Martina Pohl

List of Publications by Year in descending order

154 papers	6,153 citations	61984 43 h-index	85541 71 g-index
172 all docs	172 docs citations	172 times ranked	3720 citing authors

#	Article	IF	Citations
1	Improved biocatalysts by directed evolution and rational protein design. Current Opinion in Chemical Biology, 2001, 5, 137-143.	6.1	410
2	Development of a Donorâ^'Acceptor Concept for Enzymatic Cross-Coupling Reactions of Aldehydes:Â The First Asymmetric Cross-Benzoin Condensation. Journal of the American Chemical Society, 2002, 124, 12084-12085.	13.7	234
3	Stabilization of NAD-dependent formate dehydrogenase from Candida boidinii by site-directed mutagenesis of cysteine residues. FEBS Journal, 2000, 267, 1280-1289.	0.2	169
4	Enantioselective Synthesis of Î±-Hydroxy Ketones via Benzaldehyde Lyase-Catalyzed Câ^'C Bond Formation Reaction. Advanced Synthesis and Catalysis, 2002, 344, 96.	4.3	166
5	Thiamin-Diphosphate-Dependent Enzymes: New Aspects of Asymmetric Cï£¿C Bond Formation. Chemistry - A European Journal, 2002, 8, 5288-5295.	3.3	162
6	Effect of oxygen limitation and medium composition on Escherichia coli fermentation in shake-flask cultures. Biotechnology Progress, 2004, 20, 1062-1068.	2.6	161
7	Benzoylformate Decarboxylase fromPseudomonas putida as Stable Catalyst for the Synthesis of Chiral 2-Hydroxy Ketones. Chemistry - A European Journal, 2000, 6, 1483-1495.	3.3	159
8	A new perspective on thiamine catalysis. Current Opinion in Biotechnology, 2004, 15, 335-342.	6.6	157
9	Two Steps in One Pot: Enzyme Cascade for the Synthesis of Nor(pseudo)ephedrine from Inexpensive Starting Materials. Angewandte Chemie - International Edition, 2013, 52, 6772-6775.	13.8	157
10	Thiamin diphosphate in biological chemistry: exploitation of diverse thiamin diphosphateâ€dependent enzymes for asymmetric chemoenzymatic synthesis. FEBS Journal, 2009, 276, 2894-2904.	4.7	135
11	Enantioselective synthesis of hydroxy ketones through cleavage and formation of acyloin linkage. Enzymatic kinetic resolution via Câ€“C bond cleavage. Journal of the Chemical Society, Perkin Transactions 1, 2001, , 633-635.	1.3	112
12	Characterization of Phenylpyruvate Decarboxylase, Involved in Auxin Production of Azospirillum brasilense. Journal of Bacteriology, 2007, 189, 7626-7633.	2.2	110
13	Synthetic potential of thiamin diphosphate-dependent enzymes. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 145-159.	1.8	96
14	Asymmetric benzoin reaction catalyzed by benzoylformate decarboxylase. Tetrahedron: Asymmetry, 1999, 10, 4769-4774.	1.8	93
15	CC bond formation using ThDP-dependent lyases. Current Opinion in Chemical Biology, 2013, 17, 261-270.	6.1	93
16	Application of Î±-keto acid decarboxylases in biotransformations. BBA - Proteins and Proteomics, 1998, 1385, 307-322.	2.1	87
17	Exchanging the substrate specificities of pyruvate decarboxylase from Zymomonas mobilis and benzoylformate decarboxylase from Pseudomonas putida. Protein Engineering, Design and Selection, 2005, 18, 345-357.	2.1	80
18	An Râ€Selective Hydroxynitrile Lyase from Arabidopsis thaliana with an Î±/Î²â€Hydrolase Fold. Angewandte Chemie - International Edition, 2007, 46, 8679-8681.	13.8	77

