Kiyoko F Aoki-Kinoshita

List of Publications by Year
in descending order

104 papers	6,913 citations	136740 32 h-index	62479 80 g-index
115 all docs	115 docs citations	115 times ranked	8707 citing authors

#	Article	IF	Citations
1	From genomics to chemical genomics: new developments in KEGG. Nucleic Acids Research, 2006, 34, D354-D357.	6.5	2,662
2	Symbol Nomenclature for Graphical Representations of Glycans. Glycobiology, 2015, 25, 1323-1324.	1.3	818
3	Updates to the Symbol Nomenclature for Glycans guidelines. Glycobiology, 2019, 29, 620-624.	1.3	292
4	KEGG as a glycome informatics resource. Glycobiology, 2006, 16, 63R-70R.	1.3	279
5	Gene Annotation and Pathway Mapping in KEGG. Methods in Molecular Biology, 2007, 396, 71-91.	0.4	238
6	UniCarbKB: building a knowledge platform for glycoproteomics. Nucleic Acids Research, 2014, 42, D215-D221.	6.5	147
7	GlyTouCan: an accessible glycan structure repository. Glycobiology, 2017, 27, 915-919.	1.3	123
8	GlyGen: Computational and Informatics Resources for Glycoscience. Glycobiology, 2020, 30, 72-73.	1.3	123
9	MIRAGE: The minimum information required for a glycomics experiment. Glycobiology, 2014, 24, 402-406.	1.3	116
10	GlyTouCan 1.0 â€“ The international glycan structure repository. Nucleic Acids Research, 2016, 44, D1237-D1242.	6.5	83
11	GlycoPOST realizes FAIR principles for glycomics mass spectrometry data. Nucleic Acids Research, 2021, 49, D1523-D1528.	6.5	78
12	The GlyCosmos Portal: a unified and comprehensive web resource for the glycosciences. Nature Methods, 2020, 17, 649-650.	9.0	71
13	Towards a standardized bioinformatics infrastructure for N- and O-glycomics. Nature Communications, 2019, 10, 3275.	5.8	70
14	The minimum information required for a glycomics experiment (MIRAGE) project: improving the standards for reporting glycan microarray-based data. Glycobiology, 2017, 27, 280-284.	1.3	69
15	Systems glycomics of adult zebrafish identifies organ-specific sialylation and glycosylation patterns. Nature Communications, 2018, 9, 4647.	5.8	65
16	The minimum information required for a glycomics experiment (MIRAGE) project: sample preparation guidelines for reliable reporting of glycomics datasets. Glycobiology, 2016, 26, 907-910.	1.3	62
17	WURCS: The Web3 Unique Representation of Carbohydrate Structures. Journal of Chemical Information and Modeling, 2014, 54, 1558-1566.	2.5	61
18	Glycoproteomics. Nature Reviews Methods Primers, 2022, 2, .	11.8	61

