Qiaqing Wu

List of Publications by Year
in descending order

69	1,272	361413	434195
papers	citations	20 h-index	31 g-index

74	74	74	1221
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Asymmetric Synthesis of Nâ€Substituted Î³â€Amino Esters and Î³â€Lactams Containing Î±,Î³â€Stereogenic Centers via a Stereoselective Enzymatic Cascade. Advanced Synthesis and Catalysis, 2022, 364, 372-379.	4.3	10
2	Engineering a Carbonyl Reductase for Scalable Preparation of (S)â€3â€Cyclopentylâ€3â€hydroxypropanenitrile, the Key Building Block of Ruxolitinib. ChemBioChem, 2022, 23, .	2.6	1
3	Biotransformation Enables Innovations Toward Green Synthesis of Steroidal Pharmaceuticals. ChemSusChem, 2022, 15, .	6.8	24
4	A New 3-Ketosteroid-Î”1â€“Dehydrogenase with High Activity and Broad Substrate Scope for Efficient Transformation of Hydrocortisone at High Substrate Concentration. Microorganisms, 2022, 10, 508.	3.6	6
5	Simultaneous Preparation of (S)-2-Aminobutane and <scp>d</scp>-Alanine or <scp>d</scp>-Homoalanine via Biocatalytic Transamination at High Substrate Concentration. Organic Process Research and Development, 2022, 26, 2013-2020.	2.7	0
6	Asymmetric Synthesis of Nâ€Substituted 1,2â€Amino Alcohols from Simple Aldehydes and Amines by Oneâ€Pot Sequential Enzymatic Hydroxymethylation and Asymmetric Reductive Amination. Angewandte Chemie - International Edition, 2022, 61, .	13.8	16
7	Asymmetric Synthesis of N â€Substituted 1,2â€Amino Alcohols from Simple Aldehydes and Amines by Oneâ€Pot Sequential Enzymatic Hydroxymethylation and Asymmetric Reductive Amination. Angewandte Chemie, 2022, 134, .	2.0	2
8	Stereocomplementary Synthesis of a Key Intermediate for Tofacitinib via Enzymatic Dynamic Kinetic Resolutionâ€Reductive Amination. Advanced Synthesis and Catalysis, 2022, 364, 2380-2386.	4.3	5
9	Efficient enzymatic synthesis of (S)-1-(3â€²-bromo-2â€²-methoxyphenyl)ethanol, the key building block of lusutrombopag. Green Synthesis and Catalysis, 2022, , .	6.8	1
10	Inverting the Enantiopreference of Nitrilaseâ€Catalyzed Desymmetric Hydrolysis of Prochiral Dinitriles by Reshaping the Binding Pocket with a Mirrorâ€Image Strategy. Angewandte Chemie, 2021, 133, 3723-3728.	2.0	1
11	Inverting the Enantiopreference of Nitrilaseâ€Catalyzed Desymmetric Hydrolysis of Prochiral Dinitriles by Reshaping the Binding Pocket with a Mirrorâ€Image Strategy. Angewandte Chemie - International Edition, 2021, 60, 3679-3684.	13.8	14
12	Crystal Structures and Catalytic Mechanism of l â€•erythro â€3,5â€Diaminohexanoate Dehydrogenase and Rational Engineering for Asymmetric Synthesis of Î²â€Amino Acids. Angewandte Chemie, 2021, 133, 10291-10298.	2.0	0
13	Crystal Structures and Catalytic Mechanism of <scp>l</scp>â€erythroâ€3,5â€Diaminohexanoate Dehydrogenase and Rational Engineering for Asymmetric Synthesis of Î²â€Amino Acids. Angewandte Chemie - International Edition, 2021, 60, 10203-10210.	13.8	9
14	Improving Catalytic Activity and Reversing Enantioâ€Specificity of Ï‰â€Transaminase by Semiâ€Rational Engineering en Route to Chiral Bulky Î²â€Amino Esters. ChemCatChem, 2021, 13, 3396-3400.	3.7	6
15	Synthesis of single stereoisomers of 2,2-disubstituted 3-hydroxycyclohexane-1-ones via enzymatic desymmetric reduction of the 1,3-cyclohexanediones. Green Synthesis and Catalysis, 2021, 2, 320-323.	6.8	12
16	Modulating the active site lid of an alcohol dehydrogenase from Ralstonia sp. enabled efficient stereospecific synthesis of 17Î²-hydroxysteroids. Enzyme and Microbial Technology, 2021, 149, 109837.	3.2	4
