

Hisashi Ashida

List of Publications by Year in descending order

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94433

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83
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88
all docs

88
docs citations

88
times ranked

13205
citing authors

#	ARTICLE	IF	CITATIONS
1	Guidelines for the use and interpretation of assays for monitoring autophagy. <i>Autophagy</i> , 2012, 8, 445-544.	9.1	3,122
2	Physiology of Consumption of Human Milk Oligosaccharides by Infant Gut-associated Bifidobacteria. <i>Journal of Biological Chemistry</i> , 2011, 286, 34583-34592.	3.4	366
3	Mutants of <i>Mucor hiemalis</i> Endo- β -N-acetylglucosaminidase Show Enhanced Transglycosylation and Glycosynthase-like Activities. <i>Journal of Biological Chemistry</i> , 2008, 283, 4469-4479.	3.4	213
4	Two distinct α -L-fucosidases from <i>Bifidobacterium bifidum</i> are essential for the utilization of fucosylated milk oligosaccharides and glycoconjugates. <i>Glycobiology</i> , 2009, 19, 1010-1017.	2.5	208
5	Longevity in Mice Is Promoted by Probiotic-Induced Suppression of Colonic Senescence Dependent on Upregulation of Gut Bacterial Polyamine Production. <i>PLoS ONE</i> , 2011, 6, e23652.	2.5	207
6	<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> , 2008, 74, 3996-4004.	3.1	201
7	Deficiency of Dol-P-Man Synthase Subunit DPM3 Bridges the Congenital Disorders of Glycosylation with the Dystroglycanopathies. <i>American Journal of Human Genetics</i> , 2009, 85, 76-86.	6.2	178
8	Efficient Glycosynthase Mutant Derived from <i>Mucor hiemalis</i> Endo- β -N-acetylglucosaminidase Capable of Transferring Oligosaccharide from Both Sugar Oxazoline and Natural N-Glycan. <i>Journal of Biological Chemistry</i> , 2010, 285, 511-521.	3.4	140
9	An α -sialidase from bifidobacteria involved in the degradation of sialyloligosaccharides in human milk and intestinal glycoconjugates. <i>Glycobiology</i> , 2011, 21, 437-447.	2.5	121
10	<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, 361-368.	2.5	120
11	Chemoenzymatic synthesis and application of glycopolymers containing multivalent sialyloligosaccharides with a poly(L-glutamic acid) backbone for inhibition of infection by influenza viruses. <i>Glycobiology</i> , 2003, 13, 315-326.	2.5	112
12	Structural and Thermodynamic Analyses of Solute-binding Protein from <i>Bifidobacterium longum</i> Specific for Core 1 Disaccharide and Lacto-N-biose I. <i>Journal of Biological Chemistry</i> , 2008, 283, 13165-13173.	3.4	111
13	Cooperation of β -galactosidase and β -N-acetylhexosaminidase from bifidobacteria in assimilation of human milk oligosaccharides with type 2 structure. <i>Glycobiology</i> , 2010, 20, 1402-1409.	2.5	111
14	PGAP2 Is Essential for Correct Processing and Stable Expression of GPI-anchored Proteins. <i>Molecular Biology of the Cell</i> , 2006, 17, 1410-1420.	2.1	108
15	Efficient transfer of sialo-oligosaccharide onto proteins by combined use of a glycosynthase-like mutant of <i>Mucor hiemalis</i> endoglycosidase and synthetic sialo-complex-type sugar oxazoline. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2010, 1800, 1203-1209.	2.4	87
16	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.	3.4	83
17	α -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.	3.4	79
18	Differences in the Substrate Specificities and Active-Site Structures of Two α -Fucosidases (Glycoside Hydrolase Family 29) from <i>Bacteroides thetaiotaomicron</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2012, 76, 1022-1024.	1.3	75

