Brian G Fox

List of Publications by Year in Descending Order

162 papers	8,269 citations	50 h-index	86 g-index
167 ext. papers	9,008 ext. citations	6.1 avg, IF	5.67 L-index

#	Paper	IF	Citations
162	The Crystal Structure of Cysteamine Dioxygenase Reveals the Origin of the Large Substrate Scope of This Vital Mammalian Enzyme. *Biochemistry*, **2021**, 60, 3728-3737	3.2	2
161	Mannose- and Mannobiose-Specific Responses of the Insect-Associated Cellulolytic Bacterium sp. Strain SirexAA-E. *Applied and Environmental Microbiology*, **2021**, 87, e0271920	4.8	1
160	Multifunctional cellulases are potent, versatile tools for a renewable bioeconomy. *Current Opinion in Biotechnology*, **2021**, 67, 141-148	11.4	2
159	Spectroscopic investigation of iron(III) cysteamine dioxygenase in the presence of substrate (analogs): implications for the nature of substrate-bound reaction intermediates. *Journal of Biological Inorganic Chemistry*, **2021**, 26, 947-955	3.7	1
158	Toluene 4-Monooxygenase Reaction Intermediates **2020**, 1-11		
157	A bacterial biosynthetic pathway for methylated furan fatty acids. *Journal of Biological Chemistry*, **2020**, 295, 9786-9801	5.4	7
156	Spectroscopic Investigation of Cysteamine Dioxygenase. *Biochemistry*, **2020**, 59, 2450-2458	3.2	7
155	PreDSLpmo: A neural network-based prediction tool for functional annotation of lytic polysaccharide monooxygenases. *Journal of Biotechnology*, **2020**, 308, 148-155	3.7	
154	A structural and kinetic survey of GH5_4 endoglucanases reveals determinants of broad substrate specificity and opportunities for biomass hydrolysis. *Journal of Biological Chemistry*, **2020**, 295, 17752-17769	5.4	2
153	Solid-state NMR studies of solvent-mediated, acid-catalyzed woody biomass pre-treatment for enzymatic conversion of residual cellulose. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 6551-6563	8.3	7
152	Extent and Origins of Functional Diversity in a Subfamily of Glycoside Hydrolases. *Journal of Molecular Biology*, **2019**, 431, 1217-1233	6.5	7
151	Structural Proteomics **2018**, 99-128		
150	Determination of glycoside hydrolase specificities during hydrolysis of plant cell walls using glycome profiling. *Biotechnology for Biofuels*, **2017**, 10, 31	7.8	13
149	In-crystal reaction cycle of a toluene-bound diiron hydroxylase. *Nature*, **2017**, 544, 191-195	50.4	32
148	Reply to Kiser: Dioxygen binding in NOV1 crystal structures. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E6029-E6030	11.5	3
147	Functional characterization of three GH10 xylanases. *FASEB Journal*, **2017**, 31, 607.1	0.9	
146	Evolution of High Cellulolytic Activity in Symbiotic Streptomyces through Selection of Expanded Gene Content and Coordinated Gene Expression. *PLoS Biology*, **2016**, 14, e1002475	9.7	46

145	Structure and mechanism of NOV1, a resveratrol-cleaving dioxygenase. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14324-14329	11.5	40
144	Cell-free translation and purification of Arabidopsis thaliana regulator of G signaling 1 protein. *Protein Expression and Purification*, **2016**, 126, 33-41	2	7
143	Evolution and Ecology of Actinobacteria and Their Bioenergy Applications. *Annual Review of Microbiology*, **2016**, 70, 235-54	17.5	146
142	Spectroscopic and Computational Investigation of the H155A Variant of Cysteine Dioxygenase: Geometric and Electronic Consequences of a Third-Sphere Amino Acid Substitution. *Biochemistry*, **2015**, 54, 2874-84	3.2	21
