Vito Ferro

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8763417/publications.pdf

Version: 2024-02-01

95 papers	3,321 citations	136740 32 h-index	168136 53 g-index
108 all docs	108 docs citations	108 times ranked	3803 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	PG545, a dual heparanase and angiogenesis inhibitor, induces potent anti-tumour and anti-metastatic efficacy in preclinical models. British Journal of Cancer, 2011, 104, 635-642.	2.9	154
3	Recent advances in chitosan-based nanoparticulate pulmonary drug delivery. Nanoscale, 2016, 8, 14341-14358.	2.8	136
4	PI-88 and Novel Heparan Sulfate Mimetics Inhibit Angiogenesis. Seminars in Thrombosis and Hemostasis, 2007, 33, 557-568.	1.5	135
5	MicroRNAs Regulate Tumor Angiogenesis Modulated by Endothelial Progenitor Cells. Cancer Research, 2013, 73, 341-352.	0.4	122
6	Discovery of PG545: A Highly Potent and Simultaneous Inhibitor of Angiogenesis, Tumor Growth, and Metastasis. Journal of Medicinal Chemistry, 2012, 55, 3804-3813.	2.9	119
7	The low molecular weight heparan sulfate-mimetic, PI-88, inhibits cell-to-cell spread of herpes simplex virus. Antiviral Research, 2004, 63, 15-24.	1.9	101
8	The PG500 series: novel heparan sulfate mimetics as potent angiogenesis and heparanase inhibitors for cancer therapy. Investigational New Drugs, 2010, 28, 276-283.	1.2	97
9	Synthesis, Biological Activity, and Preliminary Pharmacokinetic Evaluation of Analogues of a Phosphosulfomannan Angiogenesis Inhibitor (PI-88). Journal of Medicinal Chemistry, 2005, 48, 8229-8236.	2.9	86
10	Development of a colorimetric assay for heparanase activity suitable for kinetic analysis and inhibitor screening. Analytical Biochemistry, 2010, 396, 112-116.	1.1	84
11	The Development of Inhibitors of Heparanase, a Key Enzyme Involved in Tumour Metastasis, Angiogenesis and Inflammation. Mini-Reviews in Medicinal Chemistry, 2004, 4, 693-702.	1.1	82
12	Probing the Interactions of Phosphosulfomannans with Angiogenic Growth Factors by Surface Plasmon Resonance. Journal of Medicinal Chemistry, 2003, 46, 4601-4608.	2.9	77
13	Preparation and anticoagulant activity of the phosphosulfomannan PI-88. European Journal of Medicinal Chemistry, 2002, 37, 783-791.	2.6	71
14	Synthesis and Biological Evaluation of Polysulfated Oligosaccharide Glycosides as Inhibitors of Angiogenesis and Tumor Growth. Journal of Medicinal Chemistry, 2010, 53, 1686-1699.	2.9	69
15	Carbohydrateâ€“ N -heterocyclic carbene metal complexes: Synthesis, catalysis and biological studies. Coordination Chemistry Reviews, 2017, 339, 1-16.	9.5	64
16	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
17	A highly lipophilic sulfated tetrasaccharide glycoside related to muparfostat (PI-88) exhibits virucidal activity against herpes simplex virus. Antiviral Research, 2010, 86, 196-203.	1.9	61
18	A Synthetic Heparanase Inhibitor Reduces Proteinuria in Passive Heymann Nephritis. Journal of the American Society of Nephrology: JASN, 2004, 15, 2882-2892.	3.0	58

