

List of Publications by Year in
Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

148 papers	7,223 citations	47 h-index	80 g-index
159 ext. papers	8,043 ext. citations	7.2 avg, IF	5.85 L-index

#	Paper	IF	Citations
148	Structural and substrate specificity analysis of 3--sulfotransferase isoform 5 to synthesize heparan sulfate.. <i>ACS Catalysis</i> , 2021 , 11, 14956-14966	13.1	1
147	Chemoenzymatic Synthesis of D-Glucaro- β -lactam Containing Oligosaccharides as Putative Heparanase Inhibitors. <i>ChemistrySelect</i> , 2021 , 6, 11690-11695	1.8	
146	Construction of heparan sulfate microarray for investigating the binding of specific saccharide sequences to proteins. <i>Glycobiology</i> , 2021 , 31, 188-199	5.8	3
145	Investigation of the biological functions of heparan sulfate using a chemoenzymatic synthetic approach. <i>RSC Chemical Biology</i> , 2021 , 2, 702-712	3	7
144	Comparison of angiopoietin-like protein 3 and 4 reveals structural and mechanistic similarities. <i>Journal of Biological Chemistry</i> , 2021 , 296, 100312	5.4	3
143	Enzyme-Based Methods to Synthesize Homogeneous Glycosaminoglycan Oligosaccharides 2021 , 706-714		1
142	Deciphering the substrate recognition mechanisms of the heparan sulfate 3--sulfotransferase-3. <i>RSC Chemical Biology</i> , 2021 , 2, 1239-1248	3	3
141	Synthesis of 3--Sulfated Heparan Sulfate Oligosaccharides Using 3--Sulfotransferase Isoform 4. <i>ACS Chemical Biology</i> , 2021 , 16, 2026-2035	4.9	2
140	Improving the Sensitivity for Quantifying Heparan Sulfate from Biological Samples. <i>Analytical Chemistry</i> , 2021 , 93, 11191-11199	7.8	0
139	A rechargeable anti-thrombotic coating for blood-contacting devices. <i>Biomaterials</i> , 2021 , 276, 121011	15.6	2
138	Degeneracy of the Antithrombin Binding Sequence in Heparin: 2-O-Sulfated Iduronic Acid Can Replace the Critical Glucuronic Acid. <i>Chemistry - A European Journal</i> , 2020 , 26, 11814-11818	4.8	6
137	Design of anti-inflammatory heparan sulfate to protect against acetaminophen-induced acute liver failure. <i>Science Translational Medicine</i> , 2020 , 12,	17.5	20
136	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. <i>Nature Communications</i> , 2020 , 11, 1481	17.4	24
135	Enzymatic Synthesis of Chondroitin Sulfate E to Attenuate Bacteria Lipopolysaccharide-Induced Organ Damage. <i>ACS Central Science</i> , 2020 , 6, 1199-1207	16.8	10
134	Using heparin molecules to manage COVID-2019. <i>Research and Practice in Thrombosis and Haemostasis</i> , 2020 , 4, 518-523	5.1	47
133	3-O-Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. <i>Angewandte Chemie</i> , 2020 , 132, 1834-1843	3.6	0
132	3-O-Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 1818-1827	16.4	40

131	Characterization of the interaction between platelet factor 4 and homogeneous synthetic low molecular weight heparins. <i>Journal of Thrombosis and Haemostasis</i> , 2020 , 18, 390-398	15.4	4
130	Synthesis of 3--Sulfated Disaccharide and Tetrasaccharide Standards for Compositional Analysis of Heparan Sulfate. <i>Biochemistry</i> , 2020 , 59, 3186-3192	3.2	7
129	Using engineered 6--sulfotransferase to improve the synthesis of anticoagulant heparin. <i>Organic and Biomolecular Chemistry</i> , 2020 , 18, 8094-8102	3.9	3
128	Potential Use of Anti-Inflammatory Synthetic Heparan Sulfate to Attenuate Liver Damage. <i>Biomedicines</i> , 2020 , 8,	4.8	3
127	Application of chiral materials in electrochemical sensors. <i>Mikrochimica Acta</i> , 2020 , 187, 676	5.8	13
