Nicholas J Turner

List of Publications by Year
in descending order

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		8172	17580
381	20,940	76	121
papers	citations	h-index	g-index

498	498	498	10987
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Directed evolution drives the next generation of biocatalysts. Nature Chemical Biology, 2009, 5, 567-573.	3.9	689
2	Conversion of alcohols to enantiopure amines through dual-enzyme hydrogen-borrowing cascades. Science, 2015, 349, 1525-1529.	6.0	339
3	Biocatalytic Approaches to the Synthesis of Enantiomerically Pure Chiral Amines. Topics in Catalysis, 2014, 57, 284-300.	1.3	330
4	Carboxylic acid reductase is a versatile enzyme for the conversion of fatty acids into fuels and chemical commodities. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 87-92.	3.3	326
5	Constructing Biocatalytic Cascades: In Vitro and in Vivo Approaches to de Novo Multi-Enzyme Pathways. ACS Catalysis, 2017, 7, 710-724.	5.5	322
6	Synthetic cascades are enabled by combining biocatalysts with artificial metalloenzymes. Nature Chemistry, 2013, 5, 93-99.	6.6	314
7	Engineering an Enantioselective Amine Oxidase for the Synthesis of Pharmaceutical Building Blocks and Alkaloid Natural Products. Journal of the American Chemical Society, 2013, 135, 10863-10869.	6.6	311
8	Biocatalytic retrosynthesis. Nature Chemical Biology, 2013, 9, 285-288.	3.9	299
9	A reductive aminase from Aspergillus oryzae. Nature Chemistry, 2017, 9, 961-969.	6.6	290
10	Extending the application of biocatalysis to meet the challenges of drug development. Nature Reviews Chemistry, 2018, 2, 409-421.	13.8	290
11	Discovery, Engineering, and Synthetic Application of Transaminase Biocatalysts. ACS Catalysis, 2017, 7, 8263-8284.	5.5	261
12	Biocatalysis. Nature Reviews Methods Primers, 2021, 1, .	11.8	255
13	Enantioselective Chemoâ€•and Biocatalysis: Partners in Retrosynthesis. Angewandte Chemie - International Edition, 2017, 56, 8942-8973.	7.2	236
14	Cytochromes P450 as useful biocatalysts: addressing the limitations. Chemical Communications, 2011, 47, 2490.	2.2	221
15	Deracemization ofï¿½ï¿½-Methylbenzylamine Using an Enzyme Obtained by In Vitro Evolution. Angewandte Chemie - International Edition, 2002, 41, 3177-3180.	7.2	219
16	A Chemo-Enzymatic Route to Enantiomerically Pure Cyclic Tertiary Amines. Journal of the American Chemical Society, 2006, 128, 2224-2225.	6.6	208
17	Enantioselective Oxidation of Câ€“O and Câ€“N Bonds Using Oxidases. Chemical Reviews, 2011, 111, 4073-4087.	23.0	204
18	Imine reductases (IREDs). Current Opinion in Chemical Biology, 2017, 37, 19-25.	2.8	202

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19	Enzyme catalysed deracemisation and dynamic kinetic resolution reactions. Current Opinion in Chemical Biology, 2004, 8, 114-119.	2.8	201
20	Biocatalysis Using Immobilized Enzymes in Continuous Flow for the Synthesis of Fine Chemicals. Organic Process Research and Development, 2019, 23, 9-18.	1.3	201
21	Deracemisation methods. Current Opinion in Chemical Biology, 2010, 14, 115-121.	2.8	195
22	Rapid and ultra-sensitive determination of enzyme activities using surface-enhanced resonance Raman scattering. Nature Biotechnology, 2004, 22, 1133-1138.	9.4	192
23	Directed Evolution of an Amine Oxidase Possessing both Broad Substrate Specificity and High Enantioselectivity. Angewandte Chemie - International Edition, 2003, 42, 4807-4810.	7.2	178
24	One-Pot Cascade Synthesis of Mono- and Disubstituted Piperidines and Pyrrolidines using Carboxylic Acid Reductase (CAR), Ï‰-Transaminase (Ï‰-TA), and Imine Reductase (IRED) Biocatalysts. ACS Catalysis, 2016, 6, 3753-3759.	5.5	171