#	Article	IF	Citations
19	Large-scale preparation of the oligosaccharide phosphate fraction of Pichia holstii NRRL Y-2448 phosphomannan for use in the manufacture of PI-88. Carbohydrate Research, 2001, 332, 183-189.	1.1	57
20	In Vitro Enzymatic Digestibility of Glutaraldehyde-Crosslinked Chitosan Nanoparticles in Lysozyme Solution and Their Applicability in Pulmonary Drug Delivery. Molecules, 2019, 24, 1271.	1.7	57
21	Use of Sulfated Linked Cyclitols as Heparan Sulfate Mimetics to Probe the Heparin/Heparan Sulfate Binding Specificity of Proteins. Journal of Biological Chemistry, 2005, 280, 8842-8849.	1.6	54
22	Substrate specificity of endoglucanase A from Cellulomonas fimi: fundamental differences between endoglucanases and exoglucanases from family 6. Biochemical Journal, 1996, 315, 467-472.	1.7	50
23	Heparin mimetics with anticoagulant activity. Medicinal Research Reviews, 2018, 38, 1582-1613.	5.0	45
24	Effects of Chemical Conjugation of <scp>l</scp>-Leucine to Chitosan on Dispersibility and Controlled Release of Drug from a Nanoparticulate Dry Powder Inhaler Formulation. Molecular Pharmaceutics, 2016, 13, 1455-1466.	2.3	44
25	Determination of the composition of the oligosaccharide phosphate fraction of Pichia (Hansenula) holstii NRRL Y-2448 phosphomannan by capillary electrophoresis and HPLC. Carbohydrate Research, 2002, 337, 139-146.	1.1	43
26	A surface plasmon resonance-based solution affinity assay for heparan sulfate-binding proteins. Glycoconjugate Journal, 2009, 26, 577-587.	1.4	43
27	Characterisation of the Anticoagulant Properties of a Range of Structurally Diverse Sulfated Oligosaccharides. Thrombosis Research, 2001, 103, 325-335.	0.8	38
28	Synthesis and heparanase inhibitory activity of sulfated mannooligosaccharides related to the antiangiogenic agent PI-88. Bioorganic and Medicinal Chemistry, 2008, 16, 699-709.	1.4	38
29	An Improvement in the Preparation of Some Carbohydrate Benzylidene Acetals. Australian Journal of Chemistry, 1988, 41, 813.	0.5	34
30	Herpes Simplex Virus Type 2 Glycoprotein G Is Targeted by the Sulfated Oligo- and Polysaccharide Inhibitors of Virus Attachment to Cells. Journal of Virology, 2007, 81, 13424-13434.	1.5	34
31	The Synthesis of Some Epoxyalkyl b-C-Glycosides as Potential Inhibitors of b-Glucan Hydrolases. Australian Journal of Chemistry, 1997, 50, 463.	0.5	34
32	Application of the four-component Ugi condensation for the preparation of sulfated glycoconjugate libraries. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 2221-2226.	1.0	33
33	Lipophile-conjugated sulfated oligosaccharides as novel microbicides against HIV-1. Antiviral Research, 2010, 86, 286-295.	1.9	33
34	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
35	1H NMR spectroscopic studies establish that heparanase is a retaining glycosidase. Biochemical and Biophysical Research Communications, 2014, 443, 185-188.	1.0	32
36	Heparan sulfate inhibitors and their therapeutic implications in inflammatory illnesses. Expert Opinion on Therapeutic Targets, 2013, 17, 965-975.	1.5	30

#	Article	IF	Citations
37	Towards the synthesis of aryl glucuronides as potential heparanase probes. An interesting outcome in the glycosidation of glucuronic acid with 4-hydroxycinnamic acid. Carbohydrate Research, 2005, 340, 2077-2085.	1.1	28
38	Potent anti-respiratory syncytial virus activity of a cholestanol-sulfated tetrasaccharide conjugate. Antiviral Research, 2012, 93, 101-109.	1.9	27
39	Dual targeting of dengue virus virions and NS1 protein with the heparan sulfate mimic PG545. Antiviral Research, 2019, 168, 121-127.	1.9	27
40	PI-88 and Related Heparan Sulfate Mimetics. Advances in Experimental Medicine and Biology, 2020, 1221, 473-491.	0.8	26
41	Inhibition of Plasmodium falciparum Growth In Vitro and Adhesion to Chondroitin-4-Sulfate by the Heparan Sulfate Mimetic PI-88 and Other Sulfated Oligosaccharides. Antimicrobial Agents and Chemotherapy, 2006, 50, 2850-2852.	1.4	25
42	Synthesis and Toxicological Evaluation of a Chitosan-<scp>l</scp>-Leucine Conjugate for Pulmonary Drug Delivery Applications. Biomacromolecules, 2014, 15, 3596-3607.	2.6	24
43	From Cancer to COVIDâ€19: A Perspective on Targeting Heparan Sulfateâ€Protein Interactions. Chemical Record, 2021, 21, 3087-3101.	2.9	24
44	Prophylactic Antiheparanase Activity by PG545 Is Antiviral In Vitro and Protects against Ross River Virus Disease in Mice. Antimicrobial Agents and Chemotherapy, 2018, 62, .	1.4	23
45	The Development of Assays for Heparanase Enzymatic Activity: Towards a Gold Standard. Molecules, 2018, 23, 2971.	1.7	23
46	Proteoglycans: Potential Agents in Mammographic Density and the Associated Breast Cancer Risk. Journal of Mammary Gland Biology and Neoplasia, 2015, 20, 121-131.	1.0	21
47	GlycoTorch Vina: Docking Designed and Tested for Glycosaminoglycans. Journal of Chemical Information and Modeling, 2020, 60, 6328-6343.	2.5	21
48	Anti-Herpes Simplex Virus Activities of Two Novel Disulphated Cyclitols. Antiviral Chemistry and Chemotherapy, 2006, 17, 97-106.	0.3	20
49	Applications of Ion Mobility-Mass Spectrometry in Carbohydrate Chemistry and Glycobiology. Molecules, 2018, 23, 2557.	1.7	20
50	Enantiospecific synthesis of the heparanase inhibitor (+)-trachyspic acid and stereoisomers from a common precursor. Organic and Biomolecular Chemistry, 2007, 5, 2826.	1.5	19
51	Synthesis of simple heparanase substrates. Organic and Biomolecular Chemistry, 2011, 9, 4614.	1.5	19
52	The Tortoise and the Hare: Evolving Regulatory Landscapes for Biosimilars. Trends in Biotechnology, 2016, 34, 70-83.	4.9	17
53	Internally quenched fluorogenic, Î±-helical dimeric peptides and glycopeptides for the evaluation of the effect of glycosylation on the conformation of peptides. Journal of the Chemical Society Perkin Transactions 1, 1997, , 1365-1374.	0.9	16
54	Molecular basis for resistance of herpes simplex virus type 1 mutants to the sulfated oligosaccharide inhibitor PI-88. Virology, 2007, 367, 244-252.	1.1	16

