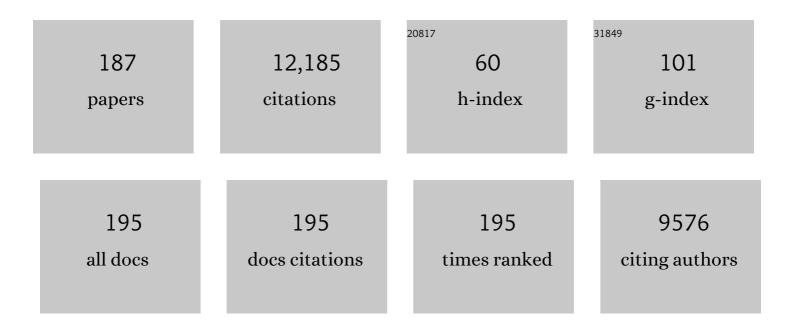
## Lindsay D Eltis

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5637907/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	The complete genome of <i>Rhodococcus</i> sp. RHA1 provides insights into a catabolic powerhouse. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15582-15587.	7.1	586
2	A gene cluster encoding cholesterol catabolism in a soil actinomycete provides insight into <i>Mycobacterium tuberculosis</i> survival in macrophages. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1947-1952.	7.1	480
3	Analysis of Pseudomonas gene products using laclq/Ptrp-lac plasmids and transposons that confer conditional phenotypes. Gene, 1993, 123, 17-24.	2.2	429
4	Crystal Structure of the Biphenyl-Cleaving Extradiol Dioxygenase from a PCB-Degrading Pseudomonad. Science, 1995, 270, 976-980.	12.6	348
5	The Ins and Outs of Ring-Cleaving Dioxygenases. Critical Reviews in Biochemistry and Molecular Biology, 2006, 41, 241-267.	5.2	344
6	ldentification of DypB from <i>Rhodococcus jostii</i> RHA1 as a Lignin Peroxidase. Biochemistry, 2011, 50, 5096-5107.	2.5	342
7	Evolutionary relationships among extradiol dioxygenases. Journal of Bacteriology, 1996, 178, 5930-5937.	2.2	290
8	Bacterial contributions to delignification and lignocellulose degradation in forest soils with metagenomic and quantitative stable isotope probing. ISME Journal, 2019, 13, 413-429.	9.8	246
9	Novel Inhibitors of Cholesterol Degradation in Mycobacterium tuberculosis Reveal How the Bacterium's Metabolism Is Constrained by the Intracellular Environment. PLoS Pathogens, 2015, 11, e1004679.	4.7	245
10	Breaking Down Lignin to High-Value Chemicals: The Conversion of Lignocellulose to Vanillin in a Gene Deletion Mutant of <i>Rhodococcus jostii</i> RHA1. ACS Chemical Biology, 2013, 8, 2151-2156.	3.4	228
11	Genetic analysis of a Pseudomonas locus encoding a pathway for biphenyl/polychlorinated biphenyl degradation. Gene, 1993, 130, 47-55.	2.2	195
12	Studies of a Ring-Cleaving Dioxygenase Illuminate the Role of Cholesterol Metabolism in the Pathogenesis of Mycobacterium tuberculosis. PLoS Pathogens, 2009, 5, e1000344.	4.7	193
13	High-Throughput Screening Identifies Inhibitors of the SARS Coronavirus Main Proteinase. Chemistry and Biology, 2004, 11, 1445-1453.	6.0	182
14	The Actinobacterial mce4 Locus Encodes a Steroid Transporter. Journal of Biological Chemistry, 2008, 283, 35368-35374.	3.4	173
15	Effects of charged amino acid mutations on the bimolecular kinetics of reduction of yeast iso-1-ferricytochrome c by bovine ferrocytochrome b5. Biochemistry, 1993, 32, 6613-6623.	2.5	162
16	Crystal Structures of the Main Peptidase from the SARS Coronavirus Inhibited by a Substrate-like Aza-peptide Epoxide. Journal of Molecular Biology, 2005, 353, 1137-1151.	4.2	153
17	Mycobacterial Cytochrome P450 125 (Cyp125) Catalyzes the Terminal Hydroxylation of C27 Steroids. Journal of Biological Chemistry, 2009, 284, 35534-35542.	3.4	153
18	Characterization of Dye-Decolorizing Peroxidases from <i>Rhodococcus jostii</i> RHA1. Biochemistry, 2011. 50. 5108-5119.	2.5	144

#	Article	IF	CITATIONS
19	Characterization of 3-Ketosteroid 9α-Hydroxylase, a Rieske Oxygenase in the Cholesterol Degradation Pathway of Mycobacterium tuberculosis. Journal of Biological Chemistry, 2009, 284, 9937-9946.	3.4	142
20	Catabolism of Benzoate and Phthalate in Rhodococcus sp. Strain RHA1: Redundancies and Convergence. Journal of Bacteriology, 2005, 187, 4050-4063.	2.2	140
21	The biological occurrence and trafficking of cobalt. Metallomics, 2011, 3, 963.	2.4	136
22	Reduction Potentials of Rieske Clusters:Â Importance of the Coupling between Oxidation State and Histidine Protonation Stateâ€. Biochemistry, 2003, 42, 12400-12408.	2.5	135
23	Definitive Evidence for Monoanionic Binding of 2,3-Dihydroxybiphenyl to 2,3-Dihydroxybiphenyl 1,2-Dioxygenase from UV Resonance Raman Spectroscopy, UV/Vis Absorption Spectroscopy, and Crystallography. Journal of the American Chemical Society, 2002, 124, 2485-2496.	13.7	124
