

# Yasuhiro Kajihara

## List of Publications by Year in descending order

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98  
papers

2,786  
citations

172457

29  
h-index

197818

49  
g-index

112  
all docs

112  
docs citations

112  
times ranked

1687  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical assembly of N-glycoproteins: a refined toolbox to address a ubiquitous posttranslational modification. <i>Chemical Society Reviews</i> , 2013, 42, 4408.	38.1	203
2	Prompt Chemoenzymatic Synthesis of Diverse Complex-Type Oligosaccharides and Its Application to the Solid-Phase Synthesis of a Glycopeptide with Asn-Linked Sialyl-undeca- and Asialo-nonasaccharides. <i>Chemistry - A European Journal</i> , 2004, 10, 971-985.	3.3	162
3	Chemical Synthesis of a Glycoprotein Having an Intact Human Complex-Type Sialyloligosaccharide under the Boc and Fmoc Synthetic Strategies. <i>Journal of the American Chemical Society</i> , 2008, 130, 501-510.	13.7	159
4	Chemical Synthesis of an Erythropoietin Glycoform Containing a Complex-Type Disialyloligosaccharide. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 3567-3572.	13.8	135
5	Chemical Synthesis of Homogeneous Human Glycosyl-interferon- $\beta$ That Exhibits Potent Antitumor Activity in Vivo. <i>Journal of the American Chemical Society</i> , 2012, 134, 5428-5431.	13.7	111
6	Chemical synthesis of erythropoietin glycoforms for insights into the relationship between glycosylation pattern and bioactivity. <i>Science Advances</i> , 2016, 2, e1500678.	10.3	102
7	Design and Synthesis of a Homogeneous Erythropoietin Analogue with Two Human Complex-Type Sialyloligosaccharides: Combined Use of Chemical and Bacterial Protein Expression Methods. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 9557-9560.	13.8	82
8	Convenient synthesis of a sialylglycopeptide-thioester having an intact and homogeneous complex-type disialyl-oligosaccharide. <i>Carbohydrate Research</i> , 2006, 341, 1333-1340.	2.3	79
9	Ultra-large chemical libraries for the discovery of high-affinity peptide binders. <i>Nature Communications</i> , 2020, 11, 3183.	12.8	73
10	Chemical Synthesis of Intentionally Misfolded Homogeneous Glycoprotein: A Unique Approach for the Study of Glycoprotein Quality Control. <i>Journal of the American Chemical Society</i> , 2012, 134, 7238-7241.	13.7	66
11	Both isoforms of human UDP-glucose:glycoprotein glucosyltransferase are enzymatically active. <i>Glycobiology</i> , 2014, 24, 344-350.	2.5	66
12	Uncovering a Latent Ligation Site for Glycopeptide Synthesis. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 5402-5406.	13.8	65
13	(Quasi-)Racemic X-ray Structures of Glycosylated and Non-Glycosylated Forms of the Chemokine Ser $\beta$ CCL1 Prepared by Total Chemical Synthesis. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5194-5198.	13.8	59
14	Solid-Phase Synthesis of Sialylglycopeptides through Selective Esterification of the Sialic Acid Residues of an Asn-Linked Complex-Type Sialyloligosaccharide. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 2537-2540.	13.8	56
15	Characterization of inhibitory activities and binding mode of synthetic 6 $\alpha$ - <sup>2</sup> -modified methyl N-acetyl- $\beta$ -lactosaminide toward rat liver CMP-d-Neu5Ac: d-galactoside-(2 $\rightarrow$ 6)- $\beta$ -d-sialyltransferase. <i>Carbohydrate Research</i> , 1993, 247, 179-193.	2.3	48
16	Efficient Chemical Synthesis of CMP-Neu5Ac and CMP-(Neu5Ac.alpha.2.fwdarw.8Neu5Ac). <i>Journal of Organic Chemistry</i> , 1995, 60, 5732-5735.	3.2	48
17	An Approach for a Synthesis of Asparagine-Linked Sialylglycopeptides Having Intact and Homogeneous Complex-Type Undecadisialyloligosaccharides. <i>Chemistry - A European Journal</i> , 2007, 13, 613-625.	3.3	47
18	A Synthetic Approach to a Peptide $\beta$ -Thioester from an Unprotected Peptide through Cleavage and Activation of a Specific Peptide Bond by $\alpha$ -Acetylguanidine. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 191-196.	13.8	47

