Marco Fraaije

List of Publications by Year
in descending order

241 papers	14,252 citations	17440 63 h-index	26613 107 g-index
265 all docs	265 docs citations	265 times ranked	10249 citing authors

#	Article	IF	Citations
1	Systematic Assessment of Uncoupling in Flavoprotein Oxidases and Monooxygenases. ACS Sustainable Chemistry and Engineering, 2023, 11, 4948-4959.	6.7	9
2	Kinetic resolution of racemic benzofused alcohols catalysed by HMFO variants in presence of natural deep eutectic solvents. Biocatalysis and Biotransformation, 2023, 41, 145-152.	2.0	1
3	Introducing an Artificial Deazaflavin Cofactor in <i>Escherichia coli</i> and <i>Saccharomyces cerevisiae</i>. ACS Synthetic Biology, 2022, 11, 938-952.	3.8	3
4	Broadening the Scope of the Flavinâ€Tag Method by Improving Flavin Incorporation and Incorporating Flavin Analogs. ChemBioChem, 2022, 23, .	2.6	4
5	Chemoenzymatic Synthesis of the Most Pleasant Stereoisomer of Jessemal. Journal of Organic Chemistry, 2022, , .	3.2	1
6	Facile Stereoselective Reduction of Prochiral Ketones by using an F₄₂₀â€dependent Alcohol Dehydrogenase. ChemBioChem, 2021, 22, 156-159.	2.6	7
7	Optimizing the linker length for fusing an alcohol dehydrogenase with a cyclohexanone monooxygenase. Methods in Enzymology, 2021, 647, 107-143.	1.0	3
8	Modular Assembly of Phosphite Dehydrogenase and Phenylacetone Monooxygenase for Tuning Cofactor Regeneration. Biomolecules, 2021, 11, 905.	4.0	3
9	Enantioselective oxidation of secondary alcohols by the flavoprotein alcohol oxidase from Phanerochaete chrysosporium. Archives of Biochemistry and Biophysics, 2021, 704, 108888.	3.0	6
10	On the diversity of <scp>F₄₂₀</scp>â€dependent oxidoreductases: A sequenceâ€•and structureâ€based classification. Proteins: Structure, Function and Bioinformatics, 2021, 89, 1497-1507.	2.6	6
11	SERR Spectroelectrochemistry as a Guide for Rational Design of DyP-Based Bioelectronics Devices. International Journal of Molecular Sciences, 2021, 22, 7998.	4.1	2
12	Flavin-tag: A Facile Method for Site-Specific Labeling of Proteins with a Flavin Fluorophore. Bioconjugate Chemistry, 2021, 32, 1559-1563.	3.6	4
13	Discovery, Biocatalytic Exploration and Structural Analysis of a 4â€Ethylphenol Oxidase from <i>Gulosibacter chungangensis</i>. ChemBioChem, 2021, 22, 3225-3233.	2.6	5
14	A Tailor-Made Deazaflavin-Mediated Recycling System for Artificial Nicotinamide Cofactor Biomimetics. ACS Catalysis, 2021, 11, 11561-11569.	11.2	10
15	The vast repertoire of carbohydrate oxidases: An overview. Biotechnology Advances, 2021, 51, 107634.	11.7	22
16	Mutational and structural analysis of an ancestral fungal dyeâ€decolorizing peroxidase. FEBS Journal, 2021, 288, 3602-3618.	4.7	13
17	Ancestral reconstruction of mammalian FMO1 enables structural determination, revealing unique features that explain its catalytic properties. Journal of Biological Chemistry, 2021, 296, 100221.	3.4	12
18	Discovery of two novel oxidases using a highâ€throughput activity screen. ChemBioChem, 2021, , .	2.6	4

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19	Kinetic and Structural Properties of a Robust Bacterial L-Amino Acid Oxidase. Catalysts, 2021, 11, 1309.	3.5	3
20	Whole-cell screening of oxidative enzymes using genetically encoded sensors. Chemical Science, 2021, 12, 14766-14772.	7.4	6
