Mark von Itzstein

List of Publications by Year
in descending order

106 papers	5,921 citations	172457 29 h-index	76900 74 g-index
115 all docs	115 docs citations	115 times ranked	5931 citing authors

#	Article	IF	Citations
1	Dysregulation of Streptococcus pneumoniae zinc homeostasis breaks ampicillin resistance in a pneumonia infection model. Cell Reports, 2022, 38, 110202.	6.4	18
2	Rescuing Tetracycline Class Antibiotics for the Treatment of Multidrug-Resistant Acinetobacter baumannii Pulmonary Infection. MBio, 2022, 13, e0351721.	4.1	11
3	Neurodegenerative Disease Treatment Drug PBT2 Breaks Intrinsic Polymyxin Resistance in Gram-Positive Bacteria. Antibiotics, 2022, 11, 449.	3.7	3
4	Characterization of the Phase-Variable Autotransporter Lav Reveals a Role in Host Cell Adherence and Biofilm Formation in Nontypeable Haemophilus influenzae. Infection and Immunity, 2022, 90, e0056521.	2.2	2
5	Discovery of Cofactor Competitive Inhibitors against the Human Methyltransferase Fibrillarin. Pharmaceuticals, 2022, 15, 26.	3.8	0
6	Pneumococcal Phasevarions Control Multiple Virulence Traits, Including Vaccine Candidate Expression. Microbiology Spectrum, 2022, 10, e0091622.	3.0	8
7	Conformational Modulation of Iduronic Acidâ€Containing Sulfated Glycosaminoglycans by a Polynuclear Platinum Compound and Implications for Development of Antimetastatic Platinum Drugs. Angewandte Chemie - International Edition, 2021, 60, 3283-3289.	13.8	12
8	Conformational Modulation of Iduronic Acidâ€Containing Sulfated Glycosaminoglycans by a Polynuclear Platinum Compound and Implications for Development of Antimetastatic Platinum Drugs. Angewandte Chemie, 2021, 133, 3320-3326.	2.0	5
9	Platinum complexes act as shielding agents against virus infection. Chemical Communications, 2021, 57, 4666-4669.	4.1	14
10	Multidisciplinary Approaches Identify Compounds that Bind to Human ACE2 or SARS-CoV-2 Spike Protein as Candidates to Block SARS-CoV-2â“ACE2 Receptor Interactions. MBio, 2021, 12, .	4.1	47
11	A drug candidate for Alzheimerâ€™s and Huntingtonâ€™s disease, PBT2, can be repurposed to render Neisseria gonorrhoeae susceptible to natural cationic antimicrobial peptides. Journal of Antimicrobial Chemotherapy, 2021, 76, 2850-2853.	3.0	4
12	A Portable Device for LAMP Based Detection of SARS-CoV-2. Micromachines, 2021, 12, 1151.	2.9	8
13	Combinatorial liposomal peptide vaccine induces IgA and confers protection against influenza virus and bacterial superâ€infection. Clinical and Translational Immunology, 2021, 10, e1337.	3.8	5
14	Overcoming Microenvironment-Mediated Chemoprotection through Stromal Galectin-3 Inhibition in Acute Lymphoblastic Leukemia. International Journal of Molecular Sciences, 2021, 22, 12167.	4.1	9
15	Neisseria gonorrhoeae Becomes Susceptible to Polymyxin B and Colistin in the Presence of PBT2. ACS Infectious Diseases, 2020, 6, 50-55.	3.8	21
16	Repurposing a neurodegenerative disease drug to treat Gram-negative antibiotic-resistant bacterial sepsis. Science Translational Medicine, 2020, 12, .	12.4	36
17	Neutralizing the pathological effects of extracellular histones with small polyanions. Nature Communications, 2020, 11, 6408.	12.8	48
18	Transcriptomic Data Sets To Determine Gene Expression Changes Mediated by the Presence of PBT2 in Growth Medium of Multidrug-Resistant Neisseria gonorrhoeae WHO Z. Microbiology Resource Announcements, 2020, 9, .	0.6	1

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19	All major cholesterol-dependent cytolysins use glycans as cellular receptors. Science Advances, 2020, 6, eaaz4926.	10.3	46