25	A highly efficient synthesis of telaprevir by strategic use of biocatalysis and multicomponent reactions. Chemical Communications, 2010, 46, 7918.	2.2	170
26	Directed evolution of enzymes for applied biocatalysis. Trends in Biotechnology, 2003, 21, 474-478.	4.9	160
27	An automated Design-Build-Test-Learn pipeline for enhanced microbial production of fine chemicals. Communications Biology, 2018, 1, 66.	2.0	159
28	A Regioâ€•and Stereoselective Ï‰â€Transaminase/Monoamine Oxidase Cascade for the Synthesis of Chiral 2,5â€Disubstituted Pyrrolidines. Angewandte Chemie - International Edition, 2014, 53, 2447-2450.	7.2	158
29	Rapid screening and scale-up of transaminase catalysed reactions. Organic and Biomolecular Chemistry, 2009, 7, 395-398.	1.5	154
30	Enantioselective Biocatalytic Oxidative Desymmetrization of Substituted Pyrrolidines. Angewandte Chemie - International Edition, 2010, 49, 2182-2184.	7.2	150
31	Chiral Amine Synthesis Using Ï‰â€Transaminases: An Amine Donor that Displaces Equilibria and Enables Highâ€Throughput Screening. Angewandte Chemie - International Edition, 2014, 53, 10714-10717.	7.2	149
32	Identification of a New Class of Cytochrome P450 from a Rhodococcus sp. Journal of Bacteriology, 2002, 184, 3898-3908.	1.0	146
33	Efficient Production of Enantiomerically Pure Chiral Amines at Concentrations of 50 g/L Using Transaminases. Organic Process Research and Development, 2010, 14, 234-237.	1.3	143
34	Directed Evolution of Galactose Oxidase: Generation of Enantioselective Secondary Alcohol Oxidases. ChemBioChem, 2008, 9, 857-860.	1.3	140
35	Ammonia lyases and aminomutases as biocatalysts for the synthesis of Î±-amino and Î²-amino acids. Current Opinion in Chemical Biology, 2011, 15, 234-240.	2.8	140
36	Asymmetric Reduction of Cyclic Imines Catalyzed by a Wholeâ€Cell Biocatalyst Containing an (S)â€Imine Reductase. ChemCatChem, 2013, 5, 3505-3508.	1.8	134

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37	Synthetic and Therapeutic Applications of Ammonia-lyases and Aminomutases. Chemical Reviews, 2018, 118, 73-118.	23.0	134
38	RetroBioCat as a computer-aided synthesis planning tool for biocatalytic reactions and cascades. Nature Catalysis, 2021, 4, 98-104.	16.1	131
39	An (R)â€imine Reductase Biocatalyst for the Asymmetric Reduction of Cyclic Imines. ChemCatChem, 2015, 7, 579-583.	1.8	126
40	Enzyme cascade reactions: synthesis of furandicarboxylic acid (FDCA) and carboxylic acids using oxidases in tandem. Green Chemistry, 2015, 17, 3271-3275.	4.6	124
41	Directed Evolution of an Amine Oxidase for the Preparative Deracemisation of Cyclic Secondary Amines. ChemBioChem, 2005, 6, 637-639.	1.3	121
42	A Versatile Chemo-Enzymatic Route to Enantiomerically Pure Î²-Branched Î±-Amino Acids. Journal of the American Chemical Society, 2004, 126, 4098-4099.	6.6	118
43	Structures of carboxylic acid reductase reveal domain dynamics underlying catalysis. Nature Chemical Biology, 2017, 13, 975-981.	3.9	118
44	Applications of transketolases in organic synthesis. Current Opinion in Biotechnology, 2000, 11, 527-531.	3.3	117
45	Amineâ€“boranes: effective reducing agents for the deracemisation of dl-amino acids using l-amino acid oxidase from Proteus myxofaciens. Tetrahedron Letters, 2002, 43, 707-710.	0.7	117
46	InspIRED by Nature: NADPHâ€Dependent Imine Reductases (IREDs) as Catalysts for the Preparation of Chiral Amines. Chemistry - A European Journal, 2016, 22, 1900-1907.	1.7	116
47	Synthesis of homochiral l-(S)-tert-leucine via a lipase catalysed dynamic resolution process. Tetrahedron Letters, 1995, 36, 1113-1116.	0.7	113