126	Quantitative analysis of heparan sulfate using isotopically labeled calibrants. <i>Communications Biology</i> , 2020 , 3, 425	6.7	5
125	Synthetic anticoagulant heparan sulfate attenuates liver ischemia reperfusion injury. <i>Scientific Reports</i> , 2020 , 10, 17187	4.9	4
124	Circulating heparan sulfate fragments mediate septic cognitive dysfunction. <i>Journal of Clinical Investigation</i> , 2019 , 129, 1779-1784	15.9	52
123	Molecular mechanisms of heparin-induced modulation of human interleukin 12 bioactivity. <i>Journal of Biological Chemistry</i> , 2019 , 294, 4412-4424	5.4	14
122	Circulating heparin oligosaccharides rapidly target the hippocampus in sepsis, potentially impacting cognitive functions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 9208-9213	11.5	32
121	Complex Natural Product Heparin: Biosynthesis, Biology, and Application via Synthetic Heparins. <i>AAPS Advances in the Pharmaceutical Sciences Series</i> , 2019 , 45-58	0.5	
120	Recombinant dermatan sulfate is a potent activator of heparin cofactor II-dependent inhibition of thrombin. <i>Glycobiology</i> , 2019 , 29, 446-451	5.8	8
119	Expedient Synthesis of Core Disaccharide Building Blocks from Natural Polysaccharides for Heparan Sulfate Oligosaccharide Assembly. <i>Angewandte Chemie</i> , 2019 , 131, 18750-18756	3.6	4
118	Expedient Synthesis of Core Disaccharide Building Blocks from Natural Polysaccharides for Heparan Sulfate Oligosaccharide Assembly. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 18577-18583	16.4	21
117	Controlled Chemoenzymatic Synthesis of Heparan Sulfate Oligosaccharides. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 5340-5344	16.4	37
116	Using structurally defined oligosaccharides to understand the interactions between proteins and heparan sulfate. <i>Current Opinion in Structural Biology</i> , 2018 , 50, 155-161	8.1	21
115	Controlled Chemoenzymatic Synthesis of Heparan Sulfate Oligosaccharides. <i>Angewandte Chemie</i> , 2018 , 130, 5438-5442	3.6	6
114	Advances in Clinical and Basic Science of Coagulation: Illustrated abstracts of the 9th Chapel Hill Symposium on Hemostasis. <i>Research and Practice in Thrombosis and Haemostasis</i> , 2018 , 2, 407-428	5.1	3

113	Downstream Products are Potent Inhibitors of the Heparan Sulfate 2-O-Sulfotransferase. <i>Scientific Reports</i> , 2018 , 8, 11832	4.9	8
112	Chemoenzymatic synthesis of unmodified heparin oligosaccharides: cleavage of p-nitrophenyl glucuronide by alkaline and Smith degradation. <i>Organic and Biomolecular Chemistry</i> , 2017 , 15, 1222-1227	3.9	13
111	Construction and characterisation of a heparan sulphate heptasaccharide microarray. <i>Chemical Communications</i> , 2017 , 53, 1743-1746	5.8	29
110	Syndecan-1 limits the progression of liver injury and promotes liver repair in acetaminophen-induced liver injury in mice. <i>Hepatology</i> , 2017 , 66, 1601-1615	11.2	15
109	Synthesis of 3-O-Sulfated Oligosaccharides to Understand the Relationship between Structures and Functions of Heparan Sulfate. <i>Journal of the American Chemical Society</i> , 2017 , 139, 5249-5256	16.4	61
108	Structural Analysis of Heparin-Derived 3-O-Sulfated Tetrasaccharides: Antithrombin Binding Site Variants. <i>Journal of Pharmaceutical Sciences</i> , 2017 , 106, 973-981	3.9	33
107	Heparan Sulfate Domains Required for Fibroblast Growth Factor 1 and 2 Signaling through Fibroblast Growth Factor Receptor 1c. <i>Journal of Biological Chemistry</i> , 2017 , 292, 2495-2509	5.4	29