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19	Continuous production of (R)-phenylacetylcarbinol in an enzyme-membrane reactor using a potent mutant of pyruvate decarboxylase fromZymomonas mobilis. Biotechnology and Bioengineering, 2001, 74, 317-325.	3.3	76
20	Engineering stereoselectivity of ThDP-dependent enzymes. FEBS Journal, 2013, 280, 6374-6394.	4.7	72
21	Enantioselective Synthesis of (S)-2-Hydroxypropanone Derivatives by Benzoylformate Decarboxylase Catalyzed Câ^'C Bond Formation. European Journal of Organic Chemistry, 2000, 2000, 2161-2170.	2.4	71
22	The Enzymatic Asymmetric Conjugate Umpolung Reaction. Angewandte Chemie - International Edition, 2010, 49, 6600-6603.	13.8	71
23	Factors Mediating Activity, Selectivity, and Substrate Specificity for the Thiamin Diphosphate-Dependent Enzymes Benzaldehyde Lyase and Benzoylformate Decarboxylase. ChemBioChem, 2006, 7, 1928-1934.	2.6	69
24	Conversion of Pyruvate Decarboxylase into an Enantioselective Carboligase with Biosynthetic Potential. Journal of the American Chemical Society, 2011, 133, 3609-3616.	13.7	69
25	Rational Protein Design of ThDPâ€Dependent Enzymesâ€"Engineering Stereoselectivity. ChemBioChem, 2008, 9, 406-412.	2.6	67
26	Improving the carboligase activity of benzoylformate decarboxylase from Pseudomonas putida by a combination of directed evolution and site-directed mutagenesis. Protein Engineering, Design and Selection, 2002, 15, 585-593.	2.1	66
27	Characterization of benzaldehyde lyase from Pseudomonas fluorescens: A versatile enzyme for asymmetric Câ€"C bond formation. Bioorganic Chemistry, 2006, 34, 345-361.	4.1	66
28	Efficient 2-step biocatalytic strategies for the synthesis of all nor(pseudo)ephedrine isomers. Green Chemistry, 2014, 16, 3341-3348.	9.0	66
29	How to overcome limitations in biotechnological processes - examples from hydroxynitrile lyase applications. Trends in Biotechnology, 2009, 27, 599-607.	9.3	65
30	Catalytically-active inclusion bodiesâ€"Carrier-free protein immobilizates for application in biotechnology and biomedicine. Journal of Biotechnology, 2017, 258, 136-147.	3.8	64
31	Structure of the branched-chain keto acid decarboxylase (KdcA) fromLactococcus lactisprovides insights into the structural basis for the chemoselective and enantioselective carboligation reaction. Acta Crystallographica Section D: Biological Crystallography, 2007, 63, 1217-1224.	2.5	60
32	Preparative enantioselective synthesis of benzoins and (R)-2-hydroxy-1-phenylpropanone using benzaldehyde lyase. Journal of Molecular Catalysis B: Enzymatic, 2006, 38, 43-47.	1.8	57
33	Stereoselective synthesis of bulky 1,2-diols with alcohol dehydrogenases. Catalysis Science and Technology, 2012, 2, 1580.	4.1	56
34	Fusion of a Coiledâ€Coil Domain Facilitates the Highâ€Level Production of Catalytically Active Enzyme Inclusion Bodies. ChemCatChem, 2016, 8, 142-152.	3.7	56
35	Alteration of the Substrate Specificity of Benzoylformate Decarboxylase from Pseudomonas putida by Directed Evolution. ChemBioChem, 2003, 4, 721-726.	2.6	55
36	Uneven twins: Comparison of two enantiocomplementary hydroxynitrile lyases with Î±/Î²-hydrolase fold. Journal of Biotechnology, 2009, 141, 166-173.	3.8	54

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37	Advantages of Hydrogel-Based 3D-Printed Enzyme Reactors and Their Limitations for Biocatalysis. Frontiers in Bioengineering and Biotechnology, 2018, 6, 211.	4.1	52
