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	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
2	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
3	Construction and comprehensive characterization of an EcLDCc-CatIB setâ€”varying linkers and aggregation inducing tags. Microbial Cell Factories, 2021, 20, 49.	4.0	12
4	Structural Analysis of a Genetically Encoded FRET Biosensor by SAXS and MD Simulations. Sensors, 2021, 21, 4144.	3.8	6
5	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
6	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
7	XyloSenS â€“ FRETâ€basierte Biosensoren zur online Inâ€vitroâ€Ãœberwachung der Substratkonzentration von Kultivierungen. Chemie-Ingenieur-Technik, 2020, 92, 1206-1207.	0.8	0
8	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
9	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
10	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
11	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
12	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
13	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
14	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
15	Tailoring the properties of (catalytically)-active inclusion bodies. Microbial Cell Factories, 2019, 18, 33.	4.0	34
16	Towards a Mechanistic Understanding of Factors Controlling the Stereoselectivity of Transketolase. ChemCatChem, 2018, 10, 2601-2611.	3.7	1
17	Catalytically active inclusion bodies of L-lysine decarboxylase from E. coli for 1,5-diaminopentane production. Scientific Reports, 2018, 8, 5856.	3.3	45
18	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

#	Article	IF	Citations
19	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
20	Tailor-made catalytically active inclusion bodies for different applications in biocatalysis. Catalysis Science and Technology, 2018, 8, 5816-5826.	4.1	24
21	(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
22	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
23	Konzepte zur funktionalen Enzymreinigung und Immobilisierung in einem Schritt. Chemie-Ingenieur-Technik, 2018, 90, 1333-1333.	0.8	0
24	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
25	Genetically Encoded FÃ¶rster Resonance Energy Transfer-Based Biosensors Studied on the Single-Molecule Level. ACS Sensors, 2018, 3, 1462-1470.	7.8	23
26	Structural and Mutagenesis Studies of the Thiamineâ€Dependent, Ketoneâ€Accepting YerE from Pseudomonas protegens. ChemBioChem, 2018, 19, 2283-2292.	2.6	8
27	Advantages of Hydrogel-Based 3D-Printed Enzyme Reactors and Their Limitations for Biocatalysis. Frontiers in Bioengineering and Biotechnology, 2018, 6, 211.	4.1	52
28	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
29	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
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	HaloTagâ„¢: Evaluation of a covalent one-step immobilization for biocatalysis. Journal of Biotechnology, 2017, 241, 170-174.	3.8	25
32	(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
33	Asymmetric synthesis of (S)-phenylacetylcarbinol â€“ closing a gap in Câ€“C bond formation. Green Chemistry, 2017, 19, 380-384.	9.0	24
34	A Toolbox of Genetically Encoded FRET-Based Biosensors for Rapid l-Lysine Analysis. Sensors, 2016, 16, 1604.	3.8	28
35	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
36	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