106	Chemoenzymatic synthesis of heparan sulfate and heparin oligosaccharides and NMR analysis: paving the way to a diverse library for glycobiologists. <i>Chemical Science</i> , 2017 , 8, 7932-7940	9.4	58
105	Synthetic oligosaccharides can replace animal-sourced low-molecular weight heparins. <i>Science Translational Medicine</i> , 2017 , 9,	17.5	60
104	Enzymatic Synthesis of Homogeneous Chondroitin Sulfate Oligosaccharides. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 11784-11787	16.4	38
103	Enzymatic Synthesis of Homogeneous Chondroitin Sulfate Oligosaccharides. <i>Angewandte Chemie</i> , 2017 , 129, 11946-11949	3.6	7
102	Insights into the role of 3-O-sulfotransferase in heparan sulfate biosynthesis. <i>Organic and Biomolecular Chemistry</i> , 2017 , 15, 6792-6799	3.9	7
101	Expression of chondroitin-4-O-sulfotransferase in <i>Escherichia coli</i> and <i>Pichia pastoris</i> . <i>Applied Microbiology and Biotechnology</i> , 2017 , 101, 6919-6928	5.7	17
100	Discovery of a Small-Molecule Modulator of Glycosaminoglycan Sulfation. <i>ACS Chemical Biology</i> , 2017 , 12, 3126-3133	4.9	14
99	Structure Based Substrate Specificity Analysis of Heparan Sulfate 6-O-Sulfotransferases. <i>ACS Chemical Biology</i> , 2017 , 12, 73-82	4.9	26
98	Gas-Phase Analysis of the Complex of Fibroblast Growth Factor 1 with Heparan Sulfate: A Traveling Wave Ion Mobility Spectrometry (TWIMS) and Molecular Modeling Study. <i>Journal of the American Society for Mass Spectrometry</i> , 2017 , 28, 96-109	3.5	17
97	CHEMOENZYMATIC SYNTHESIS OF CARBOHYDRATES 2016 , 221-233		
96	Uncovering the Relationship between Sulphation Patterns and Conformation of Iduronic Acid in Heparan Sulphate. <i>Scientific Reports</i> , 2016 , 6, 29602	4.9	42

95	Epitope mapping by a Wnt-blocking antibody: evidence of the Wnt binding domain in heparan sulfate. <i>Scientific Reports</i> , 2016 , 6, 26245	4.9	32
94	The US regulatory and pharmacopeia response to the global heparin contamination crisis. <i>Nature Biotechnology</i> , 2016 , 34, 625-30	44.5	77
93	Fibronectin on the Surface of Myeloma Cell-derived Exosomes Mediates Exosome-Cell Interactions. <i>Journal of Biological Chemistry</i> , 2016 , 291, 1652-1663	5.4	156
92	Expanding the 3-O-Sulfate Proteome--Enhanced Binding of Neuropilin-1 to 3-O-Sulfated Heparan Sulfate Modulates Its Activity. <i>ACS Chemical Biology</i> , 2016 , 11, 971-80	4.9	38
91	Design and synthesis of active heparan sulfate-based probes. <i>Chemical Communications</i> , 2015 , 51, 11019-11021	5.1	1027
90	2-O-Sulfated Domains in Syndecan-1 Heparan Sulfate Inhibit Neutrophil Cathelicidin and Promote Staphylococcus aureus Corneal Infection. <i>Journal of Biological Chemistry</i> , 2015 , 290, 16157-67	5.4	19
89	Facile chemoenzymatic synthesis of biotinylated heparosan hexasaccharide. <i>Organic and Biomolecular Chemistry</i> , 2015 , 13, 5098-101	3.9	14
88	Role of Deacetylase Activity of N-Deacetylase/N-Sulfotransferase 1 in Forming N-Sulfated Domain in Heparan Sulfate. <i>Journal of Biological Chemistry</i> , 2015 , 290, 20427-37	5.4	19
87	Divergent Synthesis of Heparan Sulfate Oligosaccharides. <i>Journal of Organic Chemistry</i> , 2015 , 80, 12265-72	4.9	37
86	Homogeneous low-molecular-weight heparins with reversible anticoagulant activity. <i>Nature Chemical Biology</i> , 2014 , 10, 248-50	11.7	147
85	De novo synthesis of a narrow size distribution low-molecular-weight heparin. <i>Glycobiology</i> , 2014 , 24, 476-86	5.8	14
