Gao-Wei Zheng

List of Publications by Year
in descending order

52	2,031	257450	243625
papers	citations	24 h-index	44 g-index

58	58	58	1709
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent progress on deep eutectic solvents in biocatalysis. Bioresources and Bioprocessing, 2017, 4, 34.	4.2	262
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 the Active Pocket of Amine Dehydrogenases for Asymmetric Synthesis of Bulky Aliphatic Amines. ACS Catalysis, 2018, 8, 2622-2628.	11.2	100
5	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
6	Preparation of Structurally Diverse Chiral Alcohols by Engineering Ketoreductase CgKR1. ACS Catalysis, 2017, 7, 7174-7181.	11.2	74
7	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
8	Whole-Cell Biocatalytic Processes with Ionic Liquids. ACS Sustainable Chemistry and Engineering, 2016, 4, 371-386.	6.7	68
9	Efficient Synthesis of Chiral Indolines using an Imine Reductase from Paenibacillus lactis. Advanced Synthesis and Catalysis, 2015, 357, 1692-1696.	4.3	65
10	One-pot biocatalytic route from cycloalkanes to Î±,Ï‰â€dicarboxylic acids by designed Escherichia coli consortia. Nature Communications, 2020, 11, 5035.	12.8	60
11	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
12	Efficient production of (R)-o-chloromandelic acid by deracemization of o-chloromandelonitrile with a new nitrilase mined from Labrenzia aggregata. Applied Microbiology and Biotechnology, 2012, 95, 91-99.	3.6	56
13	Identification of an Imine Reductase for Asymmetric Reduction of Bulky Dihydroisoquinolines. Organic Letters, 2017, 19, 3151-3154.	4.6	56
14	Enantioselective Synthesis of Chiral Vicinal Amino Alcohols Using Amine Dehydrogenases. ACS Catalysis, 2019, 9, 11813-11818.	11.2	54
15	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
16	Oneâ€Pot Enzyme Cascade for Controlled Synthesis of Furancarboxylic Acids from 5â€Hydroxymethylfurfural by H₂O₂ Internal Recycling. ChemSusChem, 2019, 12, 4764-4768.	6.8	45
17	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
18	Bioamination of alkane with ammonium by an artificially designed multienzyme cascade. Metabolic Engineering, 2018, 47, 184-189.	7.0	35

#	Article	IF	Citations
19	An efficient bioprocess for enzymatic production of l-menthol with high ratio of substrate to catalyst using whole cells of recombinant E. coli. Journal of Biotechnology, 2010, 150, 108-114.	3.8	34
20	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
21	Highly efficient bioreduction of 2-hydroxyacetophenone to (S)- and (R)-1-phenyl-1,2-ethanediol by two substrate tolerance carbonyl reductases with cofactor regeneration. Journal of Biotechnology, 2017, 243, 1-9.	3.8	31
22	A Novel (R)â€‘mine Reductase from Paenibacillus lactis for Asymmetric Reduction of 3â€‰Hâ€‘ndoles. ChemCatChem, 2016, 8, 724-727.	3.7	30
23	Engineering of a novel carbonyl reductase with coenzyme regeneration in E. coli for efficient biosynthesis of enantiopure chiral alcohols. Journal of Biotechnology, 2016, 230, 54-62.	3.8	29
24	Bioreduction of methyl o-chlorobenzoylformate at 500gLâ¯1 without external cofactors for efficient production of enantiopure clopidogrel intermediate. Tetrahedron Letters, 2012, 53, 4715-4717.	1.4	27
25	Evolution of Glucose Dehydrogenase for Cofactor Regeneration in Bioredox Processes with Denaturing Agents. ChemBioChem, 2020, 21, 2680-2688.	2.6	26
26	Stereocomplementary Synthesis of Pharmaceutically Relevant Chiral 2-Aryl-Substituted Pyrrolidines Using Imine Reductases. Organic Letters, 2020, 22, 3367-3372.	4.6	25
27	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
28	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
29	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
30	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
31	An Ammonium-Formate-Driven Trienzymatic Cascade for Ï‰-Transaminase-Catalyzed (R)-Selective Amination. Journal of Organic Chemistry, 2019, 84, 14987-14993.	3.2	22
32	Asymmetric Reductive Amination of Structurally Diverse Ketones with Ammonia Using a Spectrum-Extended Amine Dehydrogenase. ACS Catalysis, 2021, 11, 14274-14283.	11.2	22
33	Myoglobin-Catalyzed Efficient In Situ Regeneration of NAD(P)⁺and Their Synthetic Biomimetic for Dehydrogenase-Mediated Oxidations. ACS Catalysis, 2019, 9, 2196-2202.	11.2	21
34	Efficient production of succinic acid in engineered Escherichia coli strains controlled by anaerobically-induced nirB promoter using sweet potato waste hydrolysate. Journal of Environmental Management, 2019, 237, 147-154.	7.8	21
35	Improved biosynthesis of ethyl (S)-4-chloro-3-hydroxybutanoate by adding l-glutamine plus glycine instead of NAD+ in Î²-cyclodextrinâ€“water system. Bioresource Technology, 2015, 182, 98-102.	9.6	19
36	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

#	Article	IF	Citations
37	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
38	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
39	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
40	Direct reductive amination of ketones with amines by reductive aminases. Green Synthesis and Catalysis, 2021, 2, 345-349.	6.8	12
41	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
42	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
43	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
44	Multi-substrate fingerprinting of esterolytic enzymes with a group of acetylated alcohols and statistic analysis of substrate spectrum. Journal of Molecular Catalysis B: Enzymatic, 2013, 89, 41-47.	1.8	9
45	Enantioselective Hydrolysis of dl-Menthyl Benzoate by Cell-Free Extract of Newly Isolated Acinetobacter sp. ECU2040. Applied Biochemistry and Biotechnology, 2013, 170, 1974-1981.	2.9	8
46	Efficient production of red Monascus pigments with single non-natural amine residue by in situ chemical modification. World Journal of Microbiology and Biotechnology, 2019, 35, 13.	3.6	8
47	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
48	Separation of enantiopure m-substituted 1-phenylethanols in high space-time yield using Bacillus subtilis esterase. RSC Advances, 2013, 3, 20446.	3.6	5
49	Reductive amination of ketones with ammonium catalyzed by a newly identified Brevibacterium epidermidis strain for the synthesis of (S)-chiral amines. Chinese Journal of Catalysis, 2018, 39, 1625-1632.	14.0	5
50	Efficient Synthesis of Methyl 3-Acetoxypropionate by a Newly Identified Baeyer-Villiger Monooxygenase. Applied and Environmental Microbiology, 2019, 85, .	3.1	5
51	Cloning and Characterization of an Enantioselective l-Menthyl Benzoate Hydrolase from Acinetobacter sp. ECU2040. Applied Biochemistry and Biotechnology, 2015, 176, 1102-1113.	2.9	4
52	Multifunctional Biocatalysis: An Unusual Imine Reductase. Engineering Microbiology, 2022, , 100023.	4.7	0