Andreas Stolz

List of Publications by Year
in descending order

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50 papers	2,380 citations	172457 29 h-index	206112 48 g-index
51 all docs	51 docs citations	51 times ranked	1910 citing authors

#	Article	IF	Citations
1	Synthesis of (R)-mandelic acid and (R)-mandelic acid amide by recombinant E. coli strains expressing a (R)-specific oxynitrilase and an arylacetonitrilase. Biotechnology Letters, 2021, 43, 287-296.	2.2	8
2	Substrate promiscuity and active site differences in gentisate 1,2-dioxygenases: electron paramagnetic resonance study. Journal of Biological Inorganic Chemistry, 2019, 24, 287-296.	2.6	3
3	Conversion of phenylglycinonitrile by recombinant Escherichia coli cells synthesizing variants of the arylacetonitrilase from Pseudomonas fluorescens EBC191. Applied Microbiology and Biotechnology, 2019, 103, 6737-6746.	3.6	6
4	Comparative Analysis of the Conversion of Mandelonitrile and 2-Phenylpropionitrile by a Large Set of Variants Generated from a Nitrilase Originating from Pseudomonas fluorescens EBC191. Molecules, 2019, 24, 4232.	3.8	11
5	Aerobic Hydrocarbon-Degrading Alphaproteobacteria: Sphingomonadales. , 2019, , 105-124.		14
6	Aerobic Hydrocarbon-Degrading Alphaproteobacteria: Sphingomonadales. , 2018, , 1-21.		4
7	Conversion of aliphatic nitriles by the arylacetonitrilase from Pseudomonas fluorescens EBC191. World Journal of Microbiology and Biotechnology, 2018, 34, 91.	3.6	16
8	Expansion of the substrate range of the gentisate 1,2-dioxygenase from Corynebacterium glutamicum for the conversion of monohydroxylated benzoates. Protein Engineering, Design and Selection, 2016, 30, 57-65.	2.1	6
9	Spontaneous release of fluoride during the dioxygenolytic cleavage of 5-fluorosalicylate by the salicylate 1,2-dioxygenase fromPseudaminobacter salicylatoxidansBN12. FEMS Microbiology Letters, 2016, 363, fnv211.	1.8	4
10	Improvement of the amides forming capacity of the arylacetonitrilase from Pseudomonas fluorescens EBC191 by site-directed mutagenesis. Applied Microbiology and Biotechnology, 2015, 99, 2623-2635.	3.6	26
11	Function of different amino acid residues in the reaction mechanism of gentisate 1,2-dioxygenases deduced from the analysis of mutants of the salicylate 1,2-dioxygenase from Pseudaminobacter salicylatoxidans. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1425-1437.	2.3	14
12	Enzymatic cascade synthesis of (S)-2-hydroxycarboxylic amides and acids: Cascade reactions employing a hydroxynitrile lyase, nitrile-converting enzymes and an amidase. Journal of Molecular Catalysis B: Enzymatic, 2015, 114, 25-30.	1.8	24
13	Degradative plasmids from sphingomonads. FEMS Microbiology Letters, 2014, 350, 9-19.	1.8	59
14	Random mutagenesis of the arylacetonitrilase from Pseudomonas fluorescens EBC191 and identification of variants, which form increased amounts of mandeloamide from mandelonitrile. Applied Microbiology and Biotechnology, 2014, 98, 1595-1607.	3.6	30
15	The combi-CLEA approach: enzymatic cascade synthesis of enantiomerically pure (S)-mandelic acid. Tetrahedron: Asymmetry, 2013, 24, 1225-1232.	1.8	58
16	The salicylate 1,2â€dioxygenase as a model for a conventional gentisate 1,2â€dioxygenase: crystal structures of the G106A mutant and its adducts with gentisate and salicylate. FEBS Journal, 2013, 280, 1643-1652.	4.7	25
17	Conversion of Sterically Demanding Î±,Î±-Disubstituted Phenylacetonitriles by the Arylacetonitrilase from Pseudomonas fluorescens EBC191. Applied and Environmental Microbiology, 2012, 78, 48-57.	3.1	15
18	The generation of a 1-hydroxy-2-naphthoate 1,2-dioxygenase by single point mutations of salicylate 1,2-dioxygenase â€“ Rational design of mutants and the crystal structures of the A85H and W104Y variants. Journal of Structural Biology, 2012, 180, 563-571.	2.8	13

