Dirk Tischler

List of Publications by Year
in descending order

96 papers	2,558 citations	186265 28 h-index	223800 46 g-index
105 all docs	105 docs citations	105 times ranked	2167 citing authors

#	Article	IF	Citations
1	Engineering of continuous bienzymatic cascade process using monolithic microreactors â€“ In flow synthesis of trehalose. Chemical Engineering Journal, 2022, 427, 131439.	12.7	8
2	Improving Biocatalytic Properties of an Azoreductase <i>via</i> the <i>Nâ€</i>Terminal Fusion of Formate Dehydrogenase. ChemBioChem, 2022, 23, .	2.6	9
3	Identification of molecular basis that underlie enzymatic specificity of AzoRo from Rhodococcus opacus 1CP: A potential NADH:quinone oxidoreductase. Archives of Biochemistry and Biophysics, 2022, 717, 109123.	3.0	5
4	In vitro and in silico analysis of Brilliant Black degradation by Actinobacteria and a Paraburkholderia sp.. Genomics, 2022, 114, 110266.	2.9	4
5	Microbial Degradation of Azo Dyes: Approaches and Prospects for a Hazard-Free Conversion by Microorganisms. International Journal of Environmental Research and Public Health, 2022, 19, 4740.	2.6	43
6	Cellâ€Free Protein Synthesis for the Screening of Novel Azoreductases and Their Preferred Electron Donor. ChemBioChem, 2022, 23, .	2.6	4
7	Biochemical Characterization of Phenylacetaldehyde Dehydrogenases from Styrene-degrading Soil Bacteria. Applied Biochemistry and Biotechnology, 2021, 193, 650-667.	2.9	3
8	Asymmetric azidohydroxylation of styrene derivatives mediated by a biomimetic styrene monooxygenase enzymatic cascade. Catalysis Science and Technology, 2021, 11, 5077-5085.	4.1	14
9	Natural diversity of FAD-dependent 4-hydroxybenzoate hydroxylases. Archives of Biochemistry and Biophysics, 2021, 702, 108820.	3.0	18
10	Characterization of Two Hydrogen Peroxide Resistant Peroxidases from Rhodococcus opacus 1CP. Applied Sciences (Switzerland), 2021, 11, 7941.	2.5	2
11	Characterization of the Glutathione<i>S</i>-Transferases Involved in Styrene Degradation in Gordonia rubripertincta CWB2. Microbiology Spectrum, 2021, 9, e0047421.	3.0	8
12	Flavoprotein monooxygenases: Versatile biocatalysts. Biotechnology Advances, 2021, 51, 107712.	11.7	78
13	Secondary metabolites released by the rhizosphere bacteria Arthrobacter oxydans and Kocuria rosea enhance plant availability and soilâ€“plant transfer of germanium (Ge) and rare earth elements (REEs). Chemosphere, 2021, 285, 131466.	8.2	23
14	Screening for Microbial Metal-Chelating Siderophores for the Removal of Metal Ions from Solutions. Microorganisms, 2021, 9, 111.	3.6	15
15	Isolation and characterization of arsenic-binding siderophores from Rhodococcus erythropolis S43: role of heterobactin B and other heterobactin variants. Applied Microbiology and Biotechnology, 2021, 105, 1731-1744.	3.6	11
16	Accessing Enantiopure Epoxides and Sulfoxides: Related Flavinâ€Dependent Monooxygenases Provide Reversed Enantioselectivity. ChemCatChem, 2020, 12, 199-209.	3.7	29
17	Asymmetric Reduction of (<i>R</i>)â€Carvone through a Thermostable and Organicâ€Solventâ€Tolerant Eneâ€Reductase. ChemBioChem, 2020, 21, 1217-1225.	2.6	14
18	Glutathione: A powerful but rare cofactor among Actinobacteria. Advances in Applied Microbiology, 2020, 110, 181-217.	2.4	13

