Nicholas J Turner

List of Publications by Year in Descending Order

383 papers	16,034 citations	67 h-index	107 g-index
498 ext. papers	18,468 ext. citations	8.4 avg, IF	7.28 L-index

#	Paper	IF	Citations
383	Algorithm-aided engineering of aliphatic halogenase WelO5* for the asymmetric late-stage functionalization of soraphens.. *Nature Communications*, **2022**, 13, 371	17.4	8
382	An Engineered Cytidine Deaminase for Biocatalytic Production of a Key Intermediate of the Covid-19 Antiviral Molnupiravir.. *Journal of the American Chemical Society*, **2022**,	16.4	7
381	Multifunctional biocatalyst for conjugate reduction and reductive amination.. *Nature*, **2022**, 604, 86-91	50.4	11
380	New Trends and Future Opportunities in the Enzymatic Formation of C-C, C-N, and C-O bonds. *ChemBioChem*, **2021**,	3.8	3
379	Screening and characterization of a diverse panel of metagenomic imine reductases for biocatalytic reductive amination. *Nature Chemistry*, **2021**, 13, 140-148	17.6	36
378	Enzymkatalysierte späte Modifizierungen: Besser spät als nie. *Angewandte Chemie*, **2021**, 133, 16962-16993	3.6	4
377	Asymmetric Synthesis of N-Substituted β-Amino Esters from β-Ketoesters via Imine Reductase-Catalyzed Reductive Amination. *Angewandte Chemie - International Edition*, **2021**, 60, 8717-8721	16.4	13
376	Enzymatic Late-Stage Modifications: Better Late Than Never. *Angewandte Chemie - International Edition*, **2021**, 60, 16824-16855	16.4	22
375	Asymmetric Synthesis of N-Substituted β-Amino Esters from β-Ketoesters via Imine Reductase-Catalyzed Reductive Amination. *Angewandte Chemie*, **2021**, 133, 8799-8803	3.6	4
374	Rapid Screening of Diverse Biotransformations for Enzyme Evolution. *Jacs Au*, **2021**, 1, 508-516		3
373	Development of Continuous Flow Systems to Access Secondary Amines Through Previously Incompatible Biocatalytic Cascades*. *Angewandte Chemie - International Edition*, **2021**, 60, 18660-18665	16.4	15
372	Exploiting Bidirectional Electrocatalysis by a Nanoconfined Enzyme Cascade to Drive and Control Enantioselective Reactions. *ACS Catalysis*, **2021**, 11, 6526-6533	13.1	5
371	Development of Continuous Flow Systems to Access Secondary Amines Through Previously Incompatible Biocatalytic Cascades**. *Angewandte Chemie*, **2021**, 133, 18808-18813	3.6	3
370	Biocatalysis. *Nature Reviews Methods Primers*, **2021**, 1,		57
369	Rücktitelbild: Development of Continuous Flow Systems to Access Secondary Amines Through Previously Incompatible Biocatalytic Cascades (Angew. Chem. 34/2021). *Angewandte Chemie*, **2021**, 133, 19040-19040	3.6	
368	Titelbild: Enzymkatalysierte späte Modifizierungen: Besser spät als nie (Angew. Chem. 31/2021). *Angewandte Chemie*, **2021**, 133, 16853-16853	3.6	0
367	Integrated Electro-Biocatalysis for Amine Alkylation with Alcohols. *ChemCatChem*, **2021**, 13, 864-867	5.2	4

366	RetroBioCat as a computer-aided synthesis planning tool for biocatalytic reactions and cascades. *Nature Catalysis*, **2021**, 4, 98-104	36.5	44
365	Enzyme immobilisation on wood-derived cellulose scaffolds via carbohydrate-binding module fusion constructs. *Green Chemistry*, **2021**, 23, 4716-4732	10	5
364	The beauty of biocatalysis: sustainable synthesis of ingredients in cosmetics. *Natural Product Reports*, **2021**,	15.1	6
363	Biocatalytic Synthesis of Chiral Amines Using Oxidoreductases **2021**, 243-283		0
362	Expanding the synthetic scope of biocatalysis by enzyme discovery and protein engineering. *Tetrahedron*, **2021**, 82, 131926	2.4	12
361	Biotechnological synthesis of Pd/Ag and Pd/Au nanoparticles for enhanced Suzuki-Miyaura cross-coupling activity. *Microbial Biotechnology*, **2021**, 14, 2435-2447	6.3	3
360	Toward scalable biocatalytic conversion of 5-hydroxymethylfurfural by galactose oxidase using coordinated reaction and enzyme engineering. *Nature Communications*, **2021**, 12, 4946	17.4	10
359	Synthesis of Pharmaceutically Relevant 2-Aminotetralin and 3-Aminochroman Derivatives via Enzymatic Reductive Amination. *Angewandte Chemie*, **2021**, 133, 24661	3.6	0
358	Synthesis of Pharmaceutically Relevant 2-Aminotetralin and 3-Aminochroman Derivatives via Enzymatic Reductive Amination. *Angewandte Chemie - International Edition*, **2021**, 60, 24456-24460	16.4	5
357	Enzyme Cascade Design: Retrosynthesis Approach **2021**, 7-30		1
356	Asymmetric synthesis of primary amines catalyzed by thermotolerant fungal reductive aminases. *Chemical Science*, **2020**, 11, 5052-5057	9.4	26
355	Monoamine Oxidase (MAO-N) Biocatalyzed Synthesis of Indoles from Indolines Prepared via Photocatalytic Cyclization/Arylative Dearomatization. *ACS Catalysis*, **2020**, 10, 6414-6421	13.1	11
354	Synthesis of protected 3-aminopiperidine and 3-aminoazepane derivatives using enzyme cascades. *Chemical Communications*, **2020**, 56, 7949-7952	5.8	6
353	Rapid Model-Based Optimization of a Two-Enzyme System for Continuous Reductive Amination in Flow. *Organic Process Research and Development*, **2020**, 24, 1969-1977	3.9	11
352	Engineered formate dehydrogenase from Chaetomium thermophilum, a promising enzymatic solution for biotechnical CO fixation. *Biotechnology Letters*, **2020**, 42, 2251-2262	3	9
351	One-Pot Synthesis of Chiral N-Arylamines by Combining Biocatalytic Aminations with Buchwald-Hartwig N-Arylation. *Angewandte Chemie - International Edition*, **2020**, 59, 18156-18160	16.4	30
350	One-Pot Synthesis of Chiral N-Arylamines by Combining Biocatalytic Aminations with Buchwald–Hartwig N-Arylation. *Angewandte Chemie*, **2020**, 132, 18313-18317	3.6	5
349	Chemoenzymatic synthesis of 3-deoxy-3-fluoro-l-fucose and its enzymatic incorporation into glycoconjugates. *Chemical Communications*, **2020**, 56, 6408-6411	5.8	5

348	Rapid prototyping of microbial production strains for the biomanufacture of potential materials monomers. *Metabolic Engineering*, **2020**, 60, 168-182	9.7	25
347	Characterization of imine reductases in reductive amination for the exploration of structure-activity relationships. *Science Advances*, **2020**, 6, eaay9320	14.3	23
346	Data-driven enzyme immobilisation: a case study using DNA to immobilise galactose oxidase. *Engineering Biology*, **2020**, 4, 43-46	1.1	
345	Natural heterogeneous catalysis with immobilised oxidase biocatalysts.. *RSC Advances*, **2020**, 10, 19501-19505	3.7	5
344	Consolidated production of coniferol and other high-value aromatic alcohols directly from lignocellulosic biomass. *Green Chemistry*, **2020**, 22, 144-152	10	14
343	Bi-enzymatic Conversion of Cinnamic Acids to 2-Arylethylamines. *ChemCatChem*, **2020**, 12, 995-998	5.2	2
342	Is it time for biocatalysis in fragment-based drug discovery?. *Chemical Science*, **2020**, 11, 11104-11112	9.4	10
341	Redox surrogate methods for sustainable amine N-alkylation. *Current Opinion in Chemical Engineering*, **2020**, 30, 60-68	5.4	3
340	Biocatalytic Monoacylation of Symmetrical Diamines and Its Application to the Synthesis of Pharmaceutically Relevant Amides. *ACS Catalysis*, **2020**, 10, 10005-10009	13.1	12
339	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	7.8	19
338	Engineering towards production of gatekeeper (2)-flavanones: naringenin, pinocembrin, eriodictyol and homoeriodictyol. *Synthetic Biology*, **2020**, 5, ysaa012	3.3	17
337	One-pot Chemoenzymatic Deracemisation of Secondary Alcohols Employing Variants of Galactose Oxidase and Transfer Hydrogenation. *ChemCatChem*, **2020**, 12, 6191-6195	5.2	6
336	Enzyme-catalysed enantioselective oxidation of alcohols by air exploiting fast electrochemical nicotinamide cycling in electrode nanopores. *Green Chemistry*, **2019**, 21, 4958-4963	10	13
335	A biocatalytic cascade for the conversion of fatty acids to fatty amines. *Green Chemistry*, **2019**, 21, 4932-4935	10	23
334	New Frontiers in Biocatalysis **2019**, 73-86		1
333	Biocatalysis: Ready to Master Increasing Complexity. *Advanced Synthesis and Catalysis*, **2019**, 361, 2373-2376	5.6	9
332	GeneORator: An Effective Strategy for Navigating Protein Sequence Space More Efficiently through Boolean OR-Type DNA Libraries. *ACS Synthetic Biology*, **2019**, 8, 1371-1378	5.7	15
331	Technical Considerations for Scale-Up of Imine-Reductase-Catalyzed Reductive Amination: A Case Study. *Organic Process Research and Development*, **2019**, 23, 1262-1268	3.9	31

