

# Sebastian Bartsch

## List of Publications by Year in descending order

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23  
papers

1,072  
citations

430874

18  
h-index

526287

27  
g-index

30  
all docs

30  
docs citations

30  
times ranked

1047  
citing authors

#	ARTICLE	IF	CITATIONS
1	Complete Inversion of Enantioselectivity towards Acetylated Tertiary Alcohols by a Double Mutant of a <i>Bacillus Subtilis</i> Esterase. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 1508-1511.	13.8	143
2	The $\beta$ -Hydrolase Fold 3DM Database (ABHDB) as a Tool for Protein Engineering. <i>ChemBioChem</i> , 2010, 11, 1635-1643.	2.6	126
3	Priming ammonia lyases and aminomutases for industrial and therapeutic applications. <i>Current Opinion in Chemical Biology</i> , 2013, 17, 250-260.	6.1	85
4	The crystal structure of an esterase from the hyperthermophilic microorganism <i>Pyrobaculum calidifontis</i> VA1 explains its enantioselectivity. <i>Applied Microbiology and Biotechnology</i> , 2011, 91, 1061-1072.	3.6	64
5	Highly Enantioselective Synthesis of Arylaliphatic Tertiary Alcohols using Mutants of an Esterase from <i>Bacillus subtilis</i> . <i>Advanced Synthesis and Catalysis</i> , 2007, 349, 1393-1398.	4.3	59
6	Understanding Promiscuous Amidase Activity of an Esterase from <i>Bacillus subtilis</i> . <i>ChemBioChem</i> , 2008, 9, 67-69.	2.6	58
7	Explaining Operational Instability of Amine Transaminases: Substrate-Induced Inactivation Mechanism and Influence of Quaternary Structure on Enzyme Cofactor Intermediate Stability. <i>ACS Catalysis</i> , 2017, 7, 1259-1269.	11.2	54
8	A Single Residue Influences the Reaction Mechanism of Ammonia Lyases and Mutases. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3362-3365.	13.8	53
9	Mutational analysis of phenylalanine ammonia lyase to improve reactions rates for various substrates. <i>Protein Engineering, Design and Selection</i> , 2010, 23, 929-933.	2.1	51
10	Mechanism-Inspired Engineering of Phenylalanine Aminomutase for Enhanced $\beta$ -Regioselective Asymmetric Amination of Cinnamates. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 482-486.	13.8	48
11	Three in One: Temperature, Solvent and Catalytic Stability by Engineering the Cofactor-Binding Element of Amine Transaminase. <i>ChemBioChem</i> , 2017, 18, 1482-1486.	2.6	34
12	Approaching boiling point stability of an alcohol dehydrogenase through computationally-guided enzyme engineering. <i>ELife</i> , 2020, 9, .	6.0	33
13	Biochemical Properties and Crystal Structure of a $\beta$ -Phenylalanine Aminotransferase from <i>Variovorax paradoxus</i> . <i>Applied and Environmental Microbiology</i> , 2013, 79, 185-195.	3.1	29
14	Redesign of a Phenylalanine Aminomutase into a Phenylalanine Ammonia Lyase. <i>ChemCatChem</i> , 2013, 5, 1797-1802.	3.7	27
15	Ironing out Their Differences: Dissecting the Structural Determinants of a Phenylalanine Aminomutase and Ammonia Lyase. <i>ACS Chemical Biology</i> , 2015, 10, 989-997.	3.4	23
16	Enzymatic network for production of ether amines from alcohols. <i>Biotechnology and Bioengineering</i> , 2016, 113, 1853-1861.	3.3	23
17	Probing the enantioselectivity of <i>Bacillus subtilis</i> esterase BS2 for tert. alcohols. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2009, 60, 82-86.	1.8	16
18	Synthesis of Sebacic Acid Using a De Novo Designed Retroaldolase as a Key Catalyst. <i>ChemCatChem</i> , 2017, 9, 1378-1382.	3.7	14

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19	<i>Bacillus subtilis</i> Esterase (BS2) and its Double Mutant Have Different Selectivity in the Removal of Carboxyl Protecting Groups. <i>Advanced Synthesis and Catalysis</i> , 2009, 351, 2325-2332.	4.3	10
20	Optimization of Alcohol Dehydrogenase for Industrial Scale Oxidation of Lactols. <i>Biotechnology Journal</i> , 2020, 15, e2000171.	3.5	10
21	Room-temperature solid phase ionic liquid (RTSPIL) coated $\alpha$ -transaminases: Development and application in organic solvents. <i>Molecular Catalysis</i> , 2018, 452, 11-19.	2.0	9
22	Recovery of choline oxidase activity by in vitro recombination of individual segments. <i>Applied Microbiology and Biotechnology</i> , 2008, 81, 275-282.	3.6	3
23	Einfluss einer einzelnen Aminosäure auf den Reaktionsmechanismus von Ammonium-Lyase und -Mutasen. <i>Angewandte Chemie</i> , 2010, 122, 3951-3951.	2.0	3