Marco Fraaije

List of Publications by Year
in descending order

241 papers	14,252 citations	17405 63 h-index	26548 107 g-index
265 all docs	265 docs citations	265 times ranked	10249 citing authors

#	Article	IF	Citations
1	Flavoprotein monooxygenases, a diverse class of oxidative biocatalysts. Journal of Biotechnology, 2006, 124, 670-689.	1.9	611
2	Cascade Reactions in Multicompartmentalized Polymersomes. Angewandte Chemie - International Edition, 2014, 53, 146-150.	7.2	463
3	Flavoenzymes: diverse catalysts with recurrent features. Trends in Biochemical Sciences, 2000, 25, 126-132.	3.7	446
4	Bacterial enzymes involved in lignin degradation. Journal of Biotechnology, 2016, 236, 110-119.	1.9	411
5	The possible role of matrix metalloproteinase (MMP)-2 and MMP-9 in cancer, e.g. acute leukemia. Critical Reviews in Oncology/Hematology, 2004, 50, 87-100.	2.0	308
6	Same Substrate, Many Reactions: Oxygen Activation in Flavoenzymes. Chemical Reviews, 2018, 118, 1742-1769.	23.0	306
7	Crystal structure of a Baeyer-Villiger monooxygenase. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13157-13162.	3.3	267
8	Enzymeâ€Catalyzed Oxidation of 5â€Hydroxymethylfurfural to Furanâ€2,5â€dicarboxylic Acid. Angewandte Chemie - International Edition, 2014, 53, 6515-6518.	7.2	259
9	Discovery of a thermostable Baeyerâ€"Villiger monooxygenase by genome mining. Applied Microbiology and Biotechnology, 2005, 66, 393-400.	1.7	238
10	Monooxygenases as biocatalysts: Classification, mechanistic aspects and biotechnological applications. Journal of Biotechnology, 2010, 146, 9-24.	1.9	227
11	Decorating microbes: surface display of proteins on Escherichia coli. Trends in Biotechnology, 2011, 29, 79-86.	4.9	198
12	Identification of a Baeyer-Villiger monooxygenase sequence motif. FEBS Letters, 2002, 518, 43-47.	1.3	193
13	The enigmatic reaction of flavins with oxygen. Trends in Biochemical Sciences, 2012, 37, 373-380.	3.7	193
14	Recent Developments in the Application of Baeyerâ€"Villiger Monooxygenases as Biocatalysts. ChemBioChem, 2010, 11, 2208-2231.	1.3	189
15	A robust and extracellular heme-containing peroxidase from Thermobifida fusca as prototype of a bacterial peroxidase superfamily. Applied Microbiology and Biotechnology, 2010, 86, 1419-1430.	1.7	168
16	DyP-type peroxidases: a promising and versatile class of enzymes. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 1-7.	1.4	166
17	Risk assessment studies on succinate dehydrogenase inhibitors, the new weapons in the battle to control Septoria leaf blotch in wheat. Molecular Plant Pathology, 2012, 13, 263-275.	2.0	162
18	Multiple pathways guide oxygen diffusion into flavoenzyme active sites. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10603-10608.	3.3	157

#	ARTICLE	IF	CITATIONS
19	A rapid quantitative activity assay shows that the <i>Vibrio cholerae</i> colonization factor GbpA is an active lytic polysaccharide monooxygenase. FEBS Letters, 2014, 588, 3435-3440.	1.3	155
20	Crystal structures and inhibitor binding in the octameric flavoenzyme vanillyl-alcohol oxidase: the shape of the active-site cavity controls substrate specificity. Structure, 1997, 5, 907-920.	1.6	154
21	Whatâ€™s in a covalent bond?. FEBS Journal, 2009, 276, 3405-3427.	2.2	151