330	Regio- and Enantio-selective Chemo-enzymatic C-H-Lactonization of Decanoic Acid to (S)-Decalactone. *Angewandte Chemie - International Edition*, **2019**, 58, 5668-5671	16.4	35
329	Regio- and Enantio-selective Chemo-enzymatic C-H-Lactonization of Decanoic Acid to (S)-Decalactone. *Angewandte Chemie*, **2019**, 131, 5724-5727	3.6	5
328	One-Pot Biocatalytic Synthesis of Substituted d-Tryptophans from Indoles Enabled by an Engineered Aminotransferase. *ACS Catalysis*, **2019**, 9, 3482-3486	13.1	27
327	Bio-derived Production of Cinnamyl Alcohol via a Three Step Biocatalytic Cascade and Metabolic Engineering. *Green Chemistry*, **2019**, 20, 658-663	10	24
326	Selective Oxidation of N-Glycolylneuraminic Acid Using an Engineered Galactose Oxidase Variant. *ACS Catalysis*, **2019**, 9, 8208-8212	13.1	6
325	Carboxylic acid reductases (CARs): An industrial perspective. *Journal of Biotechnology*, **2019**, 304, 78-88	3.7	28
324	Biocatalytic retrosynthesis approaches to D-(2,4,5-trifluorophenyl)alanine, key precursor of the antidiabetic sitagliptin. *Green Chemistry*, **2019**, 21, 4368-4379	10	10
323	Synthesis of copper catalysts for click chemistry from distillery wastewater using magnetically recoverable bionanoparticles. *Green Chemistry*, **2019**, 21, 4020-4024	10	10
322	Efficient synthesis of -alkyl- amino amides by transaminase-mediated dynamic kinetic resolutions. *Catalysis Science and Technology*, **2019**, 9, 4083-4090	5.5	6
321	Electrified Nanoconfined Biocatalysis with Rapid Cofactor Recycling. *ChemCatChem*, **2019**, 11, 5662-5670	3.2	11
320	Enantioselective Synthesis of Chiral Vicinal Amino Alcohols Using Amine Dehydrogenases. *ACS Catalysis*, **2019**, 9, 11813-11818	13.1	26
319	Biocatalytic Oxidation in Continuous Flow for the Generation of Carbohydrate Dialdehydes. *ACS Catalysis*, **2019**, 9, 11658-11662	13.1	19
318	One-Pot Biocatalytic Cascade Reduction of Cyclic Enimines for the Preparation of Diastereomerically Enriched -Heterocycles. *Journal of the American Chemical Society*, **2019**, 141, 19208-19213	16.4	29
317	A facile and regioselective multicomponent synthesis of chiral aryl-1,2-mercaptoamines in water followed by monoamine oxidase (MAO-N) enzymatic resolution. *Organic and Biomolecular Chemistry*, **2019**, 17, 8982-8986	3.9	2
316	Identifying an iodinase. *Nature Chemistry*, **2019**, 11, 1076-1078	17.6	3
315	Engineered enzymes that retain and regenerate their cofactors enable continuous-flow biocatalysis. *Nature Catalysis*, **2019**, 2, 1006-1015	36.5	54
314	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	16.4	63
313	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. *Angewandte Chemie*, **2019**, 131, 5002-5006	3.6	3

312	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. *Angewandte Chemie - International Edition*, **2019**, 58, 4948-4952	16.4	37
311	Biocatalysis Using Immobilized Enzymes in Continuous Flow for the Synthesis of Fine Chemicals. *Organic Process Research and Development*, **2019**, 23, 9-18	3.9	138
310	A generic platform for the immobilisation of engineered biocatalysts. *Tetrahedron*, **2019**, 75, 327-334	2.4	50
309	An Engineered Alcohol Oxidase for the Oxidation of Primary Alcohols. *ChemBioChem*, **2019**, 20, 276-281	3.8	27
308	Cloning, expression and characterisation of P450-Hal1 (CYP116B62) from Halomonas sp. NCIMB 172: A self-sufficient P450 with high expression and diverse substrate scope. *Enzyme and Microbial Technology*, **2018**, 113, 1-8	3.8	14
307	Engineered Ammonia Lyases for the Production of Challenging Electron-Rich l-Phenylalanines. *ACS Catalysis*, **2018**, 8, 3129-3132	13.1	24
306	Discovery of a new metal and NAD-dependent formate dehydrogenase from Clostridium ljungdahlii. *Preparative Biochemistry and Biotechnology*, **2018**, 48, 327-334	2.4	8
305	Biocatalytic Conversion of Cyclic Ketones Bearing □-Quaternary Stereocenters into Lactones in an Enantioselective Radical Approach to Medium-Sized Carbocycles. *Angewandte Chemie*, **2018**, 130, 3754-3758	3.6	12
304	Discovery and Investigation of Mutase-like Activity in a Phenylalanine Ammonia Lyase from. *Topics in Catalysis*, **2018**, 61, 288-295	2.3	6
303	Biocatalytic Conversion of Cyclic Ketones Bearing □-Quaternary Stereocenters into Lactones in an Enantioselective Radical Approach to Medium-Sized Carbocycles. *Angewandte Chemie - International Edition*, **2018**, 57, 3692-3696	16.4	28
302	Improved Descriptors for the Quantitative Structure-Activity Relationship Modeling of Peptides and Proteins. *Journal of Chemical Information and Modeling*, **2018**, 58, 234-243	6.1	22
301	Selenzyme: enzyme selection tool for pathway design. *Bioinformatics*, **2018**, 34, 2153-2154	7.2	41
300	Biosynthesis and Characterization of Copper Nanoparticles Using Shewanella oneidensis: Application for Click Chemistry. *Small*, **2018**, 14, 1703145	11	87
299	A Single Enzyme Oxidative □asca□e□ia a Dual-Functional Galactose Oxidase. *ACS Catalysis*, **2018**, 8, 4025-4032	13.1	26
298	Synthetic and Therapeutic Applications of Ammonia-lyases and Aminomutases. *Chemical Reviews*, **2018**, 118, 73-118	68.1	97
297	n-Butylamine as an alternative amine donor for the stereoselective biocatalytic transamination of ketones. *Catalysis Today*, **2018**, 306, 96-101	5.3	7
296	Biocatalytic Potential of Enzymes Involved in the Biosynthesis of Isoprenoid Quinones. *ChemCatChem*, **2018**, 10, 124-135	5.2	8
295	Mapping the substrate scope of monoamine oxidase (MAO-N) as a synthetic tool for the enantioselective synthesis of chiral amines. *Bioorganic and Medicinal Chemistry*, **2018**, 26, 1338-1346	3.4	30