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19	Crystal structures of salicylate 1,2-dioxygenase-substrates adducts: A step towards the comprehension of the structural basis for substrate selection in class III ring cleaving dioxygenases. Journal of Structural Biology, 2012, 177, 431-438.	2.8	29
20	Influence of point mutations near the active site on the catalytic properties of fungal arylacetonitrilases from Aspergillus niger and Neurospora crassa. Journal of Molecular Catalysis B: Enzymatic, 2012, 77, 74-80.	1.8	24
21	Application of a Recombinant Escherichia coli Wholeâ€Cell Catalyst Expressing Hydroxynitrile Lyase and Nitrilase Activities in Ionic Liquids for the Production of (S)â€Mandelic Acid and (S)â€Mandeloamide. Advanced Synthesis and Catalysis, 2012, 354, 113-122.	4.3	36
22	Characterisation of the flavin-free oxygen-tolerant azoreductase from Xenophilus azovorans KF46F in comparison to flavin-containing azoreductases. Applied Microbiology and Biotechnology, 2010, 87, 2067-2076.	3.6	36
23	Construction and Application of Variants of the Pseudomonas fluorescens EBC191 Arylacetonitrilase for Increased Production of Acids or Amides. Applied and Environmental Microbiology, 2010, 76, 3668-3674.	3.1	42
24	Identification of Amino Acid Residues Responsible for the Enantioselectivity and Amide Formation Capacity of the Arylacetonitrilase from Pseudomonas fluorescens EBC191. Applied and Environmental Microbiology, 2009, 75, 5592-5599.	3.1	56
25	Construction of Recombinant Escherichia coli Catalysts which Simultaneously Express an (S)â€Oxynitrilase and Different Nitrilase Variants for the Synthesis of (S)â€Mandelic Acid and (S)â€Mandelic Amide from Benzaldehyde and Cyanide. Advanced Synthesis and Catalysis, 2009, 351, 1531-1538.	4.3	39
26	Molecular characteristics of xenobiotic-degrading sphingomonads. Applied Microbiology and Biotechnology, 2009, 81, 793-811.	3.6	209
27	Simultaneous expression of an arylacetonitrilase from Pseudomonas fluorescens and a (S)-oxynitrilase from Manihot esculenta in Pichia pastoris for the synthesis of (S)-mandelic acid. Applied Microbiology and Biotechnology, 2008, 80, 87-97.	3.6	27
28	Salicylate 1,2-Dioxygenase from Pseudaminobacter salicylatoxidans: Crystal Structure of a Peculiar Ring-cleaving Dioxygenase. Journal of Molecular Biology, 2008, 380, 856-868.	4.2	39
29	Influence of different carboxy-terminal mutations on the substrate-, reaction- and enantiospecificity of the arylacetonitrilase from Pseudomonas fluorescens EBC191. Protein Engineering, Design and Selection, 2007, 20, 385-396.	2.1	46
30	Crossâ€Linked Amorphous Nitrilase Aggregates for Enantioselective Nitrile Hydrolysis. Advanced Synthesis and Catalysis, 2007, 349, 2167-2176.	4.3	47
31	Isolation and characterization of a nitrile hydrolysing acidotolerant black yeastâ€"Exophiala oligosperma R1. Applied Microbiology and Biotechnology, 2007, 75, 899-908.	3.6	33
32	Synthesis of enantiomerically pure (S)-mandelic acid using an oxynitrilaseâ€"nitrilase bienzymatic cascade: a nitrilase surprisingly shows nitrile hydratase activity. Tetrahedron: Asymmetry, 2006, 17, 320-323.	1.8	144
33	Nitrile Hydratase Activity of a Recombinant Nitrilase. Advanced Synthesis and Catalysis, 2006, 348, 2597-2603.	4.3	92
34	Identification and functional analysis of the genes for naphthalenesulfonate catabolism by Sphingomonas xenophaga BN6. Microbiology (United Kingdom), 2006, 152, 1929-1940.	1.8	26
35	Structural and replicative diversity of large plasmids from sphingomonads that degrade polycyclic aromatic compounds and xenobiotics. Microbiology (United Kingdom), 2005, 151, 2025-2037.	1.8	67
36	Nitrilase from Pseudomonas fluorescens EBC191: cloning and heterologous expression of the gene and biochemical characterization of the recombinant enzyme. Microbiology (United Kingdom), 2005, 151, 3639-3648.	1.8	114