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37	Î¼MORE: A microfluidic magnetic oscillation reactor for accelerated parameter optimization in biocatalysis. Journal of Biotechnology, 2016, 231, 174-182.	3.8	10
38	Regioâ€•and Stereoselective Aliphaticâ€“Aromatic Crossâ€Benzoin Reaction: Enzymatic Divergent Catalysis. Chemistry - A European Journal, 2016, 22, 13999-14005.	3.3	31
39	BioCatNet: A Database System for the Integration of Enzyme Sequences and Biocatalytic Experiments. ChemBioChem, 2016, 17, 2093-2098.	2.6	32
40	Structure-Function Studies on the Chemo- and Stereoselectivity of ThDP-Dependent Enzymes. Chemie-Ingenieur-Technik, 2016, 88, 1247-1247.	0.8	0
41	Development of New FRET-Based Biosensors for Extracellular Metabolite Analysis. Chemie-Ingenieur-Technik, 2016, 88, 1403-1404.	0.8	0
42	New Options for Biocatalysis: Merging Purification and Immobilization through Innovative Binding Tags. Chemie-Ingenieur-Technik, 2016, 88, 1245-1245.	0.8	1
43	FRET-Based Biosensors for Online Measurement of Lysine Production. Chemie-Ingenieur-Technik, 2016, 88, 1401-1401.	0.8	0
44	Exploring the Sequence-Function Space of ThDP-Dependent Enzymes. Chemie-Ingenieur-Technik, 2016, 88, 1246-1246.	0.8	0
45	Catalytically Active Inclusion Bodies: A New Carrier-Free Enzyme Immobilization Method. Chemie-Ingenieur-Technik, 2016, 88, 1247-1247.	0.8	1
46	Enzyme Toolboxes & Reaction Engineering - Solutions for Applied Viocatalysis. Chemie-Ingenieur-Technik, 2016, 88, 1241-1242.	0.8	0
47	Encapsulation of FRET-based glucose and maltose biosensors to develop functionalized silica nanoparticles. Analyst, The, 2016, 141, 3982-3984.	3.5	13
48	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
49	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
50	Asymmetric Stetter reactions catalyzed by thiamine diphosphate-dependent enzymes. Applied Microbiology and Biotechnology, 2014, 98, 9681-9690.	3.6	20
51	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
52	Effective Production of (S)-Î±-Hydroxy ketones: An Reaction Engineering Approach. Topics in Catalysis, 2014, 57, 401-411.	2.8	10
53	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
54	An evaluation of genetically encoded FRET-based biosensors for quantitative metabolite analyses in vivo. Journal of Biotechnology, 2014, 191, 250-259.	3.8	31

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55	Efficient 2-step biocatalytic strategies for the synthesis of all nor(pseudo)ephedrine isomers. Green Chemistry, 2014, 16, 3341-3348.	9.0	66
56	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
57	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
58	Biochemical characterization of an alcohol dehydrogenase from Ralstonia sp.. Biotechnology and Bioengineering, 2013, 110, 1838-1848.	3.3	41
59	(S)-Selective MenD variants from Escherichia coli provide access to new functionalized chiral Î±-hydroxy ketones. Chemical Communications, 2013, 49, 2061.	4.1	27
60	CC bond formation using ThDP-dependent lyases. Current Opinion in Chemical Biology, 2013, 17, 261-270.	6.1	93
61	Advanced in vivo applications of blue light photoreceptors as alternative fluorescent proteins. Photochemical and Photobiological Sciences, 2013, 12, 1125-1134.	2.9	25
62	Engineering stereoselectivity of ThDP-dependent enzymes. FEBS Journal, 2013, 280, 6374-6394.	4.7	72
63	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
64	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
65	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
66	Influence of Organic Solvents on Enzymatic Asymmetric Carboligations. Advanced Synthesis and Catalysis, 2012, 354, 2805-2820.	4.3	47
67	Stereoselective synthesis of bulky 1,2-diols with alcohol dehydrogenases. Catalysis Science and Technology, 2012, 2, 1580.	4.1	56
68	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
69	A standard numbering scheme for thiamine diphosphate-dependent decarboxylases. BMC Biochemistry, 2012, 13, 24.	4.4	35
70	Tailoring a Stabilized Variant of Hydroxynitrile Lyase from Arabidopsis thaliana. ChemBioChem, 2012, 13, 797-802.	2.6	20
71	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
72	Entwicklung eines neuen Mikroreaktor-Konzepts fÃ¼r die enzymatische Carboligation. Chemie-Ingenieur-Technik, 2012, 84, 1397-1397.	0.8	0