38	Asymmetric Synthesis of Aliphatic 2-Hydroxy Ketones by Enzymatic Carboligation of Aldehydes. European Journal of Organic Chemistry, 2007, 2007, 2940-2944.	2.4	51
39	Reaction Engineering of Benzaldehyde Lyase fromPseudomonas fluorescensCatalyzing Enantioselective Câ^'C Bond Formation. Organic Process Research and Development, 2006, 10, 1172-1177.	2.7	49
40	Branchedâ€Chain Keto Acid Decarboxylase from Lactococcus lactis (KdcA), a Valuable Thiamine Diphosphateâ€Dependent Enzyme for Asymmetric Cï£¿C Bond Formation. Advanced Synthesis and Catalysis, 2007, 349, 1425-1435.	4.3	49
41	The Replacement of Trp392 by Alanine Influences the Decarboxylase/Carboligase Activity and Stability of Pyruvate Decarboxylase from Zymomonas mobilis. FEBS Journal, 1995, 234, 650-655.	0.2	48
42	Active site mutants of pyruvate decarboxylase from Zymomonas mobilis . A site-directed mutagenesis study of L112, I472, I476, E473 and N482. FEBS Journal, 1998, 257, 538-546.	0.2	47
43	Influence of Organic Solvents on Enzymatic Asymmetric Carboligations. Advanced Synthesis and Catalysis, 2012, 354, 2805-2820.	4.3	47
44	Novel biocatalysts for white biotechnology. Biotechnology Journal, 2006, 1, 777-786.	3.5	46
45	Î±,Î²â€Unsaturated Aldehydes as Substrates for Asymmetric Cï£¿C Bond Forming Reactions with Thiamin Diphosphate (ThDP)â€Dependent Enzymes. Advanced Synthesis and Catalysis, 2008, 350, 759-771.	4.3	46
46	Catalytically active inclusion bodies of L-lysine decarboxylase from E. coli for 1,5-diaminopentane production. Scientific Reports, 2018, 8, 5856.	3.3	45
47	Sâ€Selective Mixed Carboligation by Structureâ€Based Design of the Pyruvate Decarboxylase from Acetobacter pasteurianus. ChemCatChem, 2011, 3, 1587-1596.	3.7	44
48	Comparative characterisation of thiamin diphosphate-dependent decarboxylases. Journal of Molecular Catalysis B: Enzymatic, 2009, 61, 30-35.	1.8	42
49	Biochemical characterization of an alcohol dehydrogenase from Ralstonia sp.. Biotechnology and Bioengineering, 2013, 110, 1838-1848.	3.3	41
50	Enantioselective Cï£¿C Bond Ligation Using RecombinantEscherichia coli-Whole-Cell Biocatalysts. Advanced Synthesis and Catalysis, 2008, 350, 165-173.	4.3	39
51	An Orthogonal Biocatalytic Approach for the Safe Generation and Use of HCN in a Multistep Continuous Preparation of Chiral O-Acetylcyanohydrins. Synlett, 2016, 27, 262-266.	1.8	37
52	Closing the gap for efficient immobilization of biocatalysts in continuous processes: HaloTagâ„¢ fusion enzymes for a continuous enzymatic cascade towards a vicinal chiral diol. Green Chemistry, 2018, 20, 544-552.	9.0	37
53	A Synthetic Reaction Cascade Implemented by Colocalization of Two Proteins within Catalytically Active Inclusion Bodies. ACS Synthetic Biology, 2018, 7, 2282-2295.	3.8	36
54	A standard numbering scheme for thiamine diphosphate-dependent decarboxylases. BMC Biochemistry, 2012, 13, 24.	4.4	35

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55	Rapid, selective and stable HaloTag-LbADH immobilization directly from crude cell extract for the continuous biocatalytic production of chiral alcohols and epoxides. Reaction Chemistry and Engineering, 2018, 3, 8-12.	3.7	35