22	Halohydrin Dehalogenases Are Structurally and Mechanistically Related to Short-Chain Dehydrogenases/Reductases. Journal of Bacteriology, 2001, 183, 5058-5066.	1.0	147
23	Baeyerâ€"Villiger monooxygenases: recent advances and future challenges. Current Opinion in Chemical Biology, 2010, 14, 138-144.	2.8	146
24	The Prodrug Activator EtaA from Mycobacterium tuberculosis Is a Baeyer-Villiger Monooxygenase. Journal of Biological Chemistry, 2004, 279, 3354-3360.	1.6	143
25	A novel oxidoreductase family sharing a conserved FAD-binding domain. Trends in Biochemical Sciences, 1998, 23, 206-207.	3.7	141
26	Revealing the moonlighting role of NADP in the structure of a flavin-containing monooxygenase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6572-6577.	3.3	134
27	Converting Phenylacetone Monooxygenase into Phenylcyclohexanone Monooxygenase by Rational Design: Towards Practical Baeyer-Villiger Monooxygenases. Advanced Synthesis and Catalysis, 2005, 347, 979-986.	2.1	132
28	4-Hydroxyacetophenone monooxygenase fromPseudomonas fluorescensACB. FEBS Journal, 2001, 268, 2547-2557.	0.2	131
29	Flavoprotein oxidases: classification and applications. Applied Microbiology and Biotechnology, 2013, 97, 5177-5188.	1.7	123
30	Selfâ€Sufficient Baeyerâ€"Villiger Monooxygenases: Effective Coenzyme Regeneration for Biooxygenation by Fusion Engineering. Angewandte Chemie - International Edition, 2008, 47, 2275-2278.	7.2	122
31	Discovery and Characterization of a 5-Hydroxymethylfurfural Oxidase from Methylovorus sp. Strain MP688. Applied and Environmental Microbiology, 2014, 80, 1082-1090.	1.4	122
32	Reduction of Carbonâ^'Carbon Double Bonds Using Organocatalytically Generated Diimide. Journal of Organic Chemistry, 2008, 73, 9482-9485.	1.7	117
33	Crystal structures and atomic model of NADPH oxidase. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6764-6769.	3.3	117
34	Snapshots of Enzymatic Baeyer-Villiger Catalysis. Journal of Biological Chemistry, 2011, 286, 29284-29291.	1.6	116
35	A Highly Specific Mechanism of Histone H3-K4 Recognition by Histone Demethylase LSD1. Journal of Biological Chemistry, 2006, 281, 35289-35295.	1.6	115
36	Substrate Specificity and Enantioselectivity of 4-Hydroxyacetophenone Monooxygenase. Applied and Environmental Microbiology, 2003, 69, 419-426.	1.4	111

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37	Discovery of a Novel Styrene Monooxygenase Originating from the Metagenome. Applied and Environmental Microbiology, 2007, 73, 5832-5839.	1.4	111
38	Covalent Flavinylation Is Essential for Efficient Redox Catalysis in Vanillyl-alcohol Oxidase. Journal of Biological Chemistry, 1999, 274, 35514-35520.	1.6	108
39	Baeyerâ€“Villiger Monooxygenases: Tunable Oxidative Biocatalysts. ACS Catalysis, 2019, 9, 11207-11241.	5.5	108
40	The growing VAO flavoprotein family. Archives of Biochemistry and Biophysics, 2008, 474, 292-301.	1.4	107
41	Recent Developments in Flavinâ€based Catalysis. ChemCatChem, 2013, 5, 403-415.	1.8	100
42	The taming of oxygen: biocatalytic oxyfunctionalisations. Chemical Communications, 2014, 50, 13180-13200.	2.2	99
43	Altering the Substrate Specificity and Enantioselectivity of Phenylacetone Monooxygenase by Structure-Inspired Enzyme Redesign. Advanced Synthesis and Catalysis, 2007, 349, 1361-1368.	2.1	97