48	Efficient kinetic resolution of racemic amines using a transaminase in combination with an amino acid oxidase. Chemical Communications, 2009, , 2127.	2.2	113
49	Highly Stereoselective Synthesis of Substituted Prolyl Peptides Using a Combination of Biocatalytic Desymmetrization and Multicomponent Reactions. Angewandte Chemie - International Edition, 2010, 49, 5289-5292.	7.2	112
50	Absolute Quantification of Uric Acid in Human Urine Using Surface Enhanced Raman Scattering with the Standard Addition Method. Analytical Chemistry, 2017, 89, 2472-2477.	3.2	112
51	Biosynthesis and Characterization of Copper Nanoparticles Using Shewanella oneidensis: Application for Click Chemistry. Small, 2018, 14, 1703145.	5.2	112
52	Artificial concurrent catalytic processes involving enzymes. Chemical Communications, 2015, 51, 450-464.	2.2	106
53	Glycoprotein Labeling Using Engineered Variants of Galactose Oxidase Obtained by Directed Evolution. Journal of the American Chemical Society, 2011, 133, 8436-8439.	6.6	105
54	NAD(P)Hâ€Dependent Dehydrogenases for the Asymmetric Reductive Amination of Ketones: Structure, Mechanism, Evolution and Application. Advanced Synthesis and Catalysis, 2017, 359, 2011-2025.	2.1	103

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55	Synthesis of <scp>D</scp>â€•and <scp>L</scp>â€Phenylalanine Derivatives by Phenylalanine Ammonia Lyases: A Multienzymatic Cascade Process. Angewandte Chemie - International Edition, 2015, 54, 4608-4611.	7.2	100
56	Screening and characterization of a diverse panel of metagenomic imine reductases for biocatalytic reductive amination. Nature Chemistry, 2021, 13, 140-148.	6.6	100
57	Enzyme Toolbox: Novel Enantiocomplementary Imine Reductases. ChemBioChem, 2014, 15, 2201-2204.	1.3	98
58	Selective hydrolysis of nitriles under mild conditions by an enzyme.. Tetrahedron Letters, 1990, 31, 7223-7226.	0.7	96
59	Stereoselectivity and Structural Characterization of an Imine Reductase (IRED) from Amycolatopsis orientalis. ACS Catalysis, 2016, 6, 3880-3889.	5.5	96
60	A Self-sufficient Cytochrome P450 with a Primary Structural Organization That Includes a Flavin Domain and a [2Fe-2S] Redox Center. Journal of Biological Chemistry, 2003, 278, 48914-48920.	1.6	94
61	Engineered enzymes that retain and regenerate their cofactors enable continuous-flow biocatalysis. Nature Catalysis, 2019, 2, 1006-1015.	16.1	91
62	Biocatalytic N-Alkylation of Amines Using Either Primary Alcohols or Carboxylic Acids via Reductive Aminase Cascades. Journal of the American Chemical Society, 2019, 141, 1201-1206.	6.6	91
63	Structure and Activity of NADPHâ€Dependent Reductase Q1EQE0 from Streptomyces kanamyceticus, which Catalyses the Râ€Selective Reduction of an Imine Substrate. ChemBioChem, 2013, 14, 1372-1379.	1.3	90
64	Direct Alkylation of Amines with Primary and Secondary Alcohols through Biocatalytic Hydrogen Borrowing. Angewandte Chemie - International Edition, 2017, 56, 10491-10494.	7.2	90
65	Deracemisation and stereoinversion of Î±-amino acids using D-amino acid oxidase and hydride reducing agents. Chemical Communications, 2002, , 246-247.	2.2	88
66	Process Requirements of Galactose Oxidase Catalyzed Oxidation of Alcohols. Organic Process Research and Development, 2015, 19, 1580-1589.	1.3	88
67	A template-based mnemonic for monoamine oxidase (MAO-N) catalyzed reactions and its application to the chemo-enzymatic deracemisation of the alkaloid (Â±)-crispine A. Chemical Communications, 2007, , 3640.	2.2	87