56	Tailoring the properties of (catalytically)-active inclusion bodies. Microbial Cell Factories, 2019, 18, 33.	4.0	34
57	Mechanism of acetaldehyde-induced deactivation of microbial lipases. BMC Biochemistry, 2011, 12, 10.	4.4	33
58	Hydroxynitrile Lyase from Arabidopsis thaliana: Identification of Reaction Parameters for Enantiopure Cyanohydrin Synthesis by Pure and Immobilized Catalyst. Advanced Synthesis and Catalysis, 2011, 353, 2399-2408.	4.3	33
59	The production of (R)-2-hydroxy-1-phenyl-propan-1-one derivatives by benzaldehyde lyase fromPseudomonas fluorescensin a continuously operated membrane reactor. Biotechnology and Bioengineering, 2007, 96, 835-843.	3.3	32
60	Stereoselective Reduction of 2â€Hydroxy Ketones towards synâ€•and antiâ€1,2â€Diols. Advanced Synthesis and Catalysis, 2011, 353, 2359-2362.	4.3	32
61	A Tailorâ€Made Chimeric Thiamine Diphosphate Dependent Enzyme for the Direct Asymmetric Synthesis of (S)â€Benzoins. Angewandte Chemie - International Edition, 2014, 53, 9376-9379.	13.8	32
62	BioCatNet: A Database System for the Integration of Enzyme Sequences and Biocatalytic Experiments. ChemBioChem, 2016, 17, 2093-2098.	2.6	32
63	Structure elucidation of the thermal degradation products of the nucleotide cofactors NADH and NADPH by nano-ESI-FTICR-MS and HPLC-MS. Analytical and Bioanalytical Chemistry, 2010, 398, 2803-2811.	3.7	31
64	An evaluation of genetically encoded FRET-based biosensors for quantitative metabolite analyses in vivo. Journal of Biotechnology, 2014, 191, 250-259.	3.8	31
65	Regioâ€•and Stereoselective Aliphaticâ€“Aromatic Crossâ€Benzoin Reaction: Enzymatic Divergent Catalysis. Chemistry - A European Journal, 2016, 22, 13999-14005.	3.3	31
66	Reversible Dissociation and Unfolding of Pyruvate Decarboxylase from Zymomonas mobilis. FEBS Journal, 1994, 224, 651-661.	0.2	30
67	A high-throughput screening assay for hydroxynitrile lyase activity. Chemical Communications, 2006, , 4201.	4.1	30
68	Efficient Nicotinamide Adenine Dinucleotide Phosphate [NADP(H)] Recycling in Closedâ€Loop Continuous Flow Biocatalysis. Advanced Synthesis and Catalysis, 2020, 362, 2894-2901.	4.3	30
69	TTC-based screening assay for Ï‰-transaminases: A rapid method to detect reduction of 2-hydroxy ketones. Journal of Biotechnology, 2012, 159, 188-194.	3.8	29
70	A Toolbox of Genetically Encoded FRET-Based Biosensors for Rapid l-Lysine Analysis. Sensors, 2016, 16, 1604.	3.8	28
71	Studies on the continuous production of (R)-(âˆ')-phenylacetylcarbinol in an enzyme-membrane reactor. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 387-396.	1.8	27
72	(S)-Selective MenD variants from Escherichia coli provide access to new functionalized chiral Î±-hydroxy ketones. Chemical Communications, 2013, 49, 2061.	4.1	27

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73	Impact of Molecular Crowding on Translational Mobility and Conformational Properties of Biological Macromolecules. Journal of Physical Chemistry B, 2019, 123, 4477-4486.	2.6	27
74	Hydroxynitrile lyase catalyzed cyanohydrin synthesis at high pH-values. Bioprocess and Biosystems Engineering, 2008, 31, 155-161.	3.4	26
75	Cloning and expression of (R)-hydroxynitrile lyase from Linum usitatissimum (flax). Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 315-332.	1.8	25
