

Motomitsu Kitaoka

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

209
papers

5,999
citations

44
h-index

66
g-index

220
ext. papers

6,712
ext. citations

3.8
avg, IF

5.69
L-index

#	Paper	IF	Citations
209	Discovery of solabiose phosphorylase and its application for enzymatic synthesis of solabiose from sucrose and lactose.. <i>Scientific Reports</i> , 2022 , 12, 259	4.9	0
208	Diversification of a fucosyllactose transporter within the genus. <i>Applied and Environmental Microbiology</i> , 2021 , AEM0143721	4.8	4
207	Identification of difructose dianhydride I synthase/hydrolase from an oral bacterium establishes a novel glycoside hydrolase family. <i>Journal of Biological Chemistry</i> , 2021 , 297, 101324	5.4	6
206	Three-dimensional alignment of cellulose II microcrystals under a strong magnetic field. <i>Cellulose</i> , 2021 , 28, 6757-6765	5.5	3
205	Next-generation prebiotic promotes selective growth of bifidobacteria, suppressing. <i>Gut Microbes</i> , 2021 , 13, 1973835	8.8	4
204	Generation of 3-deoxypentulose by the isomerization and elimination of 4-O-substituted glucose and fructose. <i>Carbohydrate Research</i> , 2021 , 508, 108402	2.9	1
203	Effect of C-6 Methylol Groups on Substrate Recognition of Glucose/Xylose Mixed Oligosaccharides by Cellobiose Dehydrogenase from the Basidiomycete. <i>Journal of Applied Glycoscience (1999)</i> , 2020 , 67, 51-57	1	0
202	[Review] Enzymes Involved in Levoglucosan Metabolism by Microbes. <i>Bulletin of Applied Glycoscience</i> , 2020 , 10, 103-108	0.1	
201	Surface structural analysis of selectively ¹³ C-labeled cellulose II by solid-state NMR spectroscopy. <i>Cellulose</i> , 2020 , 27, 1899-1907	5.5	5
200	Alkoxy carbonyl elimination of 3-O-substituted glucose and fructose by heat treatment under neutral pH. <i>Carbohydrate Research</i> , 2020 , 496, 108129	2.9	3
199	Conversion of levoglucosan into glucose by the coordination of four enzymes through oxidation, elimination, hydration, and reduction. <i>Scientific Reports</i> , 2020 , 10, 20066	4.9	3
198	Evolutionary adaptation in fucosyllactose uptake systems supports bifidobacteria-infant symbiosis. <i>Science Advances</i> , 2019 , 5, eaaw7696	14.3	68
197	Structural basis for broad substrate specificity of UDP-glucose 4-epimerase in the human milk oligosaccharide catabolic pathway of <i>Bifidobacterium longum</i> . <i>Scientific Reports</i> , 2019 , 9, 11081	4.9	10
196	Varied Pathways of Infant Gut-Associated to Assimilate Human Milk Oligosaccharides: Prevalence of the Gene Set and Its Correlation with Bifidobacteria-Rich Microbiota Formation. <i>Nutrients</i> , 2019 , 12,	6.7	49
195	Epimerization and Decomposition of Kojibiose and Sophorose by Heat Treatment under Neutral pH Conditions. <i>Journal of Applied Glycoscience (1999)</i> , 2019 , 66, 1-9	1	4
194	Expression and Characterization of Recombinant Sucrose Phosphorylase. <i>Protein Journal</i> , 2018 , 37, 93-100	3.9	5
193	Identification, functional characterization, and crystal structure determination of bacterial levoglucosan dehydrogenase. <i>Journal of Biological Chemistry</i> , 2018 , 293, 17375-17386	5.4	13