20	Multiple Bactericidal Mechanisms of the Zinc Ionophore PBT2. MSphere, 2020, 5, .	2.9	24
21	How Size Matters: Diversity for Fragment Library Design. Molecules, 2019, 24, 2838.	3.8	21
22	A Novel Series of Sialic Acid-Based Influenza Virus Inhibitors that Target Influenza Virus Neuraminidase. Proceedings (mdpi), 2019, 22, .	0.2	0
23	Efficient Blocking of Enterovirus 71 Infection by Heparan Sulfate Analogues Acting as Decoy Receptors. ACS Infectious Diseases, 2019, 5, 1708-1717.	3.8	17
24	NAD ⁺ cleavage activity by animal and plant TIR domains in cell death pathways. Science, 2019, 365, 793-799.	12.6	357
25	Targeting Human Parainfluenza Virus Type-1 Haemagglutinin-Neuraminidase with Mechanism-Based Inhibitors. Viruses, 2019, 11, 417.	3.3	7
26	Cyclization-blocked proguanil as a strategy to improve the antimalarial activity of atovaquone. Communications Biology, 2019, 2, 166.	4.4	20
27	Approach for Profiling of Glycosphingolipid Glycosylation by Multiplexed Capillary Gel Electrophoresis Coupled to Laser-Induced Fluorescence Detection To Identify Cell-Surface Markers of Human Pluripotent Stem Cells and Derived Cardiomyocytes. Analytical Chemistry, 2019, 91, 6413-6418.	6.5	28
28	New antiviral approaches for human parainfluenza: Inhibiting the haemagglutinin-neuraminidase. Antiviral Research, 2019, 167, 89-97.	4.1	20
29	How Size Matters: Designing Diverse Fragment Libraries for Novel Drug Discovery. Proceedings (mdpi), 2019, 22, .	0.2	0
30	Glycans as Ligands in Bioinorganic Chemistry. Probing the Interaction of a Trinuclear Platinum Anticancer Complex with Defined Monosaccharide Fragments of Heparan Sulfate. Inorganic Chemistry, 2019, 58, 7146-7155.	4.0	14
31	Glycointeractions in bacterial pathogenesis. Nature Reviews Microbiology, 2018, 16, 440-452.	28.6	181
32	Substitutionâ€inert Polynuclear Platinum Complexes as Metalloshielding Agents for Heparan Sulfate. Chemistry - A European Journal, 2018, 24, 6606-6616.	3.3	23
33	A Sulfonozanamivir Analogue Has Potent Antiâ€influenza Virus Activity. ChemMedChem, 2018, 13, 785-789.	3.2	12
34	Structural Insights into Human Parainfluenza Virus 3 Hemagglutininâ€“Neuraminidase Using Unsaturated 3-N-Substituted Sialic Acids as Probes. ACS Chemical Biology, 2018, 13, 1544-1550.	3.4	10
35	Unravelling the Role of O-glycans in Influenza A Virus Infection. Scientific Reports, 2018, 8, 16382.	3.3	66
36	Chemical Synergy between Ionophore PBT2 and Zinc Reverses Antibiotic Resistance. MBio, 2018, 9, .	4.1	56

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37	A sialosyl sulfonate as a potent inhibitor of influenza virus replication. Organic and Biomolecular Chemistry, 2017, 15, 5249-5253.	2.8	9
38	Enhancing Vaccine Efficacy by Engineering a Complex Synthetic Peptide To Become a Super Immunogen. Journal of Immunology, 2017, 199, 2794-2802.	0.8	15
39	The impact of the butterfly effect on human parainfluenza virus haemagglutinin-neuraminidase inhibitor design. Scientific Reports, 2017, 7, 4507.	3.3	11
40	Exploring inhibitor structural features required to engage the 216-loop of human parainfluenza virus type-3 hemagglutinin-neuraminidase. MedChemComm, 2017, 8, 130-134.	3.4	8
41	Antiangiogenic platinum through glycan targeting. Chemical Science, 2017, 8, 241-252.	7.4	35
42	A dual drug regimen synergistically blocks human parainfluenza virus infection. Scientific Reports, 2016, 6, 24138.	3.3	14
