

# Gao-Wei Zheng

## List of Publications by Year in descending order

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52  
papers

2,031  
citations

293460

24  
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274796

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58  
all docs

58  
docs citations

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times ranked

1848  
citing authors

#	ARTICLE	IF	CITATIONS
1	Continuous-Flow Microreactor-Enhanced Clean NAD <sup>+</sup> Regeneration for Biosynthesis of 7-Oxo-lipoic Acid. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 456-463.	3.2	12
2	Multifunctional Biocatalysis: An Unusual Imine Reductase. <i>Engineering Microbiology</i> , 2022, , 100023.	2.2	0
3	Direct reductive amination of ketones with amines by reductive aminases. <i>Green Synthesis and Catalysis</i> , 2021, 2, 345-349.	3.7	12
4	Asymmetric Reductive Amination of Structurally Diverse Ketones with Ammonia Using a Spectrum-Extended Amine Dehydrogenase. <i>ACS Catalysis</i> , 2021, 11, 14274-14283.	5.5	22
5	Coevolution of the Activity and Thermostability of an $\alpha$ -Keto Ester Reductase for Better Synthesis of an $\alpha$ -Lipoic Acid Precursor. <i>ChemBioChem</i> , 2020, 21, 1341-1346.	1.3	13
6	One-pot biocatalytic route from cycloalkanes to $\alpha,\omega$ -dicarboxylic acids by designed <i>Escherichia coli</i> consortia. <i>Nature Communications</i> , 2020, 11, 5035.	5.8	60
7	Reductive Amination of Biobased Levulinic Acid to Unnatural Chiral $\beta$ -Amino Acid Using an Engineered Amine Dehydrogenase. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17054-17061.	3.2	24
8	Rational Engineering of Formate Dehydrogenase Substrate/Cofactor Affinity for Better Performance in NADPH Regeneration. <i>Applied Biochemistry and Biotechnology</i> , 2020, 192, 530-543.	1.4	32
9	Stereocomplementary Synthesis of Pharmaceutically Relevant Chiral 2-Aryl-Substituted Pyrrolidines Using Imine Reductases. <i>Organic Letters</i> , 2020, 22, 3367-3372.	2.4	25
10	Evolution of Glucose Dehydrogenase for Cofactor Regeneration in Bioredox Processes with Denaturing Agents. <i>ChemBioChem</i> , 2020, 21, 2680-2688.	1.3	26
11	Development of an engineered thermostable amine dehydrogenase for the synthesis of structurally diverse chiral amines. <i>Catalysis Science and Technology</i> , 2020, 10, 2353-2358.	2.1	37
12	An Ammonium-Formate-Driven Trienzymatic Cascade for $\alpha$ -Transaminase-Catalyzed $\alpha$ -Selective Amination. <i>Journal of Organic Chemistry</i> , 2019, 84, 14987-14993.	1.7	22
13	One-Pot Enzyme Cascade for Controlled Synthesis of Furancarboxylic Acids from 5-Hydroxymethylfurfural by H <sub>2</sub> O <sub>2</sub> Internal Recycling. <i>ChemSusChem</i> , 2019, 12, 4764-4768.	3.6	45
14	Myoglobin-Catalyzed Efficient In Situ Regeneration of NAD(P) <sup>+</sup> and Their Synthetic Biomimetic for Dehydrogenase-Mediated Oxidations. <i>ACS Catalysis</i> , 2019, 9, 2196-2202.	5.5	21
15	Efficient Synthesis of Methyl 3-Acetoxypropionate by a Newly Identified Baeyer-Villiger Monooxygenase. <i>Applied and Environmental Microbiology</i> , 2019, 85, .	1.4	5
16	Efficient production of succinic acid in engineered <i>Escherichia coli</i> strains controlled by anaerobically-induced nirB promoter using sweet potato waste hydrolysate. <i>Journal of Environmental Management</i> , 2019, 237, 147-154.	3.8	21
17	Enantioselective Synthesis of Chiral Vicinal Amino Alcohols Using Amine Dehydrogenases. <i>ACS Catalysis</i> , 2019, 9, 11813-11818.	5.5	54
18	Development of an Engineered Ketoreductase with Simultaneously Improved Thermostability and Activity for Making a Bulky Atorvastatin Precursor. <i>ACS Catalysis</i> , 2019, 9, 147-153.	5.5	93

