

Tjaard Pijning

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9147786/publications.pdf>

Version: 2024-02-01

59
papers

2,597
citations

159585

30
h-index

189892

50
g-index

60
all docs

60
docs citations

60
times ranked

2273
citing authors

#	ARTICLE	IF	CITATIONS
1	Glucansucrases: Three-dimensional structures, reactions, mechanism, α -glucan analysis and their implications in biotechnology and food applications. <i>Journal of Biotechnology</i> , 2013, 163, 250-272.	3.8	250
2	Crystal Structure of the Copper-Containing Quercetin 2,3-Dioxygenase from <i>Aspergillus japonicus</i> . <i>Structure</i> , 2002, 10, 259-268.	3.3	216
3	Crystal Structure and Carbohydrate-binding Properties of the Human Cartilage Glycoprotein-39. <i>Journal of Biological Chemistry</i> , 2003, 278, 37753-37760.	3.4	183
4	Crystal structure of a 117 kDa glucansucrase fragment provides insight into evolution and product specificity of GH70 enzymes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 21406-21411.	7.1	140
5	<i>Thermus thermophilus</i> Glycoside Hydrolase Family 57 Branching Enzyme. <i>Journal of Biological Chemistry</i> , 2011, 286, 3520-3530.	3.4	88
6	Functional and Structural Characterization of α -(1 \rightarrow 2) Branching Sucrase Derived from DSR-E Glucansucrase. <i>Journal of Biological Chemistry</i> , 2012, 287, 7915-7924.	3.4	78
7	Improved activity and thermostability of <i>Bacillus pumilus</i> lipase by directed evolution. <i>Journal of Biotechnology</i> , 2013, 164, 123-129.	3.8	73
8	Biotechnological potential of novel glycoside hydrolase family 70 enzymes synthesizing α -glucans from starch and sucrose. <i>Biotechnology Advances</i> , 2018, 36, 196-207.	11.7	68
9	Structure-function relationships of family GH70 glucansucrase and 4,6- α -glucanotransferase enzymes, and their evolutionary relationships with family GH13 enzymes. <i>Cellular and Molecular Life Sciences</i> , 2016, 73, 2681-2706.	5.4	64
10	Crystal Structure of Inulosucrase from <i>Lactobacillus</i> : Insights into the Substrate Specificity and Product Specificity of GH68 Fructansucrases. <i>Journal of Molecular Biology</i> , 2011, 412, 80-93.	4.2	63
11	A Novel Genetic Selection System for Improved Enantioselectivity of <i>Bacillus subtilis</i> Lipase A. <i>ChemBioChem</i> , 2008, 9, 1110-1115.	2.6	60
12	Biochemical Characterization of the <i>Lactobacillus reuteri</i> Glycoside Hydrolase Family 70 GTFB Type of 4,6- α -Glucanotransferase Enzymes That Synthesize Soluble Dietary Starch Fibers. <i>Applied and Environmental Microbiology</i> , 2015, 81, 7223-7232.	3.1	54
13	Glycosidic bond specificity of glucansucrases: on the role of acceptor substrate binding residues. <i>Biotransformation and Biotransformation</i> , 2012, 30, 366-376.	2.0	53
14	Enantioselective Synthesis of Pharmaceutically Active β -Aminobutyric Acids Using a Tailor-Made Artificial Michaelase in One-Pot Cascade Reactions. <i>ACS Catalysis</i> , 2019, 9, 1503-1513.	11.2	53
15	4,6- α -Glucanotransferase activity occurs more widespread in <i>Lactobacillus</i> strains and constitutes a separate GH70 subfamily. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 181-193.	3.6	52
16	The structure of the <i>Escherichia coli</i> phosphotransferase IIamannitol reveals a novel fold with two conformations of the active site. <i>Structure</i> , 1998, 6, 377-388.	3.3	49
17	Biophysical characterization of mutants of <i>Bacillus subtilis</i> lipase evolved for thermostability: Factors contributing to increased activity retention. <i>Protein Science</i> , 2012, 21, 487-497.	7.6	49
18	A general mechanism of ribosome dimerization revealed by single-particle cryo-electron microscopy. <i>Nature Communications</i> , 2017, 8, 722.	12.8	49

