Jeremy E Turnbull

List of Publications by Year in descending order

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117571 91828 5,493 72 34 69 citations g-index h-index papers 82 82 82 6815 docs citations times ranked citing authors all docs

#	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	Heparan Sulfate Oligosaccharides Require 6-O-Sulfation for Promotion of Basic Fibroblast Growth Factor Mitogenic Activity. Journal of Biological Chemistry, 1998, 273, 22936-22942.	1.6	263
4	Modular Synthesis of Heparan Sulfate Oligosaccharides for Structureâ^'Activity Relationship Studies. Journal of the American Chemical Society, 2009, 131, 17394-17405.	6.6	246
5	Interactions of heparin/heparan sulfate with proteins: Appraisal of structural factors and experimental approaches. Glycobiology, 2004, 14, 17R-30R.	1.3	231
6	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
7	Fibroblast growth factor receptor signalling is dictated by specific heparan sulphate saccharides. Current Biology, 1999, 9, 1343-1346.	1.8	186
8	Heparan sulfate regulates amyloid precursor protein processing by BACE1, the Alzheimer's \hat{l}^2 -secretase. Journal of Cell Biology, 2003, 163, 97-107.	2.3	175
9	Structural Modification of Fibroblast Growth Factor-binding Heparan Sulfate at a Determinative Stage of Neural Development. Journal of Biological Chemistry, 1998, 273, 4350-4359.	1.6	165
10	Heparan Sulfate Undergoes Specific Structural Changes during the Progression from Human Colon Adenoma to Carcinoma in Vitro. Journal of Biological Chemistry, 1998, 273, 51-57.	1.6	119
11	Fabrication of Carbohydrate Microarrays on Gold Surfaces:Â Direct Attachment of Nonderivatized Oligosaccharides to Hydrazide-Modified Self-Assembled Monolayers. Analytical Chemistry, 2006, 78, 4786-4793.	3.2	118
12	A Molecular Mechanism for the Heparan Sulfate Dependence of Slit-Robo Signaling. Journal of Biological Chemistry, 2006, 281, 39693-39698.	1.6	99
13	How members of the human gut microbiota overcome the sulfation problem posed by glycosaminoglycans. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7037-7042.	3.3	99
14	A Versatile Gold Surface Approach for Fabrication and Interrogation of Glycoarrays. ChemBioChem, 2008, 9, 1568-1575.	1.3	88
15	Synthesis of a Targeted Library of Heparan Sulfate Hexa―to Dodecasaccharides as Inhibitors of β‧ecretase: Potential Therapeutics for Alzheimer's Disease. Chemistry - A European Journal, 2013, 19, 6817-6823.	1.7	80
16	Unfractionated heparin inhibits live wild type SARSâ€CoVâ€2 cell infectivity at therapeutically relevant concentrations. British Journal of Pharmacology, 2021, 178, 626-635.	2.7	73
17	Heparin Derivatives as Inhibitors of BACE-1, the Alzheimer's \hat{l}^2 -Secretase, with Reduced Activity against Factor Xa and Other Proteases. Journal of Medicinal Chemistry, 2006, 49, 6129-6132.	2.9	69
18	Influence of substitution pattern and cation binding on conformation and activity in heparin derivatives. Glycobiology, 2007, 17, 983-993.	1.3	66

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19	Variant heparan sulfates synthesized in developing mouse brain differentially regulate FGF signaling. Glycobiology, 2002, 12, 721-727.	1.3	64
20	Towards GAG glycomics: Analysis of highly sulfated heparins by MALDI-TOF massÂspectrometry. Glycobiology, 2007, 17, 972-982.	1.3	62
21	Synthetic Heparan Sulfate Mimetic Pixatimod (PG545) Potently Inhibits SARS-CoV-2 by Disrupting the Spike–ACE2 Interaction. ACS Central Science, 2022, 8, 527-545.	5.3	62
22	Intrinsic tryptophan fluorescence spectroscopy reliably determines galectin-ligand interactions. Scientific Reports, 2019, 9, 11851.	1.6	52
23	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
24	Generating heparan sulfate saccharide libraries for glycomics applications. Nature Protocols, 2010, 5, 821-833.	5.5	47
25	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
26	Rapid Purification and High Sensitivity Analysis of Heparan Sulfate from Cells and Tissues. Journal of Biological Chemistry, 2009, 284, 25714-25722.	1.6	44
27	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
28	Nanoscale self-assembled multivalent (SAMul) heparin binders in highly competitive, biologically relevant, aqueous media. Chemical Science, 2014, 5, 1484.	3.7	42
29	Microwave enhanced reaction of carbohydrates with amino-derivatised labels and glass surfaces. Journal of Materials Chemistry, 2003, 13, 2061.	6.7	41
30	The Satellite Cell Niche Regulates the Balance between Myoblast Differentiation and Self-Renewal via p53. Stem Cell Reports, 2018, 10, 970-983.	2.3	41
31	Highly Diverse Heparan Sulfate Analogue Libraries:  Providing Access to Expanded Areas of Sequence Space for Bioactivity Screening. Journal of Medicinal Chemistry, 2004, 47, 277-280.	2.9	39
32	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. Nature Communications, 2020, 11, 1481.	5.8	39
33	Differential Sulfation Remodelling of Heparan Sulfate by Extracellular 6- <i>O</i> -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
34	Singleâ€Entity Heparan Sulfate Glycomimetic Clusters for Therapeutic Applications. Angewandte Chemie - International Edition, 2015, 54, 2718-2723.	7.2	34
35	Software Tool for the Structural Determination of Glycosaminoglycans by Mass Spectrometry. Analytical Chemistry, 2008, 80, 9204-9212.	3.2	33
36	Heparan Sulfate Proteoglycan Synthesis Is Dysregulated in Human Osteoarthritic Cartilage. American Journal of Pathology, 2019, 189, 632-647.	1.9	33

