

# Kazuyuki Sugahara

## List of Publications by Year in descending order

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85  
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47006

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86  
docs citations

86  
times ranked

4897  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in the structural biology of chondroitin sulfate and dermatan sulfate. <i>Current Opinion in Structural Biology</i> , 2003, 13, 612-620.	5.7	653
2	Recent advances in the study of the biosynthesis and functions of sulfated glycosaminoglycans. <i>Current Opinion in Structural Biology</i> , 2000, 10, 518-527.	5.7	384
3	Specific Molecular Interactions of Oversulfated Chondroitin Sulfate E with Various Heparin-binding Growth Factors. <i>Journal of Biological Chemistry</i> , 2002, 277, 43707-43716.	3.4	299
4	Chondroitin/dermatan sulfate in the central nervous system. <i>Current Opinion in Structural Biology</i> , 2007, 17, 536-545.	5.7	259
5	Heparin and Heparan Sulfate Biosynthesis. <i>IUBMB Life</i> , 2002, 54, 163-175.	3.4	227
6	Oversulfated Chondroitin/Dermatan Sulfates Containing GlcA <sup>2</sup> S1/IdoA <sup>1</sup> S3GalNAc(4,6-O-disulfate) Interact with L- and P-selectin and Chemokines. <i>Journal of Biological Chemistry</i> , 2002, 277, 12921-12930.	3.4	222
7	Microanalysis of Glycosaminoglycan-Derived Oligosaccharides Labeled with a Fluorophore 2-Aminobenzamide by High-Performance Liquid Chromatography: Application to Disaccharide Composition Analysis and Exosequencing of Oligosaccharides. <i>Analytical Biochemistry</i> , 1999, 269, 367-378.	2.4	196
8	Molecular Cloning and Expression of a Human Chondroitin Synthase. <i>Journal of Biological Chemistry</i> , 2001, 276, 38721-38726.	3.4	184
9	The Tumor Suppressor EXT-like Gene EXTL2 Encodes an $\alpha$ 1, 4-N-Acetylhexosaminyltransferase That Transfers N-Acetylgalactosamine and N-Acetylglucosamine to the Common Glycosaminoglycan-Protein Linkage Region. <i>Journal of Biological Chemistry</i> , 1999, 274, 13933-13937.	3.4	182
10	Molecular interactions between chondroitin <sup>6</sup> -dermatan sulfate and growth factors/receptors/matrix proteins. <i>Current Opinion in Structural Biology</i> , 2015, 34, 35-42.	5.7	179
11	Loss of chondroitin 6-O-sulfotransferase-1 function results in severe human chondrodysplasia with progressive spinal involvement. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 10155-10160.	7.1	169
12	Chondroitin 6-sulphate synthesis is up-regulated in injured CNS, induced by injury-related cytokines and enhanced in axon-growth inhibitory glia. <i>European Journal of Neuroscience</i> , 2005, 21, 378-390.	2.6	169
13	Molecular Cloning and Expression of Glucuronyltransferase I Involved in the Biosynthesis of the Glycosaminoglycan-Protein Linkage Region of Proteoglycans. <i>Journal of Biological Chemistry</i> , 1998, 273, 6615-6618.	3.4	163
14	The EXT1/EXT2 tumor suppressors: catalytic activities and role in heparan sulfate biosynthesis. <i>EMBO Reports</i> , 2000, 1, 282-286.	4.5	153
15	Molecular Cloning of a Chondroitin Polymerizing Factor That Cooperates with Chondroitin Synthase for Chondroitin Polymerization. <i>Journal of Biological Chemistry</i> , 2003, 278, 23666-23671.	3.4	150
16	Characteristic Hexasaccharide Sequences in Octasaccharides Derived from Shark Cartilage Chondroitin Sulfate D with a Neurite Outgrowth Promoting Activity. <i>Journal of Biological Chemistry</i> , 1998, 273, 3296-3307.	3.4	149
17	Glycosaminoglycan modification of neuropilin-1 modulates VEGFR2 signaling. <i>EMBO Journal</i> , 2006, 25, 3045-3055.	7.8	147
18	Loss-of-function mutations of CHST14 in a new type of Ehlers-Danlos syndrome. <i>Human Mutation</i> , 2010, 31, 966-974.	2.5	137