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73	Enzymatische Kaskadenreaktionen mit ThDP-abhÃngigen Lyasen und Ï‰-Transaminasen zur nachhaltigen Synthese chiraler Aminoalkohole. Chemie-Ingenieur-Technik, 2012, 84, 1217-1218.	0.8	0
74	Enzymatische Kaskadenreaktionen mit ThDP-abhÃngigen Lyasen und Ï‰-Transaminasen zur nachhaltigen Synthese chiraler Aminoalkohole. Chemie-Ingenieur-Technik, 2012, 84, 1220-1220.	0.8	0
75	Conversion of Pyruvate Decarboxylase into an Enantioselective Carboligase with Biosynthetic Potential. Journal of the American Chemical Society, 2011, 133, 3609-3616.	13.7	69
76	Sâ€Selective Mixed Carboligation by Structureâ€Based Design of the Pyruvate Decarboxylase from Acetobacter pasteurianus. ChemCatChem, 2011, 3, 1587-1596.	3.7	44
77	Mechanism of acetaldehyde-induced deactivation of microbial lipases. BMC Biochemistry, 2011, 12, 10.	4.4	33
78	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
79	Stereoselective Reduction of 2â€Hydroxy Ketones towards synâ€and antiâ€1,2â€Diols. Advanced Synthesis and Catalysis, 2011, 353, 2359-2362.	4.3	32
80	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
81	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
82	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
83	Entwicklung einer Enzymplattform fÃ¼r die biokatalytische Câ€“Câ€VerknÃ¼pfung. Chemie-Ingenieur-Technik, 2010, 82, 81-86.	0.8	2
84	Aufbau von Enzym-Toolboxen fÃ¼r chirale Produkte. Chemie-Ingenieur-Technik, 2010, 82, 1533-1533.	0.8	0
85	Immobilisierung der Hydroxynitril-Lyase aus Arabidopsis thaliana. Chemie-Ingenieur-Technik, 2010, 82, 1532-1532.	0.8	0
86	Charakterisierung von Enzymen zur Synthese chiraler Aminoalkohole. Chemie-Ingenieur-Technik, 2010, 82, 1536-1537.	0.8	0
87	The Enzymatic Asymmetric Conjugate Umpolung Reaction. Angewandte Chemie - International Edition, 2010, 49, 6600-6603.	13.8	71
88	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
89	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
90	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

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91	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
92	Comparative characterisation of thiamin diphosphate-dependent decarboxylases. Journal of Molecular Catalysis B: Enzymatic, 2009, 61, 30-35.	1.8	42
93	How to overcome limitations in biotechnological processes - examples from hydroxynitrile lyase applications. Trends in Biotechnology, 2009, 27, 599-607.	9.3	65
94	Rationales Enzymdesign fÃ¼r die (S)â€selektive Benzoinkondensation. Chemie-Ingenieur-Technik, 2009, 81, 1256-1256.	0.8	0
95	Propioin synthesis using thiamine diphosphateâ€dependent enzymes. Biotechnology Progress, 2009, 25, 132-138.	2.6	10
96	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
97	Uneven twins: Comparison of two enantiocomplementary hydroxynitrile lyases with Î±/Î²-hydrolase fold. Journal of Biotechnology, 2009, 141, 166-173.	3.8	54
98	Substrate and water adsorption phenomena in a gas/solid enzymatic reactor. Biotechnology Journal, 2009, 4, 712-721.	3.5	5
99	Hydroxynitrile lyase catalyzed cyanohydrin synthesis at high pH-values. Bioprocess and Biosystems Engineering, 2008, 31, 155-161.	3.4	26
100	Rational Protein Design of ThDPâ€Dependent Enzymesâ€"Engineering Stereoselectivity. ChemBioChem, 2008, 9, 406-412.	2.6	67
101	Enantioselective Cï£¿C Bond Ligation Using RecombinantEscherichia coli-Whole-Cell Biocatalysts. Advanced Synthesis and Catalysis, 2008, 350, 165-173.	4.3	39
102	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
103	Characterization of Phenylpyruvate Decarboxylase, Involved in Auxin Production of Azospirillum brasilense. Journal of Bacteriology, 2007, 189, 7626-7633.	2.2	110
104	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
105	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
106	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
107	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
108	Asymmetric Synthesis of Aliphatic 2-Hydroxy Ketones by Enzymatic Carboligation of Aldehydes. European Journal of Organic Chemistry, 2007, 2007, 2940-2944.	2.4	51