68	Biocatalytic Dynamic Kinetic Resolution for the Synthesis of Atropisomeric Biaryl Nâ€Oxide Lewis Base Catalysts. Angewandte Chemie - International Edition, 2016, 55, 10755-10759.	7.2	87
69	Asymmetric synthesis of synthetic alkaloids by a tandem biocatalysis/Ugi/Pictetâ€“Spengler-type cyclization sequence. Chemical Communications, 2010, 46, 7706.	2.2	86
70	Identification of Novel Bacterial Members of the Imine Reductase Enzyme Family that Perform Reductive Amination. ChemCatChem, 2018, 10, 510-514.	1.8	86
71	Wholeâ€Cell Biocatalysts for Stereoselective Câˆ’H Amination Reactions. Angewandte Chemie - International Edition, 2016, 55, 1511-1513.	7.2	85
72	Transketolase from Escherichia coli: A practical procedure for using the biocatalyst for asymmetric carbon-carbon bond synthesis. Tetrahedron: Asymmetry, 1996, 7, 2185-2188.	1.8	83

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73	Engineering a Biometallic Whole Cell Catalyst for Enantioselective Deracemization Reactions. ACS Catalysis, 2011, 1, 1589-1594.	5.5	82
74	The continuous oxidation of HMF to FDCA and the immobilisation and stabilisation of periplasmic aldehyde oxidase (PaoABC). Green Chemistry, 2017, 19, 4660-4665.	4.6	79
75	Microwave-Assisted Sequential Amide Bond Formation and Intramolecular Amidation:â€‰ A Rapid Entry to Functionalized Oxindoles. Organic Letters, 2005, 7, 863-866.	2.4	78
76	Monoamine Oxidase (MAO-N) Catalyzed Deracemization of Tetrahydro-Î²-carbolines: Substrate Dependent Switch in Enantioselectivity. ACS Catalysis, 2013, 3, 2869-2872.	5.5	78
77	A Mechanism for Reductive Amination Catalyzed by Fungal Reductive Aminases. ACS Catalysis, 2018, 8, 11534-11541.	5.5	78
78	Enzyme-catalysed carbonâ€“carbon bond formation: use of transketolase from Escherichia coli. Journal of the Chemical Society Perkin Transactions 1, 1993, , 165-166.	0.9	76
79	Directed evolution of enzymes: new biocatalysts for asymmetric synthesis. Organic and Biomolecular Chemistry, 2003, 1, 4133.	1.5	76
80	The Structure of Monoamine Oxidase from Aspergillus niger Provides a Molecular Context for Improvements in Activity Obtained by Directed Evolution. Journal of Molecular Biology, 2008, 384, 1218-1231.	2.0	76
81	Deracemization ofï¿½ï¿½-Methylbenzylamine Using an Enzyme Obtained by In Vitro Evolution. Angewandte Chemie, 2002, 114, 3309-3312.	1.6	75
82	Enantioselektive Chemoâ€•und Biokatalyse: Partner in der Retrosynthese. Angewandte Chemie, 2017, 129, 9068-9100.	1.6	75
83	Enzyme Cascades in Whole Cells for the Synthesis of Chiral Cyclic Amines. ACS Catalysis, 2017, 7, 2920-2925.	5.5	75
84	Selenzyme: enzyme selection tool for pathway design. Bioinformatics, 2018, 34, 2153-2154.	1.8	75
85	Monoamine Oxidase: Tunable Activity for Amine Resolution and Functionalization. ACS Catalysis, 2018, 8, 11889-11907.	5.5	75
86	Enzymatic Lateâ€Stage Modifications: Better Late Than Never. Angewandte Chemie - International Edition, 2021, 60, 16824-16855.	7.2	75
87	Adenylation Activity of Carboxylic Acid Reductases Enables the Synthesis of Amides. Angewandte Chemie - International Edition, 2017, 56, 14498-14501.	7.2	74
88	Simple and Versatile Laboratory Scale CSTR for Multiphasic Continuous-Flow Chemistry and Long Residence Times. Organic Process Research and Development, 2017, 21, 1294-1301.	1.3	74
89	Biocatalytic Desymmetrization of an Atropisomer with both an Enantioselective Oxidase and Ketoreductases. Angewandte Chemie - International Edition, 2010, 49, 7010-7013.	7.2	73
90	Deracemization By Simultaneous Bioâ€oxidative Kinetic Resolution and Stereoinversion. Angewandte Chemie - International Edition, 2014, 53, 3731-3734.	7.2	73