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19	Identification of Chondroitin Sulfate Glucuronyltransferase as Chondroitin Synthase-3 Involved in Chondroitin Polymerization. <i>Journal of Biological Chemistry</i> , 2008, 283, 11396-11406.	3.4	129
20	Molecular Cloning and Expression of Human Chondroitin N-Acetylgalactosaminyltransferase. <i>Journal of Biological Chemistry</i> , 2002, 277, 8841-8846.	3.4	116
21	Specificities of Three Distinct Human Chondroitin/Dermatan N-Acetylgalactosamine 4-O-Sulfotransferases Demonstrated Using Partially Desulfated Dermatan Sulfate as an Acceptor. <i>Journal of Biological Chemistry</i> , 2003, 278, 36115-36127.	3.4	114
22	Chondroitin Sulfate Characterized by the E-disaccharide Unit Is a Potent Inhibitor of Herpes Simplex Virus Infectivity and Provides the Virus Binding Sites on gro2C Cells. <i>Journal of Biological Chemistry</i> , 2005, 280, 32193-32199.	3.4	113
23	Mutations in B3GALT6, which Encodes a Glycosaminoglycan Linker Region Enzyme, Cause a Spectrum of Skeletal and Connective Tissue Disorders. <i>American Journal of Human Genetics</i> , 2013, 92, 927-934.	6.2	112
24	Faulty Initiation of Proteoglycan Synthesis Causes Cardiac and Joint Defects. <i>American Journal of Human Genetics</i> , 2011, 89, 15-27.	6.2	108
25	Antibody GD3G7 Selected against Embryonic Glycosaminoglycans Defines Chondroitin Sulfate-E Domains Highly Up-Regulated in Ovarian Cancer and Involved in Vascular Endothelial Growth Factor Binding. <i>American Journal of Pathology</i> , 2007, 171, 1324-1333.	3.8	105
26	Molecular Cloning and Expression of a Second Chondroitin N-Acetylgalactosaminyltransferase Involved in the Initiation and Elongation of Chondroitin/Dermatan Sulfate. <i>Journal of Biological Chemistry</i> , 2003, 278, 3072-3078.	3.4	104
27	Demonstration of glycosaminoglycans in <i>Caenorhabditis elegans</i> . <i>FEBS Letters</i> , 1999, 459, 327-331.	2.8	95
28	Involvement of chondroitin sulfate synthase-3 (chondroitin synthase-2) in chondroitin polymerization through its interaction with chondroitin synthase-1 or chondroitin-polymerizing factor. <i>Biochemical Journal</i> , 2007, 403, 545-552.	3.7	93
29	Involvement of Highly Sulfated Chondroitin Sulfate in the Metastasis of the Lewis Lung Carcinoma Cells. <i>Journal of Biological Chemistry</i> , 2008, 283, 34294-34304.	3.4	93
30	Receptor for Advanced Glycation End Products (RAGE) Functions as Receptor for Specific Sulfated Glycosaminoglycans, and Anti-RAGE Antibody or Sulfated Glycosaminoglycans Delivered in Vivo Inhibit Pulmonary Metastasis of Tumor Cells. <i>Journal of Biological Chemistry</i> , 2012, 287, 18985-18994.	3.4	93
31	Human Genetic Disorders Caused by Mutations in Genes Encoding Biosynthetic Enzymes for Sulfated Glycosaminoglycans*. <i>Journal of Biological Chemistry</i> , 2013, 288, 10953-10961.	3.4	93
32	Chondroitin 4-O-Sulfotransferase-1 Regulates E Disaccharide Expression of Chondroitin Sulfate Required for Herpes Simplex Virus Infectivity. <i>Journal of Biological Chemistry</i> , 2006, 281, 38668-38674.	3.4	91
33	Chondroitin Sulfate "Wobble Motifs" Modulate Maintenance and Differentiation of Neural Stem Cells and Their Progeny. <i>Journal of Biological Chemistry</i> , 2012, 287, 2935-2942.	3.4	88
34	EXTL2, a Member of the EXT Family of Tumor Suppressors, Controls Glycosaminoglycan Biosynthesis in a Xylose Kinase-dependent Manner. <i>Journal of Biological Chemistry</i> , 2013, 288, 9321-9333.	3.4	83
35	Defect in 3'-phosphoadenosine 5'-phosphosulfate synthesis in brachymorphic mice. <i>Archives of Biochemistry and Biophysics</i> , 1982, 214, 589-601.	3.0	81
36	Loss of dermatan sulfate epimerase (DSE) function results in musculocontractural Ehlers-Danlos syndrome. <i>Human Molecular Genetics</i> , 2013, 22, 3761-3772.	2.9	78