43	Titelbild: The Catalytic Mechanism of Human Parainfluenza Virus Typeâ€...3 Haemagglutinin-Neuraminidase Revealed (Angew. Chem. 10/2015). Angewandte Chemie, 2015, 127, 2899-2899.	2.0	0
44	The Catalytic Mechanism of Human Parainfluenza Virus Typeâ€...3 Haemagglutininâ€Neuraminidase Revealed. Angewandte Chemie, 2015, 127, 2979-2983.	2.0	0
45	The Catalytic Mechanism of Human Parainfluenza Virus Typeâ€...3 Haemagglutininâ€Neuraminidase Revealed. Angewandte Chemie - International Edition, 2015, 54, 2936-2940.	13.8	27
46	Exploring Bacterial Heparinase II Activities with Defined Substrates. ChemBioChem, 2015, 16, 1205-1211.	2.6	13
47	Functional and structural characterization of a heparanase. Nature Chemical Biology, 2015, 11, 955-957.	8.0	31
48	The approved pediatric drug suramin identified as a clinical candidate for the treatment of EV71 infectionâ€"suramin inhibits EV71 infection in vitro and in vivo. Emerging Microbes and Infections, 2014, 3, 1-9.	6.5	47
49	Ferrets exclusively synthesize Neu5Ac and express naturally humanized influenza A virus receptors. Nature Communications, 2014, 5, 5750.	12.8	94
50	Investigation of the binding and cleavage characteristics of <scp>N</scp>1 neuraminidases from avian, seasonal, and pandemic influenza viruses using saturation transfer difference nuclear magnetic resonance. Influenza and Other Respiratory Viruses, 2014, 8, 235-242.	3.4	20
51	Structure-guided discovery of potent and dual-acting human parainfluenza virus haemagglutininâ€"neuraminidase inhibitors. Nature Communications, 2014, 5, 5268.	12.8	32
52	Carbohydrate-binding protein identification by coupling structural similarity searching with binding affinity prediction. Journal of Computational Chemistry, 2014, 35, 2177-2183.	3.3	20
53	A versatile synthesis of â€œtafuramycin Aâ€• a potent anticancer and parasite attenuating agent. Organic and Biomolecular Chemistry, 2014, 12, 4260-4264.	2.8	6
54	Exploring Human Parainfluenza Virus Type-1 Hemagglutininâ€"Neuraminidase as a Target for Inhibitor Discovery. Journal of Medicinal Chemistry, 2014, 57, 7613-7623.	6.4	20

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55	Novel 3,4-disubstituted-Neu5Ac2en derivatives as probes to investigate flexibility of the influenza virus sialidase 150-loop. Bioorganic and Medicinal Chemistry, 2013, 21, 4820-4830.	3.0	11
56	Microwave-assisted synthesis of N-glycolylneuraminic acid derivatives. Tetrahedron Letters, 2013, 54, 5558-5561.	1.4	5
57	Defining a Substrateâ€Binding Model of a Polysialyltransferase. ChemBioChem, 2013, 14, 1949-1953.	2.6	5
58	Rapid and clean microwave-assisted synthesis of N-acetylneuraminic acid methyl ester and its Î²-methyl glycoside. Tetrahedron Letters, 2012, 53, 6254-6256.	1.4	9
59	Exposing the Flexibility of Human Parainfluenza Virus Hemagglutinin-neuraminidase. Journal of the American Chemical Society, 2012, 134, 18447-18452.	13.7	15
60	A Secondary Sialic Acid Binding Site on Influenza Virus Neuraminidase: Fact or Fiction?. Angewandte Chemie - International Edition, 2012, 51, 2221-2224.	13.8	30
61	Synthesis of simple heparanase substrates. Organic and Biomolecular Chemistry, 2011, 9, 4614.	2.8	19
62	RÃ¼cktitelbild: Rhesus-Rotaviren erkennen Glykane des GM3-Gangliosids (Angew. Chem. 5/2011). Angewandte Chemie, 2011, 123, 1232-1232.	2.0	0
63	Recognition of the GM3 Ganglioside Glycan by Rhesus Rotavirus Particles. Angewandte Chemie - International Edition, 2011, 50, 1055-1058.	13.8	36
64	Back Cover: Recognition of the GM3 Ganglioside Glycan by Rhesus Rotavirus Particles (Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock 10 T	13.8	0
