

# Birgit Wiltschi

## List of Publications by Year in descending order

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Version: 2024-02-01

36  
papers

800  
citations

567281

15  
h-index

526287

27  
g-index

38  
all docs

38  
docs citations

38  
times ranked

920  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enzymes revolutionize the bioproduction of value-added compounds: From enzyme discovery to special applications. <i>Biotechnology Advances</i> , 2020, 40, 107520.	11.7	97
2	Synthetic Biology of Proteins: Tuning GFPs Folding and Stability with Fluoroproline. <i>PLoS ONE</i> , 2008, 3, e1680.	2.5	96
3	Lipase Congeners Designed by Genetic Code Engineering. <i>ChemCatChem</i> , 2011, 3, 213-221.	3.7	65
4	Residue-specific global fluorination of <i>Candida antarctica</i> lipase B in <i>Pichia pastoris</i> . <i>Molecular BioSystems</i> , 2010, 6, 1630.	2.9	60
5	Biocatalytic Friedel-Crafts Acylation and Fries Reaction. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7615-7619.	13.8	54
6	Fluoro amino acids: A rarity in nature, yet a prospect for protein engineering. <i>Biotechnology Journal</i> , 2015, 10, 427-446.	3.5	49
7	Non-canonical amino acids as a useful synthetic biological tool for lipase-catalysed reactions in hostile environments. <i>Catalysis Science and Technology</i> , 2013, 3, 1198.	4.1	38
8	A synthetic biology approach for the transformation of $\alpha$ -amino acids to the corresponding enantiopure (R)- or (S)- $\beta$ -hydroxy acids. <i>Chemical Communications</i> , 2015, 51, 2828-2831.	4.1	33
9	Incorporation of non-canonical amino acids into proteins in yeast. <i>Fungal Genetics and Biology</i> , 2016, 89, 137-156.	2.1	29
10	Binding assays with artificial tethered membranes using surface plasmon resonance. <i>Methods</i> , 2006, 39, 134-146.	3.8	28
11	Fine Tuning the N-Terminal Residue Excision with Methionine Analogues. <i>ChemBioChem</i> , 2009, 10, 217-220.	2.6	25
12	Effect of Noncanonical Amino Acids on Protein-Carbohydrate Interactions: Structure, Dynamics, and Carbohydrate Affinity of a Lectin Engineered with Fluorinated Tryptophan Analogs. <i>ACS Chemical Biology</i> , 2018, 13, 2211-2219.	3.4	22
13	Binding of Small Mono- and Oligomeric Integrin Ligands to Membrane-Embedded Integrins Monitored by Surface Plasmon-Enhanced Fluorescence Spectroscopy. <i>Analytical Chemistry</i> , 2006, 78, 4524-4533.	6.5	21
14	Expanding the genetic code of <i>Saccharomyces cerevisiae</i> with methionine analogues. <i>Yeast</i> , 2008, 25, 775-786.	1.7	21
15	High-level biosynthesis of norleucine in <i>E. coli</i> for the economic labeling of proteins. <i>Journal of Biotechnology</i> , 2016, 235, 100-111.	3.8	19
16	Decoupling Protein Production from Cell Growth Enhances the Site-Specific Incorporation of Noncanonical Amino Acids in <i>E. coli</i> . <i>ACS Synthetic Biology</i> , 2020, 9, 3052-3066.	3.8	18
17	In Vivo Chemoenzymatic Control of N-Terminal Processing in Recombinant Human Epidermal Growth Factor. <i>ChemBioChem</i> , 2007, 8, 2227-2232.	2.6	13
18	Plasmid Design for Tunable Two-Enzyme Co-Expression Promotes Whole-Cell Production of Cellobiose. <i>Biotechnology Journal</i> , 2020, 15, e2000063.	3.5	13

#	ARTICLE	IF	CITATIONS
19	A Machine Learning Approach for Efficient Selection of Enzyme Concentrations and Its Application for Flux Optimization. <i>Catalysts</i> , 2020, 10, 291.	3.5	13
20	Expressed Protein Modifications: Making Synthetic Proteins. <i>Methods in Molecular Biology</i> , 2012, 813, 211-225.	0.9	12
21	A Semi-Rationally Engineered Bacterial Pyrrolysyl-tRNA Synthetase Genetically Encodes Phenyl Azide Chemistry. <i>Biotechnology Journal</i> , 2019, 14, 1800125.	3.5	10
22	“Clickable lectins”™: bioorthogonal reactive handles facilitate the directed conjugation of lectins in a modular fashion. <i>Interface Focus</i> , 2019, 9, 20180072.	3.0	9
23	Molecular cloning, expression, and characterization of acyltransferase from <i>Pseudomonas protegens</i> . <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 6057-6068.	3.6	8
24	Sterol Binding Assay Using Surface Plasmon Fluorescence Spectroscopy. <i>Analytical Chemistry</i> , 2006, 78, 547-555.	6.5	7
25	Evaluation of bichinonic acid as a ligand for copper(i)-catalyzed azide-alkyne bioconjugations. <i>Organic and Biomolecular Chemistry</i> , 2012, 10, 6629.	2.8	7
26	Systems biocatalysis: para-alkenylation of unprotected phenols. <i>Catalysis Science and Technology</i> , 2016, 6, 8098-8103.	4.1	7
27	Engineering cascade biocatalysis in whole cells for bottom-up synthesis of cello-oligosaccharides: flux control over three enzymatic steps enables soluble production. <i>Microbial Cell Factories</i> , 2022, 21, 61.	4.0	7
28	Substituting the catalytic proline of 4-oxalocrotonate tautomerase with non-canonical analogues reveals a finely tuned catalytic system. <i>Scientific Reports</i> , 2019, 9, 2697.	3.3	6
29	Fast Protein Modification in the Nanomolar Concentration Range Using an Oxalyl Amide as Latent Thioester. <i>Angewandte Chemie - International Edition</i> , 2022, , .	13.8	4
30	Protein Building Blocks and the Expansion of the Genetic Code. , 2016, , 143-209.		3
31	Residue-Specific Incorporation of the Non-Canonical Amino Acid Norleucine Improves Lipase Activity on Synthetic Polyesters. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 769830.	4.1	3
32	Engineering the Ligand Specificity of the Human Galectin-1 by Incorporation of Tryptophan Analogues. <i>ChemBioChem</i> , 2022, , .	2.6	2
33	Integrin-Functionalized Artificial Membranes as Test Platforms for Monitoring Small Integrin Ligand Binding by Surface Plasmon-Enhanced Fluorescence Spectroscopy. , 2013, , 705-745.		0
34	Chapter 14. Synthetic Biology for Organic Syntheses. <i>RSC Green Chemistry</i> , 2016, , 165-179.	0.1	0
35	Site-Specific Incorporation of Non-canonical Amino Acids by Amber Stop Codon Suppression in <i>Escherichia coli</i> . <i>Springer Protocols</i> , 2020, , 267-281.	0.3	0
36	Fast Protein Modification in the Nanomolar Concentration Range Using an Oxalyl Amide as Latent Thioester. <i>Angewandte Chemie</i> , 0, , .	2.0	0