

# Fabio Parmeggiani

## List of Publications by Year in descending order

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88  
papers

2,308  
citations

172457

29  
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254184

43  
g-index

98  
all docs

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docs citations

98  
times ranked

1981  
citing authors

#	ARTICLE	IF	CITATIONS
1	â€œA Study in Yellowâ€ Investigations in the Stereoselectivity of Eneâ€Reductases. ChemBioChem, 2022, 23, .	2.6	21
2	Oneâ€Pot Biocatalytic In Vivo Methylationâ€Hydroamination of Bioderived Lignin Monomers to Generate a Key Precursor to Lâ€DOPA. Angewandte Chemie, 2022, 134, .	2.0	2
3	Oneâ€Pot Biocatalytic In Vivo Methylationâ€Hydroamination of Bioderived Lignin Monomers to Generate a Key Precursor to Lâ€DOPA. Angewandte Chemie - International Edition, 2022, 61, .	13.8	12
4	Multi-step chemo-enzymatic synthesis of azelaic and pelargonic acids from the soapstock of high-oleic sunflower oil refinement. Green Chemistry, 2022, 24, 2082-2093.	9.0	6
5	Multifunctional biocatalyst for conjugate reduction and reductive amination. Nature, 2022, 604, 86-91.	27.8	48
6	Chemo-enzymatic oxidative cleavage of isosafrole for the synthesis of piperonal. Reaction Chemistry and Engineering, 2021, 6, 1591-1600.	3.7	2
7	A promiscuous glycosyltransferase generates poly-Î²-1,4-glucan derivatives that facilitate mass spectrometry-based detection of cellulolytic enzymes. Organic and Biomolecular Chemistry, 2021, 19, 5529-5533.	2.8	6
8	Enzymatic Methods for the Manipulation and Valorization of Soapstock from Vegetable Oil Refining Processes. Sustainable Chemistry, 2021, 2, 74-91.	4.7	17
9	Biotechnological synthesis of Pd/Ag and Pd/Au nanoparticles for enhanced Suzukiâ€Miyaura crossâ€coupling activity. Microbial Biotechnology, 2021, 14, 2435-2447.	4.2	7
10	Rapid Screening of Diverse Biotransformations for Enzyme Evolution. Jacs Au, 2021, 1, 508-516.	7.9	13
11	Oxidation of threo â€9,10â€Dihydroxystearic Acid Mediated by Micrococcus luteus as a Key Step in the Conversion of Oleic Acid into Pelargonic and Azelaic Acids. ChemCatChem, 2021, 13, 3275-3282.	3.7	3
12	From Nantwich to Oxygen: Public Engagement in Chemistry at a Local History Museum. Journal of Chemical Education, 2021, 98, 1249-1255.	2.3	3
13	Consolidated production of coniferol and other high-value aromatic alcohols directly from lignocellulosic biomass. Green Chemistry, 2020, 22, 144-152.	9.0	38
14	Biâ€enzymatic Conversion of Cinnamic Acids to 2â€Arylethylamines. ChemCatChem, 2020, 12, 995-998.	3.7	4
15	An Enzymatic Nâ€Acylation Step Enables the Biocatalytic Synthesis of Unnatural Sialosides. Angewandte Chemie, 2020, 132, 5346-5349.	2.0	5
16	An Enzymatic Nâ€Acylation Step Enables the Biocatalytic Synthesis of Unnatural Sialosides. Angewandte Chemie - International Edition, 2020, 59, 5308-5311.	13.8	8
17	Enzymatic Buildingâ€Block Synthesis for Solidâ€Phase Automated Glycan Assembly. Angewandte Chemie - International Edition, 2020, 59, 22456-22459.	13.8	6
18	Enzymatic Buildingâ€Block Synthesis for Solidâ€Phase Automated Glycan Assembly. Angewandte Chemie, 2020, 132, 22642-22645.	2.0	2

