

Chao Cai

List of Publications by Year in descending order

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Version: 2024-02-01

78
papers

3,184
citations

201674
27
h-index

155660
55
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82
all docs

82
docs citations

82
times ranked

4516
citing authors

#	ARTICLE	IF	CITATIONS
1	Canagliflozin Prevents Lipid Accumulation, Mitochondrial Dysfunction, and Gut Microbiota Dysbiosis in Mice With Diabetic Cardiovascular Disease. <i>Frontiers in Pharmacology</i> , 2022, 13, 839640.	3.5	11
2	Recent Advances in the Chemical Synthesis of Marine Acidic Carbohydrates. <i>Current Organic Chemistry</i> , 2021, 25, 507-518.	1.6	0
3	Porphyranâ€derived oligosaccharides alleviate NAFLD and related cecal microbiota dysbiosis in mice. <i>FASEB Journal</i> , 2021, 35, e21458.	0.5	12
4	Recent progress and advanced technology in carbohydrate-based drug development. <i>Current Opinion in Biotechnology</i> , 2021, 69, 191-198.	6.6	31
5	IDDF2021-ABS-0197â€...Delayed intervention of agarpectin-derived oligosaccharides alleviate lipid accumulation by modulating intestinal flora homeostasis. , 2021, , .		0
6	IDDF2021-ABS-0198â€...Canagliflozin alleviates diabetic cardiovascular disease via lipid lowering, mitochondrial homeostasis, and gut microbiota regulation. , 2021, , .		3
7	Purification, structural characterization, and immunomodulatory activity of the polysaccharides from <i>Ganoderma lucidum</i> . <i>International Journal of Biological Macromolecules</i> , 2020, 143, 806-813.	7.5	96
8	Anti-diabetic activities of agarpectin-derived oligosaccharides from <i>Gloiopeltis furcata</i> via regulation of mitochondrial function. <i>Carbohydrate Polymers</i> , 2020, 229, 115482.	10.2	20
9	Collaborative assembly of doxorubicin and galactosyl diblock glycopolymers for targeted drug delivery of hepatocellular carcinoma. <i>Biomaterials Science</i> , 2020, 8, 189-200.	5.4	20
10	Fucoidan from sea cucumber <i>Holothuria polii</i> : Structural elucidation and stimulation of hematopoietic activity. <i>International Journal of Biological Macromolecules</i> , 2020, 154, 1123-1131.	7.5	29
11	Two different fucosylated chondroitin sulfates: Structural elucidation, stimulating hematopoiesis and immune-enhancing effects. <i>Carbohydrate Polymers</i> , 2020, 230, 115698.	10.2	21
12	Fucoidan from <i>Ascophyllum nodosum</i> Suppresses Postprandial Hyperglycemia by Inhibiting Na ⁺ /Glucose Cotransporter 1 Activity. <i>Marine Drugs</i> , 2020, 18, 485.	4.6	17
13	Photoprotective effect of <i>Astragalus membranaceus</i> polysaccharide on UVA-induced damage in HaCaT cells. <i>PLoS ONE</i> , 2020, 15, e0235515.	2.5	12
14	Odd-numbered agaro-oligosaccharides alleviate type 2 diabetes mellitus and related colonic microbiota dysbiosis in mice. <i>Carbohydrate Polymers</i> , 2020, 240, 116261.	10.2	41
15	End-functionalised glycopolymers as glycosaminoglycan mimetics inhibit HeLa cell proliferation. <i>Polymer Chemistry</i> , 2020, 11, 4714-4722.	3.9	5
16	Mass spectrometric evidence for the mechanism of free-radical depolymerization of various types of glycosaminoglycans. <i>Carbohydrate Polymers</i> , 2020, 233, 115847.	10.2	9
17	Glycocalyxâ€Like Hydrogel Coatings for Small Diameter Vascular Grafts. <i>Advanced Functional Materials</i> , 2020, 30, 1908963.	14.9	33
18	Title is missing!. , 2020, 15, e0235515.		0

