Jian-He Xu

List of Publications by Year
in descending order

154 papers	4,049 citations	117625 34 h-index	175258 52 g-index
165 all docs	165 docs citations	165 times ranked	2831 citing authors

#	Article	IF	Citations
1	Biocatalytic ketone reduction: A green and efficient access to enantiopure alcohols. Biotechnology Advances, 2012, 30, 1279-1288.	11.7	201
2	New opportunities for biocatalysis: driving the synthesis of chiral chemicals. Current Opinion in Biotechnology, 2011, 22, 784-792.	6.6	153
3	Asymmetric Amination of Secondary Alcohols by using a Redoxâ€Neutral Twoâ€Enzyme Cascade. ChemCatChem, 2015, 7, 3838-3841.	3.7	108
4	Reshaping an Enzyme Binding Pocket for Enhanced and Inverted Stereoselectivity: Use of Smallest Amino Acid Alphabets in Directed Evolution. Angewandte Chemie - International Edition, 2015, 54, 12410-12415.	13.8	103
5	Reshaping the Active Pocket of Amine Dehydrogenases for Asymmetric Synthesis of Bulky Aliphatic Amines. ACS Catalysis, 2018, 8, 2622-2628.	11.2	100
6	Development of an Engineered Ketoreductase with Simultaneously Improved Thermostability and Activity for Making a Bulky Atorvastatin Precursor. ACS Catalysis, 2019, 9, 147-153.	11.2	93
7	Wholeâ€Cellâ€Catalyzed Multiple Regioâ€and Stereoselective Functionalizations in Cascade Reactions Enabled by Directed Evolution. Angewandte Chemie - International Edition, 2016, 55, 12026-12029.	13.8	79
8	Engineering of an epoxide hydrolase for efficient bioresolution of bulky pharmaco substrates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15717-15722.	7.1	76
9	Preparation of Structurally Diverse Chiral Alcohols by Engineering Ketoreductase CgKR1. ACS Catalysis, 2017, 7, 7174-7181.	11.2	74
10	Newly Identified Thermostable Esterase from Sulfobacillus acidophilus: Properties and Performance in Phthalate Ester Degradation. Applied and Environmental Microbiology, 2014, 80, 6870-6878.	3.1	71
11	Efficient Synthesis of a Chiral Precursor for Angiotensin-Converting Enzyme (ACE) Inhibitors in High Space-Time Yield by a New Reductase without External Cofactors. Organic Letters, 2012, 14, 1982-1985.	4.6	68
12	Efficient Synthesis of Chiral Indolines using an Imine Reductase from Paenibacillus lactis. Advanced Synthesis and Catalysis, 2015, 357, 1692-1696.	4.3	65
13	Enhanced limonene production by optimizing the expression of limonene biosynthesis and MEP pathway genes in E. coli. Bioresources and Bioprocessing, 2014, 1, .	4.2	61
14	Stereospecific Reduction of Methyl oâ€Chlorobenzoylformate at 300â€...gâ‹…L^{â^'1} without Additional Cofactor using a Carbonyl Reductase Mined from Candida glabrata. Advanced Synthesis and Catalysis, 2012, 354, 1765-1772.	4.3	59
15	Unusually Broad Substrate Profile of Selfâ€Sufficient Cytochrome P450 Monooxygenase CYP116B4 from Labrenzia aggregata. ChemBioChem, 2014, 15, 2443-2449.	2.6	57
16	Identification of an Imine Reductase for Asymmetric Reduction of Bulky Dihydroisoquinolines. Organic Letters, 2017, 19, 3151-3154.	4.6	56
17	Efficient Reduction of Ethyl 2â€Oxoâ€4â€phenylbutyrate at 620â€...gâ‹…L^{â^'1} by a Bacterial Reductase with Broad Substrate Spectrum. Advanced Synthesis and Catalysis, 2011, 353, 1213-1217.	4.3	54
18	Enantioselective Synthesis of Chiral Vicinal Amino Alcohols Using Amine Dehydrogenases. ACS Catalysis, 2019, 9, 11813-11818.	11.2	54

#	Article	IF	Citations
19	Enzymatic Production of lâ€Menthol by a High Substrate Concentration Tolerable Esterase from Newly Isolated Bacillus subtilis ECU0554. Advanced Synthesis and Catalysis, 2009, 351, 405-414.	4.3	53