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19	Functional analysis of endoplasmic reticulum glucosyltransferase (UGGT): Synthetic chemistry's initiative in glycobiology. <i>Seminars in Cell and Developmental Biology</i> , 2015, 41, 90-98.	5.0	46
20	Total Chemical Synthesis and Biological Activities of Glycosylated and Non-Glycosylated Forms of the Chemokines CCL1 and Ser-CCL1. <i>Angewandte Chemie - International Edition</i> , 2014, 53, n/a-n/a.	13.8	43
21	Semisynthesis of Intact Complex-Type Triantennary Oligosaccharides from a Biantennary Oligosaccharide Isolated from a Natural Source by Selective Chemical and Enzymatic Glycosylation. <i>Journal of the American Chemical Society</i> , 2016, 138, 3461-3468.	13.7	41
22	Total Chemical Synthesis of a Nonfibrillating Human Glycoinsulin. <i>Journal of the American Chemical Society</i> , 2020, 142, 1164-1169.	13.7	41
23	Efficient synthesis of glycopeptide- $\beta$ -thioesters with a high-mannose type oligosaccharide by means of tert-Boc-solid phase peptide synthesis. <i>Carbohydrate Research</i> , 2012, 364, 41-48.	2.3	38
24	Folding of Synthetic Homogeneous Glycoproteins in the Presence of a Glycoprotein Folding Sensor Enzyme. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2883-2887.	13.8	38
25	Recent advances in the chemical synthesis of N-linked glycoproteins. <i>Current Opinion in Chemical Biology</i> , 2018, 46, 130-137.	6.1	37
26	Efficient Substitution Reaction from Cysteine to the Serine Residue of Glycosylated Polypeptide: Repetitive Peptide Segment Ligation Strategy and the Synthesis of Glycosylated Tetracontapeptide Having Acid Labile Sialyl-TN Antigens. <i>Journal of Organic Chemistry</i> , 2009, 74, 2494-2501.	3.2	35
27	Chemical Synthesis of an Erythropoietin Glycoform Having a Triantennary <i>N</i> -Glycan: Significant Change of Biological Activity of Glycoprotein by Addition of a Small Molecular Weight Trisaccharide. <i>Journal of the American Chemical Society</i> , 2020, 142, 20671-20679.	13.7	33
28	Monitoring of Glycoprotein Quality Control System with a Series of Chemically Synthesized Homogeneous Native and Misfolded Glycoproteins. <i>Journal of the American Chemical Society</i> , 2018, 140, 17499-17507.	13.7	31
29	Efficient Synthesis of MUC4 Sialylglycopeptide through the New Sialylation Using 5-Acetamido-Neuraminamide Donors. <i>Journal of Organic Chemistry</i> , 2008, 73, 3460-3466.	3.2	30
30	<sup>15</sup> N-Amino Acid Scan of Two Small Proteins. <i>Journal of the American Chemical Society</i> , 2016, 138, 12099-12111.	13.7	30
31	Chemical synthesis of homogeneous glycopeptides and glycoproteins. <i>Chemical Record</i> , 2010, 10, 80-100.	5.8	28
32	Convenient synthesis of a glycopeptide analogue having a complex type disialyl-undecasaccharide. <i>Tetrahedron Letters</i> , 2004, 45, 3287-3290.	1.4	27
33	Substrate Recognition of Glycoprotein Folding Sensor UGGT Analyzed by Site-Specifically <sup>15</sup> N-Labeled Glycopeptide and Small Glycopeptide Library Prepared by Parallel Native Chemical Ligation. <i>Journal of the American Chemical Society</i> , 2017, 139, 11421-11426.	13.7	23
34	Protein Cysteine Modifications: (2) Reactivity Specificity and Topics of Medicinal Chemistry and Protein Engineering. <i>Current Medicinal Chemistry</i> , 2009, 16, 4490-4501.	2.4	22
35	Decoration of proteins with sugar chains: recent advances in glycoprotein synthesis. <i>Current Opinion in Chemical Biology</i> , 2014, 22, 92-99.	6.1	22
36	Efficient and systematic synthesis of a small glycoconjugate library having human complex type oligosaccharides. <i>Carbohydrate Research</i> , 2009, 344, 762-770.	2.3	20

