Shuji Mizumoto, æº´æœ¬ çš€äºŒ

List of Publications by Year
in descending order

95 papers	3,265 citations	159585 30 h-index	161849 54 g-index
98 all docs	98 docs citations	98 times ranked	3682 citing authors

#	Article	IF	Citations
1	Molecular interactions between chondroitinâ€“dermatan sulfate and growth factors/receptors/matrix proteins. Current Opinion in Structural Biology, 2015, 34, 35-42.	5.7	179
2	Proteoglycans and Glycosaminoglycans Improve Toughness of Biocompatible Double Network Hydrogels. Advanced Materials, 2014, 26, 436-442.	21.0	155
3	Recent Advances in the Structural Study of Functional Chondroitin Sulfate and Dermatan Sulfate in Health and Disease. Connective Tissue Research, 2008, 49, 133-139.	2.3	146
4	Loss-of-function mutations of CHST14 in a new type of Ehlers-Danlos syndrome. Human Mutation, 2010, 31, 966-974.	2.5	137
5	Specificities of Three Distinct Human Chondroitin/Dermatan N-Acetylgalactosamine 4-O-Sulfotransferases Demonstrated Using Partially Desulfated Dermatan Sulfate as an Acceptor. Journal of Biological Chemistry, 2003, 278, 36115-36127.	3.4	114
6	Mutations in B3GALT6, which Encodes a Glycosaminoglycan Linker Region Enzyme, Cause a Spectrum of Skeletal and Connective Tissue Disorders. American Journal of Human Genetics, 2013, 92, 927-934.	6.2	112
7	Faulty Initiation of Proteoglycan Synthesis Causes Cardiac and Joint Defects. American Journal of Human Genetics, 2011, 89, 15-27.	6.2	108
8	Heparanase-mediated Loss of Nuclear Syndecan-1 Enhances Histone Acetyltransferase (HAT) Activity to Promote Expression of Genes That Drive an Aggressive Tumor Phenotype. Journal of Biological Chemistry, 2011, 286, 30377-30383.	3.4	98
9	Involvement of Highly Sulfated Chondroitin Sulfate in the Metastasis of the Lewis Lung Carcinoma Cells. Journal of Biological Chemistry, 2008, 283, 34294-34304.	3.4	93
10	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. Journal of Biological Chemistry, 2012, 287, 18985-18994.	3.4	93
11	Human Genetic Disorders Caused by Mutations in Genes Encoding Biosynthetic Enzymes for Sulfated Glycosaminoglycans*. Journal of Biological Chemistry, 2013, 288, 10953-10961.	3.4	93
12	Identification of human hyaluronidase-4 as a novel chondroitin sulfate hydrolase that preferentially cleaves the galactosaminidic linkage in the trisulfated tetrasaccharide sequence. Glycobiology, 2010, 20, 300-309.	2.5	91
13	De Novo Mutations inSLC35A2Encoding a UDP-Galactose Transporter Cause Early-Onset Epileptic Encephalopathy. Human Mutation, 2013, 34, 1708-1714.	2.5	85
14	Loss of dermatan sulfate epimerase (DSE) function results in musculocontractural Ehlersâ€“Danlos syndrome. Human Molecular Genetics, 2013, 22, 3761-3772.	2.9	78
15	Important role of heparan sulfate in postnatal islet growth and insulin secretion. Biochemical and Biophysical Research Communications, 2009, 383, 113-118.	2.1	77
16	Functions of Chondroitin Sulfate/Dermatan Sulfate Chains in Brain Development. Journal of Biological Chemistry, 2007, 282, 19442-19452.	3.4	75
17	Interaction of chondroitin sulfate and dermatan sulfate from various biological sources with heparin-binding growth factors and cytokines. Glycoconjugate Journal, 2013, 30, 619-632.	2.7	74
18	Glycosaminoglycans are functional ligands for receptor for advanced glycation endâ€products in tumors. FEBS Journal, 2013, 280, 2462-2470.	4.7	57