294	Panel of New Thermostable CYP116B Self-Sufficient Cytochrome P450 Monooxygenases that Catalyze C–H Activation with a Diverse Substrate Scope. *ChemCatChem*, **2018**, 10, 1042-1051	5.2	27
293	Cloning and upscale production of monoamine oxidase N (MAO-N D5) by Pichia pastoris. *Biotechnology Letters*, **2018**, 40, 127-133	3	5
292	Identification of Novel Bacterial Members of the Imine Reductase Enzyme Family that Perform Reductive Amination. *ChemCatChem*, **2018**, 10, 510-514	5.2	62
291	Kinetic Resolution and Deracemization of Racemic Amines Using a Reductive Aminase. *ChemCatChem*, **2018**, 10, 515-519	5.2	34
290	Highly Productive Oxidative Biocatalysis in Continuous Flow by Enhancing the Aqueous Equilibrium Solubility of Oxygen. *Angewandte Chemie - International Edition*, **2018**, 57, 10535-10539	16.4	44
289	Synthesis of 2,5-Disubstituted Pyrrolidine Alkaloids via A One-Pot Cascade Using Transaminase and Reductive Aminase Biocatalysts. *ChemCatChem*, **2018**, 10, 4733-4738	5.2	21
288	Monoamine Oxidase (MAO-N) Whole Cell Biocatalyzed Aromatization of 1,2,5,6-Tetrahydropyridines into Pyridines. *ACS Catalysis*, **2018**, 8, 8781-8787	13.1	18
287	An automated Design-Build-Test-Learn pipeline for enhanced microbial production of fine chemicals. *Communications Biology*, **2018**, 1, 66	6.7	97
286	Characterisation of CYP102A25 from Bacillus marmarensis and CYP102A26 from Pontibacillus halophilus: P450 Homologues of BM3 with Preference towards Hydroxylation of Medium-Chain Fatty Acids. *ChemBioChem*, **2018**, 19, 513-520	3.8	8
285	Engineered Aminotransferase for the Production of d-Phenylalanine Derivatives Using Biocatalytic Cascades. *ChemCatChem*, **2018**, 10, 470-474	5.2	17
284	Monoamine Oxidase: Tunable Activity for Amine Resolution and Functionalization. *ACS Catalysis*, **2018**, 8, 11889-11907	13.1	50
283	Extending the application of biocatalysis to meet the challenges of drug development. *Nature Reviews Chemistry*, **2018**, 2, 409-421	34.6	168
282	Characterization of a Putrescine Transaminase From and its Application to the Synthesis of Benzylamine Derivatives. *Frontiers in Bioengineering and Biotechnology*, **2018**, 6, 205	5.8	6
281	Chemoenzymatic Synthesis of Substituted Azepanes by Sequential Biocatalytic Reduction and Organolithium-Mediated Rearrangement. *Journal of the American Chemical Society*, **2018**, 140, 17872-17877	16.4	35
280	Concurrent Biocatalytic Oxidation and C–C Bond Formation via Gold Catalysis: One-Pot Alkynylation of N-Alkyl Tetrahydroisoquinolines. *ACS Catalysis*, **2018**, 8, 10032-10035	13.1	21
279	Catalysis and Prerequisites for the Modern Pharmaceutical Industry Landscape **2018**, 1-30		
278	Catalytic C–H Insertion Reactions **2018**, 341-358		
277	Phase-Transfer Catalysis **2018**, 359-386		0

276	Biocatalysis **2018**, 387-413		
275	Catalytic Process Design: The Industrial Perspective **2018**, 31-73		2
274	Hydrogenation, Hydroformylation, and Other Reductions **2018**, 75-112		
273	Oxidation: Nobel Prize Chemistry Catalysis **2018**, 113-145		
272	Catalytic Addition Reactions **2018**, 147-173		
271	Catalytic Cross-Coupling Reactions Nobel Prize Catalysis **2018**, 175-257		
270	Catalytic Metathesis Reactions: Nobel Prize Catalysis **2018**, 259-290		
269	Catalytic Cycloaddition Reactions: Coming Full Circle **2018**, 291-319		
268	Catalytic Cyclopropanation Reactions **2018**, 321-340		
267	A Mechanism for Reductive Amination Catalyzed by Fungal Reductive Aminases. *ACS Catalysis*, **2018**, 8, 11534-11541	13.1	41
266	Chemo-Enzymatic Synthesis of Pyrazines and Pyrroles. *Angewandte Chemie - International Edition*, **2018**, 57, 16760-16763	16.4	18
265	Chemo-Enzymatic Synthesis of Pyrazines and Pyrroles. *Angewandte Chemie*, **2018**, 130, 17002-17005	3.6	2
264	Biomimetic synthesis of 2-substituted N-heterocycle alkaloids by one-pot hydrolysis, transamination and decarboxylative Mannich reaction. *Chemical Communications*, **2018**, 54, 11316-11319	5.8	10
263	The crystal structure of P450-TT heme-domain provides the first structural insights into the versatile class VII P450s. *Biochemical and Biophysical Research Communications*, **2018**, 501, 846-850	3.4	10
262	Imine Reductases, Reductive Aminases, and Amine Oxidases for the Synthesis of Chiral Amines: Discovery, Characterization, and Synthetic Applications. *Methods in Enzymology*, **2018**, 608, 131-149	1.7	18
261	Synergistic Chemo/Biocatalytic Synthesis of Alkaloidal Tetrahydroquinolines. *ACS Catalysis*, **2018**, 8, 5570-5573	13.1	25
260	Highly Productive Oxidative Biocatalysis in Continuous Flow by Enhancing the Aqueous Equilibrium Solubility of Oxygen. *Angewandte Chemie*, **2018**, 130, 10695-10699	3.6	12
259	Absolute Quantification of Uric Acid in Human Urine Using Surface Enhanced Raman Scattering with the Standard Addition Method. *Analytical Chemistry*, **2017**, 89, 2472-2477	7.8	67

258	The self-sufficient P450 RhF expressed in a whole cell system selectively catalyses the 5-hydroxylation of diclofenac. *Biotechnology Journal*, **2017**, 12, 1600520	5.6	22
257	Real-Time Screening of Biocatalysts in Live Bacterial Colonies. *Journal of the American Chemical Society*, **2017**, 139, 1408-1411	16.4	38
256	Kinetic Resolution of Aromatic β-Amino Acids Using a Combination of Phenylalanine Ammonia Lyase and Aminomutase Biocatalysts. *Advanced Synthesis and Catalysis*, **2017**, 359, 1570-1576	5.6	13
255	Enantioselective Chemo- and Biocatalysis: Partners in Retrosynthesis. *Angewandte Chemie - International Edition*, **2017**, 56, 8942-8973	16.4	172
254	Enantioselektive Chemo- und Biokatalyse: Partner in der Retrosynthese. *Angewandte Chemie*, **2017**, 129, 9068-9100	3.6	62
253	NAD(P)H-Dependent Dehydrogenases for the Asymmetric Reductive Amination of Ketones: Structure, Mechanism, Evolution and Application. *Advanced Synthesis and Catalysis*, **2017**, 359, 2011-2025	5.6	70
252	Front Cover Picture: NAD(P)H-Dependent Dehydrogenases for the Asymmetric Reductive Amination of Ketones: Structure, Mechanism, Evolution and Application (Adv. Synth. Catal. 12/2017). *Advanced Synthesis and Catalysis*, **2017**, 359, 2009-2009	5.6	
251	One-Pot Biocatalytic Double Oxidation of α-Isophorone for the Synthesis of Ketoisophorone. *ChemCatChem*, **2017**, 9, 3338-3348	5.2	22
250	A reductive aminase from Aspergillus oryzae. *Nature Chemistry*, **2017**, 9, 961-969	17.6	198
249	Recommendations on the Implementation of Genetic Algorithms for the Directed Evolution of Enzymes for Industrial Purposes. *ChemBioChem*, **2017**, 18, 1087-1097	3.8	8
248	Real-Time Monitoring of Enzyme-Catalysed Reactions using Deep UV Resonance Raman Spectroscopy. *Chemistry - A European Journal*, **2017**, 23, 6983-6987	4.8	8
247	Enzyme Cascades in Whole Cells for the Synthesis of Chiral Cyclic Amines. *ACS Catalysis*, **2017**, 7, 2920-2925	13.1	52
246	Comparison of a Batch and Flow Approach for the Lipase-Catalyzed Resolution of a Cyclopropanecarboxylate Ester, A Key Building Block for the Synthesis of Ticagrelor. *Organic Process Research and Development*, **2017**, 21, 195-199	3.9	21
245	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	13.1	49
244	Imine reductases (IREDs). *Current Opinion in Chemical Biology*, **2017**, 37, 19-25	9.7	153
243	Constructing Biocatalytic Cascades: In Vitro and in Vivo Approaches to de Novo Multi-Enzyme Pathways. *ACS Catalysis*, **2017**, 7, 710-724	13.1	241
242	From Multistep Enzyme Monitoring to Whole-Cell Biotransformations: Development of Real-Time Ultraviolet Resonance Raman Spectroscopy. *Analytical Chemistry*, **2017**, 89, 12527-12532	7.8	4
241	Biocatalytic Routes to Enantiomerically Enriched Dibenz[c,e]azepines. *Angewandte Chemie - International Edition*, **2017**, 56, 15589-15593	16.4	49