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19	Efficient production of red <i>Monascus</i> pigments with single non-natural amine residue by in situ chemical modification. <i>World Journal of Microbiology and Biotechnology</i> , 2019, 35, 13.	1.7	8
20	Bioamination of alkane with ammonium by an artificially designed multienzyme cascade. <i>Metabolic Engineering</i> , 2018, 47, 184-189.	3.6	35
21	Reshaping the Active Pocket of Amine Dehydrogenases for Asymmetric Synthesis of Bulky Aliphatic Amines. <i>ACS Catalysis</i> , 2018, 8, 2622-2628.	5.5	100
22	Reductive amination of ketones with ammonium catalyzed by a newly identified <i>Brevibacterium epidermidis</i> strain for the synthesis of (S)-chiral amines. <i>Chinese Journal of Catalysis</i> , 2018, 39, 1625-1632.	6.9	5
23	Direct Access to Medium-Chain Dicarboxylic Acids by Using a Baeyer-Villiger Monooxygenase of Abnormal Regioselectivity. <i>ChemBioChem</i> , 2018, 19, 2049-2054.	1.3	13
24	Identification of an Imine Reductase for Asymmetric Reduction of Bulky Dihydroisoquinolines. <i>Organic Letters</i> , 2017, 19, 3151-3154.	2.4	56
25	Highly efficient bioreduction of 2-hydroxyacetophenone to (S)- and (R)-1-phenyl-1,2-ethanediol by two substrate tolerance carbonyl reductases with cofactor regeneration. <i>Journal of Biotechnology</i> , 2017, 243, 1-9.	1.9	31
26	Recent progress on deep eutectic solvents in biocatalysis. <i>Bioresources and Bioprocessing</i> , 2017, 4, 34.	2.0	262
27	Preparation of Structurally Diverse Chiral Alcohols by Engineering Ketoreductase KR1. <i>ACS Catalysis</i> , 2017, 7, 7174-7181.	5.5	74
28	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> , 2017, 21, 1349-1354.	1.3	24
29	Engineering of a novel carbonyl reductase with coenzyme regeneration in <i>E. coli</i> for efficient biosynthesis of enantiopure chiral alcohols. <i>Journal of Biotechnology</i> , 2016, 230, 54-62.	1.9	29
30	Green access to chiral Vince lactam in a buffer-free aqueous system using a newly identified substrate-tolerant ( $\alpha$ )-lactamase. <i>Catalysis Science and Technology</i> , 2016, 6, 6305-6310.	2.1	12
31	A Novel Imine Reductase from <i>Paenibacillus lactis</i> for Asymmetric Reduction of 3-Hydroxyindoles. <i>ChemCatChem</i> , 2016, 8, 724-727.	1.8	30
32	Whole-Cell Biocatalytic Processes with Ionic Liquids. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 371-386.	3.2	68
33	Asymmetric Amination of Secondary Alcohols by using a Redox-Neutral Two-Enzyme Cascade. <i>ChemCatChem</i> , 2015, 7, 3838-3841.	1.8	108
34	Efficient Synthesis of Chiral Indolines using an Imine Reductase from <i>Paenibacillus lactis</i> . <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1692-1696.	2.1	65
35	Identification of an $\alpha$ -Keto Ester Reductase for the Efficient Synthesis of an $\alpha$ -Lipoic Acid Precursor. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1697-1702.	2.1	23
36	Cloning and Characterization of an Enantioselective l-Menthyl Benzoate Hydrolase from <i>Acinetobacter</i> sp. ECU2040. <i>Applied Biochemistry and Biotechnology</i> , 2015, 176, 1102-1113.	1.4	4