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19	Hyaluronidases Have Strong Hydrolytic Activity toward Chondroitin 4-Sulfate Comparable to that for Hyaluronan. Biomolecules, 2012, 2, 549-563.	4.0	56
20	Omaniâ€type spondyloepiphyseal dysplasia with cardiac involvement caused by a missense mutation in CHST3. Clinical Genetics, 2009, 75, 375-383.	2.0	54
21	Chondroitin Sulfate/Dermatan Sulfate Hybrid Chains in the Development of Cerebellum. Journal of Biological Chemistry, 2006, 281, 18942-18952.	3.4	53
22	Spondyloepiphyseal dysplasia, Omani type: Further definition of the phenotype. American Journal of Medical Genetics, Part A, 2008, 146A, 2376-2384.	1.2	48
23	Global mapping of glycosylation pathways in human-derived cells. Developmental Cell, 2021, 56, 1195-1209.e7.	7.0	46
24	Human Genetic Disorders and Knockout Mice Deficient in Glycosaminoglycan. BioMed Research International, 2014, 2014, 1-24.	1.9	45
25	Pivotal Role of Carbohydrate Sulfotransferase 15 in Fibrosis and Mucosal Healing in Mouse Colitis. PLoS ONE, 2016, 11, e0158967.	2.5	45
26	Roles of two types of heparan sulfate clusters in Wnt distribution and signaling in Xenopus. Nature Communications, 2017, 8, 1973.	12.8	38
27	Impaired proteoglycan glycosylation, elevated TGF-Î² signaling, and abnormal osteoblast differentiation as the basis for bone fragility in a mouse model for gerodermia osteodysplastica. PLoS Genetics, 2018, 14, e1007242.	3.5	36
28	Dermatan sulfate epimerase 2 is the predominant isozyme in the formation of the chondroitin sulfate/dermatan sulfate hybrid structure in postnatal developing mouse brain. Glycobiology, 2011, 21, 565-574.	2.5	35
29	Identification of biallelic EXTL3 mutations in a novel type of spondylo-epi-metaphyseal dysplasia. Journal of Human Genetics, 2017, 62, 797-801.	2.3	35
30	Occurrence of a nonsulfated chondroitin proteoglycan in the dried saliva of Collocalia swiftlets (edible bird's-nest). Glycobiology, 2007, 17, 157-164.	2.5	31
31	Glycosaminoglycan Chain Analysis and Characterization (Glycosylation/Epimerization). Methods in Molecular Biology, 2012, 836, 99-115.	0.9	30
32	Identification of a Novel Chondroitin Hydrolase in Caenorhabditis elegans. Journal of Biological Chemistry, 2008, 283, 14971-14979.	3.4	29
33	Identification of Amino Acid Residues Required for the Substrate Specificity of Human and Mouse Chondroitin Sulfate Hydrolase (Conventional Hyaluronidase-4)*. Journal of Biological Chemistry, 2012, 287, 42119-42128.	3.4	29
34	Clinical and Radiographic Features of the Autosomal Recessive form of Brachyolmia Caused byPAPSS2Mutations. Human Mutation, 2013, 34, 1381-1386.	2.5	29
35	Involvement of Human Natural Killer-1 (HNK-1) Sulfotransferase in the Biosynthesis of the GlcUA(3-O-sulfate)-Gal-Gal-Xyl Tetrasaccharide Found in Î±-Thrombomodulin from Human Urine. Journal of Biological Chemistry, 2011, 286, 33003-33011.	3.4	27
36	Expression ofN-Acetylgalactosamine 4-Sulfate 6-O-Sulfotransferase Involved in Chondroitin Sulfate Synthesis Is Responsible for Pulmonary Metastasis. BioMed Research International, 2013, 2013, 1-9.	1.9	27

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37	Skeletal dysplasia in a consanguineous clan from the island of Nias/Indonesia is caused by a novel mutation in B3GAT3. Human Genetics, 2015, 134, 691-704.	3.8	27