141	X-ray structure of a mammalian stearoyl-CoA desaturase. *Nature*, **2015**, 524, 252-6	50.4	136
140	Expression platforms for producing eukaryotic proteins: a comparison of E. coli cell-based and wheat germ cell-free synthesis, affinity and solubility tags, and cloning strategies. *Journal of Structural and Functional Genomics*, **2015**, 16, 67-80		10
139	Active site and laminarin binding in glycoside hydrolase family 55. *Journal of Biological Chemistry*, **2015**, 290, 11819-32	5.4	24
138	Structure of T4moF, the Toluene 4-Monooxygenase Ferredoxin Oxidoreductase. *Biochemistry*, **2015** , 54, 5980-8	3.2	8
137	Iron Cofactors: Nonhaem **2015**, 1-8		
136	Development of a High Throughput Platform for Screening Glycoside Hydrolases Based on Oxime-NIMS. *Frontiers in Bioengineering and Biotechnology*, **2015**, 3, 153	5.8	14
135	Use of Nanostructure-Initiator Mass Spectrometry to Deduce Selectivity of Reaction in Glycoside Hydrolases. *Frontiers in Bioengineering and Biotechnology*, **2015**, 3, 165	5.8	4
134	Multifunctional cellulase catalysis targeted by fusion to different carbohydrate-binding modules. *Biotechnology for Biofuels*, **2015**, 8, 220	7.8	38
133	Rapid kinetic characterization of glycosyl hydrolases based on oxime derivatization and nanostructure-initiator mass spectrometry (NIMS). *ACS Chemical Biology*, **2014**, 9, 1470-9	4.9	30
132	Cell-free protein synthesis for functional and structural studies. *Methods in Molecular Biology*, **2014**, 1091, 161-78	1.4	16
131	Spectroscopic and computational investigation of iron(III) cysteine dioxygenase: implications for the nature of the putative superoxo-Fe(III) intermediate. *Biochemistry*, **2014**, 53, 5759-70	3.2	23
130	Cellulolytic Streptomyces strains associated with herbivorous insects share a phylogenetically linked capacity to degrade lignocellulose. *Applied and Environmental Microbiology*, **2014**, 80, 4692-701	4.8	49
129	Functional evolution of ribonuclease inhibitor: insights from birds and reptiles. *Journal of Molecular Biology*, **2014**, 426, 3041-56	6.5	25
128	Expression, purification and characterization of a functional carbohydrate-binding module from Streptomyces sp. SirexAA-E. *Protein Expression and Purification*, **2014**, 98, 1-9	2	18

127	Structure-guided analysis of catalytic specificity of the abundantly secreted chitosanase SACTE_5457 from Streptomyces sp. SirexAA-E. *Proteins: Structure, Function and Bioinformatics*, **2014**, 82, 1245-57	4.2	23
126	Structural basis for biomolecular recognition in overlapping binding sites in a diiron enzyme system. *Nature Communications*, **2014**, 5, 5009	17.4	24
125	Evolution of substrate specificity in bacterial AA10 lytic polysaccharide monooxygenases. *Biotechnology for Biofuels*, **2014**, 7, 109	7.8	59
124	The oligomeric states of the purified sigma-1 receptor are stabilized by ligands. *Journal of Biological Chemistry*, **2014**, 289, 20333-44	5.4	72
123	Biochemical properties and atomic resolution structure of a proteolytically processed β-mannanase from cellulolytic Streptomyces sp. SirexAA-E. *PLoS ONE*, **2014**, 9, e94166	3.7	12
122	Cell-free translation of biofuel enzymes. *Methods in Molecular Biology*, **2014**, 1118, 71-95	1.4	17
121	Coordinating the impact of structural genomics on the human α-helical transmembrane proteome. *Nature Structural and Molecular Biology*, **2013**, 20, 135-8	17.6	57
120	Improved expression and purification of sigma 1 receptor fused to maltose binding protein by alteration of linker sequence. *Protein Expression and Purification*, **2013**, 89, 203-9	2	11