20	Highly stereoselective reduction of prochiral ketones by a bacterial reductase coupled with cofactor regeneration. Organic and Biomolecular Chemistry, 2011, 9, 5463.	2.8	50
21	A Smart Library of Epoxide Hydrolase Variants and the Top Hits for Synthesis of (S)â€Î²â€Blocker Precursors. Angewandte Chemie - International Edition, 2014, 53, 6641-6644.	13.8	50
22	Isolation of Rhodococcus sp. Strain ECU0066, a New Sulfide Monooxygenase-Producing Strain for Asymmetric Sulfoxidation. Applied and Environmental Microbiology, 2009, 75, 551-556.	3.1	47
23	An Unusual (R)â€Selective Epoxide Hydrolase with High Activity for Facile Preparation of Enantiopure Glycidyl Ethers. Advanced Synthesis and Catalysis, 2011, 353, 1510-1518.	4.3	46
24	Switching Cofactor Dependence of 7Î²-Hydroxysteroid Dehydrogenase for Cost-Effective Production of Ursodeoxycholic Acid. ACS Catalysis, 2019, 9, 466-473.	11.2	46
25	A novel d-mandelate dehydrogenase used in three-enzyme cascade reaction for highly efficient synthesis of non-natural chiral amino acids. Journal of Biotechnology, 2015, 195, 67-71.	3.8	45
26	Sequence analysis and heterologous expression of a new cytochrome P450 monooxygenase from Rhodococcus sp. for asymmetric sulfoxidation. Applied Microbiology and Biotechnology, 2010, 85, 615-624.	3.6	44
27	Highly efficient synthesis of ethyl (S)-4-chloro-3-hydroxybutanoate and its derivatives by a robust NADH-dependent reductase from E. coli CCZU-K14. Bioresource Technology, 2014, 161, 461-464.	9.6	44
28	Engineering 7Î²-Hydroxysteroid Dehydrogenase for Enhanced Ursodeoxycholic Acid Production by Multiobjective Directed Evolution. Journal of Agricultural and Food Chemistry, 2017, 65, 1178-1185.	5.2	43
29	Engineering of Cyclohexanone Monooxygenase for the Enantioselective Synthesis of (S)-Omeprazole. ACS Sustainable Chemistry and Engineering, 2019, 7, 7218-7226.	6.7	42
30	Asymmetric ring opening of racemic epoxides for enantioselective synthesis of (S)-Î²-amino alcohols by a cofactor self-sufficient cascade biocatalysis system. Catalysis Science and Technology, 2019, 9, 70-74.	4.1	39
31	Catalytic conversion of corncob to furfuryl alcohol in tandem reaction with tin-loaded sulfonated zeolite and NADPH-dependent reductase biocatalyst. Bioresource Technology, 2021, 320, 124267.	9.6	38
32	Efficient Synthesis of (R)â€2â€Chloroâ€1â€(2,4â€dichlorophenyl)ethanol with a Ketoreductase from Scheffersomyces stipitis CBS 6045. Advanced Synthesis and Catalysis, 2017, 359, 426-431.	4.3	37
33	Development of an engineered thermostable amine dehydrogenase for the synthesis of structurally diverse chiral amines. Catalysis Science and Technology, 2020, 10, 2353-2358.	4.1	37
34	Increased Catalyst Productivity in Î±-Hydroxy Acids Resolution by Esterase Mutation and Substrate Modification. ACS Catalysis, 2014, 4, 1026-1031.	11.2	36
35	Bioamination of alkane with ammonium by an artificially designed multienzyme cascade. Metabolic Engineering, 2018, 47, 184-189.	7.0	35
36	Regioselectivity Engineering of Epoxide Hydrolase: Near-Perfect Enantioconvergence through a Single Site Mutation. ACS Catalysis, 2018, 8, 8314-8317.	11.2	35

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37	Significant enhancement of lipase enantioselectivity toward (S)- Ketoprofen ester at pH 2. Biotechnology Letters, 1999, 21, 143-146.	2.2	34
38	Efficient preparation of (R)-?-monobenzoyl glycerol by lipase catalyzed asymmetric esterification: Optimization and operation in packed bed reactor. Biotechnology and Bioengineering, 2001, 73, 493-499.	3.3	33