21	Production of Hydroxy Acids: Selective Double Oxidation of Diols by Flavoprotein Alcohol Oxidase. Angewandte Chemie - International Edition, 2020, 59, 4869-4872.	13.8	29
22	Production of Hydroxy Acids: Selective Double Oxidation of Diols by Flavoprotein Alcohol Oxidase. Angewandte Chemie, 2020, 132, 4899-4902.	2.0	7
23	Ancestral-sequence reconstruction unveils the structural basis of function in mammalian FMOs. Nature Structural and Molecular Biology, 2020, 27, 14-24.	8.2	54
24	Creating Flavin Reductase Variants with Thermostable and Solventâ€Tolerant Properties by Rationalâ€Design Engineering. ChemBioChem, 2020, 21, 1481-1491.	2.6	17
25	An overview of microbial indigo-forming enzymes. Applied Microbiology and Biotechnology, 2020, 104, 925-933.	3.6	63
26	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.	2.1	33
27	Production of indigo through the use of a dual-function substrate and a bifunctional fusion enzyme. Enzyme and Microbial Technology, 2020, 142, 109692.	3.2	19
28	The multipurpose family of flavoprotein oxidases. The Enzymes, 2020, 47, 63-86.	1.7	12
29	Vanillyl alcohol oxidase. The Enzymes, 2020, 47, 87-116.	1.7	17
30	Multienzymatic Stereoselective Reduction of Tetrasubstituted Cyclic Enones to Halohydrins with Three Contiguous Stereogenic Centers. ACS Catalysis, 2020, 10, 13050-13057.	11.2	15
31	Substrate binding tunes the reactivity of hispidin 3-hydroxylase, a flavoprotein monooxygenase involved in fungal bioluminescence. Journal of Biological Chemistry, 2020, 295, 16013-16022.	3.4	5
32	Analysis of the structure and substrate scope of chitooligosaccharide oxidase reveals high affinity for C2â€modified glucosamines. FEBS Letters, 2020, 594, 2819-2828.	2.8	8
33	Resonance Raman view of the active site architecture in bacterial DyP-type peroxidases. RSC Advances, 2020, 10, 11095-11104.	3.6	6
34	Genome Mining of Oxidation Modules in <i>trans</i>â€Acyltransferase Polyketide Synthases Reveals a Culturable Source for Lobatamides. Angewandte Chemie - International Edition, 2020, 59, 7761-7765.	13.8	19
35	Genome Mining of Oxidation Modules in trans â€Acyltransferase Polyketide Synthases Reveals a Culturable Source for Lobatamides. Angewandte Chemie, 2020, 132, 7835-7839.	2.0	0
36	Unique Features of a New Baeyerâ€“Villiger Monooxygenase from a Halophilic Archaeon. Catalysts, 2020, 10, 128.	3.5	5

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37	Mechanistic and Crystallographic Studies of Azoreductase AzoA from <i>Bacillus wakoensis</i> A01. ACS Chemical Biology, 2020, 15, 504-512.	3.4	11
38	Positive Impact of Natural Deep Eutectic Solvents on the Biocatalytic Performance of 5-Hydroxymethyl-Furfural Oxidase. Catalysts, 2020, 10, 447.	3.5	21
39	High-level production of industrially relevant oxidases by a two-stage fed-batch approach: overcoming catabolite repression in arabinose-inducible Escherichia coli systems. Applied Microbiology and Biotechnology, 2020, 104, 5337-5345.	3.6	4
40	Approaching boiling point stability of an alcohol dehydrogenase through computationally-guided enzyme engineering. ELife, 2020, 9, .	6.0	33
41	Biocatalytic Enantioselective Oxidation of <i>Sec</i>â€Allylic Alcohols with Flavinâ€Dependent Oxidases. Advanced Synthesis and Catalysis, 2019, 361, 5264-5271.	4.3	16
42	Baeyerâ€"Villiger Monooxygenases: Tunable Oxidative Biocatalysts. ACS Catalysis, 2019, 9, 11207-11241.	11.2	108