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19	Draft genomes and initial characterization of siderophore producing pseudomonads isolated from mine dump and mine drainage. Biotechnology Reports (Amsterdam, Netherlands), 2020, 25, e00403.	4.4	7
20	Highly Efficient Access to (S)â€Sulfoxides Utilizing a Promiscuous Flavoprotein Monooxygenase in a Wholeâ€Cell Biocatalyst Format. ChemCatChem, 2020, 12, 4664-4671.	3.7	12
21	Evolutionary diverse Chlamydomonas reinhardtii Old Yellow Enzymes reveal distinctive catalytic properties and potential for whole-cell biotransformations. Algal Research, 2020, 50, 101970.	4.6	13
22	Styrene monooxygenases, indole monooxygenases and related flavoproteins applied in bioremediation and biocatalysis. The Enzymes, 2020, 47, 399-425.	1.7	7
23	Immobilization of the Highly Active UDP-Glucose Pyrophosphorylase From Thermocrispum agreste Provides a Highly Efficient Biocatalyst for the Production of UDP-Glucose. Frontiers in Bioengineering and Biotechnology, 2020, 8, 740.	4.1	5
24	A Perspective on Enzyme Inhibitors from Marine Organisms. Marine Drugs, 2020, 18, 431.	4.6	7
25	Metal binding ability of microbial natural metal chelators and potential applications. Natural Product Reports, 2020, 37, 1262-1283.	10.3	51
26	Biosynthesis of desferrioxamine siderophores initiated by decarboxylases: A functional investigation of two lysine/ornithine-decarboxylases from Gordonia rubripertincta CWB2 and Pimelobacter simplex 3E. Archives of Biochemistry and Biophysics, 2020, 689, 108429.	3.0	9
27	Data on metal-chelating, -immobilisation and biosorption properties by Gordonia rubripertincta CWB2 in dependency on rare earth adaptation. Data in Brief, 2020, 31, 105739.	1.0	5
28	Flavin-dependent N-hydroxylating enzymes: distribution and application. Applied Microbiology and Biotechnology, 2020, 104, 6481-6499.	3.6	34
29	Enantioselective Epoxidation by Flavoprotein Monooxygenases Supported by Organic Solvents. Catalysts, 2020, 10, 568.	3.5	8
30	Toward Biorecycling: Isolation of a Soil Bacterium That Grows on a Polyurethane Oligomer and Monomer. Frontiers in Microbiology, 2020, 11, 404.	3.5	64
31	Draft genome sequence of Kocuria indica DP-K7, a methyl red degrading actinobacterium. 3 Biotech, 2020, 10, 175.	2.2	9
32	Cultivation dependent formation of siderophores by Gordonia rubripertincta CWB2. Microbiological Research, 2020, 238, 126481.	5.3	15
33	Bacterial Metabolites Produced Under Iron Limitation Kill Pinewood Nematode and Attract Caenorhabditis elegans. Frontiers in Microbiology, 2019, 10, 2166.	3.5	19
34	Leloir Glycosyltransferases in Applied Biocatalysis: A Multidisciplinary Approach. International Journal of Molecular Sciences, 2019, 20, 5263.	4.1	63
35	Chemoenzymatic Cascade Synthesis of Optically Pure Alkanoic Acids by Using Engineered Arylmalonate Decarboxylase Variants. Chemistry - A European Journal, 2019, 25, 5071-5076.	3.3	14
36	Indigoid dyes by group E monooxygenases: mechanism and biocatalysis. Biological Chemistry, 2019, 400, 939-950.	2.5	28

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37	Editorial: Actinobacteria, a Source of Biocatalytic Tools. Frontiers in Microbiology, 2019, 10, 800.	3.5	9
38	Two Homologous Enzymes of the GalU Family in Rhodococcus opacus 1CPâ€"RoGalU1 and RoGalU2. International Journal of Molecular Sciences, 2019, 20, 5809.	4.1	5
39	Microbial Degradation of Azo Dyes. , 2019, , 1867-1897.		0
40	On the Enigma of Glutathione-Dependent Styrene Degradation in Gordonia rubripertincta CWB2. Applied and Environmental Microbiology, 2018, 84, .	3.1	38
41	Detection of arsenic-binding siderophores in arsenic-tolerating Actinobacteria by a modified CAS assay. Ecotoxicology and Environmental Safety, 2018, 157, 176-181.	6.0	48
42	Enzymgesteuerte Indigoproduktion. BioSpektrum, 2018, 24, 446-448.	0.0	4
43	Pyridine Nucleotide Coenzyme Specificity of p-Hydroxybenzoate Hydroxylase and Related Flavoprotein Monooxygenases. Frontiers in Microbiology, 2018, 9, 3050.	3.5	17
44	Biodegradation of High Concentrations of Aliphatic Hydrocarbons in Soil from a Petroleum Refinery: Implications for Applicability of New Actinobacterial Strains. Applied Sciences (Switzerland), 2018, 8, 1855.	2.5	13
45	Catalytic Performance of a Class III Old Yellow Enzyme and Its Cysteine Variants. Frontiers in Microbiology, 2018, 9, 2410.	3.5	9
46	Two-Component FAD-Dependent Monooxygenases: Current Knowledge and Biotechnological Opportunities. Biology, 2018, 7, 42.	2.8	68
47	A Review: The Styrene Metabolizing Cascade of Side-Chain Oxygenation as Biotechnological Basis to Gain Various Valuable Compounds. Frontiers in Microbiology, 2018, 9, 490.	3.5	54
48	VpStyA1/VpStyA2B of Variovorax paradoxus EPS: An Aryl Alkyl Sulfoxidase Rather than a Styrene Epoxidizing Monooxygenase. Molecules, 2018, 23, 809.	3.8	21
49	Analysis of desferrioxamine-like siderophores and their capability to selectively bind metals and metalloids: development of a robust analytical RP-HPLC method. Research in Microbiology, 2018, 169, 598-607.	2.1	18
50	Draft genome sequence of Rhodococcus erythropolis B7g, a biosurfactant producing actinobacterium. Journal of Biotechnology, 2018, 280, 38-41.	3.8	20
51	Microbial Degradation of Azo Dyes. Advances in Environmental Engineering and Green Technologies Book Series, 2018, , 341-371.	0.4	0
52	Effects of citric acid and the siderophore desferrioxamine B (DFO-B) on the mobility of germanium and rare earth elements in soil and uptake in <i>Phalaris arundinacea</i>. International Journal of Phytoremediation, 2017, 19, 746-754.	3.1	36
53	Characterization of Aldehyde Dehydrogenases Applying an Enzyme Assay with In Situ Formation of Phenylacetaldehydes. Applied Biochemistry and Biotechnology, 2017, 182, 1095-1107.	2.9	8
54	Changing the electron donor improves azoreductase dye degrading activity at neutral pH. Enzyme and Microbial Technology, 2017, 100, 17-19.	3.2	37