192	Sharing of human milk oligosaccharides degradants within bifidobacterial communities in faecal cultures supplemented with <i>Bifidobacterium bifidum</i> . <i>Scientific Reports</i> , 2018 , 8, 13958	4.9	78
191	[Review] Advanced Utilization of Carbohydrate-Processing Enzymes. <i>Bulletin of Applied Glycoscience</i> , 2018 , 8, 20-32	0.1	
190	Molecular Insight into Evolution of Symbiosis between Breast-Fed Infants and a Member of the Human Gut Microbiome <i>Bifidobacterium longum</i> . <i>Cell Chemical Biology</i> , 2017 , 24, 515-524.e5	8.2	62
189	Discovery of β -arabinopyranosidases from human gut microbiome expands the diversity within glycoside hydrolase family 42. <i>Journal of Biological Chemistry</i> , 2017 , 292, 21092-21101	5.4	6
188	Enzymatic Synthesis of 1,5-Anhydro-4- β -D-glucopyranosyl-D-fructose Using Cellobiose Phosphorylase and Its Spontaneous Decomposition via β Elimination. <i>Journal of Applied Glycoscience (1999)</i> , 2017 , 64, 91-97	1	2
187	Synthesis of 3-Keto-levoglucosan Using Pyranose Oxidase and Its Spontaneous Decomposition via β Elimination. <i>Journal of Applied Glycoscience (1999)</i> , 2017 , 64, 99-107	1	6
186	Introduction of H-antigens into oligosaccharides and sugar chains of glycoproteins using highly efficient 1,2- β -fucosyltransferase. <i>Glycobiology</i> , 2016 , 26, 1235-1247	5.8	27
185	Galacto-N-biose is neuroprotective against glutamate-induced excitotoxicity in vitro. <i>European Journal of Pharmacology</i> , 2016 , 791, 711-717	5.3	7
184	A glycosynthase derived from an inverting chitinase with an extended binding cleft. <i>Journal of Biochemistry</i> , 2016 , 160, 93-100	3.1	6
183	Functional and Structural Analysis of a β Glucosidase Involved in β 1,2-Glucan Metabolism in <i>Listeria innocua</i> . <i>PLoS ONE</i> , 2016 , 11, e0148870	3.7	27
182	Structural insights into the difference in substrate recognition of two mannoside phosphorylases from two GH130 subfamilies. <i>FEBS Letters</i> , 2016 , 590, 828-37	3.8	10
181	The crystal structure of an inverting glycoside hydrolase family 9 exo- β -glucosaminidase and the design of glycosynthase. <i>Biochemical Journal</i> , 2016 , 473, 463-72	3.8	12
180	Crystal Structure and Substrate Recognition of Cellobionic Acid Phosphorylase, Which Plays a Key Role in Oxidative Cellulose Degradation by Microbes. <i>Journal of Biological Chemistry</i> , 2015 , 290, 18281-924	5.4	17
179	Novel substrate specificities of two lacto-N-biosidases towards β linked galacto-N-biose-containing oligosaccharides of globo H, Gb5, and GA1. <i>Carbohydrate Research</i> , 2015 , 408, 18-24	2.9	13
178	Diversity of phosphorylases in glycoside hydrolase families. <i>Applied Microbiology and Biotechnology</i> , 2015 , 99, 8377-90	5.7	31
177	An inverting β 1,2-mannosidase belonging to glycoside hydrolase family 130 from <i>Dyadobacter fermentans</i> . <i>FEBS Letters</i> , 2015 , 589, 3604-10	3.8	9
176	Facile enzymatic synthesis of sugar 1-phosphates as substrates for phosphorylases using anomeric kinases. <i>Carbohydrate Research</i> , 2015 , 401, 1-4	2.9	24
175	Characterization and crystal structure determination of β 1,2-mannobiose phosphorylase from <i>Listeria innocua</i> . <i>FEBS Letters</i> , 2015 , 589, 3816-21	3.8	16