17	Biocatalytic Access to 1,4-Diazepanes via Imine Reductase-Catalyzed Intramolecular Asymmetric Reductive Amination. ACS Catalysis, 2020, 10, 8780-8787.	11.2	42
18	Highly Diastereoselective Synthesis of 2,2-Disubstituted Cyclopentane-1,3-diols via Stepwise Ketone Reduction Enabling Concise Chirality Construction. Journal of Organic Chemistry, 2020, 85, 9599-9606.	3.2	4

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19	Chemoenzymatic Stereoselective Synthesis of Substituted Î³â€•or Î´â€‘lactams with Two Chiral Centers via Transaminaseâ€‘catalysed Dynamic Kinetic Resolution. ChemCatChem, 2020, 12, 6311-6316.	3.7	6
20	Engineering of l-threonine aldolase for the preparation of 4-(methylsulfonyl)phenylserine, an important intermediate for the synthesis of florfenicol and thiamphenicol. Enzyme and Microbial Technology, 2020, 137, 109551.	3.2	17
21	2,3â€‘Dihydroxybenzoic Acid Decarboxylase from Fusarium oxysporum : Crystal Structures and Substrate Recognition Mechanism. ChemBioChem, 2020, 21, 2950-2956.	2.6	10
22	Structure-Guided Directed Evolution of a Carbonyl Reductase Enables the Stereoselective Synthesis of (2S,3S)-2,2-Disubstituted-3-hydroxycyclopentanones via Desymmetric Reduction. Organic Letters, 2020, 22, 3444-3448.	4.6	19
23	Distinct Regioselectivity of Fungal P450 Enzymes for Steroidal Hydroxylation. Applied and Environmental Microbiology, 2019, 85, .	3.1	27
24	Efficient reductive desymmetrization of bulky 1,3-cyclodiketones enabled by structure-guided directed evolution of a carbonyl reductase. Nature Catalysis, 2019, 2, 931-941.	34.4	68
25	Efficient microbial synthesis of key steroidal intermediates from bio-renewable phytosterols by genetically modified Mycobacterium fortuitum strains. Green Chemistry, 2019, 21, 4076-4083.	9.0	11
26	Flavin Oxidoreductaseâ€‘Mediated Regeneration of Nicotinamide Adenine Dinucleotide with Dioxygen and Catalytic Amount of Flavin Mononucleotide for Oneâ€‘Pot Multiâ€‘Enzymatic Preparation of Ursodeoxycholic Acid. Advanced Synthesis and Catalysis, 2019, 361, 2497-2504.	4.3	20
27	Improving the catalytic efficiency and stereoselectivity of a nitrilase from Synechocystis sp. PCC6803 by semi-rational engineering en route to chiral Î³-amino acids. Catalysis Science and Technology, 2019, 9, 1504-1510.	4.1	13
28	Imine Reductaseâ€‘Catalyzed Enantioselective Reduction of Bulky Î±,Î²â€‘Unsaturated Imines en Route to a Pharmaceutically Important Morphinan Skeleton. Advanced Synthesis and Catalysis, 2019, 361, 556-561.	4.3	28
29	Manipulating the stereoselectivity of a thermostable alcohol dehydrogenase by directed evolution for efficient asymmetric synthesis of arylpropanols. Biological Chemistry, 2019, 400, 313-321.	2.5	9
30	Biochemical characterization and substrate profiling of a reversible 2,3-dihydroxybenzoic acid decarboxylase for biocatalytic Kolbe-Schmitt reaction. Enzyme and Microbial Technology, 2018, 113, 37-43.	3.2	26
31	New product identification in the sterol metabolism by an industrial strain Mycobacterium neoaurum NRRL B-3805. Steroids, 2018, 132, 40-45.	1.8	16
32	Enzymatic synthesis of d-alanine from a renewable starting material by co-immobilized dehydrogenases. Process Biochemistry, 2018, 66, 126-132.	3.7	4
33	Biocatalytic Route to Chiral 2-Substituted-1,2,3,4-Tetrahydroquinolines Using Cyclohexylamine Oxidase Muteins. ACS Catalysis, 2018, 8, 1648-1652.	11.2	28