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19	PIG-V Involved in Transferring the Second Mannose in Glycosylphosphatidylinositol. <i>Journal of Biological Chemistry</i> , 2005, 280, 9489-9497.	3.4	74
20	1,3-1,4- α -L-Fucosyltransferase That Specifically Introduces Lewis a/x Antigens into Type-1/2 Chains. <i>Journal of Biological Chemistry</i> , 2012, 287, 16709-16719.	3.4	74
21	Mammalian PIG-X and Yeast Pbn1p Are the Essential Components of Glycosylphosphatidylinositol-Mannosyltransferase I. <i>Molecular Biology of the Cell</i> , 2005, 16, 1439-1448.	2.1	68
22	Glucosamine induces autophagy via an mTOR-independent pathway. <i>Biochemical and Biophysical Research Communications</i> , 2010, 391, 1775-1779.	2.1	60
23	Characterization of two different endo- α -N-acetylgalactosaminidases from probiotic and pathogenic enterobacteria, <i>Bifidobacterium longum</i> and <i>Clostridium perfringens</i> . <i>Glycobiology</i> , 2008, 18, 727-734.	2.5	59
24	Prebiotic Effect of Lacto-N-biose I on Bifidobacterial Growth. <i>Bioscience, Biotechnology and Biochemistry</i> , 2009, 73, 1175-1179.	1.3	56
25	Design of a Sialylglycopolymer with a Chitosan Backbone Having Efficient Inhibitory Activity against Influenza Virus Infection. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 4496-4503.	6.4	54
26	GPI transamidase of <i>Trypanosoma brucei</i> has two previously uncharacterized (trypanosomatid) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46 the United States of America, 2003, 100, 10682-10687.	7.1	53
27	Crystal Structures of a Glycoside Hydrolase Family 20 Lacto-N-biosidase from <i>Bifidobacterium bifidum</i> . <i>Journal of Biological Chemistry</i> , 2013, 288, 11795-11806.	3.4	53
28	Crystal Structures of Phosphoketolase. <i>Journal of Biological Chemistry</i> , 2010, 285, 34279-34287.	3.4	52
29	Calorie Restriction Mimetics: Upstream-Type Compounds for Modulating Glucose Metabolism. <i>Nutrients</i> , 2018, 10, 1821.	4.1	50
30	Crystallographic and Mutational Analyses of Substrate Recognition of Endo- α -N-acetylgalactosaminidase from <i>Bifidobacterium longum</i> . <i>Journal of Biochemistry</i> , 2009, 146, 389-398.	1.7	48
31	GPI7 Is the Second Partner of PIG-F and Involved in Modification of Glycosylphosphatidylinositol. <i>Journal of Biological Chemistry</i> , 2005, 280, 9728-9734.	3.4	47
32	DPM1, the Catalytic Subunit of Dolichol-phosphate Mannose Synthase, Is Tethered to and Stabilized on the Endoplasmic Reticulum Membrane by DPM3. <i>Journal of Biological Chemistry</i> , 2006, 281, 896-904.	3.4	47
33	A Clostridial Endo- β -galactosidase That Cleaves Both Blood Group A and B Glycotopes. <i>Journal of Biological Chemistry</i> , 2005, 280, 7720-7728.	3.4	45
34	CHO Glycosylation Mutants: GPI Anchor. <i>Methods in Enzymology</i> , 2006, 416, 182-205.	1.0	42
35	β -Glucuronidase from <i>Lactobacillus brevis</i> useful for baicalin hydrolysis belongs to glycoside hydrolase family 30. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 4021-4032.	3.6	42
36	Enzymatic Adaptation of <i>Bifidobacterium bifidum</i> to Host Glycans, Viewed from Glycoside Hydrolases and Carbohydrate-Binding Modules. <i>Microorganisms</i> , 2020, 8, 481.	3.6	41