43	Stabilization of cyclohexanone monooxygenase by computational and experimental library design. Biotechnology and Bioengineering, 2019, 116, 2167-2177.	3.3	25
44	Expression and Characterization of a Dye-Decolorizing Peroxidase from Pseudomonas Fluorescens Pf0-1. Catalysts, 2019, 9, 463.	3.5	14
45	Chemoenzymatic Synthesis of an Unnatural Deazaflavin Cofactor That Can Fuel F₄₂₀-Dependent Enzymes. ACS Catalysis, 2019, 9, 6435-6443.	11.2	22
46	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.	5.7	26
47	Editorial: Actinobacteria, a Source of Biocatalytic Tools. Frontiers in Microbiology, 2019, 10, 800.	3.5	9
48	Characterization of a New DyP-Peroxidase from the Alkaliphilic Cellulomonad, Cellulomonas bogoriensis. Molecules, 2019, 24, 1208.	3.8	29
49	Exploring the Biocatalytic Potential of a Selfâ€Sufficient Cytochrome P450 from <i>Thermothelomyces thermophila</i>. Advanced Synthesis and Catalysis, 2019, 361, 2487-2496.	4.3	9
50	Convergent Cascade Catalyzed by Monooxygenaseâ€"Alcohol Dehydrogenase Fusion Applied in Organic Media. ChemBioChem, 2019, 20, 1653-1658.	2.6	20
51	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.	1.9	21
52	Structure-Based Redesign of a Self-Sufficient Flavin-Containing Monooxygenase towards Indigo Production. International Journal of Molecular Sciences, 2019, 20, 6148.	4.1	15
53	Design of Artificial Alcohol Oxidases: Alcohol Dehydrogenaseâ€"NADPH Oxidase Fusions for Continuous Oxidations. ChemBioChem, 2019, 20, 51-56.	2.6	24
54	Enzyme Fusions in Biocatalysis: Coupling Reactions by Pairing Enzymes. ChemBioChem, 2019, 20, 20-28.	2.6	97

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55	Characterization of a thermostable flavin-containing monooxygenase from Nitrincola lacisaponensis (NiFMO). Applied Microbiology and Biotechnology, 2019, 103, 1755-1764.	3.6	18
56	Kinetic Resolution of <i>sec</i>â€Thiols by Enantioselective Oxidation with Rationally Engineered 5â€(Hydroxymethyl)furfural Oxidase. Angewandte Chemie, 2018, 130, 2914-2918.	2.0	3
57	Kinetic Resolution of <i>sec</i>â€Thiols by Enantioselective Oxidation with Rationally Engineered 5â€(Hydroxymethyl)furfural Oxidase. Angewandte Chemie - International Edition, 2018, 57, 2864-2868.	13.8	15
58	Same Substrate, Many Reactions: Oxygen Activation in Flavoenzymes. Chemical Reviews, 2018, 118, 1742-1769.	47.7	306
59	Exploring the Substrate Scope of Baeyerâ€“Villiger Monooxygenases with Branched Lactones as Entry towards Polyesters. ChemBioChem, 2018, 19, 354-360.	2.6	12
60	Exploring PTDHâ€“P450BM3 Variants for the Synthesis of Drug Metabolites. ChemBioChem, 2018, 19, 326-337.	2.6	14
61	Reconstructing the evolutionary history of F420-dependent dehydrogenases. Scientific Reports, 2018, 8, 17571.	3.3	18
62	Structure-Based Engineering of <i>Phanerochaete chrysosporium</i> Alcohol Oxidase for Enhanced Oxidative Power toward Glycerol. Biochemistry, 2018, 57, 6209-6218.	2.5	25
63	Side-Chain Pruning Has Limited Impact on Substrate Preference in a Promiscuous Enzyme. ACS Catalysis, 2018, 8, 11648-11656.	11.2	15
64	Enantio- and regioselective <i>ene</i>-reductions using F₄₂₀H₂-dependent enzymes. Chemical Communications, 2018, 54, 11208-11211.	4.1	29
65	The Biocatalytic Synthesis of Syringaresinol from 2,6-Dimethoxy-4-allylphenol in One-Pot Using a Tailored Oxidase/Peroxidase System. ACS Catalysis, 2018, 8, 5549-5552.	11.2	20
