SelÄºn Kara

List of Publications by Year
in descending order

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Version: 2024-02-01

72 papers	2,292 citations	201575 27 h-index	233338 45 g-index
89 all docs	89 docs citations	89 times ranked	1646 citing authors

#	Article	IF	Citations
1	Photobioreactors for cultivation and synthesis: Specifications, challenges, and perspectives. Engineering in Life Sciences, 2022, 22, 712-724.	2.0	21
2	Expression and activity of heterologous hydroxyisocaproate dehydrogenases in Synechocystis sp. PCC 6803 Î”hoxYH. Engineering Microbiology, 2022, 2, 100008.	2.2	9
3	Impact of deep eutectic solvents (DESs) and individual DES components on alcohol dehydrogenase catalysis: connecting experimental data and molecular dynamics simulations. Green Chemistry, 2022, 24, 1120-1131.	4.6	37
4	Development of a Thioredoxinâ€Based Cofactor Regeneration System for NADPHâ€Dependent Oxidoreductases. ChemCatChem, 2022, 14, .	1.8	5
5	Photobiocatalysis in Continuous Flow. Frontiers in Catalysis, 2022, 1, .	1.8	18
6	Enzyme immobilization in hydrogels: A perfect liaison for efficient and sustainable biocatalysis. Engineering in Life Sciences, 2022, 22, 165-177.	2.0	39
7	Enzymatic Cascade for the Synthesis of 2,5â€Furandicarboxylic Acid in Biphasic and Microaqueous Conditions: â€˜Mediaâ€Agnosticâ€™ Biocatalysts for Biorefineries. ChemSusChem, 2022, 15, e202102704.	3.6	18
8	A Deep Eutectic Solvent Thermomorphic Multiphasic System for Biocatalytic Applications. Angewandte Chemie - International Edition, 2022, 61, .	7.2	19
9	Unraveling Alcohol Dehydrogenase Catalysis in Organicâ€“Aqueous Biphasic Systems Combining Experiments and Molecular Dynamics Simulations. ACS Catalysis, 2022, 12, 9171-9180.	5.5	11
10	Recent developments in the use of peroxygenases â€“ Exploring their high potential in selective oxyfunctionalisations. Biotechnology Advances, 2021, 51, 107615.	6.0	101
11	Kinetics Modeling of a Convergent Cascade Catalyzed by Monooxygenaseâ€“Alcohol Dehydrogenase Coupled Enzymes. Organic Process Research and Development, 2021, 25, 411-420.	1.3	4
12	Divorce in the two-component BVMO family: the single oxygenase for enantioselective chemo-enzymatic Baeyerâ€“Villiger oxidations. Organic and Biomolecular Chemistry, 2021, 19, 3441-3450.	1.5	8
13	Enzyme Cascade Reaction Engineering. , 2021, , 109-124.		1
14	Chromoselective Photocatalysis Enables Stereocomplementary Biocatalytic Pathways**. Angewandte Chemie - International Edition, 2021, 60, 6965-6969.	7.2	52
15	Chromoselective Photocatalysis Enables Stereocomplementary Biocatalytic Pathways**. Angewandte Chemie, 2021, 133, 7041-7045.	1.6	12
16	Coupling light with biocatalysis for sustainable synthesisâ€”very recent developments and future perspectives. Current Opinion in Green and Sustainable Chemistry, 2021, 31, 100496.	3.2	18
17	Can Deep Eutectic Solvents Sustain Oxygen-Dependent Bioprocesses?â€”Measurements of Oxygen Transfer Rates. ACS Sustainable Chemistry and Engineering, 2021, 9, 8347-8353.	3.2	12
18	Exploring the in Vitro Operating Window of Glycosyltransferase PtUGT1 from Polygonum tinctorium for a Biocatalytic Route to Indigo Dye. ACS Sustainable Chemistry and Engineering, 2021, 9, 8497-8506.	3.2	7