38	Structural alteration of glycosaminoglycan side chains and spatial disorganization of collagen networks in the skin of patients with mcEDS-CHST14. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 623-631.	2.4	26
39	Chondroitin 4-O-sulfotransferase-1 is required for somitic muscle development and motor axon guidance in zebrafish. Biochemical Journal, 2009, 419, 387-399.	3.7	25
40	Mutations in Biosynthetic Enzymes for the Protein Linker Region of Chondroitin/Dermatan/Heparan Sulfate Cause Skeletal and Skin Dysplasias. BioMed Research International, 2015, 2015, 1-7.	1.9	25
41	Defect in dermatan sulfate in urine of patients with Ehlers-Danlos syndrome caused by a CHST14/D4ST1 deficiency. Clinical Biochemistry, 2017, 50, 670-677.	1.9	25
42	Pathophysiological Significance of Dermatan Sulfate Proteoglycans Revealed by Human Genetic Disorders. Pharmaceuticals, 2017, 10, 34.	3.8	25
43	Recent Advances in the Pathophysiology of Musculocontractural Ehlers-Danlos Syndrome. Genes, 2020, 11, 43.	2.4	24
44	Isolation and characterization of a novel chondroitin sulfate from squid liver integument rich in N-acetylgalactosamine(4,6-disulfate) and glucuronate(3-sulfate) residues. Carbohydrate Research, 2009, 344, 1526-1532.	2.3	23
45	Synthesis of the glycosaminoglycanâ€“protein linkage tetraosyl peptide moieties of betaglycan, which serve as a hexosamine acceptor for enzymatic glycosyl transfer. Carbohydrate Research, 2010, 345, 2115-2123.	2.3	22
46	Demonstration of the hepatocyte growth factor signaling pathway in the in vitro neuritogenic activity of chondroitin sulfate from ray fish cartilage. Biochimica Et Biophysica Acta - General Subjects, 2011, 1810, 406-413.	2.4	22
47	Functional validation of novel compound heterozygous variants in B3GAT3 resulting in severe osteopenia and fractures: expanding the disease phenotype. BMC Medical Genetics, 2016, 17, 86.	2.1	22
48	Chondroitin SulfateN-acetylgalactosaminyltransferase-1 (CSGalNAcT-1) Deficiency Results in a Mild Skeletal Dysplasia and Joint Laxity. Human Mutation, 2017, 38, 34-38.	2.5	22
49	A response to: Loss of dermatan-4-sulfotransferase 1 (D4ST1/CHST14) function represents the first dermatan sulfate biosynthesis defect, â€œdermatan sulfate-deficient Adducted Thumb-Clubfoot Syndromeâ€: Which name is appropriate, â€œAdducted Thumb-Clubfoot Synd. Human Mutation, 2011, 32, 1507-1509.	2.5	21
50	Sulfation patterns of exogenous chondroitin sulfate affect chondrogenic differentiation of ATDC5 cells. Journal of Orthopaedic Science, 2014, 19, 1028-1035.	1.1	21
51	Highly sulfated hexasaccharide sequences isolated from chondroitin sulfate of shark fin cartilage: Insights into the sugar sequences with bioactivities. Glycobiology, 2013, 23, 155-168.	2.5	20
52	Receptor protein tyrosine phosphatase beta/zeta is a functional binding partner for vascular endothelial growth factor. Molecular Cancer, 2015, 14, 19.	19.2	20
53	Vascular abnormalities in the placenta of Chst14â^'/â^' fetuses: implications in the pathophysiology of perinatal lethality of the murine model and vascular lesions in human CHST14/D4ST1 deficiency. Glycobiology, 2018, 28, 80-89.	2.5	20
54	Screening of known disease genes in congenital scoliosis. Molecular Genetics & Genomic Medicine, 2018, 6, 966-974.	1.2	20