#	ARTICLE	IF	CITATIONS
19	Title is missing!. , 2020, 15, e0235515.		0
20	Title is missing!. , 2020, 15, e0235515.		0
21	Title is missing!. , 2020, 15, e0235515.		0
22	Synthesis and Properties of Functional Glycomimetics through Click Grafting of Fucose onto Chondroitin Sulfates. <i>Biomacromolecules</i> , 2019, 20, 3798-3808.	5.4	11
23	Anti-Metabolic Syndrome Effects of Fucoidan from <i>Fucus vesiculosus</i> via Reactive Oxygen Species-Mediated Regulation of JNK, Akt, and AMPK Signaling. <i>Molecules</i> , 2019, 24, 3319.	3.8	21
24	Fabrication of carbohydrate microarrays on poly(2-hydroxyethyl methacrylate)-cyanuric chloride-modified substrates for the analysis of carbohydrateâ€“lectin interactions. <i>New Journal of Chemistry</i> , 2019, 43, 9145-9151.	2.8	5
25	Alkaline Extraction, Structural Characterization, and Bioactivities of (1â†’6)-Î²-d-Glucan from <i>Lentinus edodes</i> . <i>Molecules</i> , 2019, 24, 1610.	3.8	20
26	Concise chemoenzymatic synthesis of heparan sulfate analogues as potent BACE-1 inhibitors. <i>Carbohydrate Polymers</i> , 2019, 217, 232-239.	10.2	5
27	Extraction, isolation and structural characterization of a novel polysaccharide from <i>Cyclocarya paliurus</i> . <i>International Journal of Biological Macromolecules</i> , 2019, 132, 864-870.	7.5	31
28	Heavy Heparin: A Stable Isotopeâ€“Enriched, Chemoenzymaticallyâ€“Synthesized, Polyâ€“Component Drug. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 5962-5966.	13.8	35
29	Chemoenzymatic Synthesis of Heparan Sulfate Mimetic Glycopolymers and Their Interactions with the Receptor for Advanced Glycation End-Product. <i>ACS Macro Letters</i> , 2019, 8, 1570-1574.	4.8	16
30	Recent Advances in Pharmaceutical Potential of Brown Algal Polysaccharides and their Derivatives. <i>Current Pharmaceutical Design</i> , 2019, 25, 1290-1311.	1.9	23
31	Synthesis of Fucoidan-Mimetic Glycopolymers with Well-Defined Sulfation Patterns via Emulsion Ring-Opening Metathesis Polymerization. <i>ACS Macro Letters</i> , 2018, 7, 330-335.	4.8	24
32	Interaction of <i>Neisseria meningitidis</i> Group X N-acetylglucosamine-1-phosphotransferase with its donor substrate. <i>Glycobiology</i> , 2018, 28, 100-107.	2.5	13
33	Marine polysaccharides attenuate metabolic syndrome by fermentation products and altering gut microbiota: An overview. <i>Carbohydrate Polymers</i> , 2018, 195, 601-612.	10.2	94
34	Synthesis and anti-inflammatory activity of gold-nanoparticle bearing a dermatan sulfate disaccharide analog. <i>Chinese Chemical Letters</i> , 2018, 29, 81-83.	9.0	7
35	Gut microbiota fermentation of marine polysaccharides and its effects on intestinal ecology: An overview. <i>Carbohydrate Polymers</i> , 2018, 179, 173-185.	10.2	165
36	A novel structural fucosylated chondroitin sulfate from <i>Holothuria Mexicana</i> and its effects on growth factors binding and anticoagulation. <i>Carbohydrate Polymers</i> , 2018, 181, 1160-1168.	10.2	58