84	Chemoenzymatic synthesis and structural characterization of 2-O-sulfated glucuronic acid-containing heparan sulfate hexasaccharides. <i>Glycobiology</i> , 2014 , 24, 681-92	5.8	26
83	Chemoenzymatic synthesis of heparan sulfate and heparin. <i>Natural Product Reports</i> , 2014 , 31, 1676-85	15.1	142
82	Hs3st3-modified heparan sulfate controls KIT+ progenitor expansion by regulating 3-O-sulfotransferases. <i>Developmental Cell</i> , 2014 , 29, 662-73	10.2	52
81	Molecular mechanism of substrate specificity for heparan sulfate 2-O-sulfotransferase. <i>Journal of Biological Chemistry</i> , 2014 , 289, 13407-18	5.4	33
80	Fibroblast growth factor-based signaling through synthetic heparan sulfate blocks copolymers studied using high cell density three-dimensional cell printing. <i>Journal of Biological Chemistry</i> , 2014 , 289, 9754-65	5.4	20
79	Assays for determining heparan sulfate and heparin O-sulfotransferase activity and specificity. <i>Analytical and Bioanalytical Chemistry</i> , 2014 , 406, 525-36	4.4	14
78	Heparan Sulfate (Glucosamine) 3-O-Sulfotransferase 1-6 (HS3ST1-6) 2014 , 1081-1089		0

77	Heparosan-derived heparan sulfate/heparin-like compounds: one kind of potential therapeutic agents. <i>Medicinal Research Reviews</i> , 2013 , 33, 665-92	14.4	36
76	Towards the chemoenzymatic synthesis of heparan sulfate oligosaccharides: Oxidative cleavage of -nitrophenyl group with ceric ammonium salts. <i>Tetrahedron Letters</i> , 2013 , 54, 4471-4474	2	17
75	N-sulfotestosteronan, a novel substrate for heparan sulfate 6-O-sulfotransferases and its analysis by oxidative degradation. <i>Biopolymers</i> , 2013 , 99, 675-85	2.2	5
74	Multi-faceted substrate specificity of heparanase. <i>Matrix Biology</i> , 2013 , 32, 223-7	11.4	62
73	Neutralizing the anticoagulant activity of ultra-low-molecular-weight heparins using N-acetylglucosamine 6-sulfatase. <i>FEBS Journal</i> , 2013 , 280, 2523-32	5.7	8
72	Use of biosynthetic enzymes in heparin and heparan sulfate synthesis. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 4786-92	3.4	33
71	Investigation of the substrate specificity of K5 lyase A from K5A bacteriophage. <i>Glycobiology</i> , 2013 , 23, 132-41	5.8	6
70	Chemoenzymatic synthesis of glycosaminoglycans: re-creating, re-modeling and re-designing nature's longest or most complex carbohydrate chains. <i>Glycobiology</i> , 2013 , 23, 764-77	5.8	110
69	Chemoenzymatic synthesis of uridine diphosphate-GlcNAc and uridine diphosphate-GalNAc analogs for the preparation of unnatural glycosaminoglycans. <i>Journal of Organic Chemistry</i> , 2012 , 77, 1449-56	4.2	50
68	Synthetic heparin. <i>Current Opinion in Pharmacology</i> , 2012 , 12, 217-9	5.1	66
67	Understanding the substrate specificity of the heparan sulfate sulfotransferases by an integrated biosynthetic and crystallographic approach. <i>Current Opinion in Structural Biology</i> , 2012 , 22, 550-7	8.1	29
66	Chemoenzymatic synthesis of heparin oligosaccharides with both anti-factor Xa and anti-factor IIa activities. <i>Journal of Biological Chemistry</i> , 2012 , 287, 29054-61	5.4	44
65	Substrate specificity of 6-O-endosulfatase (Sulf-2) and its implications in synthesizing anticoagulant heparan sulfate. <i>Glycobiology</i> , 2012 , 22, 1353-62	5.8	20
64	Probing structural selectivity of synthetic heparin binding to Stabilin protein receptors. <i>Journal of Biological Chemistry</i> , 2012 , 287, 20774-83	5.4	30