#	Article	IF	Citations
55	Synthetic Approaches to l-Iduronic Acid and l-Idose. Advances in Carbohydrate Chemistry and Biochemistry, 2015, 72, 21-61.	0.4	16
56	Anticoagulant Heparin Mimetics via RAFT Polymerization. Biomacromolecules, 2020, 21, 1009-1021.	2.6	16
57	The synthesis of phosphorylated disaccharide components of the extracellular phosphomannan of Pichia (Hansenula) holstii NRRL Y-2448. Bioorganic and Medicinal Chemistry, 2004, 12, 6063-6075.	1.4	15
58	Synthesis of a Heparan Sulfate Mimetic Library Targeting FGF and VEGF via Click Chemistry on a Monosaccharide Template. ChemMedChem, 2012, 7, 1267-1275.	1.6	15
59	The Synthesis and Biological Evaluation of Two Analogues of the C-Riboside Showdomycin. Australian Journal of Chemistry, 2005, 58, 86.	0.5	14
60	A focused sulfated glycoconjugate Ugi library for probing heparan sulfate-binding angiogenic growth factors. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 6190-6194.	1.0	14
61	Heparanase Promotes Syndecan-1 Expression to Mediate Fibrillar Collagen and Mammographic Density in Human Breast Tissue Cultured ex vivo. Frontiers in Cell and Developmental Biology, 2020, 8, 599.	1.8	14
62	Inhibition of Tumorâ€“Host Cell Interactions Using Synthetic Heparin Mimetics. ACS Applied Materials & Interfaces, 2021, 13, 7080-7093.	4.0	14
63	Design, synthesis, FGF-1 binding, and molecular modeling studies of conformationally flexible heparin mimetic disaccharides. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 344-349.	1.0	13
64	Structural and conformational studies of the heparan sulfate mimetic PI-88. Glycobiology, 2018, 28, 731-740.	1.3	13
65	Mucopolysaccharidosis type II (Hunter syndrome): Clinical and biochemical aspects of the disease and approaches to its diagnosis and treatment. Advances in Carbohydrate Chemistry and Biochemistry, 2020, 77, 71-117.	0.4	13
66	The stereoselectivities of tributyltin hydride-mediated reductions of 5-bromo-<scp>d</scp>-glucuronides to<scp>l</scp>-iduronides are dependent on the anomeric substituent: syntheses and DFT calculations. Organic and Biomolecular Chemistry, 2016, 14, 2950-2960.	1.5	12
67	Glycosylations of Simple Acceptors with 2â€•O â€Acyl l â€Idose or l â€Iduronic Acid Donors Reveal Only a Minor Role for Neighbouringâ€Group Participation. European Journal of Organic Chemistry, 2018, 2018, 2214-2227.	1.2	12
68	New structural insights into the oligosaccharide phosphate fraction of Pichia (Hansenula) holstii NRRL Y2448 phosphomannan. Carbohydrate Research, 2017, 446-447, 68-75.	1.1	11
69	Structural Insights into Pixatimod (PG545) Inhibition of Heparanase, a Key Enzyme in Cancer and Viral Infections. Chemistry - A European Journal, 2022, 28, .	1.7	11
70	Tumour cell-activated platelets modulate the immunological activity of CD4+, CD8+, and NK cells, which is efficiently antagonized by heparin. Cancer Immunology, Immunotherapy, 2022, 71, 2523-2533.	2.0	11
71	Analysis of the1H NMR spectra of some diethyl phosphonates. Magnetic Resonance in Chemistry, 1994, 32, 749-752.	1.1	10
72	Synthesis of 2â€²- and 2â€³-O-acylated maltotriosides as potential fluorescence-quenched substrates for Î±-amylase. Journal of the Chemical Society Perkin Transactions 1, 1994, , 2169-2176.	0.9	10