24	Cytochrome P450 125 (CYP125) catalyses C26â€hydroxylation to initiate sterol side hain degradation in <i>Rhodococcus jostii</i> RHA1. Molecular Microbiology, 2009, 74, 1031-1043.	2.5	114
25	A Cluster Exposed. Structure, 2000, 8, 1267-1278.	3.3	113
26	In vitro evolution of horse heart myoglobin to increase peroxidase activity. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 12825-12831.	7.1	112
27	The Mechanism-based Inactivation of 2,3-Dihydroxybiphenyl 1,2-Dioxygenase by Catecholic Substrates. Journal of Biological Chemistry, 2002, 277, 2019-2027.	3.4	105
28	Phenylacetate Catabolism in Rhodococcus sp. Strain RHA1: a Central Pathway for Degradation of Aromatic Compounds. Journal of Bacteriology, 2005, 187, 4497-4504.	2.2	102
29	The three-dimensional structure in solution of the paramagnetic high-potential iron-sulfur protein I from Ectothiorhodospira halophila through nuclear magnetic resonance. FEBS Journal, 1994, 225, 715-725.	0.2	99
30	Genetic and Genomic Insights into the Role of Benzoate-Catabolic Pathway Redundancy in <i>Burkholderia xenovorans</i> LB400. Applied and Environmental Microbiology, 2006, 72, 585-595.	3.1	99
31	Identification and analysis of a bottleneck in PCB biodegradation. Nature Structural Biology, 2002, 9, 934-939.	9.7	98
32	Synthesis and Evaluation of Keto-Glutamine Analogues as Potent Inhibitors of Severe Acute Respiratory Syndrome 3CLproâ€. Journal of Medicinal Chemistry, 2004, 47, 6113-6116.	6.4	98
33	An Inducible Propane Monooxygenase Is Responsible for <i>N</i> -Nitrosodimethylamine Degradation by <i>Rhodococcus</i> sp. Strain RHA1. Applied and Environmental Microbiology, 2007, 73, 6930-6938.	3.1	98
34	A Flavin-dependent Monooxygenase from Mycobacterium tuberculosis Involved in Cholesterol Catabolism. Journal of Biological Chemistry, 2010, 285, 22264-22275.	3.4	98
35	Vanillin Catabolism in Rhodococcus jostii RHA1. Applied and Environmental Microbiology, 2012, 78, 586-588.	3.1	95
36	Growth Substrate- and Phase-Specific Expression of Biphenyl, Benzoate, and C <sub>1</sub> Metabolic Pathways in <i>Burkholderia xenovorans</i> LB400. Journal of Bacteriology, 2005, 187, 7996-8005.	2.2	94

#	Article	IF	CITATIONS
37	All in the family: Structural and evolutionary relationships among three modular proteins with diverse functions and variable assembly. Protein Science, 1998, 7, 1661-1670.	7.6	93
38	Molecular Basis for the Stabilization and Inhibition of 2,3-Dihydroxybiphenyl 1,2-Dioxygenase by t-Butanol. Journal of Biological Chemistry, 1998, 273, 34887-34895.	3.4	92
39	Identification of a Serine Hydrolase as a Key Determinant in the Microbial Degradation of Polychlorinated Biphenyls. Journal of Biological Chemistry, 2000, 275, 15701-15708.	3.4	91
40	Distal Heme Pocket Residues of B-type Dye-decolorizing Peroxidase. Journal of Biological Chemistry, 2012, 287, 10623-10630.	3.4	90
41	Characterization of a Carbon-Carbon Hydrolase from Mycobacterium tuberculosis Involved in Cholesterol Metabolism. Journal of Biological Chemistry, 2010, 285, 434-443.	3.4	89
42	Improved Manganese-Oxidizing Activity of DypB, a Peroxidase from a Lignolytic Bacterium. ACS Chemical Biology, 2013, 8, 700-706.	3.4	89
43	Role of the Heme Propionates in the Interaction of Heme with Apomyoglobin and Apocytochromeb5â€. Biochemistry, 1997, 36, 1010-1017.	2.5	86
44	Activity of 3-Ketosteroid 9α-Hydroxylase (KshAB) Indicates Cholesterol Side Chain and Ring Degradation Occur Simultaneously in Mycobacterium tuberculosis. Journal of Biological Chemistry, 2011, 286, 40717-40724.	3.4	85
45	Transcriptomic Assessment of Isozymes in the Biphenyl Pathway of <i>Rhodococcus</i> sp. Strain RHA1. Applied and Environmental Microbiology, 2006, 72, 6183-6193.	3.1	83
46	The multihued palette of dye-decolorizing peroxidases. Archives of Biochemistry and Biophysics, 2015, 574, 56-65.	3.0	81
47	Catabolism of the Last Two Steroid Rings in <i>Mycobacterium tuberculosis</i> and Other Bacteria. MBio, 2017, 8, .	4.1	77
48	Transcriptomic Analysis Reveals a Bifurcated Terephthalate Degradation Pathway in Rhodococcus sp. Strain RHA1. Journal of Bacteriology, 2007, 189, 1641-1647.	2.2	76