63	Directing the biological activities of heparan sulfate oligosaccharides using a chemoenzymatic approach. <i>Glycobiology</i> , 2012 , 22, 96-106	5.8	21
62	Deciphering mode of action of heparanase using structurally defined oligosaccharides. <i>Journal of Biological Chemistry</i> , 2012 , 287, 34836-43	5.4	45
61	Uncovering biphasic catalytic mode of C5-epimerase in heparan sulfate biosynthesis. <i>Journal of Biological Chemistry</i> , 2012 , 287, 20996-1002	5.4	52
60	Dissecting the substrate recognition of 3-O-sulfotransferase for the biosynthesis of anticoagulant heparin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 5265-70	11.5	42

59	Chemoenzymatic synthesis of heparan sulfate and heparin. <i>Biocatalysis and Biotransformation</i> , 2012 , 30, 296-308	2.5	9
58	Enzymatic placement of 6-O-sulfo groups in heparan sulfate. <i>Biochemistry</i> , 2011 , 50, 4382-91	3.2	15
57	Chemoenzymatic synthesis of homogeneous ultralow molecular weight heparins. <i>Science</i> , 2011 , 334, 498-501	33.3	303
56	Control of the heparosan N-deacetylation leads to an improved bioengineered heparin. <i>Applied Microbiology and Biotechnology</i> , 2011 , 91, 91-9	5.7	46
55	Anti-heparan sulfate peptides that block herpes simplex virus infection in vivo. <i>Journal of Biological Chemistry</i> , 2011 , 286, 25406-15	5.4	83
54	Expression of heparan sulfate sulfotransferases in <i>Kluyveromyces lactis</i> and preparation of 3Tphosphoadenosine-5Tphosphosulfate. <i>Glycobiology</i> , 2011 , 21, 771-80	5.8	60
53	The dominating role of N-deacetylase/N-sulfotransferase 1 in forming domain structures in heparan sulfate. <i>Journal of Biological Chemistry</i> , 2011 , 286, 19768-76	5.4	54
52	Unraveling the specificity of heparanase utilizing synthetic substrates. <i>Journal of Biological Chemistry</i> , 2010 , 285, 14504-13	5.4	55
51	Using engineered 2-O-sulfotransferase to determine the activity of heparan sulfate C5-epimerase and its mutants. <i>Journal of Biological Chemistry</i> , 2010 , 285, 11106-13	5.4	17
50	Chemoenzymatic design of heparan sulfate oligosaccharides. <i>Journal of Biological Chemistry</i> , 2010 , 285, 34240-9	5.4	127
49	Enzymatic Synthesis of Heparin 2010 , 259-277		2
48	Structure, Biosynthesis, and Function of Glycosaminoglycans 2010 , 407-427		5
47	Preactivation-based, one-pot combinatorial synthesis of heparin-like hexasaccharides for the analysis of heparin-protein interactions. <i>Chemistry - A European Journal</i> , 2010 , 16, 8365-75	4.8	88
46	Recent progress and applications in glycosaminoglycan and heparin research. <i>Current Opinion in Chemical Biology</i> , 2009 , 13, 633-40	9.7	88
45	Quantification of heparan sulfate disaccharides using ion-pairing reversed-phase microflow high-performance liquid chromatography with electrospray ionization trap mass spectrometry. <i>Analytical Chemistry</i> , 2009 , 81, 4349-55	7.8	79
44	Design of biologically active heparan sulfate and heparin using an enzyme-based approach. <i>Natural Product Reports</i> , 2009 , 26, 610-27	15.1	74
43	Engineering sulfotransferases to modify heparan sulfate. <i>Nature Chemical Biology</i> , 2008 , 4, 200-2	11.7	59
42	Solution structures of chemoenzymatically synthesized heparin and its precursors. <i>Journal of the American Chemical Society</i> , 2008 , 130, 12998-3007	16.4	140

41	Using a 3-O-sulfated heparin octasaccharide to inhibit the entry of herpes simplex virus type 1. <i>Biochemistry</i> , 2008 , 47, 5774-83	3.2	105