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91	Controlling chirality. Current Opinion in Biotechnology, 2003, 14, 401-406.	3.3	72
92	Biocatalytic transamination with near-stoichiometric inexpensive amine donors mediated by bifunctional mono- and di-amine transaminases. Green Chemistry, 2017, 19, 361-366.	4.6	69
93	A generic platform for the immobilisation of engineered biocatalysts. Tetrahedron, 2019, 75, 327-334.	1.0	69
94	Regioselective hydrolysis of aromatic dinitriles using a whole cell catalyst. Journal of the Chemical Society Perkin Transactions 1, 1994, , 1679.	0.9	68
95	Stereoselective hydrolysis of nitriles and amides under mild conditions using a whole cell catalyst. Tetrahedron: Asymmetry, 1993, 4, 1085-1104.	1.8	67
96	Chemoenzymatic Synthesis of Optically Purel- andd-Biarylalanines through Biocatalytic Asymmetric Amination and Palladium-Catalyzed Arylation. ACS Catalysis, 2015, 5, 5410-5413.	5.5	67
97	Dynamic kinetic resolution: synthesis of optically active Î±-amino acid derivatives. Tetrahedron: Asymmetry, 2000, 11, 1687-1690.	1.8	66
98	Role of laccase as an enzymatic pretreatment method to improve lignocellulosic saccharification. Catalysis Science and Technology, 2014, 4, 2251-2259.	2.1	65
99	Catalytic bioâ€“chemo and bioâ€“bio tandem oxidation reactions for amide and carboxylic acid synthesis. Green Chemistry, 2014, 16, 4524-4529.	4.6	65
100	Combined Imine Reductase and Amine Oxidase Catalyzed Deracemization of Nitrogen Heterocycles. ChemCatChem, 2016, 8, 117-120.	1.8	65
101	Development of an Râ€Selective Amine Oxidase with Broad Substrate Specificity and High Enantioselectivity. ChemCatChem, 2014, 6, 996-1002.	1.8	64
102	Unveiling the Biocatalytic Aromatizing Activity of Monoamine Oxidases MAO-N and 6-HDNO: Development of Chemoenzymatic Cascades for the Synthesis of Pyrroles. ACS Catalysis, 2017, 7, 1295-1300.	5.5	64
103	Twoâ€Enzyme Hydrogenâ€Borrowing Amination of Alcohols Enabled by a Cofactorâ€Switched Alcohol Dehydrogenase. ChemCatChem, 2017, 9, 3833-3836.	1.8	64
104	The Bacterial Ammonia Lyase EncP: A Tunable Biocatalyst for the Synthesis of Unnatural Amino Acids. Journal of the American Chemical Society, 2015, 137, 12977-12983.	6.6	63
105	Biocatalytic Routes to Enantiomerically Enriched Dibenz[c,e]azepines. Angewandte Chemie - International Edition, 2017, 56, 15589-15593.	7.2	62
106	A surface plasmon resonance-based assay for small molecule inhibitors of human cyclophilin A. Analytical Biochemistry, 2005, 345, 214-226.	1.1	61
107	Design, synthesis and trypanocidal activity of lead compounds based on inhibitors of parasite glycolysis. Bioorganic and Medicinal Chemistry, 2008, 16, 5050-5061.	1.4	61
108	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. Angewandte Chemie - International Edition, 2019, 58, 4948-4952.	7.2	60

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109	Directed Evolution of the Enzyme Monoamine Oxidase (MAOâ€N): Highly Efficient Chemoâ€enzymatic Deracemisation of the Alkaloid (Â±)â€Crispineâ€...A. ChemCatChem, 2012, 4, 1259-1261.	1.8	58
110	Engineering and improvement of the efficiency of a chimeric [P450cam-RhFRed reductase domain] enzyme. Chemical Communications, 2009, , 2478.	2.2	56
111	Structure, Activity and Stereoselectivity of NADPHâ€Dependent Oxidoreductases Catalysing the Sâ€Selective Reduction of the Imine Substrate 2â€Methylpyrroline. ChemBioChem, 2015, 16, 1052-1059.	1.3	56
112	Toward scalable biocatalytic conversion of 5-hydroxymethylfurfural by galactose oxidase using coordinated reaction and enzyme engineering. Nature Communications, 2021, 12, 4946.	5.8	56