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37	Characterization of Endo- β -N-acetylgalactosaminidase from <i>Bacillus</i> sp. and Syntheses of Neo-oligosaccharides Using Its Transglycosylation Activity. <i>Archives of Biochemistry and Biophysics</i> , 2000, 373, 394-400.	3.0	38
38	Identification and characterization of endo- β -N-acetylglucosaminidase from methylotrophic yeast <i>Ogataea minuta</i> . <i>Glycobiology</i> , 2013, 23, 736-744.	2.5	37
39	Two Novel β -Arabinofuranosidases from <i>Bifidobacterium longum</i> subsp. <i>longum</i> Belonging to Glycoside Hydrolase Family 43 Cooperatively Degrade Arabinan. <i>Applied and Environmental Microbiology</i> , 2019, 85, .	3.1	37
40	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, 751-753.	0.7	36
41	Free Oligosaccharides in the Cytosol of <i>Caenorhabditis elegans</i> Are Generated through Endoplasmic Reticulum-Golgi Trafficking. <i>Journal of Biological Chemistry</i> , 2007, 282, 22080-22088.	3.4	35
42	Purification and characterization of membrane-bound endoglycoceramidase from <i>Corynebacterium</i> sp.. <i>FEBS Journal</i> , 1992, 205, 729-735.	0.2	34
43	Introduction of H-antigens into oligosaccharides and sugar chains of glycoproteins using highly efficient 1,2- β -L-fucosyltransferase. <i>Glycobiology</i> , 2016, 26, 1235-1247.	2.5	31
44	Identification and characterization of a sulfoglycosidase from <i>Bifidobacterium bifidum</i> implicated in mucin glycan utilization. <i>Bioscience, Biotechnology and Biochemistry</i> , 2017, 81, 2018-2027.	1.3	30
45	Glycoside Hydrolase Family 89 β -N-acetylglucosaminidase from <i>Clostridium perfringens</i> Specifically Acts on GlcNAc β 1,4Gal β 1R at the Non-reducing Terminus of O-Glycans in Gastric Mucin. <i>Journal of Biological Chemistry</i> , 2011, 286, 6479-6489.	3.4	29
46	<i>Bifidobacterium</i> β -galactosidase with unique carbohydrate-binding module specifically acts on blood group B antigen. <i>Glycobiology</i> , 2013, 23, 232-240.	2.5	28
47	Unique Peptide:N-glycanase of <i>Caenorhabditis elegans</i> has Activity of Protein Disulphide Reductase as well as of Deglycosylation. <i>Journal of Biochemistry</i> , 2007, 142, 175-181.	1.7	26
48	β -N-Acetylglucosaminidase from <i>Bifidobacterium bifidum</i> specifically hydrolyzes β -linked N-acetylglucosamine at nonreducing terminus of O-glycan on gastric mucin. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 3941-3948.	3.6	25
49	Transglycosylation Activity of Endoglycoceramidase from <i>Corynebacterium</i> sp. <i>Archives of Biochemistry and Biophysics</i> , 1993, 305, 559-562.	3.0	24
50	A Novel Endo- β -galactosidase from <i>Clostridium perfringens</i> That Liberates the Disaccharide GlcNAc β 1,4Gal from Glycans Specifically Expressed in the Gastric Gland Mucous Cell-type Mucin. <i>Journal of Biological Chemistry</i> , 2001, 276, 28226-28232.	3.4	21
51	Glucosamine Extends the Lifespan of <i>Caenorhabditis elegans</i> via Autophagy Induction. <i>Journal of Applied Glycoscience</i> (1999), 2018, 65, 37-43.	0.7	21
52	The first crystal structure of a family 129 glycoside hydrolase from a probiotic bacterium reveals critical residues and metal cofactors. <i>Journal of Biological Chemistry</i> , 2017, 292, 12126-12138.	3.4	20
53	Enzymatic syntheses of T antigen-containing glycolipid mimicry using the transglycosylation activity of endo- β -N-acetylgalactosaminidase. <i>Carbohydrate Research</i> , 2001, 330, 487-493.	2.3	19
54	TbGPI16 is an essential component of GPI transamidase in <i>Trypanosoma brucei</i> . <i>FEBS Letters</i> , 2006, 580, 603-606.	2.8	19

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55	A selected probiotic strain of <i>Lactobacillus fermentum</i> CM33 isolated from breast-fed infants as a potential source of β -galactosidase for prebiotic oligosaccharide synthesis. <i>Journal of Microbiology</i> , 2012, 50, 119-126.	2.8	19
56	Molecular Cloning of cDNA Encoding β -N-Acetylgalactosaminidase from <i>Acremonium</i> sp. and Its Expression in Yeast. <i>Archives of Biochemistry and Biophysics</i> , 2000, 384, 305-310.	3.0	18
57	One-step synthesis of efficient binding-inhibitor for influenza virus through multiple addition of sialyloligosaccharides on chitosan. <i>Carbohydrate Polymers</i> , 2010, 81, 330-334.	10.2	18
58	Removal or Maintenance of Inositol-linked Acyl Chain in Glycosylphosphatidylinositol Is Critical in Trypanosome Life Cycle. <i>Journal of Biological Chemistry</i> , 2006, 281, 11595-11602.	3.4	17
59	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.	2.3	15
60	Bifunctional properties and characterization of a novel sialidase with esterase activity from <i>Bifidobacterium bifidum</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2018, 82, 2030-2039.	1.3	15
61	Characterization of a Novel Endo- β -galactosidase Specific for Releasing the Disaccharide GlcNAc β 1-4Gal from Glycoconjugates. <i>Biochemistry</i> , 2002, 41, 2388-2395.	2.5	14
62	Structural analysis of cerebrosides from <i>Aspergillus</i> fungi: the existence of galactosylceramide in <i>A. oryzae</i> . <i>Biotechnology Letters</i> , 2014, 36, 2507-2513.	2.2	14
63	Both Mammalian PIG-M and PIG-X are Required for Growth of GPI14-Disrupted Yeast. <i>Journal of Biochemistry</i> , 2007, 142, 123-129.	1.7	13
64	Application study of 1,2- β -fucosynthase: introduction of Fuc β 1-2Gal disaccharide structures on N-glycan, ganglioside, and xyloglucan oligosaccharide. <i>Bioscience, Biotechnology and Biochemistry</i> , 2017, 81, 283-291.	1.3	13
65	Three-dimensional structure of GlcNAc β 1-4Gal releasing Endo- β -Galactosidase from <i>Clostridium perfringens</i> . <i>Proteins: Structure, Function and Bioinformatics</i> , 2005, 59, 141-144.	2.6	12
66	Functions of Novel Glycosidases Isolated from Bifidobacteria. <i>Journal of Applied Glycoscience</i> (1999), 2008, 55, 101-109.	0.7	11
67	Syntheses of mucin-type O-glycopeptides and oligosaccharides using transglycosylation and reverse-hydrolysis activities of <i>Bifidobacterium endo-β-N-acetylgalactosaminidase</i> . <i>Glycoconjugate Journal</i> , 2010, 27, 125-132.	2.7	11
68	Overexpression, crystallization and preliminary X-ray analysis of xylulose-5-phosphate/fructose-6-phosphate phosphoketolase from <i>Bifidobacterium breve</i> . <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2010, 66, 941-943.	0.7	11
69	1,6- β -L-Fucosidases from <i>Bifidobacterium longum</i> subsp. <i>infantis</i> ATCC 15697 Involved in the Degradation of Core-fucosylated N-Glycan. <i>Journal of Applied Glycoscience</i> (1999), 2020, 67, 23-29.	0.7	11
70	Formation of Lyso-glycosphingolipids by <i>Streptomyces</i> sp. <i>Bioscience, Biotechnology and Biochemistry</i> , 1995, 59, 2028-2032.	1.3	10
71	Deficiency of β -glucosidase I alters glycoprotein glycosylation and lifespan in <i>Caenorhabditis elegans</i> . <i>Glycobiology</i> , 2013, 23, 1142-1151.	2.5	9
72	Two β -l-arabinofuranosidases from <i>Bifidobacterium longum</i> subsp. <i>longum</i> are involved in arabinoxylan utilization. <i>Applied Microbiology and Biotechnology</i> , 2022, 106, 1957-1965.	3.6	9

