Slavko Kralj

List of Publications by Year
in descending order

38 papers	2,597 citations	172457 29 h-index	315739 38 g-index
40 all docs	40 docs citations	40 times ranked	1437 citing authors

#	Article	IF	Citations
1	Enzymatic Polymerization Routes to Syntheticâ€“Natural Materials: A Review. ACS Sustainable Chemistry and Engineering, 2020, 8, 9947-9954.	6.7	24
2	Synthesis of fructooligosaccharides (FosA) and inulin (InuO) by GH68 fructosyltransferases from Bacillus agaradhaerens strain WDG185. Carbohydrate Polymers, 2018, 179, 350-359.	10.2	36
3	Characterization of the glucansucrase GTF180 W1065 mutant enzymes producing polysaccharides and oligosaccharides with altered linkage composition. Food Chemistry, 2017, 217, 81-90.	8.2	33
4	Flexibility of truncated and fullâ€length glucansucrase <scp>GTF</scp>180 enzymes from <i>LactobacillusÂreuteri</i> 180. FEBS Journal, 2014, 281, 2159-2171.	4.7	21
5	4,6-Î±-Glucanotransferase activity occurs more widespread in Lactobacillus strains and constitutes a separate GH70 subfamily. Applied Microbiology and Biotechnology, 2013, 97, 181-193.	3.6	52
6	Glucansucrases: Three-dimensional structures, reactions, mechanism, Î±-glucan analysis and their implications in biotechnology and food applications. Journal of Biotechnology, 2013, 163, 250-272.	3.8	250
7	An Unconventional Glycosyl Transfer Reaction: Glucansucrase GTFA Functions as an Allosyltransferase Enzyme. ChemBioChem, 2013, 14, 2423-2426.	2.6	9
8	Structural characterization of linear isomalto-/malto-oligomer products synthesized by the novel GTFB 4,6-Î±-glucanotransferase enzyme from Lactobacillus reuteri 121. Glycobiology, 2012, 22, 517-528.	2.5	60
9	The role of conserved inulosucrase residues in the reaction and product specificity of <i>Lactobacillusâ€ƒreuteri</i> inulosucrase. FEBS Journal, 2012, 279, 3612-3621.	4.7	23
10	Structure of the Î±-1,6/Î±-1,4-specific glucansucrase GTFA from<i>Lactobacillus reuteri</i>121. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1448-1454.	0.7	47
11	Enzymatic degradation of granular potato starch by Microbacterium aurum strain B8.A. Applied Microbiology and Biotechnology, 2012, 93, 645-654.	3.6	36
12	4,6-Î±-Glucanotransferase, a Novel Enzyme That Structurally and Functionally Provides an Evolutionary Link between Glycoside Hydrolase Enzyme Families 13 and 70. Applied and Environmental Microbiology, 2011, 77, 8154-8163.	3.1	81
13	Crystal Structure of Inulosucrase from Lactobacillus: Insights into the Substrate Specificity and Product Specificity of GH68 Fructansucrases. Journal of Molecular Biology, 2011, 412, 80-93.	4.2	63
14	Thermus thermophilus Glycoside Hydrolase Family 57 Branching Enzyme. Journal of Biological Chemistry, 2011, 286, 3520-3530.	3.4	88
15	Crystal structure of a 117 kDa glucansucrase fragment provides insight into evolution and product specificity of GH70 enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 21406-21411.	7.1	140
16	Inulin and levan synthesis by probiotic Lactobacillus gasseri strains: characterization of three novel fructansucrase enzymes and their fructan products. Microbiology (United Kingdom), 2010, 156, 1264-1274.	1.8	93
17	The Unique Branching Patterns of <i>Deinococcus</i> Glycogen Branching Enzymes Are Determined by Their N-Terminal Domains. Applied and Environmental Microbiology, 2009, 75, 1355-1362.	3.1	78
18	Screening of lactic acid bacteria from Indonesia reveals glucansucrase and fructansucrase genes in two different<i>Weissella confusa</i>strains from soya. FEMS Microbiology Letters, 2009, 300, 131-138.	1.8	50