113	Highly Productive Oxidative Biocatalysis in Continuous Flow by Enhancing the Aqueous Equilibrium Solubility of Oxygen. Angewandte Chemie - International Edition, 2018, 57, 10535-10539.	7.2	55
114	Enantioselective Synthesis of Chiral Vicinal Amino Alcohols Using Amine Dehydrogenases. ACS Catalysis, 2019, 9, 11813-11818.	5.5	54
115	LICRED: A Versatile Dropâ€In Vector for Rapid Generation of Redoxâ€Selfâ€Sufficient Cytochrome P450s. ChemBioChem, 2010, 11, 987-994.	1.3	53
116	Nitrile hydratase enzymes in organic synthesis: Enantioselective synthesis of the lactone moiety of the mevinic acids. Tetrahedron Letters, 1996, 37, 6001-6004.	0.7	52
117	The biosynthesis of carbocyclic nucleosides. Chemical Society Reviews, 1995, 24, 169.	18.7	51
118	Analysis of the domain properties of the novel cytochrome P450 RhF. FEBS Letters, 2005, 579, 2215-2220.	1.3	51
119	Systematic methodology for the development of biocatalytic hydrogen-borrowing cascades: application to the synthesis of chiral Î±-substituted carboxylic acids from Î±-substituted Î±,Î²-unsaturated aldehydes. Organic and Biomolecular Chemistry, 2015, 13, 223-233.	1.5	51
120	Singleâ€Biocatalyst Synthesis of Enantiopure <scp>d</scp>â€Arylalanines Exploiting an Engineered <scp>d</scp>â€Amino Acid Dehydrogenase. Advanced Synthesis and Catalysis, 2016, 358, 3298-3306.	2.1	51
121	Biocatalytic retrosynthesis: Redesigning synthetic routes to high-value chemicals. Perspectives in Science, 2016, 9, 42-48.	0.6	51
122	Oneâ€Pot Synthesis of Chiral Nâ€Arylamines by Combining Biocatalytic Aminations with Buchwaldâ€“Hartwig Nâ€Arylation. Angewandte Chemie - International Edition, 2020, 59, 18156-18160.	7.2	51
123	An Engineered Alcohol Oxidase for the Oxidation of Primary Alcohols. ChemBioChem, 2019, 20, 276-281.	1.3	50
124	Regioâ€and Enantioâ€selective Chemoâ€enzymatic Câ€“Hâ€Lactonization of Decanoic Acid to (S)â€Îâ€Decalactone. Angewandte Chemie - International Edition, 2019, 58, 5668-5671.	7.2	50
125	Phenylalanine Ammonia Lyase Catalyzed Synthesis of Amino Acids by an MIOâ€Cofactor Independent Pathway. Angewandte Chemie - International Edition, 2014, 53, 4652-4656.	7.2	49
126	Galactose Oxidase Variants for the Oxidation of Amino Alcohols in Enzyme Cascade Synthesis. ChemCatChem, 2015, 7, 2313-2317.	1.8	49

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127	Asymmetric synthesis of primary amines catalyzed by thermotolerant fungal reductive aminases. Chemical Science, 2020, 11, 5052-5057.	3.7	49
128	Cephalosporin biosynthesis: A branched pathway sensitive to an isotope effect. Tetrahedron, 1991, 47, 9881-9900.	1.0	48
129	Real-Time Screening of Biocatalysts in Live Bacterial Colonies. Journal of the American Chemical Society, 2017, 139, 1408-1411.	6.6	48
130	Chemoenzymatic Synthesis of Substituted Azepanes by Sequential Biocatalytic Reduction and Organolithium-Mediated Rearrangement. Journal of the American Chemical Society, 2018, 140, 17872-17877.	6.6	48
131	Rapid prototyping of microbial production strains for the biomanufacture of potential materials monomers. Metabolic Engineering, 2020, 60, 168-182.	3.6	48
132	Characterization of imine reductases in reductive amination for the exploration of structure-activity relationships. Science Advances, 2020, 6, eaay9320.	4.7	48
133	Multifunctional biocatalyst for conjugate reduction and reductive amination. Nature, 2022, 604, 86-91.	13.7	48
134	An Asymmetric Enzyme-Catalyzed Retro-Claisen Reaction for the Desymmetrization of CyclicÎ²-Diketones. Angewandte Chemie - International Edition, 2001, 40, 1111-1114.	7.2	47