49	Roles of Ring-Hydroxylating Dioxygenases in Styrene and Benzene Catabolism in <i>Rhodococcus jostii</i> RHA1. Journal of Bacteriology, 2008, 190, 37-47.	2.2	75
50	Reduction of horse heart ferricytochrome c by bovine liver ferrocytochrome b5. Experimental and theoretical analysis. Biochemistry, 1991, 30, 3663-3674.	2.5	73
51	Design, Synthesis, and Evaluation of Inhibitors for Severe Acute Respiratory Syndrome 3C-Like Protease Based on Phthalhydrazide Ketones or Heteroaromatic Esters. Journal of Medicinal Chemistry, 2007, 50, 1850-1864.	6.4	73
52	<scp>FadD</scp> 3 is an acylâ€ <scp>CoA</scp> synthetase that initiates catabolism of cholesterol rings <scp>C</scp> and <scp>D</scp> in actinobacteria. Molecular Microbiology, 2013, 87, 269-283.	2.5	73
53	Gene Cluster Encoding Cholate Catabolism in Rhodococcus spp. Journal of Bacteriology, 2012, 194, 6712-6719.	2.2	72
54	Metagenomic scaffolds enable combinatorial lignin transformation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10143-10148.	7.1	72

#	Article	IF	CITATIONS
55	A Serine → Cysteine Ligand Mutation in the High Potential Ironâ^'Sulfur Protein fromChromatium vinosumProvides Insight into the Electronic Structure of the [4Feâ^'4S] Cluster. Journal of the American Chemical Society, 1996, 118, 75-80.	13.7	69
56	The Solution Structure Refinement of the Paramagnetic Reduced High-Potential Iron-Sulfur Protein I from Ectothiorhodospira Halophila by Using Stable Isotope Labeling and Nuclear Relaxation. FEBS Journal, 1996, 241, 440-452.	0.2	69
57	Crystal structure of cisâ€biphenylâ€2,3â€dihydrodiolâ€2,3â€dehydrogenase from a PCB degrader at 2.0 Ã resolution. Protein Science, 1998, 7, 1286-1293.	7.6	69
58	Characterization of key triacylglycerol biosynthesis processes in rhodococci. Scientific Reports, 2016, 6, 24985.	3.3	66
59	Functional Characterization of a Catabolic Plasmid from Polychlorinated- Biphenyl-Degrading Rhodococcus sp. Strain RHA1. Journal of Bacteriology, 2004, 186, 7783-7795.	2.2	65
60	Purification and Preliminary Characterization of a Serine Hydrolase Involved in the Microbial Degradation of Polychlorinated Biphenyls. Journal of Biological Chemistry, 1998, 273, 22943-22949.	3.4	64
61	Steady-state Kinetic Characterization and Crystallization of a Polychlorinated Biphenyl-transforming Dioxygenase. Journal of Biological Chemistry, 2000, 275, 12430-12437.	3.4	62
62	Purification and characterization of a novel nitrile hydratase from <i>Rhodococcus</i> sp. RHA1. Molecular Microbiology, 2007, 65, 828-838.	2.5	60
63	Insights into Sequence–Activity Relationships amongst Baeyer–Villiger Monooxygenases as Revealed by the Intragenomic Complement of Enzymes from <i>Rhodococcus jostii</i> RHA1. ChemBioChem, 2009, 10, 1208-1217, Adventures in <i>Rhodococcus</i> — from steroids to explosivesThis article is based on a presentation by Dr. Lindeay Elsis at the 60th Appual Meeting of the Canadian Society of Microbiologists in	2.6	60
64	by Dr. Lindsay Eltis at the 60th Annual Meeting of the Canadian Society of Microbiologists in Hamilton, Ontario, 14Â June 2010. Dr. Eltis was the recipient of the 2010 Norgen Biotek Corporation / CSM Award, an annual award sponsored by Norgen Biotek and the Canadian Society of Microbiologists intended to recognize outstanding scientific work in microbiology by a Canadian	1.7	59
65	researcher. Canadian Journal of Microbiology, 2011, 57, 155-168 Spectroscopic and Electronic Structure Studies of 2,3-Dihydroxybiphenyl 1,2-Dioxygenase:Â O2Reactivity of the Non-Heme Ferrous Site in Extradiol Dioxygenases. Journal of the American Chemical Society, 2003, 125, 11214-11227.	13.7	58
66	Structure–function analyses reveal key features in Staphylococcus aureus IsdB-associated unfolding of the heme-binding pocket of human hemoglobin. Journal of Biological Chemistry, 2018, 293, 177-190.	3.4	55
67	Characterization of Biphenyl Dioxygenase of Pandoraea pnomenusa B-356 As a Potent Polychlorinated Biphenyl-Degrading Enzyme. Journal of Bacteriology, 2007, 189, 5705-5715.	2.2	53
68	Analysis of the bimolecular reduction of ferricytochrome c by ferrocytochrome b5 through mutagenesis and molecular modelling. Biochimie, 1994, 76, 592-604.	2.6	51