65	Synthesis of C-9 oxidised N-acetylneuraminic acid derivatives as biological probes. Tetrahedron Letters, 2011, 52, 98-100.	1.4	3
66	An efficient approach to 2,5-anhydro-glucitol-based 1â€²-homo-N-nucleoside mimetics. Tetrahedron Letters, 2011, 52, 2741-2743.	1.4	7
67	Neisseria meningitidis Serogroup B Polysialyltransferase: Insights into Substrate Binding. ChemBioChem, 2010, 11, 170-174.	2.6	6
68	Novel sialic acid derivatives lock open the 150-loop of an influenza A virus group-1 sialidase. Nature Communications, 2010, 1, 113.	12.8	102
69	Complexity in Influenza Virus Targeted Drug Design: Interaction with Human Sialidases. Journal of Medicinal Chemistry, 2010, 53, 2998-3002.	6.4	62
70	Differential Carbohydrate Recognition by Campylobacter jejuni Strain 11168: Influences of Temperature and Growth Conditions. PLoS ONE, 2009, 4, e4927.	2.5	95
71	Anti-Influenza Drugs: The Development of Sialidase Inhibitors. Handbook of Experimental Pharmacology, 2009, , 111-154.	1.8	46
72	Influenza C virus and bovine coronavirus esterase reveal a similar catalytic mechanism: new insights for drug discovery. Glycoconjugate Journal, 2008, 25, 393-399.	2.7	8

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73	Avian Influenza H5â€Containing Virusâ€Like Particles (VLPs): Hostâ€Cell Receptor Specificity by STD NMR Spectroscopy. Angewandte Chemie - International Edition, 2008, 47, 1910-1912.	13.8	51
74	Avian influenza virus, a very sticky situation. Current Opinion in Chemical Biology, 2008, 12, 102-108.	6.1	11
75	Disease-associated carbohydrate-recognising proteins and structure-based inhibitor design. Current Opinion in Structural Biology, 2008, 18, 558-566.	5.7	27
76	Limited Inhibitory Effects of Oseltamivir and Zanamivir on Human Sialidases. Antimicrobial Agents and Chemotherapy, 2008, 52, 3484-3491.	3.2	154
77	Synthesis and evaluation of galactofuranosyl N,N-dialkyl sulfenamides and sulfonamides as antimycobacterial agents. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 2274-2277.	2.2	37
78	Synthesis and biological evaluation of galactofuranosyl alkyl thioglycosides as inhibitors of mycobacteria. Carbohydrate Research, 2007, 342, 1773-1780.	2.3	38
79	Synthesis and evaluation of 4-O-alkylated 2-deoxy-2,3-didehydro-N-acetylneuraminic acid derivatives as inhibitors of human parainfluenza virus type-3 sialidase activity. Bioorganic and Medicinal Chemistry Letters, 2007, 17, 1655-1658.	2.2	22
80	The war against influenza: discovery and development of sialidase inhibitors. Nature Reviews Drug Discovery, 2007, 6, 967-974.	46.4	614
81	The synthesis and biological evaluation of lactose-based sialylmimetics as inhibitors of rotaviral infection. Bioorganic and Medicinal Chemistry, 2006, 14, 739-757.	3.0	21
82	Unsaturated N-acetyl- D-glucosaminuronic acid glycosides as inhibitors of influenza virus sialidase. Glycoconjugate Journal, 2006, 23, 127-133.	2.7	22
83	A 1H STD NMR spectroscopic investigation of sialylnucleoside mimetics as probes of CMP-Kdn synthetase. Glycoconjugate Journal, 2006, 23, 371-375.	2.7	4
84	Endosialidase NF Appears To Bind PolySia DP5 in a Helical Conformation. ChemBioChem, 2006, 7, 1875-1877.	2.6	10
85	An approach towards the synthesis of sialyl nucleoside mimetics. Tetrahedron: Asymmetry, 2005, 16, 1425-1434.	1.8	7
86	Probing a CMP-Kdn synthetase by 1H, 31P, and STD NMR spectroscopy. Biochemical and Biophysical Research Communications, 2005, 327, 565-570.	2.1	16
