

# Jian-He Xu

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

153  
papers

2,916  
citations

30  
h-index

44  
g-index

165  
ext. papers

3,537  
ext. citations

5.6  
avg. IF

5.54  
L-index

#	Paper	IF	Citations
153	Continuous-Flow Microreactor-Enhanced Clean NAD <sup>+</sup> Regeneration for Biosynthesis of 7-Oxo-lithocholic Acid. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2022</b> , 10, 456-463	8.3	4
152	Engineering Isopropanol Dehydrogenase for Efficient Regeneration of Nicotinamide Cofactors.. <i>Applied and Environmental Microbiology</i> , <b>2022</b> , e0034122	4.8	2
151	Asymmetric Reductive Amination of Structurally Diverse Ketones with Ammonia Using a Spectrum-Extended Amine Dehydrogenase. <i>ACS Catalysis</i> , <b>2021</b> , 11, 14274-14283	13.1	3
150	Random and combinatorial mutagenesis for improved total production of secretory target protein in Escherichia coli. <i>Scientific Reports</i> , <b>2021</b> , 11, 5290	4.9	1
149	Protein engineering of thioether monooxygenase to improve its thermostability for enzymatic synthesis of chiral sulfoxide. <i>Molecular Catalysis</i> , <b>2021</b> , 509, 111625	3.3	0
148	Discovery and Engineering of Bacterial (1S)-Isopiperitenol Dehydrogenases to Enhance (1S)-Menthol Precursor Biosynthesis. <i>Advanced Synthesis and Catalysis</i> , <b>2021</b> , 363, 3973-3982	5.6	1
147	A High-Throughput Screening Method for the Directed Evolution of Hydroxynitrile Lyase towards Cyanohydrin Synthesis. <i>ChemBioChem</i> , <b>2021</b> , 22, 996-1000	3.8	2
146	Identification two key residues at the intersection of domains of a thioether monooxygenase for improving its sulfoxidation performance. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 118, 737-744	4.9	3
145	Catalytic conversion of corncob to furfuryl alcohol in tandem reaction with tin-loaded sulfonated zeolite and NADPH-dependent reductase biocatalyst. <i>Bioresource Technology</i> , <b>2021</b> , 320, 124267	11	15
144	Discovery and Engineering of a Novel Baeyer-Villiger Monooxygenase with High Normal Regioselectivity. <i>ChemBioChem</i> , <b>2021</b> , 22, 1190-1195	3.8	2
143	Engineering of an oleate hydratase for efficient C10-Functionalization of oleic acid. <i>Biochemical and Biophysical Research Communications</i> , <b>2021</b> , 537, 64-70	3.4	4
142	Design of a self-sufficient hydride-shuttling cascade for concurrent bioproduction of 7,12-dioxolithocholate and L-tert-leucine. <i>Green Chemistry</i> , <b>2021</b> , 23, 4125-4133	10	3
141	Confining Enzyme Clusters in Bacteriophage P22 Enhances Cofactor Recycling and Stereoselectivity for Chiral Alcohol Synthesis. <i>ACS Catalysis</i> , <b>2021</b> , 11, 10487-10493	13.1	1
140	Improving the Oxygenation Performance of a Cyanobacterial Lipoyxygenase by Oxygen Channel Engineering. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 12514-12519	8.3	2
139	Reductive Amination of Biobased Levulinic Acid to Unnatural Chiral $\alpha$ -Amino Acid Using an Engineered Amine Dehydrogenase. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 17054-17061	8.3	7
138	Rational Engineering of Formate Dehydrogenase Substrate/Cofactor Affinity for Better Performance in NADPH Regeneration. <i>Applied Biochemistry and Biotechnology</i> , <b>2020</b> , 192, 530-543	3.2	11
137	Efficient Transformation of Linoleic Acid into 13(S)-Hydroxy-9,11-(Z,E)-octadecadienoic Acid Using Putative Lipoyxygenases from Cyanobacteria. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 5558-5565	8.25	3