240	Discovery, Engineering, and Synthetic Application of Transaminase Biocatalysts. *ACS Catalysis*, **2017**, 7, 8263-8284	13.1	166
239	Zymophore identification enables the discovery of novel phenylalanine ammonia lyase enzymes. *Scientific Reports*, **2017**, 7, 13691	4.9	22
238	Biocatalytic Routes to Enantiomerically Enriched Dibenz[c,e]azepines. *Angewandte Chemie*, **2017**, 129, 15795-15799	3.6	7
237	The continuous oxidation of HMF to FDCA and the immobilisation and stabilisation of periplasmic aldehyde oxidase (PaoABC). *Green Chemistry*, **2017**, 19, 4660-4665	10	60
236	Adenylation Activity of Carboxylic Acid Reductases Enables the Synthesis of Amides. *Angewandte Chemie - International Edition*, **2017**, 56, 14498-14501	16.4	55
235	Adenylation Activity of Carboxylic Acid Reductases Enables the Synthesis of Amides. *Angewandte Chemie*, **2017**, 129, 14690-14693	3.6	20
234	Structures of carboxylic acid reductase reveal domain dynamics underlying catalysis. *Nature Chemical Biology*, **2017**, 13, 975-981	11.7	80
233	Direct Alkylation of Amines with Primary and Secondary Alcohols through Biocatalytic Hydrogen Borrowing. *Angewandte Chemie*, **2017**, 129, 10627-10630	3.6	25
232	Direct Alkylation of Amines with Primary and Secondary Alcohols through Biocatalytic Hydrogen Borrowing. *Angewandte Chemie - International Edition*, **2017**, 56, 10491-10494	16.4	67
231	Two-Enzyme Hydrogen-Borrowing Amination of Alcohols Enabled by a Cofactor-Switched Alcohol Dehydrogenase. *ChemCatChem*, **2017**, 9, 3833-3836	5.2	51
230	A biocatalytic cascade for the amination of unfunctionalised cycloalkanes. *Organic and Biomolecular Chemistry*, **2017**, 15, 9790-9793	3.9	25
229	Simple and Versatile Laboratory Scale CSTR for Multiphasic Continuous-Flow Chemistry and Long Residence Times. *Organic Process Research and Development*, **2017**, 21, 1294-1301	3.9	56
228	Biocatalytic transamination with near-stoichiometric inexpensive amine donors mediated by bifunctional mono- and di-amine transaminases. *Green Chemistry*, **2017**, 19, 361-366	10	51
227	Chemo-biocatalytic one-pot two-step conversion of cyclic amine to lactam using whole cell monoamine oxidase. *Journal of Chemical Technology and Biotechnology*, **2017**, 92, 1558-1565	3.5	9
226	Sugar analog synthesis by in vitro biocatalytic cascade: A comparison of alternative enzyme complements for dihydroxyacetone phosphate production as a precursor to rare chiral sugar synthesis. *PLoS ONE*, **2017**, 12, e0184183	3.7	5
225	Development of a Solid Phase Array Assay for the Screening of Galactose Oxidase Activity and for Fast Identification of Inhibitors. *Protein and Peptide Letters*, **2017**, 24, 742-746	1.9	0
224	Chaetomium thermophilum formate dehydrogenase has high activity in the reduction of hydrogen carbonate (HCO3 -) to formate. *Protein Engineering, Design and Selection*, **2017**, 30, 47-55	1.9	16
223	Single-Biocatalyst Synthesis of Enantiopure d-Arylalanines Exploiting an Engineered d-Amino Acid Dehydrogenase. *Advanced Synthesis and Catalysis*, **2016**, 358, 3298-3306	5.6	37

222	Biocatalytic Dynamic Kinetic Resolution for the Synthesis of Atropisomeric Biaryl N-Oxide Lewis Base Catalysts. *Angewandte Chemie*, **2016**, 128, 10913-10917	3.6	28
221	Biocatalytic retrosynthesis: Redesigning synthetic routes to high-value chemicals. *Perspectives in Science*, **2016**, 9, 42-48	0.8	40
220	Biocatalytic approaches to a key building block for the anti-thrombotic agent ticagrelor. *Organic and Biomolecular Chemistry*, **2016**, 14, 8064-7	3.9	16
219	Structural Basis of the Substrate Range and Enantioselectivity of Two (S)-Selective □-Transaminases. *Biochemistry*, **2016**, 55, 4422-31	3.2	21
218	Synthesis of Enantiomerically Pure Ring-Substituted l-Pyridylalanines by Biocatalytic Hydroamination. *Organic Letters*, **2016**, 18, 5468-5471	6.2	17
217	Ganzzellen-Biokatalysator f□ stereoselektive C-H-Aminierungen. *Angewandte Chemie*, **2016**, 128, 1533-1536	3.6	17
216	Enantioselective Benzylic Hydroxylation Catalysed by P450 Monooxygenases: Characterisation of a P450cam Mutant Library and Molecular Modelling. *ChemBioChem*, **2016**, 17, 426-32	3.8	22
215	Engineering of phenylalanine ammonia lyase from Rhodotorula graminis for the enhanced synthesis of unnatural l-amino acids. *Tetrahedron*, **2016**, 72, 7343-7347	2.4	23
214	Intensified biocatalytic production of enantiomerically pure halophenylalanines from acrylic acids using ammonium carbamate as the ammonia source. *Catalysis Science and Technology*, **2016**, 6, 4086-4089	5.5	21
213	Substituent effects on axial chirality in 1-aryl-3,4-dihydroisoquinolines: controlling the rate of bond rotation. *Tetrahedron*, **2016**, 72, 5172-5177	2.4	5
212	Rapid and sensitive monitoring of biocatalytic reactions using ion mobility mass spectrometry. *Analyst, The*, **2016**, 141, 2351-5	5	8
211	Semi-Rational Design of Geobacillus stearothermophilus L-Lactate Dehydrogenase to Access Various Chiral □-Hydroxy Acids. *Applied Biochemistry and Biotechnology*, **2016**, 179, 474-84	3.2	10
210	Case Studies Illustrating a Science and Risk-Based Approach to Ensuring Drug Quality When Using Enzymes in the Manufacture of Active Pharmaceuticals Ingredients for Oral Dosage Form. *Organic Process Research and Development*, **2016**, 20, 594-601	3.9	12
209	Telescopic one-pot condensation-hydroamination strategy for the synthesis of optically pure L-phenylalanines from benzaldehydes. *Tetrahedron*, **2016**, 72, 7256-7262	2.4	17
208	Whole-Cell Biocatalysts for Stereoselective C-H Amination Reactions. *Angewandte Chemie - International Edition*, **2016**, 55, 1511-3	16.4	74
207	Putrescine Transaminases for the Synthesis of Saturated Nitrogen Heterocycles from Polyamines. *ChemCatChem*, **2016**, 8, 1038-1042	5.2	32
206	InspIRED by Nature: NADPH-Dependent Imine Reductases (IREDs) as Catalysts for the Preparation of Chiral Amines. *Chemistry - A European Journal*, **2016**, 22, 1900-1907	4.8	97
205	Stereoselective Monoamine Oxidase-Catalyzed Oxidative Aza-Friedel□Crafts Reactions of meso-Pyrrolidines in Aqueous Buffer. *Advanced Synthesis and Catalysis*, **2016**, 358, 1555-1560	5.6	11