39	Enantioselective synthesis of enantiopure Î²-amino alcohols via kinetic resolution and asymmetric reductive amination by a robust transaminase from Mycobacterium vanbaalenii. Journal of Biotechnology, 2019, 290, 24-32.	3.8	33
40	Enzymatic Preparation of the Chiral (S)-Sulfoxide Drug Esomeprazole at Pilot-Scale Levels. Organic Process Research and Development, 2020, 24, 1124-1130.	2.7	33
41	Continuous Production of Ursodeoxycholic Acid by Using Two Cascade Reactors with Coâ€immobilized Enzymes. ChemBioChem, 2018, 19, 347-353.	2.6	32
42	Rational Engineering of Formate Dehydrogenase Substrate/Cofactor Affinity for Better Performance in NADPH Regeneration. Applied Biochemistry and Biotechnology, 2020, 192, 530-543.	2.9	32
43	A Novel (R)â€mine Reductase from Paenibacillus lactis for Asymmetric Reduction of 3â€‰Hâ€ndoles. ChemCatChem, 2016, 8, 724-727.	3.7	30
44	Combinatorial evolution of phosphotriesterase toward a robust malathion degrader by hierarchical iteration mutagenesis. Biotechnology and Bioengineering, 2016, 113, 2350-2357.	3.3	30
45	One-Pot Synthesis of Phenylglyoxylic Acid from Racemic Mandelic Acids via Cascade Biocatalysis. Journal of Agricultural and Food Chemistry, 2019, 67, 2946-2953.	5.2	30
46	Enantioselective bioreductive preparation of chiral halohydrins employing two newly identified stereocomplementary reductases. RSC Advances, 2015, 5, 22703-22711.	3.6	28
47	Burkholderia jiangsuensis sp. nov., a methyl parathion degrading bacterium, isolated from methyl parathion contaminated soil. International Journal of Systematic and Evolutionary Microbiology, 2014, 64, 3247-3253.	1.7	27
48	Altering the Substrate Specificity of Reductase CgKR1 from Candida glabrata by Protein Engineering for Bioreduction of Aromatic Î±â€Keto Esters. Advanced Synthesis and Catalysis, 2014, 356, 1943-1948.	4.3	27
49	Efficient synthesis of a statin precursor in high space-time yield by a new aldehyde-tolerant aldolase identified from Lactobacillus brevis. Catalysis Science and Technology, 2015, 5, 4048-4054.	4.1	27
50	Engineering Streptomyces coelicolor Carbonyl Reductase for Efficient Atorvastatin Precursor Synthesis. Applied and Environmental Microbiology, 2017, 83, .	3.1	27
51	Enhancing transglutaminase production of Streptomyces mobaraensis by iterative mutagenesis breeding with atmospheric and room-temperature plasma (ARTP). Bioresources and Bioprocessing, 2017, 4, 37.	4.2	27
52	Evolution of Glucose Dehydrogenase for Cofactor Regeneration in Bioredox Processes with Denaturing Agents. ChemBioChem, 2020, 21, 2680-2688.	2.6	26
53	Molecular Dynamics Investigation of the Substrate Binding Mechanism in Carboxylesterase. Biochemistry, 2015, 54, 1841-1848.	2.5	25
54	Discovery of Two Native Baeyer-Villiger Monooxygenases for Asymmetric Synthesis of Bulky Chiral Sulfoxides. Applied and Environmental Microbiology, 2018, 84, .	3.1	25

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55	Stereocomplementary Synthesis of Pharmaceutically Relevant Chiral 2-Aryl-Substituted Pyrrolidines Using Imine Reductases. Organic Letters, 2020, 22, 3367-3372.	4.6	25
56	Confining Enzyme Clusters in Bacteriophage P22 Enhances Cofactor Recycling and Stereoselectivity for Chiral Alcohol Synthesis. ACS Catalysis, 2021, 11, 10487-10493.	11.2	25
57	Identification of a Robust Carbonyl Reductase for Diastereoselectively Buildingsyn-3,5-Dihydroxy Hexanoate: a Bulky Side Chain of Atorvastatin. Organic Process Research and Development, 2017, 21, 1349-1354.	2.7	24
58	Biosynthesis of Phenylglyoxylic Acid by LhDMDH, a Novel <scp>d</scp>-Mandelate Dehydrogenase with High Catalytic Activity. Journal of Agricultural and Food Chemistry, 2018, 66, 2805-2811.	5.2	24