136	Enantioselective Bioamination of Aromatic Alkanes Using Ammonia: A Multienzymatic Cascade Approach. <i>ChemCatChem</i> , <b>2020</b> , 12, 2077-2082	5.2	6
135	High level and enantioselective production of L-phenylglycine from racemic mandelic acid by engineered <i>Escherichia coli</i> using response surface methodology. <i>Enzyme and Microbial Technology</i> , <b>2020</b> , 136, 109513	3.8	10
134	Structure-Guided Tuning of a Hydroxynitrile Lyase to Accept Rigid Pharmacological Aldehydes. <i>ACS Catalysis</i> , <b>2020</b> , 10, 5757-5763	13.1	11
133	High throughput solid-phase screening of bacteria with cyclic amino alcohol deamination activity for enantioselective synthesis of chiral cyclic $\alpha$ -amino alcohols. <i>Biotechnology Letters</i> , <b>2020</b> , 42, 1501-1511 <sup>3</sup>		1
132	Stereocomplementary Synthesis of Pharmaceutically Relevant Chiral 2-Aryl-Substituted Pyrrolidines Using Imine Reductases. <i>Organic Letters</i> , <b>2020</b> , 22, 3367-3372	6.2	12
131	Evolution of Glucose Dehydrogenase for Cofactor Regeneration in Bioredox Processes with Denaturing Agents. <i>ChemBioChem</i> , <b>2020</b> , 21, 2680-2688	3.8	5
130	Enzymatic Preparation of the Chiral (S)-Sulfoxide Drug Esomeprazole at Pilot-Scale Levels. <i>Organic Process Research and Development</i> , <b>2020</b> , 24, 1124-1130	3.9	19
129	Efficient expression of novel glutamate decarboxylases and high level production of $\alpha$ -aminobutyric acid catalyzed by engineered <i>Escherichia coli</i> . <i>International Journal of Biological Macromolecules</i> , <b>2020</b> , 160, 372-379	7.9	10
128	Development of an engineered thermostable amine dehydrogenase for the synthesis of structurally diverse chiral amines. <i>Catalysis Science and Technology</i> , <b>2020</b> , 10, 2353-2358	5.5	19
127	Attenuated substrate inhibition of a haloketone reductase via structure-guided loop engineering. <i>Journal of Biotechnology</i> , <b>2020</b> , 308, 141-147	3.7	3
126	Coevolution of the Activity and Thermostability of an $\alpha$ -Keto Ester Reductase for Better Synthesis of an (R)- $\beta$ -Lipoic Acid Precursor. <i>ChemBioChem</i> , <b>2020</b> , 21, 1341-1346	3.8	6
125	Structure-guided engineering of <i>Pseudomonas dacunhae</i> -aspartate $\beta$ -decarboxylase for L-homophenylalanine synthesis. <i>Chemical Communications</i> , <b>2020</b> , 56, 13876-13879	5.8	1
124	Engineering <i>Bacillus subtilis</i> Isoleucine Dioxygenase for Efficient Synthesis of (2,3,4)-4-Hydroxyisoleucine. <i>Journal of Agricultural and Food Chemistry</i> , <b>2020</b> , 68, 14555-14563	5.7	2
123	Reprogramming Epoxide Hydrolase to Improve Enantioconvergence in Hydrolysis of Styrene Oxide Scaffolds. <i>Advanced Synthesis and Catalysis</i> , <b>2020</b> , 362, 4699-4706	5.6	3
122	Accelerated directed evolution of dye-decolorizing peroxidase using a bacterial extracellular protein secretion system (BENNY). <i>Bioresources and Bioprocessing</i> , <b>2019</b> , 6, 20	5.2	8
121	Asymmetric ring opening of racemic epoxides for enantioselective synthesis of (S)- $\alpha$ -amino alcohols by a cofactor self-sufficient cascade biocatalysis system. <i>Catalysis Science and Technology</i> , <b>2019</b> , 9, 70-74 <sup>5.5</sup>		30
120	Enzymatic synthesis of 10-oxostearic acid in high space-time yield via cascade reaction of a new oleate hydratase and an alcohol dehydrogenase. <i>Journal of Biotechnology</i> , <b>2019</b> , 306S, 100008	3.7	7
119	Synthetic Biomimetic Coenzymes and Alcohol Dehydrogenases for Asymmetric Catalysis. <i>Catalysts</i> , <b>2019</b> , 9, 207	4	13

