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	Synthetic Strategies for FRET-Enabled Carbohydrate Active Enzyme Probes. Methods in Molecular Biology, 2022, 2370, 237-264.	0.4	3
2	Chemical synthesis of 4â€²-thio and 4â€²-sulfinyl pyrimidine nucleoside analogues. Organic and Biomolecular Chemistry, 2022, 20, 1401-1406.	1.5	7
3	Oxidase enzymes as sustainable oxidation catalysts. Royal Society Open Science, 2022, 9, 211572.	1.1	20
4	Sweet targets: sugar nucleotide biosynthesis inhibitors. Future Medicinal Chemistry, 2022, 14, 295-298.	1.1	3
5	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
6	Advances in biocatalytic and chemoenzymatic synthesis of nucleoside analogues. Expert Opinion on Drug Discovery, 2022, 17, 355-364.	2.5	16
7	Using NMR to Dissect the Chemical Space and O-Sulfation Effects within the O- and S-Glycoside Analogues of Heparan Sulfate. ACS Omega, 2022, 7, 24461-24467.	1.6	6
8	Glycosaminoglycans from Litopenaeus vannamei Inhibit the Alzheimerâ€™s Disease Î² Secretase, BACE1. Marine Drugs, 2021, 19, 203.	2.2	8
9	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
10	Developments in the Chemical Synthesis of Heparin and Heparan Sulfate. Chemical Record, 2021, 21, 3238-3255.	2.9	16
11	Prospects for anti-Candida therapy through targeting the cell wall: A mini-review. Cell Surface, 2021, 7, 100063.	1.5	8
12	Exploring anomeric glycosylation of phosphoric acid: Optimisation and scope for non-native substrates. Carbohydrate Research, 2020, 488, 107896.	1.1	3
13	Inhibition of the GDP-<scp>d</scp>-Mannose Dehydrogenase from Pseudomonas aeruginosa Using Targeted Sugar Nucleotide Probes. ACS Chemical Biology, 2020, 15, 3086-3092.	1.6	14
14	Unifying the synthesis of nucleoside analogs. Science, 2020, 369, 623-623.	6.0	8
15	Illuminating glycoscience: synthetic strategies for FRET-enabled carbohydrate active enzyme probes. RSC Chemical Biology, 2020, 1, 352-368.	2.0	4
16	Recent Advances in the Chemical Synthesis and Evaluation of Anticancer Nucleoside Analogues. Molecules, 2020, 25, 2050.	1.7	67
17	Chemical synthesis of a sulfated d-glucosamine library and evaluation of cell proliferation capabilities. Carbohydrate Research, 2020, 495, 108085.	1.1	1
18	Synthesis and Isolation of Diastereomeric Anomeric Sulfoxides from a d-Mannuronate Thioglycoside Building Block. MolBank, 2020, 2020, M1111.	0.2	1

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19	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
20	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
21	6R/S-deutero-Î±-d-mannopyranoside 1-phosphate. MolBank, 2019, 2019, M1068.	0.2	0
22	Chemical and enzymatic synthesis of the alginate sugar nucleotide building block: GDP-d-mannuronic acid. Carbohydrate Research, 2019, 485, 107819.	1.1	14
23	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
24	Exploring a glycosylation methodology for the synthesis of hydroxamate-modified alginate building blocks. Organic and Biomolecular Chemistry, 2019, 17, 9321-9335.	1.5	8
25	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
26	Recent advances in the enzymatic synthesis of sugar-nucleotides using nucleotidylyltransferases and glycosyltransferases. Carbohydrate Research, 2018, 469, 38-47.	1.1	29
27	Recent advances in the chemical synthesis of sugar-nucleotides. Carbohydrate Research, 2017, 451, 95-109.	1.1	35
28	1,2,3,4-Tetra-O-Acetyl-Î²-d-Mannuronic Acid. MolBank, 2017, 2017, M947.	0.2	3
29	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
30	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
31	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
32	Amyl nitrite-mediated conversion of aromatic and heteroaromatic primary amides to carboxylic acids. Tetrahedron Letters, 2015, 56, 5153-5156.	0.7	7
33	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
34	Synthetic heparan sulfate dodecasaccharides reveal single sulfation site interconverts CXCL8 and CXCL12 chemokine biology. Chemical Communications, 2015, 51, 13846-13849.	2.2	35
35	A latent reactive handle for functionalising heparin-like and LMWH deca- and dodecasaccharides. Organic and Biomolecular Chemistry, 2015, 13, 11208-11219.	1.5	10
36	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

#	Article	IF	Citations
37	Abstract 1375: Development of synthetic heparan sulfate oligosaccharides as anti-angiogenic agents. , 2015, , .		0
38	The development of anti-angiogenic heparan sulfate oligosaccharides. Biochemical Society Transactions, 2014, 42, 1596-1600.	1.6	6
39	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
40	Small-Molecule-Induced Clustering of Heparan Sulfate Promotes Cell Adhesion. Journal of the American Chemical Society, 2013, 135, 11032-11039.	6.6	25
41	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
42	First Gram-Scale Synthesis of a Heparin-Related Dodecasaccharide. Organic Letters, 2013, 15, 88-91.	2.4	46
43	Tetrasaccharide iteration synthesis of a heparin-like dodecasaccharide and radiolabelling for in vivo tissue distribution studies. Nature Communications, 2013, 4, 2016.	5.8	50
44	Selection of a Novel Anti-Nicotine Vaccine: Influence of Antigen Design on Antibody Function in Mice. PLoS ONE, 2013, 8, e76557.	1.1	71
45	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
46	A synthesis of C-glycosidic multivalent mannosides suitable for divergent functionalized conjugation. Tetrahedron Letters, 2011, 52, 3216-3218.	0.7	3
47	Adaptable Synthesis of C-Glycosidic Multivalent Carbohydrates and Succinamide-Linked Derivatization. Organic Letters, 2010, 12, 5262-5265.	2.4	17
48	Thieme Chemistry Journal Awardees - Where are They Now? Synthesis of the Marine Glycolipid Dioctadecanoyl Discoside. Synlett, 2009, 2009, 3099-3102.	1.0	3
49	Biology-enabling inositol phosphates, phosphatidylinositol phosphates and derivatives. Natural Product Reports, 2007, 24, 687.	5.2	65
50	Preparation of Methyl 1,2,3,4-tetra-O-acetyl-Î²-D-glucopyranuronate. Organic Syntheses, 0, 93, 200-209.	1.0	2