40	Redirecting the substrate specificity of heparan sulfate 2-O-sulfotransferase by structurally guided mutagenesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 18724-9	11.5	39
39	Synthesis of uridine 5'diphosphouronic acid: a potential substrate for the chemoenzymatic synthesis of heparin. <i>Journal of Organic Chemistry</i> , 2008 , 73, 7631-7	4.2	22
38	Using an enzymatic combinatorial approach to identify anticoagulant heparan sulfate structures. <i>Chemistry and Biology</i> , 2007 , 14, 986-93		94
37	Anticoagulant heparan sulfate: structural specificity and biosynthesis. <i>Applied Microbiology and Biotechnology</i> , 2007 , 74, 263-72	5.7	101
36	Mutational study of heparan sulfate 2-O-sulfotransferase and chondroitin sulfate 2-O-sulfotransferase. <i>Journal of Biological Chemistry</i> , 2007 , 282, 8356-67	5.4	22
35	Enzymatic synthesis of glycosaminoglycan heparin. <i>Seminars in Thrombosis and Hemostasis</i> , 2007 , 33, 453-65	5.3	40
34	The principal neuronal gD-type 3-O-sulfotransferases and their products in central and peripheral nervous system tissues. <i>Matrix Biology</i> , 2007 , 26, 442-55	11.4	37
33	Inhibition or activation of Apert syndrome FGFR2 (S252W) signaling by specific glycosaminoglycans. <i>Journal of Biological Chemistry</i> , 2006 , 281, 6924-30	5.4	42
32	Enzymatic synthesis of heparin related polysaccharides on sensor chips: rapid screening of heparin-protein interactions. <i>Biochemical and Biophysical Research Communications</i> , 2006 , 339, 597-602	3.4	39
31	Determination of the substrate specificities of N-acetyl-d-glucosaminyltransferase. <i>Biochemistry</i> , 2006 , 45, 12358-65	3.2	44
30	Affinity, kinetic, and structural study of the interaction of 3-O-sulfotransferase isoform 1 with heparan sulfate. <i>Biochemistry</i> , 2006 , 45, 5122-8	3.2	20
29	Characterization of the N-deacetylase domain from the heparan sulfate N-deacetylase/N-sulfotransferase 2. <i>Biochemical and Biophysical Research Communications</i> , 2006 , 339, 1232-7	3.4	38
28	Characterization of the structure of antithrombin-binding heparan sulfate generated by heparan sulfate 3-O-sulfotransferase 5. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2005 , 1725, 190-200	4	15
27	Characterization of heparan sulphate 3-O-sulphotransferase isoform 6 and its role in assisting the entry of herpes simplex virus type 1. <i>Biochemical Journal</i> , 2005 , 385, 451-9	3.8	90
26	Enzymatic redesigning of biologically active heparan sulfate. <i>Journal of Biological Chemistry</i> , 2005 , 280, 42817-25	5.4	102
25	A role for 3-O-sulfated heparan sulfate in cell fusion induced by herpes simplex virus type 1. <i>Journal of General Virology</i> , 2004 , 85, 805-809	4.9	71
24	Structural analysis of the sulfotransferase (3-o-sulfotransferase isoform 3) involved in the biosynthesis of an entry receptor for herpes simplex virus 1. <i>Journal of Biological Chemistry</i> , 2004 , 279, 45185-93	5.4	69

23	Crystal structure and mutational analysis of heparan sulfate 3-O-sulfotransferase isoform 1. <i>Journal of Biological Chemistry</i> , 2004 , 279, 25789-97	5.4	58
22	Analysis of the interaction between adeno-associated virus and heparan sulfate using atomic force microscopy. <i>Glycobiology</i> , 2004 , 14, 969-77	5.8	25
21	A conformational change in heparan sulfate 3-O-sulfotransferase-1 is induced by binding to heparan sulfate. <i>Biochemistry</i> , 2004 , 43, 4680-8	3.2	11
20	The biosynthesis of anticoagulant heparan sulfate by the heparan sulfate 3-O-sulfotransferase isoform 5. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2004 , 1671, 34-43	4	31