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19	Profiling Substrate Promiscuity of Wild-Type Sugar Kinases for Multi-fluorinated Monosaccharides. <i>Cell Chemical Biology</i> , 2020, 27, 1199-1206.e5.	5.2	15
20	One-Pot Synthesis of Chiral N-Arylamines by Combining Biocatalytic Aminations with Buchwald-Hartwig Arylation. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18156-18160.	13.8	51
21	One-Pot Synthesis of Chiral N-Arylamines by Combining Biocatalytic Aminations with Buchwald-Hartwig N-Arylation. <i>Angewandte Chemie</i> , 2020, 132, 18313-18317.	2.0	6
22	Innentitelbild: An Enzymatic N-Acylation Step Enables the Biocatalytic Synthesis of Unnatural Sialosides ( <i>Angew. Chem.</i> 13/2020). <i>Angewandte Chemie</i> , 2020, 132, 5006-5006.	2.0	0
23	Biochemical characterisation of an $\alpha$ -1,4 galactosyltransferase from <i>Neisseria weaveri</i> for the synthesis of $\alpha$ -1,4-linked galactosides. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 3142-3148.	2.8	7
24	Selective Oxidation of N-Glycolylneuraminic Acid Using an Engineered Galactose Oxidase Variant. <i>ACS Catalysis</i> , 2019, 9, 8208-8212.	11.2	16
25	Biocatalytic retrosynthesis approaches to (2,4,5-trifluorophenyl)alanine, key precursor of the antidiabetic sitagliptin. <i>Green Chemistry</i> , 2019, 21, 4368-4379.	9.0	20
26	Synthesis of copper catalysts for click chemistry from distillery wastewater using magnetically recoverable bionanoparticles. <i>Green Chemistry</i> , 2019, 21, 4020-4024.	9.0	17
27	The characterisation of a galactokinase from <i>Streptomyces coelicolor</i> . <i>Carbohydrate Research</i> , 2019, 472, 132-137.	2.3	8
28	Enzymatic synthesis of N-acetylglucosamine from lactose enabled by recombinant $\alpha$ -1,4-galactosyltransferases. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 5920-5924.	2.8	14
29	Stereoselectivity Switch in the Reduction of $\alpha$ -Alkyl- $\beta$ -Arylenones by Structure-Guided Designed Variants of the Ene Reductase OYE1. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 89.	4.1	16
30	One-Pot Biocatalytic Synthesis of Substituted Tryptophans from Indoles Enabled by an Engineered Aminotransferase. <i>ACS Catalysis</i> , 2019, 9, 3482-3486.	11.2	43
31	Chemoselective Biohydrogenation of Alkenes in the Presence of Alkynes for the Homologation of $\alpha$ -Alkynals/ $\beta$ -Alkynones into $\gamma$ -Alkynals/Alkynols. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2638-2648.	4.3	10
32	One-Pot Biocatalytic Cascade Reduction of Cyclic Enamines for the Preparation of Diastereomerically Enriched N-Heterocycles. <i>Journal of the American Chemical Society</i> , 2019, 141, 19208-19213.	13.7	43
33	Engineered Ammonia Lyases for the Production of Challenging Electron-Rich $\alpha$ -Phenylalanines. <i>ACS Catalysis</i> , 2018, 8, 3129-3132.	11.2	32
34	Discovery and Investigation of Mutase-like Activity in a Phenylalanine Ammonia Lyase from <i>Anabaena variabilis</i> . <i>Topics in Catalysis</i> , 2018, 61, 288-295.	2.8	9
35	Biosynthesis and Characterization of Copper Nanoparticles Using <i>Shewanella oneidensis</i> : Application for Click Chemistry. <i>Small</i> , 2018, 14, 1703145.	10.0	112
36	Synthetic and Therapeutic Applications of Ammonia-lyases and Aminomutases. <i>Chemical Reviews</i> , 2018, 118, 73-118.	47.7	134