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37	Efficient synthesis of polypeptide- $\alpha$ -thioester by the method combining polypeptide expression and chemical activation for the semi-synthesis of interferon- $\beta$ having oligosaccharides. <i>Journal of Peptide Science</i> , 2014, 20, 958-963.	1.4	20
38	Homogeneous Human Complex-type Oligosaccharides in Correctly Folded Intact Glycoproteins: Evaluation of Oligosaccharide Influence On Protein Folding, Stability, and Conformational Properties. <i>Chemistry - A European Journal</i> , 2012, 18, 5944-5953.	3.3	18
39	An unambiguous assignment method by 2D selective-TOCSY-HSQC and selective-TOCSY-DQFCOSY and structural analysis by selective-TOCSY-NOESY experiments of a biantennary undecasaccharide. <i>Carbohydrate Research</i> , 2005, 340, 469-479.	2.3	17
40	Safe and efficient Boc-SPPS for the synthesis of glycopeptide- $\alpha$ -thioesters. <i>Journal of Peptide Science</i> , 2014, 20, 98-101.	1.4	17
41	Title is missing!. <i>Angewandte Chemie</i> , 2003, 115, 2641-2644.	2.0	16
42	Unique Self-Anhydride Formation in the Degradation of Cytidine- $5'$ -monophosphosialic Acid (CMP-Neu5Ac) and Cytidine- $5'$ -diphosphosialic Acid (CDP-Neu5Ac) and its Application in CMP-sialic Acid Analogue Synthesis. <i>Chemistry - A European Journal</i> , 2011, 17, 7645-7655.	1.3	16
43	Effects of domain composition on catalytic activity of human UDP-glucose:glycoprotein glucosyltransferases. <i>Glycobiology</i> , 2016, 26, 999-1006.	2.5	16
44	Highly efficient synthesis of sialylglycopeptides overcoming unexpected aspartimide formation during activation of Fmoc-Asn(undecadisialyloligosaccharide)-OH. <i>Tetrahedron Letters</i> , 2006, 47, 1341-1346.	1.4	15
45	Synthesis of CMP- $9'$ -modified-sialic acids as donor substrate analogues for mammalian and bacterial sialyltransferases. <i>Carbohydrate Research</i> , 2007, 342, 1680-1688.	2.3	15
46	Semisynthesis of a Post-translationally Modified Protein by Using Chemical Cleavage and Activation of an Expressed Fusion Polypeptide. <i>Chemistry - A European Journal</i> , 2014, 20, 10425-10430.	3.3	15
47	Synthesis of Glc <sub>1</sub> Man <sub>9</sub> -Glycoprotein Probes by a Misfolding/Enzymatic Glucosylation/Misfolding Sequence. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3968-3971.	13.8	15
48	Glycoprotein Semisynthesis by Chemical Insertion of Glycosyl Asparagine Using a Bifunctional Thioacid-Mediated Strategy. <i>Journal of the American Chemical Society</i> , 2021, 143, 10157-10167.	13.7	14
49	Regioselective $\alpha$ -Peptide Bond Formation Through the Oxidation of Amino Thioacids. <i>Biochemistry</i> , 2019, 58, 1672-1678.	2.5	13
50	An $\alpha$ 2,3-Sialyltransferase from <i>Photobacterium</i> sp. JT-ISH-224 Transfers N-Acetylneuraminic Acid to Both the O-2 and O-3 Hydroxyl Groups of Lactose. <i>Journal of Carbohydrate Chemistry</i> , 2010, 29, 51-60.	1.1	12
51	Chemical-Synthesis-Based Approach to Glycoprotein Functions in the Endoplasmic Reticulum. <i>Chemistry - A European Journal</i> , 2020, 26, 15461-15470.	3.3	12
52	Chemoenzymatic synthesis of diverse asparagine-linked $\alpha$ -(2,3)-sialyloligosaccharides. <i>Glycoconjugate Journal</i> , 2004, 21, 243-250.	2.7	11
53	2D Selective-TOCSY-DQFCOSY and HSQC-TOCSY NMR experiments for assignment of a homogeneous asparagine-linked triantennary complex type undecasaccharide. <i>Carbohydrate Research</i> , 2008, 343, 1333-1345.	2.3	11
54	Definitive evidence that a single N-glycan among three glycans on inducible costimulator is required for proper protein trafficking and ligand binding. <i>Biochemical and Biophysical Research Communications</i> , 2010, 391, 557-563.	2.1	10