119	Aerobic deconstruction of cellulosic biomass by an insect-associated Streptomyces. *Scientific Reports*, **2013**, 3, 1030	4.9	93
118	Spectroscopic and computational characterization of the NO adduct of substrate-bound Fe(II) cysteine dioxygenase: insights into the mechanism of O2 activation. *Biochemistry*, **2013**, 52, 6040-51	3.2	27
117	Mutations in FLS2 Ser-938 dissect signaling activation in FLS2-mediated Arabidopsis immunity. *PLoS Pathogens*, **2013**, 9, e1003313	7.6	44
116	Cell-free production of integral membrane aspartic acid proteases reveals zinc-dependent methyltransferase activity of the Pseudomonas aeruginosa prepilin peptidase PilD. *MicrobiologyOpen*, **2013**, 2, 94-104	3.4	18
115	Fusion of dioxygenase and lignin-binding domains in a novel secreted enzyme from cellulolytic Streptomyces sp. SirexAA-E. *Journal of Biological Chemistry*, **2013**, 288, 18574-87	5.4	23
114	Function of Shaker potassium channels produced by cell-free translation upon injection into Xenopus oocytes. *Scientific Reports*, **2013**, 3, 1040	4.9	18
113	Crystallographic analysis of active site contributions to regiospecificity in the diiron enzyme toluene 4-monooxygenase. *Biochemistry*, **2012**, 51, 1101-13	3.2	16
112	Robotic large-scale application of wheat cell-free translation to structural studies including membrane proteins. *New Biotechnology*, **2011**, 28, 239-49	6.4	20
111	Structure of cellobiose phosphorylase from Clostridium thermocellum in complex with phosphate. *Acta Crystallographica Section F: Structural Biology Communications*, **2011**, 67, 1345-9		20
110	Structural architecture of Galdieria sulphuraria DCN1L. *Proteins: Structure, Function and Bioinformatics*, **2011**, 79, 1329-36	4.2	3

109	Amino acid determinants of substrate selectivity in the Trypanosoma brucei sphingolipid synthase family. *Biochemistry*, **2011**, 50, 8853-61	3.2	4
108	Global gene expression patterns in Clostridium thermocellum as determined by microarray analysis of chemostat cultures on cellulose or cellobiose. *Applied and Environmental Microbiology*, **2011**, 77, 1243-53	4.8	66
107	Maltose-neopentyl glycol (MNG) amphiphiles for solubilization, stabilization and crystallization of membrane proteins. *Nature Methods*, **2010**, 7, 1003-8	21.6	316
106	Cell-free synthesis and functional characterization of sphingolipid synthases from parasitic trypanosomatid protozoa. *Journal of Biological Chemistry*, **2010**, 285, 20580-7	5.4	32
105	Spectroscopic and computational characterization of substrate-bound mouse cysteine dioxygenase: nature of the ferrous and ferric cysteine adducts and mechanistic implications. *Biochemistry*, **2010**, 49, 6033-41	3.2	60
104	Cell-free protein synthesis technology in NMR high-throughput structure determination. *Methods in Molecular Biology*, **2010**, 607, 127-47	1.4	29
103	The Center for Eukaryotic Structural Genomics. *Journal of Structural and Functional Genomics*, **2009**, 10, 165-79		25
102	Transformation of RDX and other energetic compounds by xenobiotic reductases XenA and XenB. *Applied Microbiology and Biotechnology*, **2009**, 84, 535-44	5.7	56
101	X-ray structure of ILL2, an auxin-conjugate amidohydrolase from Arabidopsis thaliana. *Proteins: Structure, Function and Bioinformatics*, **2009**, 74, 61-71	4.2	37
100	Discovery of sarcosine dimethylglycine methyltransferase from Galdieria sulphuraria. *Proteins: Structure, Function and Bioinformatics*, **2009**, 74, 368-77	4.2	10