66	Experimental Protocols for Generating Focused Mutant Libraries and Screening for Thermostable Proteins. Methods in Enzymology, 2018, 608, 151-187.	1.0	11
67	Mining the Genome of Streptomyces leeuwenhoekii: Two New Type I Baeyerâ€“Villiger Monooxygenases From Atacama Desert. Frontiers in Microbiology, 2018, 9, 1609.	3.5	15
68	Overriding Traditional Electronic Effects in Biocatalytic Baeyerâ€“Villiger Reactions by Directed Evolution. Journal of the American Chemical Society, 2018, 140, 10464-10472.	13.7	43
69	Molecular Basis for Converting (2S)-Methylsuccinyl-CoA Dehydrogenase into an Oxidase. Molecules, 2018, 23, 68.	3.8	10
70	Characterization of Two VAO-Type Flavoprotein Oxidases from Myceliophthora thermophila. Molecules, 2018, 23, 111.	3.8	7
71	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
72	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.	9.0	63

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73	Isolation and characterization of a thermostable F420:NADPH oxidoreductase from Thermobifida fusca. Journal of Biological Chemistry, 2017, 292, 10123-10130.	3.4	17
74	Nicotinamide Adenine Dinucleotideâ€Dependent Redoxâ€Neutral Convergent Cascade for Lactonizations with Type II Flavinâ€Containing Monooxygenase. Advanced Synthesis and Catalysis, 2017, 359, 2142-2148.	4.3	27
75	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.	7.1	117
76	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.	3.6	28
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.	13.7	54
78	Engineering Cyclohexanone Monooxygenase for the Production of Methyl Propanoate. ACS Chemical Biology, 2017, 12, 291-299.	3.4	24
79	P450BM3 fused to phosphite dehydrogenase allows phosphite-driven selective oxidations. Applied Microbiology and Biotechnology, 2017, 101, 2319-2331.	3.6	26
80	Coupled reactions by coupled enzymes: alcohol to lactone cascade with alcohol dehydrogenaseâ€"cyclohexanone monooxygenase fusions. Applied Microbiology and Biotechnology, 2017, 101, 7557-7565.	3.6	55
81	Creating Oxidaseâ€"Peroxidase Fusion Enzymes as a Toolbox for Cascade Reactions. ChemBioChem, 2017, 18, 2226-2230.	2.6	24
82	Two tyrosine residues, Tyr-108 and Tyr-503, are responsible for the deprotonation of phenolic substrates in vanillyl-alcohol oxidase. Journal of Biological Chemistry, 2017, 292, 14668-14679.	3.4	14
83	A Biocatalytic Oneâ€Pot Approach for the Preparation of Lignin Oligomers Using an Oxidase/Peroxidase Cascade Enzyme System. Advanced Synthesis and Catalysis, 2017, 359, 3354-3361.	4.3	18
84	Baeyerâ€"Villiger Monooxygenase FMO5 as Entry Point in Drug Metabolism. ACS Chemical Biology, 2017, 12, 2379-2387.	3.4	32
85	Manipulating the stereoselectivity of the thermostable Baeyerâ€"Villiger monooxygenase TmCHMO by directed evolution. Organic and Biomolecular Chemistry, 2017, 15, 9824-9829.	2.8	30
86	The VAO/PCMH flavoprotein family. Archives of Biochemistry and Biophysics, 2017, 632, 104-117.	3.0	40
87	Conversion of Furans by Baeyer-Villiger Monooxygenases. Catalysts, 2017, 7, 179.	3.5	18
88	Expanding the Repertoire of Flavoenzyme-Based Biocatalysis. , 2017, , 119-133.		1
89	Polycyclic Ketone Monooxygenase (PockeMO): A Robust Biocatalyst for the Synthesis of Optically Active Sulfoxides. Catalysts, 2017, 7, 288.	3.5	22
90	Rational Engineering of a Flavoprotein Oxidase for Improved Direct Oxidation of Alcohols to Carboxylic Acids. Molecules, 2017, 22, 2205.	3.8	9

