Scott E Guimond

List of Publications by Year
in descending order

58 papers	3,798 citations	185998 28 h-index	143772 57 g-index
65 all docs	65 docs citations	65 times ranked	5643 citing authors

#	Article	IF	Citations
1	Extracellular matrix and cell signalling: the dynamic cooperation of integrin, proteoglycan and growth factor receptor. Journal of Endocrinology, 2011, 209, 139-151.	1.2	985
2	Heparan sulfate: decoding a dynamic multifunctional cell regulator. Trends in Cell Biology, 2001, 11, 75-82.	3.6	440
3	Heparin Inhibits Cellular Invasion by SARS-CoV-2: Structural Dependence of the Interaction of the Spike S1 Receptor-Binding Domain with Heparin. Thrombosis and Haemostasis, 2020, 120, 1700-1715.	1.8	228
4	Fibroblast growth factor receptor signalling is dictated by specific heparan sulphate saccharides. Current Biology, 1999, 9, 1343-1346.	1.8	186
5	Anosmin-1 Modulates Fibroblast Growth Factor Receptor 1 Signaling in Human Gonadotropin-Releasing Hormone Olfactory Neuroblasts through a Heparan Sulfate-Dependent Mechanism. Journal of Neuroscience, 2004, 24, 10384-10392.	1.7	138
6	[11] Regulation by heparan sulfate in fibroblast growth factor signaling. Methods in Enzymology, 1994, 245, 219-240.	0.4	98
7	Localisation of specific heparan sulfate proteoglycans during the proliferative phase of brain development. Developmental Dynamics, 2003, 227, 170-184.	0.8	92
8	Diversification of the Structural Determinants of Fibroblast Growth Factor-Heparin Interactions. Journal of Biological Chemistry, 2012, 287, 40061-40073.	1.6	69
9	Novel Mechanisms of Fibroblast Growth Factor Receptor 1 Regulation by Extracellular Matrix Protein Anosmin-1. Journal of Biological Chemistry, 2009, 284, 29905-29920.	1.6	68
10	Influence of substitution pattern and cation binding on conformation and activity in heparin derivatives. Glycobiology, 2007, 17, 983-993.	1.3	66
11	Variant heparan sulfates synthesized in developing mouse brain differentially regulate FGF signaling. Glycobiology, 2002, 12, 721-727.	1.3	64
12	Synthetic Heparan Sulfate Mimetic Pixatimod (PG545) Potently Inhibits SARS-CoV-2 by Disrupting the Spikeâ€“ACE2 Interaction. ACS Central Science, 2022, 8, 527-545.	5.3	62
13	High sensitivity separation and detection of heparan sulfate disaccharides. Journal of Chromatography A, 2006, 1135, 52-56.	1.8	54
14	Glycosaminoglycan origin and structure revealed by multivariate analysis of NMR and CD spectra. Glycobiology, 2009, 19, 52-67.	1.3	50
15	Disaccharide compositional analysis of heparan sulfate and heparin polysaccharides using UV or high-sensitivity fluorescence (BODIPY) detection. Nature Protocols, 2010, 5, 1983-1992.	5.5	47
16	Sulf1 and Sulf2 Differentially Modulate Heparan Sulfate Proteoglycan Sulfation during Postnatal Cerebellum Development: Evidence for Neuroprotective and Neurite Outgrowth Promoting Functions. PLoS ONE, 2015, 10, e0139853.	1.1	45
17	Rapid Purification and High Sensitivity Analysis of Heparan Sulfate from Cells and Tissues. Journal of Biological Chemistry, 2009, 284, 25714-25722.	1.6	44
18	Chemically modified, non-anticoagulant heparin derivatives are potent galectin-3 binding inhibitors and inhibit circulating galectin-3-promoted metastasis. Oncotarget, 2015, 6, 23671-23687.	0.8	43