#	Article	IF	Citations
73	Synthetic Disaccharide Standards Enable Quantitative Analysis of Stored Heparan Sulfate in MPS IIIA Murine Brain Regions. ACS Chemical Neuroscience, 2019, 10, 3847-3858.	1.7	10
74	An Improved Synthetic Route to the Potent Angiogenesis Inhibitor Benzyl ManÎ±(1â†'3)-ManÎ±(1â†'3)-ManÎ±(1â†'3)-ManÎ±(1â†'2)-Man Hexadecasulfate. Australian Journal of Chemistry, 2009, 62, 546.	0.5	9
75	Structure and stereochemistry of an anti-inflammatory anhydrosugar from the Australian marine sponge Plakinastrella clathrata and the synthesis of two analogues. Tetrahedron, 2013, 69, 8074-8079.	1.0	9
76	Cross-Species Analysis of Glycosaminoglycan Binding Proteins Reveals Some Animal Models Are â€œMore Equalâ€•than Others. Molecules, 2019, 24, 924.	1.7	9
77	Structural insights into heparanase activity using a fluorogenic heparan sulfate disaccharide. Chemical Communications, 2020, 56, 13780-13783.	2.2	9
78	Sulfonated RAFT Copolymers as Heparin Mimetics: Synthesis, Reactivity Ratios, and Anticoagulant Activity. Macromolecular Bioscience, 2020, 20, e2000110.	2.1	9
79	Synthesis of [14C]- and [35S]-labelled PI-88 for pharmacokinetic and tissue distribution studies. Journal of Labelled Compounds and Radiopharmaceuticals, 2002, 45, 747-754.	0.5	8
80	Synthesis of a heparan sulfate mimetic disaccharide with a conformationally locked residue from a common intermediate. Carbohydrate Research, 2009, 344, 2394-2398.	1.1	8
81	Synthesis of Disaccharides Containing 6-Deoxy-a-L-talose as Potential Heparan Sulfate Mimetics. Molecules, 2012, 17, 9790-9802.	1.7	8
82	Synthesis of Mannoseâ€Cholesterol Conjugates for Targeted Liposomal Drug Delivery. ChemistrySelect, 2016, 1, 31-35.	0.7	8
83	Approaches to the Synthesis of Retronecine From Some Pyrrolidine Precursors. Australian Journal of Chemistry, 1993, 46, 805.	0.5	7
84	N-Glycosyl phosphonamidates: potential transition-state analogue inhibitors of glycopeptidases. Canadian Journal of Chemistry, 1998, 76, 313-318.	0.6	7
85	Synthesis and mass spectrometric analysis of disaccharides from methanolysis of heparan sulfate. Organic and Biomolecular Chemistry, 2018, 16, 8791-8803.	1.5	6
86	Auâ€NHC complexes with thiocarboxylate ligands: Synthesis, structure, stability, thiol exchange and in vitro anticancer activity. Applied Organometallic Chemistry, 0, , .	1.7	6
87	The Synthesis of Some Pyrrolidines as Potential Precursors to Retronecine. Australian Journal of Chemistry, 1993, 46, 787.	0.5	5
88	Development of Improved Synthetic Routes to Pixatimod (PG545), a Sulfated Oligosaccharide-Steroid Conjugate. Bioconjugate Chemistry, 2021, 32, 2420-2431.	1.8	5
89	PG545 treatment reduces RRV-induced elevations of AST, ALT with secondary lymphoid organ alterations in C57BL/6 mice. PLoS ONE, 2019, 14, e0217998.	1.1	4
90	A Substituentâ€Directed Strategy for the Selective Synthesis of Lâ€Hexoses: An Expeditious Route to Lâ€Idose. European Journal of Organic Chemistry, 2021, 2021, 1575-1584.	1.2	4

#	Article	IF	Citations
91	Convergent synthesis of a fluorescence-quenched glycopeptide as a potential substrate for peptide: N-glycosidases. Carbohydrate Research, 1998, 306, 531-538.	1.1	3
92	Attempted Synthesis of the Imidazylate of an Î±-Hydroxylactone Results in Unexpected Chlorination: Synthesis and X-Ray Crystal Structure of 5-Chloro-5-deoxy-1,2-O-isopropylidene-Î²-l-idurono-6,3-lactone. Journal of Carbohydrate Chemistry, 2014, 33, 197-205.	0.4	3
93	Glycosaminoglycans and Their Mimetics. Molecules, 2017, 22, 20.	1.7	3
94	Lowâ€molecularâ€weight heparin biosimilars: potential implications for clinical practice. Internal Medicine Journal, 2014, 44, 497-500.	0.5	2
95	Spectroscopic and structural characterization of products arising from the base-promoted benzylation of 3-sulfolene. Arkivoc, 2006, 2006, 35-41.	0.3	1