118	Engineering of Cyclohexanone Monooxygenase for the Enantioselective Synthesis of (S)-Omeprazole. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 7218-7226	8.3	24
117	Efficient Synthesis of Methyl 3-Acetoxypropionate by a Newly Identified Baeyer-Villiger Monooxygenase. <i>Applied and Environmental Microbiology</i> , <b>2019</b> , 85,	4.8	4
116	Efficient Synthesis of 12-Oxocholesterol Acid Using a 12 $\beta$ -Hydroxysteroid Dehydrogenase from <i>Rhodococcus ruber</i> . <i>Advanced Synthesis and Catalysis</i> , <b>2019</b> , 361, 4661-4668	5.6	12
115	Protein engineering for bioreduction of carboxylic acids. <i>Journal of Biotechnology</i> , <b>2019</b> , 303, 53-64	3.7	6
114	One Pot Asymmetric Synthesis of (R)-Phenylglycinol from Racemic Styrene Oxide via Cascade Biocatalysis. <i>ChemCatChem</i> , <b>2019</b> , 11, 3802-3807	5.2	12
113	An Ammonium-Formate-Driven Trienzymatic Cascade for $\alpha$ -Transaminase-Catalyzed ( $\alpha$ )-Selective Amination. <i>Journal of Organic Chemistry</i> , <b>2019</b> , 84, 14987-14993	4.2	13
112	One-Pot Synthesis of Phenylglyoxylic Acid from Racemic Mandelic Acids via Cascade Biocatalysis. <i>Journal of Agricultural and Food Chemistry</i> , <b>2019</b> , 67, 2946-2953	5.7	14
111	Enantioselective Synthesis of Chiral Vicinal Amino Alcohols Using Amine Dehydrogenases. <i>ACS Catalysis</i> , <b>2019</b> , 9, 11813-11818	13.1	26
110	A green-by-design bioprocess for L-carnosine production integrating enzymatic synthesis with membrane separation. <i>Catalysis Science and Technology</i> , <b>2019</b> , 9, 5971-5978	5.5	2
109	Enantioselective synthesis of enantiopure $\beta$ -amino alcohols via kinetic resolution and asymmetric reductive amination by a robust transaminase from <i>Mycobacterium vanbaalenii</i> . <i>Journal of Biotechnology</i> , <b>2019</b> , 290, 24-32	3.7	21
108	Development of an Engineered Ketoreductase with Simultaneously Improved Thermostability and Activity for Making a Bulky Atorvastatin Precursor. <i>ACS Catalysis</i> , <b>2019</b> , 9, 147-153	13.1	54
107	Switching Cofactor Dependence of 7 $\beta$ -Hydroxysteroid Dehydrogenase for Cost-Effective Production of Ursodeoxycholic Acid. <i>ACS Catalysis</i> , <b>2019</b> , 9, 466-473	13.1	25
106	Biosynthesis of Phenylglyoxylic Acid by LhDMDH, a Novel d-Mandelate Dehydrogenase with High Catalytic Activity. <i>Journal of Agricultural and Food Chemistry</i> , <b>2018</b> , 66, 2805-2811	5.7	13
105	Bioamination of alkane with ammonium by an artificially designed multienzyme cascade. <i>Metabolic Engineering</i> , <b>2018</b> , 47, 184-189	9.7	27
104	Enhancing the Catalytic Performance of a CYP116B Monooxygenase by Transdomain Combination Mutagenesis. <i>ChemCatChem</i> , <b>2018</b> , 10, 2962-2968	5.2	7
103	Exploitation of cold-active cephalosporin C acylase by computer-aided directed evolution and its potential application in low-temperature biosynthesis of 7-aminocephalosporanic acid. <i>Journal of Chemical Technology and Biotechnology</i> , <b>2018</b> , 93, 2925-2930	3.5	8
102	Reshaping the Active Pocket of Amine Dehydrogenases for Asymmetric Synthesis of Bulky Aliphatic Amines. <i>ACS Catalysis</i> , <b>2018</b> , 8, 2622-2628	13.1	63
101	Continuous Production of Ursodeoxycholic Acid by Using Two Cascade Reactors with Co-immobilized Enzymes. <i>ChemBioChem</i> , <b>2018</b> , 19, 347-353	3.8	24

