Marco Guerrini

List of Publications by Year
in descending order

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107	4,385	101496	123376
papers	citations	36 h-index	61 g-index

116	116	116	3750
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Oversulfated chondroitin sulfate is a contaminant in heparin associated with adverse clinical events. Nature Biotechnology, 2008, 26, 669-675.	9.4	559
2	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
3	1H and 13C NMR spectral assignments of the major sequences of twelve systematically modified heparin derivatives. Carbohydrate Research, 1996, 294, 15-27.	1.1	141
4	Complex glycosaminoglycans: profiling substitution patterns by two-dimensional nuclear magnetic resonance spectroscopy. Analytical Biochemistry, 2005, 337, 35-47.	1.1	118
5	Identification and Characterization of Heparin/Heparan Sulfate Binding Domains of the Endoglycosidase Heparanase. Journal of Biological Chemistry, 2005, 280, 20457-20466.	1.6	118
6	Heparin-like compounds prepared by chemical modification of capsular polysaccharide from E. coli K5. Carbohydrate Research, 1994, 263, 271-284.	1.1	105
7	Conformation of heparin pentasaccharide bound to antithrombin III. Biochemical Journal, 2001, 359, 265-272.	1.7	101
8	Low Molecular Weight Heparins: Structural Differentiation by Bidimensional Nuclear Magnetic Resonance Spectroscopy. Seminars in Thrombosis and Hemostasis, 2007, 33, 478-487.	1.5	96
9	Orthogonal analytical approaches to detect potential contaminants in heparin. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16956-16961.	3.3	90
10	Undersulfated and Glycol-Split Heparins Endowed with Antiangiogenic Activity. Journal of Medicinal Chemistry, 2004, 47, 838-848.	2.9	80
11	Combined Quantitative 1H and 13C Nuclear Magnetic Resonance Spectroscopy for Characterization of Heparin Preparations. Seminars in Thrombosis and Hemostasis, 2001, 27, 473-482.	1.5	78
12	Short Heparin Sequences Spaced by Glycol-Split Uronate Residues Are Antagonists of Fibroblast Growth Factor 2 and Angiogenesis Inhibitors. Biochemistry, 2002, 41, 10519-10528.	1.2	76
13	Structural features of low-molecular-weight heparins affecting their affinity to antithrombin. Thrombosis and Haemostasis, 2009, 102, 865-873.	1.8	76
14	Structural and Conformational Aspects of the Anticoagulant and Antithrombotic Activity of Heparin and Dermatan Sulfate. Current Pharmaceutical Design, 2004, 10, 939-949.	0.9	73
15	Antithrombin-binding Octasaccharides and Role of Extensions of the Active Pentasaccharide Sequence in the Specificity and Strength of Interaction. Journal of Biological Chemistry, 2008, 283, 26662-26675.	1.6	72
16	In Vitro Antiplasmodial Activity of Extracts ofTristaniopsisSpecies and Identification of the Active Constituents:Â Ellagic Acid and 3,4,5-Trimethoxyphenyl-(6â€˜-O-galloyl)-O-Î²-d-glucopyranoside. Journal of Natural Products, 2001, 64, 603-607.	1.5	69
17	Influence of substitution pattern and cation binding on conformation and activity in heparin derivatives. Glycobiology, 2007, 17, 983-993.	1.3	66
18	Conformation of heparin pentasaccharide bound to antithrombin III. Biochemical Journal, 2001, 359, 265.	1.7	57

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19	Minimum FGF2 Binding Structural Requirements of Heparin and Heparan Sulfate Oligosaccharides As Determined by NMR Spectroscopy. Biochemistry, 2008, 47, 13862-13869.	1.2	57
20	Characterization and binding activity of the chondroitin/dermatan sulfate chain from Endocan, a soluble endothelial proteoglycan. Glycobiology, 2010, 20, 1380-1388.	1.3	57
21	Effect of substitution pattern on 1H, 13C NMR chemical shifts and 1JCH coupling constants in heparin derivatives. Carbohydrate Research, 2000, 329, 239-247.	1.1	54