#	ARTICLE	IF	CITATIONS
19	A crystallographic study of Cys69Ala flavodoxin II from <i>Azotobacter vinelandii</i> : Structural determinants of redox potential. <i>Protein Science</i> , 2005, 14, 2284-2295.	7.6	48
20	Structure of the α -1,6/ α -1,4-specific glucansucrase GTFa from <i>Lactobacillus reuteri</i> 121. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2012, 68, 1448-1454.	0.7	47
21	Crystal Structure of α -1,6-Glucanotransferase Supports Diet-Driven Evolution of GH70 Enzymes from α -Amylases in Oral Bacteria. <i>Structure</i> , 2017, 25, 231-242.	3.3	45
22	The structure of an energy-coupling protein from bacteria, IIBcellobiose, reveals similarity to eukaryotic protein tyrosine phosphatases. <i>Structure</i> , 1997, 5, 217-225.	3.3	43
23	α -1,3-Glucanotransferase, a novel reaction specificity in glycoside hydrolase family 70 and clan GH-H. <i>Scientific Reports</i> , 2017, 7, 39761.	3.3	42
24	The <i>Exiguobacterium sibiricum</i> 255-15 GtfC Enzyme Represents a Novel Glycoside Hydrolase 70 Subfamily of α -1,6-Glucanotransferase Enzymes. <i>Applied and Environmental Microbiology</i> , 2016, 82, 756-766.	3.1	38
25	Loop Grafting of <i>Bacillus subtilis</i> Lipase A: Inversion of Enantioselectivity. <i>Chemistry and Biology</i> , 2008, 15, 782-789.	6.0	35
26	Residue Leu940 Has a Crucial Role in the Linkage and Reaction Specificity of the Glucansucrase GTF180 of the Probiotic Bacterium <i>Lactobacillus reuteri</i> 180. <i>Journal of Biological Chemistry</i> , 2014, 289, 32773-32782.	3.4	33
27	Characterization of the glucansucrase GTF180 W1065 mutant enzymes producing polysaccharides and oligosaccharides with altered linkage composition. <i>Food Chemistry</i> , 2017, 217, 81-90.	8.2	33
28	A new group of glycoside hydrolase family 13 α -amylases with an aberrant catalytic triad. <i>Scientific Reports</i> , 2017, 7, 44230.	3.3	32
29	Biochemical and crystallographic characterization of a glucansucrase from <i>Lactobacillus reuteri</i> 180. <i>Biocatalysis and Biotransformation</i> , 2008, 26, 12-17.	2.0	31
30	Characterization of the Functional Roles of Amino Acid Residues in Acceptor-binding Subsite +1 in the Active Site of the Glucansucrase GTF180 from <i>Lactobacillus reuteri</i> 180. <i>Journal of Biological Chemistry</i> , 2015, 290, 30131-30141.	3.4	31
31	Structure of the complex between trypanosomal triosephosphate isomerase and <i>N</i> -hydroxy-4-phosphonobutanamide: Binding at the active site despite an α -open flexible loop conformation. <i>Protein Science</i> , 1992, 1, 1578-1584.	7.6	30
32	The three-dimensional structure of the nitrogen regulatory protein IIA Ntr from <i>Escherichia coli</i> 1 Edited by K. Nagai. <i>Journal of Molecular Biology</i> , 1998, 279, 245-255.	4.2	30
33	Engineering of the <i>Bacillus circulans</i> β -Galactosidase Product Specificity. <i>Biochemistry</i> , 2017, 56, 704-711.	2.5	30
34	Crystal Structure of the Leucine Aminopeptidase from <i>Pseudomonas putida</i> Reveals the Molecular Basis for its Enantioselectivity and Broad Substrate Specificity. <i>Journal of Molecular Biology</i> , 2010, 398, 703-714.	4.2	28
35	The crystal structure of a hyperthermoactive exopolygalacturonase from <i>Thermotoga maritima</i> reveals a unique tetramer. <i>FEBS Letters</i> , 2009, 583, 3665-3670.	2.8	27
36	<i>Lactobacillus reuteri</i> Strains Convert Starch and Maltodextrins into Homoexopolysaccharides Using an Extracellular and Cell-Associated α -1,6-Glucanotransferase. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 2941-2952.	5.2	27