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19	Comparison and Validation of Force Fields for Deep Eutectic Solvents in Combination with Water and Alcohol Dehydrogenase. Journal of Chemical Theory and Computation, 2021, 17, 5322-5341.	2.3	17
20	Optimization and Engineering of Fatty Acid Photodecarboxylase for Substrate Specificity. ChemCatChem, 2021, 13, 4038-4046.	1.8	13
21	Internal Illumination to Overcome the Cell Density Limitation in the Scaleâ€up of Wholeâ€Cell Photobiocatalysis. ChemSusChem, 2021, 14, 3219-3225.	3.6	22
22	Modeling Alcohol Dehydrogenase Catalysis in Deep Eutectic Solvent/Water Mixtures. ChemBioChem, 2020, 21, 811-817.	1.3	28
23	A whole-cell process for the production of Îµ-caprolactone in aqueous media. Process Biochemistry, 2020, 88, 22-30.	1.8	18
24	The rise of continuous flow biocatalysis â€“ fundamentals, very recent developments and future perspectives. Reaction Chemistry and Engineering, 2020, 5, 2155-2184.	1.9	121
25	Extending the Library of Lightâ€Dependent Protochlorophyllide Oxidoreductases and their Solvent Tolerance, Stability in Light and Cofactor Flexibility. ChemCatChem, 2020, 12, 4044-4051.	1.8	13
26	Deep Eutectic Solvents as Smart Cosubstrate in Alcohol Dehydrogenase-Catalyzed Reductions. Catalysts, 2020, 10, 1013.	1.6	13
27	Solventâ€Free Photobiocatalytic Hydroxylation of Cyclohexane. ChemCatChem, 2020, 12, 4009-4013.	1.8	39
28	Biocatalyst Immobilization by Anchor Peptides on an Additively Manufacturable Material. Organic Process Research and Development, 2019, 23, 1852-1859.	1.3	28
29	Enzymatic Ringâ€Opening Polymerization of Lactones: Traditional Approaches and Alternative Strategies. ChemCatChem, 2019, 11, 4983-4997.	1.8	30
30	Deep Eutectic Solvents as Efficient Solvents in Biocatalysis. Trends in Biotechnology, 2019, 37, 943-959.	4.9	262
31	Characterization of new Baeyer-Villiger monooxygenases for lactonizations in redox-neutral cascades. Molecular Catalysis, 2019, 468, 44-51.	1.0	20
32	Convergent Cascade Catalyzed by Monooxygenaseâ€“Alcohol Dehydrogenase Fusion Applied in Organic Media. ChemBioChem, 2019, 20, 1653-1658.	1.3	20
33	Enzymatische Umsetzung von Catechol zu 2,3-DihydroxybenzoesÃure mit Amin-postfunktionalisierten Silicagelen. Chemie-Ingenieur-Technik, 2018, 90, 1276-1276.	0.4	0
34	Biocatalytic synthesis of lactones and lactams. Chemistry - an Asian Journal, 2018, 13, 3601-3610.	1.7	34
35	Deep eutectic solvents in biocatalysis. Chemie-Ingenieur-Technik, 2018, 90, 1259-1259.	0.4	0
36	Horse Liver Alcohol Dehydrogenase-Catalyzed Oxidative Lactamization of Amino Alcohols. ACS Catalysis, 2018, 8, 8680-8684.	5.5	35

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37	Synthesis of (-)-menthol fatty acid esters in and from (-)-menthol and fatty acids â€“ novel concept for lipase catalyzed esterification based on eutectic solvents. Molecular Catalysis, 2018, 458, 67-72.	1.0	57
38	Prinzipien der angewandten Biokatalyse. , 2018, , 225-242.		1
39	Kinetic insights into Ïµâ€caprolactone synthesis: Improvement of an enzymatic cascade reaction. Biotechnology and Bioengineering, 2017, 114, 1215-1221.	1.7	50
40	Nicotinamide Adenine Dinucleotideâ€Dependent Redoxâ€Neutral Convergent Cascade for Lactonizations with Type II Flavinâ€Containing Monooxygenase. Advanced Synthesis and Catalysis, 2017, 359, 2142-2148.	2.1	27
41	Reaction engineering of biocatalytic (S)-naproxen synthesis integrating in-line process monitoring by Raman spectroscopy. Reaction Chemistry and Engineering, 2017, 2, 531-540.	1.9	12
42	Development and Scaling-Up of the Fragrance Compound 4-Ethylguaiacol Synthesis via a Two-Step Chemo-Enzymatic Reaction Sequence. Organic Process Research and Development, 2017, 21, 85-93.	1.3	36
43	Amineâ€Mediated Enzymatic Carboxylation of Phenols Using CO₂ as Substrate Increases Equilibrium Conversions and Reaction Rates. Biotechnology Journal, 2017, 12, 1700332.	1.8	14
44	Fungal BVMOs as alternatives to cyclohexanone monooxygenase. Enzyme and Microbial Technology, 2017, 106, 11-17.	1.6	18
45	Photobiocatalytic alcohol oxidation using LED light sources. Green Chemistry, 2017, 19, 376-379.	4.6	44
46	Improvement of the Process Stability of Arylmalonate Decarboxylase by Immobilization for Biocatalytic Profen Synthesis. Frontiers in Microbiology, 2017, 8, 448.	1.5	18
47	A Fedâ€Batch Synthetic Strategy for a Threeâ€Step Enzymatic Synthesis of Polyâ€Ïµâ€caprolactone. ChemCatChem, 2016, 8, 3446-3452.	1.8	50
48	Evaluation of the Substrate Scope of Benzoic Acid (De)carboxylases According to Chemical and Biochemical Parameters. ChemBioChem, 2016, 17, 1845-1850.	1.3	11
49	Enhancing the productivity of the bi-enzymatic convergent cascade for É›-caprolactone synthesis through design of experiments and a biphasic system. Tetrahedron, 2016, 72, 7222-7228.	1.0	37
50	A Biâ€enzymatic Convergent Cascade for Ïµâ€Caprolactone Synthesis Employing 1,6â€Hexanediol as a â€˜Doubleâ€Smart Cosubstrateâ€™. ChemCatChem, 2015, 7, 2442-2445.	1.8	55
51	Scaling-Up of â€œSmart Cosubstrateâ€•1,4-Butanediol Promoted Asymmetric Reduction of Ethyl-4,4,4-trifluoroacetoacetate in Organic Media. Organic Process Research and Development, 2015, 19, 369-372.	1.3	29
52	Reversibility of asymmetric catalyzed Câ€“C bond formation by benzoylformate decarboxylase. Catalysis Science and Technology, 2015, 5, 2418-2426.	2.1	3
53	Complete Enzymatic Oxidation of Methanol to Carbon Dioxide: Towards More Ecoâ€Efficient Regeneration Systems for Reduced Nicotinamide Cofactors. Advanced Synthesis and Catalysis, 2015, 357, 1687-1691.	2.1	26
54	Medium and reaction engineering for the establishment of a chemo-enzymatic dynamic kinetic resolution of rac-benzoin in batch and continuous mode. Journal of Molecular Catalysis B: Enzymatic, 2015, 114, 42-49.	1.8	43