22	Uncovering the Relationship between Sulphation Patterns and Conformation of Iduronic Acid in Heparan Sulphate. Scientific Reports, 2016, 6, 29602.	1.6	53
23	Minimal Heparin/Heparan Sulfate Sequences for Binding to Fibroblast Growth Factor-1. Biochemical and Biophysical Research Communications, 2002, 292, 222-230.	1.0	52
24	Glycosaminoglycan origin and structure revealed by multivariate analysis of NMR and CD spectra. Glycobiology, 2009, 19, 52-67.	1.3	50
25	An unusual antithrombin-binding heparin octasaccharide with an additional 3-O-sulfated glucosamine in the active pentasaccharide sequence. Biochemical Journal, 2013, 449, 343-351.	1.7	49
26	Conformational transitions induced in heparin octasaccharides by binding with antithrombin III. Biochemical Journal, 2006, 399, 191-198.	1.7	48
27	Atomic Details of the Interactions of Glycosaminoglycans with Amyloid-Î² Fibrils. Journal of the American Chemical Society, 2016, 138, 8328-8331.	6.6	48
28	Qualification of HSQC methods for quantitative composition of heparin and low molecular weight heparins. Journal of Pharmaceutical and Biomedical Analysis, 2017, 136, 92-105.	1.4	48
29	A novel computational approach to integrate NMR spectroscopy and capillary electrophoresis for structure assignment of heparin and heparan sulfate oligosaccharides. Glycobiology, 2002, 12, 713-719.	1.3	46
30	Human (Î±2â†'6) and Avian (Î±2â†'3) Sialylated Receptors of Influenza A Virus Show Distinct Conformations and Dynamics in Solution. Biochemistry, 2013, 52, 7217-7230.	1.2	45
31	Effects on Molecular Conformation and Anticoagulant Activities of 1,6-Anhydrosugars at the Reducing Terminal of Antithrombin-Binding Octasaccharides Isolated from Low-Molecular-Weight Heparin Enoxaparin. Journal of Medicinal Chemistry, 2010, 53, 8030-8040.	2.9	44
32	Differentiation of Generic Enoxaparins Marketed in the United States by Employing NMR and Multivariate Analysis. Analytical Chemistry, 2015, 87, 8275-8283.	3.2	42
33	Heparin Dodecasaccharide Containing Two Antithrombin-binding Pentasaccharides. Journal of Biological Chemistry, 2013, 288, 25895-25907.	1.6	40
34	A Rational Approach to Heparin-Related Fragments â^' Synthesis of Differently Sulfated Tetrasaccharides as Potential Ligands for Fibroblast Growth Factors. European Journal of Organic Chemistry, 2001, 2001, 2727-2734.	1.2	37
35	Cycloartane saponins from Astragalus peregrinus as modulators of lymphocyte proliferation. FÃ¬toterapÃ¬Â¢, 2001, 72, 894-905.	1.1	37
36	Cycloartane and Oleanane Saponins from EgyptianAstragalusspp. as Modulators of Lymphocyte Proliferation. Planta Medica, 2002, 68, 986-994.	0.7	37

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37	Structural peculiarity and antithrombin binding region profile of mucosal bovine and porcine heparins. Journal of Pharmaceutical and Biomedical Analysis, 2016, 118, 52-63.	1.4	36
38	Synthesis of disaccharidic sub-units of a new series of heparin related oligosaccharides. Tetrahedron, 1999, 55, 9867-9880.	1.0	33
39	Active Conformations of Glycosaminoglycans. NMR Determination of the Conformation of Heparin Sequences Complexed with Antithrombin and Fibroblast Growth Factors in Solution. Seminars in Thrombosis and Hemostasis, 2002, 28, 325-334.	1.5	33
40	Dynamic properties of biologically active synthetic heparin-like hexasaccharides. Glycobiology, 2005, 15, 1008-1015.	1.3	33
41	Monosaccharide composition of glycans based on Q-HSQC NMR. Carbohydrate Polymers, 2014, 104, 34-41.	5.1	33
42	Structure of heparin-derived tetrasaccharide complexed to the plasma protein antithrombin derived from NOEs,J-couplings and chemical shifts. FEBS Journal, 1999, 261, 789-801.	0.2	32