100	Engineering P450LaMO stereospecificity and product selectivity for selective C <sub>β</sub> oxidation of tetralin-like alkylbenzenes. <i>Catalysis Science and Technology</i> , <b>2018</b> , 8, 4638-4644	5.5	10
99	Enhancing the Catalytic Performance of a CYP116B Monooxygenase by Transdomain Combination Mutagenesis. <i>ChemCatChem</i> , <b>2018</b> , 10, 2927-2927	5.2	
98	Direct Access to Medium-Chain $\beta,\beta$ -Dicarboxylic Acids by Using a Baeyer-Villiger Monooxygenase of Abnormal Regioselectivity. <i>ChemBioChem</i> , <b>2018</b> , 19, 2049-2054	3.8	6
97	Discovery of Two Native Baeyer-Villiger Monooxygenases for Asymmetric Synthesis of Bulky Chiral Sulfoxides. <i>Applied and Environmental Microbiology</i> , <b>2018</b> , 84,	4.8	17
96	Characterization of a new nitrilase from <i>Hoeflea phototrophica</i> DFL-43 for a two-step one-pot synthesis of (S)- $\beta$ -amino acids. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 6047-6056	5.7	9
95	Regioselectivity Engineering of Epoxide Hydrolase: Near-Perfect Enantioconvergence through a Single Site Mutation. <i>ACS Catalysis</i> , <b>2018</b> , 8, 8314-8317	13.1	24
94	A Single Mutation Increases the Activity and Stability of <i>Pectobacterium carotovorum</i> Nitrile Reductase. <i>ChemBioChem</i> , <b>2018</b> , 19, 521-526	3.8	3
93	One pot simultaneous preparation of both enantiomer of $\beta$ -amino alcohol and vicinal diol via cascade biocatalysis. <i>Biotechnology Letters</i> , <b>2018</b> , 40, 349-358	3	9
92	Cross-linked enzyme-polymer conjugates with excellent stability and detergent-enhanced activity for efficient organophosphate degradation. <i>Bioresources and Bioprocessing</i> , <b>2018</b> , 5,	5.2	10
91	Structural investigation of the enantioselectivity and thermostability mechanisms of esterase RhEst1. <i>Journal of Molecular Graphics and Modelling</i> , <b>2018</b> , 85, 182-189	2.8	5
90	Efficient Synthesis of (R)-2-Chloro-1-(2,4-dichlorophenyl)ethanol with a Ketoreductase from <i>Scheffersomyces stipitis</i> CBS 6045. <i>Advanced Synthesis and Catalysis</i> , <b>2017</b> , 359, 426-431	5.6	33
89	Engineering $\beta$ -Hydroxysteroid Dehydrogenase for Enhanced Ursodeoxycholic Acid Production by Multiobjective Directed Evolution. <i>Journal of Agricultural and Food Chemistry</i> , <b>2017</b> , 65, 1178-1185	5.7	24
88	Hydroxynitrile Lyase Isozymes from <i>Prunus communis</i> : Identification, Characterization and Synthetic Applications. <i>Advanced Synthesis and Catalysis</i> , <b>2017</b> , 359, 1185-1193	5.6	16
87	Engineering <i>Streptomyces coelicolor</i> Carbonyl Reductase for Efficient Atorvastatin Precursor Synthesis. <i>Applied and Environmental Microbiology</i> , <b>2017</b> , 83,	4.8	22
86	Identification of an Imine Reductase for Asymmetric Reduction of Bulky Dihydroisoquinolines. <i>Organic Letters</i> , <b>2017</b> , 19, 3151-3154	6.2	39
85	Efficient Degradation of Malathion in the Presence of Detergents Using an Engineered Organophosphorus Hydrolase Highly Expressed by <i>Pichia pastoris</i> without Methanol Induction. <i>Journal of Agricultural and Food Chemistry</i> , <b>2017</b> , 65, 9094-9100	5.7	12
84	Enhancing transglutaminase production of by iterative mutagenesis breeding with atmospheric and room-temperature plasma (ARTP). <i>Bioresources and Bioprocessing</i> , <b>2017</b> , 4, 37	5.2	19
83	Preparation of Structurally Diverse Chiral Alcohols by Engineering Ketoreductase CgKR1. <i>ACS Catalysis</i> , <b>2017</b> , 7, 7174-7181	13.1	52