19	Biosynthesis of 3-O-sulfated heparan sulfate: unique substrate specificity of heparan sulfate 3-O-sulfotransferase isoform 5. <i>Glycobiology</i> , 2003 , 13, 785-94	5.8	40
18	Cell surface heparan sulfate and its roles in assisting viral infections. <i>Medicinal Research Reviews</i> , 2002 , 22, 1-25	14.4	247
17	Characterization of a heparan sulfate octasaccharide that binds to herpes simplex virus type 1 glycoprotein D. <i>Journal of Biological Chemistry</i> , 2002 , 277, 33456-67	5.4	125
16	Heparan sulfate 3-O-sulfotransferase isoform 5 generates both an antithrombin-binding site and an entry receptor for herpes simplex virus, type 1. <i>Journal of Biological Chemistry</i> , 2002 , 277, 37912-9	5.4	129
15	Expression in Escherichia coli, purification and kinetic characterization of human heparan sulfate 3-O-sulfotransferase-1. <i>Biochemical and Biophysical Research Communications</i> , 2002 , 290, 1206-13	3.4	11
14	Heparan Sulfate D-Glucosaminyl 3-O-Sulfotransferase-1, -2, -3, and -4 2002 , 475-483		4
13	6-O-sulfotransferase-1 represents a critical enzyme in the anticoagulant heparan sulfate biosynthetic pathway. <i>Journal of Biological Chemistry</i> , 2001 , 276, 42311-21	5.4	65
12	Enzymatic modification of heparan sulfate on a biochip promotes its interaction with antithrombin III. <i>Biochemical and Biophysical Research Communications</i> , 2000 , 276, 292-7	3.4	55
11	Multiple isoforms of heparan sulfate D-glucosaminyl 3-O-sulfotransferase. Isolation, characterization, and expression of human cdnas and identification of distinct genomic loci. <i>Journal of Biological Chemistry</i> , 1999 , 274, 5170-84	5.4	189
10	Molecular cloning and characterization of a human uronyl 2-sulfotransferase that sulfates iduronyl and glucuronyl residues in dermatan/chondroitin sulfate. <i>Journal of Biological Chemistry</i> , 1999 , 274, 10474-80	5.4	110
9	Heparan sulfate D-glucosaminyl 3-O-sulfotransferase-3A sulfates N-unsubstituted glucosamine residues. <i>Journal of Biological Chemistry</i> , 1999 , 274, 38155-62	5.4	83
8	Anticoagulant heparan sulfate precursor structures in F9 embryonal carcinoma cells. <i>Journal of Biological Chemistry</i> , 1999 , 274, 5681-91	5.4	32
7	A novel role for 3-O-sulfated heparan sulfate in herpes simplex virus 1 entry. <i>Cell</i> , 1999 , 99, 13-22	56.2	844
6	Expression of heparan sulfate D-glucosaminyl 3-O-sulfotransferase isoforms reveals novel substrate specificities. <i>Journal of Biological Chemistry</i> , 1999 , 274, 5185-92	5.4	139

5	The retinoic acid and cAMP-dependent up-regulation of 3-O-sulfotransferase-1 leads to a dramatic augmentation of anticoagulant active heparan sulfate biosynthesis in F9 embryonal carcinoma cells. <i>Journal of Biological Chemistry</i> , 1998 , 273, 27998-8003	5.4	29
4	Molecular cloning and expression of mouse and human cDNAs encoding heparan sulfate D-glucosaminyl 3-O-sulfotransferase. <i>Journal of Biological Chemistry</i> , 1997 , 272, 28008-19	5.4	143
3	Purification of heparan sulfate D-glucosaminyl 3-O-sulfotransferase. <i>Journal of Biological Chemistry</i> , 1996 , 271, 27072-82	5.4	97
2	Cell-free Synthesis of Anticoagulant Heparan Sulfate Reveals a Limiting Converting Activity That Modifies an Excess Precursor Pool. <i>Journal of Biological Chemistry</i> , 1996 , 271, 27063-27071	5.4	24
1	Strategy for the sequence analysis of heparin. <i>Glycobiology</i> , 1995 , 5, 765-74	5.8	33