99	X-ray structure of Danio rerio secretagogin: A hexa-EF-hand calcium sensor. *Proteins: Structure, Function and Bioinformatics*, **2009**, 76, 477-83	4.2	17
98	Role for threonine 201 in the catalytic cycle of the soluble diiron hydroxylase toluene 4-monooxygenase. *Biochemistry*, **2009**, 48, 3838-46	3.2	21
97	Crystallographic and catalytic studies of the peroxide-shunt reaction in a diiron hydroxylase. *Biochemistry*, **2009**, 48, 8932-9	3.2	39
96	Flexi vector cloning. *Methods in Molecular Biology*, **2009**, 498, 55-73	1.4	22
95	Autoinduction of protein expression. *Current Protocols in Protein Science*, **2009**, Chapter 5, Unit 5.23	3.1	45
94	Cell-free translation of integral membrane proteins into unilamelar liposomes. *Methods in Enzymology*, **2009**, 463, 647-73	1.7	39
93	Structural genomics: from genes to structures with valuable materials and many questions in between. *Nature Methods*, **2008**, 5, 129-32	21.6	39
92	Structure of human J-type co-chaperone HscB reveals a tetracysteine metal-binding domain. *Journal of Biological Chemistry*, **2008**, 283, 30184-92	5.4	33

91	Soluble expression and purification of the oxidoreductase component of toluene 4-monooxygenase. *Protein Expression and Purification*, **2008**, 57, 9-16	2	15
90	A Protein Structure Initiative approach to expression, purification, and in situ delivery of human cytochrome b5 to membrane vesicles. *Protein Expression and Purification*, **2008**, 58, 229-41	2	23
89	Wheat germ cell-free translation, purification, and assembly of a functional human stearoyl-CoA desaturase complex. *Protein Expression and Purification*, **2008**, 62, 171-8	2	71
88	Geometric and electronic structure studies of the binuclear nonheme ferrous active site of toluene-4-monooxygenase: parallels with methane monooxygenase and insight into the role of the effector proteins in O2 activation. *Journal of the American Chemical Society*, **2008**, 130, 7098-109	16.4	37
87	In vivo inactivation of the mycobacterial integral membrane stearoyl coenzyme A desaturase DesA3 by a C-terminus-specific degradation process. *Journal of Bacteriology*, **2008**, 190, 6686-96	3.5	6
86	Structural consequences of effector protein complex formation in a diiron hydroxylase. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 19194-8	11.5	80
85	X-ray structure of a soluble Rieske-type ferredoxin from Mus musculus. *Acta Crystallographica Section D: Biological Crystallography*, **2008**, 64, 933-40		4
84	Structural and functional characterization of a novel phosphatase from the Arabidopsis thaliana gene locus At1g05000. *Proteins: Structure, Function and Bioinformatics*, **2008**, 73, 241-53	4.2	13
83	Enhanced bacterial protein expression during auto-induction obtained by alteration of lac repressor dosage and medium composition. *Biotechnology Progress*, **2007**, 23, 585-98	2.8	124
82	Characterization of the nitrosyl adduct of substrate-bound mouse cysteine dioxygenase by electron paramagnetic resonance: electronic structure of the active site and mechanistic implications. *Biochemistry*, **2007**, 46, 8569-78	3.2	91
81	Structures of proteins of biomedical interest from the Center for Eukaryotic Structural Genomics. *Journal of Structural and Functional Genomics*, **2007**, 8, 73-84		9
80	Small-scale, semi-automated purification of eukaryotic proteins for structure determination. *Journal of Structural and Functional Genomics*, **2007**, 8, 153-66		27
