Doris Ribitsch

List of Publications by Year
in descending order

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67

papers

3,063

citations

172457

29

h-index

168389

53

g-index

73

all docs

73

docs citations

73

times ranked

2262

citing authors

#	ARTICLE	IF	CITATIONS
1	Enzymatic Surface Hydrolysis of PET: Effect of Structural Diversity on Kinetic Properties of Cutinases from Thermobifida. Macromolecules, 2011, 44, 4632-4640.	4.8	298
2	Biochar surface functional groups as affected by biomass feedstock, biochar composition and pyrolysis temperature. Carbon Resources Conversion, 2021, 4, 36-46.	5.9	155
3	Enhanced Cutinase-Catalyzed Hydrolysis of Polyethylene Terephthalate by Covalent Fusion to Hydrophobins. Applied and Environmental Microbiology, 2015, 81, 3586-3592.	3.1	149
4	A New Esterase from Thermobifida halotolerans Hydrolyses Polyethylene Terephthalate (PET) and Polylactic Acid (PLA). Polymers, 2012, 4, 617-629.	4.5	146
5	Hydrolysis of polyethyleneterephthalate by <i>p</i>â€•nitrobenzylesterase from <i>Bacillus subtilis</i>. Biotechnology Progress, 2011, 27, 951-960.	2.6	138
6	Fusion of Binding Domains to Thermobifida cellulosilytica Cutinase to Tune Sorption Characteristics and Enhancing PET Hydrolysis. Biomacromolecules, 2013, 14, 1769-1776.	5.4	137
7	Characterization of a new cutinase from<i>Thermobifida alba</i>for PET-surface hydrolysis. Biocatalysis and Biotransformation, 2012, 30, 2-9.	2.0	125
8	Surface engineering of a cutinase from <i>Thermobifida cellulosilytica</i> for improved polyester hydrolysis. Biotechnology and Bioengineering, 2013, 110, 2581-2590.	3.3	118
9	The Closure of the Cycle: Enzymatic Synthesis and Functionalization of Bio-Based Polyesters. Trends in Biotechnology, 2016, 34, 316-328.	9.3	107
10	Enzymes revolutionize the bioproduction of value-added compounds: From enzyme discovery to special applications. Biotechnology Advances, 2020, 40, 107520.	11.7	97
11	Enzymatic Hydrolysis of Polyester Thin Films at the Nanoscale: Effects of Polyester Structure and Enzyme Active-Site Accessibility. Environmental Science & Technology, 2017, 51, 7476-7485.	10.0	89
12	Two Novel Class II Hydrophobins from Trichoderma spp. Stimulate Enzymatic Hydrolysis of Poly(Ethylene Terephthalate) when Expressed as Fusion Proteins. Applied and Environmental Microbiology, 2013, 79, 4230-4238.	3.1	86
13	Improving enzymatic polyurethane hydrolysis by tuning enzyme sorption. Polymer Degradation and Stability, 2016, 132, 69-77.	5.8	85
14	PpEst is a novel PBAT degrading polyesterase identified by proteomic screening of Pseudomonas pseudoalcaligenes. Applied Microbiology and Biotechnology, 2017, 101, 2291-2303.	3.6	82
15	Characterization of a poly(butylene adipate-co-terephthalate)-hydrolyzing lipase from Pelosinus fermentans. Applied Microbiology and Biotechnology, 2016, 100, 1753-1764.	3.6	75
16	Hydrolysis of synthetic polyesters by <i>Clostridium botulinum</i> esterases. Biotechnology and Bioengineering, 2016, 113, 1024-1034.	3.3	65
17	Enzymatic Degradation of Aromatic and Aliphatic Polyesters by P. pastoris Expressed Cutinase 1 from Thermobifida cellulosilytica. Frontiers in Microbiology, 2017, 8, 938.	3.5	62
18	Substrate specificities of cutinases on aliphaticâ€“aromatic polyesters and on their model substrates. New Biotechnology, 2016, 33, 295-304.	4.4	56