44	Enzyme Fusions in Biocatalysis: Coupling Reactions by Pairing Enzymes. ChemBioChem, 2019, 20, 20-28.	1.3	97
45	Efficient Biooxidations Catalyzed by a New Generation of Selfâ€Sufficient Baeyerâ€“Villiger Monooxygenases. ChemBioChem, 2009, 10, 2595-2598.	1.3	96
46	Characterization and Crystal Structure of a Robust Cyclohexanone Monooxygenase. Angewandte Chemie - International Edition, 2016, 55, 15852-15855.	7.2	92
47	Structure-Based Enzyme Tailoring of 5-Hydroxymethylfurfural Oxidase. ACS Catalysis, 2015, 5, 1833-1839.	5.5	91
48	Substrate Specificity of Flavin-Dependent Vanillyl-Alcohol Oxidase from Penicillium Simplicissimum. Evidence for the Production of 4-Hydroxycinnamyl Alcohols from 4-Allylphenols. FEBS Journal, 1995, 234, 271-277.	0.2	89
49	Oxidations catalyzed by phenylacetone monooxygenase from Thermobifida fusca. Tetrahedron: Asymmetry, 2005, 16, 3077-3083.	1.8	89
50	Kinetic Mechanism of Phenylacetone Monooxygenase fromThermobifida fuscaâ€. Biochemistry, 2008, 47, 4082-4093.	1.2	89
51	Occurrence and Biocatalytic Potential of Carbohydrate Oxidases. Advances in Applied Microbiology, 2006, 60, 17-54.	1.3	87
52	Identification of a Gatekeeper Residue That Prevents Dehydrogenases from Acting as Oxidases. Journal of Biological Chemistry, 2009, 284, 4392-4397.	1.6	83
53	Biocatalytic properties of Baeyerâ€“Villiger monooxygenases in aqueousâ€“organic media. Journal of Molecular Catalysis B: Enzymatic, 2006, 39, 91-97.	1.8	80
54	Catalytic Mechanism of the Oxidative Demethylation of 4-(Methoxymethyl)phenol by Vanillyl-Alcohol Oxidase. Journal of Biological Chemistry, 1997, 272, 18111-18116.	1.6	79

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55	4-Hydroxyacetophenone monooxygenase from Pseudomonas fluorescens ACB as an oxidative biocatalyst in the synthesis of optically active sulfoxides. Tetrahedron: Asymmetry, 2006, 17, 130-135.	1.8	78
56	Enzymatic Synthesis of Vanillin. Journal of Agricultural and Food Chemistry, 2001, 49, 2954-2958.	2.4	76
57	Inversion of stereospecificity of vanillyl-alcohol oxidase. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 9455-9460.	3.3	74
58	Structures of Michaelis and Product Complexes of Plant Cytokinin Dehydrogenase: Implications for Flavoenzyme Catalysis. Journal of Molecular Biology, 2004, 341, 1237-1249.	2.0	73
59	Discovery, Characterization, and Kinetic Analysis of an Alditol Oxidase from Streptomyces coelicolor*. Journal of Biological Chemistry, 2007, 282, 20283-20291.	1.6	72
60	Catalytic reaction of cytokinin dehydrogenase: preference for quinones as electron acceptors. Biochemical Journal, 2004, 380, 121-130.	1.7	70
61	Expanding the set of rhodococcal Baeyerâ€"Villiger monooxygenases by high-throughput cloning, expression and substrate screening. Applied Microbiology and Biotechnology, 2012, 95, 1479-1489.	1.7	66
62	Identifying determinants of NADPH specificity in Baeyer-Villiger monooxygenases. FEBS Journal, 2004, 271, 2107-2116.	0.2	65
63	Structural Analysis of the Catalytic Mechanism and Stereoselectivity in <i>Streptomyces coelicolor</i> Alditol Oxidase[,]. Biochemistry, 2008, 47, 978-985.	1.2	65