174	Large-scale Preparation of 1,2- β -Glucan Using 1,2- β -Oligoglucan Phosphorylase. <i>Journal of Applied Glycoscience (1999)</i> , 2015 , 62, 47-52	1	27
173	Functional reassignment of <i>Cellvibrio vulgaris</i> EpiA to cellobiose 2-epimerase and an evaluation of the biochemical functions of the 4-O- β -mannosyl-D-glucose phosphorylase-like protein, UnkA. <i>Bioscience, Biotechnology and Biochemistry</i> , 2015 , 79, 969-77	2.1	16
172	Open-close structural change upon ligand binding and two magnesium ions required for the catalysis of N-acetylhexosamine 1-kinase. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2015 , 1854, 333-40	4	11
171	[Review: Symposium on Applied Glycoscience] Discovery of Novel β -Mannoside Phosphorylases. <i>Bulletin of Applied Glycoscience</i> , 2015 , 5, 120-127	0.1	
170	Facile preparation of highly crystalline lamellae of (1 \rightarrow 3)- β -D-glucan using an extract of <i>Euglena gracilis</i> . <i>International Journal of Biological Macromolecules</i> , 2014 , 64, 415-9	7.9	19
169	A β -6/ β -3 galactosidase from <i>Bifidobacterium animalis</i> subsp. <i>lactis</i> Bl-04 gives insight into sub-specificities of β -galactoside catabolism within <i>Bifidobacterium</i> . <i>Molecular Microbiology</i> , 2014 , 94, 1024	4.1	26
168	Distinct substrate specificities of three glycoside hydrolase family 42 β -galactosidases from <i>Bifidobacterium longum</i> subsp. <i>infantis</i> ATCC 15697. <i>Glycobiology</i> , 2014 , 24, 208-16	5.8	31
167	1,2- β -Oligoglucan phosphorylase from <i>Listeria innocua</i> . <i>PLoS ONE</i> , 2014 , 9, e92353	3.7	31
166	One Pot Enzymatic Production of Nigerose from Common Sugar Resources Employing Nigerose Phosphorylase. <i>Journal of Applied Glycoscience (1999)</i> , 2014 , 61, 75-80	1	19
165	Characterization of Two β -1,3-Glucoside Phosphorylases from <i>Clostridium phytofermentans</i> . <i>Journal of Applied Glycoscience (1999)</i> , 2014 , 61, 59-66	1	12
164	Structural basis for reversible phosphorolysis and hydrolysis reactions of 2-O- β -glucosylglycerol phosphorylase. <i>Journal of Biological Chemistry</i> , 2014 , 289, 18067-75	5.4	12
163	Characterization of a thermophilic 4-O- β -mannosyl-D-glucose phosphorylase from <i>Rhodothermus marinus</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2014 , 78, 263-70	2.1	20
162	2-O- β -glucosylglycerol phosphorylase from <i>Bacillus selenitireducens</i> MLS10 possessing hydrolytic activity on β -D-glucose 1-phosphate. <i>PLoS ONE</i> , 2014 , 9, e86548	3.7	28
161	Discovery of two β -1,2-mannoside phosphorylases showing different chain-length specificities from <i>Thermoanaerobacter</i> sp. X-514. <i>PLoS ONE</i> , 2014 , 9, e114882	3.7	27
160	Random insertional-deletional strand exchange mutagenesis (RAISE): a simple method for generating random insertion and deletion mutations. <i>Methods in Molecular Biology</i> , 2014 , 1179, 151-8	1.4	4
159	Error-prone rolling circle amplification greatly simplifies random mutagenesis. <i>Methods in Molecular Biology</i> , 2014 , 1179, 23-9	1.4	4
158	[Review: Symposium on Applied Glycoscience] Discovery of Novel Phosphorylases Involved in Nigeran Metabolism from <i>Clostridium phytofermentans</i> . <i>Bulletin of Applied Glycoscience</i> , 2014 , 4, 147-153	0.1	
157	Lacto-N-biosidase encoded by a novel gene of <i>Bifidobacterium longum</i> subspecies <i>longum</i> shows unique substrate specificity and requires a designated chaperone for its active expression. <i>Journal of Biological Chemistry</i> , 2013 , 288, 25194-25206	5.4	61