204	A stereospecific solid-phase screening assay for colonies expressing both (R)- and (S)-selective aminotransferases. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	9
203	Combined Imine Reductase and Amine Oxidase Catalyzed Deracemization of Nitrogen Heterocycles. *ChemCatChem*, **2016**, 8, 117-120	5.2	50
202	Innentitelbild: Ganzzellen-Biokatalysator für stereoselektive C-H-Aminierungen (Angew. Chem. 4/2016). *Angewandte Chemie*, **2016**, 128, 1234-1234	3.6	
201	Whole-cell microtiter plate screening assay for terminal hydroxylation of fatty acids by P450s. *Chemical Communications*, **2016**, 52, 6158-61	5.8	11
200	One-Pot Cascade Synthesis of Mono- and Disubstituted Piperidines and Pyrrolidines using Carboxylic Acid Reductase (CAR), Transaminase (TA), and Imine Reductase (IRED) Biocatalysts. *ACS Catalysis*, **2016**, 6, 3753-3759	13.1	125
199	Label-Free Surface Enhanced Raman Scattering Approach for High-Throughput Screening of Biocatalysts. *Analytical Chemistry*, **2016**, 88, 5898-903	7.8	24
198	Stereoselectivity and Structural Characterization of an Imine Reductase (IRED) from Amycolatopsis orientalis. *ACS Catalysis*, **2016**, 6, 3880-3889	13.1	70
197	Immobilisation and kinetics of monoamine oxidase (MAO-N-D5) enzyme in polyvinyl alcohol gels. *Journal of Molecular Catalysis B: Enzymatic*, **2016**, 129, 69-74		8
196	SYNBIOCHEM-a SynBio foundry for the biosynthesis and sustainable production of fine and speciality chemicals. *Biochemical Society Transactions*, **2016**, 44, 675-7	5.1	5
195	Cascade Reactions **2016**, 213-252		1
194	Biocatalytic Dynamic Kinetic Resolution for the Synthesis of Atropisomeric Biaryl N-Oxide Lewis Base Catalysts. *Angewandte Chemie - International Edition*, **2016**, 55, 10755-9	16.4	60
193	Achieving optimal SERS through enhanced experimental design. *Journal of Raman Spectroscopy*, **2016**, 47, 59-66	2.3	36
192	An ()-Imine Reductase Biocatalyst for the Asymmetric Reduction of Cyclic Imines. *ChemCatChem*, **2015**, 7, 579-583	5.2	106
191	Synthesis of D- and L-phenylalanine derivatives by phenylalanine ammonia lyases: a multienzymatic cascade process. *Angewandte Chemie - International Edition*, **2015**, 54, 4608-11	16.4	84
190	Synthesis of d- and l-Phenylalanine Derivatives by Phenylalanine Ammonia Lyases: A Multienzymatic Cascade Process. *Angewandte Chemie*, **2015**, 127, 4691-4694	3.6	20
189	Enzyme cascade reactions: synthesis of furandicarboxylic acid (FDCA) and carboxylic acids using oxidases in tandem. *Green Chemistry*, **2015**, 17, 3271-3275	10	100
188	Conversion of alcohols to enantiopure amines through dual-enzyme hydrogen-borrowing cascades. *Science*, **2015**, 349, 1525-9	33.3	268
187	The Bacterial Ammonia Lyase EncP: A Tunable Biocatalyst for the Synthesis of Unnatural Amino Acids. *Journal of the American Chemical Society*, **2015**, 137, 12977-83	16.4	51

186	Characterization of a new acidic NAD+-dependent formate dehydrogenase from thermophilic fungus Chaetomium thermophilum. *Journal of Molecular Catalysis B: Enzymatic*, **2015**, 122, 212-217		6
185	Process Requirements of Galactose Oxidase Catalyzed Oxidation of Alcohols. *Organic Process Research and Development*, **2015**, 19, 1580-1589	3.9	60
184	Engineering Biocatalysts for Synthesis Including Cascade Processes. *Advanced Synthesis and Catalysis*, **2015**, 357, 1565-1566	5.6	5
183	Chemoenzymatic Synthesis of Optically Purel- andd-Biarylalanines through Biocatalytic Asymmetric Amination and Palladium-Catalyzed Arylation. *ACS Catalysis*, **2015**, 5, 5410-5413	13.1	56
182	Systematic methodology for the development of biocatalytic hydrogen-borrowing cascades: application to the synthesis of chiral □-substituted carboxylic acids from □-substituted □,□unsaturated aldehydes. *Organic and Biomolecular Chemistry*, **2015**, 13, 223-33	3.9	41
181	Artificial concurrent catalytic processes involving enzymes. *Chemical Communications*, **2015**, 51, 450-64	5.8	92
180	Immobilised whole-cell recombinant monoamine oxidase biocatalysis. *Applied Microbiology and Biotechnology*, **2015**, 99, 1229-36	5.7	32
179	Galactose Oxidase Variants for the Oxidation of Amino Alcohols in Enzyme Cascade Synthesis. *ChemCatChem*, **2015**, 7, 2313-2317	5.2	36
178	Structure, Activity and Stereoselectivity of NADPH-Dependent Oxidoreductases Catalysing the S-Selective Reduction of the Imine Substrate 2-Methylpyrroline. *ChemBioChem*, **2015**, 16, 1052-9	3.8	39
177	Asymmetric Synthesis of Tetracyclic Pyrroloindolines and Constrained Tryptamines by a Switchable Cascade Reaction. *Angewandte Chemie*, **2015**, 127, 14339-14342	3.6	6
176	Asymmetric Synthesis of Tetracyclic Pyrroloindolines and Constrained Tryptamines by a Switchable Cascade Reaction. *Angewandte Chemie - International Edition*, **2015**, 54, 14133-6	16.4	22
175	Active site diversification of P450cam with indole generates catalysts for benzylic oxidation reactions. *Beilstein Journal of Organic Chemistry*, **2015**, 11, 1713-1720	2.5	14
174	Enzymatic cascades for the regio- and stereoselective synthesis of chiral amines. *Perspectives in Science*, **2015**, 4, 55-61	0.8	29
173	Biocatalytic Approaches to the Synthesis of Enantiomerically Pure Chiral Amines. *Topics in Catalysis*, **2014**, 57, 284-300	2.3	249
172	Application of Enzymes in Kinetic Resolutions, Dynamic Kinetic Resolutions and Deracemization Reactions **2014**, 123-160		1
171	Phenylalanine ammonia lyase catalyzed synthesis of amino acids by an MIO-cofactor independent pathway. *Angewandte Chemie - International Edition*, **2014**, 53, 4652-6	16.4	43
170	Role of laccase as an enzymatic pretreatment method to improve lignocellulosic saccharification. *Catalysis Science and Technology*, **2014**, 4, 2251-2259	5.5	54
169	Development of an R-Selective Amine Oxidase with Broad Substrate Specificity and High Enantioselectivity. *ChemCatChem*, **2014**, 6, 996-1002	5.2	56

168	A regio- and stereoselective Ɑ-transaminase/monoamine oxidase cascade for the synthesis of chiral 2,5-disubstituted pyrrolidines. *Angewandte Chemie - International Edition*, **2014**, 53, 2447-50	16.4	131
167	Deracemisation of benzylisoquinoline alkaloids employing monoamine oxidase variants. *Catalysis Science and Technology*, **2014**, 4, 3657-3664	5.5	23
166	Enzyme toolbox: novel enantiocomplementary imine reductases. *ChemBioChem*, **2014**, 15, 2201-4	3.8	80
165	Chiral amine synthesis using Ɑ-transaminases: an amine donor that displaces equilibria and enables high-throughput screening. *Angewandte Chemie - International Edition*, **2014**, 53, 10714-7	16.4	115
164	Catalytic bio-chemo and bio-Bio tandem oxidation reactions for amide and carboxylic acid synthesis. *Green Chemistry*, **2014**, 16, 4524-4529	10	48
163	Bacterial Anabaena variabilis phenylalanine ammonia lyase: a biocatalyst with broad substrate specificity. *Bioorganic and Medicinal Chemistry*, **2014**, 22, 5555-7	3.4	31
162	Monoamine Oxidase-Ɑ-Transaminase Cascade for the Deracemisation and Dealkylation of Amines. *ChemCatChem*, **2014**, 6, 992-995	5.2	35
161	Deracemisierung durch simultane bio-oxidative Racematspaltung und Stereoinversion. *Angewandte Chemie*, **2014**, 126, 3805-3809	3.6	23
160	A Regio- and Stereoselective Ɑ-Transaminase/Monoamine Oxidase Cascade for the Synthesis of Chiral 2,5-Disubstituted Pyrrolidines. *Angewandte Chemie*, **2014**, 126, 2479-2482	3.6	46
159	Phenylalanine Ammonia Lyase Catalyzed Synthesis of Amino Acids by an MIO-Cofactor Independent Pathway. *Angewandte Chemie*, **2014**, 126, 4740-4744	3.6	17
158	Deracemization by simultaneous bio-oxidative kinetic resolution and stereoinversion. *Angewandte Chemie - International Edition*, **2014**, 53, 3731-4	16.4	63
157	Chiral Amine Synthesis Using Ɑ-Transaminases: An Amine Donor that Displaces Equilibria and Enables High-Throughput Screening. *Angewandte Chemie*, **2014**, 126, 10890-10893	3.6	31
156	Enzymatic desymmetrising redox reactions for the asymmetric synthesis of biaryl atropisomers. *Chemistry - A European Journal*, **2014**, 20, 13084-8	4.8	21
155	Engineering an enantioselective amine oxidase for the synthesis of pharmaceutical building blocks and alkaloid natural products. *Journal of the American Chemical Society*, **2013**, 135, 10863-9	16.4	257
154	Structure and activity of NADPH-dependent reductase Q1EQE0 from Streptomyces kanamyceticus, which catalyses the R-selective reduction of an imine substrate. *ChemBioChem*, **2013**, 14, 1372-9	3.8	69
153	Monoamine Oxidase (MAO-N) Catalyzed Deracemization of Tetrahydro-Ɑ-carbolines: Substrate Dependent Switch in Enantioselectivity. *ACS Catalysis*, **2013**, 3, 2869-2872	13.1	67
152	Substrate promiscuity of cytochrome P450 RhF. *Catalysis Science and Technology*, **2013**, 3, 1490	5.5	40
151	Asymmetric Reduction of Cyclic Imines Catalyzed by a Whole-Cell Biocatalyst Containing an (S)-Imine Reductase. *ChemCatChem*, **2013**, 5, 3505-3508	5.2	110