76	Identification of Novel Benzoylformate Decarboxylases by Growth Selection. Applied and Environmental Microbiology, 2006, 72, 7510-7517.	3.1	25
77	Hydroxynitrile Lyases with Î±/Î²â€Hydrolase Fold: Two Enzymes with Almost Identical 3D Structures but Opposite Enantioselectivities and Different Reaction Mechanisms. ChemBioChem, 2012, 13, 1932-1939.	2.6	25
78	Advanced in vivo applications of blue light photoreceptors as alternative fluorescent proteins. Photochemical and Photobiological Sciences, 2013, 12, 1125-1134.	2.9	25
79	HaloTagâ„¢: Evaluation of a covalent one-step immobilization for biocatalysis. Journal of Biotechnology, 2017, 241, 170-174.	3.8	25
80	High-throughput assay of (R)-phenylacetylcarbinol synthesized by pyruvate decarboxylase. Analytical and Bioanalytical Chemistry, 2002, 374, 1069-1073.	3.7	24
81	Synthesis of Chiral Cyanohydrins by Recombinant Escherichia coli Cells in a Micro-Aqueous Reaction System. Applied and Environmental Microbiology, 2012, 78, 5025-5027.	3.1	24
82	Asymmetric synthesis of (S)-phenylacetylcarbinol â€“ closing a gap in Câ€“C bond formation. Green Chemistry, 2017, 19, 380-384.	9.0	24
83	Tailor-made catalytically active inclusion bodies for different applications in biocatalysis. Catalysis Science and Technology, 2018, 8, 5816-5826.	4.1	24
84	An Activity, Stability and Selectivity Comparison of Propioin Synthesis by Thiamine Diphosphate-Dependent Enzymes in a Solid/Gas Bioreactor. ChemBioChem, 2007, 8, 1063-1070.	2.6	23
85	Genetically Encoded FÃ¶rster Resonance Energy Transfer-Based Biosensors Studied on the Single-Molecule Level. ACS Sensors, 2018, 3, 1462-1470.	7.8	23
86	Synthetic peptides as antagonists of the anaphylatoxin C3a. FEBS Journal, 1992, 210, 185-191.	0.2	21
87	Investigation of the carboligase activity of thiamine diphosphate-dependent enzymes using kinetic modeling and NMR spectroscopy. Journal of Molecular Catalysis B: Enzymatic, 2009, 61, 73-79.	1.8	20
88	Tailoring a Stabilized Variant of Hydroxynitrile Lyase from Arabidopsis thaliana. ChemBioChem, 2012, 13, 797-802.	2.6	20
89	Asymmetric Stetter reactions catalyzed by thiamine diphosphate-dependent enzymes. Applied Microbiology and Biotechnology, 2014, 98, 9681-9690.	3.6	20
90	(R,R)-Butane-2,3-diol dehydrogenase from Bacillus clausii DSM 8716 T : Cloning and expression of the bdhA -gene, and initial characterization of enzyme. Journal of Biotechnology, 2017, 258, 41-50.	3.8	20

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91	A FRET-based biosensor for the quantification of glucose in culture supernatants of mL scale microbial cultivations. Microbial Cell Factories, 2019, 18, 143.	4.0	20
92	Tailoring the Sâ€Selectivity of 2â€Succinylâ€5â€enolpyruvylâ€6â€hydroxyâ€3â€cyclohexeneâ€1â€carboxylate Synthase (MenD) from Escherichia coli. ChemCatChem, 2013, 5, 3587-3594.	3.7	19
93	Factors influencing the operational stability of NADPH-dependent alcohol dehydrogenase and an NADH-dependent variant thereof in gas/solid reactors. Journal of Molecular Catalysis B: Enzymatic, 2010, 67, 271-283.	1.8	18
94	Phenylalanine ammonia lyase from Arabidopsis thaliana (At PAL2): A potent MIO-enzyme for the synthesis of non-canonical aromatic alpha-amino acids. Journal of Biotechnology, 2017, 258, 148-157.	3.8	18