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19	The RINGS Resource for Glycome Informatics Analysis and Data Mining on the Web. OMICS A Journal of Integrative Biology, 2010, 14, 475-486.	1.0	58
20	Toolboxes for a standardised and systematic study of glycans. BMC Bioinformatics, 2014, 15, S9.	1.2	58
21	The Lectin Frontier Database (LfDB), and Data Generation Based on Frontal Affinity Chromatography. Molecules, 2015, 20, 951-973.	1.7	56
22	UniCarbKB: Putting the pieces together for glycomics research. Proteomics, 2011, 11, 4117-4121.	1.3	55
23	An Introduction to Bioinformatics for Glycomics Research. PLoS Computational Biology, 2008, 4, e1000075.	1.5	52
24	GlycoRDF: an ontology to standardize glycomics data in RDF. Bioinformatics, 2015, 31, 919-925.	1.8	51
25	BioHackathon series in 2011 and 2012: penetration of ontology and linked data in life science domains. Journal of Biomedical Semantics, 2014, 5, 5.	0.9	47
26	Introducing glycomics data into the Semantic Web. Journal of Biomedical Semantics, 2013, 4, 39.	0.9	46
27	Global mapping of glycosylation pathways in human-derived cells. Developmental Cell, 2021, 56, 1195-1209.e7.	3.1	46
28	The international glycan repository GlyTouCan version 3.0. Nucleic Acids Research, 2021, 49, D1529-D1533.	6.5	44
29	WURCS 2.0 Update To Encapsulate Ambiguous Carbohydrate Structures. Journal of Chemical Information and Modeling, 2017, 57, 632-637.	2.5	43
30	Using Databases and Web Resources for Glycomics Research. Molecular and Cellular Proteomics, 2013, 12, 1036-1045.	2.5	39
31	Implementation of GlycanBuilder to draw a wide variety of ambiguous glycans. Carbohydrate Research, 2017, 445, 104-116.	1.1	39
32	Improving MHC binding peptide prediction by incorporating binding data of auxiliary MHC molecules. Bioinformatics, 2006, 22, 1648-1655.	1.8	38
33	The DBCLS BioHackathon: standardization and interoperability for bioinformatics web services and workflows. Journal of Biomedical Semantics, 2010, 1, 8.	0.9	31
34	The GlycomeAtlas tool for visualizing and querying glycome data. Bioinformatics, 2012, 28, 2849-2850.	1.8	30
35	Identification of Genes Required for Neural-Specific Glycosylation Using Functional Genomics. PLoS Genetics, 2010, 6, e1001254.	1.5	29
36	ProfilePSTMM: capturing tree-structure motifs in carbohydrate sugar chains. Bioinformatics, 2006, 22, e25-e34.	1.8	28

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37	Comprehensive analysis of the N-glycan biosynthetic pathway using bioinformatics to generate UniCorn: A theoretical N-glycan structure database. Carbohydrate Research, 2016, 431, 56-63.	1.1	28
38	The GlySpace Alliance: toward a collaborative global glycoinformatics community. Glycobiology, 2020, 30, 70-71.	1.3	28
39	Enhanced validation of small-molecule ligands and carbohydrates in the Protein Data Bank. Structure, 2021, 29, 393-400.e1.	1.6	28
40	Phenotypeâ€based clustering of glycosylationâ€related genes by <scp>RNA</scp>iâ€mediated gene silencing. Genes To Cells, 2015, 20, 521-542.	0.5	25
41	GlycanFormatConverter: a conversion tool for translating the complexities of glycans. Bioinformatics, 2019, 35, 2434-2440.	1.8	23
42	Overview of KEGG applications to omics-related research. Journal of Pesticide Sciences, 2006, 31, 296-299.	0.8	22
43	MCAW-DB: A glycan profile database capturing the ambiguity of glycan recognition patterns. Carbohydrate Research, 2018, 464, 44-56.	1.1	22
44	GlyGen data model and processing workflow. Bioinformatics, 2020, 36, 3941-3943.	1.8	22
45	A probabilistic model for mining labeled ordered trees: capturing patterns in carbohydrate sugar chains. IEEE Transactions on Knowledge and Data Engineering, 2005, 17, 1051-1064.	4.0	21
46	The 2nd DBCLS BioHackathon: interoperable bioinformatics Web services for integrated applications. Journal of Biomedical Semantics, 2011, 2, 4.	0.9	19
47	Frequent glycan structure mining of influenza virus data revealed a sulfated glycan motif that increased viral infection. Bioinformatics, 2014, 30, 706-711.	1.8	18
48	A gram distribution kernel applied to glycan classification and motif extraction. Genome Informatics, 2006, 17, 25-34.	0.4	16
49	A weighted q-gram method for glycan structure classification. BMC Bioinformatics, 2010, 11, S33.	1.2	15
50	Implementation of linked data in the life sciences at BioHackathon 2011. Journal of Biomedical Semantics, 2015, 6, 3.	0.9	15
51	Glycomic Analysis Using KEGG GLYCAN. Methods in Molecular Biology, 2015, 1273, 97-107.	0.4	15
52	A consensus-based and readable extension of Linear Code for Reaction Rules (LiCoRR). Beilstein Journal of Organic Chemistry, 2020, 16, 2645-2662.	1.3	14
53	A systematic framework to derive N-glycan biosynthesis process and the automated construction of glycosylation networks. BMC Bioinformatics, 2016, 17, 240.	1.2	13
54	Development and application of an algorithm to compute weighted multiple glycan alignments. Bioinformatics, 2017, 33, 1317-1323.	1.8	13