#	Article	IF	Citations
19	Structural Characterization of Bioengineered Î±-d-Glucans Produced by Mutant Glucansucrase GTF180 Enzymes of Lactobacillus reuteri Strain 180. Biomacromolecules, 2009, 10, 580-588.	5.4	50
20	Structural analysis of the Î±-d-glucan (EPS180) produced by the Lactobacillus reuteri strain 180 glucansucrase GTF180 enzyme. Carbohydrate Research, 2008, 343, 1237-1250.	2.3	86
21	Structural analysis of the Î±-d-glucan (EPS35-5) produced by the Lactobacillus reuteri strain 35-5 glucansucrase GTFA enzyme. Carbohydrate Research, 2008, 343, 1251-1265.	2.3	61
22	Hybrid reuteransucrase enzymes reveal regions important for glucosidic linkage specificity and the transglucosylation/hydrolysis ratio. FEBS Journal, 2008, 275, 6002-6010.	4.7	15
23	Biochemical and crystallographic characterization of a glucansucrase fromLactobacillus reuteri180. Biocatalysis and Biotransformation, 2008, 26, 12-17.	2.0	31
24	Structural Analysis of Bioengineered Î±-d-Glucan Produced by a Triple Mutant of the Glucansucrase GTF180 Enzyme from Lactobacillus reuteri Strain 180: Generation of (Î±1â†’4) Linkages in a Native (1â†’3)(1â†’6)-Î±-d-Glucan. Biomacromolecules, 2008, 9, 2251-2258.	5.4	31
25	Engineering the Glucansucrase GTFR Enzyme Reaction and Glycosidic Bond Specificity: Toward Tailor-Made Polymer and Oligosaccharide Productsâ€. Biochemistry, 2008, 47, 6678-6684.	2.5	58
26	The Probiotic <i>Lactobacillus johnsonii</i> NCC 533 Produces High-Molecular-Mass Inulin from Sucrose by Using an Inulosucrase Enzyme. Applied and Environmental Microbiology, 2008, 74, 3426-3433.	3.1	77
27	Fructansucrase enzymes and sucrose analogues: A new approach for the synthesis of unique fructo-oligosaccharides. Biocatalysis and Biotransformation, 2008, 26, 32-41.	2.0	18
28	Highly Efficient Chemoenzymatic Synthesis of Novel Branched Thiooligosaccharides by Substrate Direction with Glucansucrases. ChemBioChem, 2007, 8, 273-276.	2.6	28
29	Purification, crystallization and preliminary X-ray analysis of a thermostable glycoside hydrolase family 43 Î²-xylosidase fromGeobacillus thermoleovoransIT-08. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 932-935.	0.7	5
30	Structure-Function Relationships of Glucansucrase and Fructansucrase Enzymes from Lactic Acid Bacteria. Microbiology and Molecular Biology Reviews, 2006, 70, 157-176.	6.6	366
31	Role of asparagine 1134 in glucosidic bond and transglycosylation specificity of reuteransucrase from Lactobacillus reuteri 121. FEBS Journal, 2006, 273, 3735-3742.	4.7	29
32	Single amino acid residue changes in subsite âˆ’â€Š1 of inulosucrase from Lactobacillus reuteri 121 strongly influence the size of products synthesized. FEBS Journal, 2006, 273, 4104-4113.	4.7	42
33	The levansucrase and inulosucrase enzymes of Lactobacillus reuteri 121 catalyse processive and non-processive transglycosylation reactions. Microbiology (United Kingdom), 2006, 152, 1187-1196.	1.8	123
34	Highly Hydrolytic Reuteransucrase from Probiotic Lactobacillus reuteri Strain ATCC 55730. Applied and Environmental Microbiology, 2005, 71, 3942-3950.	3.1	82
35	Rational Transformation of Lactobacillus reuteri 121 Reuteransucrase into a Dextransucrase. Biochemistry, 2005, 44, 9206-9216.	2.5	75
36	Efficient Screening Methods for Glucosyltransferase Genes inLactobacillusStrains. Biocatalysis and Biotransformation, 2003, 21, 181-187.	2.0	33

#	Article	IF	Citations
37	Molecular Characterization of a Novel Glucosyltransferase from Lactobacillus reuteri Strain 121 Synthesizing a Unique, Highly Branched Glucan with Î±-(1â†’4) and Î±-(1â†’6) Glucosidic Bonds. Applied and Environmental Microbiology, 2002, 68, 4283-4291.	3.1	110
38	Hydrophobic Amino Acid Residues in the Acceptor Binding Site Are Main Determinants for Reaction Mechanism and Specificity of Cyclodextrin-glycosyltransferase. Journal of Biological Chemistry, 2001, 276, 44557-44562.	3.4	93