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73	Glycan region of GPI anchored-protein is required for cytotoxic oligomerization of an anticancer parasporin-2, Cry46Aa1 protein, from <i>Bacillus thuringiensis</i> strain A1547. <i>Journal of Invertebrate Pathology</i> , 2017, 142, 71-81.	3.2	8
74	Chemo-enzymatic synthesis of the glucagon containing N-linked oligosaccharide and its characterization. <i>Carbohydrate Research</i> , 2018, 455, 92-96.	2.3	8
75	Mechanism of Cooperative Degradation of Gum Arabic Arabinogalactan Protein by <i>Bifidobacterium longum</i> Surface Enzymes. <i>Applied and Environmental Microbiology</i> , 2022, 88, aem0218721.	3.1	8
76	Trypsin Inhibitory Activity of Bovine Fetuin De-O-glycosylated by Endo- β -N-acetylgalactosaminidase. <i>Bioscience, Biotechnology and Biochemistry</i> , 2000, 64, 2266-2268.	1.3	7
77	Identification of a second catalytically active trans-sialidase in <i>Trypanosoma brucei</i> . <i>Biochemical and Biophysical Research Communications</i> , 2011, 415, 421-425.	2.1	7
78	Putrescine Production by <i>Lactobacillus curvatus</i> KP 3-4 Isolated from Fermented Foods. <i>Microorganisms</i> , 2022, 10, 697.	3.6	6
79	Novel neogala-series glycosphingolipids with terminal mannose and glucose residues from <i>Hirsutella rossiliensis</i> , an aureobasidin A-resistant ascomycete fungus. <i>Glycobiology</i> , 2010, 20, 433-441.	2.5	5
80	Glycosidases: Inborn Errors of Glycosphingolipid Catabolism. <i>Advances in Neurobiology</i> , 2014, 9, 463-484.	1.8	5
81	Generation and Metabolism of Cytosolic Free Oligosaccharides in <i>Caenorhabditis elegans</i> . <i>Trends in Glycoscience and Glycotechnology</i> , 2009, 21, 163-177.	0.1	5
82	Shifting the focus of d-glucosamine from a dietary supplement for knee osteoarthritis to a potential anti-aging drug. <i>Human Nutrition and Metabolism</i> , 2021, 26, 200134.	1.7	4
83	Crystallization and preliminary X-ray analysis of GlcNAc β 1,4Gal-releasing endo- β -galactosidase from <i>Clostridium perfringens</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 537-538.	2.5	2
84	<i>Bifidobacterium bifidum</i> Lacto- <i>N</i> -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.	3.1	0
85	[Review] Symbiotic Mechanism between Intestinal Microorganisms and Host through Mucin Glycans. <i>Bulletin of Applied Glycoscience</i> , 2021, 11, 14-21.	0.0	0
86	[Review: Symposium on Applied Glycoscience] A Novel Glycosynthase-like Mutant of Endoglycosidase from <i>Mucor hiemalis</i> Enables Efficient Syntheses of Glycoconjugates. <i>Bulletin of Applied Glycoscience</i> , 2013, 3, 143-150.	0.0	0
87	[Review] Hexoses with Anti-aging Effect and Strategies for Achieving Healthy Longevity. <i>Bulletin of Applied Glycoscience</i> , 2019, 9, 98-102.	0.0	0