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37	Characterisation of a Bacterial Galactokinase with High Activity and Broad Substrate Tolerance for Chemoenzymatic Synthesis of 6-Phosphogalactose and Analogues. <i>ChemBioChem</i> , 2018, 19, 388-394.	2.6	18
38	Engineered Aminotransferase for the Production of $\alpha$ -Phenylalanine Derivatives Using Biocatalytic Cascades. <i>ChemCatChem</i> , 2018, 10, 470-474.	3.7	23
39	Characterization of a Putrescine Transaminase From <i>Pseudomonas putida</i> and its Application to the Synthesis of Benzylamine Derivatives. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 205.	4.1	11
40	Biomimetic synthesis of 2-substituted N-heterocycle alkaloids by one-pot hydrolysis, transamination and decarboxylative Mannich reaction. <i>Chemical Communications</i> , 2018, 54, 11316-11319.	4.1	15
41	Real-Time Screening of Biocatalysts in Live Bacterial Colonies. <i>Journal of the American Chemical Society</i> , 2017, 139, 1408-1411.	13.7	48
42	Asymmetric Bioreduction of $\beta$ -Acylaminonitroalkenes: Easy Access to Chiral Building Blocks with Two Vicinal Nitrogen-Containing Functional Groups. <i>ChemCatChem</i> , 2017, 9, 2480-2487.	3.7	14
43	Kinetic Resolution of Aromatic $\beta$ -Amino Acids Using a Combination of Phenylalanine Ammonia Lyase and Aminomutase Biocatalysts. <i>Advanced Synthesis and Catalysis</i> , 2017, 359, 1570-1576.	4.3	15
44	One-Pot Biocatalytic Double Oxidation of $\beta$ -Ksophorone for the Synthesis of Ketoisophorone. <i>ChemCatChem</i> , 2017, 9, 3338-3348.	3.7	30
45	Biocatalytic synthesis of chiral cyclic $\beta$ -oxoesters by sequential C-H hydroxylation, alcohol oxidation and alkene reduction. <i>Green Chemistry</i> , 2017, 19, 5122-5130.	9.0	22
46	Zymophore identification enables the discovery of novel phenylalanine ammonia lyase enzymes. <i>Scientific Reports</i> , 2017, 7, 13691.	3.3	30
47	Adenylation Activity of Carboxylic Acid Reductases Enables the Synthesis of Amides. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14498-14501.	13.8	74
48	Adenylation Activity of Carboxylic Acid Reductases Enables the Synthesis of Amides. <i>Angewandte Chemie</i> , 2017, 129, 14690-14693.	2.0	25
49	Biocatalytic transamination with near-stoichiometric inexpensive amine donors mediated by bifunctional mono- and di-amine transaminases. <i>Green Chemistry</i> , 2017, 19, 361-366.	9.0	69
50	One-Pot Multi-Enzymatic Synthesis of the Four Stereoisomers of 4-Methylheptan-3-ol. <i>Molecules</i> , 2017, 22, 1591.	3.8	12
51	Substrate Scope Evaluation of the Enantioselective Reduction of $\beta$ -Alkyl- $\beta$ -Crylnitroalkenes by Old Yellow Enzymes 1-3 for Organic Synthesis Applications. <i>ChemCatChem</i> , 2016, 8, 577-583.	3.7	16
52	Synthesis of Enantiomerically Enriched 2-Hydroxymethylalkanoic Acids by Oxidative Desymmetrisation of Achiral 1,3-Diols Mediated by <i>Acetobacter acetii</i> . <i>ChemCatChem</i> , 2016, 8, 3796-3803.	3.7	8
53	Single-Biocatalyst Synthesis of Enantiopure $\alpha$ -Arylalanines Exploiting an Engineered $\alpha$ -Amino Acid Dehydrogenase. <i>Advanced Synthesis and Catalysis</i> , 2016, 358, 3298-3306.	4.3	51
54	Synthesis of Enantiomerically Pure Ring-Substituted $\alpha$ -Pyridylalanines by Biocatalytic Hydroamination. <i>Organic Letters</i> , 2016, 18, 5468-5471.	4.6	18