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91	Special issue OxiZymes 2016. Journal of Molecular Catalysis B: Enzymatic, 2016, 134, 273.	1.8	0
92	Microbial Flavoprotein Monooxygenases as Mimics of Mammalian Flavin-Containing Monooxygenases for the Enantioselective Preparation of Drug Metabolites. Drug Metabolism and Disposition, 2016, 44, 1270-1276.	3.3	14
93	High overexpression of dye decolorizing peroxidase TfuDyP leads to the incorporation of heme precursor protoporphyrin IX. Journal of Molecular Catalysis B: Enzymatic, 2016, 134, 372-377.	1.8	10
94	Discovery of a Xylooligosaccharide Oxidase from Myceliophthora thermophila C1. Journal of Biological Chemistry, 2016, 291, 23709-23718.	3.4	26
95	Bacterial enzymes involved in lignin degradation. Journal of Biotechnology, 2016, 236, 110-119.	3.8	411
96	Characterization and Crystal Structure of a Robust Cyclohexanone Monooxygenase. Angewandte Chemie, 2016, 128, 16084-16087.	2.0	26
97	Characterization and Crystal Structure of a Robust Cyclohexanone Monooxygenase. Angewandte Chemie - International Edition, 2016, 55, 15852-15855.	13.8	92
98	Biocatalytic Properties and Structural Analysis of Eugenol Oxidase from <i>Rhodococcus jostii</i> RHA1: A Versatile Oxidative Biocatalyst. ChemBioChem, 2016, 17, 1359-1366.	2.6	29
99	Characterization of a chitinase from the cellulolytic actinomycete Thermobifida fusca. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 1253-1259.	2.3	21
100	Exploring the biocatalytic potential of a DyP-type peroxidase by profiling the substrate acceptance of Thermobifida fusca DyP peroxidase. Tetrahedron, 2016, 72, 7276-7281.	1.9	35
101	Identification of a novel oxygenase capable of regiospecific hydroxylation of d-limonene into (+)-trans-carveol. Tetrahedron, 2016, 72, 7263-7267.	1.9	16
102	Covalent immobilization of a flavoprotein monooxygenase via its flavin cofactor. Enzyme and Microbial Technology, 2016, 82, 138-143.	3.2	20
103	Expanding the substrate scope of chitooligosaccharide oxidase from <i>Fusarium graminearum</i> by structureâ€inspired mutagenesis. Biotechnology and Bioengineering, 2015, 112, 1074-1080.	3.3	14
104	Structure-Based Enzyme Tailoring of 5-Hydroxymethylfurfural Oxidase. ACS Catalysis, 2015, 5, 1833-1839.	11.2	91
105	Lyophilization conditions for the storage of monooxygenases. Journal of Biotechnology, 2015, 203, 41-44.	3.8	11
106	Not so monofunctionalâ€"a case of thermostable Thermobifida fusca catalase with peroxidase activity. Applied Microbiology and Biotechnology, 2015, 99, 2225-2232.	3.6	20
107	Catalases as biocatalysts in technical applications: current state and perspectives. Applied Microbiology and Biotechnology, 2015, 99, 3351-3357.	3.6	46
108	Finding the Switch: Turning a Baeyerâ€"Villiger Monooxygenase into a NADPH Oxidase. Journal of the American Chemical Society, 2014, 136, 16966-16969.	13.7	41

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109	Insights in the kinetic mechanism of the eukaryotic Baeyerâ€“Villiger monooxygenase BVMOAf1 from Aspergillus fumigatus Af293. Biochimie, 2014, 107, 270-276.	2.6	7
110	Stabilization of cyclohexanone monooxygenase by a computationally designed disulfide bond spanning only one residue. FEBS Open Bio, 2014, 4, 168-174.	2.3	59
111	Extending the substrate scope of a Baeyerâ€“Villiger monooxygenase by multiple-site mutagenesis. Applied Microbiology and Biotechnology, 2014, 98, 4009-4020.	3.6	35