64	Structural Analysis of Flavinylation in Vanillyl-Alcohol Oxidase. Journal of Biological Chemistry, 2000, 275, 38654-38658.	1.6	63
65	From waste to value â€" direct utilization of limonene from orange peel in a biocatalytic cascade reaction towards chiral carvolactone. Green Chemistry, 2017, 19, 367-371.	4.6	63
66	An overview of microbial indigo-forming enzymes. Applied Microbiology and Biotechnology, 2020, 104, 925-933.	1.7	63
67	Enzymatic Synthesis of Novel Chiral Sulfoxides Employing Baeyerâ€"Villiger Monooxygenases. European Journal of Organic Chemistry, 2010, 2010, 6409-6416.	1.2	62
68	Blending Baeyerâ€"Villiger monooxygenases: using a robust BVMO as a scaffold for creating chimeric enzymes with novel catalytic properties. Chemical Communications, 2012, 48, 3288.	2.2	61
69	Stabilization of cyclohexanone monooxygenase by a computationally designed disulfide bond spanning only one residue. FEBS Open Bio, 2014, 4, 168-174.	1.0	59
70	A fast, sensitive and easy colorimetric assay for chitinase and cellulase activity detection. Biotechnology for Biofuels, 2014, 7, 37.	6.2	59
71	Enzymatic kinetic resolution of racemic ketones catalyzed by Baeyerâ€"Villiger monooxygenases. Tetrahedron: Asymmetry, 2007, 18, 1338-1344.	1.8	56
72	Synthesis of Chiral 3-Alkyl-3,4-dihydroisocoumarins by Dynamic Kinetic Resolutions Catalyzed by a Baeyerâ^'Villiger Monooxygenase. Journal of Organic Chemistry, 2010, 75, 2073-2076.	1.7	55

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73	Coupled reactions by coupled enzymes: alcohol to lactone cascade with alcohol dehydrogenaseâ€"cyclohexanone monooxygenase fusions. Applied Microbiology and Biotechnology, 2017, 101, 7557-7565.	1.7	55
74	Flavoenzyme-Catalyzed Oxygenations and Oxidations of Phenolic Compounds. Advanced Synthesis and Catalysis, 2002, 344, 1023-1035.	2.1	54
75	Discovery of a eugenol oxidase from Rhodococcus sp. strain RHA1. FEBS Journal, 2007, 274, 2311-2321.	2.2	54
76	Cofactor regeneration in polymersome nanoreactors: enzymatically catalysed Baeyerâ€"Villiger reactions. Journal of Materials Chemistry, 2011, 21, 18923.	6.7	54
77	Polycyclic Ketone Monooxygenase from the Thermophilic Fungus <i>Thermothelomyces thermophila</i>: A Structurally Distinct Biocatalyst for Bulky Substrates. Journal of the American Chemical Society, 2017, 139, 627-630.	6.6	54
78	Ancestral-sequence reconstruction unveils the structural basis of function in mammalian FMOs. Nature Structural and Molecular Biology, 2020, 27, 14-24.	3.6	54
79	Elucidation of the 4-Hydroxyacetophenone Catabolic Pathway in Pseudomonas fluorescens ACB. Journal of Bacteriology, 2008, 190, 5190-5198.	1.0	53
80	Hydroquinone Dioxygenase from <i>Pseudomonas fluorescens</i> ACB: a Novel Member of the Family of Nonheme-Iron(II)-Dependent Dioxygenases. Journal of Bacteriology, 2008, 190, 5199-5209.	1.0	53
81	The role of double covalent flavin binding in chito-oligosaccharide oxidase from <i>Fusarium graminearum</i>. Biochemical Journal, 2008, 413, 175-183.	1.7	51
82	Exploring the biocatalytic scope of a bacterial flavin-containing monooxygenase. Organic and Biomolecular Chemistry, 2011, 9, 1337.	1.5	50
83	[Cp*Rh(bpy)(H2O)]2+ as a coenzyme substitute in enzymatic oxidations catalyzed by Baeyerâ€"Villiger monooxygenases. Chemical Communications, 2005, , 3724.	2.2	48