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55	Semisynthesis of Erythropoietin Analog Having Three Oligosaccharides. <i>Journal of Carbohydrate Chemistry</i> , 2011, 30, 306-319.	1.1	10
56	Total Synthesis of $\alpha$ -GalNAcylated Antifreeze Glycoprotein using the Switchable Reactivity of Peptidyl-N- $\epsilon$ -pivaloylguanidine. <i>Chemistry - A European Journal</i> , 2017, 23, 9253-9257.	3.3	9
57	Semisynthesis of Complex-Type Biantennary Oligosaccharides Containing Lactosamine Repeating Units from a Biantennary Oligosaccharide Isolated from a Natural Source. <i>Journal of Organic Chemistry</i> , 2018, 83, 443-451.	3.2	9
58	Purified EDEM3 or EDEM1 alone produces determinant oligosaccharide structures from M8B in mammalian glycoprotein ERAD. <i>ELife</i> , 2021, 10, .	6.0	9
59	Unique cleavage of 2-acetamido-2-deoxy-d-glucose from the reducing end of biantennary complex type oligosaccharides. <i>Carbohydrate Research</i> , 2010, 345, 1702-1707.	2.3	8
60	Chemical Synthesis of Glycoproteins with the Specific Installation of Gradient-Enriched $^{15}\text{N}$ -Labeled Amino Acids for Getting Insights into Glycoprotein Behavior. <i>Chemistry - A European Journal</i> , 2017, 23, 6579-6585.	3.3	8
61	Expanding the Scope of Native Chemical Ligation in Glycopeptide Synthesis. <i>International Journal of Peptide Research and Therapeutics</i> , 2010, 16, 191-198.	1.9	7
62	Synthesis of misfolded glycoprotein dimers through native chemical ligation of a dimeric peptide thioester. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 6088-6094.	2.8	7
63	Studies on the Precise Chemical Synthesis of Human Glycoproteins. <i>Bulletin of the Chemical Society of Japan</i> , 2016, 89, 409-423.	3.2	7
64	An efficient solid-phase synthesis of peptidyl-N- $\epsilon$ -acetylguanidines for use in native chemical ligation. <i>Journal of Peptide Science</i> , 2016, 22, 343-351.	1.4	7
65	Chemical Modification of the N Termini of Unprotected Peptides for Semisynthesis of Modified Proteins by Utilizing a Hydrophilic Protecting Group. <i>Chemistry - A European Journal</i> , 2019, 25, 10197-10203.	3.3	7
66	Identification of the epitope of 10-7G glycan antibody to recognize cancer-associated haptoglobin. <i>Analytical Biochemistry</i> , 2020, 593, 113588.	2.4	7
67	Acceleration and Deceleration Factors on the Hydrolysis Reaction of 4,6-O-Benzylidene Acetal Group. <i>Journal of Organic Chemistry</i> , 2020, 85, 15849-15856.	3.2	7
68	Synthesis of Glycopeptides. <i>Methods in Enzymology</i> , 2010, 478, 503-519.	1.0	6
69	Elucidating the Function of Complex-Type Oligosaccharides by Use of Chemical Synthesis of Homogeneous Glycoproteins. <i>Israel Journal of Chemistry</i> , 2011, 51, 917-929.	2.3	6
70	Misfolded Glycoproteins as Probes for Analysis of Folding Sensor Enzyme UDP-Glucose. <i>Trends in Glycoscience and Glycotechnology</i> , 2013, 25, 1-12.	0.1	6
71	Synthesis of d, l-amino acid derivatives bearing a thiol at the $\beta^2$ -position and their enzymatic optical resolution. <i>Tetrahedron Letters</i> , 2015, 56, 6565-6568.	1.4	6
72	Direct assay for endo- $\beta$ -mannosidase substrate preference on correctly folded and misfolded model glycoproteins. <i>Carbohydrate Research</i> , 2016, 434, 94-98.	2.3	6