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19	Small cause, large effect: Structural characterization of cutinases from <i>Thermobifida cellulosilytica</i>. Biotechnology and Bioengineering, 2017, 114, 2481-2488.	3.3	56
20	Equalizer technology â€“ Equal rights for disparate beads. Proteomics, 2010, 10, 2089-2098.	2.2	54
21	Surface engineering of polyester-degrading enzymes to improve efficiency and tune specificity. Applied Microbiology and Biotechnology, 2018, 102, 3551-3559.	3.6	51
22	A novel aryl acylamidase from <i>Nocardia farcinica</i> hydrolyses polyamide. Biotechnology and Bioengineering, 2009, 102, 1003-1011.	3.3	46
23	Complete switch from Î±-2,3- to Î±-2,6-regioselectivity in Pasteurella dagmatis Î²-<scp>d</scp>-galactoside sialyltransferase by active-site redesign. Chemical Communications, 2015, 51, 3083-3086.	4.1	41
24	An Esterase from Anaerobic <i>Clostridium hathewayi</i> Can Hydrolyze Aliphaticâ€“Aromatic Polyesters. Environmental Science & Technology, 2016, 50, 2899-2907.	10.0	39
25	Extracellular serine proteases from Stenotrophomonas maltophilia: Screening, isolation and heterologous expression in E. coli. Journal of Biotechnology, 2012, 157, 140-147.	3.8	37
26	Natural Deep Eutectic Solvents as Multifunctional Media for the Valorization of Agricultural Wastes. ChemSusChem, 2019, 12, 1310-1315.	6.8	37
27	Two-step enzymatic functionalisation of polyamide with phenolics. Journal of Molecular Catalysis B: Enzymatic, 2012, 79, 54-60.	1.8	35
28	Hydrolysis of Ionic Phthalic Acid Based Polyesters by Wastewater Microorganisms and Their Enzymes. Environmental Science & Technology, 2017, 51, 4596-4605.	10.0	35
29	Characterization of a multifunctional Î±2,3-sialyltransferase from Pasteurella dagmatis. Glycobiology, 2013, 23, 1293-1304.	2.5	29
30	Polyol Structure Influences Enzymatic Hydrolysis of Bioâ€Based 2,5â€Furandicarboxylic Acid (FDCA) Polyesters. Biotechnology Journal, 2017, 12, 1600741.	3.5	29
31	Synergistic effect of mutagenesis and truncation to improve a polyesterase from Clostridium botulinum for polyester hydrolysis. Scientific Reports, 2018, 8, 3745.	3.3	27
32	Polyester hydrolysis is enhanced by a truncated esterase: Less is more. Biotechnology Journal, 2017, 12, .	3.5	26
33	Natural Deep Eutectic Solvents as Performance Additives for Peroxygenase Catalysis. ChemCatChem, 2020, 12, 989-994.	3.7	26
34	Polyphenol oxidases exhibit promiscuous proteolytic activity. Communications Chemistry, 2020, 3, .	4.5	25
35	C-terminal truncation of a metagenome-derived detergent protease for effective expression in E. coli. Journal of Biotechnology, 2010, 150, 408-416.	3.8	24
36	Enantioselective Sulfoxidation of Thioanisole by Cascading a Choline Oxidase and a Peroxygenase in the Presence of Natural Deep Eutectic Solvents. ChemPlusChem, 2020, 85, 254-257.	2.8	22