156	Potassium ion-dependent trehalose phosphorylase from halophilic <i>Bacillus selenitireducens</i> MLS10. <i>FEBS Letters</i> , 2013 , 587, 3382-6	3.8	7
155	Recent development of phosphorylases possessing large potential for oligosaccharide synthesis. <i>Current Opinion in Chemical Biology</i> , 2013 , 17, 301-9	9.7	102
154	Discovery of cellobionic acid phosphorylase in cellulolytic bacteria and fungi. <i>FEBS Letters</i> , 2013 , 587, 3556-61	3.8	25
153	In vitro comparative evaluation of the impact of lacto-N-biose I, a major building block of human milk oligosaccharides, on the fecal microbiota of infants. <i>Anaerobe</i> , 2013 , 19, 50-7	2.8	26
152	Directed evolution to enhance thermostability of galacto-N-biose/lacto-N-biose I phosphorylase. <i>Protein Engineering, Design and Selection</i> , 2013 , 26, 755-61	1.9	13
151	Discovery of β 1,4-D-mannosyl-N-acetyl-D-glucosamine phosphorylase involved in the metabolism of N-glycans. <i>Journal of Biological Chemistry</i> , 2013 , 288, 27366-27374	5.4	57
150	Structure of a bacterial glycoside hydrolase family 63 enzyme in complex with its glycosynthase product, and insights into the substrate specificity. <i>FEBS Journal</i> , 2013 , 280, 4560-71	5.7	7
149	Colorimetric Quantification of β -D-Mannose 1-Phosphate. <i>Journal of Applied Glycoscience</i> (1999), 2013 , 60, 137-139	1	6
148	Characterization of the Cytosolic β -N-Acetylglucosaminidase from <i>Bifidobacterium longum</i> subsp. <i>longum</i> . <i>Journal of Applied Glycoscience</i> (1999), 2013 , 60, 141-146	1	11
147	Identification of amino acid residues that determine the substrate preference of 1,3- β -galactosyl-N-acetylhexosamine phosphorylase. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2012 , 74, 97-102		7
146	Discovery of nigerose phosphorylase from <i>Clostridium phytofermentans</i> . <i>Applied Microbiology and Biotechnology</i> , 2012 , 93, 1513-22	5.7	37
145	A glycosynthase derived from an inverting GH19 chitinase from the moss <i>Bryum coronatum</i> . <i>Biochemical Journal</i> , 2012 , 444, 437-43	3.8	24
144	1,3-1,4- β -L-fucosynthase that specifically introduces Lewis a/x antigens into type-1/2 chains. <i>Journal of Biological Chemistry</i> , 2012 , 287, 16709-19	5.4	65
143	Characterization of a bacterial laminaribiose phosphorylase. <i>Bioscience, Biotechnology and Biochemistry</i> , 2012 , 76, 343-8	2.1	33
142	Identification of <i>Bacillus selenitireducens</i> MLS10 maltose phosphorylase possessing synthetic ability for branched β -D-glucosyl trisaccharides. <i>Carbohydrate Research</i> , 2012 , 360, 25-30	2.9	15
141	Characterization of a laminaribiose phosphorylase from <i>Acholeplasma laidlawii</i> PG-8A and production of 1,3- β -D-glucosyl disaccharides. <i>Carbohydrate Research</i> , 2012 , 361, 49-54	2.9	25
140	3-O- β -D-glucopyranosyl-L-rhamnose phosphorylase from <i>Clostridium phytofermentans</i> . <i>Carbohydrate Research</i> , 2012 , 350, 94-7	2.9	24
139	β -N-acetylgalactosaminidase from infant-associated bifidobacteria belonging to novel glycoside hydrolase family 129 is implicated in alternative mucin degradation pathway. <i>Journal of Biological Chemistry</i> , 2012 , 287, 693-700	5.4	73