34	Molecular Basis for the High Activity and Enantioselectivity of the Carbonyl Reductase from Sporobolomyces salmonicolor toward Î±-Haloacetophenones. ACS Catalysis, 2018, 8, 3525-3531.	11.2	23
35	Accessing <scp>d</scp>â€‘Valine Synthesis by Improved Variants of Bacterial Cyclohexylamine Oxidase. ChemCatChem, 2018, 10, 387-390.	3.7	7
36	Efficient selective hydrolysis of terephthalonitrile to 4-cyanobenzoic acid catalyzed by a novel nitrilase from Pantoea sp. Process Biochemistry, 2018, 75, 152-156.	3.7	2

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37	A Fungal P450 Enzyme from Thanatephorus cucumeris with Steroid Hydroxylation Capabilities. Applied and Environmental Microbiology, 2018, 84, .	3.1	26
38	Oneâ€Pot Enzymatic Synthesis of Cyclic Vicinal Diols from Aliphatic Dialdehydes via Intramolecular Câ^'C Bond Formation and Carbonyl Reduction Using Pyruvate Decarboxylases and Alcohol Dehydrogenases. Advanced Synthesis and Catalysis, 2018, 360, 4191-4196.	4.3	14
39	Structure-guided engineering ofmeso-diaminopimelate dehydrogenase for enantioselective reductive amination of sterically bulky 2-keto acids. Catalysis Science and Technology, 2018, 8, 4994-5002.	4.1	18
40	Characterization of new recombinant 3-ketosteroid-Î”1-dehydrogenases for the biotransformation of steroids. Applied Microbiology and Biotechnology, 2017, 101, 6049-6060.	3.6	37
41	Simultaneous engineering of an enzyme's entrance tunnel and active site: the case of monoamine oxidase MAO-N. Chemical Science, 2017, 8, 4093-4099.	7.4	88
42	Highly Atom Economic Synthesis of <scp>d</scp>â€2â€Aminobutyric Acid through an Inâ€…Vitro Triâ€enzymatic Catalytic System. ChemistryOpen, 2017, 6, 534-540.	1.9	10
43	Regio- and stereoselective reduction of 17-oxosteroids to 17Î²-hydroxysteroids by a yeast strain Zygowilliopsis sp. WY7905. Steroids, 2017, 118, 17-24.	1.8	9
44	Find_tfSBP: find thermodynamics-feasible and smallest balanced pathways with high yield from large-scale metabolic networks. Scientific Reports, 2017, 7, 17334.	3.3	5
45	Enzymatic synthesis of 3-hydroxypropionic acid at high productivity by using free or immobilized cells of recombinant Escherichia coli. Journal of Molecular Catalysis B: Enzymatic, 2016, 129, 37-42.	1.8	14
46	Efficient Biosynthesis of (R)â€•or (S)â€2â€Hydroxybutyrate from <scp>l</scp>â€Threonine through a Synthetic Biology Approach. Advanced Synthesis and Catalysis, 2016, 358, 2923-2928.	4.3	15
47	A sialic acid aldolase from Peptoclostridium difficile NAP08 with 4-hydroxy-2-oxo-pentanoate aldolase activity. Enzyme and Microbial Technology, 2016, 92, 99-106.	3.2	6
48	New recombinant cyclohexylamine oxidase variants for deracemization of secondary amines by orthogonally assaying designed mutants with structurally diverse substrates. Scientific Reports, 2016, 6, 24973.	3.3	15
49	An Unprecedented Effective Enzymatic Carboxylation of Phenols. ACS Catalysis, 2016, 6, 564-567.	11.2	42
50	Heterologous expression of a GH3 Î²-glucosidase from Neurospora crassa in Pichia pastoris with high purity and its application in the hydrolysis of soybean isoflavone glycosides. Protein Expression and Purification, 2016, 119, 75-84.	1.3	19
51	Efficient Biosynthesis of Ethyl (R)-3-Hydroxyglutarate through a One-Pot Bienzymatic Cascade of Halohydrin Dehalogenase and Nitrilase. ChemCatChem, 2015, 7, 1389-1389.	3.7	1
52	Synthesis of Î±,Î²-unsaturated esters via a chemo-enzymatic chain elongation approach by combining carboxylic acid reduction and Wittig reaction. Beilstein Journal of Organic Chemistry, 2015, 11, 2245-2251.	2.2	21