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37	In Vitro Heparan Sulfate Polymerization. <i>Journal of Biological Chemistry</i> , 2003, 278, 41618-41623.	3.4	77
38	Important role of heparan sulfate in postnatal islet growth and insulin secretion. <i>Biochemical and Biophysical Research Communications</i> , 2009, 383, 113-118.	2.1	77
39	Functions of Chondroitin Sulfate/Dermatan Sulfate Chains in Brain Development. <i>Journal of Biological Chemistry</i> , 2007, 282, 19442-19452.	3.4	75
40	2-O-Phosphorylation of Xylose and 6-O-Sulfation of Galactose in the Protein Linkage Region of Glycosaminoglycans Influence the Glucuronyltransferase-I Activity Involved in the Linkage Region Synthesis. <i>Journal of Biological Chemistry</i> , 2008, 283, 16801-16807.	3.4	68
41	Impairment of Embryonic Cell Division and Glycosaminoglycan Biosynthesis in Glucuronyltransferase-I-deficient Mice. <i>Journal of Biological Chemistry</i> , 2010, 285, 12190-12196.	3.4	66
42	Demonstration of the Pleiotrophin-binding Oligosaccharide Sequences Isolated from Chondroitin Sulfate/Dermatan Sulfate Hybrid Chains of Embryonic Pig Brains. <i>Journal of Biological Chemistry</i> , 2005, 280, 35318-35328.	3.4	61
43	Defect in 3- $\beta$ -phosphoadenosine 5- $\beta$ -phosphosulfate synthesis in brachymorphic mice. <i>Archives of Biochemistry and Biophysics</i> , 1982, 214, 602-609.	3.0	59
44	Glycosaminoglycans are functional ligands for receptor for advanced glycation end-products in tumors. <i>FEBS Journal</i> , 2013, 280, 2462-2470.	4.7	57
45	Functional expression and genomic structure of human chondroitin 6-sulfotransferase1. <i>FEBS Letters</i> , 1998, 441, 235-241.	2.8	54
46	Embryonic Fibroblasts with a Gene Trap Mutation in Ext1 Produce Short Heparan Sulfate Chains. <i>Journal of Biological Chemistry</i> , 2004, 279, 32134-32141.	3.4	52
47	Structural Analysis of Unsaturated Hexasaccharides Isolated from Shark Cartilage Chondroitin Sulfate D that are Substrates for the Exolytic Action of Chondroitin ABC Lyase. <i>FEBS Journal</i> , 1996, 239, 871-880.	0.2	51
48	Spondyloepiphyseal dysplasia, Omani type: Further definition of the phenotype. <i>American Journal of Medical Genetics, Part A</i> , 2008, 146A, 2376-2384.	1.2	48
49	Characterization of recombinant human glucuronyltransferase I involved in the biosynthesis of the glycosaminoglycan-protein linkage region of proteoglycans. <i>FEBS Letters</i> , 1999, 459, 415-420.	2.8	45
50	Human Genetic Disorders and Knockout Mice Deficient in Glycosaminoglycan. <i>BioMed Research International</i> , 2014, 2014, 1-24.	1.9	45
51	Pivotal Role of Carbohydrate Sulfotransferase 15 in Fibrosis and Mucosal Healing in Mouse Colitis. <i>PLoS ONE</i> , 2016, 11, e0158967.	2.5	45
52	Identification of cell-binding site of angiomodulin (AGM/TAF/Mac25) that interacts with heparan sulfates on cell surface. <i>Journal of Cellular Biochemistry</i> , 1999, 75, 187-195.	2.6	43
53	The Uniform Galactose 4-Sulfate Structure in the Carbohydrate-Protein Linkage Region of Human Urinary Trypsin Inhibitor. <i>FEBS Journal</i> , 1995, 233, 687-693.	0.2	40
54	Insight into the role of chondroitin sulfate E in angiogenesis. <i>FEBS Journal</i> , 2019, 286, 2921-2936.	4.7	40