95	The properties of platinum or palladium supported on Î²-aluminium trifluoride or magnesium difluoride: catalysts for the hydrodechlorination of 1,1-dichlorotetrafluoroethane. Journal of Materials Chemistry, 2002, 12, 3499-3507.	6.7	17
96	Asymmetric synthesis of chiral 2-hydroxy ketones by coupled biocatalytic alkene oxidation and CC bond formation. Journal of Molecular Catalysis B: Enzymatic, 2009, 61, 111-116.	1.8	17
97	Phenylalanine ammonia lyase from Arabidopsis thaliana (At PAL2): A potent MIO-enzyme for the synthesis of non-canonical aromatic alpha-amino acids.. Journal of Biotechnology, 2017, 258, 158-166.	3.8	17
98	An Enzymatic 2â€Step Cofactor and Coâ€Product Recycling Cascade towards a Chiral 1,2â€Diol. Part I: Cascade Design. Advanced Synthesis and Catalysis, 2019, 361, 2607-2615.	4.3	17
99	Protein design on pyruvate decarboxylase (PDC) by site-directed mutagenesis. Advances in Biochemical Engineering/Biotechnology, 1997, , 15-43.	1.1	15
100	Influence of the hydrostatic pressure and pH on the asymmetric 2â€hydroxyketone formation catalyzed by Pseudomonas putida benzoylformate decarboxylase and variants thereof. Biotechnology and Bioengineering, 2010, 106, 18-26.	3.3	15
101	MenD from Bacillus subtilis: A Potent Catalyst for the Enantiocomplementary Asymmetric Synthesis of Functionalized Î±â€Hydroxy Ketones. ChemCatChem, 2014, 6, 1082-1088.	3.7	15
102	Activation of thiamine diphosphate in pyruvate decarboxylase from Zymomonas mobilis. FEBS Letters, 1998, 441, 404-406.	2.8	14
103	Process development for enzyme catalysed asymmetric Câ€“C-bond formation. Chemical Engineering Science, 2007, 62, 5201-5205.	3.8	14
104	Fusion of a Flavin-Based Fluorescent Protein to Hydroxynitrile Lyase from Arabidopsis thaliana Improves Enzyme Stability. Applied and Environmental Microbiology, 2013, 79, 4727-4733.	3.1	14
105	Continuous enzymatic carboligation of benzaldehyde and acetaldehyde in an enzyme ultrafiltration membrane reactor and laminar flow microreactors. Journal of Molecular Catalysis B: Enzymatic, 2014, 102, 132-137.	1.8	13
106	Purification and simultaneous immobilization of Arabidopsis thaliana hydroxynitrile lyase using a family 2 carbohydrateâ€binding module. Biotechnology Journal, 2015, 10, 811-819.	3.5	13
107	Expedient Synthesis of C â€Aryl Carbohydrates by Consecutive Biocatalytic Benzoin and Aldol Reactions. Chemistry - A European Journal, 2015, 21, 3335-3346.	3.3	13
108	Encapsulation of FRET-based glucose and maltose biosensors to develop functionalized silica nanoparticles. Analyst, The, 2016, 141, 3982-3984.	3.5	13

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109	An Enzymatic 2â€Step Cofactor and Coâ€Product Recycling Cascade towards a Chiral 1,2â€Diol. Part II: Catalytically Active Inclusion Bodies. Advanced Synthesis and Catalysis, 2019, 361, 2616-2626.	4.3	13
110	Synthesis of Î±-hydroxy ketones and vicinal (R,R)-diols by Bacillus clausii DSM 8716^T butanediol dehydrogenase. RSC Advances, 2020, 10, 12206-12216.	3.6	13
111	Construction and comprehensive characterization of an EcLDCc-CatIB setâ€”varying linkers and aggregation inducing tags. Microbial Cell Factories, 2021, 20, 49.	4.0	12
112	Propioin synthesis using thiamine diphosphateâ€dependent enzymes. Biotechnology Progress, 2009, 25, 132-138.	2.6	10