79	A combined approach to improving large-scale production of tobacco etch virus protease. *Protein Expression and Purification*, **2007**, 55, 53-68	2	216
78	Structure and mechanism of mouse cysteine dioxygenase. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 3084-9	11.5	157
77	Component interactions and implications for complex formation in the multicomponent toluene 4-monooxygenase. *Biochemistry*, **2006**, 45, 5478-85	3.2	11
76	Identification of Rv3230c as the NADPH oxidoreductase of a two-protein DesA3 acyl-CoA desaturase in Mycobacterium tuberculosis H37Rv. *Biochemistry*, **2006**, 45, 13476-86	3.2	19
75	Identification of the binding region of the [2Fe-2S] ferredoxin in stearoyl-acyl carrier protein desaturase: insight into the catalytic complex and mechanism of action. *Biochemistry*, **2006**, 45, 4848-58	3.2	30
74	Solution structures of spinach acyl carrier protein with decanoate and stearate. *Biochemistry*, **2006**, 45, 5217-27	3.2	75

73	Preparation of isotopically labeled spinach acyl-acyl carrier protein for NMR structural studies. *Protein Expression and Purification*, **2006**, 46, 446-55	2	9
72	High efficiency single step production of expression plasmids from cDNA clones using the Flexi Vector cloning system. *Protein Expression and Purification*, **2006**, 47, 562-70	2	51
71	X-ray structure of putative acyl-ACP desaturase DesA2 from Mycobacterium tuberculosis H37Rv. *Protein Science*, **2005**, 14, 1508-17	6.3	30
70	Crystal structures and functional studies of T4moD, the toluene 4-monooxygenase catalytic effector protein. *Biochemistry*, **2005**, 44, 7131-42	3.2	19
69	Oxygen-18 tracer studies of enzyme reactions with radical/cation diagnostic probes. *Biochemical and Biophysical Research Communications*, **2005**, 338, 240-9	3.4	5
68	Expression, purification, and physical characterization of Escherichia coli lipoyl(octanoyl)transferase. *Protein Expression and Purification*, **2005**, 39, 269-82	2	26
67	Protocols for production of selenomethionine-labeled proteins in 2-L polyethylene terephthalate bottles using auto-induction medium. *Protein Expression and Purification*, **2005**, 40, 256-67	2	99
66	Auto-induction medium for the production of [U-15N]- and [U-13C, U-15N]-labeled proteins for NMR screening and structure determination. *Protein Expression and Purification*, **2005**, 40, 268-78	2	81
65	Fluorescence anisotropy assay for proteolysis of specifically labeled fusion proteins. *Analytical Biochemistry*, **2005**, 336, 75-86	3.1	20
64	Reaction mechanisms of non-heme diiron hydroxylases characterized in whole cells. *Journal of Inorganic Biochemistry*, **2005**, 99, 1998-2006	4.2	42
63	High-throughput purification and quality assurance of Arabidopsis thaliana proteins for eukaryotic structural genomics. *Journal of Structural and Functional Genomics*, **2005**, 6, 143-7		65
62	The structure at 2.4 A resolution of the protein from gene locus At3g21360, a putative Fe(II)/2-oxoglutarate-dependent enzyme from Arabidopsis thaliana. *Acta Crystallographica Section F: Structural Biology Communications*, **2005**, 61, 469-72		4
61	Comparison of cell-based and cell-free protocols for producing target proteins from the Arabidopsis thaliana genome for structural studies. *Proteins: Structure, Function and Bioinformatics*, **2005**, 59, 633-43	4.2	52
60	Identification of transcribed sequences in Arabidopsis thaliana by using high-resolution genome tiling arrays. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 4453-8	11.5	136