#	ARTICLE	IF	CITATIONS
37	Mining novel starch-converting Glycoside Hydrolase 70 enzymes from the Nestlé® Culture Collection genome database: The <i>Lactobacillus reuteri</i> NCC 2613 GtfB. <i>Scientific Reports</i> , 2017, 7, 9947.	3.3	27
38	Truncation of domain V of the multidomain glucansucrase GTF180 of <i>Lactobacillus reuteri</i> 180 heavily impairs its polysaccharide-synthesizing ability. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 5885-5894.	3.6	26
39	Biochemical characterization of two GH70 family 4,6- α -glucanotransferases with distinct product specificity from <i>Lactobacillus aviarius</i> subsp. <i>aviarius</i> DSM 20655. <i>Food Chemistry</i> , 2018, 253, 236-246.	8.2	26
40	Synthesis of New Hyperbranched α -Glucans from Sucrose by <i>Lactobacillus reuteri</i> 180 Glucansucrase Mutants. <i>Journal of Agricultural and Food Chemistry</i> , 2016, 64, 433-442.	5.2	25
41	The role of conserved inulosucrase residues in the reaction and product specificity of <i>Lactobacillus reuteri</i> inulosucrase. <i>FEBS Journal</i> , 2012, 279, 3612-3621.	4.7	23
42	Biochemical characterization of a GH70 protein from <i>Lactobacillus kunkeei</i> DSM 12361 with two catalytic domains involving branching sucrose activity. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 7935-7950.	3.6	22
43	Flexibility of truncated and full-length glucansucrase GTF180 enzymes from <i>Lactobacillus reuteri</i> 180. <i>FEBS Journal</i> , 2014, 281, 2159-2171.	4.7	21
44	Improved activity and pH stability of <i>E. coli</i> ATCC 11105 penicillin acylase by error-prone PCR. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 4467-4477.	3.6	17
45	Structural determinants of alternating (α 1 \rightarrow 4) and (α 1 \rightarrow 6) linkage specificity in reuteransucrase of <i>Lactobacillus reuteri</i> . <i>Scientific Reports</i> , 2016, 6, 35261.	3.3	17
46	Biochemical and genetic characterization of fungal proline hydroxylase in echinocandin biosynthesis. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 7877-7890.	3.6	14
47	Insights into Broad-Specificity Starch Modification from the Crystal Structure of <i>Limosilactobacillus Reuteri</i> NCC 2613 4,6- α -Glucanotransferase GtfB. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 13235-13245.	5.2	14
48	Influence of albumin on the net sinusoidal efflux of the organic anion dibromosulphothalein from rat liver. <i>Hepatology</i> , 1992, 15, 302-309.	7.3	12
49	Identification of <i>Thermotoga maritima</i> MSB8 GH57 α -amylase AmyC as a glycogen-branching enzyme with high hydrolytic activity. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 6141-6151.	3.6	12
50	Biochemical Characterization of the Functional Roles of Residues in the Active Site of the β -Galactosidase from <i>Bacillus circulans</i> ATCC 31382. <i>Biochemistry</i> , 2017, 56, 3109-3118.	2.5	12
51	Mechanistic aspects of uptake and sinusoidal efflux of dibromosulphothalein in the isolated perfused rat liver. <i>Biochemical Pharmacology</i> , 1991, 42, 1997-2002.	4.4	11
52	Crystallization of Enzyme IIB of the Cellobiose-specific Phosphotransferase System of <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 1994, 239, 588-590.	4.2	8
53	Crystal structure of an inulosucrase from <i>Halalkalicoccus jeotgali</i> B3T, a halophilic archaeal strain. <i>FEBS Journal</i> , 2021, 288, 5723-5736.	4.7	8
54	Crystal Structure of Levansucrase from the Gram-Negative Bacterium <i>Brenneria</i> Provides Insights into Its Product Size Specificity. <i>Journal of Agricultural and Food Chemistry</i> , 2022, 70, 5095-5105.	5.2	7

#	ARTICLE	IF	CITATIONS
55	Mutational Analysis of the Role of the Glucansucrase Gtf180's N Active Site Residues in Product and Linkage Specificity with Lactose as Acceptor Substrate. Journal of Agricultural and Food Chemistry, 2018, 66, 12544-12554.	5.2	6
56	Using Mutability Landscapes To Guide Enzyme Thermostabilization. ChemBioChem, 2021, 22, 170-175.	2.6	6
57	Enzymatic glucosylation of polyphenols using glucansucrases and branching sucrases of glycoside hydrolase family 70. Critical Reviews in Food Science and Nutrition, 2023, 63, 5247-5267.	10.3	4
58	The sinusoidal efflux of dibromosulfophthalein from rat liver is stimulated by albumin, ligandin and fatty acid binding protein but not by other dibromosulfophthalein binding proteins. Journal of Hepatology, 1994, 21, 29-36.	3.7	3
59	Mutations in Amino Acid Residues of <i>Limosilactobacillus reuteri</i> 121 GtfB 4,6- α -Glucanotransferase that Affect Reaction and Product Specificity. Journal of Agricultural and Food Chemistry, 2022, 70, 1952-1961.	5.2	3