69	Comparative Specificities of Two Evolutionarily Divergent Hydrolases Involved in Microbial Degradation of Polychlorinated Biphenyls. Journal of Bacteriology, 2001, 183, 1511-1516.	2.2	51
70	Characterization of <i>p</i> -Hydroxycinnamate Catabolism in a Soil Actinobacterium. Journal of Bacteriology, 2014, 196, 4293-4303.	2.2	51
71	Critical enzyme reactions in aromatic catabolism for microbial lignin conversion. Nature Catalysis, 2022, 5, 86-98.	34.4	51
72	A Mechanistic View of Enzyme Inhibition and Peptide Hydrolysis in the Active Site of the SARS-CoV 3C-like Peptidase. Journal of Molecular Biology, 2007, 371, 1060-1074.	4.2	50

#	Article	IF	CITATIONS
73	Regulation of the <scp>KstR</scp> 2 regulon of <i><scp>M</scp>ycobacterium tuberculosis</i> by a cholesterol catabolite. Molecular Microbiology, 2013, 89, 1201-1212.	2.5	50
74	Crystal Structures Reveal an Induced-fit Binding of a Substrate-like Aza-peptide Epoxide to SARS Coronavirus Main Peptidase. Journal of Molecular Biology, 2007, 366, 916-932.	4.2	49
75	WhiB7, an Fe-S-dependent Transcription Factor That Activates Species-specific Repertoires of Drug Resistance Determinants in Actinobacteria. Journal of Biological Chemistry, 2013, 288, 34514-34528.	3.4	49
76	Laccase-Catalyzed Oxidation of Lignin Induces Production of H <sub>2</sub> O <sub>2</sub> . ACS Sustainable Chemistry and Engineering, 2020, 8, 831-841.	6.7	48
77	Metabolism of syringyl lignin-derived compounds in Pseudomonas putida enables convergent production of 2-pyrone-4,6-dicarboxylic acid. Metabolic Engineering, 2021, 65, 111-122.	7.0	48
78	Purification and characterization of cytochrome P450RR1 from Rhodococcus rhodochrous. FEBS Journal, 1993, 213, 211-216.	0.2	45
79	Structural Insight into the Expanded PCB-Degrading Abilities of a Biphenyl Dioxygenase Obtained by Directed Evolution. Journal of Molecular Biology, 2011, 405, 531-547.	4.2	45
80	Biphenyl and ethylbenzene dioxygenases of <i>Rhodococcus jostii</i> RHA1 transform PBDEs. Biotechnology and Bioengineering, 2011, 108, 313-321.	3.3	45
81	Determining Rieske cluster reduction potentials. Journal of Biological Inorganic Chemistry, 2008, 13, 1301-1313.	2.6	44
82	The activity of CouR, a MarR family transcriptional regulator, is modulated through a novel molecular mechanism. Nucleic Acids Research, 2016, 44, 595-607.	14.5	44
83	Ligand K-Edge X-ray Absorption Spectroscopy of [Fe4S4]1+,2+,3+ Clusters:  Changes in Bonding and Electronic Relaxation upon Redox. Journal of the American Chemical Society, 2004, 126, 8320-8328.	13.7	43
84	Characterization of the putative operon containing arylamine N-acetyltransferase (nat) in Mycobacterium bovis BCG. Molecular Microbiology, 2006, 59, 181-192.	2.5	43
85	Proteomic Analysis of Survival of Rhodococcus jostii RHA1 during Carbon Starvation. Applied and Environmental Microbiology, 2012, 78, 6714-6725.	3.1	43
86	Two Transporters Essential for Reassimilation of Novel Cholate Metabolites by Rhodococcus jostii RHA1. Journal of Bacteriology, 2012, 194, 6720-6727.	2.2	43
87	Functional Characterization of pGKT2, a 182-Kilobase Plasmid Containing the <i>xplAB</i> Genes, Which Are Involved in the Degradation of Hexahydro-1,3,5-Trinitro-1,3,5-Triazine by <i>Gordonia</i> sp. Strain KTR9. Applied and Environmental Microbiology, 2010, 76, 6329-6337.	3.1	42
88	Kinetic and Structural Insight into the Mechanism of BphD, a Câ^'C Bond Hydrolase from the Biphenyl Degradation Pathway. Biochemistry, 2006, 45, 11071-11086.	2.5	41
89	Actinobacterial Acyl Coenzyme A Synthetases Involved in Steroid Side-Chain Catabolism. Journal of Bacteriology, 2014, 196, 579-587.	2.2	41
90	Sequence-Specific Assignment of Ligand Cysteine Protons of Oxidized, Recombinant HiPIP I from Ectothiorhodospira halophila. Inorganic Chemistry, 1995, 34, 2516-2523.	4.0	40

#	Article	IF	CITATIONS
91	Characterization of Extradiol Dioxygenases from a Polychlorinated Biphenyl-Degrading Strain That Possess Higher Specificities for Chlorinated Metabolites. Journal of Bacteriology, 2003, 185, 1253-1260.	2.2	40
92	The role of a conserved tyrosine residue in highâ€potential iron sulfur proteins. Protein Science, 1995, 4, 2562-2572.	7.6	39