59	Reductive Amination of Biobased Levulinic Acid to Unnatural Chiral Î³-Amino Acid Using an Engineered Amine Dehydrogenase. ACS Sustainable Chemistry and Engineering, 2020, 8, 17054-17061.	6.7	24
60	Efficient production of diltiazem chiral intermediate using immobilized lipase from Serratia marcescens. Biotechnology and Bioprocess Engineering, 2010, 15, 199-207.	2.6	23
61	Optimization and Scale-up of a Bioreduction Process for Preparation of Ethyl (S)-4-Chloro-3-hydroxybutanoate. Organic Process Research and Development, 2014, 18, 739-743.	2.7	23
62	Identification of an Îµâ€Keto Ester Reductase for the Efficient Synthesis of an (R)â€Î±â€Lipoic Acid Precursor. Advanced Synthesis and Catalysis, 2015, 357, 1697-1702.	4.3	23
63	Reshaping an Enzyme Binding Pocket for Enhanced and Inverted Stereoselectivity: Use of Smallest Amino Acid Alphabets in Directed Evolution. Angewandte Chemie, 2015, 127, 12587-12592.	2.0	23
64	Crystal structures of Pseudomonas putida esterase reveal the functional role of residues 187 and 287 in substrate binding and chiral recognition. Biochemical and Biophysical Research Communications, 2014, 446, 1145-1150.	2.1	22
65	One Pot Asymmetric Synthesis of (R)â€Phenylglycinol from Racemic Styrene Oxide via Cascade Biocatalysis. ChemCatChem, 2019, 11, 3802-3807.	3.7	22
66	An Ammonium-Formate-Driven Trienzymatic Cascade for Ï‰-Transaminase-Catalyzed (R)-Selective Amination. Journal of Organic Chemistry, 2019, 84, 14987-14993.	3.2	22
67	Efficient expression of novel glutamate decarboxylases and high level production of Î³-aminobutyric acid catalyzed by engineered Escherichia coli. International Journal of Biological Macromolecules, 2020, 160, 372-379.	7.5	22
68	Asymmetric Reductive Amination of Structurally Diverse Ketones with Ammonia Using a Spectrum-Extended Amine Dehydrogenase. ACS Catalysis, 2021, 11, 14274-14283.	11.2	22
69	Accelerated directed evolution of dye-decolorizing peroxidase using a bacterial extracellular protein secretion system (BENNY). Bioresources and Bioprocessing, 2019, 6, 20.	4.2	21
70	Significantly improved thermostability of a reductase CgKR1 from Candida glabrata with a key mutation at Asp 138 for enhancing bioreduction of aromatic Î±-keto esters. Journal of Biotechnology, 2015, 203, 54-61.	3.8	20
71	Hydroxynitrile Lyase Isozymes from Prunus communis: Identification, Characterization and Synthetic Applications. Advanced Synthesis and Catalysis, 2017, 359, 1185-1193.	4.3	20
72	Efficient Synthesis of 12â€Oxochenodeoxycholic Acid Using a 12Î±â€Hydroxysteroid Dehydrogenase from Rhodococcus ruber. Advanced Synthesis and Catalysis, 2019, 361, 4661-4668.	4.3	20

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73	Structure-Guided Tuning of a Hydroxynitrile Lyase to Accept Rigid Pharmaco Aldehydes. ACS Catalysis, 2020, 10, 5757-5763.	11.2	20
74	Evolution of a Catalytic Mechanism. Molecular Biology and Evolution, 2016, 33, 971-979.	8.9	19
75	Improved expression of recombinant cytochrome P450 monooxygenase in Escherichia coli for asymmetric oxidation of sulfides. Bioprocess and Biosystems Engineering, 2010, 33, 1043-1049.	3.4	18
76	An ene reductase from Clavispora lusitaniae for asymmetric reduction of activated alkenes. Enzyme and Microbial Technology, 2014, 56, 40-45.	3.2	18
77	Efficient Degradation of Malathion in the Presence of Detergents Using an Engineered Organophosphorus Hydrolase Highly Expressed by Pichia pastoris without Methanol Induction. Journal of Agricultural and Food Chemistry, 2017, 65, 9094-9100.	5.2	18