82	Protein Engineering and Homologous Expression of <i>Serratia marcescens</i> Lipase for Efficient Synthesis of a Pharmaceutically Relevant Chiral Epoxyester. <i>Applied Biochemistry and Biotechnology</i> , <b>2017</b> , 183, 543-554	3.2	6
81	Identification of a Robust Carbonyl Reductase for Diastereoselectively Building syn-3,5-Dihydroxy Hexanoate: a Bulky Side Chain of Atorvastatin. <i>Organic Process Research and Development</i> , <b>2017</b> , 21, 1349-1354 <sup>17</sup>	3.9	17
80	Protein engineering of aldolase LbDERA for enhanced activity toward real substrates with a high-throughput screening method coupled with an aldehyde dehydrogenase. <i>Biochemical and Biophysical Research Communications</i> , <b>2017</b> , 482, 159-163	3.4	5
79	Whole-Cell-Catalyzed Multiple Regio- and Stereoselective Functionalizations in Cascade Reactions Enabled by Directed Evolution. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 12026-9	16.4	68
78	Biocatalytic Processes for the Synthesis of Chiral Alcohols <b>2016</b> , 219-250		1
77	Application of High-Throughput Screening in Biocatalysis <b>2016</b> , 53-69		
76	Rapid probing of the reactivity of P450 monooxygenases from the CYP116B subfamily using a substrate-based method. <i>New Journal of Chemistry</i> , <b>2016</b> , 40, 8928-8934	3.6	9
75	Dramatically Improved Performance of an Esterase for Cilastatin Synthesis by Cap Domain Engineering. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 12167-12172	3.9	9
74	A Novel (R)-Imine Reductase from <i>Paenibacillus lactis</i> for Asymmetric Reduction of 3 H-Indoles. <i>ChemCatChem</i> , <b>2016</b> , 8, 724-727	5.2	25
73	Combinatorial evolution of phosphotriesterase toward a robust malathion degrader by hierarchical iteration mutagenesis. <i>Biotechnology and Bioengineering</i> , <b>2016</b> , 113, 2350-7	4.9	23
72	Evolution of a Catalytic Mechanism. <i>Molecular Biology and Evolution</i> , <b>2016</b> , 33, 971-9	8.3	14
71	Iterative multitarget evolution dramatically enhances the enantioselectivity and catalytic efficiency of <i>Bacillus subtilis</i> esterase towards bulky benzoate esters of DL-menthol. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 2370-2376	5.5	7
70	Efficient Biocatalytic Synthesis of Chiral Chemicals. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2016</b> , 155, 55-106	1.7	6
69	A green-by-design system for efficient bio-oxidation of an unnatural hexapyranose into chiral lactone for building statin side-chains. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 7094-7100	5.5	8
68	Green access to chiral Vince lactam in a buffer-free aqueous system using a newly identified substrate-tolerant $\beta$ -lactamase. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 6305-6310	5.5	9
67	Improved efficiency of a novel methyl parathion hydrolase using consensus approach. <i>Enzyme and Microbial Technology</i> , <b>2016</b> , 93-94, 11-17	3.8	9
66	Molecular dynamics investigation of the substrate binding mechanism in carboxylesterase. <i>Biochemistry</i> , <b>2015</b> , 54, 1841-8	3.2	23
65	Effective biosynthesis of ethyl (R)-4-chloro-3-hydroxybutanoate by supplementation of l-glutamine, d-xylose and $\beta$ -cyclodextrin in n-butyl acetate-water media. <i>Journal of Biotechnology</i> , <b>2015</b> , 203, 62-7	3.7	13