43	A novel heparan sulphate with high degree of N-sulphation and high heparin cofactor-II activity from the brine shrimp Artemia franciscana. International Journal of Biological Macromolecules, 2000, 27, 49-57.	3.6	30
44	Characterizing the Microstructure of Heparin and Heparan Sulfate Using N-Sulfoglucosamine ¹H and ¹⁵N NMR Chemical Shift Analysis. Analytical Chemistry, 2013, 85, 1247-1255.	3.2	30
45	A heparin-like glycosaminoglycan from shrimp containing high levels of 3-O-sulfated d-glucosamine groups in an unusual trisaccharide sequence. Carbohydrate Research, 2014, 390, 59-66.	1.1	30
46	Interaction of Heparins with Fibroblast Growth Factors: Conformational Aspects. Current Pharmaceutical Design, 2007, 13, 2045-2056.	0.9	29
47	The Tainted Heparin Story: An Update. Thrombosis and Haemostasis, 2009, 102, 907-911.	1.8	29
48	Comparable stabilisation, structural changes and activities can be induced in FGF by a variety of HS and non-GAG analogues: implications for sequence-activity relationships. Organic and Biomolecular Chemistry, 2010, 8, 5390.	1.5	29
49	Antithrombin-binding oligosaccharides: structural diversities in a unique function?. Glycoconjugate Journal, 2014, 31, 409-416.	1.4	29
50	Electrochemical reduction of halogenosugars on silver: a new approach to C-disaccharide-like mimics. Chemical Communications, 1998, , 1575-1576.	2.2	28
51	Structure of a heteroxylan of gum exudate of the palm Scheelea phalerata (uricuri). Phytochemistry, 2004, 65, 2347-2355.	1.4	28
52	Structural features of glycol-split low-molecular-weight heparins and their heparin lyase generated fragments. Analytical and Bioanalytical Chemistry, 2014, 406, 249-265.	1.9	27
53	Motional properties of E. Coli polysaccharide K5 in aqueous solution analyzed by NMR relaxation measurements. Carbohydrate Research, 1997, 300, 69-76.	1.1	26
54	Characterization of di- and monosulfated, unsaturated heparin disaccharides with terminal N-sulfated 1,6-anhydro-Î²-d-glucosamine or N-sulfated 1,6-anhydro-Î²-d-mannosamine residues. Carbohydrate Research, 2007, 342, 835-842.	1.1	26

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55	Construction and use of a library of bona fide heparins employing 1H NMR and multivariate analysis. Analyst, The, 2011, 136, 1380.	1.7	26
56	Combining NMR Spectroscopy and Chemometrics to Monitor Structural Features of Crude Hep-arin. Molecules, 2017, 22, 1146.	1.7	26
57	Unravelling Structural Information from Complex Mixtures Utilizing Correlation Spectroscopy Applied to HSQC Spectra. Analytical Chemistry, 2013, 85, 7487-7493.	3.2	24
58	High-sensitivity visualisation of contaminants in heparin samples by spectral filtering of 1H NMR spectra. Analyst, The, 2011, 136, 1390.	1.7	23
59	How To Find a Needle (or Anything Else) in a Haystack: Two-Dimensional Correlation Spectroscopy-Filtering with Iterative Random Sampling Applied to Pharmaceutical Heparin. Analytical Chemistry, 2012, 84, 6841-6847.	3.2	22
60	Fine structural characterization of sulodexide. Journal of Pharmaceutical and Biomedical Analysis, 2018, 156, 67-79.	1.4	21
61	Low-molecular-weight heparin from Cu2+ and Fe2+ Fenton type depolymerisation processes. Thrombosis and Haemostasis, 2010, 103, 613-622.	1.8	20
62	Modifications under basic conditions of the minor sequences of heparin containing 2,3 or 2,3,6 sulfatedd-glucosamine residues. Carbohydrate Research, 1997, 302, 103-108.	1.1	19
63	Low-Molecular-Weight Heparins: Differential Characterization/Physical Characterization. Handbook of Experimental Pharmacology, 2012, , 127-157.	0.9	19
64	Synthesis of Stable Analogues of Glyceroglycolipids. Tetrahedron, 1997, 53, 6163-6170.	1.0	18