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19	Nanoscale self-assembled multivalent (SAMul) heparin binders in highly competitive, biologically relevant, aqueous media. Chemical Science, 2014, 5, 1484.	3.7	42
20	Inhibition of influenza H5N1 invasion by modified heparin derivatives. MedChemComm, 2015, 6, 640-646.	3.5	40
21	Highly Diverse Heparan Sulfate Analogue Libraries:â€‰ Providing Access to Expanded Areas of Sequence Space for Bioactivity Screening. Journal of Medicinal Chemistry, 2004, 47, 277-280.	2.9	39
22	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. Nature Communications, 2020, 11, 1481.	5.8	39
23	The Activities of Heparan Sulfate and its Analogue Heparin are Dictated by Biosynthesis, Sequence, and Conformation. Connective Tissue Research, 2008, 49, 140-144.	1.1	38
24	Differential Sulfation Remodelling of Heparan Sulfate by Extracellular 6-O-Sulfatases Regulates Fibroblast Growth Factor-Induced Boundary Formation by Glial Cells: Implications for Glial Cell Transplantation. Journal of Neuroscience, 2012, 32, 15902-15912.	1.7	38
25	Singleâ€Entity Heparan Sulfate Glycomimetic Clusters for Therapeutic Applications. Angewandte Chemie - International Edition, 2015, 54, 2718-2723.	7.2	34
26	Heparan Sulfate Proteoglycan Synthesis Is Dysregulated in Human Osteoarthritic Cartilage. American Journal of Pathology, 2019, 189, 632-647.	1.9	33
27	Site-specific interactions of copper(II) ions with heparin revealed with complementary (SRCD, NMR,) Tj ETQq1 1 0.784314 rgBT /Overlo	1.1	32
28	The Hyperlipidaemic Drug Fenofibrate Significantly Reduces Infection by SARS-CoV-2 in Cell Culture Models. Frontiers in Pharmacology, 2021, 12, 660490.	1.6	31
29	A synthetic glycosaminoglycan mimetic (RGTA) modifies natural glycosaminoglycan species during myogenesis. Journal of Cell Science, 2005, 118, 253-264.	1.2	29
30	Comparable stabilisation, structural changes and activities can be induced in FGF by a variety of HS and non-GAG analogues: implications for sequence-activity relationships. Organic and Biomolecular Chemistry, 2010, 8, 5390.	1.5	29
31	Dendrimer Heparan Sulfate Glycomimetics: Potent Heparanase Inhibitors for Anticancer Therapy. ACS Chemical Biology, 2018, 13, 3236-3242.	1.6	28
32	Versatile Separation and Analysis of Heparan Sulfate Oligosaccharides Using Graphitized Carbon Liquid Chromatography and Electrospray Mass Spectrometry. Analytical Chemistry, 2017, 89, 8942-8950.	3.2	27
33	Disruption of Rosetting in Plasmodium falciparum Malaria with Chemically Modified Heparin and Low Molecular Weight Derivatives Possessing Reduced Anticoagulant and Other Serine Protease Inhibition Activities. Journal of Medicinal Chemistry, 2008, 51, 1453-1458.	2.9	26
34	The potential for circular dichroism as an additional facile and sensitive method of monitoring low-molecular-weight heparins and heparinoids. Thrombosis and Haemostasis, 2009, 102, 874-878.	1.8	25
35	Glycomics Profiling of Heparan Sulfate Structure and Activity. Methods in Enzymology, 2010, 480, 65-85.	0.4	25
36	Heparan sulphate sulphotransferase expression in mice and Caenorhabditis elegans. Biochemical Society Transactions, 2003, 31, 343-348.	1.6	24