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55	Specificity Studies of Bacterial Sulfatases by Means of Structurally Defined Sulfated Oligosaccharides Isolated from Shark Cartilage Chondroitin Sulfate D. <i>FEBS Journal</i> , 1996, 239, 865-870.	0.2	38
56	Preparation of a series of sulfated tetrasaccharides from shark cartilage chondroitin sulfate D using testicular hyaluronidase and structure determination by 500 MHz <sup>1</sup> H NMR spectroscopy. <i>Glycoconjugate Journal</i> , 1996, 13, 609-619.	2.7	38
57	Glycosaminoglycans and Glycomimetics in the Central Nervous System. <i>Molecules</i> , 2015, 20, 3527-3548.	3.8	34
58	Structural determination of novel tetra- and hexasaccharide sequences isolated from chondroitin sulfate H (oversulfated dermatan sulfate) of hagfish notochord. <i>Glycoconjugate Journal</i> , 1999, 16, 291-305.	2.7	32
59	Sulfation of the Galactose Residues in the Glycosaminoglycan-Protein Linkage Region by Recombinant Human Chondroitin 6-O-Sulfotransferase-1. <i>Journal of Biological Chemistry</i> , 2008, 283, 27438-27443.	3.4	30
60	Glycosaminoglycan Chain Analysis and Characterization (Glycosylation/Epimerization). <i>Methods in Molecular Biology</i> , 2012, 836, 99-115.	0.9	30
61	Clinical and Radiographic Features of the Autosomal Recessive form of Brachyolmia Caused by <i>PAPSS2</i> Mutations. <i>Human Mutation</i> , 2013, 34, 1381-1386.	2.5	29
62	Expression of <i>N</i> -Acetylgalactosamine 4-Sulfate 6-O-Sulfotransferase Involved in Chondroitin Sulfate Synthesis Is Responsible for Pulmonary Metastasis. <i>BioMed Research International</i> , 2013, 2013, 1-9.	1.9	27
63	Skeletal dysplasia in a consanguineous clan from the island of Nias/Indonesia is caused by a novel mutation in <i>B3GAT3</i> . <i>Human Genetics</i> , 2015, 134, 691-704.	3.8	27
64	Polydispersity in Sulfation Profile of Oligosaccharide Alditols Isolated from the Protein-Linkage Region and the Repeating Disaccharide Region of Chondroitin 4-Sulfate of Bovine Nasal Septal Cartilage. <i>FEBS Journal</i> , 1996, 240, 789-797.	0.2	26
65	Mutations in Biosynthetic Enzymes for the Protein Linker Region of Chondroitin/Dermatan/Heparan Sulfate Cause Skeletal and Skin Dysplasias. <i>BioMed Research International</i> , 2015, 2015, 1-7.	1.9	25
66	Defect in dermatan sulfate in urine of patients with Ehlers-Danlos syndrome caused by a <i>CHST14/D4ST1</i> deficiency. <i>Clinical Biochemistry</i> , 2017, 50, 670-677.	1.9	25
67	Pathophysiological Significance of Dermatan Sulfate Proteoglycans Revealed by Human Genetic Disorders. <i>Pharmaceuticals</i> , 2017, 10, 34.	3.8	25
68	Involvement of the core protein in the first <sup>12</sup> N-acetylgalactosamine transfer to the glycosaminoglycan-protein linkage-region tetrasaccharide and in the subsequent polymerization: the critical determining step for chondroitin sulphate biosynthesis. <i>Biochemical Journal</i> , 1999, 340, 353-357.	3.7	24
69	Assessment of glycosaminoglycan-protein linkage tetrasaccharides as acceptors for GalNAc- and GlcNAc-transferases from mouse mastocytoma. <i>Glycoconjugate Journal</i> , 1997, 14, 737-742.	2.7	22
70	Functional validation of novel compound heterozygous variants in <i>B3GAT3</i> resulting in severe osteopenia and fractures: expanding the disease phenotype. <i>BMC Medical Genetics</i> , 2016, 17, 86.	2.1	22
71	Chondroitin Sulfate <i>N</i> -acetylgalactosaminyltransferase-1 ( <i>CSGalNAcT-1</i> ) Deficiency Results in a Mild Skeletal Dysplasia and Joint Laxity. <i>Human Mutation</i> , 2017, 38, 34-38.	2.5	22
72	Vascular abnormalities in the placenta of <i>Chst14</i> <sup>-/-</sup> fetuses: implications in the pathophysiology of perinatal lethality of the murine model and vascular lesions in human <i>CHST14/D4ST1</i> deficiency. <i>Glycobiology</i> , 2018, 28, 80-89.	2.5	20