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55	Immobilization of Rhodococcus opacus 1CP azoreductase to obtain azo dye degrading biocatalysts operative at acidic pH. International Biodeterioration and Biodegradation, 2017, 118, 89-94.	3.9	24
56	N -terminus determines activity and specificity of styrene monooxygenase reductases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1770-1780.	2.3	8
57	Genomic Characterization of the Arsenic-Tolerant Actinobacterium, <i>Rhodococcus erythropolis</i> S43. Solid State Phenomena, 2017, 262, 660-663.	0.3	6
58	A thermophilic-like ene-reductase originating from an acidophilic iron oxidizer. Applied Microbiology and Biotechnology, 2017, 101, 609-619.	3.6	22
59	Engineering Styrene Monooxygenase for Biocatalysis: Reductase-Epoxidase Fusion Proteins. Applied Biochemistry and Biotechnology, 2017, 181, 1590-1610.	2.9	30
60	On the Immobilization of Desferrioxamine-Like Siderophores for Selective Metal Binding. Solid State Phenomena, 2017, 262, 517-520.	0.3	8
61	Old Yellow Enzyme-Catalysed Asymmetric Hydrogenation: Linking Family Roots with Improved Catalysis. Catalysts, 2017, 7, 130.	3.5	89
62	Thermochelin, a Hydroxamate Siderophore from <i>Thermocrispum</i> <i>agreste</i> DSM 44070. Solid State Phenomena, 2017, 262, 501-504.	0.3	6
63	Horticultural crops development: the importance of fine chemicals production from microbial enzymes. Acta Horticulturae, 2016, , 7-12.	0.2	1
64	Identification and characterization of a FAD-dependent putrescine N-hydroxylase (GorA) from Gordonia rubripertincta CWB2. Journal of Molecular Catalysis B: Enzymatic, 2016, 134, 378-389.	1.8	26
65	Biochemical characterization of an azoreductase from Rhodococcus opacus 1CP possessing methyl red degradation ability. Journal of Molecular Catalysis B: Enzymatic, 2016, 130, 9-17.	1.8	41
66	Catalytic and hydrodynamic properties of styrene monooxygenases from Rhodococcus opacus 1CP are modulated by cofactor binding. AMB Express, 2015, 5, 112.	3.0	32
67	Functional characterization and stability improvement of a â€˜thermophilic-likeâ€™ ene-reductase from Rhodococcus opacus 1CP. Frontiers in Microbiology, 2015, 6, 1073.	3.5	29
68	Sphingopyxis fribergensis sp. nov., a soil bacterium with the ability to degrade styrene and phenylacetic acid. International Journal of Systematic and Evolutionary Microbiology, 2015, 65, 3008-3015.	1.7	37
69	Production of a recombinant membrane protein in an Escherichia coli strain for the whole cell biosynthesis of phenylacetic acids. Biotechnology Reports (Amsterdam, Netherlands), 2015, 7, 38-43.	4.4	18
70	Co-metabolic formation of substituted phenylacetic acids by styrene-degrading bacteria. Biotechnology Reports (Amsterdam, Netherlands), 2015, 6, 20-26.	4.4	31
71	Nonenzymatic Regeneration of Styrene Monooxygenase for Catalysis. ACS Catalysis, 2015, 5, 2961-2965.	11.2	73
72	Microbial Styrene Degradation. SpringerBriefs in Microbiology, 2015, , .	0.1	9