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55	Intensified biocatalytic production of enantiomerically pure halophenylalanines from acrylic acids using ammonium carbamate as the ammonia source. <i>Catalysis Science and Technology</i> , 2016, 6, 4086-4089.	4.1	27
56	Rapid and sensitive monitoring of biocatalytic reactions using ion mobility mass spectrometry. <i>Analyst</i> , 2016, 141, 2351-2355.	3.5	12
57	Telescopic one-pot condensation-hydroamination strategy for the synthesis of optically pure L-phenylalanines from benzaldehydes. <i>Tetrahedron</i> , 2016, 72, 7256-7262.	1.9	18
58	Cascade Coupling of Ene-Reductases and $\alpha$ -Transaminases for the Stereoselective Synthesis of Diastereomerically Enriched Amines. <i>ChemCatChem</i> , 2015, 7, 3106-3109.	3.7	34
59	A Rapid and High-Throughput Assay for the Estimation of Conversions of Ene-Reductase-Catalysed Reactions. <i>ChemBioChem</i> , 2015, 16, 1571-1573.	2.6	7
60	Opposite Enantioselectivity in the Bioreduction of ( <i>Z</i> )- $\alpha$ -Aryl- $\beta$ -Cyanoacrylates Mediated by the Tryptophan 116 Mutants of Old Yellow Enzyme 1: Synthetic Approach to ( <i>R</i> )- and ( <i>S</i> )- $\alpha$ -Aryl- $\beta$ -Lactams. <i>Advanced Synthesis and Catalysis</i> , 2015, 357, 1849-1860.	4.3	51
61	Multi-Enzymatic Cascade Procedures for the Synthesis of Chiral Odorous Molecules. <i>ACS Symposium Series</i> , 2015, , 59-75.	0.5	6
62	Substrate-engineering approach to the stereoselective chemo-multienzymatic cascade synthesis of Nicotiana tabacum lactone. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015, 114, 77-85.	1.8	28
63	Identification of fungal ene-reductase activity by means of a functional screening. <i>Fungal Biology</i> , 2015, 119, 487-493.	2.5	12
64	Synthesis of <i>D</i> - and <i>L</i> -Phenylalanine Derivatives by Phenylalanine Ammonia Lyases: A Multienzymatic Cascade Process. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 4608-4611.	13.8	100
65	Synthesis of <i>D</i> - and <i>L</i> -Phenylalanine Derivatives by Phenylalanine Ammonia Lyases: A Multienzymatic Cascade Process. <i>Angewandte Chemie</i> , 2015, 127, 4691-4694.	2.0	23
66	Investigation of the stereochemical course of ene reductase-catalysed reactions by deuterium labelling. <i>Isotopes in Environmental and Health Studies</i> , 2015, 51, 24-32.	1.0	6
67	Biocatalysed reduction of carboxylic acids to primary alcohols in aqueous medium: A novel synthetic capability of the zygomycete fungus <i>Syncephalastrum racemosum</i> . <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015, 116, 83-88.	1.8	10
68	The Bacterial Ammonia Lyase EncP: A Tunable Biocatalyst for the Synthesis of Unnatural Amino Acids. <i>Journal of the American Chemical Society</i> , 2015, 137, 12977-12983.	13.7	63
69	Chemoenzymatic Synthesis of Optically Pure- and <i>D</i> -Biarylalanines through Biocatalytic Asymmetric Amination and Palladium-Catalyzed Arylation. <i>ACS Catalysis</i> , 2015, 5, 5410-5413.	11.2	67
70	Multi-enzyme cascade synthesis of the most odorous stereoisomers of the commercial odorant Muguesia®. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015, 114, 37-41.	1.8	21
71	Enantioselective Synthesis of ( <i>R</i> )- $\alpha$ -Arylpropanenitriles Catalysed by Ene-Reductases in Aqueous Media and in Biphasic Ionic Liquid-Water Systems. <i>ChemCatChem</i> , 2014, 6, 2425-2431.	3.7	20
72	Fear of the Dark: Diazo Printing by Photochemical Decomposition of Aryldiazonium Tetrafluoroborates. <i>Journal of Chemical Education</i> , 2014, 91, 692-695.	2.3	0