135	Solid-Supported Cyclohexane-1,3-dione (CHD):â€‰ A â€œCapture and Releaseâ€•Reagent for the Synthesis of Amides and Novel Scavenger Resin. Organic Letters, 2003, 5, 849-852.	2.4	47
136	Enantioselective hydrolysis of nitriles and amides using an immobilised whole cell system. Tetrahedron: Asymmetry, 1992, 3, 1543-1546.	1.8	45
137	Coupling Droplet Microfluidics with Mass Spectrometry for Ultrahigh-Throughput Analysis of Complex Mixtures up to and above 30 Hz. Analytical Chemistry, 2020, 92, 12605-12612.	3.2	45
138	Engineering Escherichia coli towards de novo production of gatekeeper (2S)-flavanones: naringenin, pinocembrin, eriodictyol and homoeriodictyol. Synthetic Biology, 2020, 5, ysaa012.	1.2	45
139	Purification and characterization of cloned isopenicillin N synthetase.. Journal of Antibiotics, 1987, 40, 652-659.	1.0	44
140	Development of Continuous Flow Systems to Access Secondary Amines Through Previously Incompatible Biocatalytic Cascades**. Angewandte Chemie - International Edition, 2021, 60, 18660-18665.	7.2	44
141	Enzymatic Generation and In Situ Screening of a Dynamic Combinatorial Library of Sialic Acid Analogues. Angewandte Chemie - International Edition, 2002, 41, 3405-3407.	7.2	43
142	Micro-scale process development of transaminase catalysed reactions. Organic and Biomolecular Chemistry, 2010, 8, 1280.	1.5	43
143	One-Pot Biocatalytic Synthesis of Substituted <scp>d</scp>-Tryptophans from Indoles Enabled by an Engineered Aminotransferase. ACS Catalysis, 2019, 9, 3482-3486.	5.5	43
144	One-Pot Biocatalytic Cascade Reduction of Cyclic Enimines for the Preparation of Diastereomerically Enriched N-Heterocycles. Journal of the American Chemical Society, 2019, 141, 19208-19213.	6.6	43

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145	A fast and sensitive assay for measuring the activity and enantioselectivity of transaminases. Chemical Communications, 2011, 47, 773-775.	2.2	42
146	Monoamine Oxidaseâ€“Ï‰â€“Transaminase Cascade for the Deracemisation and Dealkylation of Amines. ChemCatChem, 2014, 6, 992-995.	1.8	42
147	Achieving optimal SERS through enhanced experimental design. Journal of Raman Spectroscopy, 2016, 47, 59-66.	1.2	42
148	Kinetic Resolution and Deracemization of Racemic Amines Using a Reductive Aminase. ChemCatChem, 2018, 10, 515-519.	1.8	42
149	Chemoâ€Enzymatic Synthesis of Pyrazines and Pyrroles. Angewandte Chemie - International Edition, 2018, 57, 16760-16763.	7.2	42
150	Substrate promiscuity of cytochrome P450 RhF. Catalysis Science and Technology, 2013, 3, 1490.	2.1	41
151	Technical Considerations for Scale-Up of Imine-Reductase-Catalyzed Reductive Amination: A Case Study. Organic Process Research and Development, 2019, 23, 1262-1268.	1.3	41
152	Stereoinversion of Î²- and Î³-substituted Î±-amino acids using a chemo-enzymatic oxidationâ€“reduction procedure. Chemical Communications, 2003, , 2636-2637.	2.2	40
153	Biocatalysis enters a new era. Current Opinion in Chemical Biology, 2013, 17, 212-214.	2.8	40
154	Bacterial Anabaena variabilis phenylalanine ammonia lyase: A biocatalyst with broad substrate specificity. Bioorganic and Medicinal Chemistry, 2014, 22, 5555-5557.	1.4	40
155	Asymmetric Synthesis of Nâ€Substituted Î±â€Amino Esters from Î±â€Ketoesters via Imine Reductaseâ€Catalyzed Reductive Amination. Angewandte Chemie - International Edition, 2021, 60, 8717-8721.	7.2	40
156	Recent advances in the use of enzyme-catalysed reactions in organic synthesis. Natural Product Reports, 1989, 6, 625.	5.2	38
157	Enzymic hydrolysis of prochiral dinitriles. Tetrahedron: Asymmetry, 1992, 3, 1547-1550.	1.8	38
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