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37	Biomimetic Approach to Enhance Enzymatic Hydrolysis of the Synthetic Polyester Poly(1,4-butylene) Tj ETQq1 1 0.784314 rgBT /Overlo	5.4	21
38	High Throughput Screening for New Fungal Polyester Hydrolyzing Enzymes. Frontiers in Microbiology, 2020, 11, 554.	3.5	20
39	Together Is Better: The Rumen Microbial Community as Biological Toolbox for Degradation of Synthetic Polyesters. Frontiers in Bioengineering and Biotechnology, 2021, 9, .	4.1	19
40	Identification and Application of Enantiocomplementary Lactamases for Vince Lactam Derivatives. ChemCatChem, 2014, 6, 2517-2521.	3.7	18
41	Mechanistic study of CMP-Neu5Ac hydrolysis by Î±2,3-sialyltransferase fromPasteurella dagmatis. FEBS Letters, 2014, 588, 2978-2984.	2.8	17
42	Enzymes as Enhancers for the Biodegradation of Synthetic Polymers in Wastewater. ChemBioChem, 2018, 19, 317-325.	2.6	17
43	Heterologous expression and characterization of Choline Oxidase from the soil bacterium Arthrobacter nicotianae. Applied Microbiology and Biotechnology, 2009, 81, 875-886.	3.6	16
44	Polyol Structure and Ionic Moieties Influence the Hydrolytic Stability and Enzymatic Hydrolysis of Bio-Based 2,5-Furandicarboxylic Acid (FDCA) Copolyesters. Polymers, 2017, 9, 403.	4.5	16
45	Engineering of choline oxidase from Arthrobacter nicotianae for potential use as biological bleach in detergents. Applied Microbiology and Biotechnology, 2010, 87, 1743-1752.	3.6	15
46	Switched reaction specificity in polyesterases towards amide bond hydrolysis by enzyme engineering. RSC Advances, 2019, 9, 36217-36226.	3.6	15
47	Structureâ€function analysis of two closely related cutinases from <i>Thermobifida cellulosilytica</i>. Biotechnology and Bioengineering, 2022, 119, 470-481.	3.3	15
48	Engineering of the zinc-binding domain of an esterase from Clostridium botulinum towards increased activity on polyesters. Catalysis Science and Technology, 2017, 7, 1440-1447.	4.1	14
49	Shotgun proteomics reveals putative polyesterases in the secretome of the rock-inhabiting fungus Knufia chersonesos. Scientific Reports, 2020, 10, 9770.	3.3	14
50	A new arylesterase from Pseudomonas pseudoalcaligenes can hydrolyze ionic phthalic polyesters. Journal of Biotechnology, 2017, 257, 70-77.	3.8	13
51	Oxidation of Various Kraft Lignins with a Bacterial Laccase Enzyme. International Journal of Molecular Sciences, 2021, 22, 13161.	4.1	13
52	Comparison of a fungal and a bacterial laccase for lignosulfonate polymerization. Process Biochemistry, 2021, 109, 207-213.	3.7	12
53	Comparison of Carbonic Anhydrases for CO2 Sequestration. International Journal of Molecular Sciences, 2022, 23, 957.	4.1	12
54	Data on synthesis of oligomeric and polymeric poly(butylene adipate-co-butylene terephthalate) model substrates for the investigation of enzymatic hydrolysis. Data in Brief, 2016, 7, 291-298.	1.0	11

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55	A Fungal Ascorbate Oxidase with Unexpected Laccase Activity. International Journal of Molecular Sciences, 2020, 21, 5754.	4.1	11
56	High-quality production of human Î±-2,6-sialyltransferase in Pichia pastoris requires control over N-terminal truncations by host-inherent protease activities. Microbial Cell Factories, 2014, 13, 138.	4.0	9
57	All-in-one assay for Î²-d-galactoside sialyltransferases: Quantification of productive turnover, error hydrolysis, and site selectivity. Analytical Biochemistry, 2015, 483, 47-53.	2.4	9
58	Combining expression and process engineering for high-quality production of human sialyltransferase in Pichia pastoris. Journal of Biotechnology, 2016, 235, 54-60.	3.8	9
59	Two N-terminally truncated variants of human Î²-galactoside Î±2,6 sialyltransferase I with distinct properties for inÂvitro protein glycosylation. Glycobiology, 2016, 26, 1097-1106.	2.5	7
60	Conazole fungicides epoxiconazole and tebuconazole in biochar amended soils: Degradation and bioaccumulation in earthworms. Chemosphere, 2021, 274, 129700.	8.2	6
61	A Simple and Straightforward Method for Activity Measurement of Carbonic Anhydrases. Catalysts, 2021, 11, 819.	3.5	6
62	Tuning of adsorption of enzymes to polymer. Methods in Enzymology, 2021, 648, 293-315.	1.0	5
63	Surface functionalization of polyester. Methods in Enzymology, 2019, 627, 339-360.	1.0	3
64	Residue-Specific Incorporation of the Non-Canonical Amino Acid Norleucine Improves Lipase Activity on Synthetic Polyesters. Frontiers in Bioengineering and Biotechnology, 2022, 10, 769830.	4.1	3
65	Effect of Binding Modules Fused to Cutinase on the Enzymatic Synthesis of Polyesters. Catalysts, 2022, 12, 303.	3.5	3
66	Effects of biochar on the fate of conazole fungicides in soils and their bioavailability to earthworms and plants. Environmental Science and Pollution Research, 2022, 29, 23323-23337.	5.3	2
67	Green polymer processing with enzymes. New Biotechnology, 2014, 31, S31.	4.4	0