113	An Efficient Route to Both Enantiomers of alloâ€Threonine by Simultaneous Amino Acid Racemaseâ€Catalyzed Isomerization of Threonine and Crystallization. Advanced Synthesis and Catalysis, 2011, 353, 2431-2438.	4.3	10
114	Effective Production of (S)-Î±-Hydroxy ketones: An Reaction Engineering Approach. Topics in Catalysis, 2014, 57, 401-411.	2.8	10
115	Î¼MORE: A microfluidic magnetic oscillation reactor for accelerated parameter optimization in biocatalysis. Journal of Biotechnology, 2016, 231, 174-182.	3.8	10
116	Structural and Mutagenesis Studies of the Thiamineâ€Dependent, Ketoneâ€Accepting YerE from Pseudomonas protegens. ChemBioChem, 2018, 19, 2283-2292.	2.6	8
117	Physiological relation between respiration activity and heterologous expression of selected benzoylformate decarboxylase variants in Escherichia coli. Microbial Cell Factories, 2010, 9, 76.	4.0	7
118	Structural Analysis of a Genetically Encoded FRET Biosensor by SAXS and MD Simulations. Sensors, 2021, 21, 4144.	3.8	6
119	From Enzyme to Preparative Cascade Reactions with Immobilized Enzymes: Tuning Fe(II)/Î±-Ketoglutarate-Dependent Lysine Hydroxylases for Application in Biotransformations. Catalysts, 2022, 12, 354.	3.5	6
120	Optimierung von BiokatalysatorenfÃ¼r technische Prozesse. Chemie-Ingenieur-Technik, 2000, 72, 883-885.	0.8	5
121	Substrate and water adsorption phenomena in a gas/solid enzymatic reactor. Biotechnology Journal, 2009, 4, 712-721.	3.5	5
122	Covalently Immobilized 2â€Deoxyriboseâ€5â€phosphate Aldolase (DERA) for Biocatalysis in Flow: Utilization of the 3â€Hydroxyaldehyde Intermediate in Reaction Cascades. ChemCatChem, 2022, 14, .	3.7	5
123	Synthesis of Î±-hydroxy ketones and vicinal diols with the Bacillus licheniformis DSM 13T butane-2,3-diol dehydrogenase. Journal of Biotechnology, 2020, 324, 61-70.	3.8	4
124	Continuous production of (R)-phenylacetylcarbinol in an enzyme-membrane reactor using a potent mutant of pyruvate decarboxylase from Zymomonas mobilis. Biotechnology and Bioengineering, 2001, 74, 317-25.	3.3	4
125	Cloning and stabilization of NAD-dependent formate dehydrogenase from Candida boidinii by site-directed mutagenesis. Progress in Biotechnology, 1998, 15, 331-336.	0.2	2
126	Entwicklung einer Enzymplattform fÃ¼r die biokatalytische Câ€“Câ€VerknÃ¼pfung. Chemie-Ingenieur-Technik, 2010, 82, 81-86.	0.8	2

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127	Single-Molecule Studies on a FRET Biosensor: Lessons from a Comparison of Fluorescent Protein Equipped versus Dye-Labeled Species. Molecules, 2018, 23, 3105.	3.8	2
128	Navigating within thiamine diphosphateâ€dependent decarboxylases: Sequences, structures, functional positions, and binding sites. Proteins: Structure, Function and Bioinformatics, 2019, 87, 774-785.	2.6	2
129	A cascade reaction for the synthesis of d-fagomine precursor revisited: Kinetic insight and understanding of the system. New Biotechnology, 2021, 63, 19-28.	4.4	2
130	Optimization of Biocatalysts for Technical Processes. Engineering in Life Sciences, 2001, 1, 17-20.	3.6	1
131	New Options for Biocatalysis: Merging Purification and Immobilization through Innovative Binding Tags. Chemie-Ingenieur-Technik, 2016, 88, 1245-1245.	0.8	1
132	Catalytically Active Inclusion Bodies: A New Carrier-Free Enzyme Immobilization Method. Chemie-Ingenieur-Technik, 2016, 88, 1247-1247.	0.8	1