78	Engineering P450_{LaMO}stereospecificity and product selectivity for selective Câ€“H oxidation of tetralin-like alkylbenzenes. Catalysis Science and Technology, 2018, 8, 4638-4644.	4.1	17
79	High level and enantioselective production of L-phenylglycine from racemic mandelic acid by engineered Escherichia coli using response surface methodology. Enzyme and Microbial Technology, 2020, 136, 109513.	3.2	17
80	A new high-energy density hydrogen carrier-carbohydrate-might be better than methanol. International Journal of Energy Research, 2013, 37, 769-779.	4.5	16
81	Substrate channel evolution of an esterase for the synthesis of cilastatin. Catalysis Science and Technology, 2015, 5, 2622-2629.	4.1	16
82	Effective biosynthesis of ethyl (R)-4-chloro-3-hydroxybutanoate by supplementation of l-glutamine, d-xylose and Î²-cyclodextrin in n-butyl acetateâ€“water media. Journal of Biotechnology, 2015, 203, 62-67.	3.8	16
83	Synthetic Biomimetic Coenzymes and Alcohol Dehydrogenases for Asymmetric Catalysis. Catalysts, 2019, 9, 207.	3.5	16
84	Design of a self-sufficient hydride-shuttling cascade for concurrent bioproduction of 7,12-dioxolithocholate and<scp>l</scp>-tert-leucine. Green Chemistry, 2021, 23, 4125-4133.	9.0	16
85	Enzymatic synthesis of high-titer nicotinamide mononucleotide with a new nicotinamide riboside kinase and an efficient ATP regeneration system. Bioresources and Bioprocessing, 2022, 9, .	4.2	16
86	Facile Synthesis of Enantiopure 4â€Substituted 2â€Hydroxyâ€4â€•butyrolactones using a Robust Fusarium Lactonase. Advanced Synthesis and Catalysis, 2009, 351, 2959-2966.	4.3	15
87	Cloning and Characterization of a Novel Esterase from Rhodococcus sp. for Highly Enantioselective Synthesis of a Chiral Cilastatin Precursor. Applied and Environmental Microbiology, 2014, 80, 7348-7355.	3.1	15
88	Efficient production of l-menthol in a two-phase system with SDS using an immobilized Bacillus subtilis esterase. Bioresources and Bioprocessing, 2014, 1, .	4.2	14
89	Exploitation of coldâ€active cephalosporin C acylase by computerâ€aided directed evolution and its potential application in lowâ€temperature biosynthesis of 7â€aminocephalosporanic acid. Journal of Chemical Technology and Biotechnology, 2018, 93, 2925-2930.	3.2	14
90	Engineering Isopropanol Dehydrogenase for Efficient Regeneration of Nicotinamide Cofactors. Applied and Environmental Microbiology, 2022, 88, e0034122.	3.1	14

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91	Cross-linked enzyme-polymer conjugates with excellent stability and detergent-enhanced activity for efficient organophosphate degradation. Bioresources and Bioprocessing, 2018, 5, .	4.2	13
92	Direct Access to Mediumâ€Chain Î±,Ï‰â€Dicarboxylic Acids by Using a Baeyerâ€“Villiger Monooxygenase of Abnormal Regioselectivity. ChemBioChem, 2018, 19, 2049-2054.	2.6	13
93	Coevolution of the Activity and Thermostability of an Ïµâ€Keto Ester Reductase for Better Synthesis of an (R)â€Î±â€Lipoic Acid Precursor. ChemBioChem, 2020, 21, 1341-1346.	2.6	13
94	Mining methods and typical structural mechanisms of terpene cyclases. Bioresources and Bioprocessing, 2021, 8, .	4.2	13
95	A PRACTICAL ENZYMATIC METHOD FOR PREPARATION OF (S)-KETOPROFEN WITH A CRUDECANDIDA RUGOSALIPASE. Synthetic Communications, 2001, 31, 3491-3496.	2.1	12
96	Enzymatic production of Cilastatin intermediate via highly enantioselective hydrolysis of methyl (Â±)-2,2-dimethylcyclopropane carboxylate using newly isolated Rhodococcus sp. ECU1013. Applied Microbiology and Biotechnology, 2013, 97, 7659-7667.	3.6	12