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55	Bioinformatics approaches in glycomics and drug discovery. Current Opinion in Molecular Therapeutics, 2006, 8, 514-20.	2.8	12
56	LM-GlycomeAtlas Ver. 1.0: A Novel Visualization Tool for Lectin Microarray-Based Glycomic Profiles of Mouse Tissue Sections. Molecules, 2019, 24, 2962.	1.7	11
57	A new efficient probabilistic model for mining labeled ordered trees applied to glycobiology. ACM Transactions on Knowledge Discovery From Data, 2008, 2, 1-30.	2.5	10
58	GlycoGene Database (GGDB) on the Semantic Web. , 2017, , 163-175.		10
59	A new efficient probabilistic model for mining labeled ordered trees. , 2006, , .		9
60	Mining Frequent Subtrees in Glycan Data Using the Rings Glycan Miner Tool. Methods in Molecular Biology, 2013, 939, 87-95.	0.4	9
61	The Fifth ACGG-DB Meeting Report: Towards an International Glycan Structure Repository. Glycobiology, 2013, 23, 1422-1424.	1.3	8
62	Knowledge discovery for pancreatic cancer using inductive logic programming. IET Systems Biology, 2014, 8, 162-168.	0.8	8
63	An Efficient Unordered Tree Kernel and Its Application to Glycan Classification. , 2008, , 184-195.		8
64	The glycoconjugate ontology (GlycoCoO) for standardizing the annotation of glycoconjugate data and its application. Glycobiology, 2021, 31, 741-750.	1.3	7
65	Extracting glycan motifs using a biochemically-weighted kernel. Bioinformation, 2011, 7, 405-412.	0.2	7
66	A global representation of the carbohydrate structures: a tool for the analysis of glycan. Genome Informatics, 2005, 16, 214-22.	0.4	7
67	Introduction to Informatics in Glycoprotein Analysis. Methods in Molecular Biology, 2013, 951, 257-267.	0.4	6
68	Multiple Tree Alignment with Weights Applied to Carbohydrates to Extract Binding Recognition Patterns. Lecture Notes in Computer Science, 2012, , 49-58.	1.0	6
69	The Glycome Analytics Platform: an integrative framework for glycobioinformatics. Bioinformatics, 2016, 32, 3005-3011.	1.8	5
70	Analyzing Glycan Structure Synthesis with the Glycan Pathway Predictor (GPP) Tool. Methods in Molecular Biology, 2015, 1273, 139-147.	0.4	5
71	SugarDrawer: A Web-Based Database Search Tool with Editing Glycan Structures. Molecules, 2021, 26, 7149.	1.7	5
72	Using glycome databases for drug discovery. Expert Opinion on Drug Discovery, 2008, 3, 877-890.	2.5	4