150	Synthetic cascades are enabled by combining biocatalysts with artificial metalloenzymes. *Nature Chemistry*, **2013**, 5, 93-9	17.6	271
149	Biocatalytic retrosynthesis. *Nature Chemical Biology*, **2013**, 9, 285-8	11.7	250
148	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	11.5	259
147	Synthesis of Chiral Amines Using Transaminases **2013**, 63-74		1
146	Development of a high-throughput screening method for racemase activity and its application to the identification of alanine racemase variants with activity towards l-arginine. *Tetrahedron*, **2012**, 68, 7564-7567	2.4	21
145	Stereoselective synthesis of N-aryl proline amides by biotransformation-Ugi-Smiles sequence. *Organic and Biomolecular Chemistry*, **2012**, 10, 941-4	3.9	28
144	Oxidation of C?N Bonds **2012**, 1535-1552		1
143	Regio- and stereoselective oxidation of unactivated C-H bonds with Rhodococcus rhodochrous. *Beilstein Journal of Organic Chemistry*, **2012**, 8, 496-500	2.5	6
142	Directed Evolution of the Enzyme Monoamine Oxidase (MAO-N): Highly Efficient Chemo-enzymatic Deracemisation of the Alkaloid (□)-Crispine A. *ChemCatChem*, **2012**, 4, 1259-1261	5.2	53
141	Synthesis of 1,3-Disubstituted Azetidines via a Tandem Ring-Opening Ring-Closing Procedure. *Synlett*, **2012**, 23, 1511-1515	2.2	3
140	Cytochromes P450 as useful biocatalysts: addressing the limitations. *Chemical Communications*, **2011**, 47, 2490-501	5.8	190
139	Enantioselective oxidation of C-O and C-N bonds using oxidases. *Chemical Reviews*, **2011**, 111, 4073-87	68.1	180
138	A fast and sensitive assay for measuring the activity and enantioselectivity of transaminases. *Chemical Communications*, **2011**, 47, 773-5	5.8	36
137	Enzyme-Catalyzed Enantioselective Hydrolysis of Dihydrouracils as a Route to Enantiomerically Pure □Amino Acids. *ACS Catalysis*, **2011**, 1, 1014-1016	13.1	13
136	Engineering a Biometallic Whole Cell Catalyst for Enantioselective Deracemization Reactions. *ACS Catalysis*, **2011**, 1, 1589-1594	13.1	74
135	Heavily fluorinated carbohydrates as enzyme substrates: oxidation of tetrafluorinated galactose by galactose oxidase. *Chemical Communications*, **2011**, 47, 11228-30	5.8	29
134	Chimeric self-sufficient P450cam-RhFRed biocatalysts with broad substrate scope. *Beilstein Journal of Organic Chemistry*, **2011**, 7, 1494-8	2.5	31
133	Biocatalysis □A Gateway to Industrial Biotechnology. *Advanced Synthesis and Catalysis*, **2011**, 353, 2189-2190	5.9	15

132	Design and synthesis of conformationally constrained cyclophilin inhibitors showing a cyclosporin-A phenotype in C. elegans. *ChemBioChem*, **2011**, 12, 802-10	3.8	6
131	Ammonia lyases and aminomutases as biocatalysts for the synthesis of α-amino and β-amino acids. *Current Opinion in Chemical Biology*, **2011**, 15, 234-40	9.7	127
130	Glycoprotein labeling using engineered variants of galactose oxidase obtained by directed evolution. *Journal of the American Chemical Society*, **2011**, 133, 8436-9	16.4	72
129	High throughput screens yield small molecule inhibitors of Leishmania CRK3:CYC6 cyclin-dependent kinase. *PLoS Neglected Tropical Diseases*, **2011**, 5, e1033	4.8	26
128	Micro-scale process development of transaminase catalysed reactions. *Organic and Biomolecular Chemistry*, **2010**, 8, 1280-3	3.9	38
127	A highly efficient synthesis of telaprevir by strategic use of biocatalysis and multicomponent reactions. *Chemical Communications*, **2010**, 46, 7918-20	5.8	140
126	Efficient Production of Enantiomerically Pure Chiral Amines at Concentrations of 50 g/L Using Transaminases. *Organic Process Research and Development*, **2010**, 14, 234-237	3.9	130
125	Selective chemical intervention in the proteome of Caenorhabditis elegans. *Journal of Proteome Research*, **2010**, 9, 6060-70	5.6	1
124	Asymmetric synthesis of synthetic alkaloids by a tandem biocatalysis/Ugi/Pictet-Spengler-type cyclization sequence. *Chemical Communications*, **2010**, 46, 7706-8	5.8	75
123	Biocatalytic Routes to Nonracemic Chiral Amines **2010**, 431-459		32
122	LICRED: a versatile drop-in vector for rapid generation of redox-self-sufficient cytochrome P450s. *ChemBioChem*, **2010**, 11, 987-94	3.8	46
121	Tyrosyl radical formation and propagation in flavin dependent monoamine oxidases. *ChemBioChem*, **2010**, 11, 1228-31	3.8	22
120	Biocatalytic Desymmetrization of an Atropisomer with both an Enantioselective Oxidase and Ketoreductases. *Angewandte Chemie*, **2010**, 122, 7164-7167	3.6	13
119	Enantioselective biocatalytic oxidative desymmetrization of substituted pyrrolidines. *Angewandte Chemie - International Edition*, **2010**, 49, 2182-4	16.4	132
118	Highly stereoselective synthesis of substituted prolyl peptides using a combination of biocatalytic desymmetrization and multicomponent reactions. *Angewandte Chemie - International Edition*, **2010**, 49, 5289-92	16.4	102
117	Biocatalytic desymmetrization of an atropisomer with both an enantioselective oxidase and ketoreductases. *Angewandte Chemie - International Edition*, **2010**, 49, 7010-3	16.4	46
116	Deracemisation methods. *Current Opinion in Chemical Biology*, **2010**, 14, 115-21	9.7	182
115	Directed evolution drives the next generation of biocatalysts. *Nature Chemical Biology*, **2009**, 5, 567-73	11.7	614

114	Rapid screening and scale-up of transaminase catalysed reactions. *Organic and Biomolecular Chemistry*, **2009**, 7, 395-8	3.9	138
113	Engineering and improvement of the efficiency of a chimeric [P450cam-RhFRed reductase domain] enzyme. *Chemical Communications*, **2009**, 2478-80	5.8	52
112	Efficient kinetic resolution of racemic amines using a transaminase in combination with an amino acid oxidase. *Chemical Communications*, **2009**, 2127-9	5.8	103
111	Biotechnological Manufacturing Options for Organic Chemistry. *Mini-Reviews in Organic Chemistry*, **2009**, 6, 300-306	1.7	26
110	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, 1218-31	6.5	70
109	Cloning, expression, purification, crystallization and preliminary X-ray diffraction analysis of variants of monoamine oxidase from Aspergillus niger. *Acta Crystallographica Section F: Structural Biology Communications*, **2008**, 64, 182-5		28
108	Directed evolution of galactose oxidase: generation of enantioselective secondary alcohol oxidases. *ChemBioChem*, **2008**, 9, 857-60	3.8	113
107	Rapid determination of both the activity and enantioselectivity of ketoreductases. *Angewandte Chemie - International Edition*, **2008**, 47, 2639-41	16.4	26
106	Design, synthesis and trypanocidal activity of lead compounds based on inhibitors of parasite glycolysis. *Bioorganic and Medicinal Chemistry*, **2008**, 16, 5050-61	3.4	52
105	Enantioselective oxidation of O-methyl-N-hydroxylamines using monoamine oxidase N as catalyst. *Chemical Communications*, **2007**, 1530-1	5.8	25
104	Structure-based discovery of a family of synthetic cyclophilin inhibitors showing a cyclosporin-A phenotype in Caenorhabditis elegans. *Biochemical and Biophysical Research Communications*, **2007**, 363, 1013-9	3.4	19
103	A template-based mnemonic for monoamine oxidase (MAO-N) catalyzed reactions and its application to the chemo-enzymatic deracemisation of the alkaloid (+/-)-crispine A. *Chemical Communications*, **2007**, 3640-2	5.8	79
102	Preparative deracemization of unnatural amino acids. *Biochemical Society Transactions*, **2006**, 34, 287-90	5.1	34
101	A chemo-enzymatic route to enantiomerically pure cyclic tertiary amines. *Journal of the American Chemical Society*, **2006**, 128, 2224-5	16.4	187
100	Probing the substrate specificity of the catalytically self-sufficient cytochrome P450 RhF from a Rhodococcus sp. *Chemical Communications*, **2006**, 4492-4	5.8	31
99	Agar Plate-based Assays **2006**, 137-161		2
98	Efficient terpene hydroxylation catalysts based upon P450 enzymes derived from actinomycetes. *Organic and Biomolecular Chemistry*, **2005**, 3, 2930-4	3.9	34
97	Enantioselective epoxidation of linolenic acid catalysed by cytochrome P450(BM3) from Bacillus megaterium. *Organic and Biomolecular Chemistry*, **2005**, 3, 2688-90	3.9	23