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73	Conclusions and Future Perspectives. SpringerBriefs in Microbiology, 2015, , 89-108.	0.1	0
74	Styrene: An Introduction. SpringerBriefs in Microbiology, 2015, , 1-6.	0.1	2
75	Pathways for the Degradation of Styrene. SpringerBriefs in Microbiology, 2015, , 7-22.	0.1	9
76	Molecular Genetics of Styrene Degrading Routes. SpringerBriefs in Microbiology, 2015, , 23-42.	0.1	0
77	Biotechnological Applications of Styrene-Degrading Microorganisms or Involved Enzymes. SpringerBriefs in Microbiology, 2015, , 65-88.	0.1	0
78	Selected Enzymes of Styrene Catabolism. SpringerBriefs in Microbiology, 2015, , 43-63.	0.1	0
79	Evolution der Styrol-Monooxygenase StyA1/StyA2B ausVariovorax paradoxusEPS und seine biotechnologische Anwendung. Chemie-Ingenieur-Technik, 2014, 86, 1406-1407.	0.8	1
80	Gene redundancy of two-component (chloro)phenol hydroxylases in<i>Rhodococcus opacus</i>1CP. FEMS Microbiology Letters, 2014, 361, 68-75.	1.8	33
81	Flavin dependent monooxygenases. Archives of Biochemistry and Biophysics, 2014, 544, 2-17.	3.0	430
82	A mechanistic study on SMOB-ADP1: an NADH:flavin oxidoreductase of the two-component styrene monooxygenase of Acinetobacter baylyi ADP1. Archives of Microbiology, 2014, 196, 829-845.	2.2	20
83	Styrene oxide isomerase of Sphingopyxis sp. Kp5.2. Microbiology (United Kingdom), 2014, 160, 2481-2491.	1.8	39
84	Immobilization of an integral membrane protein for biotechnological phenylacetaldehyde production. Journal of Biotechnology, 2014, 174, 7-13.	3.8	19
85	FAD C(4a)â€hydroxide stabilized in a naturally fused styrene monooxygenase. FEBS Letters, 2013, 587, 3848-3852.	2.8	20
86	Trehalose phosphate synthases OtsA1 and OtsA2 of<i>Rhodococcus opacus</i>1CP. FEMS Microbiology Letters, 2013, 342, 113-122.	1.8	22
87	Styrene Oxide Isomerase of Rhodococcus opacus 1CP, a Highly Stable and Considerably Active Enzyme. Applied and Environmental Microbiology, 2012, 78, 4330-4337.	3.1	44
88	Microbial Styrene Degradation: From Basics to Biotechnology. Environmental Science and Engineering, 2012, , 67-99.	0.2	16
89	One-Component Styrene Monooxygenases: An Evolutionary View on a Rare Class of Flavoproteins. Applied Biochemistry and Biotechnology, 2012, 167, 931-944.	2.9	35
90	Catalytic and Structural Features of Flavoprotein Hydroxylases and Epoxidases. Advanced Synthesis and Catalysis, 2011, 353, 2301-2319.	4.3	89

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91	Optimization of a genomeâ€walking method to suit GCâ€rich template DNA from biotechnological relevant Actinobacteria. Journal of Basic Microbiology, 2010, 50, 499-502.	3.3	4
92	StyA1 and StyA2B from <i>Rhodococcus opacus</i> 1CP: a Multifunctional Styrene Monooxygenase System. Journal of Bacteriology, 2010, 192, 5220-5227.	2.2	72
93	Identification of a Novel Self-Sufficient Styrene Monooxygenase from <i>Rhodococcus opacus</i> 1CP. Journal of Bacteriology, 2009, 191, 4996-5009.	2.2	114
94	Revisiting the Chrome Azurol S Assay for Various Metal Ions. Solid State Phenomena, 0, 262, 509-512.	0.3	14
95	Siderophore Purification via Immobilized Metal Affinity Chromatography. Solid State Phenomena, 0, 262, 505-508.	0.3	3
96	Gallium Mobilization in Soil by Bacterial Metallophores. Solid State Phenomena, 0, 262, 513-516.	0.3	5