

# DÄrte Rother

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

2,204  
citations

201674

27  
h-index

223800

46  
g-index

56  
all docs

56  
docs citations

56  
times ranked

1916  
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>In situ</i> reactive extraction with oleic acid for process intensification in amine transaminase catalyzed reactions. <i>Green Chemistry</i> , 2022, 24, 295-304.	9.0	9
2	Enzymatic Cascade in a Simultaneous, One-Pot Approach with <i>In Situ</i> Product Separation for the Asymmetric Production of (4 <i>S</i> ,5 <i>S</i> )-Octanediol. <i>Organic Process Research and Development</i> , 2022, 26, 2038-2045.	2.7	9
3	Photo-Regulation of Enzyme Activity: The Inactivation of a Carboligase with Genetically Encoded Photosensitizer Fusion Tags. <i>Frontiers in Catalysis</i> , 2022, 2, .	3.9	3
4	Toward the Sustainable Production of the Active Pharmaceutical Ingredient Metaraminol. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 5117-5128.	6.7	8
5	Extractive <i>in situ</i> product removal for the application of naturally produced <i>L</i> -alanine as an amine donor in enzymatic metaraminol production. <i>Green Chemistry</i> , 2021, 23, 4892-4901.	9.0	12
6	Applied biocatalysis beyond just buffers – from aqueous to unconventional media. Options and guidelines. <i>Green Chemistry</i> , 2021, 23, 3191-3206.	9.0	81
7	Computer-aided enzymatic retrosynthesis. <i>Nature Catalysis</i> , 2021, 4, 92-93.	34.4	8
8	Production of the Carboxylate Reductase from <i>Nocardia otitidiscaviarum</i> in a Soluble, Active Form for <i>in vitro</i> Applications. <i>ChemBioChem</i> , 2021, 22, 1823-1832.	2.6	5
9	The Effect of Visible Light on the Catalytic Activity of PLP-Dependent Enzymes. <i>ChemCatChem</i> , 2021, 13, 2398-2406.	3.7	9
10	Getting the Most Out of Enzyme Cascades: Strategies to Optimize In Vitro Multi-Enzymatic Reactions. <i>Catalysts</i> , 2021, 11, 1183.	3.5	43
11	Modulation of Transaminase Activity by Encapsulation in Temperature-Sensitive Poly( <i>N</i> -acryloyl) Tj ETQq <sub>1</sub> 0.784314 rgBT <sub>2.6</sub>	2.6	6
12	Continuous enzymatic stirred tank reactor cascade with unconventional medium yielding high concentrations of ( <i>S</i> )-2-hydroxyphenyl propanone and its derivatives. <i>Catalysis Science and Technology</i> , 2021, 11, 7886-7897.	4.1	3
13	Stereoselective Reduction of Prochiral Cyclic 1,3-Diketones Using Different Biocatalysts. <i>Catalysis Letters</i> , 2020, 150, 1176-1185.	2.6	8
14	Benchtop NMR for Online Reaction Monitoring of the Biocatalytic Synthesis of Aromatic Amino Alcohols. <i>ChemCatChem</i> , 2020, 12, 1190-1199.	3.7	12
15	Methoxamine Synthesis in a Biocatalytic 1-Pot 2-Step Cascade Approach. <i>ACS Catalysis</i> , 2019, 9, 7380-7388.	11.2	35
16	Stimulus-Responsive Regulation of Enzyme Activity for One-Step and Multi-Step Syntheses. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2387-2401.	4.3	54
17	An Enzymatic 2-Step Cofactor and Co-Product Recycling Cascade towards a Chiral 1,2-Diol. Part I: Cascade Design. <i>Advanced Synthesis and Catalysis</i> , 2019, 361, 2607-2615.	4.3	17
18	Selective aerobic oxidation reactions using a combination of photocatalytic water oxidation and enzymatic oxyfunctionalizations. <i>Nature Catalysis</i> , 2018, 1, 55-62.	34.4	272