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37	Evidence of a putative glycosaminoglycan binding site on the glycosylated SARS-CoV-2 spike protein N-terminal domain. Computational and Structural Biotechnology Journal, 2021, 19, 2806-2818.	1.9	33
38	The Hyperlipidaemic Drug Fenofibrate Significantly Reduces Infection by SARS-CoV-2 in Cell Culture Models. Frontiers in Pharmacology, 2021, 12, 660490.	1.6	31
39	Dendrimer Heparan Sulfate Glycomimetics: Potent Heparanase Inhibitors for Anticancer Therapy. ACS Chemical Biology, 2018, 13, 3236-3242.	1.6	28
40	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
41	Heparan sulfate glycomics: towards systems biology strategies. Biochemical Society Transactions, 2010, 38, 1356-1360.	1.6	26
42	Glycoarray Technologies: Deciphering Interactions from Proteins to Live Cell Responses. Microarrays (Basel, Switzerland), 2016, 5, 3.	1.4	26
43	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
44	Glycomics Profiling of Heparan Sulfate Structure and Activity. Methods in Enzymology, 2010, 480, 65-85.	0.4	25
45	Dissecting structure-function of 3-O-sulfated heparin and engineered heparan sulfates. Science Advances, 2021, 7, eabl6026.	4.7	23
46	Array-Based Functional Screening of Heparin Glycans. Chemistry and Biology, 2012, 19, 553-558.	6.2	22
47	Composition, Sequencing and Ion Mobility Mass Spectrometry of Heparan Sulfate-like Octasaccharide Isomers Differing in Glucuronic and Iduronic Acid Content. European Journal of Mass Spectrometry, 2015, 21, 245-254.	0.5	20
48	Cryogenic Infrared Spectroscopy Reveals Structural Modularity in the Vibrational Fingerprints of Heparan Sulfate Diastereomers. Analytical Chemistry, 2020, 92, 10228-10232.	3.2	20
49	Labelling Heparan Sulphate Saccharides with Chromophore, Fluorescence and Mass Tags for HPLC and MS Separations., 2009, 534, 157-169.		20
50	Getting the Farm Out of Pharma for Heparin Production. Science, 2011, 334, 462-463.	6.0	19
51	Heparin Isomeric Oligosaccharide Separation Using Volatile Salt Strong Anion Exchange Chromatography. Analytical Chemistry, 2016, 88, 11542-11550.	3.2	19
52	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
53	Sulfataseâ€mediated manipulation of the astrocyteâ€Schwann cell interface. Glia, 2017, 65, 19-33.	2.5	18
54	Low sulfated heparins target multiple proteins for central nervous system repair. Glia, 2019, 67, 668-687.	2.5	18

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55	By-Products of Heparin Production Provide a Diverse Source of Heparin-like and Heparan Sulfate Glycosaminoglycans. Scientific Reports, 2019, 9, 2679.	1.6	18
56	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
57	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
58	Engineered Bio-Active Polysaccharides from Heparin. Macromolecular Bioscience, 2006, 6, 681-686.	2.1	15
59	A Highâ€Fat Highâ€Fructose Diet Dysregulates the Homeostatic Crosstalk Between Gut Microbiome, Metabolome, and Immunity in an Experimental Model of Obesity. Molecular Nutrition and Food Research, 2022, 66, e2100950.	1.5	15
60	Saccharide Microarrays for High-Throughput Interrogation of Glycan-Protein Binding Interactions. , 2009, 534, 312-329.		14
61	Interaction with the heparin-derived binding inhibitors destabilizes galectin-3 protein structure. Biochemical and Biophysical Research Communications, 2020, 523, 336-341.	1.0	12
62	Enrichment of Two Isomeric Heparin Oligosaccharides Exhibiting Different Affinities toward Monocyte Chemoattractant Protein-1. Analytical Chemistry, 2016, 88, 11551-11558.	3.2	11
63	Integral Glycan Sequencing of Heparan Sulfate and Heparin Saccharides. , 2001, 171, 129-139.		10
64	Synthetic sugars enhance the functional glycomics toolkit. Nature Chemical Biology, 2006, 2, 449-450.	3.9	9
65	MYCN-Dependent Expression of Sulfatase-2 Regulates Neuroblastoma Cell Survival. Cancer Research, 2014, 74, 5999-6009.	0.4	9
66	Singleâ€Entity Heparan Sulfate Glycomimetic Clusters for Therapeutic Applications. Angewandte Chemie, 2015, 127, 2756-2761.	1.6	9
67	Omics Insights into Metabolic Stress and Resilience of Rats in Response to Shortâ€term Fructose Overfeeding. Molecular Nutrition and Food Research, 2019, 63, e1900773.	1.5	8
68	Glycomics: Technologies Taming a Frontier Omics Field. OMICS A Journal of Integrative Biology, 2010, 14, 385-387.	1.0	5
69	Glycomics Approaches for the Bioassay and Structural Analysis of Heparin/Heparan Sulphates. Metabolites, 2012, 2, 1060-1089.	1.3	4
70	Better growth-factor binding aids tissue repair. Nature Biomedical Engineering, 2020, 4, 368-369.	11.6	4
71	Enhancing the glycosciences toolkit: new GAGs in the lineup. Nature Methods, 2018, 15, 867-868.	9.0	3
72	Tian-Huang Formula, a Traditional Chinese Medicinal Prescription, Improves Hepatosteatosis and Glucose Intolerance Targeting AKT-SREBP Nexus in Diet-Induced Obese Rats. Evidence-based Complementary and Alternative Medicine, 2021, 2021, 1-15.	0.5	2