133	Towards a Mechanistic Understanding of Factors Controlling the Stereoselectivity of Transketolase. ChemCatChem, 2018, 10, 2601-2611.	3.7	1
134	Benzoylformate Decarboxylase from Pseudomonas putida as Stable Catalyst for the Synthesis of Chiral 2-Hydroxy Ketones. Chemistry - A European Journal, 2000, 6, 1483-1495.	3.3	1
135	Exploring the Substrate Specificity of Benzoylformate Decarboxylase, Pyruvate Decarboxylase, and Benzaldehyde Lyase. Oxidative Stress and Disease, 2003, , .	0.3	1
136	Improvements of Enzyme Stability and Specificity by Genetic Engineering. , 2001, , 377-382.		0
137	Thiamin-Diphosphate-Dependent Enzymes: New Aspects of Asymmetric Câ€”C Bond Formation. ChemInform, 2003, 34, no.	0.0	0
138	Catalytic Asymmetric Synthesis: Section 2.2. , 0, , 298-413.		0
139	Rationales Enzymdesign fÃ¼r die (S)â€selektive Benzoinkondensation. Chemie-Ingenieur-Technik, 2009, 81, 1256-1256.	0.8	0
140	Aufbau von Enzym-Toolboxen fÃ¼r chirale Produkte. Chemie-Ingenieur-Technik, 2010, 82, 1533-1533.	0.8	0
141	Immobilisierung der Hydroxynitril-Lyase aus Arabidopsis thaliana. Chemie-Ingenieur-Technik, 2010, 82, 1532-1532.	0.8	0
142	Charakterisierung von Enzymen zur Synthese chiraler Aminoalkohole. Chemie-Ingenieur-Technik, 2010, 82, 1536-1537.	0.8	0
143	Entwicklung eines neuen Mikroreaktor-Konzepts fÃ¼r die enzymatische Carboligation. Chemie-Ingenieur-Technik, 2012, 84, 1397-1397.	0.8	0
144	Enzymatische Kaskadenreaktionen mit ThDP-abhÃngigen Lyasen und Ï‰-Transaminasen zur nachhaltigen Synthese chiraler Aminoalkohole. Chemie-Ingenieur-Technik, 2012, 84, 1217-1218.	0.8	0

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145	Enzymatische Kaskadenreaktionen mit ThDP-abhÃngigen Lyasen und Ï‰-Transaminasen zur nachhaltigen Synthese chiraler Aminoalkohole. Chemie-Ingenieur-Technik, 2012, 84, 1220-1220.	0.8	0
146	Structure-Function Studies on the Chemo- and Stereoselectivity of ThDP-Dependent Enzymes. Chemie-Ingenieur-Technik, 2016, 88, 1247-1247.	0.8	0
147	Development of New FRET-Based Biosensors for Extracellular Metabolite Analysis. Chemie-Ingenieur-Technik, 2016, 88, 1403-1404.	0.8	0
148	FRET-Based Biosensors for Online Measurement of Lysine Production. Chemie-Ingenieur-Technik, 2016, 88, 1401-1401.	0.8	0
149	Exploring the Sequence-Function Space of ThDP-Dependent Enzymes. Chemie-Ingenieur-Technik, 2016, 88, 1246-1246.	0.8	0
150	Enzyme Toolboxes & Reaction Engineering - Solutions for Applied Viocatalysis. Chemie-Ingenieur-Technik, 2016, 88, 1241-1242.	0.8	0
151	(2 R ,3 R)-Butan-2,3-diol-Dehydrogenase aus Bacillus clausii DSM 8716T - Ein vielversprechender Biokatalysator fÃ¼r die Synthese chiraler Î± -Hydroxyketone/Diole sowie zur Biosensorentwicklung. Chemie-Ingenieur-Technik, 2018, 90, 1278-1278.	0.8	0
152	Konzepte zur funktionalen Enzymreinigung und Immobilisierung in einem Schritt. Chemie-Ingenieur-Technik, 2018, 90, 1333-1333.	0.8	0
153	XyloSenS â€“ FRETâ€basierte Biosensoren zur online Inâ€vitroâ€•Ãœberwachung der Substratkonzentration von Kultivierungen. Chemie-Ingenieur-Technik, 2020, 92, 1206-1207.	0.8	0
154	Enantioselective Syntheses of Hydroxy Ketones via Benzoylformate Decarboxylaseand Benzaldehyde Lyase- Catalyzed Câ€“C Bond Formation. Oxidative Stress and Disease, 2003, , .	0.3	0