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19	Citrate as Cost-Efficient NADPH Regenerating Agent. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 196.	4.1	12
20	Four Atom Efficient Enzyme Cascades for All 4-Methoxyphenyl-1,2-propanediol Isomers Including Product Crystallization Targeting High Product Concentrations and Excellent E-Factors. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11819-11826.	6.7	22
21	Towards environmentally acceptable synthesis of chiral $\hat{\pm}$ -hydroxy ketones via oxidase-lyase cascades. <i>Green Chemistry</i> , 2017, 19, 1226-1229.	9.0	24
22	Reductive amination of ketones catalyzed by whole cell biocatalysts containing imine reductases (IREDs). <i>Journal of Biotechnology</i> , 2017, 258, 167-170.	3.8	25
23	Enzymatic and Chemoenzymatic Three-Step Cascades for the Synthesis of Stereochemically Complementary Trisubstituted Tetrahydroisoquinolines. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12503-12507.	13.8	85
24	Enzymatic and Chemoenzymatic Three-Step Cascades for the Synthesis of Stereochemically Complementary Trisubstituted Tetrahydroisoquinolines. <i>Angewandte Chemie</i> , 2017, 129, 12677-12681.	2.0	21
25	Asymmetric synthesis of (S)-phenylacetylcarbinol – closing a gap in C–C bond formation. <i>Green Chemistry</i> , 2017, 19, 380-384.	9.0	24
26	Modularized Biocatalysis: Immobilization of Whole Cells for Preparative Applications in Microaqueous Organic Solvents. <i>ChemCatChem</i> , 2016, 8, 607-614.	3.7	24
27	Stereoselective Two-Step Biocatalysis in Organic Solvent: Toward All Stereoisomers of a 1,2-Diol at High Product Concentrations. <i>Organic Process Research and Development</i> , 2016, 20, 1744-1753.	2.7	32
28	Application of Imine Reductases (IREDs) in Micro-Aqueous Reaction Systems. <i>Advanced Synthesis and Catalysis</i> , 2016, 358, 2745-2750.	4.3	36
29	Regio- and Stereoselective Aliphatic-Aromatic Cross-Benzoin Reaction: Enzymatic Divergent Catalysis. <i>Chemistry - A European Journal</i> , 2016, 22, 13999-14005.	3.3	31
30	BioCatNet: A Database System for the Integration of Enzyme Sequences and Biocatalytic Experiments. <i>ChemBioChem</i> , 2016, 17, 2093-2098.	2.6	32
31	Recent advances in whole cell biocatalysis techniques bridging from investigative to industrial scale. <i>Current Opinion in Biotechnology</i> , 2016, 42, 169-177.	6.6	252
32	Chemoenzymatic Synthesis towards the Active Agent Travoprost. <i>ChemCatChem</i> , 2015, 7, 3125-3130.	3.7	25
33	Multi-step synthesis strategies towards 1,2-amino alcohols with special emphasis on phenylpropanolamines. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015, 114, 65-71.	1.8	67
34	(Chemo)enzymatic cascades – Nature's synthetic strategy transferred to the laboratory. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2015, 114, 1-6.	1.8	61
35	A Tailor-Made Chimeric Thiamine Diphosphate Dependent Enzyme for the Direct Asymmetric Synthesis of <i>l</i> -Benzoin. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9376-9379.	13.8	32
36	Enantioselective, continuous (R)- and (S)-2-butanol synthesis: Achieving high space-time yields with recombinant <i>E. coli</i> cells in a micro-aqueous, solvent-free reaction system. <i>Journal of Biotechnology</i> , 2014, 191, 106-112.	3.8	25

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37	Whole-Cell Teabag Catalysis for the Modularisation of Synthetic Enzyme Cascades in Micro-Aqueous Systems. <i>ChemCatChem</i> , 2014, 6, 1051-1058.	3.7	30
38	Structures of Alcohol Dehydrogenases from <i>Ralstonia</i> and <i>Sphingobium</i> spp. Reveal the Molecular Basis for Their Recognition of "Bulky" Ketones. <i>Topics in Catalysis</i> , 2014, 57, 356-365.	2.8	48
39	Effective Production of (S)-Hydroxy ketones: An Reaction Engineering Approach. <i>Topics in Catalysis</i> , 2014, 57, 401-411.	2.8	10
40	A two-step biocatalytic cascade in micro-aqueous medium: using whole cells to obtain high concentrations of a vicinal diol. <i>Green Chemistry</i> , 2014, 16, 3472-3482.	9.0	67
41	Efficient 2-step biocatalytic strategies for the synthesis of all nor(pseudo)ephedrine isomers. <i>Green Chemistry</i> , 2014, 16, 3341-3348.	9.0	66
42	MenD from <i>Bacillus subtilis</i> : A Potent Catalyst for the Enantiocomplementary Asymmetric Synthesis of Functionalized Hydroxy Ketones. <i>ChemCatChem</i> , 2014, 6, 1082-1088.	3.7	15
43	Two Steps in One Pot: Enzyme Cascade for the Synthesis of Nor(pseudo)ephedrine from Inexpensive Starting Materials. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6772-6775.	13.8	157
44	Biochemical characterization of an alcohol dehydrogenase from <i>Ralstonia</i> sp.. <i>Biotechnology and Bioengineering</i> , 2013, 110, 1838-1848.	3.3	41
45	(S)-Selective MenD variants from <i>Escherichia coli</i> provide access to new functionalized chiral hydroxy ketones. <i>Chemical Communications</i> , 2013, 49, 2061.	4.1	27
46	Engineering stereoselectivity of ThDP-dependent enzymes. <i>FEBS Journal</i> , 2013, 280, 6374-6394.	4.7	72
47	Tailoring the Selectivity of 2-Succinyl-5-enolpyruvyl-3-cyclohexene-1-carboxylate Synthase (MenD) from <i>Escherichia coli</i> . <i>ChemCatChem</i> , 2013, 5, 3587-3594.	3.7	19
48	Influence of Organic Solvents on Enzymatic Asymmetric Carbonylations. <i>Advanced Synthesis and Catalysis</i> , 2012, 354, 2805-2820.	4.3	47
49	Stereoselective synthesis of bulky 1,2-diols with alcohol dehydrogenases. <i>Catalysis Science and Technology</i> , 2012, 2, 1580.	4.1	56
50	TTC-based screening assay for %transaminases: A rapid method to detect reduction of 2-hydroxy ketones. <i>Journal of Biotechnology</i> , 2012, 159, 188-194.	3.8	29
51	Selective Mixed Carbonylation by Structure-Based Design of the Pyruvate Decarboxylase from <i>Acetobacter pasteurianus</i> . <i>ChemCatChem</i> , 2011, 3, 1587-1596.	3.7	44