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37	Effect of Anomeric Configuration on Stereocontrolled α -Glycosylation of L-Fucose. Synlett, 2018, 29, 2701-2706.	1.8	6
38	Chitosan-Based Nanomaterials for Drug Delivery. Molecules, 2018, 23, 2661.	3.8	279
39	Structural Characterization and Interaction with RCA120 of a Highly Sulfated Keratan Sulfate from Blue Shark (<i>Prionace glauca</i>) Cartilage. Marine Drugs, 2018, 16, 128.	4.6	3
40	Dietary Polysaccharide from Enteromorpha Clathrata Modulates Gut Microbiota and Promotes the Growth of Akkermansia muciniphila, Bifidobacterium spp. and Lactobacillus spp.. Marine Drugs, 2018, 16, 167.	4.6	59
41	Structure and immunomodulatory activity of a sulfated agarose with pyruvate and xylose substitutes from Polysiphonia senticulosa Harvey. Carbohydrate Polymers, 2017, 176, 29-37.	10.2	24
42	Microwave-assisted synthesis of glycopolymers by ring-opening metathesis polymerization (ROMP) in an emulsion system. Polymer Chemistry, 2017, 8, 6709-6719.	3.9	29
43	Carrageenan-induced colitis is associated with decreased population of anti-inflammatory bacterium, Akkermansia muciniphila, in the gut microbiota of C57BL/6J mice. Toxicology Letters, 2017, 279, 87-95.	0.8	130
44	Spongy bilayer dressing composed of chitosan-Ag nanoparticles and chitosan-Bletilla striata polysaccharide for wound healing applications. Carbohydrate Polymers, 2017, 157, 1538-1547.	10.2	150
45	Dietary Keratan Sulfate from Shark Cartilage Modulates Gut Microbiota and Increases the Abundance of Lactobacillus spp.. Marine Drugs, 2016, 14, 224.	4.6	29
46	In Vivo Anti-Cancer Mechanism of Low-Molecular-Weight Fucosylated Chondroitin Sulfate (LFCS) from Sea Cucumber Cucumaria frondosa. Molecules, 2016, 21, 625.	3.8	49
47	Antithrombotic activities of fucosylated chondroitin sulfates and their depolymerized fragments from two sea cucumbers. Carbohydrate Polymers, 2016, 152, 343-350.	10.2	55
48	Characteristics of glycosaminoglycans in chicken eggshells and the influence of disaccharide composition on eggshell properties. Poultry Science, 2016, 95, 2879-2888.	3.4	10
49	New Functional Tools for Antithrombogenic Activity Assessment of Live Surface Glycocalyx. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 1847-1853.	2.4	18
50	Structural modulation of gut microbiota by chondroitin sulfate and its oligosaccharide. International Journal of Biological Macromolecules, 2016, 89, 489-498.	7.5	68
51	Low anticoagulant heparin oligosaccharides as inhibitors of BACE-1, the Alzheimer's β -secretase. Carbohydrate Polymers, 2016, 151, 51-59.	10.2	19
52	Dietary fucoidan modulates the gut microbiota in mice by increasing the abundance of <i>Lactobacillus</i> and <i>Ruminococcaceae</i> . Food and Function, 2016, 7, 3224-3232.	4.6	245
53	Can natural fibers be a silver bullet? Antibacterial cellulose fibers through the covalent bonding of silver nanoparticles to electrospun fibers. Nanotechnology, 2016, 27, 055102.	2.6	31
54	One-Pot Synthesis of 1H-Indazole-4,7-diols via Iodine(III)-Mediated [3+2] Cyclization in Water. Synlett, 2016, 27, 773-776.	1.8	6

