Matthias HÃ¶hne

List of Publications by Year
in descending order

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51 papers	3,068 citations	201674 27 h-index	175258 52 g-index
55 all docs	55 docs citations	55 times ranked	1688 citing authors

#	Article	IF	Citations
1	Efficient Siteâ€Selective Immobilization of Aldehydeâ€Tagged Peptides and Proteins by Knoevenagel Ligation. ChemCatChem, 2022, 14, .	3.7	6
2	Recombinant <scp>l</scp>â€Amino Acid Oxidase with Broad Substrate Spectrum for Coâ€substrate Recycling in (<i>S</i>)â€Selective Transaminaseâ€Catalyzed Kinetic Resolutions. ChemBioChem, 2022, 23, .	2.6	5
3	Recent trends in biocatalysis. Chemical Society Reviews, 2021, 50, 8003-8049.	38.1	175
4	JeffamineÂ® EDâ€600: a polyether amine donor for enzymatic transamination in organic solvent/solventâ€free medium with membraneâ€assisted product extraction. Journal of Chemical Technology and Biotechnology, 2020, 95, 604-613.	3.2	3
5	Chemoenzymatic Synthesis of Sertraline. European Journal of Organic Chemistry, 2020, 2020, 510-513.	2.4	11
6	Threeâ€liquidâ€phase Spinning Reactor for the Transaminaseâ€catalyzed Synthesis and Recovery of a Chiral Amine. ChemCatChem, 2020, 12, 1288-1291.	3.7	3
7	Creation of (<i>R</i>)-Amine Transaminase Activity within an Î±-Amino Acid Transaminase Scaffold. ACS Chemical Biology, 2020, 15, 416-424.	3.4	24
8	Oneâ€pot Synthesis of 4â€Aminocyclohexanol Isomers by Combining a Keto Reductase and an Amine Transaminase. ChemCatChem, 2019, 11, 5794-5799.	3.7	7
9	Engineering imine reductases for industrial applications. Nature Catalysis, 2019, 2, 841-842.	34.4	16
10	Synthesis of Î²â€Chiral Amines by Dynamic Kinetic Resolution of Î±â€Branched Aldehydes Applying Imine Reductases. ChemCatChem, 2019, 11, 4281-4285.	3.7	22
11	Random Mutagenesisâ€Driven Improvement of Carboxylate Reductase Activity using an Amino Benzamidoximeâ€Mediated Highâ€Throughput Assay. Advanced Synthesis and Catalysis, 2019, 361, 2544-2549.	4.3	31
12	Application of novel High Molecular Weight amine donors in chiral amine synthesis facilitates integrated downstream processing and provides in situ product recovery opportunities. Process Biochemistry, 2019, 80, 17-25.	3.7	7
13	Combining Photoâ€Organo Redoxâ€and Enzyme Catalysis Facilitates Asymmetric Câ€H Bond Functionalization. European Journal of Organic Chemistry, 2019, 2019, 80-84.	2.4	58
14	Solid-Phase Agar Plate Assay for Screening Amine Transaminases. Methods in Molecular Biology, 2018, 1685, 283-296.	0.9	1
15	Molecular recognition of the betaâ€glucans laminarin and pustulan by a SusDâ€like glycanâ€binding protein of a marine <i>Bacteroidetes</i>. FEBS Journal, 2018, 285, 4465-4481.	4.7	13
16	In Silico Based Engineering Approach to Improve Transaminases for the Conversion of Bulky Substrates. ACS Catalysis, 2018, 8, 11524-11533.	11.2	39
17	One-step asymmetric synthesis of (R)- and (S)-rasagiline by reductive amination applying imine reductases. Green Chemistry, 2017, 19, 385-389.	9.0	93
18	A Systematic Analysis of the Substrate Scope of (<i>S</i>)â€and (<i>R</i>)â€Selective Amine Transaminases. Advanced Synthesis and Catalysis, 2017, 359, 4235-4243.	4.3	21