84	Molecular Cloning, Sequencing, and Heterologous Expression of the vaoA Gene from Penicillium simplicissimum CBS 170.90 Encoding Vanillyl-Alcohol Oxidase. Journal of Biological Chemistry, 1998, 273, 7865-7872.	1.6	47
85	Expanding the biocatalytic toolbox of flavoprotein monooxygenases from Rhodococcus jostii RHA1. Journal of Molecular Catalysis B: Enzymatic, 2013, 88, 20-25.	1.8	47
86	Catalases as biocatalysts in technical applications: current state and perspectives. Applied Microbiology and Biotechnology, 2015, 99, 3351-3357.	1.7	46
87	Selective Baeyerâ€"Villiger oxidation of racemic ketones in aqueousâ€"organic media catalyzed by phenylacetone monooxygenase. Tetrahedron: Asymmetry, 2008, 19, 197-203.	1.8	45
88	Biocatalysed concurrent production of enantioenriched compounds through parallel interconnected kinetic asymmetric transformations. Organic and Biomolecular Chemistry, 2010, 8, 1431.	1.5	44
89	Effects of water miscible organic solvents on the activity and conformation of the baeyerâ€"villiger monooxygenases from <i>Thermobifida fusca</i> and <i>Acinetobacter calcoaceticus</i>: A comparative study. Biotechnology and Bioengineering, 2011, 108, 491-499.	1.7	44
90	Exploring the Structural Basis of Substrate Preferences in Baeyer-Villiger Monooxygenases. Journal of Biological Chemistry, 2012, 287, 22626-22634.	1.6	44

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91	Overriding Traditional Electronic Effects in Biocatalytic Baeyerâ€“Villiger Reactions by Directed Evolution. Journal of the American Chemical Society, 2018, 140, 10464-10472.	6.6	43
92	Creating a more robust 5-hydroxymethylfurfural oxidase by combining computational predictions with a novel effective library design. Biotechnology for Biofuels, 2018, 11, 56.	6.2	43
93	Enigmatic Gratuitous Induction of the Covalent Flavoprotein Vanillyl-Alcohol Oxidase in Penicillium simplicissimum. Applied and Environmental Microbiology, 1997, 63, 435-439.	1.4	43
94	Oxidoreductases Working Together: Concurrent Obtaining of Valuable Derivatives by Employing the PIKAT Method. ChemCatChem, 2010, 2, 946-949.	1.8	42
95	Joint Functions of Protein Residues and NADP(H) in Oxygen Activation by Flavin-containing Monooxygenase. Journal of Biological Chemistry, 2010, 285, 35021-35028.	1.6	42
96	Mapping the Substrate Binding Site of Phenylacetone Monooxygenase from Thermobifida fusca by Mutational Analysis. Applied and Environmental Microbiology, 2011, 77, 5730-5738.	1.4	42
97	Exploring the Biocatalytic Scope of Alditol Oxidase from <i>Streptomyces coelicolor</i>. Advanced Synthesis and Catalysis, 2009, 351, 1523-1530.	2.1	41
98	Finding the Switch: Turning a Baeyerâ€“Villiger Monooxygenase into a NADPH Oxidase. Journal of the American Chemical Society, 2014, 136, 16966-16969.	6.6	41
99	Regio- and Stereospecific Conversion of 4-Alkylphenols by the Covalent Flavoprotein Vanillyl-Alcohol Oxidase. Journal of Bacteriology, 1998, 180, 5646-5651.	1.0	41
100	The VAO/PCMH flavoprotein family. Archives of Biochemistry and Biophysics, 2017, 632, 104-117.	1.4	40
101	Asp-170 Is Crucial for the Redox Properties of Vanillyl-alcohol Oxidase. Journal of Biological Chemistry, 2000, 275, 14799-14808.	1.6	37