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37	Improved biosynthesis of ethyl (S)-4-chloro-3-hydroxybutanoate by adding l-glutamine plus glycine instead of NAD <sup>+</sup> in $\beta$ -cyclodextrin <sup>®</sup> water system. <i>Bioresource Technology</i> , 2015, 182, 98-102.	4.8	19
38	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> , 2014, 1, .	2.0	14
39	Efficient synthesis of an $\mu$ -hydroxy ester in a space <sup>®</sup> time yield of 1580gL <sup>-1</sup> d <sup>-1</sup> by a newly identified reductase RhCR. <i>Tetrahedron: Asymmetry</i> , 2014, 25, 1501-1504.	1.8	11
40	Stepwise and combinatorial optimization of enantioselectivity for the asymmetric hydrolysis of 1-(3 <sup>®</sup> ,4 <sup>®</sup> -methylenedioxyphenyl)ethyl acetate under use of a cold-adapted <i>Bacillus amyloliquefaciens</i> esterase. <i>Biotechnology and Bioprocess Engineering</i> , 2014, 19, 442-448.	1.4	7
41	Enzymatic resolution of a chiral chlorohydrin precursor for (R)- $\pm$ -lipoic acid synthesis via lipase catalyzed enantioselective transacylation with vinyl acetate. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 99, 102-107.	1.8	10
42	Optimization and Scale-up of a Bioreduction Process for Preparation of Ethyl (S)-4-Chloro-3-hydroxybutanoate. <i>Organic Process Research and Development</i> , 2014, 18, 739-743.	1.3	23
43	Enantioselective Hydrolysis of dl-Menthyl Benzoate by Cell-Free Extract of Newly Isolated <i>Acinetobacter</i> sp. ECU2040. <i>Applied Biochemistry and Biotechnology</i> , 2013, 170, 1974-1981.	1.4	8
44	Multi-substrate fingerprinting of esterolytic enzymes with a group of acetylated alcohols and statistic analysis of substrate spectrum. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2013, 89, 41-47.	1.8	9
45	Separation of enantiopure m-substituted 1-phenylethanols in high space-time yield using <i>Bacillus subtilis</i> esterase. <i>RSC Advances</i> , 2013, 3, 20446.	1.7	5
46	Efficient Synthesis of a Chiral Precursor for Angiotensin-Converting Enzyme (ACE) Inhibitors in High Space-Time Yield by a New Reductase without External Cofactors. <i>Organic Letters</i> , 2012, 14, 1982-1985.	2.4	68
47	Bioreduction of methyl o-chlorobenzoylformate at 500gL <sup>-1</sup> without external cofactors for efficient production of enantiopure clopidogrel intermediate. <i>Tetrahedron Letters</i> , 2012, 53, 4715-4717.	0.7	27
48	Stereospecific Reduction of Methyl o-Chlorobenzoylformate at 300g <sup>-1</sup> without Additional Cofactor using a Carbonyl Reductase Mined from <i>Candida glabrata</i> . <i>Advanced Synthesis and Catalysis</i> , 2012, 354, 1765-1772.	2.1	59
49	Efficient production of (R)-o-chloromandelic acid by deracemization of o-chloromandelonitrile with a new nitrilase mined from <i>Labrenzia aggregata</i> . <i>Applied Microbiology and Biotechnology</i> , 2012, 95, 91-99.	1.7	56
50	New opportunities for biocatalysis: driving the synthesis of chiral chemicals. <i>Current Opinion in Biotechnology</i> , 2011, 22, 784-792.	3.3	153
51	An efficient bioprocess for enzymatic production of l-menthol with high ratio of substrate to catalyst using whole cells of recombinant <i>E. coli</i> . <i>Journal of Biotechnology</i> , 2010, 150, 108-114.	1.9	34
52	Enzymatic Production of l-Menthol by a High Substrate Concentration Tolerable Esterase from Newly Isolated <i>Bacillus subtilis</i> ECU0554. <i>Advanced Synthesis and Catalysis</i> , 2009, 351, 405-414.	2.1	53