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19	Photometric Characterization of the Reductive Amination Scope of the Imine Reductases from <i>Streptomyces tsukubaensis</i> and <i>Streptomyces ipomoeae</i>. ChemBioChem, 2017, 18, 2022-2027.	2.6	15
20	Brewing Painkillers: A Yeast Cell Factory for the Production of Opioids from Sugar. Angewandte Chemie - International Edition, 2016, 55, 1248-1250.	13.8	6
21	Structural Basis for Phospholyase Activity of a Classâ€…III Transaminase Homologue. ChemBioChem, 2016, 17, 2308-2311.	2.6	4
22	Schmerzmittel brauen: Eine Hefeâ€Zellfabrik produziert Opiate aus Zucker. Angewandte Chemie, 2016, 128, 1266-1268.	2.0	1
23	A NADH-accepting imine reductase variant: Immobilization and cofactor regeneration by oxidative deamination. Journal of Biotechnology, 2016, 230, 11-18.	3.8	32
24	Asymmetric Reductive Amination of Ketones Catalyzed by Imine Reductases. ChemCatChem, 2016, 8, 2023-2026.	3.7	109
25	Bacillus anthracis Ï‰-amino acid:pyruvate transaminase employs a different mechanism for dual substrate recognition than other amine transaminases. Applied Microbiology and Biotechnology, 2016, 100, 4511-4521.	3.6	13
26	Selective Access to All Four Diastereomers of a 1,3â€Amino Alcohol by Combination of a Keto Reductaseâ€• and an Amine Transaminaseâ€Catalysed Reaction. Advanced Synthesis and Catalysis, 2015, 357, 1808-1814.	4.3	26
27	Alteration of the Donor/Acceptor Spectrum of the (S)-Amine Transaminase from Vibrio fluvialis. International Journal of Molecular Sciences, 2015, 16, 26953-26963.	4.1	29
28	Engineering the Active Site of the Amine Transaminase from <i>Vibrio fluvialis</i> for the Asymmetric Synthesis of Arylâ€“Alkyl Amines and Amino Alcohols. ChemCatChem, 2015, 7, 757-760.	3.7	91
29	Bioinformatic analysis of a PLP-dependent enzyme superfamily suitable for biocatalytic applications. Biotechnology Advances, 2015, 33, 566-604.	11.7	193
30	Two Subtle Amino Acid Changes in a Transaminase Substantially Enhance or Invert Enantiopreference in Cascade Syntheses. ChemBioChem, 2015, 16, 1041-1045.	2.6	46
31	Structural and biochemical characterization of the dual substrate recognition of the (<i>R</i>)â€selective amine transaminase from <i>AspergillusÂ fumigatus</i>. FEBS Journal, 2015, 282, 407-415.	4.7	29
32	Characterization of three novel enzymes with imine reductase activity. Journal of Molecular Catalysis B: Enzymatic, 2014, 110, 126-132.	1.8	59
33	Protein Engineering from â€œScratchâ€•Is Maturing. Angewandte Chemie - International Edition, 2014, 53, 1200-1202.	13.8	12
34	Recent achievements in developing the biocatalytic toolbox for chiral amine synthesis. Current Opinion in Chemical Biology, 2014, 19, 180-192.	6.1	223
35	Glycine Oxidase Based High-Throughput Solid-Phase Assay for Substrate Profiling and Directed Evolution of (<i>R</i>)- and (<i>S</i>)-Selective Amine Transaminases. Analytical Chemistry, 2014, 86, 11847-11853.	6.5	44
36	Crystallographic characterization of the (<i>R</i>)-selective amine transaminase from<i>Aspergillus fumigatus</i>. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 1086-1093.	2.5	36

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37	Immobilization of (R)- and (S)-amine transaminases on chitosan support and their application for amine synthesis using isopropylamine as donor. Journal of Biotechnology, 2014, 191, 32-37.	3.8	49
38	Crystallization and preliminary X-ray diffraction studies of the (<i>R</i>)-selective amine transaminase from<i>Aspergillus fumigatus</i>. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 1415-1417.	0.7	9
39	Connecting Unexplored Protein Crystal Structures to Enzymatic Function. ChemCatChem, 2013, 5, 150-153.	3.7	67
40	Revealing the Structural Basis of Promiscuous Amine Transaminase Activity. ChemCatChem, 2013, 5, 154-157.	3.7	80
41	Immobilization of two (<i>R</i>)â€Amine Transaminases on an Optimized Chitosan Support for the Enzymatic Synthesis of Optically Pure Amines. ChemCatChem, 2013, 5, 588-593.	3.7	32
42	Enzymatic Asymmetric Synthesis of Enantiomerically Pure Aliphatic, Aromatic and Arylaliphatic Amines with (<i>R</i>)â€Selective Amine Transaminases. Advanced Synthesis and Catalysis, 2011, 353, 2439-2445.	4.3	124
43	Rational assignment of key motifs for function guides in silico enzyme identification. Nature Chemical Biology, 2010, 6, 807-813.	8.0	345
44	Aggregation and Rearrangement within a Silver Nanoparticle Layer during Polyelectrolyte Multilayer Formation. Langmuir, 2010, 26, 15219-15228.	3.5	7
45	Conductometric Method for the Rapid Characterization of the Substrate Specificity of Amine-Transaminases. Analytical Chemistry, 2010, 82, 2082-2086.	6.5	14
46	Gerichtete Evolution und rationales Design. MaÃŸgeschneiderte Enzyme. Chemie in Unserer Zeit, 2009, 43, 132-142.	0.1	3
47	Biocatalytic Routes to Optically Active Amines. ChemCatChem, 2009, 1, 42-51.	3.7	351
48	Rapid and Sensitive Kinetic Assay for Characterization of Ï‰-Transaminases. Analytical Chemistry, 2009, 81, 8244-8248.	6.5	160
49	Efficient Asymmetric Synthesis of Chiral Amines by Combining Transaminase and Pyruvate Decarboxylase. ChemBioChem, 2008, 9, 363-365.	2.6	195
50	A Protection Strategy Substantially Enhances Rate and Enantioselectivity in Ï‰â€Transaminaseâ€Catalyzed Kinetic Resolutions. Advanced Synthesis and Catalysis, 2008, 350, 807-812.	4.3	54
51	Enzymatic Removal of Carboxyl Protecting Groups. 1. Cleavage of thetert-Butyl Moiety. Journal of Organic Chemistry, 2005, 70, 3737-3740.	3.2	48