138	Bifidobacterial enzymes involved in the metabolism of human milk oligosaccharides. <i>Advances in Nutrition</i> , 2012 , 3, 422S-9S	10	70
137	<i>Bifidobacterium longum</i> subsp. <i>infantis</i> uses two different β -galactosidases for selectively degrading type-1 and type-2 human milk oligosaccharides. <i>Glycobiology</i> , 2012 , 22, 361-8	5.8	96
136	Effect of Lacto-N-biose I on the Antigen-specific Immune Responses of Splenocytes. <i>Bioscience of Microbiota, Food and Health</i> , 2012 , 31, 47-50	3.2	1
135	[Review: Symposium on Amylases and Related Enzymes] Practical Preparation of Oligosaccharides by Utilizing Bifidobacterial Enzymes. <i>Bulletin of Applied Glycoscience</i> , 2012 , 2, 136-141	0.1	1
134	[Mini Review] Production of Novel Oligosaccharides by Using of Synthetic Reaction Catalyzing by Carbohydrate Active Enzyme. <i>Bulletin of Applied Glycoscience</i> , 2012 , 2, 223-224	0.1	1
133	Interactions between Glycoside Hydrolase Family 94 Cellobiose Phosphorylase and Glucosidase Inhibitors. <i>Journal of Applied Glycoscience (1999)</i> , 2011 , 58, 91-97	1	7
132	Molecular mechanism on bifidus factor in human milk. <i>Japanese Journal of Lactic Acid Bacteria</i> , 2011 , 22, 15-25	0	
131	Mutational Analysis of Fungal Family 11 Xylanases on pH Optimum Determination. <i>Journal of Applied Glycoscience (1999)</i> , 2011 , 58, 107-114	1	4
130	An Enzymatic Colorimetric Quantification of Orthophosphate. <i>Journal of Applied Glycoscience (1999)</i> , 2011 , 58, 125-127	1	
129	One-pot enzymatic production of 2-acetamido-2-deoxy-D-galactose (GalNAc) from 2-acetamido-2-deoxy-D-glucose (GlcNAc). <i>Carbohydrate Research</i> , 2011 , 346, 2432-6	2.9	8
128	Physiology of consumption of human milk oligosaccharides by infant gut-associated bifidobacteria. <i>Journal of Biological Chemistry</i> , 2011 , 286, 34583-92	5.4	278
127	Self-transferring Product Inhibition Observed during the Hydrolysis of Aryl- β -Glucopyranosides by a β -Glucosidase from <i>Agrobacterium tumefaciens</i> . <i>Journal of Applied Glycoscience (1999)</i> , 2011 , 58, 129-132	1	
126	p-Nitrophenyl β -Glycosides of β -1,4-Gluco/xylo-disaccharides for the Characterization of Subsites in Endo-xylanases. <i>Journal of Applied Glycoscience (1999)</i> , 2011 , 58, 115-118	1	
125	Distribution of in vitro fermentation ability of lacto-N-biose I, a major building block of human milk oligosaccharides, in bifidobacterial strains. <i>Applied and Environmental Microbiology</i> , 2010 , 76, 54-9	4.8	95
124	Crystal structure of an Exo-1,5- $\{\alpha\}$ -L-arabinofuranosidase from <i>Streptomyces avermitilis</i> provides insights into the mechanism of substrate discrimination between exo- and endo-type enzymes in glycoside hydrolase family 43. <i>Journal of Biological Chemistry</i> , 2010 , 285, 34134-43	5.4	31
123	Cooperation of β -galactosidase and N-acetylhexosaminidase from bifidobacteria in assimilation of human milk oligosaccharides with type 2 structure. <i>Glycobiology</i> , 2010 , 20, 1402-9	5.8	87
122	Practical preparation of D-galactosyl-beta1-->4-L-rhamnose employing the combined action of phosphorylases. <i>Bioscience, Biotechnology and Biochemistry</i> , 2010 , 74, 1652-5	2.1	33
121	Structural explanation for the acquisition of glycosynthase activity. <i>Journal of Biochemistry</i> , 2010 , 147, 237-44	3.1	20