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73	Support Vector Machine Methods for the Prediction of Cancer Growth. , 2010, , .		4
74	Identification of Proteasome Components Required for Apical Localization of Chaoptin Using Functional Genomics. Journal of Neurogenetics, 2012, 26, 53-63.	0.6	4
75	Development of Carbohydrate Nomenclature and Representation. , 2017, , 7-25.		4
76	Glycome informatics: using systems biology to gain mechanistic insights into glycan biosynthesis. Current Opinion in Chemical Engineering, 2021, 32, 100683.	3.8	4
77	Analyzing Glycan-Binding Patterns with the ProfilePSTMM Tool. Methods in Molecular Biology, 2015, 1273, 193-202.	0.4	4
78	Computational Modeling of O-Linked Glycan Biosynthesis in CHO Cells. Molecules, 2022, 27, 1766.	1.7	4
79	Modeling genetic regulatory networks: a delay discrete dynamical model approach. Journal of Systems Science and Complexity, 2012, 25, 1052-1067.	1.6	3
80	LM-GlycomeAtlas Ver. 2.0: An Integrated Visualization for Lectin Microarray-based Mouse Tissue Glycome Mapping Data with Lectin Histochemistry. Journal of Proteome Research, 2021, 20, 2069-2075.	1.8	3
81	CarbArrayART: a new software tool for carbohydrate microarray data storage, processing, presentation, and reporting. Glycobiology, 2022, 32, 552-555.	1.3	3
82	Latest developments in Semantic Web technologies applied to the glycosciences. Perspectives in Science, 2017, 11, 18-23.	0.6	2
83	Glycoinformatics Resources Integrated Through the GlySpace Alliance. , 2021, , 507-521.		2
84	Using KEGG in the Transition from Genomics to Chemical Genomics. , 2009, , 437-452.		2
85	PAConto: RDF Representation of PACDB Data and Ontology of Infectious Diseases Known to Be Related to Glycan Binding. , 2017, , 261-295.		2
86	Using GlyTouCan Version 1.0: The First International Glycan Structure Repository. , 2017, , 41-73.		2
87	GlycoBioinformatics. Beilstein Journal of Organic Chemistry, 2021, 17, 2726-2728.	1.3	2
88	Trends and Future Perspectives for Glycoinformatics. Trends in Glycoscience and Glycotechnology, 2014, 26, 89-97.	0.0	1
89	Analyzing Glycan-Binding Profiles Using Weighted Multiple Alignment of Trees. Methods in Molecular Biology, 2018, 1807, 131-140.	0.4	1
90	Glycoinformatics: Overview. , 2015, , 185-192.		1

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91	Functional glyco-metagenomics elucidates the role of glycan-related genes in environments. BMC Bioinformatics, 2021, 22, 505.	1.2	1
92	A 6-Approximation Algorithm for Computing Smallest Common AoN-Supertree with Application to the Reconstruction of Glycan Trees. Lecture Notes in Computer Science, 2006, , 100-110.	1.0	1
93	RINGS: A Web Resource of Tools for Analyzing Glycomics Data. , 2017, , 299-334.		1
94	Bioinformatics Analysis of Glycan Structures from a Genomic Perspective. , 0, , 125-141.		0
95	On using physico-chemical properties of amino acids in string kernels for protein classification via support vector machines. Journal of Systems Science and Complexity, 2015, 28, 504-516.	1.6	0
96	Glycoinformatics Overview. , 2014, , 1-8.		0
97	RINGS Bioinformatics. , 2015, , 201-207.		0
98	2nd FCCA Symposium/Annual Forum for Young Glyco-Scientists 2015. Trends in Glycoscience and Glycotechnology, 2015, 27, E63-E64.	0.0	0
99	Educational Materials and Training for Glycosciences. , 2019, , 355-368.		0
100	BioHackathon series in 2013 and 2014: improvements of semantic interoperability in life science data and services. F1000Research, 0, 8, 1677.	0.8	0
101	Glycan Bioinformatics: Informatics Methods for Understanding Glycan Function. , 2021, , .		0
102	RDFizing the biosynthetic pathway of E.coli O-antigen to enable semantic sharing of microbiology data. BMC Microbiology, 2021, 21, 325.	1.3	0
103	Development of a novel monosaccharide substitution matrix for improved comparison of glycan structures. Carbohydrate Research, 2022, 511, 108496.	1.1	0
104	OUP accepted manuscript. Glycobiology, 2022, , .	1.3	0