102	Changing the substrate specificity of a chitooligosaccharide oxidase from <i>Fusarium graminearum</i> by modelâ€inspired siteâ€directed mutagenesis. FEBS Letters, 2007, 581, 4905-4909.	1.3	37
103	Discovery and characterization of a putrescine oxidase from Rhodococcus erythropolis NCIMB 11540. Applied Microbiology and Biotechnology, 2008, 78, 455-463.	1.7	36
104	Investigating the coenzyme specificity of phenylacetone monooxygenase from Thermobifida fusca. Applied Microbiology and Biotechnology, 2010, 88, 1135-1143.	1.7	36
105	Turning a riboflavin-binding protein into a self-sufficient monooxygenase by cofactor redesign. Chemical Communications, 2011, 47, 11050.	2.2	36
106	Covalent flavinylation of vanillylâ€alcohol oxidase is an autocatalytic process. FEBS Journal, 2008, 275, 5191-5200.	2.2	35
107	Enzymatic Baeyerâ€“Villiger Oxidation of Benzoâ€Fused Ketones: Formation of Regiocomplementary Lactones. European Journal of Organic Chemistry, 2009, 2009, 2526-2532.	1.2	35
108	Extensive substrate profiling of cyclopentadecanone monooxygenase as Baeyerâ€“Villiger biocatalyst reveals novel regiodivergent oxidations. Journal of Molecular Catalysis B: Enzymatic, 2011, 73, 9-16.	1.8	35

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109	Dynamic Kinetic Resolution of Î±â€Substituted Î²â€Ketoesters Catalyzed by Baeyerâ€"Villiger Monooxygenases: Access to Enantiopure Î±â€Hydroxy Esters. Angewandte Chemie - International Edition, 2011, 50, 8387-8390.	7.2	35
110	Extending the substrate scope of a Baeyerâ€"Villiger monooxygenase by multiple-site mutagenesis. Applied Microbiology and Biotechnology, 2014, 98, 4009-4020.	1.7	35
111	Exploring the biocatalytic potential of a DyP-type peroxidase by profiling the substrate acceptance of Thermobifida fusca DyP peroxidase. Tetrahedron, 2016, 72, 7276-7281.	1.0	35
112	Enantioselective hydroxylation of 4-alkylphenols by vanillyl alcohol oxidase. , 1998, 59, 171-177.		34
113	Biooxidation of ketones with a cyclobutanone structural motif by recombinant whole-cells expressing 4-hydroxyacetophenone monooxygenase. Journal of Molecular Catalysis B: Enzymatic, 2005, 32, 135-140.	1.8	34
114	BVMO-catalysed dynamic kinetic resolution of racemic benzyl ketones in the presence of anion exchange resins. Organic and Biomolecular Chemistry, 2010, 8, 1121.	1.5	34
115	Typeâ€...II Flavinâ€Containing Monooxygenases: A New Class of Biocatalysts that Harbors Baeyerâ€"Villiger Monooxygenases with a Relaxed Coenzyme Specificity. ChemCatChem, 2014, 6, 1112-1117.	1.8	34
116	Enzymatic Synthesis of Enantiomerically Pure Î²â€Amino Ketones, Î²â€Amino Esters, and Î²â€Amino Alcohols with Baeyerâ€"Villiger Monooxygenases. Chemistry - A European Journal, 2010, 16, 9525-9535.	1.7	33
117	Structure of a robust bacterial protein cage and its application as a versatile biocatalytic platform through enzyme encapsulation. Biochemical and Biophysical Research Communications, 2020, 529, 548-553.	1.0	33
118	Approaching boiling point stability of an alcohol dehydrogenase through computationally-guided enzyme engineering. ELife, 2020, 9, .	2.8	33
119	Cloning, overexpression and biocatalytic exploration of a novel Baeyer-Villiger monooxygenase from Aspergillus fumigatus Af293. AMB Express, 2013, 3, 33.	1.4	32