93	Spectroscopic Studies of the Anaerobic Enzymeâ^'Substrate Complex of Catechol 1,2-Dioxygenase. Journal of the American Chemical Society, 2005, 127, 16882-16891.	13.7	39
94	Three-Dimensional Structure of the Reduced C77S Mutant of theChromatium vinosumHigh-Potential Ironâ^'Sulfur Protein through Nuclear Magnetic Resonance:Â Comparison with the Solution Structure of the Wild-Type Proteinâ€,‡. Biochemistry, 1996, 35, 5928-5936.	2.5	38
95	A pyridoxal phosphate–dependent enzyme that oxidizes an unactivated carbon-carbon bond. Nature Chemical Biology, 2016, 12, 194-199.	8.0	37
96	Enhanced delignification of steam-pretreated poplar by a bacterial laccase. Scientific Reports, 2017, 7, 42121.	3.3	37
97	Hyperexpression of a synthetic gene encoding a high potential iron sulfur protein. Protein Engineering, Design and Selection, 1994, 7, 1145-1150.	2.1	36
98	Characterization of a C—C Bond Hydrolase from Sphingomonas wittichii RW1 with Novel Specificities towards Polychlorinated Biphenyl Metabolites. Journal of Bacteriology, 2007, 189, 4038-4045.	2.2	36
99	An Episulfide Cation (Thiiranium Ring) Trapped in the Active Site of HAV 3C Proteinase Inactivated by Peptide-based Ketone Inhibitors. Journal of Molecular Biology, 2006, 361, 673-686.	4.2	35
100	Aryl methylene ketones and fluorinated methylene ketones as reversible inhibitors for severe acute respiratory syndrome (SARS) 3C-like proteinase. Bioorganic Chemistry, 2008, 36, 229-240.	4.1	35
101	Characterization of alkylguaiacol-degrading cytochromes P450 for the biocatalytic valorization of lignin. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25771-25778.	7.1	35
102	The Tautomeric Half-reaction of BphD, a C-C Bond Hydrolase. Journal of Biological Chemistry, 2007, 282, 19894-19904.	3.4	34
103	Genomics and metatranscriptomics of biogeochemical cycling and degradation of lignin-derived aromatic compounds in thermal swamp sediment. ISME Journal, 2021, 15, 879-893.	9.8	34
104	Characterization of BphF, a Rieske-Type Ferredoxin with a Low Reduction Potential. Biochemistry, 2001, 40, 84-92.	2.5	33
105	Substrate Specificities and Conformational Flexibility of 3-Ketosteroid 9α-Hydroxylases. Journal of Biological Chemistry, 2014, 289, 25523-25536.	3.4	33
106	A Glutathione <i>S</i> -Transferase Catalyzes the Dehalogenation of Inhibitory Metabolites of Polychlorinated Biphenyls. Journal of Bacteriology, 2006, 188, 4424-4430.	2.2	32
107	Structural Characterization of Pandoraea pnomenusa B-356 Biphenyl Dioxygenase Reveals Features of Potent Polychlorinated Biphenyl-Degrading Enzymes. PLoS ONE, 2013, 8, e52550.	2.5	32
108	The Structure of the Transcriptional Repressor KstR in Complex with CoA Thioester Cholesterol Metabolites Sheds Light on the Regulation of Cholesterol Catabolism in Mycobacterium tuberculosis. Journal of Biological Chemistry, 2016, 291, 7256-7266.	3.4	32

#	Article	IF	CITATIONS
109	Structure of HsaD, a steroid-degrading hydrolase, from <i>Mycobacterium tuberculosis</i> . Acta Crystallographica Section F: Structural Biology Communications, 2008, 64, 2-7.	0.7	31
110	Identification of an Acyl-Enzyme Intermediate in a meta-Cleavage Product Hydrolase Reveals the Versatility of the Catalytic Triad. Journal of the American Chemical Society, 2012, 134, 4615-4624.	13.7	31
111	The Impact of Nitric Oxide Toxicity on the Evolution of the Glutathione Transferase Superfamily. Journal of Biological Chemistry, 2013, 288, 24936-24947.	3.4	31
112	The Solution Structure of Oxidized HiPIP I from <i>Ectothiorhodospira halophila</i> ; Can NMR Spectroscopy Be Used to Probe Rearrangements Associated with Electron Transfer Processes?. Chemistry - A European Journal, 1995, 1, 598-607.	3.3	30
113	AnhE, a Metallochaperone Involved in the Maturation of a Cobalt-dependent Nitrile Hydratase. Journal of Biological Chemistry, 2010, 285, 25126-25133.	3.4	30
114	Structural and Functional Characterization of a Ketosteroid Transcriptional Regulator of Mycobacterium tuberculosis. Journal of Biological Chemistry, 2015, 290, 872-882.	3.4	29
