Gavin J Miller

List of Publications by Year
in descending order

50 papers	1,365 citations	471371 17 h-index	395590 33 g-index
63 all docs	63 docs citations	63 times ranked	2066 citing authors

#	Article	IF	Citations
1	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
2	Making the longest sugars: a chemical synthesis of heparin-related [4]_noligosaccharides from 16-mer to 40-mer. Chemical Science, 2015, 6, 6158-6164.	3.7	77
3	Selection of a Novel Anti-Nicotine Vaccine: Influence of Antigen Design on Antibody Function in Mice. PLoS ONE, 2013, 8, e76557.	1.1	71
4	Recent Advances in the Chemical Synthesis and Evaluation of Anticancer Nucleoside Analogues. Molecules, 2020, 25, 2050.	1.7	67
5	Biology-enabling inositol phosphates, phosphatidylinositol phosphates and derivatives. Natural Product Reports, 2007, 24, 687.	5.2	65
6	An Updated Synthesis of the Diazo-Transfer Reagent Imidazole-1-sulfonyl Azide Hydrogen Sulfate. Journal of Organic Chemistry, 2016, 81, 3443-3446.	1.7	56
7	Tetrasaccharide iteration synthesis of a heparin-like dodecasaccharide and radiolabelling for in vivo tissue distribution studies. Nature Communications, 2013, 4, 2016.	5.8	50
8	First Gram-Scale Synthesis of a Heparin-Related Dodecasaccharide. Organic Letters, 2013, 15, 88-91.	2.4	46
9	Synthesis and Scalable Conversion of <scp>l</scp>-Iduronamides to Heparin-Related Di- and Tetrasaccharides. Journal of Organic Chemistry, 2012, 77, 7823-7843.	1.7	42
10	Efficient chemical synthesis of heparin-like octa-, deca- and dodecasaccharides and inhibition of FGF2- and VEGF165-mediated endothelial cell functions. Chemical Science, 2013, 4, 3218.	3.7	36
11	Synthetic heparan sulfate dodecasaccharides reveal single sulfation site interconverts CXCL8 and CXCL12 chemokine biology. Chemical Communications, 2015, 51, 13846-13849.	2.2	35
12	Recent advances in the chemical synthesis of sugar-nucleotides. Carbohydrate Research, 2017, 451, 95-109.	1.1	35
13	Recent advances in the enzymatic synthesis of sugar-nucleotides using nucleotidylyltransferases and glycosyltransferases. Carbohydrate Research, 2018, 469, 38-47.	1.1	29
14	Small-Molecule-Induced Clustering of Heparan Sulfate Promotes Cell Adhesion. Journal of the American Chemical Society, 2013, 135, 11032-11039.	6.6	25
15	Chemoenzymatic Synthesis of C6-Modified Sugar Nucleotides To Probe the GDP-d-Mannose Dehydrogenase from Pseudomonas aeruginosa. Organic Letters, 2019, 21, 4415-4419.	2.4	24
16	Oxidase enzymes as sustainable oxidation catalysts. Royal Society Open Science, 2022, 9, 211572.	1.1	20
17	Adaptable Synthesis of <i>C</i>-Glycosidic Multivalent Carbohydrates and Succinamide-Linked Derivatization. Organic Letters, 2010, 12, 5262-5265.	2.4	17
18	Synthesis of a heparin-related GlcNâ€“IdoA sulfation-site variable disaccharide library and analysis by Raman and ROA spectroscopy. Carbohydrate Research, 2014, 400, 44-53.	1.1	17