96	Identification of broad specificity P450CAM variants by primary screening against indole as substrate. *Chemical Communications*, **2005**, 3652-4	5.8	34
95	Analysis of the domain properties of the novel cytochrome P450 RhF. *FEBS Letters*, **2005**, 579, 2215-20	3.8	47
94	Microwave-assisted sequential amide bond formation and intramolecular amidation: a rapid entry to functionalized oxindoles. *Organic Letters*, **2005**, 7, 863-6	6.2	72
93	A surface plasmon resonance-based assay for small molecule inhibitors of human cyclophilin A. *Analytical Biochemistry*, **2005**, 345, 214-26	3.1	56
92	Directed evolution of an amine oxidase for the preparative deracemisation of cyclic secondary amines. *ChemBioChem*, **2005**, 6, 637-9	3.8	106
91	Rapid and ultra-sensitive determination of enzyme activities using surface-enhanced resonance Raman scattering. *Nature Biotechnology*, **2004**, 22, 1133-8	44.5	166
90	Rapid identification of cytochrome P450cam variants by in vivo screening of active site libraries. *Tetrahedron: Asymmetry*, **2004**, 15, 2829-2831		12
89	Dimedone esters as novel hydrolase substrates and their application in the colorimetric detection of lipase and esterase activity. *ChemBioChem*, **2004**, 5, 1144-8	3.8	11
88	Generation of a dynamic combinatorial library using sialic acid aldolase and in situ screening against wheat germ agglutinin. *Tetrahedron*, **2004**, 60, 771-780	2.4	35
87	Enzyme catalysed deracemisation and dynamic kinetic resolution reactions. *Current Opinion in Chemical Biology*, **2004**, 8, 114-9	9.7	186
86	Nucleotide sequence of a portion of the camphor-degrading gene cluster from Rhodococcus sp. NCIMB 9784. *DNA Sequence*, **2004**, 15, 96-103		2
85	A versatile chemo-enzymatic route to enantiomerically pure beta-branched alpha-amino acids. *Journal of the American Chemical Society*, **2004**, 126, 4098-9	16.4	104
84	Efficient palladium-catalyzed cross-coupling of beta-chloroalkylidene/arylidene malonates using microwave chemistry. *Journal of Organic Chemistry*, **2004**, 69, 6920-2	4.2	32
83	Directed evolution of enzymes for applied biocatalysis. *Trends in Biotechnology*, **2003**, 21, 474-8	15.1	142
82	Directed Evolution of an Amine Oxidase Possessing both Broad Substrate Specificity and High Enantioselectivity. *Angewandte Chemie*, **2003**, 115, 4955-4958	3.6	43
81	Directed evolution of an amine oxidase possessing both broad substrate specificity and high enantioselectivity. *Angewandte Chemie - International Edition*, **2003**, 42, 4807-10	16.4	153
80	Synthesis of optically active methadones, LAAM and bufuralol by lipase-catalysed acylations. *Tetrahedron: Asymmetry*, **2003**, 14, 567-576		15
79	Controlling chirality. *Current Opinion in Biotechnology*, **2003**, 14, 401-6	11.4	66

78	Directed evolution of enzymes: new biocatalysts for asymmetric synthesis. *Organic and Biomolecular Chemistry*, **2003**, 1, 4133-7	3.9	67
77	Solid-supported cyclohexane-1,3-dione (CHD): a "capture and release" reagent for the synthesis of amides and novel scavenger resin. *Organic Letters*, **2003**, 5, 849-52	6.2	40
76	Lipase-catalyzed kinetic resolution on solid-phase via a "capture and release" strategy. *Journal of the American Chemical Society*, **2003**, 125, 13952-3	16.4	24
75	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, 48914-20	5.4	84
74	Stereoinversion of beta- and gamma-substituted alpha-amino acids using a chemo-enzymatic oxidation-reduction procedure. *Chemical Communications*, **2003**, 2636-7	5.8	34
73	Deracemization of □-Methylbenzylamine Using an Enzyme Obtained by In Vitro Evolution. *Angewandte Chemie*, **2002**, 114, 3309-3312	3.6	68
72	Deracemization of alpha-methylbenzylamine using an enzyme obtained by in vitro evolution. *Angewandte Chemie - International Edition*, **2002**, 41, 3177-80	16.4	194
71	Enzymatic generation and in situ screening of a dynamic combinatorial library of sialic acid analogues. *Angewandte Chemie - International Edition*, **2002**, 41, 3405-7	16.4	28
70	P450(camr), a cytochrome P450 catalysing the stereospecific 6- endo-hydroxylation of (1 R)-(+)-camphor. *Applied Microbiology and Biotechnology*, **2002**, 59, 449-54	5.7	21
69	Amine□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	2	105
68	Identification of a new class of cytochrome P450 from a Rhodococcus sp. *Journal of Bacteriology*, **2002**, 184, 3898-908	3.5	133
67	Deracemisation and stereoinversion of alpha-amino acids using D-amino acid oxidase and hydride reducing agents. *Chemical Communications*, **2002**, 246-7	5.8	76
66	An Asymmetric Enzyme-Catalyzed Retro-Claisen Reaction for the Desymmetrization of Cyclic □Diketones. *Angewandte Chemie - International Edition*, **2001**, 40, 1111-1114	16.4	42
65	Diastereoselective hydroxylation and reduction of derivatised tetrahydrofurans by Beauveria bassiana. *Biotechnology Letters*, **2001**, 23, 119-124	3	2
64	The desymmetrization of bicyclic beta -diketones by an enzymatic retro-Claisen reaction. A new reaction of the crotonase superfamily. *Journal of Biological Chemistry*, **2001**, 276, 12565-72	5.4	31
63	Tuning lipase enantioselectivity in organic media using solid-state buffers. *Journal of Organic Chemistry*, **2001**, 66, 5074-9	4.2	32
62	Synthesis of a novel N-hydroxypyrrolidine using enzyme catalysed asymmetric carbon□carbon bond synthesis. *Tetrahedron Letters*, **2000**, 41, 4481-4485	2	33
61	Dynamic kinetic resolution: synthesis of optically active □-amino acid derivatives. *Tetrahedron: Asymmetry*, **2000**, 11, 1687-1690		59