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55	Lightâ€Accelerated Biocatalytic Oxidation Reactions. ChemPlusChem, 2014, 79, 1554-1557.	1.3	19
56	Alcohol dehydrogenase stabilization by additives under industrially relevant reaction conditions. Journal of Molecular Catalysis B: Enzymatic, 2014, 103, 24-28.	1.8	21
57	Exploring the Substrate Specificity and Enantioselectivity of a Baeyerâ€“Villiger Monooxygenase from Dietzia sp. D5: Oxidation of Sulfides and Aldehydes. Topics in Catalysis, 2014, 57, 366-375.	1.3	30
58	Recent trends and novel concepts in cofactor-dependent biotransformations. Applied Microbiology and Biotechnology, 2014, 98, 1517-1529.	1.7	123
59	Chemo-enzymatische heterogenkatalysierte Eintopfsynthese von enantiomerenreinem Benzoin. Chemie-Ingenieur-Technik, 2014, 86, 1488-1488.	0.4	0
60	Bioreductions Catalyzed by an Alcohol Dehydrogenase in Nonâ€aqueous Media. ChemCatChem, 2014, 6, 973-976.	1.8	45
61	Expanding the Scope of Laccaseâ€Mediator Systems. ChemCatChem, 2013, 5, 3027-3032.	1.8	37
62	One-pot combination of enzyme and Pd nanoparticle catalysis for the synthesis of enantiomerically pure 1,2-amino alcohols. Green Chemistry, 2013, 15, 3318.	4.6	75
63	Access to Lactone Building Blocks via Horse Liver Alcohol Dehydrogenase-Catalyzed Oxidative Lactonization. ACS Catalysis, 2013, 3, 2436-2439.	5.5	71
64	More efficient redox biocatalysis by utilising 1,4-butanediol as a â€˜smart cosubstrateâ€™. Green Chemistry, 2013, 15, 330.	4.6	56
65	Berichtigung: Oxidation von Aldehyden mit Alkoholdehydrogenasen. Angewandte Chemie, 2012, 124, 12094-12094.	1.6	1
66	Enantioselective Oxidation of Aldehydes Catalyzed by Alcohol Dehydrogenase. Angewandte Chemie - International Edition, 2012, 51, 9914-9917.	7.2	74
67	Immobilization and characterization of benzoylformate decarboxylase from Pseudomonas putida on spherical silica carrier. Bioprocess and Biosystems Engineering, 2011, 34, 671-680.	1.7	6
68	Influence of reaction conditions on the enantioselectivity of biocatalyzed Câ€“C bond formations under high pressure conditions. Journal of Biotechnology, 2011, 152, 87-92.	1.9	19
69	Fluorescence spectroscopy as a novel method for on-line analysis of biocatalytic Câ€“C bond formations. Journal of Molecular Catalysis B: Enzymatic, 2010, 66, 124-129.	1.8	7
70	Fluoreszenzspektroskopie als neue Methode fÃ¼r die Online-Analyse biokatalytischer C-C-KnÃ¼pfungsreaktionen. Chemie-Ingenieur-Technik, 2010, 82, 1528-1529.	0.4	0
71	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.	1.7	15
72	A Deep Eutectic Solvent Thermomorphic Multiphasic System for Biocatalytic Applications. Angewandte Chemie, 0, , .	1.6	0