115	Replacement of isoleucineâ€47 by threonine in the HPr protein of Streptococcus salivarius abrogates the preferential metabolism of glucose and fructose over lactose and melibiose but does not prevent the phosphorylation of HPr on serineâ€46. Molecular Microbiology, 1997, 25, 695-705.	2.5	28
116	Catabolism of Aromatic Compounds and Steroids by Rhodococcus. Microbiology Monographs, 2010, , 133-169.	0.6	28
117	Functional analyses of three acylâ€ <scp>CoA</scp> synthetases involved in bile acid degradation in <scp><i>P</i>P</scp> <i>seudomonas putida</i> â€ <scp>DOC</scp> 21. Environmental Microbiology, 2015, 17, 47-63.	3.8	28
118	IpdAB, a virulence factor in <i>Mycobacterium tuberculosis</i> , is a cholesterol ring-cleaving hydrolase. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3378-E3387.	7.1	28
119	A thermostable laccase from Thermus sp. 2.9 and its potential for delignification of Eucalyptus biomass. AMB Express, 2019, 9, 24.	3.0	28
120	Degradation of Polychlorinated Biphenyl Metabolites by Naphthalene-Catabolizing Enzymes. Applied and Environmental Microbiology, 1998, 64, 4637-4642.	3.1	28
121	7-Ketocholesterol Catabolism by <i>Rhodococcus jostii</i> RHA1. Applied and Environmental Microbiology, 2010, 76, 352-355.	3.1	27
122	The power distribution advantage of fiber-optic coupled ultraviolet resonance Raman spectroscopy for bioanalytical and biomedical applications. Journal of Raman Spectroscopy, 2002, 33, 503-510.	2.5	26
123	Evolutionarily Divergent Extradiol Dioxygenases Possess Higher Specificities for Polychlorinated Biphenyl Metabolites. Journal of Bacteriology, 2005, 187, 415-421.	2.2	26
124	Conserved Active Site Residues Limit Inhibition of a Copper-Containing Nitrite Reductase by Small Molecules. Biochemistry, 2008, 47, 4452-4460.	2.5	26
125	Role of Nitrogen Limitation in Transformation of RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) by Gordonia sp. Strain KTR9. Applied and Environmental Microbiology, 2013, 79, 1746-1750.	3.1	26
126	Multiple iron reduction by methoxylated phenolic lignin structures and the generation of reactive oxygen species by lignocellulose surfaces. International Journal of Biological Macromolecules, 2019, 128, 340-346.	7.5	24

#	Article	IF	CITATIONS
127	Ring-Cleavage Dioxygenases. , 2004, , 359-395.		23
128	Structures of Ternary Complexes of BphK, a Bacterial Glutathione S-Transferase That Reductively Dechlorinates Polychlorinated Biphenyl Metabolites. Journal of Biological Chemistry, 2006, 281, 30933-30940.	3.4	23
129	Phylogenetic analysis reveals the surprising diversity of an oxygenase class. Journal of Biological Inorganic Chemistry, 2012, 17, 425-436.	2.6	23
130	Hemoglobin Binding and Catalytic Heme Extraction by IsdB Near Iron Transporter Domains. Biochemistry, 2014, 53, 2286-2294.	2.5	23
131	Steady-state kinetics and inhibition of anaerobically purified human homogentisate 1,2-dioxygenase. Biochemical Journal, 2005, 386, 305-314.	3.7	22
132	The effects of pressure on porphyrin c-cytochrome b5 complex formation. Journal of the American Chemical Society, 1988, 110, 5909-5911.	13.7	21
133	Tetrameric structure and cellular location of catechol 2,3-dioxygenase. Archives of Microbiology, 1995, 163, 65-69.	2.2	21
134	Directed Evolution of a Ring-cleaving Dioxygenase for Polychlorinated Biphenyl Degradation. Journal of Biological Chemistry, 2005, 280, 42307-42314.	3.4	21
135	The Molecular Basis for Inhibition of BphD, a C-C Bond Hydrolase Involved in Polychlorinated Biphenyls Degradation. Journal of Biological Chemistry, 2007, 282, 36377-36385.	3.4	21
136	Heteroaromatic ester inhibitors of hepatitis A virus 3C proteinase: Evaluation of mode of action. Bioorganic and Medicinal Chemistry, 2008, 16, 5761-5777.	3.0	21
137	Genomic and Transcriptomic Studies of an RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine)-Degrading Actinobacterium. Applied and Environmental Microbiology, 2012, 78, 7798-7800.	3.1	20
138	Characterization of an extradiol dioxygenase involved in the catabolism of ligninâ€derived biphenyl. FEBS Letters, 2017, 591, 1001-1009.	2.8	20