120	Role of a PA14 domain in determining substrate specificity of a glycoside hydrolase family 3 β -glucosidase from <i>Kluyveromyces marxianus</i> . <i>Biochemical Journal</i> , 2010 , 431, 39-49	3.8	83
119	Improving Enzyme Character by Molecular Breeding: Preparation of Chimeric Genes 2010 , 31-42		
118	Glycosynthases from Inverting Hydrolases 2010 , 361-376		
117	Effect of growth temperature, induction, and molecular chaperones on the solubilization of over-expressed cellobiose phosphorylase from <i>Cellvibrio Gilvus</i> under in vivo conditions. <i>Biotechnology and Bioprocess Engineering</i> , 2010 , 15, 273-276	3.1	9
116	Characterization of d-galactosyl- β -1 \rightarrow 4-l-rhamnose phosphorylase from <i>Opiritutus terrae</i> . <i>Enzyme and Microbial Technology</i> , 2010 , 46, 315-319	3.8	10
115	Thermal decomposition of beta-D-galactopyranosyl-(1 \rightarrow 3)-2-acetamido-2-deoxy-D-hexopyranoses under neutral conditions. <i>Carbohydrate Research</i> , 2010 , 345, 1901-8	2.9	20
114	Analyses of Bifidobacterial Glycosidases Involved in the Metabolism of Oligosaccharides. <i>Bioscience and Microflora</i> , 2010 , 29, 23-30		6
113	Enzymatic Production of Cellobiose from Starch and Its Reduction to Cellobiitol. <i>Journal of Applied Glycoscience (1999)</i> , 2010 , 57, 113-119	1	2
112	<i>Bifidobacterium bifidum</i> Lacto- N -Biosidase, a Critical Enzyme for the Degradation of Human Milk Oligosaccharides with a Type 1 Structure. <i>Applied and Environmental Microbiology</i> , 2009 , 75, 6414-6414	4.8	78
111	Crystal structure of glycoside hydrolase family 55 {beta}-1,3-glucanase from the basidiomycete <i>Phanerochaete chrysosporium</i> . <i>Journal of Biological Chemistry</i> , 2009 , 284, 10100-9	5.4	40
110	The crystal structure of galacto-N-biose/lacto-N-biose I phosphorylase: a large deformation of a TIM barrel scaffold. <i>Journal of Biological Chemistry</i> , 2009 , 284, 7273-83	5.4	37
109	Characterization of three beta-galactoside phosphorylases from <i>Clostridium phytofermentans</i> : discovery of d-galactosyl-beta1 \rightarrow 4-l-rhamnose phosphorylase. <i>Journal of Biological Chemistry</i> , 2009 , 284, 19220-7	5.4	35
108	Crystallographic and mutational analyses of substrate recognition of endo-alpha-N-acetylgalactosaminidase from <i>Bifidobacterium longum</i> . <i>Journal of Biochemistry</i> , 2009 , 146, 389-98	3.1	40
107	Synthesis of highly ordered cellulose II in vitro using cellodextrin phosphorylase. <i>Carbohydrate Research</i> , 2009 , 344, 2468-73	2.9	91
106	Characterization of beta-1,3-galactosyl-N-acetylhexosamine phosphorylase from <i>Propionibacterium acnes</i> . <i>Applied Microbiology and Biotechnology</i> , 2009 , 83, 109-15	5.7	16
105	Purification, crystallization and preliminary X-ray analysis of beta-glucosidase from <i>Kluyveromyces marxianus</i> NBRC1777. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2009 , 65, 1190-2		9
104	Synthesis of cellobiose from starch by the successive actions of two phosphorylases. <i>New Biotechnology</i> , 2009 , 26, 137-42	6.4	28
103	Substrate specificity of N-acetylhexosamine kinase towards N-acetylgalactosamine derivatives. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 5433-5	2.9	34