112	Cascade Reactions in Multicompartmentalized Polymersomes. Angewandte Chemie - International Edition, 2014, 53, 146-150.	13.8	463
113	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.	3.7	34
114	DyP-type peroxidases: a promising and versatile class of enzymes. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 1-7.	3.0	166
115	The Oxidation of Thiols by Flavoprotein Oxidases: a Biocatalytic Route to Reactive Thiocarbonyls. Angewandte Chemie - International Edition, 2014, 53, 13206-13209.	13.8	20
116	Kinetic mechanism of putrescine oxidase from <i><scp>R</scp>hodococcusÂerythropolis</i>. FEBS Journal, 2014, 281, 4384-4393.	4.7	12
117	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.	2.8	155
118	A fast, sensitive and easy colorimetric assay for chitinase and cellulase activity detection. Biotechnology for Biofuels, 2014, 7, 37.	6.2	59
119	The taming of oxygen: biocatalytic oxyfunctionalisations. Chemical Communications, 2014, 50, 13180-13200.	4.1	99
120	Synthesis of methyl propanoate by Baeyerâ€“Villiger monooxygenases. Chemical Communications, 2014, 50, 13034-13036.	4.1	19
121	Discovery and Characterization of a 5-Hydroxymethylfurfural Oxidase from Methylovorus sp. Strain MP688. Applied and Environmental Microbiology, 2014, 80, 1082-1090.	3.1	122
122	Enzymeâ€Catalyzed Oxidation of 5â€Hydroxymethylfurfural to Furanâ€2,5â€dicarboxylic Acid. Angewandte Chemie - International Edition, 2014, 53, 6515-6518.	13.8	259
123	Turning a monocovalent flavoprotein into a bicovalent flavoprotein by structure-inspired mutagenesis. Bioorganic and Medicinal Chemistry, 2014, 22, 5621-5627.	3.0	9
124	Cloning, overexpression and biocatalytic exploration of a novel Baeyer-Villiger monooxygenase from Aspergillus fumigatus Af293. AMB Express, 2013, 3, 33.	3.0	32
125	Discovery of Baeyerâ€“Villiger monooxygenases from photosynthetic eukaryotes. Journal of Molecular Catalysis B: Enzymatic, 2013, 98, 145-154.	1.8	24
126	Flavoprotein oxidases: classification and applications. Applied Microbiology and Biotechnology, 2013, 97, 5177-5188.	3.6	123

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127	Recent Developments in Flavinâ€based Catalysis. ChemCatChem, 2013, 5, 403-415.	3.7	100
128	Expanding the biocatalytic toolbox of flavoprotein monooxygenases from Rhodococcus jostii RHA1. Journal of Molecular Catalysis B: Enzymatic, 2013, 88, 20-25.	1.8	47
129	Beyond the Protein Matrix: Probing Cofactor Variants in a Baeyerâ€“Villiger Oxygenation Reaction. ACS Catalysis, 2013, 3, 3058-3062.	11.2	10
130	A Generic, Whole-Cellâ€“Based Screening Method for Baeyer-Villiger Monooxygenases. Journal of Biomolecular Screening, 2013, 18, 678-687.	2.6	8
131	Precursor of ether phospholipids is synthesized by a flavoenzyme through covalent catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18791-18796.	7.1	15
132	Applications of Flavoprotein Oxidases in Organic Synthesis: Novel Reactivities that Go Beyond Amine and Alcohol Oxidations. Current Organic Chemistry, 2012, 16, 2542-2550.	1.6	15
133	Exploring the Structural Basis of Substrate Preferences in Baeyer-Villiger Monooxygenases. Journal of Biological Chemistry, 2012, 287, 22626-22634.	3.4	44
134	Exploiting the enantioselectivity of Baeyer-Villiger monooxygenases via boron oxidation. Tetrahedron: Asymmetry, 2012, 23, 703-708.	1.8	20