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73	Rationalisation of the stereochemical outcome of ene-reductase-mediated bioreduction of $\hat{1}\pm, \hat{1}^2$ -difunctionalised alkenes. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 101, 67-72.	1.8	15
74	Substrate scope and synthetic applications of the enantioselective reduction of $\hat{1}\pm$ -alkyl- $\hat{1}^2$ -arylenones mediated by Old Yellow Enzymes. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 2988.	2.8	33
75	Synthesis of Robalzotan, Ebalzotan, and Rotigotine Precursors via the Stereoselective Multienzymatic Cascade Reduction of $\hat{1}\pm, \hat{1}^2$ -Unsaturated Aldehydes. <i>Journal of Organic Chemistry</i> , 2013, 78, 4811-4822.	3.2	47
76	Old Yellow Enzyme-mediated reduction of $\hat{1}^2$ -cyano- $\hat{1}\pm, \hat{1}^2$ -unsaturated esters for the synthesis of chiral building blocks: stereochemical analysis of the reaction. <i>Catalysis Science and Technology</i> , 2013, 3, 1136.	4.1	39
77	Productivity enhancement of C $\hat{1}$ €C bioreductions by coupling the in situ substrate feeding product removal technology with isolated enzymes. <i>Chemical Communications</i> , 2012, 48, 79-81.	4.1	37
78	Enoate Reductase-Mediated Preparation of Methyl (S)-2-Bromobutanoate, a Useful Key Intermediate for the Synthesis of Chiral Active Pharmaceutical Ingredients. <i>Organic Process Research and Development</i> , 2012, 16, 262-268.	2.7	53
79	Biotechnological Development of a Practical Synthesis of Ethyl (S)-2-Ethoxy-3-(p-methoxyphenyl)propanoate (EEHP): Over 100-Fold Productivity Increase from Yeast Whole Cells to Recombinant Isolated Enzymes. <i>Organic Process Research and Development</i> , 2012, 16, 269-276.	2.7	71
80	On the stereochemistry of the Baker's Yeast-mediated reduction of regioisomeric unsaturated aldehydes: Examples of enantioselectivity switch promoted by substrate-engineering. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012, 84, 94-101.	1.8	16
81	Steric Effects on the Stereochemistry of Old Yellow Enzyme-Mediated Reductions of Unsaturated Diesters: Flipping of the Substrate within the Enzyme Active Site Induced by Structural Modifications. <i>Advanced Synthesis and Catalysis</i> , 2012, 354, 2859-2864.	4.3	26
82	Preparation and Luminescence Thermochromism of Tetranuclear Copper(I)â€“Pyridineâ€“Iodide Clusters. <i>Journal of Chemical Education</i> , 2012, 89, 946-949.	2.3	34
83	Cascade Coupling of Ene Reductases with Alcohol Dehydrogenases: Enantioselective Reduction of Prochiral Unsaturated Aldehydes. <i>ChemCatChem</i> , 2012, 4, 653-659.	3.7	52
84	Stereochemical Outcome of the Biocatalysed Reduction of Activated Tetrasubstituted Olefins by Old Yellow Enzymes 1â€“3. <i>Advanced Synthesis and Catalysis</i> , 2012, 354, 105-112.	4.3	34
85	Enantioselective CC bond reduction of unsaturated $\hat{1}\pm$ -chloro esters by old yellow enzymes. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2011, , .	1.8	2
86	Biocatalyzed Enantioselective Reduction of Activated C=C Bonds: Synthesis of Enantiomerically Enriched $\hat{1}\pm$ -Halo- $\hat{1}^2$ -arylpropionic Acids. <i>European Journal of Organic Chemistry</i> , 2011, 2011, 4015-4022.	2.4	35
87	Enzyme-mediated synthesis of EEHP and EMHP, useful pharmaceutical intermediates of PPAR agonists. <i>Tetrahedron: Asymmetry</i> , 2009, 20, 2594-2599.	1.8	13
88	New stereospecific synthesis of Tesaglitazar and Navaglitazar precursors. <i>Tetrahedron: Asymmetry</i> , 2009, 20, 2694-2698.	1.8	22