59	Production in two-liter beverage bottles of proteins for NMR structure determination labeled with either 15N- or 13C-15N. *Journal of Structural and Functional Genomics*, **2004**, 5, 87-93		22
58	Solution structure of T4moC, the Rieske ferredoxin component of the toluene 4-monooxygenase complex. *Journal of Biological Inorganic Chemistry*, **2004**, 9, 945-53	3.7	11
57	Results from high-throughput DNA cloning of Arabidopsis thaliana target genes using site-specific recombination. *Journal of Structural and Functional Genomics*, **2004**, 5, 267-76		73
56	Crystal structure of the protein from gene At3g17210 of Arabidopsis thaliana. *Proteins: Structure, Function and Bioinformatics*, **2004**, 57, 218-20	4.2	5

55	Crystal structure of At2g03760, a putative steroid sulfotransferase from Arabidopsis thaliana. *Proteins: Structure, Function and Bioinformatics*, **2004**, 57, 854-7	4.2	14
54	Crystallization and preliminary analysis of xenobiotic reductase A and ligand complexes from Pseudomonas putida II-B. *Acta Crystallographica Section D: Biological Crystallography*, **2004**, 60, 957-61		7
53	Crystallization and preliminary analysis of xenobiotic reductase B from Pseudomonas fluorescens I-C. *Acta Crystallographica Section D: Biological Crystallography*, **2004**, 60, 1289-91		10
52	Remarkable aliphatic hydroxylation by the diiron enzyme toluene 4-monooxygenase in reactions with radical or cation diagnostic probes norcarane, 1,1-dimethylcyclopropane, and 1,1-diethylcyclopropane. *Biochemistry*, **2004**, 43, 15688-701	3.2	32
51	Reactions of the diiron enzyme stearoyl-acyl carrier protein desaturase. *Accounts of Chemical Research*, **2004**, 37, 421-9	24.3	152
50	Crystallization and preliminary analysis of native and N-terminal truncated isoforms of toluene-4-monooxygenase catalytic effector protein. *Acta Crystallographica Section D: Biological Crystallography*, **2003**, 59, 572-5		1
49	Rapid-mix and chemical quench studies of ferredoxin-reduced stearoyl-acyl carrier protein desaturase. *Biochemistry*, **2003**, 42, 5857-66	3.2	18
48	Insight into the mechanism of aromatic hydroxylation by toluene 4-monooxygenase by use of specifically deuterated toluene and p-xylene. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 3784-9	11.5	92
47	Chain cleavage and sulfoxidation of thiastearoyl-ACP upon reaction with stearoyl-ACP desaturase. *Biochemistry*, **2003**, 42, 7828-35	3.2	14
46	Effects of sterculic acid on stearoyl-CoA desaturase in differentiating 3T3-L1 adipocytes. *Biochemical and Biophysical Research Communications*, **2003**, 300, 316-26	3.4	65
45	N-isotope effects on the Raman spectra of Fe(2)S(2) ferredoxin and Rieske ferredoxin: evidence for structural rigidity of metal sites. *Journal of Biological Inorganic Chemistry*, **2003**, 8, 318-26	3.7	35
44	Role of Nucleic Acid and Protein Manipulation Technologies in High-throughput Structural Biology Efforts **2003**,		2
43	Fluorescence anisotropy studies of enzyme-substrate complex formation in stearoyl-ACP desaturase. *Biochemistry*, **2002**, 41, 14472-81	3.2	20
42	Molecular differences caused by differentiation of 3T3-L1 preadipocytes in the presence of either dehydroepiandrosterone (DHEA) or 7-oxo-DHEA. *Biochemistry*, **2002**, 41, 5473-82	3.2	32
41	Desaturation, chain scission, and register-shift of oxygen-substituted fatty acids during reaction with stearoyl-ACP desaturase. *Biochemistry*, **2002**, 41, 10141-8	3.2	22
40	Combined participation of hydroxylase active site residues and effector protein binding in a para to ortho modulation of toluene 4-monooxygenase regiospecificity. *Biochemistry*, **2002**, 41, 3176-88	3.2	81