139	A P450 fusion library of heme domains from Rhodococcus jostii RHA1 and its evaluation for the biotransformation of drug molecules. Bioorganic and Medicinal Chemistry, 2015, 23, 5603-5609.	3.0	19
140	Structural Basis of the Enhanced Pollutant-Degrading Capabilities of an Engineered Biphenyl Dioxygenase. Journal of Bacteriology, 2016, 198, 1499-1512.	2.2	19
141	Physiological Adaptation of the <i>Rhodococcus jostii</i> RHA1 Membrane Proteome to Steroids as Growth Substrates. Journal of Proteome Research, 2013, 12, 1188-1198.	3.7	18
142	The Catalytic Serine of meta-Cleavage Product Hydrolases Is Activated Differently for C–O Bond Cleavage Than for C–C Bond Cleavage. Biochemistry, 2012, 51, 5831-5840.	2.5	17
143	Molecular insights into substrate recognition and catalysis by phthalate dioxygenase from Comamonas testosteroni. Journal of Biological Chemistry, 2021, 297, 101416.	3.4	17
144	Spectroscopic characterization of a newly isolated cytochrome P450 from Rhodococcus rhodochrous. Biophysical Journal, 1993, 65, 806-813.	0.5	16

#	Article	IF	CITATIONS
145	Experimental evidence for the role of buried polar groups in determining the reduction potential of metalloproteins: the S79P variant of Chromatium vinosum HiPIP. Journal of Biological Inorganic Chemistry, 1999, 4, 692-700.	2.6	16
146	Combined Directed <b><i>ortho</i></b> Metalation/Suzukiâ^'Miyaura Cross-Coupling Strategies. Regiospecific Synthesis of Chlorodihydroxybiphenyls and Polychlorinated Biphenyls. Journal of Organic Chemistry, 2007, 72, 5960-5967.	3.2	16
147	Distinct Roles for Two CYP226 Family Cytochromes P450 in Abietane Diterpenoid Catabolism by <i>Burkholderia xenovorans</i> LB400. Journal of Bacteriology, 2008, 190, 1575-1583.	2.2	16
148	Cytochromes P450 in the biocatalytic valorization of lignin. Current Opinion in Biotechnology, 2022, 73, 43-50.	6.6	16
149	Chapter 11. Biological Funneling as a Means of Transforming Lignin-derived Aromatic Compounds into Value-added Chemicals. RSC Energy and Environment Series, 2018, , 290-313.	0.5	16
150	Discovery of lignin-transforming bacteria and enzymes in thermophilic environments using stable isotope probing. ISME Journal, 2022, 16, 1944-1956.	9.8	16
151	Kinetics of flavin semiquinone reduction of the components of the cytochrome c-cytochrome b5 complex. Biochemistry, 1988, 27, 5455-5460.	2.5	15
152	Reactivity of Toluate Dioxygenase with Substituted Benzoates and Dioxygen. Journal of Bacteriology, 2002, 184, 4096-4103.	2.2	15
153	Steryl Ester Formation and Accumulation in Steroid-Degrading Bacteria. Applied and Environmental Microbiology, 2020, 86, .	3.1	15
154	Improved identification of membrane proteins by MALDI-TOF MS/MS using vacuum sublimated matrix spots on an ultraphobic chip surface. Journal of Biomolecular Techniques, 2008, 19, 129-38.	1.5	15
155	A nanocompartment system contributes to defense against oxidative stress in Mycobacterium tuberculosis. ELife, 2021, 10, .	6.0	15
156	Specificity Fingerprinting of Retaining βâ€1,4â€Glycanases in the <i>Cellulomonas fimi</i> Secretome Using Two Fluorescent Mechanismâ€Based Probes. ChemBioChem, 2007, 8, 2125-2132.	2.6	14
157	A Fatty Acyl Coenzyme A Reductase Promotes Wax Ester Accumulation in Rhodococcus jostii RHA1. Applied and Environmental Microbiology, 2017, 83, .	3.1	14
158	Catabolism of Alkylphenols in Rhodococcus via a Meta-Cleavage Pathway Associated With Genomic Islands. Frontiers in Microbiology, 2019, 10, 1862.	3.5	14
159	A Substrate-Assisted Mechanism of Nucleophile Activation in a Ser–His–Asp Containing C–C Bond Hydrolase. Biochemistry, 2013, 52, 7428-7438.	2.5	13
160	A biocatalyst for sustainable wax ester production: re-wiring lipid accumulation in <i>Rhodococcus</i> to yield high-value oleochemicals. Green Chemistry, 2019, 21, 6468-6482.	9.0	13
161	The influence of a surface charge on the electronic and steric structure of a high potential iron-sulfur protein. Journal of Biological Inorganic Chemistry, 1996, 1, 257-263.	2.6	12
162	The Lid Domain of the MCP Hydrolase DxnB2 Contributes to the Reactivity toward Recalcitrant PCB Metabolites. Biochemistry, 2013, 52, 5685-5695.	2.5	12