64	Reshaping an enzyme binding pocket for enhanced and inverted stereoselectivity: use of smallest amino acid alphabets in directed evolution. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 12410-5 <sup>16.4</sup>	77
63	Monoterpene hydroxylation with an artificial self-sufficient P450 utilizing a P450SMO reductase domain for the electron transfer. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2015</b> , 116, 78-82	2
62	Reshaping an Enzyme Binding Pocket for Enhanced and Inverted Stereoselectivity: Use of Smallest Amino Acid Alphabets in Directed Evolution. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 12587-12592	3.6 19
61	Significantly improved thermostability of a reductase CgKR1 from <i>Candida glabrata</i> with a key mutation at Asp 138 for enhancing bioreduction of aromatic $\beta$ -keto esters. <i>Journal of Biotechnology</i> , <b>2015</b> , 203, 54-61	3.7 16
60	Enantioselective bioreductive preparation of chiral halohydrins employing two newly identified stereocomplementary reductases. <i>RSC Advances</i> , <b>2015</b> , 5, 22703-22711	3.7 23
59	Identification of key residues in <i>Debaryomyces hansenii</i> carbonyl reductase for highly productive preparation of (S)-aryl halohydrins. <i>Chemical Communications</i> , <b>2015</b> , 51, 15728-31	5.8 11
58	Rational design of a carboxylic esterase RhEst1 based on computational analysis of substrate binding. <i>Journal of Molecular Graphics and Modelling</i> , <b>2015</b> , 62, 319-324	2.8 8
57	Efficient synthesis of a statin precursor in high space-time yield by a new aldehyde-tolerant aldolase identified from <i>Lactobacillus brevis</i> . <i>Catalysis Science and Technology</i> , <b>2015</b> , 5, 4048-4054	5.5 25
56	Efficient biosynthesis of rare natural product scopolamine using <i>E. coli</i> cells expressing a S14P/K97A mutant of hyoscyamine 6 $\beta$ -hydroxylase AaH6H. <i>Journal of Biotechnology</i> , <b>2015</b> , 211, 123-9	3.7 10
55	A novel D-mandelate dehydrogenase used in three-enzyme cascade reaction for highly efficient synthesis of non-natural chiral amino acids. <i>Journal of Biotechnology</i> , <b>2015</b> , 195, 67-71	3.7 34
54	Asymmetric Amination of Secondary Alcohols by using a Redox-Neutral Two-Enzyme Cascade. <i>ChemCatChem</i> , <b>2015</b> , 7, 3838-3841	5.2 87
53	Efficient Synthesis of Chiral Indolines using an Imine Reductase from <i>Paenibacillus lactis</i> . <i>Advanced Synthesis and Catalysis</i> , <b>2015</b> , 357, 1692-1696	5.6 54
52	Identification of an $\beta$ -Keto Ester Reductase for the Efficient Synthesis of an (R)- $\beta$ -Lipoic Acid Precursor. <i>Advanced Synthesis and Catalysis</i> , <b>2015</b> , 357, 1697-1702	5.6 16
51	Substrate channel evolution of an esterase for the synthesis of cilastatin. <i>Catalysis Science and Technology</i> , <b>2015</b> , 5, 2622-2629	5.5 13
50	Engineering of an epoxide hydrolase for efficient bioresolution of bulky pharmaco substrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 15717-22	11.5 54
49	Newly identified thermostable esterase from <i>Sulfobacillus acidophilus</i> : properties and performance in phthalate ester degradation. <i>Applied and Environmental Microbiology</i> , <b>2014</b> , 80, 6870-8	4.8 53
48	Increased Catalyst Productivity in $\beta$ -Hydroxy Acids Resolution by Esterase Mutation and Substrate Modification. <i>ACS Catalysis</i> , <b>2014</b> , 4, 1026-1031	13.1 33
47	Stepwise and combinatorial optimization of enantioselectivity for the asymmetric hydrolysis of 1-(3,4-dimethylenedioxyphenyl)ethyl acetate under use of a cold-adapted <i>Bacillus amyloliquefaciens</i> esterase. <i>Biotechnology and Bioprocess Engineering</i> , <b>2014</b> , 19, 442-448	3.1 7