65	Differentiation of Beef and Pig Mucosal Heparins by NMR Spectroscopy. Thrombosis and Haemostasis, 1995, 74, 1205-1205.	1.8	18
66	Synthesis and characterisation of hexa- and tetrasaccharide mimics from acetobromomaltotriose and acetobromomaltose, and of C-disaccharide mimics from acetobromoglucose, obtained by electrochemical reduction on silver. Tetrahedron: Asymmetry, 2005, 16, 243-253.	1.8	17
67	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
68	A robust method to quantify low molecular weight contaminants in heparin: detection of tris(2-n-butoxyethyl) phosphate. Analyst, The, 2011, 136, 2330.	1.7	16
69	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
70	Human milk oligosaccharides: an enzymatic protection step simplifies the synthesis of 3â€²- and 6â€²-O-sialyllactose and their analogues. Carbohydrate Research, 2002, 337, 473-483.	1.1	15
71	Investigating Glycol-Split-Heparin-Derived Inhibitors of Heparanase: A Study of Synthetic Trisaccharides. Molecules, 2016, 21, 1602.	1.7	15
72	Insights into the Human Glycan Receptor Conformation of 1918 Pandemic Hemagglutininâ€“Glycan Complexes Derived from Nuclear Magnetic Resonance and Molecular Dynamics Studies. Biochemistry, 2014, 53, 4122-4135.	1.2	14

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73	Molecular Weights of Bovine and Porcine Heparin Samples: Comparison of Chromatographic Methods and Results of a Collaborative Survey. Molecules, 2017, 22, 1214.	1.7	14
74	1D and 2D-HSQC NMR: Two Methods to Distinguish and Characterize Heparin From Different Animal and Tissue Sources. Frontiers in Medicine, 2019, 6, 142.	1.2	14
75	Inclusion complex characterization between progesterone and hydroxypropyl-Î²-cyclodextrin in aqueous solution by NMR study. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2007, 57, 317-321.	1.6	13
76	Characterization of Danaparoid Complex Extractive Drug by an Orthogonal Analytical Approach. Molecules, 2017, 22, 1116.	1.7	13
77	SAX-HPLC and HSQC NMR Spectroscopy: Orthogonal Methods for Characterizing Heparin Batches Composition. Frontiers in Medicine, 2019, 6, 78.	1.2	13
78	Nuclear Magnetic Resonance and Molecular Dynamics Simulation of the Interaction between Recognition Protein H7 of the Novel Influenza Virus H7N9 and Glycan Cell Surface Receptors. Biochemistry, 2016, 55, 6605-6616.	1.2	12
79	Structural Characterization of the Low-Molecular-Weight Heparin Dalteparin by Combining Different Analytical Strategies. Molecules, 2017, 22, 1051.	1.7	12
80	Pentosan Polysulfate Inhibits Attachment and Infection by SARS-CoV-2 In Vitro: Insights into Structural Requirements for Binding. Thrombosis and Haemostasis, 2022, 122, 984-997.	1.8	12
81	Recognition and Conformational Properties of an Alternative Antithrombin Binding Sequence Obtained by Chemoenzymatic Synthesis. ChemBioChem, 2018, 19, 1178-1188.	1.3	11
82	A galactosphingolipid from the lichen, Ramalina celastri. Phytochemistry, 1997, 45, 651-653.	1.4	10
83	Introduction to the Molecules Special Edition Entitled â€˜Heparan Sulfate and Heparin: Challenges and Controversiesâ€™: Some Outstanding Questions in Heparan Sulfate and Heparin Research. Molecules, 2019, 24, 1399.	1.7	10
84	Multivariate analysis applied to complex biological medicines. Faraday Discussions, 2019, 218, 303-316.	1.6	9
85	Degeneracy of the Antithrombin Binding Sequence in Heparin: 2â€Oâ€Sulfated Iduronic Acid Can Replace the Critical Glucuronic Acid. Chemistry - A European Journal, 2020, 26, 11814-11818.	1.7	9
86	NMR spectroscopy and chemometric models to detect a specific non-porcine ruminant contaminant in pharmaceutical heparin. Journal of Pharmaceutical and Biomedical Analysis, 2022, 214, 114724.	1.4	9