120	Baeyerâ€"Villiger Monooxygenase FMO5 as Entry Point in Drug Metabolism. ACS Chemical Biology, 2017, 12, 2379-2387.	1.6	32
121	Kinetic mechanism of vanillyl-alcohol oxidase with short-chain 4-alkylphenols. FEBS Journal, 1998, 253, 712-719.	0.2	31
122	Alkyl-dihydroxyacetonephosphate Synthase. Journal of Biological Chemistry, 2000, 275, 6276-6283.	1.6	31
123	Coenzyme Binding during Catalysis Is Beneficial for the Stability of 4-Hydroxyacetophenone Monooxygenase. Journal of Biological Chemistry, 2005, 280, 32115-32121.	1.6	31
124	Baeyerâ€"Villiger monooxygenase-catalyzed kinetic resolution of racemic Î±-alkyl benzyl ketones: enzymatic synthesis of Î±-alkyl benzylketones and Î±-alkyl benzylesters. Tetrahedron: Asymmetry, 2009, 20, 1168-1173.	1.8	30
125	Manipulating the stereoselectivity of the thermostable Baeyerâ€"Villiger monooxygenase TmCHMO by directed evolution. Organic and Biomolecular Chemistry, 2017, 15, 9824-9829.	1.5	30
126	Vanillyl-alcohol oxidase, a tasteful biocatalyst. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 185-188.	1.8	29

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127	Biocatalytic Properties and Structural Analysis of Eugenol Oxidase from <i>Rhodococcus jostii</i> RHA1: A Versatile Oxidative Biocatalyst. ChemBioChem, 2016, 17, 1359-1366.	1.3	29
128	Enantio- and regioselective <i>ene</i>-reductions using F₄₂₀H₂-dependent enzymes. Chemical Communications, 2018, 54, 11208-11211.	2.2	29
129	Characterization of a New DyP-Peroxidase from the Alkaliphilic Cellulomonad, Cellulomonas bogoriensis. Molecules, 2019, 24, 1208.	1.7	29
130	Production of Hydroxy Acids: Selective Double Oxidation of Diols by Flavoprotein Alcohol Oxidase. Angewandte Chemie - International Edition, 2020, 59, 4869-4872.	7.2	29
131	Discovery and characterization of an F420-dependent glucose-6-phosphate dehydrogenase (Rh-FGD1) from Rhodococcus jostii RHA1. Applied Microbiology and Biotechnology, 2017, 101, 2831-2842.	1.7	28
132	Nicotinamide Adenine Dinucleotideâ€Dependent Redoxâ€Neutral Convergent Cascade for Lactonizations with Type II Flavinâ€Containing Monooxygenase. Advanced Synthesis and Catalysis, 2017, 359, 2142-2148.	2.1	27
133	Discovery of a Xylooligosaccharide Oxidase from Myceliophthora thermophila C1. Journal of Biological Chemistry, 2016, 291, 23709-23718.	1.6	26
134	Characterization and Crystal Structure of a Robust Cyclohexanone Monooxygenase. Angewandte Chemie, 2016, 128, 16084-16087.	1.6	26
135	P450BM3 fused to phosphite dehydrogenase allows phosphite-driven selective oxidations. Applied Microbiology and Biotechnology, 2017, 101, 2319-2331.	1.7	26
136	Beyond active site residues: overall structural dynamics control catalysis in flavin-containing and heme-containing monooxygenases. Current Opinion in Structural Biology, 2019, 59, 29-37.	2.6	26
137	Kinetic and chemical analyses of the cytokinin dehydrogenase-catalysed reaction: correlations with the crystal structure. Biochemical Journal, 2006, 398, 113-124.	1.7	25
138	Export of functional Streptomyces coelicolor alditol oxidase to the periplasm or cell surface of Escherichia coli and its application in whole-cell biocatalysis. Applied Microbiology and Biotechnology, 2009, 83, 679-687.	1.7	25