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55	Chondroitin sulfate protects vascular endothelial cells from toxicities of extracellular histones. European Journal of Pharmacology, 2018, 826, 48-55.	3.5	19
56	Congenital Disorders of Deficiency in Glycosaminoglycan Biosynthesis. Frontiers in Genetics, 2021, 12, 717535.	2.3	19
57	Delineation of musculocontractural Ehlersâ€“Danlos Syndrome caused by dermatan sulfate epimerase deficiency. Molecular Genetics & Genomic Medicine, 2020, 8, e1197.	1.2	18
58	Identification of novel LFNG mutations in spondylocostal dysostosis. Journal of Human Genetics, 2019, 64, 261-264.	2.3	17
59	An Overview of in vivo Functions of Chondroitin Sulfate and Dermatan Sulfate Revealed by Their Deficient Mice. Frontiers in Cell and Developmental Biology, 2021, 9, 764781.	3.7	17
60	Analysis of the structure and neuritogenic activity of chondroitin sulfate/dermatan sulfate hybrid chains from porcine fetal membranes. Glycoconjugate Journal, 2010, 27, 49-60.	2.7	15
61	Effects of sesamin on the biosynthesis of chondroitin sulfate proteoglycans in human articular chondrocytes in primary culture. Glycoconjugate Journal, 2014, 31, 221-230.	2.7	15
62	CSGALNACT1â€congenital disorder of glycosylation: A mild skeletal dysplasia with advanced bone age. Human Mutation, 2020, 41, 655-667.	2.5	15
63	Systematic investigation of the skin inChst14â^'/â^'mice: A model for skin fragility in musculocontractural Ehlersâ€“Danlos syndrome caused byCHST14variants (mcEDS-CHST14). Glycobiology, 2021, 31, 137-150.	2.5	15
64	Hyaluronan degradation and release of a hyaluronan-aggrecan complex from perineuronal nets in the aged mouse brain. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129804.	2.4	15
65	Novel Insight Into Glycosaminoglycan Biosynthesis Based on Gene Expression Profiles. Frontiers in Cell and Developmental Biology, 2021, 9, 709018.	3.7	15
66	Hyaluronidase-4 is produced by mast cells and can cleave serglycin chondroitin sulfate chains into lower molecular weight forms. Journal of Biological Chemistry, 2019, 294, 11458-11472.	3.4	14
67	The Specific Role of Dermatan Sulfate as an Instructive Glycosaminoglycan in Tissue Development. International Journal of Molecular Sciences, 2022, 23, 7485.	4.1	13
68	The reduction of heparan sulphate in the glomerular basement membrane does not augment urinary albumin excretion. Nephrology Dialysis Transplantation, 2018, 33, 26-33.	0.7	11
69	b3galt6 Knock-Out Zebrafish Recapitulate Î²3GalT6-Deficiency Disorders in Human and Reveal a Trisaccharide Proteoglycan Linkage Region. Frontiers in Cell and Developmental Biology, 2020, 8, 597857.	3.7	11
70	Dermatan sulphate promotes neuronal differentiation in mouse and human stem cells. Journal of Biochemistry, 2021, 169, 55-64.	1.7	11
71	Muscle pathophysiology in mouse models of musculocontractural Ehlers-Danlos syndrome due to CHST14 mutations (mcEDS-CHST14), generated through CRISPR/Cas9-mediated genomic editing. DMM Disease Models and Mechanisms, 2021, , .	2.4	11
72	Pseudodiastrophic dysplasia expands the known phenotypic spectrum of defects in proteoglycan biosynthesis. Journal of Medical Genetics, 2020, 57, 454-460.	3.2	8

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73	Compositional analysis of the glycosaminoglycan family in velvet antlers of Sika deer (Cervus nippon) at different growing stages. Glycoconjugate Journal, 2019, 36, 127-139.	2.7	7
