , 2017 , 89, 9976-9983 | 7.8 | 22 |
| 93 | Mycobacterium tuberculosis cytochrome P450 enzymes: a cohort of novel TB drug targets. <i>Biochemical Society Transactions</i> , 2012 , 40, 573-9 | 5.1 | 22 |
| 92 | Tyrosyl radical formation and propagation in flavin dependent monoamine oxidases. <i>ChemBioChem</i> , 2010 , 11, 1228-31 | 3.8 | 22 |
| 91 | Role of active site residues and solvent in proton transfer and the modulation of flavin reduction potential in bacterial morphinone reductase. <i>Journal of Biological Chemistry</i> , 2005 , 280, 27103-10 | 5.4 | 22 |
| 90 | 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. <i>Journal of Biological Chemistry</i> , 2005 , 280, 10695-709 | 5.4 | 22 |
| 89 | 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. <i>FEBS Journal</i> , 2004 , 271, 2548-60 | | 22 |
| 88 | Catalytically functional flavocytochrome chimeras of P450 BM3 and nitric oxide synthase. <i>Journal of Inorganic Biochemistry</i> , 2002 , 91, 515-26 | 4.2 | 22 |
| 87 | Novel Aryl Substituted Pyrazoles as Small Molecule Inhibitors of Cytochrome P450 CYP121A1: Synthesis and Antimycobacterial Evaluation. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 10257-10267 | 8.3 | 21 |
| 86 | Expression and characterization of Mycobacterium tuberculosis CYP144: common themes and lessons learned in the M. tuberculosis P450 enzyme family. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2011 , 1814, 76-87 | 4 | 21 |

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| 85 | Human P450-like oxidation of diverse proton pump inhibitor drugs by Gatekeeper mutants of flavocytochrome P450 BM3. <i>Biochemical Journal</i> , 2014 , 460, 247-59 | 3.8 | 19 |
| 84 | Introduction. Quantum catalysis in enzymes: beyond the transition state theory paradigm. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2006 , 361, 1293-1294 | 5.8 | 18 |
| 83 | Heme and Hemoproteins 2009 , 160-183 | | 18 |
| 82 | A novel intermediate in the reaction of seleno CYP119 with m-chloroperbenzoic acid. <i>Biochemistry</i> , 2011 , 50, 3014-24 | 3.2 | 17 |
| 81 | Clobetasol Propionate Is a Heme-Mediated Selective Inhibitor of Human Cytochrome P450 3A5. <i>Journal of Medicinal Chemistry</i> , 2020 , 63, 1415-1433 | 8.3 | 16 |
| 80 | Expression, Purification, and Biochemical Characterization of the Flavocytochrome P450 CYP505A30 from. <i>ACS Omega</i> , 2017 , 2, 4705-4724 | 3.9 | 16 |
| 79 | Thermodynamic basis of electron transfer in dihydroorotate dehydrogenase B from <i>Lactococcus lactis</i> : analysis by potentiometry, EPR spectroscopy, and ENDOR spectroscopy. <i>Biochemistry</i> , 2004 , 43, 6498-510 | 3.2 | 16 |
| 78 | The genome sequence of <i>Mycobacterium tuberculosis</i> reveals cytochromes P450 as novel anti-TB drug targets. <i>Journal of Chemical Technology and Biotechnology</i> , 2000 , 75, 933-941 | 3.5 | 16 |
| 77 | <i>Bacillus megaterium</i> has both a functional BluB protein required for DMB synthesis and a related flavoprotein that forms a stable radical species. <i>PLoS ONE</i> , 2013 , 8, e55708 | 3.7 | 16 |
| 76 | An oxidative N-demethylase reveals PAS transition from ubiquitous sensor to enzyme. <i>Nature</i> , 2016 , 539, 593-597 | 50.4 | 15 |
| 75 | Electron transfer reactions, cyanide and O ₂ binding of truncated hemoglobin from <i>Bacillus subtilis</i> . <i>Electrochimica Acta</i> , 2013 , 110, 86-93 | 6.7 | 15 |
| 74 | 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. <i>Journal of Biological Chemistry</i> , 2009 , 284, 4796-805 | 5.4 | 15 |
| 73 | Conformational dynamics of the cytochrome P450 BM3/N-palmitoylglycine complex: the proposed "proximal-distal" transition probed by temperature-jump spectroscopy. <i>Journal of Physical Chemistry B</i> , 2007 , 111, 7879-86 | 3.4 | 15 |