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73	Synthesis of Glc<sub>1</sub>Man<sub>9</sub>â€Glycoprotein Probes by a Misfolding/Enzymatic Glucosylation/Misfolding Sequence. <i>Angewandte Chemie</i> , 2016, 128, 4036-4039.	2.0	6
74	Semisynthesis of a Homogeneous Glycoprotein Using Chemical Transformation of Peptides to Thioester Surrogates. <i>Journal of Organic Chemistry</i> , 2022, 87, 114-124.	3.2	6
75	Synthesis of Heavily Glycosylated Peptide<sup>Î±</sup> Thioester. <i>Journal of Carbohydrate Chemistry</i> , 2010, 29, 84-91.	1.1	5
76	The study of glycopeptide syntheses: exploring concise O-linked sialylglycopeptide synthesis and glycopeptide coupling reaction. <i>Trends in Glycoscience and Glycotechnology</i> , 2008, 20, 203-217.	0.1	5
77	Chemical Synthesis of a Synthetic Analogue of the Sialic Acidâ€Binding Lectin Siglecâ€7. <i>ChemBioChem</i> , 2014, 15, 2503-2507.	2.6	4
78	Chemical Synthesis of Homogeneous Glycoproteins for the Study of Glycoprotein Quality Control System. <i>Israel Journal of Chemistry</i> , 2015, 55, 306-314.	2.3	4
79	Efficient Synthesis of L-galactose from D-galactose. <i>Journal of Carbohydrate Chemistry</i> , 2015, 34, 560-566.	1.1	3
80	Evaluation of the effect of postâ€translational modification toward protein structure: Chemical synthesis of glycosyl crambins having either a high mannoseâ€type or a complexâ€type oligosaccharide. <i>Biopolymers</i> , 2016, 106, 446-452.	2.4	3
81	Chemical Synthesis of Ubiquitinated High-Mannose-Type N-Glycoprotein CCL1 in Different Folding States. <i>Journal of Organic Chemistry</i> , 2020, 85, 16024-16034.	3.2	3
82	Inside Cover: Design and Synthesis of a Homogeneous Erythropoietin Analogue with Two Human Complex-Type Sialyloligosaccharides: Combined Use of Chemical and Bacterial Protein Expression Methods ( <i>Angew. Chem. Int. Ed.</i> 50/2009). <i>Angewandte Chemie - International Edition</i> , 2009, 48, 9378-9378.	13.8	2
83	Inside Cover: Chemical Synthesis of an Erythropoietin Glycoform Containing a Complex-type Disialyloligosaccharide ( <i>Angew. Chem. Int. Ed.</i> 15/2012). <i>Angewandte Chemie - International Edition</i> , 2012, 51, 3494-3494.	13.8	2
84	Effects of N-Glycans on Glycoprotein Folding and Protein Dynamics. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1104, 1-19.	1.6	2
85	Chemical Synthesis and Characterization of a Nonfibrillating Glycoglucagon. <i>Bioconjugate Chemistry</i> , 2021, 32, 2148-2153.	3.6	2
86	Optimization of Semisynthetic Approach for Glycosyl Interferon-Î²-polypeptide by Utilizing Bacterial Protein Expression and Chemical Modification. <i>Organic and Biomolecular Chemistry</i> , 2022, , .	2.8	2
87	Design and Synthesis of Glycosylated Cholera Toxin B Subunit as a Tracer of Glycoprotein Trafficking in Organelles of Living Cells. <i>Chemistry - A European Journal</i> , 0, , .	3.3	2
88	A Chemoselective Peptide Bond Formation by Amino Thioacid Coupling. <i>Chemistry Letters</i> , 2019, 48, 1391-1393.	1.3	1
89	Chemical Synthesis of Homogeneous Glycoproteins. , 2015, , 313-321.		1
90	Recent Chemical Glycoprotein Syntheses. <i>Trends in Glycoscience and Glycotechnology</i> , 2019, 31, SE25-SE27.	0.1	1

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91	Innentitelbild: Design and Synthesis of a Homogeneous Erythropoietin Analogue with Two Human Complex-Type Sialyloligosaccharides: Combined Use of Chemical and Bacterial Protein Expression Methods (Angew. Chem. 50/2009). Angewandte Chemie, 2009, 121, 9542-9542.	2.0	0
92	Innentitelbild: Chemical Synthesis of an Erythropoietin Glycoform Containing a Complex-type Disialyloligosaccharide (Angew. Chem. 15/2012). Angewandte Chemie, 2012, 124, 3552-3552.	2.0	0
93	N,N-Dimethylaminoxy Carbonyl, a Polar Protecting Group for Efficient Peptide Synthesis. Frontiers in Chemistry, 2019, 7, 173.	3.6	0
94	Chemical Synthesis of Homogeneous Glycoproteins. , 2014, , 1-8.		0
95	Glycoengineering. , 2019, , 145-166.		0
96	Chemical and Enzymatic Synthesis and Production of Glycans. , 2019, , 65-86.		0
97	Recent Chemical Glycoprotein Syntheses. Trends in Glycoscience and Glycotechnology, 2019, 31, SJ25-SJ27.	0.1	0
98	Studies for Elucidation of Oligosaccharide Functions of Glycoproteins. Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry, 2020, 78, 1021-1038.	0.1	0