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37	Array-Based Functional Screening of Heparin Glycans. Chemistry and Biology, 2012, 19, 553-558.	6.2	22
38	Heparin Isomeric Oligosaccharide Separation Using Volatile Salt Strong Anion Exchange Chromatography. Analytical Chemistry, 2016, 88, 11542-11550.	3.2	19
39	2-O Heparan Sulfate Sulfation by Hs2st Is Required for Erk/Mapk Signalling Activation at the Mid-Gestational Mouse Telencephalic Midline. PLoS ONE, 2015, 10, e0130147.	1.1	19
40	Sulfataseâ€mediated manipulation of the astrocyteâ€Schwann cell interface. Glia, 2017, 65, 19-33.	2.5	18
41	Detection of Protein Tyrosine Kinase Activity Using a High-Capacity Streptavidin-Coated Membrane and Optimized Biotinylated Peptide Substrates. Analytical Biochemistry, 1998, 261, 100-112.	1.1	17
42	Distinct patterns of heparan sulphate in pancreatic islets suggest novel roles in paracrine islet regulation. Molecular and Cellular Endocrinology, 2015, 399, 296-310.	1.6	17
43	Cations Modulate Polysaccharide Structure To Determine FGFâ^'FGFR Signaling: A Comparison of Signaling and Inhibitory Polysaccharide Interactions with FGF-1 in Solution. Biochemistry, 2009, 48, 4772-4779.	1.2	16
44	Inhibition of BACE1, the Î²-secretase implicated in Alzheimerâ€™s disease, by a chondroitin sulfate extract from Sardina pilchardus. Neural Regeneration Research, 2020, 15, 1546.	1.6	16
45	Engineered Bio-Active Polysaccharides from Heparin. Macromolecular Bioscience, 2006, 6, 681-686.	2.1	15
46	A semi-synthetic glycosaminoglycan analogue inhibits and reverses Plasmodium falciparum cytoadherence. PLoS ONE, 2017, 12, e0186276.	1.1	11
47	Singleâ€Entity Heparan Sulfate Glycomimetic Clusters for Therapeutic Applications. Angewandte Chemie, 2015, 127, 2756-2761.	1.6	9
48	Proteoglycans Make the Grade-ient. Molecular Cell, 2004, 16, 159-160.	4.5	8
49	Glycosaminoglycans from Litopenaeus vannamei Inhibit the Alzheimerâ€™s Disease Î² Secretase, BACE1. Marine Drugs, 2021, 19, 203.	2.2	8
50	Variations in the Peritrophic Matrix Composition of Heparan Sulphate from the Tsetse Fly, Glossina morsitans morsitans. Pathogens, 2018, 7, 32.	1.2	6
51	A Glycosaminoglycan Extract from Portunus pelagicus Inhibits BACE1, the Î² Secretase Implicated in Alzheimerâ€™s Disease. Marine Drugs, 2019, 17, 293.	2.2	6
52	Dynamic biosynthesis of heparan sulphate sequences in developing mouse brain: a potential regulatory mechanism during development. Biochemical Society Transactions, 2001, 29, 177-81.	1.6	6
53	Heparan sulfate phage display antibodies recognise epitopes defined by a combination of sugar sequence and cation binding. Organic and Biomolecular Chemistry, 2015, 13, 6066-6072.	1.5	5
54	Tools for the Quality Control of Pharmaceutical Heparin. Medicina (Lithuania), 2019, 55, 636.	0.8	5

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55	Chemometric analysis for comparison of heparan sulphate oligosaccharides. Journal of the Royal Society Interface, 2009, 6, 997-1004.	1.5	4
56	Chemical synthesis of a sulfated d-glucosamine library and evaluation of cell proliferation capabilities. Carbohydrate Research, 2020, 495, 108085.	1.1	1
57	Heparan Sulphate-Growth Factor Interactions in Development and Disease. Trends in Glycoscience and Glycotechnology, 2005, 17, 241-253.	0.0	1
58	Highly diverse heparan sulfate analogue libraries: a novel resource for bioactivity screening of proteins. International Journal of Experimental Pathology, 2004, 85, A62-A63.	0.6	0