39	Assignment of 1H, 13C and 15N NMR signals from toluene 4-monooxygenase Rieske ferredoxin in its oxidized state. *Journal of Biomolecular NMR*, **2001**, 21, 73-4	3	
38	Aromatic hydroxylation catalyzed by toluene 4-monooxygenase in organic solvent/aqueous buffer mixtures. *Applied Biochemistry and Biotechnology*, **2001**, 90, 187-97	3.2	13

37	Mössbauer and EPR studies of the photoactivation of nitrile hydratase. *Biochemistry*, **2001**, 40, 7984-91	3.2	54
36	Solution structure of the toluene 4-monooxygenase effector protein (T4moD). *Biochemistry*, **2001**, 40, 3512-24	3.2	26
35	Desaturation of trans-octadecenoyl-acyl carrier protein by stearoyl-acyl carrier protein delta9 desaturase. *Journal of Inorganic Biochemistry*, **2000**, 78, 7-14	4.2	13
34	Assignment of 1H, 13C and 15N NMR signals in the toluene 4-monooxygenase effector protein. *Journal of Biomolecular NMR*, **2000**, 16, 359-60	3	1
33	Toluene monooxygenase-catalyzed epoxidation of alkenes. *Applied and Environmental Microbiology* , **2000**, 66, 1877-82	4.8	57
32	Transformation of 2,4,6-trinitrotoluene by purified xenobiotic reductase B from Pseudomonas fluorescens I-C. *Applied and Environmental Microbiology*, **2000**, 66, 4742-50	4.8	128
31	Optimized expression and purification of toluene 4-monooxygenase hydroxylase. *Protein Expression and Purification*, **2000**, 20, 58-65	2	27
30	Chemical and posttranslational modification of Escherichia coli acyl carrier protein for preparation of dansyl-acyl carrier proteins. *Protein Expression and Purification*, **2000**, 20, 274-84	2	15
29	Threonine 201 in the diiron enzyme toluene 4-monooxygenase is not required for catalysis. *Biochemistry*, **2000**, 39, 791-9	3.2	50
28	Resonance Raman studies of the stoichiometric catalytic turnover of a substrate-stearoyl-acyl carrier protein delta(9) desaturase complex. *Biochemistry*, **2000**, 39, 10507-13	3.2	14
27	Differential regulation of the stearoyl-CoA desaturase genes by thiazolidinediones in 3T3-L1 adipocytes. *Journal of Lipid Research*, **2000**, 41, 1310-1316	6.3	59
26	Role of hydrophobic partitioning in substrate selectivity and turnover of the ricinus communis stearoyl acyl carrier protein delta(9) desaturase. *Biochemistry*, **1999**, 38, 12833-40	3.2	28
25	Mössbauer studies of the formation and reactivity of a quasi-stable peroxo intermediate of stearoyl-acyl carrier protein Delta 9-desaturase. *Biochemistry*, **1999**, 38, 12197-204	3.2	97
24	Circular Dichroism and Magnetic Circular Dichroism Studies of the Reduced Binuclear Non-Heme Iron Site of Stearoyl-ACP Δ9-Desaturase: Substrate Binding and Comparison to Ribonucleotide Reductase. *Journal of the American Chemical Society*, **1999**, 121, 2770-2783	16.4	62
23	Spinach holo-acyl carrier protein: overproduction and phosphopantetheinylation in Escherichia coli BL21(DE3), in vitro acylation, and enzymatic desaturation of histidine-tagged isoform I. *Protein Expression and Purification*, **1999**, 15, 314-26	2	25
22	Application of fed-batch fermentation to the preparation of isotopically labeled or selenomethionyl-labeled proteins. *Protein Expression and Purification*, **1999**, 16, 109-19	2	40
21	Cloning and sequence analysis of two Pseudomonas flavoprotein xenobiotic reductases. *Journal of Bacteriology*, **1999**, 181, 6254-63	3.5	131
20	Designing ligands to achieve robust oxidation catalysts. Iron based systems. *Coordination Chemistry Reviews*, **1998**, 174, 361-390	23.2	59