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55	Surface modification of a polyethylene film for anticoagulant and antimicrobial catheter. <i>Reactive and Functional Polymers</i> , 2016, 100, 142-150.	4.1	27
56	Keratan sulfate glycosaminoglycan from chicken egg white. <i>Glycobiology</i> , 2016, 26, 693-700.	2.5	18
57	In vitro and in vivo hypoglycemic effects of brown algal fucoidans. <i>International Journal of Biological Macromolecules</i> , 2016, 82, 249-255.	7.5	114
58	A purification process for heparin and precursor polysaccharides using the pH responsive behavior of chitosan. <i>Biotechnology Progress</i> , 2015, 31, 1348-1359.	2.6	6
59	Extraction, Isolation, Structural Characterization and Anti-Tumor Properties of an Apigalacturonan-Rich Polysaccharide from the Sea Grass <i>Zostera caespitosa</i> Miki. <i>Marine Drugs</i> , 2015, 13, 3710-3731.	4.6	23
60	Click-coated, heparinized, decellularized vascular grafts. <i>Acta Biomaterialia</i> , 2015, 13, 177-187.	8.3	65
61	Structural Study of Sulfated Fuco-Oligosaccharide Branched Glucuronomannan from <i>Kjellmaniella crassifolia</i> by ESI-CID-MS/MS. <i>Journal of Carbohydrate Chemistry</i> , 2015, 34, 303-317.	1.1	19
62	Green Solvents in Carbohydrate Chemistry: From Raw Materials to Fine Chemicals. <i>Chemical Reviews</i> , 2015, 115, 6811-6853.	47.7	296
63	Enzymatic formation of a resorcylic acid by creating a structure-guided single-point mutation in stilbene synthase. <i>Protein Science</i> , 2015, 24, 167-173.	7.6	25
64	High Sensitivity Detection of Active Botulinum Neurotoxin by Glyco-Quantitative Polymerase Chain-Reaction. <i>Analytical Chemistry</i> , 2014, 86, 2279-2284.	6.5	6
65	Stereoselective total synthesis of cochliomycin A. <i>Tetrahedron</i> , 2014, 70, 2616-2620.	1.9	20
66	Homogeneous low-molecular-weight heparins with reversible anticoagulant activity. <i>Nature Chemical Biology</i> , 2014, 10, 248-250.	8.0	173
67	Fluorous-Assisted Chemoenzymatic Synthesis of Heparan Sulfate Oligosaccharides. <i>Organic Letters</i> , 2014, 16, 2240-2243.	4.6	54
68	Method to Detect Contaminants in Heparin Using Radical Depolymerization and Liquid Chromatography-Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 326-330.	6.5	32
69	Capillary electrophoresis for total glycosaminoglycan analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 4617-4626.	3.7	33
70	Heparin stability by determining unsubstituted amino groups using hydrophilic interaction chromatography mass spectrometry. <i>Analytical Biochemistry</i> , 2014, 461, 46-48.	2.4	22
71	Toward the chemoenzymatic synthesis of heparan sulfate oligosaccharides: oxidative cleavage of p-nitrophenyl group with ceric ammonium salts. <i>Tetrahedron Letters</i> , 2013, 54, 4471-4474.	1.4	18
72	Ultrasensitive Detection and Quantification of Acidic Disaccharides Using Capillary Electrophoresis and Quantum Dot-Based Fluorescence Resonance Energy Transfer. <i>Analytical Chemistry</i> , 2013, 85, 9356-9362.	6.5	25

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73	Preparation and application of a "clickable" acceptor for enzymatic synthesis of heparin oligosaccharides. Carbohydrate Research, 2013, 372, 30-34.	2.3	12
74	Semi-synthesis of chondroitin sulfate-E from chondroitin sulfate-A. Carbohydrate Polymers, 2012, 87, 822-829.	10.2	49
75	Stereoselective Total Synthesis of (âˆ“) -Cleistenolide. Journal of Organic Chemistry, 2010, 75, 5754-5756.	3.2	26
76	Methyl 2,3-di-O-acetyl-4-O-levulinoyl-1-O-(2,2,2-trichloro-2-iminoethyl)-L-idopyranosiduronate. Acta Crystallographica Section E: Structure Reports Online, 2010, 66, o949-o949.	0.1	2
77	Highly Efficient and Versatile Synthesis of Some Important Precursors from 1,6-Anhydrous- β -D-glucopyranose as a Green Starting Material. Chinese Journal of Chemistry, 2009, 27, 1589-1592.	4.9	3
78	Selective cleavage of sugar anomeric O-acyl groups using FeCl ₃ ·6H ₂ O. Tetrahedron Letters, 2008, 49, 5488-5491.	1.4	18