87	Glycosaminoglycans from Litopenaeus vannamei Inhibit the Alzheimerâ€™s Disease Î² Secretase, BACE1. Marine Drugs, 2021, 19, 203.	2.2	8
88	Preserving the Original Heparin Structure of a Novel Low Molecular Weight Heparin by Î³-Irradiation. Arzneimittelforschung, 2001, 51, 806-813.	0.5	7
89	A zinc complex of heparan sulfate destabilises lysozyme and alters its conformation. Biochemical and Biophysical Research Communications, 2012, 425, 794-799.	1.0	7
90	Investigating the relationship between temperature, conformation and calcium binding in heparin model oligosaccharides. Carbohydrate Research, 2017, 438, 58-64.	1.1	7

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91	C-Glucosyl quinones and related spacer-connected C-disaccharide. Chemical Communications, 1997, , 1617-1618.	2.2	6
92	Acetobromomaltose, a New Source of Carbohydrate Radicals. EPR Characterisation of Maltosyl and 2-Deoxymaltos-2-yl Radicals and Syntheses of Tetrasaccharide-like Mimics, Maltal, 3-Î±-Maltosyl Propiononitrile, 1,5-Anhydromaltitol and 2-Deoxymaltopyranoside. Tetrahedron, 2000, 56, 6291-6297.	1.0	6
93	Low-Molecular-Weight Heparin and Dermatan Sulfate End Group-Labeled with Tyramine and Fluorescein. Biochemical and Biological Characterization of the Fluorescent-Labeled Heparin Derivative. Seminars in Thrombosis and Hemostasis, 2002, 28, 343-354.	1.5	6
94	A Glycosaminoglycan Extract from Portunus pelagicus Inhibits BACE1, the Î² Secretase Implicated in Alzheimerâ€™s Disease. Marine Drugs, 2019, 17, 293.	2.2	6
95	Following Proteinâ€“Glycosaminoglycan Polysaccharide Interactions with Differential Scanning Fluorimetry. Methods in Molecular Biology, 2012, 836, 171-182.	0.4	4
96	Efficient selective deacetylation of complex oligosaccharides using the neutral organotin catalyst [tBu2SnOH(Cl)]2. Carbohydrate Research, 2020, 498, 108172.	1.1	4
97	Characterization of an Antibody Recognizing the Conserved Inner Core of Pseudomonas aeruginosa Lipopolysaccharides. Biochemistry, 2020, 59, 4202-4211.	1.2	4
98	Semisynthesis and Analysis of Lipophilically Modified Unfractionated and Low Molecular Mass Heparins. Seminars in Thrombosis and Hemostasis, 1994, 20, 182-192.	1.5	3
99	Nuclear Magnetic Resonance Analysis of Human Urine: Influence of Intravenous and Oral Administration of Glycosaminoglycans. Seminars in Thrombosis and Hemostasis, 1994, 20, 144-151.	1.5	2
100	Conformational changes of 1-4-glucopyranosyl residues of a sulfated CC linked hexasaccharide. Carbohydrate Research, 2014, 389, 134-140.	1.1	2
101	MD simulation of the interaction between sialoglycans and the second sialic acid binding site of influenza A virus N1 neuraminidase. Biochemical Journal, 2021, 478, 423-441.	1.7	2
102	Molecular Aspects of Heparanase Interaction with Heparan Sulfate, Heparin and Glycol Split Heparin. Advances in Experimental Medicine and Biology, 2020, 1221, 169-188.	0.8	2
103	Synthesis and Biological Effects ofN-Alkylamine-Labeled Low-Molecular-Mass Dermatan Sulfate. Seminars in Thrombosis and Hemostasis, 1997, 23, 99-107.	1.5	1
104	Saturated tetrasaccharide profile of enoxaparin. An additional piece to the heparin biosynthesis puzzle. Carbohydrate Polymers, 2021, 273, 118554.	5.1	1
105	CHAPTER 14. New Methods for the Analysis of Heterogeneous Polysaccharides â€“ Lessons Learned from the Heparin Crisis. New Developments in NMR, 0, , 305-334.	0.1	1
106	NMR in the Characterization of Complex Mixture Drugs. AAPS Advances in the Pharmaceutical Sciences Series, 2019, , 115-137.	0.2	0
107	Structural variation in the linkage region of pharmaceutical heparin arising from oxidative treatments during manufacture. Carbohydrate Research, 2022, 514, 108540.	1.1	0