139	Structure-Based Engineering of <i>Phanerochaete chrysosporium</i> Alcohol Oxidase for Enhanced Oxidative Power toward Glycerol. Biochemistry, 2018, 57, 6209-6218.	1.2	25
140	Stabilization of cyclohexanone monooxygenase by computational and experimental library design. Biotechnology and Bioengineering, 2019, 116, 2167-2177.	1.7	25
141	Selective Oxidations of Organoboron Compounds Catalyzed by Baeyerâ€“Villiger Monooxygenases. Advanced Synthesis and Catalysis, 2011, 353, 2169-2173.	2.1	24
142	Discovery of Baeyerâ€“Villiger monooxygenases from photosynthetic eukaryotes. Journal of Molecular Catalysis B: Enzymatic, 2013, 98, 145-154.	1.8	24
143	Engineering Cyclohexanone Monooxygenase for the Production of Methyl Propanoate. ACS Chemical Biology, 2017, 12, 291-299.	1.6	24
144	Creating Oxidaseâ€“Peroxidase Fusion Enzymes as a Toolbox for Cascade Reactions. ChemBioChem, 2017, 18, 2226-2230.	1.3	24

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145	Design of Artificial Alcohol Oxidases: Alcohol Dehydrogenaseâ€"NADPH Oxidase Fusions for Continuous Oxidations. ChemBioChem, 2019, 20, 51-56.	1.3	24
146	Polycyclic Ketone Monooxygenase (PockeMO): A Robust Biocatalyst for the Synthesis of Optically Active Sulfoxides. Catalysts, 2017, 7, 288.	1.6	22
147	Chemoenzymatic Synthesis of an Unnatural Deazaflavin Cofactor That Can Fuel F₄₂₀-Dependent Enzymes. ACS Catalysis, 2019, 9, 6435-6443.	5.5	22
148	The vast repertoire of carbohydrate oxidases: An overview. Biotechnology Advances, 2021, 51, 107634.	6.0	22
149	Chemoenzymatic approaches to obtain chiral-centered selenium compounds. Tetrahedron, 2012, 68, 10431-10436.	1.0	21
150	Characterization of a chitinase from the cellulolytic actinomycete Thermobifida fusca. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 1253-1259.	1.1	21
151	What to sacrifice? Fusions of cofactor regenerating enzymes with Baeyer-Villiger monooxygenases and alcohol dehydrogenases for self-sufficient redox biocatalysis. Tetrahedron, 2019, 75, 1832-1839.	1.0	21
152	Positive Impact of Natural Deep Eutectic Solvents on the Biocatalytic Performance of 5-Hydroxymethyl-Furfural Oxidase. Catalysts, 2020, 10, 447.	1.6	21
153	Crystallization and preliminary x-ray analysis of the flavoenzyme vanillyl-alcohol oxidase fromPenicillium Simplicissimum. , 1997, 27, 601-603.		20
154	Exploiting the enantioselectivity of Baeyer-Villiger monooxygenases via boron oxidation. Tetrahedron: Asymmetry, 2012, 23, 703-708.	1.8	20
155	Hot or not? Discovery and characterization of a thermostable alditol oxidase from Acidothermus cellulolyticus 11B. Applied Microbiology and Biotechnology, 2012, 95, 389-403.	1.7	20
156	The Oxidation of Thiols by Flavoprotein Oxidases: a Biocatalytic Route to Reactive Thiocarbonyls. Angewandte Chemie - International Edition, 2014, 53, 13206-13209.	7.2	20
157	Not so monofunctionalâ€"a case of thermostable Thermobifida fusca catalase with peroxidase activity. Applied Microbiology and Biotechnology, 2015, 99, 2225-2232.	1.7	20
158	Covalent immobilization of a flavoprotein monooxygenase via its flavin cofactor. Enzyme and Microbial Technology, 2016, 82, 138-143.	1.6	20
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