135	A stepwise approach for the reproducible optimization of PAMO expression in Escherichia coli for whole-cell biocatalysis. BMC Biotechnology, 2012, 12, 31.	3.3	9
136	Chemoenzymatic approaches to obtain chiral-centered selenium compounds. Tetrahedron, 2012, 68, 10431-10436.	1.9	21
137	The enigmatic reaction of flavins with oxygen. Trends in Biochemical Sciences, 2012, 37, 373-380.	7.5	193
138	Expanding the set of rhodococcal Baeyerâ€“Villiger monooxygenases by high-throughput cloning, expression and substrate screening. Applied Microbiology and Biotechnology, 2012, 95, 1479-1489.	3.6	66
139	Blending Baeyerâ€“Villiger monooxygenases: using a robust BVMO as a scaffold for creating chimeric enzymes with novel catalytic properties. Chemical Communications, 2012, 48, 3288.	4.1	61
140	DyP-type Peroxidases: A Promising and Versatile Class of Enzymes. Enzyme Engineering, 2012, 01, .	0.3	5
141	Hot or not? Discovery and characterization of a thermostable alditol oxidase from Acidothermus cellulolyticus 11B. Applied Microbiology and Biotechnology, 2012, 95, 389-403.	3.6	20
142	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.	4.2	162
143	Functionalization of Oxidases with Peroxidase Activity Creates Oxiperoxidases: A New Breed of Hybrid Enzyme Capable of Cascade Chemistry. ChemBioChem, 2012, 13, 252-258.	2.6	4
144	Turning a riboflavin-binding protein into a self-sufficient monooxygenase by cofactor redesign. Chemical Communications, 2011, 47, 11050.	4.1	36

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145	Cofactor regeneration in polymersome nanoreactors: enzymatically catalysed Baeyerâ€“Villiger reactions. Journal of Materials Chemistry, 2011, 21, 18923.	6.7	54
146	Structure-Based Redesign of Cofactor Binding in Putrescine Oxidase. Biochemistry, 2011, 50, 4209-4217.	2.5	18
147	Exploring the biocatalytic scope of a bacterial flavin-containing monooxygenase. Organic and Biomolecular Chemistry, 2011, 9, 1337.	2.8	50
148	Decorating microbes: surface display of proteins on Escherichia coli. Trends in Biotechnology, 2011, 29, 79-86.	9.3	198
149	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
150	Selective Oxidations of Organoboron Compounds Catalyzed by Baeyerâ€“Villiger Monooxygenases. Advanced Synthesis and Catalysis, 2011, 353, 2169-2173.	4.3	24
151	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.	13.8	35
152	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.	3.3	44
153	Mapping the Substrate Binding Site of Phenylacetone Monooxygenase from Thermobifida fusca by Mutational Analysis. Applied and Environmental Microbiology, 2011, 77, 5730-5738.	3.1	42
154	Snapshots of Enzymatic Baeyer-Villiger Catalysis. Journal of Biological Chemistry, 2011, 286, 29284-29291.	3.4	116
155	Oxidoreductases Working Together: Concurrent Obtaining of Valuable Derivatives by Employing the PIKAT Method. ChemCatChem, 2010, 2, 946-949.	3.7	42
156	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.	3.6	168
157	Investigating the coenzyme specificity of phenylacetone monooxygenase from Thermobifida fusca. Applied Microbiology and Biotechnology, 2010, 88, 1135-1143.	3.6	36
158	Enzymatic Synthesis of Novel Chiral Sulfoxides Employing Baeyerâ€“Villiger Monooxygenases. European Journal of Organic Chemistry, 2010, 2010, 6409-6416.	2.4	62
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