46	Unusually broad substrate profile of self-sufficient cytochrome P450 monooxygenase CYP116B4 from <i>Labrenzia aggregata</i> . <i>ChemBioChem</i> , <b>2014</b> , 15, 2443-9	3.8	43
45	Enzymatic resolution of a chiral chlorohydrin precursor for (R)- $\beta$ -lipoic acid synthesis via lipase catalyzed enantioselective transacylation with vinyl acetate. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2014</b> , 99, 102-107		8
44	An ene reductase from <i>Clavispora lusitaniae</i> for asymmetric reduction of activated alkenes. <i>Enzyme and Microbial Technology</i> , <b>2014</b> , 56, 40-5	3.8	14
43	Crystal structures of <i>Pseudomonas putida</i> esterase reveal the functional role of residues 187 and 287 in substrate binding and chiral recognition. <i>Biochemical and Biophysical Research Communications</i> , <b>2014</b> , 446, 1145-50	3.4	21
42	Altering the Substrate Specificity of Reductase CgKR1 from <i>Candida glabrata</i> by Protein Engineering for Bioreduction of Aromatic $\beta$ -Keto Esters. <i>Advanced Synthesis and Catalysis</i> , <b>2014</b> , 356, 1943-1948	5.6	26
41	A smart library of epoxide hydrolase variants and the top hits for synthesis of (S)- $\beta$ -blocker precursors. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 6641-4	16.4	45
40	Optimization and Scale-up of a Bioreduction Process for Preparation of Ethyl (S)-4-Chloro-3-hydroxybutanoate. <i>Organic Process Research and Development</i> , <b>2014</b> , 18, 739-743	3.9	22
39	Highly efficient synthesis of ethyl (S)-4-chloro-3-hydroxybutanoate and its derivatives by a robust NADH-dependent reductase from <i>E. coli</i> CCZU-K14. <i>Bioresource Technology</i> , <b>2014</b> , 161, 461-4	11	38
38	Enhanced limonene production by optimizing the expression of limonene biosynthesis and MEP pathway genes in <i>E. coli</i> . <i>Bioresources and Bioprocessing</i> , <b>2014</b> , 1,	5.2	51
37	NADH-dependent lactate dehydrogenase from <i>Alcaligenes eutrophus</i> H16 reduces 2-oxoadipate to 2-hydroxyadipate. <i>Biotechnology and Bioprocess Engineering</i> , <b>2014</b> , 19, 1048-1057	3.1	3
36	A Smart Library of Epoxide Hydrolase Variants and the Top Hits for Synthesis of (S)- $\beta$ -Blocker Precursors. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 6759-6762	3.6	5
35	Efficient production of l-menthol in a two-phase system with SDS using an immobilized <i>Bacillus subtilis</i> esterase. <i>Bioresources and Bioprocessing</i> , <b>2014</b> , 1,	5.2	14
34	Draft Genome Sequence of <i>Burkholderia</i> sp. Strain MP-1, a Methyl Parathion (MP)-Degrading Bacterium from MP-Contaminated Soil. <i>Genome Announcements</i> , <b>2014</b> , 2,		8
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