87	An investigation of the activity of recombinant rat skeletal muscle cytosolic sialidase. FEBS Letters, 2005, 579, 1034-1038.	2.8	10
88	An efficient approach to N-acetyl-d-glucosaminuronic acid-based sialylmimetics as potential sialidase inhibitors. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 5555-5558.	2.2	14
89	Saturation transfer difference (STD) 1H-NMR experiments and in silico docking experiments to probe the binding of N-acetylneuraminic acid and derivatives to Vibrio cholerae sialidase. Proteins: Structure, Function and Bioinformatics, 2004, 56, 346-353.	2.6	19
90	BROMOHYDROXYLATION OF GLYCALSâ€"AN INVESTIGATION INTO THE REACTION OF SOME 4-N-ACYLATED DERIVATIVES OF METHYL 5-ACETAMIDO-7,8,9-TRI-O-ACETYL-2,6-ANHYDRO-3,4,5-TRIDEOXY-D-GLYCERO-D-GALACTO-NON-2-ENONATE AND ITS 4-EPIMER. Journal of Carbohydrate Chemistry, 2001, 20, 359-374.	1.1	7

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91	Analysis of inhibitor binding in influenza virus neuraminidase. Protein Science, 2001, 10, 689-696.	7.6	97
92	How pure is your thiosialoside? A reinvestigation into the HPLC purification of thioglycosides of N-acetylneuraminic acid. Glycoconjugate Journal, 1999, 16, 13-17.	2.7	12
93	Synthesis and evaluation of N-acetylneuraminic acid-based affinity matrices for the purification of sialic acid-recognizing proteins. Glycoconjugate Journal, 1998, 15, 663-669.	2.7	13
94	Synthesis of Phosphonic Acid Analogues of Sialic Acids (Neu5Ac and KDN) as Potential Sialidase Inhibitors. Journal of Organic Chemistry, 1997, 62, 3500-3504.	3.2	40
95	A Conformational Study of the Human and Rat Encephalitogenic Myelin Oligodendrocyte Glycoprotein Peptides 35-55. FEBS Journal, 1997, 246, 59-70.	0.2	24
96	A Study of the Active Site of Influenza Virus Sialidase:Â An Approach to the Rational Design of Novel Anti-influenza Drugs. Journal of Medicinal Chemistry, 1996, 39, 388-391.	6.4	118
97	Decarboxylation of a sialic acid derivative. Carbohydrate Research, 1996, 282, 181-187.	2.3	11
98	A1H NMR investigation of the hydrolysis of a synthetic substrate by KDN-sialidase fromCrassostrea virginica. Glycoconjugate Journal, 1996, 13, 927-931.	2.7	12
99	A structural and energetics analysis of the binding of a series of N-acetylneuraminic-acid-based inhibitors to influenza virus sialidase. Journal of Computer-Aided Molecular Design, 1996, 10, 233-246.	2.9	35
100	Molecular Modeling Studies on Ligand Binding to Sialidase from Influenza Virus and the Mechanism of Catalysis. Journal of Medicinal Chemistry, 1994, 37, 616-624.	6.4	214
101	Inhibition of sialidases from viral, bacterial and mammalian sources by analogues of 2-deoxy-2,3-didehydro-N-acetylneuraminic acid modified at the C-4 position. Glycoconjugate Journal, 1993, 10, 40-44.	2.7	139
102	Rational design of potent sialidase-based inhibitors of influenza virus replication. Nature, 1993, 363, 418-423.	27.8	1,823
103	A convenient method for the introduction of nitrogen and sulfur at C-4 on a sialic acid analogue. Carbohydrate Research, 1993, 244, 181-185.	2.3	64
104	Anti-infectives Overview: The development of potential anti-influenza drugs. Current Opinion in Therapeutic Patents, 1993, 3, 1755-1762.	0.0	6
105	Evidence for a sialosyl cation transition-state complex in the reaction of sialidase from influenza virus. FEBS Journal, 1992, 207, 335-343.	0.2	158
106	(p-Dimethylaminophenyl) Diphenylphosphine: A More Practical Phosphine in the Mitsunobu Reaction. Synthetic Communications, 1990, 20, 2049-2057.	2.1	32