19	The fundamental, versatile role of diiron enzymes in lipid metabolism. *Lipid - Fett*, **1998**, 100, 103-113		29
18	EXAFS and Mössbauer characterization of the Diiron(III) site in stearoyl-acyl carrier protein Δ9 desaturase. *Journal of Biological Inorganic Chemistry*, **1998**, 3, 392-400	3.7	21
17	Peroxodiferric intermediate of stearoyl-acyl carrier protein delta 9 desaturase: oxidase reactivity during single turnover and implications for the mechanism of desaturation. *Biochemistry*, **1998**, 37, 14664-71	3.2	205
16	Changes in the regiospecificity of aromatic hydroxylation produced by active site engineering in the diiron enzyme toluene 4-monooxygenase. *Biochemistry*, **1997**, 36, 9283-9	3.2	92
15	Recombinant toluene-4-monooxygenase: catalytic and Mössbauer studies of the purified diiron and rieske components of a four-protein complex. *Biochemistry*, **1996**, 35, 9106-19	3.2	165
14	Resonance Raman evidence for an Fe-O-Fe center in stearoyl-ACP desaturase. Primary sequence identity with other diiron-oxo proteins. *Biochemistry*, **1994**, 33, 12776-86	3.2	186
13	Oxidation-reduction potentials of the methane monooxygenase hydroxylase component from Methylosinus trichosporium OB3b. *Biochemistry*, **1994**, 33, 713-22	3.2	110
12	Eight histidine residues are catalytically essential in a membrane-associated iron enzyme, stearoyl-CoA desaturase, and are conserved in alkane hydroxylase and xylene monooxygenase. *Biochemistry*, **1994**, 33, 12787-94	3.2	649
11	Spectroscopic studies of the coupled binuclear non-heme iron active site in the fully reduced hydroxylase component of methane monooxygenase: comparison to deoxy and deoxy-azide hemerythrin. *Journal of the American Chemical Society*, **1993**, 115, 12409-12422	16.4	90
10	Moessbauer, EPR, and ENDOR studies of the hydroxylase and reductase components of methane monooxygenase from Methylosinus trichosporium OB3b. *Journal of the American Chemical Society*, **1993**, 115, 3688-3701	16.4	167
9	A transient intermediate of the methane monooxygenase catalytic cycle containing an FeIVFeIV cluster. *Journal of the American Chemical Society*, **1993**, 115, 6450-6451	16.4	307
8	High-valent transition metal chemistry. Moessbauer and EPR studies of high-spin (S = 2) iron(IV) and intermediate-spin (S = 3/2) iron(III) complexes with a macrocyclic tetraamido-N ligand. *Journal of the American Chemical Society*, **1993**, 115, 6746-6757	16.4	159
7	High valent transition metal chemistry. Synthesis and characterization of an intermediate-spin iron(IV) complex of a strong .pi.-acid ligand. *Journal of the American Chemical Society*, **1992**, 114, 8724-8725	16.4	45
6	Haloalkene oxidation by the soluble methane monooxygenase from Methylosinus trichosporium OB3b: mechanistic and environmental implications. *Biochemistry*, **1990**, 29, 6419-27	3.2	345
5	Integer-spin EPR studies of the fully reduced methane monooxygenase hydroxylase component. *Journal of the American Chemical Society*, **1990**, 112, 5861-5865	16.4	132
4	Methane monooxygenase from Methylosinus trichosporium OB3b. *Methods in Enzymology*, **1990**, 188, 191-202	1.7	71
3	Methane Monooxygenase: A Novel Biological Catalyst for Hydrocarbon Oxidations **1990**, 367-388		15
2	Purification of a high specific activity methane monooxygenase hydroxylase component from a type II methanotroph. *Biochemical and Biophysical Research Communications*, **1988**, 154, 165-70	3.4	41

List of Publications

1 Structural Proteomics99-128