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19	Synthesis of <scp>l</scp>-Iduronic Acid Derivatives via [3.2.1] and [2.2.2] <scp>l</scp>-Iduronic Lactones from Bulk Glucose-Derived Cyanohydrin Hydrolysis: A Reversible Conformationally Switched Superdisarmed/Rearmed Lactone Route to Heparin Disaccharides. Journal of Organic Chemistry, 2015, 80, 3777-3789.	1.7	17
20	Developments in the Chemical Synthesis of Heparin and Heparan Sulfate. Chemical Record, 2021, 21, 3238-3255.	2.9	16
21	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
22	Advances in biocatalytic and chemoenzymatic synthesis of nucleoside analogues. Expert Opinion on Drug Discovery, 2022, 17, 355-364.	2.5	16
23	Chemical and enzymatic synthesis of the alginate sugar nucleotide building block: GDP-d-mannuronic acid. Carbohydrate Research, 2019, 485, 107819.	1.1	14
24	Inhibition of the GDP-<scp>d</scp>-Mannose Dehydrogenase from <i>Pseudomonas aeruginosa</i> Using Targeted Sugar Nucleotide Probes. ACS Chemical Biology, 2020, 15, 3086-3092.	1.6	14
25	Modular Synthesis of Heparin-Related Tetra-, Hexa- and Octasaccharides with Differential O-6 Protections: Programming for Regiodefined 6-O-Modifications. Molecules, 2015, 20, 6167-6180.	1.7	12
26	A latent reactive handle for functionalising heparin-like and LMWH deca- and dodecasaccharides. Organic and Biomolecular Chemistry, 2015, 13, 11208-11219.	1.5	10
27	Gas-liquid flow hydrogenation of nitroarenes: Efficient access to a pharmaceutically relevant pyrrolobenzo[1,4]diazepine scaffold. Tetrahedron, 2018, 74, 6795-6803.	1.0	10
28	Design, chemical synthesis and antiviral evaluation of 2â€²-deoxy-2â€²-fluoro-2â€²-C-methyl-4â€²-thionucleosides. Bioorganic and Medicinal Chemistry Letters, 2022, 61, 128605.	1.0	9
29	Exploring a glycosylation methodology for the synthesis of hydroxamate-modified alginate building blocks. Organic and Biomolecular Chemistry, 2019, 17, 9321-9335.	1.5	8
30	Unifying the synthesis of nucleoside analogs. Science, 2020, 369, 623-623.	6.0	8
31	Glycosaminoglycans from Litopenaeus vannamei Inhibit the Alzheimerâ€™s Disease Î² Secretase, BACE1. Marine Drugs, 2021, 19, 203.	2.2	8
32	Synthetic Site-Selectively Mono-6-O-Sulfated Heparan Sulfate Dodecasaccharide Shows Anti-Angiogenic Properties In Vitro and Sensitizes Tumors to Cisplatin In Vivo. PLoS ONE, 2016, 11, e0159739.	1.1	8
33	Prospects for anti-Candida therapy through targeting the cell wall: A mini-review. Cell Surface, 2021, 7, 100063.	1.5	8
34	Amyl nitrite-mediated conversion of aromatic and heteroaromatic primary amides to carboxylic acids. Tetrahedron Letters, 2015, 56, 5153-5156.	0.7	7
35	Chemical synthesis of 4â€²-thio and 4â€²-sulfinyl pyrimidine nucleoside analogues. Organic and Biomolecular Chemistry, 2022, 20, 1401-1406.	1.5	7
36	The development of anti-angiogenic heparan sulfate oligosaccharides. Biochemical Society Transactions, 2014, 42, 1596-1600.	1.6	6

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37	Using NMR to Dissect the Chemical Space and <i>O</i>-Sulfation Effects within the <i>O</i>- and <i>S</i>-Glycoside Analogues of Heparan Sulfate. ACS Omega, 2022, 7, 24461-24467.	1.6	6
38	Illuminating glycoscience: synthetic strategies for FRET-enabled carbohydrate active enzyme probes. RSC Chemical Biology, 2020, 1, 352-368.	2.0	4
39	Thieme Chemistry Journal Awardees - Where are They Now? Synthesis of the Marine Glycolipid Dioctadecanoyl Discoside. Synlett, 2009, 2009, 3099-3102.	1.0	3
40	A synthesis of C-glycosidic multivalent mannosides suitable for divergent functionalized conjugation. Tetrahedron Letters, 2011, 52, 3216-3218.	0.7	3
41	1,2,3,4-Tetra-O-Acetyl-Î²-d-Mannuronic Acid. MolBank, 2017, 2017, M947.	0.2	3
42	Exploring anomeric glycosylation of phosphoric acid: Optimisation and scope for non-native substrates. Carbohydrate Research, 2020, 488, 107896.	1.1	3
43	Synthetic Strategies for FRET-Enabled Carbohydrate Active Enzyme Probes. Methods in Molecular Biology, 2022, 2370, 237-264.	0.4	3
44	Sweet targets: sugar nucleotide biosynthesis inhibitors. Future Medicinal Chemistry, 2022, 14, 295-298.	1.1	3
45	Preparation of Methyl 1,2,3,4-tetra-O-acetyl-Î²-D-glucopyranuronate. Organic Syntheses, 0, 93, 200-209.	1.0	2
46	Chemical synthesis of a sulfated d-glucosamine library and evaluation of cell proliferation capabilities. Carbohydrate Research, 2020, 495, 108085.	1.1	1
47	Synthesis and Isolation of Diastereomeric Anomeric Sulfoxides from a d-Mannuronate Thioglycoside Building Block. MolBank, 2020, 2020, M1111.	0.2	1
48	Chemical synthesis of C6-tetrazole á´…-mannose building blocks and access to a bioisostere of mannuronic acid 1-phosphate. Beilstein Journal of Organic Chemistry, 2021, 17, 1527-1532.	1.3	1
49	6R/S-deutero-Î±-d-mannopyranoside 1-phosphate. MolBank, 2019, 2019, M1068.	0.2	0
50	Abstract 1375: Development of synthetic heparan sulfate oligosaccharides as anti-angiogenic agents. , 2015, , .		0