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73	Purification and characterization of fetal bovine serum beta-N-acetyl-D-galactosaminyltransferase and beta-D-glucuronyltransferase involved in chondroitin sulfate biosynthesis. FEBS Journal, 1999, 264, 461-467.	0.2	18
74	Demonstration of a novel sulfotransferase in fetal bovine serum, which transfers sulfate to the C6 position of the GalNAc residue in the sequence iduronic acid-1-3GalNAc-2-4-iduronic acid in dermatan sulfate. FEBS Letters, 1999, 452, 185-189.	2.8	17
75	Heparin interaction with a receptor on hyperglycemic dividing cells prevents intracellular hyaluronan synthesis and autophagy responses in models of type 1 diabetes. Matrix Biology, 2015, 48, 36-41.	3.6	17
76	Human glycosaminoglycan glucuronyltransferase I gene and a related processed pseudogene: genomic structure, chromosomal mapping and characterization. Biochemical Journal, 2001, 358, 539-546.	3.7	15
77	CSGALNACT1 is a congenital disorder of glycosylation: A mild skeletal dysplasia with advanced bone age. Human Mutation, 2020, 41, 655-667.	2.5	15
78	Overexpression of Galnt3 in Chondrocytes Resulted in Dwarfism Due to the Increase of Mucin-type O-Glycans and Reduction of Glycosaminoglycans. Journal of Biological Chemistry, 2014, 289, 26584-26596.	3.4	14
79	Structural determination of sulfated tetrasaccharides and hexasaccharides containing a rare disaccharide sequence, -3GalNAc(4,6-disulfate)beta1-4IdoAalpha1-, isolated from porcine intestinal dermatan sulfate. FEBS Journal, 1998, 258, 775-783.	0.2	12
80	Substrate specificity studies of Flavobacterium chondroitinase C and heparitinases towards the glycosaminoglycan-protein linkage region . Use of a sensitive analytical method developed by chromophore-labeling of linkage glycoserines using dimethylaminoazobenzenesulfonyl chloride. FEBS Journal, 1999, 262, 127-133.	0.2	11
81	Elimination of heparan sulfate by heparitinases induces abnormal mesodermal and neural formation in Xenopus embryos. Development Growth and Differentiation, 1995, 37, 337-346.	1.5	8
82	Pseudodiastrophic dysplasia expands the known phenotypic spectrum of defects in proteoglycan biosynthesis. Journal of Medical Genetics, 2020, 57, 454-460.	3.2	8
83	Effects of Pharmacists' Consultation on Serum Cholesterol Level Using Drug History Notebook or Drug Instruction Sheets for Outpatients with Hypercholesterolemia.. Iryo Yakugaku (Japanese Journal) Tj ETQq1 1 00784314 18 BT /Over	0.2	0
84	Investigation of action pattern of a novel chondroitin sulfate/dermatan sulfate 4-O-sulfatase. Biochemical Journal, 2021, 478, 281-298.	3.7	2
85	Kichitaro Kawaguchi-The Founder of TIGG/FCCA. Trends in Glycoscience and Glycotechnology, 2006, 18, 103-115.	0.1	0