97	Identification of key residues in Debaryomyces hansenii carbonyl reductase for highly productive preparation of (S)-aryl halohydrins. Chemical Communications, 2015, 51, 15728-15731.	4.1	12
98	A green-by-design system for efficient bio-oxidation of an unnatural hexapyranose into chiral lactone for building statin side-chains. Catalysis Science and Technology, 2016, 6, 7094-7100.	4.1	12
99	Green access to chiral Vince lactam in a buffer-free aqueous system using a newly identified substrate-tolerant (â^')-Î³-lactamase. Catalysis Science and Technology, 2016, 6, 6305-6310.	4.1	12
100	Enantioselective Bioamination of Aromatic Alkanes Using Ammonia: A Multienzymatic Cascade Approach. ChemCatChem, 2020, 12, 2077-2082.	3.7	12
101	Continuous-Flow Microreactor-Enhanced Clean NAD⁺ Regeneration for Biosynthesis of 7-Oxo-lithocholic Acid. ACS Sustainable Chemistry and Engineering, 2022, 10, 456-463.	6.7	12
102	Strain improvement of Serratia marcescens ECU1010 and medium cost reduction for economic production of lipase. World Journal of Microbiology and Biotechnology, 2010, 26, 537-543.	3.6	11
103	Draft Genome Sequence of Burkholderia sp. Strain MP-1, a Methyl Parathion (MP)-Degrading Bacterium from MP-Contaminated Soil. Genome Announcements, 2014, 2, .	0.8	11
104	Efficient synthesis of an Îµ-hydroxy ester in a spaceâ€“time yield of 1580gLâ^'1dâ^'1 by a newly identified reductase RhCR. Tetrahedron: Asymmetry, 2014, 25, 1501-1504.	1.8	11
105	Efficient biosynthesis of rare natural product scopolamine using E. coli cells expressing a S14P/K97A mutant of hyoscyamine 6Î²-hydroxylase AaH6H. Journal of Biotechnology, 2015, 211, 123-129.	3.8	11
106	Improved efficiency of a novel methyl parathion hydrolase using consensus approach. Enzyme and Microbial Technology, 2016, 93-94, 11-17.	3.2	11
107	Dramatically Improved Performance of an Esterase for Cilastatin Synthesis by Cap Domain Engineering. Industrial & Engineering Chemistry Research, 2016, 55, 12167-12172.	3.7	11
108	Iterative multitarget evolution dramatically enhances the enantioselectivity and catalytic efficiency of Bacillus subtilis esterase towards bulky benzoate esters of <scp>dl</scp>-menthol. Catalysis Science and Technology, 2016, 6, 2370-2376.	4.1	11

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109	One pot simultaneous preparation of both enantiomer of Î²-amino alcohol and vicinal diol via cascade biocatalysis. Biotechnology Letters, 2018, 40, 349-358.	2.2	11
110	Characterization of a new nitrilase from Hoeflea phototrophica DFL-43 for a two-step one-pot synthesis of (S)-Î²-amino acids. Applied Microbiology and Biotechnology, 2018, 102, 6047-6056.	3.6	11
111	Identification two key residues at the intersection of domains of a thioether monooxygenase for improving its sulfoxidation performance. Biotechnology and Bioengineering, 2021, 118, 737-744.	3.3	11
112	ASYMMETRIC REDUCTION OF AROMATIC KETONES BY THE BAKER'S YEAST IN ORGANIC SOLVENT SYSTEMS. Synthetic Communications, 2001, 31, 1521-1526.	2.1	10
113	Thermodynamic Equilibrium Control of the Enzymatic Hydrolysis of Penicillin G in a Cloud Point System without pH Control. Industrial & Engineering Chemistry Research, 2006, 45, 8049-8055.	3.7	10
114	Enzymatic resolution of a chiral chlorohydrin precursor for (R)-Î±-lipoic acid synthesis via lipase catalyzed enantioselective transacylation with vinyl acetate. Journal of Molecular Catalysis B: Enzymatic, 2014, 99, 102-107.	1.8	10
115	Rapid probing of the reactivity of P450 monooxygenases from the CYP116B subfamily using a substrate-based method. New Journal of Chemistry, 2016, 40, 8928-8934.	2.8	10