#	Article	IF	CITATIONS
163	The essential role of nitrogen limitation in expression of xplA and degradation of hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) in Gordonia sp. strain KTR9. Applied Microbiology and Biotechnology, 2015, 99, 459-467.	3.6	12
164	Snapshots of the Catalytic Cycle of an O <sub>2</sub> , Pyridoxal Phosphate-Dependent Hydroxylase. ACS Chemical Biology, 2018, 13, 965-974.	3.4	12
165	The bacterial meta-cleavage hydrolase LigY belongs to the amidohydrolase superfamily, not to the α/β-hydrolase superfamily. Journal of Biological Chemistry, 2017, 292, 18290-18302.	3.4	11
166	Molecular basis for the substrate selectivity of bicyclic and monocyclic extradiol dioxygenases. Biochemical and Biophysical Research Communications, 2005, 338, 215-222.	2.1	10
167	Identification of functionally important residues and structural features in a bacterial lignostilbene dioxygenase. Journal of Biological Chemistry, 2019, 294, 12911-12920.	3.4	10
168	IpdE1-IpdE2 Is a Heterotetrameric Acyl Coenzyme A Dehydrogenase That Is Widely Distributed in Steroid-Degrading Bacteria. Biochemistry, 2020, 59, 1113-1123.	2.5	10
169	An Integrative Toolbox for Synthetic Biology in <i>Rhodococcus</i> . ACS Synthetic Biology, 2021, 10, 2383-2395.	3.8	10
170	Investigation of the role of a surface patch in the self-association of Chromatium vinosum high potential iron-sulfur protein. BBA - Proteins and Proteomics, 1999, 1433, 159-169.	2.1	9
171	Characterization of Hybrid Toluate and Benzoate Dioxygenases. Journal of Bacteriology, 2003, 185, 5333-5341.	2.2	9
172	Anaerobic crystallization and initial X-ray diffraction data of biphenyl 2,3-dioxygenase from <i>Burkholderia xenovorans</i> LB400: addition of agarose improved the quality of the crystals. Acta Crystallographica Section F: Structural Biology Communications, 2011, 67, 59-63.	0.7	9
173	Bacterial Transformation of Aromatic Monomers in Softwood Black Liquor. Frontiers in Microbiology, 2021, 12, 735000.	3.5	9
174	The Comparative Abilities of a Small Laccase and a Dye-Decoloring Peroxidase From the Same Bacterium to Transform Natural and Technical Lignins. Frontiers in Microbiology, 2021, 12, 723524.	3.5	9
175	Mechanistic Insights into DyPB from <i>Rhodococcus jostii</i> RHA1 Via Kinetic Characterization. ACS Catalysis, 2021, 11, 5486-5495.	11.2	8
176	Structural and functional analysis of lignostilbene dioxygenases from Sphingobium sp. SYK-6. Journal of Biological Chemistry, 2021, 296, 100758.	3.4	7
177	A shared mechanistic pathway for pyridoxal phosphate–dependent arginine oxidases. Proceedings of the United States of America, 2021, 118, .	7.1	7
178	A Fluorescent Protein-Based Biological Screen of Proteinase Activity. Journal of Biomolecular Screening, 2010, 15, 224-229.	2.6	6
179	Metal- and Serine-Dependent Meta-Cleavage Product Hydrolases Utilize Similar Nucleophile-Activation Strategies. ACS Catalysis, 2018, 8, 11622-11632.	11.2	6
180	Biphenyl Dioxygenase from an Arctic Isolate Is Not Cold Adapted. Applied and Environmental Microbiology, 2008, 74, 3908-3911.	3.1	5

#	Article	IF	CITATIONS
181	Genomic analysis of the phenylacetyl-CoA pathway in Burkholderia xenovorans LB400. Archives of Microbiology, 2011, 193, 641-650.	2.2	5
182	Bacterial Catabolism of Biphenyls: Synthesis and Evaluation of Analogues. ChemBioChem, 2018, 19, 1771-1778.	2.6	5
183	Characterization of a phylogenetically distinct extradiol dioxygenase involved in the bacterial catabolism of lignin-derived aromatic compounds. Journal of Biological Chemistry, 2022, 298, 101871.	3.4	5
184	Characterization of DitA3, the [Fe3S4] ferredoxin of an aromatic ring-hydroxylating dioxygenase from a diterpenoid-degrading microorganism. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2006, 1764, 1462-1469.	2.3	4
185	Nature teaches but can be bettered. Current Opinion in Chemical Biology, 2008, 12, 115-117.	6.1	1
186	Environmental biotechnology for sustainability: unleashing the might of the small. Current Opinion in Biotechnology, 2011, 22, 386-387.	6.6	0
187	Snapshots of the catalytic cycle of an O 2 , pyridoxal phosphateâ€dependent hydroxylase. FASEB Journal, 2018, 32, 796.35.	0.5	Ο