53	Development of Î²-Amino Acid Dehydrogenase for the Synthesis of Î²-Amino Acids via Reductive Amination of Î²-Keto Acids. ACS Catalysis, 2015, 5, 2220-2224.	11.2	30
54	Highly Efficient Synthesis of Optically Pure (S)â€1â€phenylâ€1,2â€ethanediol by a Selfâ€Sufficient Whole Cell Biocatalyst. ChemistryOpen, 2015, 4, 483-488.	1.9	10

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55	Exploring the synthetic applicability of a new carboxylic acid reductase from Segniliparus rotundus DSM 44985. Journal of Molecular Catalysis B: Enzymatic, 2015, 115, 1-7.	1.8	42
56	Structural Analysis Reveals the Substrateâ€Binding Mechanism for the Expanded Substrate Specificity of Mutant mesoâ€Diaminopimelate Dehydrogenase. ChemBioChem, 2015, 16, 924-929.	2.6	14
57	Efficient Biosynthesis of Ethyl (R)â€3â€Hydroxyglutarate through a Oneâ€Pot Bienzymatic Cascade of Halohydrin Dehalogenase and Nitrilase. ChemCatChem, 2015, 7, 1438-1444.	3.7	15
58	Semiâ€“Rational Engineering a Carbonyl Reductase for the Enantioselective Reduction of Î²-Amino Ketones. ACS Catalysis, 2015, 5, 2452-2457.	11.2	46
59	Enzymatic Synthesis of a Key Intermediate for Rosuvastatin by Nitrilaseâ€Catalyzed Hydrolysis of Ethyl (R)â€4â€Cyanoâ€3â€hydroxybutyate at High Substrate Concentration. ChemCatChem, 2015, 7, 271-275.	3.7	11
60	Structural and Mutational Studies on the Unusual Substrate Specificity of mesoâ€Diaminopimelate Dehydrogenase from Symbiobacterium thermophilum. ChemBioChem, 2014, 15, 217-222.	2.6	29
61	Substrate profile of an Ï‰-transaminase from Burkholderia vietnamiensis and its potential for the production of optically pure amines and unnatural amino acids. Journal of Molecular Catalysis B: Enzymatic, 2014, 100, 32-39.	1.8	22
62	Biotransformations of steroids to testololactone by a multifunctional strain Penicillium simplicissimum WY134-2. Tetrahedron, 2014, 70, 41-46.	1.9	19
63	Substrate profiling of cyclohexylamine oxidase and its mutants reveals new biocatalytic potential in deracemization of racemic amines. Applied Microbiology and Biotechnology, 2014, 98, 1681-1689.	3.6	32
64	Deracemization of 2-Methyl-1,2,3,4-Tetrahydroquinoline Using Mutant Cyclohexylamine Oxidase Obtained by Iterative Saturation Mutagenesis. ACS Catalysis, 2014, 4, 903-908.	11.2	51
65	Biocatalytic desymmetrization of 3-substituted glutaronitriles by nitrilases. A convenient chemoenzymatic access to optically active (S)-Pregabalin and (R)-Baclofen. Science China Chemistry, 2014, 57, 1164-1171.	8.2	27
66	N-terminal truncation of a maleate cisâ€“trans isomerase from Rhodococcus jostii RHA1 results in a highly active enzyme for the biocatalytic production of fumaric acid. Journal of Molecular Catalysis B: Enzymatic, 2013, 93, 44-50.	1.8	4
67	Microbial stereospecific reduction of 3-quinuclidinone with newly isolated Nocardia sp. and Rhodococcus erythropolis. Journal of Molecular Catalysis B: Enzymatic, 2013, 88, 14-19.	1.8	18
68	Engineering the meso -Diaminopimelate Dehydrogenase from Symbiobacterium thermophilum by Site Saturation Mutagenesis for <scp>d</scp> -Phenylalanine Synthesis. Applied and Environmental Microbiology, 2013, 79, 5078-5081.	3.1	29
69	A Novel meso -Diaminopimelate Dehydrogenase from Symbiobacterium thermophilum: Overexpression, Characterization, and Potential for <scp>d</scp> -Amino Acid Synthesis. Applied and Environmental Microbiology, 2012, 78, 8595-8600.	3.1	40