116	Enhancing the Catalytic Performance of a CYP116B Monooxygenase by Transdomain Combination Mutagenesis. ChemCatChem, 2018, 10, 2962-2968.	3.7	10
117	Protein engineering for bioreduction of carboxylic acids. Journal of Biotechnology, 2019, 303, 53-64.	3.8	10
118	Enzymatic synthesis of 10-oxostearic acid in high space-time yield via cascade reaction of a new oleate hydratase and an alcohol dehydrogenase. Journal of Biotechnology, 2019, 306, 100008.	3.8	10
119	Structure-guided engineering ofPseudomonas dacunhae<scp>l</scp>-aspartate Î²-decarboxylase for<scp>l</scp>-homophenylalanine synthesis. Chemical Communications, 2020, 56, 13876-13879.	4.1	10
120	Efficient Transformation of Linoleic Acid into 13(S)-Hydroxy-9,11-(Z,E)-octadecadienoic Acid Using Putative Lipoxygenases from Cyanobacteria. ACS Sustainable Chemistry and Engineering, 2020, 8, 5558-5565.	6.7	10
121	Comparison of differently modifiedPseudomonascepacialipases in enantioselective preparation of a chiral alcohol for agrochemical use. Biocatalysis and Biotransformation, 2005, 23, 415-422.	2.0	8
122	Efficient Biocatalytic Synthesis of Chiral Chemicals. Advances in Biochemical Engineering/Biotechnology, 2014, 155, 55-106.	1.1	8
123	Rational design of a carboxylic esterase RhEst1 based on computational analysis of substrate binding. Journal of Molecular Graphics and Modelling, 2015, 62, 319-324.	2.4	8
124	A green-by-design bioprocess for<scp>l</scp>-carnosine production integrating enzymatic synthesis with membrane separation. Catalysis Science and Technology, 2019, 9, 5971-5978.	4.1	8
125	Engineering of an oleate hydratase for efficient C10-Functionalization of oleic acid. Biochemical and Biophysical Research Communications, 2021, 537, 64-70.	2.1	8
126	Stepwise and combinatorial optimization of enantioselectivity for the asymmetric hydrolysis of 1-(3â€™,4â€™-methylenedioxyphenyl)ethyl acetate under use of a cold-adapted Bacillus amyloliquefaciens esterase. Biotechnology and Bioprocess Engineering, 2014, 19, 442-448.	2.6	7

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127	Attenuated substrate inhibition of a haloketone reductase via structure-guided loop engineering. Journal of Biotechnology, 2020, 308, 141-147.	3.8	7
128	Engineering Bacillus subtilis Isoleucine Dioxygenase for Efficient Synthesis of (2S,3R,4S)-4-Hydroxyisoleucine. Journal of Agricultural and Food Chemistry, 2020, 68, 14555-14563.	5.2	7
129	Random and combinatorial mutagenesis for improved total production of secretory target protein in Escherichia coli. Scientific Reports, 2021, 11, 5290.	3.3	7
130	Improving the Oxygenation Performance of a Cyanobacterial Lipoxygenase by Oxygen Channel Engineering. ACS Sustainable Chemistry and Engineering, 2021, 9, 12514-12519.	6.7	7
131	NADH-dependent lactate dehydrogenase from Alcaligenes eutrophus H16 reduces 2-oxoadipate to 2-hydroxyadipate. Biotechnology and Bioprocess Engineering, 2014, 19, 1048-1057.	2.6	6
132	Protein Engineering and Homologous Expression of Serratia marcescens Lipase for Efficient Synthesis of a Pharmaceutically Relevant Chiral Epoxyester. Applied Biochemistry and Biotechnology, 2017, 183, 543-554.	2.9	6
133	Protein engineering of aldolase LbDERA for enhanced activity toward real substrates with a high-throughput screening method coupled with an aldehyde dehydrogenase. Biochemical and Biophysical Research Communications, 2017, 482, 159-163.	2.1	6
134	Structural investigation of the enantioselectivity and thermostability mechanisms of esterase RhEst1. Journal of Molecular Graphics and Modelling, 2018, 85, 182-189.	2.4	6