| 72 | Effects of environment on flavin reactivity in morphine reductase: analysis of enzymes displaying differential charge near the N-1 atom and C-2 carbonyl region of the active-site flavin. <i>Biochemical Journal</i> , 2001 , 359, 315-323 | 3.8 | 15 |
| 71 | Spectral properties of the oxyferrous complex of the heme domain of cytochrome P450 BM-3 (CYP102). <i>Biochemical and Biophysical Research Communications</i> , 1999 , 266, 187-9 | 3.4 | 15 |
| 70 | Inhibitor/fatty acid interactions with cytochrome P-450 BM3. <i>FEBS Letters</i> , 1996 , 396, 196-200 | 3.8 | 15 |
| 69 | 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. <i>Molecular Microbiology</i> , 2014 , 93, 247-61 | 4.1 | 14 |
| 68 | Laser photoexcitation of NAD(P)H induces reduction of P450 BM3 heme domain on the microsecond time scale. <i>Journal of the American Chemical Society</i> , 2007 , 129, 6647-53 | 16.4 | 14 |

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| 67 | Probing the NADPH-binding site of Escherichia coli flavodoxin oxidoreductase. <i>Biochemical Journal</i> , 2000 , 352, 257-266 | 3.8 | 14 |
| 66 | Substrate Fragmentation for the Design of M. tuberculosis CYP121 Inhibitors. <i>ChemMedChem</i> , 2016 , 11, 1924-35 | 3.7 | 13 |
| 65 | Design and Synthesis of Imidazole and Triazole Pyrazoles as CYP121A1 Inhibitors. <i>ChemistryOpen</i> , 2019 , 8, 995-1011 | 2.3 | 13 |
| 64 | Overview on theoretical studies discriminating the two-oxidant versus two-state-reactivity models for substrate monooxygenation by cytochrome P450 enzymes. <i>Current Topics in Medicinal Chemistry</i> , 2013 , 13, 2218-32 | 3 | 13 |
| 63 | Analysis of the interactions of cytochrome b5 with flavocytochrome P450 BM3 and its domains. <i>Drug Metabolism Reviews</i> , 2007 , 39, 599-617 | 7 | 13 |
| 62 | Structural and catalytic properties of the peroxygenase P450 enzyme CYP152K6 from Bacillus methanolicus. <i>Journal of Inorganic Biochemistry</i> , 2018 , 188, 18-28 | 4.2 | 12 |
| 61 | Nanoelectrospray ionization mass spectrometric study of Mycobacterium tuberculosis CYP121-ligand interactions. <i>Analytical Chemistry</i> , 2013 , 85, 5707-14 | 7.8 | 12 |
| 60 | Glutamate-haem ester bond formation is disfavoured in flavocytochrome P450 BM3: characterization of glutamate substitution mutants at the haem site of P450 BM3. <i>Biochemical Journal</i> , 2010 , 427, 455-66 | 3.8 | 12 |
| 59 | Use of high pressure to study elementary steps in P450 and nitric oxide synthase. <i>Journal of Inorganic Biochemistry</i> , 2001 , 87, 191-5 | 4.2 | 12 |
| 58 | Structures of redox enzymes. <i>Current Opinion in Biotechnology</i> , 2000 , 11, 369-76 | 11.4 | 12 |
| 57 | Role of the conserved phenylalanine 181 of NADPH-cytochrome P450 oxidoreductase in FMN binding and catalytic activity. <i>Biochemistry</i> , 2001 , 40, 13439-47 | 3.2 | 12 |
| 56 | Fatty acid-induced alteration of the porphyrin macrocycle of cytochrome P450 BM3. <i>Biophysical Journal</i> , 1998 , 74, 3241-9 | 2.9 | 12 |
| 55 | Structural Characterization and Ligand/Inhibitor Identification Provide Functional Insights into the Mycobacterium tuberculosis Cytochrome P450 CYP126A1. <i>Journal of Biological Chemistry</i> , 2017 , 292, 1310-1329 | 5.4 | 11 |
| 54 | Novel insights into P450 BM3 interactions with FDA-approved antifungal azole drugs. <i>Scientific Reports</i> , 2019 , 9, 1577 | 4.9 | 11 |
| 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. <i>Biochemical Journal</i> , 2001 , 359, 315-23 | 3.8 | 10 |
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