60	The enzymatic glucuronidation of 3-O-protected morphine□ new route to 7,8-dihydromorphine-6-glucuronide. *Tetrahedron: Asymmetry*, **2000**, 11, 413-416		10
59	Applications of transketolases in organic synthesis. *Current Opinion in Biotechnology*, **2000**, 11, 527-31	11.4	106
58	Functional Group Transformations Mediated by Whole Cells and Strategies for the Efficient Synthesis of Optically Pure Chiral Intermediates. *NATO Science Series Partnership Sub-series 1, Disarmament Technologies*, **2000**, 71-94		1
57	Novel mechanism of inhibition of elastase by beta-lactams is defined by two inhibitor crystal complexes. *Journal of Biological Chemistry*, **1999**, 274, 24901-5	5.4	11
56	A versatile procedure for the generation of nucleoside 5?-carboxylic acids using nucleoside oxidase. *Tetrahedron*, **1998**, 54, 8171-8182	2.4	12
55	A novel linker for the attachment of alcohols to solid supports. *Tetrahedron Letters*, **1998**, 39, 3819-3822	2	34
54	Biohydroxylations of Cbz-protected alkyl substituted piperidines by Beauveria bassiana ATCC 7159. *Journal of the Chemical Society Perkin Transactions 1*, **1998**, 3365-3370		16
53	Molecular modelling studies of substrate binding to the lipase from Rhizomucor miehei. *Journal of Computer-Aided Molecular Design*, **1997**, 11, 256-64	4.2	10
52	Concerning the Baker's Yeast (Saccharomyces cerevisiae) Mediated Reduction of Nitroarenes and Other N-O Containing Functional Groups. *Tetrahedron Letters*, **1997**, 38, 3043-3046	2	21
51	The application of microbial methods to the synthesis of chiral fine chemicals. *Advances in Asymmetric Synthesis*, **1997**, 285-307		
50	The Application of Enzymes in the Synthesis of Amino Acids, Peptides and Carbohydrates. *Current Organic Chemistry*, **1997**, 1, 21-36	1.7	6
49	Asymmetric synthesis using enzymes and whole cells **1996**, 260-274		1
48	Carbon□Carbon Bond Synthesis: The Impact of rDNA Technology on the Production and Use of E. coli Transketolase. *Annals of the New York Academy of Sciences*, **1996**, 782, 513-525	6.5	24
47	Nitrile hydratase enzymes in organic synthesis: Enantioselective synthesis of the lactone moiety of the mevinic acids. *Tetrahedron Letters*, **1996**, 37, 6001-6004	2	44
46	Crystallisation-induced dynamic resolution of dipeptide-derived 5(4H)-oxazolones. *Tetrahedron Letters*, **1996**, 37, 6575-6578	2	11
45	Transketolase from Escherichia coli: A practical procedure for using the biocatalyst for asymmetric carbon-carbon bond synthesis. *Tetrahedron: Asymmetry*, **1996**, 7, 2185-2188		73
44	Synthesis of homochiral l-(S)-tert-leucine via a lipase catalysed dynamic resolution process. *Tetrahedron Letters*, **1995**, 36, 1113-1116	2	96
43	Synthesis of morphine-6-glucuronide via a highly selective enzyme catalysed hydrolysis reaction. *Tetrahedron Letters*, **1995**, 36, 1117-1120	2	17

42	Revised pathway for the biosynthesis of aristeromycin and neplanocin A from D-glucose in Streptomyces citricolor. *Journal of the American Chemical Society*, **1995**, 117, 5391-5392	16.4	25
41	Synthesis of enantiomerically pure □-hydroxyaldehydes from the corresponding □-hydroxycarboxylic acids: novel substrates for Escherichia coli transketolase. *Journal of the Chemical Society Chemical Communications*, **1995**, 2475-2476		28
40	N-(2-carboxybenzoyl)-L-phenylalanylglycine: a low molecular-mass gelling agent. *Journal of the Chemical Society Chemical Communications*, **1995**, 2063		23
39	The biosynthesis of carbocyclic nucleosides. *Chemical Society Reviews*, **1995**, 24, 169	58.5	47
38	Synthesis of shidasterone and the unambiguous determination of its configuration at C-22. *Journal of the Chemical Society Chemical Communications*, **1995**, 933		14
37	An improved strategy for the stereoselective synthesis of glycosides using glycosidases as catalysts. *Tetrahedron: Asymmetry*, **1994**, 5, 2517-2522		12
36	Regioselective reduction of substituted dinitroarenes using baker's yeast. *Tetrahedron Letters*, **1994**, 35, 7867-7870	2	17
35	Microbial hydrolysis of glutaronitrile derivatives with Brevibacterium sp. R 312. *Bioorganic and Medicinal Chemistry*, **1994**, 2, 447-55	3.4	10
34	Regioselective hydrolysis of aromatic dinitriles using a whole cell catalyst. *Journal of the Chemical Society Perkin Transactions 1*, **1994**, 1679		60
33	Recent advances in the use of enzyme-catalysed reactions in organic synthesis. *Natural Product Reports*, **1994**, 11, 1-15	15.1	29
32	Enzyme-catalysed carbon□arbon bond formation: use of transketolase from Escherichia coli. *Journal of the Chemical Society Perkin Transactions 1*, **1993**, 165-166		68
31	Chemo-enzymic synthesis of guanosine 5?-diphosphomannose (GDP-mannose) and selected analogues. *Journal of the Chemical Society Perkin Transactions 1*, **1993**, 3017-3022		11
30	The isolation and absolute configuration of (1S,2S,3R)-4- Hydroxymethylcyclopent-4-ene-1,2,3-triol: A putative intermediate in the biosynthesis of aristeromycin by Streptomyces citricolor. *Tetrahedron Letters*, **1993**, 34, 4083-4086	2	7
29	Stereoselective hydrolysis of nitriles and amides under mild conditions using a whole cell catalyst. *Tetrahedron: Asymmetry*, **1993**, 4, 1085-1104		51
28	Some recent developments in the use of enzyme catalysed reactions in organic synthesis. *Journal of Biotechnology*, **1992**, 22, 227-44	3.7	28
27	Enantioselective hydrolysis of nitriles and amides using an immobilised whole cell system. *Tetrahedron: Asymmetry*, **1992**, 3, 1543-1546		33
26	Enzymic hydrolysis of prochiral dinitriles. *Tetrahedron: Asymmetry*, **1992**, 3, 1547-1550		30
25	Use of Enzymes as Catalysts in Key Reactions Leading to the Synthesis of Optically Active Natural Products and Analogues **1992**, 93-111		

24	Synthesis of □□-aminoadipoyl--cysteinyl--allylglycine, and eight deuterated analogues, substrates for the investigation of the mechanism of action of isopenicillin n synthase.. *Tetrahedron*, **1991**, 47, 8203-8222	2.4	14
23	Enzymic conversion of deuterated analogues of □□-aminoadipoyl--cysteinyl--allylglycine, an unnatural substrate for isopenicilin n synthase: A unified theory of second ring closure.. *Tetrahedron*, **1991**, 47, 8223-8242	2.4	8
22	Cephalosporin biosynthesis: A branched pathway sensitive to an isotope effect. *Tetrahedron*, **1991**, 47, 9881-9900	2.4	37
21	Chemo-enzymatic synthesis of a □mannosyl-containing trisaccharide. *Journal of the Chemical Society Chemical Communications*, **1991**, 382-384		12
20	Stereospecific attachment of carbohydrates to amino acid derivatives using □glucosidase and □xylosidase. *Journal of the Chemical Society Chemical Communications*, **1991**, 1349-1350		22
19	Synthesis of a novel acceptor substrate for a mannosyl transferase. *Journal of the Chemical Society Chemical Communications*, **1991**, 380		5
18	Some Interesterification Reactions Involving Mucor Miehei Lipase. *Biocatalysis*, **1991**, 5, 13-19		17
17	Selective hydrolysis of nitriles under mild conditions by an enzyme.. *Tetrahedron Letters*, **1990**, 31, 7223-7226		77
16	Enzyme-catalysed inter-esterification procedure for the preparation of esters of a chiral secondary alcohol in high enantiomeric purity. *Journal of the Chemical Society Chemical Communications*, **1990**, 569		31
15	Penicillin biosynthesis: active substrates derived by methoxy substitution in the valinyl residue of the natural substrate. *Journal of the Chemical Society Chemical Communications*, **1989**, 802		2
14	Recent advances in the use of enzyme-catalysed reactions in organic synthesis. *Natural Product Reports*, **1989**, 6, 625-44	15.1	23
13	Cephalosporin C biosynthesis; stereochemistry of the incorporation of D,L,D-□-aminodipoyl-cysteinyl-(3S)-[2-2H,4-13C]valine into □lactam compounds. *Journal of the Chemical Society Chemical Communications*, **1989**, 1141-1143		7
12	Evidence for epoxide formation from isopenicillin N synthase. *Journal of the Chemical Society Chemical Communications*, **1989**, 978		13
11	Identification and characterisation of shunt metabolites from isopenicillin N synthase. *Journal of the Chemical Society Chemical Communications*, **1988**, 1125		7
10	Purification and characterization of cloned isopenicillin N synthetase. *Journal of Antibiotics*, **1987**, 40, 652-9	3.7	38
9	Penicillin biosynthesis: the origin of hydroxy groups in □lactams derived from unsaturated substrates. *Journal of the Chemical Society Chemical Communications*, **1986**, 1305-1308		13
8	Enzymatic synthesis of a new type of penicillin. *Journal of the Chemical Society Chemical Communications*, **1986**, 975		12
7	Penicillin biosynthesis: multiple pathways from a modified substrate. *Journal of the Chemical Society Chemical Communications*, **1984**, 1211		17

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2	Application of Engineered Biocatalysts for the Synthesis of Active Pharmaceutical Ingredients (APIs)265-294		
1	Reductive Aminations by Imine Reductases: From Milligrams to Tons. *Chemical Science*,	9.4	4