74	Chondroitin Hydrolase in Caenorhabditis elegans. Trends in Glycoscience and Glycotechnology, 2009, 21, 149-162.	0.1	7
75	Carbohydrate (N-Acetylgalactosamine 4-O) Sulfotransferase 14 (CHST14). , 2014, , 1135-1148.		5
76	Myopathy Associated With Dermatan Sulfate-Deficient Decorin and Myostatin in Musculocontractural Ehlers-Danlos Syndrome: A Mouse Model Investigation. Frontiers in Cell and Developmental Biology, 2021, 9, 695021.	3.7	5
77	Defects in Biosynthesis of Glycosaminoglycans Cause Hereditary Bone, Skin, Heart, Immune, and Neurological Disorders. Trends in Glycoscience and Glycotechnology, 2018, 30, E67-E89.	0.1	4
78	Congenital Disorders Caused by Defects in Anabolism of Glycosaminoglycans. Trends in Glycoscience and Glycotechnology, 2020, 32, E45-E51.	0.1	2
79	Development of a mouse monoclonal antibody against the chondroitin sulfate-protein linkage region derived from shark cartilage. Glycoconjugate Journal, 2010, 27, 387-399.	2.7	1
80	ISCSM2011 Chondroitin Sulfate E-type Structure at Tumor Cell Surface Is Involved in Experimental Metastasis. Advances in Experimental Medicine and Biology, 2012, 749, 33-45.	1.6	1
81	Biosynthetic Pathways for Differential Expression of Functional Chondroitin Sulfate and Heparan Sulfate. , 2005, , 289-324.		1
82	2.6 Bone and skin disorders caused by a disturbance in the biosynthesis of chondroitin sulfate and dermatan sulfate. , 0, , .		1
83	612 Orally Active siRNA Targeting Carbohydrate Sulfotransferase 15 Alleviates Colonic Mucosal Injury in Mice. Gastroenterology, 2016, 150, S125.	1.3	0
84	Memories of Professor Kazuyuki Sugahara. Trends in Glycoscience and Glycotechnology, 2021, 33, E49-E50.	0.1	0
85	Memories of Professor Kazuyuki Sugahara. Trends in Glycoscience and Glycotechnology, 2021, 33, J49-J49.	0.1	0
86	Pathogenic variants in uridine diphosphate nucleotidase (CANT1) or glucuronyltransferase () Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.5	0
87	Roles of Dermatan Sulfate Epimerase of Notch Receptors. Trends in Glycoscience and Glycotechnology, 2010, 22, 256-258.	0.1	0
88	Disorder of Biosynthesis of Dermatan Sulfate Causes a New Type of Ehlers-Danlos Syndrome. Trends in Glycoscience and Glycotechnology, 2011, 23, 197-199.	0.1	0
89	Reduction of Chondroitin 4-O-Sulfotransferase-1 Expression Causes Costello Syndrome. Trends in Glycoscience and Glycotechnology, 2013, 25, 87-89.	0.1	0
90	Defects in Biosynthesis of Glycosaminoglycans Cause Hereditary Bone, Skin, Heart, Immune, and Neurological Disorders. Trends in Glycoscience and Glycotechnology, 2018, 30, J43-J64.	0.1	0

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91	Functional Analysis of Dermatan Sulfate and Chondroitin Sulfate. Trends in Glycoscience and Glycotechnology, 2019, 31, SE98-SE99.	0.1	0
92	Functional Analysis of Dermatan Sulfate and Chondroitin Sulfate. Trends in Glycoscience and Glycotechnology, 2019, 31, SJ98-SJ99.	0.1	0
93	Congenital Disorders Caused by Defects in Anabolism of Glycosaminoglycans. Trends in Glycoscience and Glycotechnology, 2020, 32, J43-J49.	0.1	0
94	Congenital Disorders Caused by Defects in Catabolism of Glycosaminoglycans. Trends in Glycoscience and Glycotechnology, 2020, 32, E127-E133.	0.1	0
95	Congenital Disorders Caused by Defects in Catabolism of Glycosaminoglycans. Trends in Glycoscience and Glycotechnology, 2020, 32, J105-J110.	0.1	0