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109	Process development for enzyme catalysed asymmetric Câ€“C-bond formation. Chemical Engineering Science, 2007, 62, 5201-5205.	3.8	14
110	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
111	A high-throughput screening assay for hydroxynitrile lyase activity. Chemical Communications, 2006, , 4201.	4.1	30
112	Reaction Engineering of Benzaldehyde Lyase fromPseudomonas fluorescensCatalyzing Enantioselective Câ¯C Bond Formation. Organic Process Research and Development, 2006, 10, 1172-1177.	2.7	49
113	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
114	Novel biocatalysts for white biotechnology. Biotechnology Journal, 2006, 1, 777-786.	3.5	46
115	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
116	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
117	Identification of Novel Benzoylformate Decarboxylases by Growth Selection. Applied and Environmental Microbiology, 2006, 72, 7510-7517.	3.1	25
118	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
119	Effect of oxygen limitation and medium composition on Escherichia coli fermentation in shake-flask cultures. Biotechnology Progress, 2004, 20, 1062-1068.	2.6	161
120	A new perspective on thiamine catalysis. Current Opinion in Biotechnology, 2004, 15, 335-342.	6.6	157
121	Thiamin-Diphosphate-Dependent Enzymes: New Aspects of Asymmetric Câ€”C Bond Formation. ChemInform, 2003, 34, no.	0.0	0
122	Alteration of the Substrate Specificity of Benzoylformate Decarboxylase from Pseudomonas putida by Directed Evolution. ChemBioChem, 2003, 4, 721-726.	2.6	55
123	Exploring the Substrate Specificity of Benzoylformate Decarboxylase, Pyruvate Decarboxylase, and Benzaldehyde Lyase. Oxidative Stress and Disease, 2003, , .	0.3	1
124	Enantioselective Syntheses of Hydroxy Ketones via Benzoylformate Decarboxylaseand Benzaldehyde Lyase- Catalyzed Câ€“C Bond Formation. Oxidative Stress and Disease, 2003, , .	0.3	0
125	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
126	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

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127	Thiamin-Diphosphate-Dependent Enzymes: New Aspects of Asymmetric Cï£¿C Bond Formation. Chemistry - A European Journal, 2002, 8, 5288-5295.	3.3	162
128	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
129	High-throughput assay of (R)-phenylacetylcarbinol synthesized by pyruvate decarboxylase. Analytical and Bioanalytical Chemistry, 2002, 374, 1069-1073.	3.7	24
130	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
131	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
132	Improved biocatalysts by directed evolution and rational protein design. Current Opinion in Chemical Biology, 2001, 5, 137-143.	6.1	410
133	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
134	Optimization of Biocatalysts for Technical Processes. Engineering in Life Sciences, 2001, 1, 17-20.	3.6	1
135	Studies on the continuous production of (R)-(â^')-phenylacetylcarbinol in an enzyme-membrane reactor. Journal of Molecular Catalysis B: Enzymatic, 2001, 11, 387-396.	1.8	27
136	Improvements of Enzyme Stability and Specificity by Genetic Engineering. , 2001, , 377-382.		0
137	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
138	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
139	Optimierung von BiokatalysatorenfÃ¼r technische Prozesse. Chemie-Ingenieur-Technik, 2000, 72, 883-885.	0.8	5
140	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
141	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
142	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
143	Asymmetric benzoin reaction catalyzed by benzoylformate decarboxylase. Tetrahedron: Asymmetry, 1999, 10, 4769-4774.	1.8	93
144	Synthetic potential of thiamin diphosphate-dependent enzymes. Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 145-159.	1.8	96

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145	Cloning and expression of (R)-hydroxynitrile lyase from Linum usitatissimum (flax). Journal of Molecular Catalysis B: Enzymatic, 1999, 6, 315-332.	1.8	25
146	Application of Î±-keto acid decarboxylases in biotransformations. BBA - Proteins and Proteomics, 1998, 1385, 307-322.	2.1	87
147	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
148	Activation of thiamine diphosphate in pyruvate decarboxylase from Zymomonas mobilis. FEBS Letters, 1998, 441, 404-406.	2.8	14
149	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
150	Protein design on pyruvate decarboxylase (PDC) by site-directed mutagenesis. Advances in Biochemical Engineering/Biotechnology, 1997, , 15-43.	1.1	15
151	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
152	Reversible Dissociation and Unfolding of Pyruvate Decarboxylase from Zymomonas mobilis. FEBS Journal, 1994, 224, 651-661.	0.2	30
153	Synthetic peptides as antagonists of the anaphylatoxin C3a. FEBS Journal, 1992, 210, 185-191.	0.2	21
154	Catalytic Asymmetric Synthesis: Section 2.2. , 0, , 298-413.		0