135	Reprogramming Epoxide Hydrolase to Improve Enantioconvergence in Hydrolysis of Styrene Oxide Scaffolds. Advanced Synthesis and Catalysis, 2020, 362, 4699-4706.	4.3	6
136	A Highâ€Throughput Screening Method for the Directed Evolution of Hydroxynitrile Lyase towards Cyanohydrin Synthesis. ChemBioChem, 2021, 22, 996-1000.	2.6	6
137	Discovery and Engineering of a Novel Baeyerâ€Villiger Monooxygenase with High Normal Regioselectivity. ChemBioChem, 2021, 22, 1190-1195.	2.6	6
138	Carving the Active Site of CYP153A7 Monooxygenase for Improving Terminal Hydroxylation of Mediumâ€Chain Fatty Acids. ChemBioChem, 2022, , .	2.6	6
139	Enantioselective Esterification of Racemic Acid Catalyzed by Lipase in a Mixed Solvent Systema. Annals of the New York Academy of Sciences, 1998, 864, 405-408.	3.8	5
140	Separation of enantiopure m-substituted 1-phenylethanols in high space-time yield using Bacillus subtilis esterase. RSC Advances, 2013, 3, 20446.	3.6	5
141	A Single Mutation Increases the Activity and Stability of Pectobacterium carotovorum Nitrile Reductase. ChemBioChem, 2018, 19, 521-526.	2.6	5
142	Efficient Synthesis of Methyl 3-Acetoxypropionate by a Newly Identified Baeyer-Villiger Monooxygenase. Applied and Environmental Microbiology, 2019, 85, .	3.1	5
143	Protein engineering of thioether monooxygenase to improve its thermostability for enzymatic synthesis of chiral sulfoxide. Molecular Catalysis, 2021, 509, 111625.	2.0	5
144	Removing the Obstacle to (â^')â€Menthol Biosynthesis by Building a Microbial Cell Factory of (+)â€cisâ€Isopulegone from (â^')â€Limonene. ChemSusChem, 2022, 15, .	6.8	4

#	Article	IF	Citations
145	Co-Cross-Linked Aggregates of Baeyerâ€“Villiger Monooxygenases and Formate Dehydrogenase for Repeated Use in Asymmetric Biooxidation. Organic Process Research and Development, 2022, 26, 1978-1983.	2.7	4
146	Facile Production of (+)-Aristolochene and (+)-Bicyclogermacrene in Escherichia coli Using Newly Discovered Sesquiterpene Synthases from Penicillium expansum. Journal of Agricultural and Food Chemistry, 2022, 70, 5860-5868.	5.2	4
147	Colorimetric Highâ€Throughput Screening Method for Directed Evolution of Prazole Sulfide Monooxygenase. ChemBioChem, 2022, 23, .	2.6	4
148	Modified ferric hydroxamate spectrophotometry for assaying glycolic acid from the hydrolysis of glycolonitrile by Rhodococcus sp. CCZU10-1. Biotechnology and Bioprocess Engineering, 2011, 16, 901-907.	2.6	3
149	Monoterpene hydroxylation with an artificial self-sufficient P450 utilizing a P450SMO reductase domain for the electron transfer. Journal of Molecular Catalysis B: Enzymatic, 2015, 116, 78-82.	1.8	3
150	High throughput solid-phase screening of bacteria with cyclic amino alcohol deamination activity for enantioselective synthesis of chiral cyclic Î²-amino alcohols. Biotechnology Letters, 2020, 42, 1501-1511.	2.2	3
151	Discovery and Engineering of Bacterial (â˜)â€Isopiperitenol Dehydrogenases to Enhance (â˜)â€Menthol Precursor Biosynthesis. Advanced Synthesis and Catalysis, 2021, 363, 3973-3982.	4.3	3
152	Secretory expression of cyclohexanone monooxygenase by methylotrophic yeast for efficient omeprazole sulfide bio-oxidation. Bioresources and Bioprocessing, 2021, 8, .	4.2	2
153	Environmentally Benign Bioprocesses for Energy and Chemicals Production. Applied Biochemistry and Biotechnology, 2009, 159, 589-590.	2.9	0
154	Enhancing the Catalytic Performance of a CYP116B Monooxygenase by Transdomain Combination Mutagenesis. ChemCatChem, 2018, 10, 2927-2927.	3.7	0