102	One-pot enzymatic production of beta-D-galactopyranosyl-(1-->3)-2-acetamido-2-deoxy-D-galactose (galacto-N-biose) from sucrose and 2-acetamido-2-deoxy-D-galactose (N-acetylglactosamine). <i>Carbohydrate Research</i> , 2009 , 344, 2573-6	2.9	57
101	A chemoenzymatic route to N-acetylglucosamine-1-phosphate analogues: substrate specificity investigations of N-acetylhexosamine 1-kinase. <i>Chemical Communications</i> , 2009 , 2944-6	5.8	65
100	Prebiotic effect of lacto-N-biose I on bifidobacterial growth. <i>Bioscience, Biotechnology and Biochemistry</i> , 2009 , 73, 1175-9	2.1	49
99	2-Acetamido-2-de-oxy-3-O-Et-galactopyranosyl-d-glucose dihydrate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2009 , 65, o1781-2		4
98	Conversion of inverting glycoside hydrolases into catalysts for synthesizing glycosides employing a glycosynthase strategy. <i>Trends in Glycoscience and Glycotechnology</i> , 2009 , 21, 23-39	0.1	11
97	Conversion of an Inverting Glycoside Hydrolase into Glycosynthase. <i>Journal of Applied Glycoscience</i> (1999), 2009 , 56, 119-125	1	2
96	Modifying Enzyme Character by Gene Manipulation 2009 , 207-214		
95	Bifidobacterial Lacto-N-biose/Galacto-N-biose Pathway Involved in Intestinal Growth 2009 , 113-121		
94	1,2-alpha-l-Fucosynthase: a glycosynthase derived from an inverting alpha-glycosidase with an unusual reaction mechanism. <i>FEBS Letters</i> , 2008 , 582, 3739-43	3.8	88
93	Enzymatic hydrolysis of 1,3-1,4-beta-glucosyl oligosaccharides by 1,3-1,4-beta-glucanase from <i>Synechocystis</i> PCC6803: a comparison with assays using polymer and chromophoric oligosaccharide substrates. <i>Archives of Biochemistry and Biophysics</i> , 2008 , 478, 187-94	4.1	7
92	Bifidobacterium bifidum lacto-N-biosidase, a critical enzyme for the degradation of human milk oligosaccharides with a type 1 structure. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 3996-4004	4.8	176
91	Diversity and similarity of microbial communities in petroleum crude oils produced in Asia. <i>Bioscience, Biotechnology and Biochemistry</i> , 2008 , 72, 2831-9	2.1	44
90	Alternative strategy for converting an inverting glycoside hydrolase into a glycosynthase. <i>Glycobiology</i> , 2008 , 18, 325-30	5.8	48
89	Structural and thermodynamic analyses of solute-binding Protein from Bifidobacterium longum specific for core 1 disaccharide and lacto-N-biose I. <i>Journal of Biological Chemistry</i> , 2008 , 283, 13165-73	5.4	92
88	Identification of lacto-N-Biose I phosphorylase from <i>Vibrio vulnificus</i> CMCP6. <i>Applied and Environmental Microbiology</i> , 2008 , 74, 6333-7	4.8	23
87	Characterization of <i>Bacillus halodurans</i> alpha-galactosidase Mel4A encoded by the mel4A gene (BH2228). <i>Bioscience, Biotechnology and Biochemistry</i> , 2008 , 72, 2459-62	2.1	8
86	????????????????????????????????????????????????????????????-N-?????????????????????????????????????????. <i>Kagaku To Seibutsu</i> , 2008 , 46, 522-524	0	2
85	Strategy for Converting an Inverting Glycoside Hydrolase into a Glycosynthase 2008 , 193-205		1

84	Identification of galacto-N-biose phosphorylase from <i>Clostridium perfringens</i> ATCC13124. <i>Applied Microbiology and Biotechnology</i> , 2008 , 78, 465-71	5.7	27
83	A reducing-end-acting chitinase from <i>Vibrio proteolyticus</i> belonging to glycoside hydrolase family 19. <i>Applied Microbiology and Biotechnology</i> , 2008 , 78, 627-34	5.7	22
82	Computational analyses of the conformational itinerary along the reaction pathway of GH94 cellobiose phosphorylase. <i>Carbohydrate Research</i> , 2008 , 343, 1023-33	2.9	21
81	Colorimetric quantification of alpha-D-galactose 1-phosphate. <i>Analytical Biochemistry</i> , 2007 , 371, 259-61	3.1	14
80	Purification, crystallization and preliminary X-ray analysis of the galacto-N-biose-/lacto-N-biose I-binding protein (GL-BP) of the ABC transporter from <i>Bifidobacterium longum</i> JCM1217. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2007 , 63, 751-3		32
79	Characterization of raffinose synthase from rice (<i>Oryza sativa</i> L. var. Nipponbare). <i>Biotechnology Letters</i> , 2007 , 29, 635-40	3	19
78	Practical preparation of lacto-N-biose I, a candidate for the bifidus factor in human milk. <i>Bioscience, Biotechnology and Biochemistry</i> , 2007 , 71, 2101-4	2.1	126
77	Molecular anatomy of the alkaliphilic xylanase from <i>Bacillus halodurans</i> C-125. <i>Journal of Biochemistry</i> , 2007 , 141, 709-17	3.1	4
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