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37	Detection and Characterization of Conjugative Degradative Plasmids in Xenobiotic-Degrading Sphingomonas Strains. Journal of Bacteriology, 2004, 186, 3862-3872.	2.2	114
38	Biochemical and Molecular Characterization of a Ring Fission Dioxygenase with the Ability to Oxidize (Substituted) Salicylate(s) from Pseudaminobacter salicylatoxidans. Journal of Biological Chemistry, 2004, 279, 37250-37260.	3.4	41
39	Cloning of a Nitrilase Gene from the Cyanobacterium Synechocystis sp. Strain PCC6803 and Heterologous Expression and Characterization of the Encoded Protein. Applied and Environmental Microbiology, 2003, 69, 4359-4366.	3.1	66
40	Cloning and Heterologous Expression of an Enantioselective Amidase from Rhodococcus erythropolis Strain MP50. Applied and Environmental Microbiology, 2002, 68, 3279-3286.	3.1	32
41	Identification of Quinoide Redox Mediators That Are Formed during the Degradation of Naphthalene-2-Sulfonate by Sphingomonas xenophaga BN6. Applied and Environmental Microbiology, 2002, 68, 4341-4349.	3.1	71
42	Molecular Cloning and Characterization of the Gene Coding for the Aerobic Azoreductase from Xenophilus azovorans KF46F. Applied and Environmental Microbiology, 2002, 68, 3948-3955.	3.1	142
43	Direct Ring Fission of Salicylate by a Salicylate 1,2-Dioxygenase Activity from Pseudaminobacter salicylatoxidans. Journal of Bacteriology, 2001, 183, 6936-6942.	2.2	73
44	Purification and characterization of the enantioselective nitrile hydratase from Rhodococcus equi A4. Applied Microbiology and Biotechnology, 2001, 55, 150-156.	3.6	56
45	Hydrogenophaga intermedia sp. nov., a 4-aminobenzene-sulfonate Degrading Organism. Systematic and Applied Microbiology, 2000, 23, 487-493.	2.8	53
46	Autoxidation Reactions of Different Aromatico-Aminohydroxynaphthalenes That Are Formed during the Anaerobic Reduction of Sulfonated Azo Dyes. Environmental Science & Technology, 1999, 33, 896-901.	10.0	134
47	Enantioselectivitiy of the nitrile hydratase from Rhodococcus equi A4 towards substituted (R,S)-2-arylpropionitriles. Biotechnology Letters, 1996, 18, 1073-1076.	2.2	24
48	2-Hydroxychromene-2-carboxylate isomerase from bacteria that degrade naphthalenesulfonates. Biodegradation, 1993, 4, 155-162.	3.0	15
49	Enantioselective hydrolysis of O-acetylmandelonitrile to O-acetylmandelic acid by bacterial nitrilases. Archives of Microbiology, 1992, 158, 405.	2.2	57
50	Metabolism of naphthalene by the biphenyl-degrading bacterium Pseudomonas paucimobilis Q1. Biodegradation, 1991, 2, 115-120.	3.0	57