

Robert J Linhardt

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8243727/robert-j-linhardt-publications-by-year.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

649
papers

26,150
citations

81
h-index

135
g-index

677
ext. papers

30,028
ext. citations

6.6
avg, IF

7.35
L-index

#	Paper	IF	Citations
649	Enzyme-extracted raspberry pectin exhibits a high-branched structure and enhanced anti-inflammatory properties than hot acid-extracted pectin.. <i>Food Chemistry</i> , 2022 , 383, 132387	8.5	3
648	One-Pot Enzymatic Synthesis of Heparin from N-Sulfoheparosan. <i>Methods in Molecular Biology</i> , 2022 , 2303, 3-11	1.4	1
647	GRASP depletion-mediated Golgi fragmentation impairs glycosaminoglycan synthesis, sulfation, and secretion.. <i>Cellular and Molecular Life Sciences</i> , 2022 , 79, 199	10.3	1
646	Fractionation of sulfated galactan from the red alga <i>Botryocladia occidentalis</i> separates its anticoagulant and anti-SARS-CoV-2 properties.. <i>Journal of Biological Chemistry</i> , 2022 , 101856	5.4	1
645	Comprehensive analysis of chondroitin sulfate and aggrecan in the head cartilage of bony fishes: Identification of proteoglycans in the head cartilage of sturgeon.. <i>International Journal of Biological Macromolecules</i> , 2022 , 208, 333-342	7.9	3
644	Intrinsically Disordered N-terminal Domain (NTD) of p53 Interacts with Mitochondrial PTP Regulator Cyclophilin D.. <i>Journal of Molecular Biology</i> , 2022 , 434, 167552	6.5	1
643	Homogalacturonan from squash: Characterization and tau-binding pattern of a sulfated derivative.. <i>Carbohydrate Polymers</i> , 2022 , 285, 119250	10.3	1
642	Implications of Glycosaminoglycans on Viral Zoonotic Diseases. <i>Diseases (Basel, Switzerland)</i> , 2021 , 9,	4.4	1
641	Anti-SARS-CoV-2 Activity of Rhamnan Sulfate from .. <i>Marine Drugs</i> , 2021 , 19,	6	3
640	Glycosaminoglycans in Neurodegenerative Diseases. <i>Advances in Experimental Medicine and Biology</i> , 2021 , 1325, 189-204	3.6	5
639	Glycosaminoglycans. <i>Advances in Experimental Medicine and Biology</i> , 2021 , 1325, 103-116	3.6	2
638	Loss of Hs3st3a1 or Hs3st3b1 enzymes alters heparan sulfate to reduce epithelial morphogenesis and adult salivary gland function. <i>Matrix Biology</i> , 2021 , 103-104, 37-57	11.4	0
637	Protective effects of six different pectic polysaccharides on DSS-induced IBD in mice. <i>Food Hydrocolloids</i> , 2021 , 127, 107209	10.6	1
636	Enhanced mandrel design for electrospinning aligned fiber mats from low volatility solvents. <i>Polymer Engineering and Science</i> , 2021 , 61, 793-801	2.3	2
635	Coupling Liquid Chromatography and Tandem Mass Spectrometry to Electrophoresis for In-Depth Analysis of Glycosaminoglycan Drugs: Heparin and the Multicomponent Sulodexide. <i>Analytical Chemistry</i> , 2021 , 93, 1433-1442	7.8	1
634	The effect of electrospun scaffolds on the glycosaminoglycan profile of differentiating neural stem cells. <i>Biochimie</i> , 2021 , 182, 61-72	4.6	2
633	Complete biosynthesis of a sulfated chondroitin in <i>Escherichia coli</i> . <i>Nature Communications</i> , 2021 , 12, 1389	17.4	14

632	Synthetic heparan sulfate standards and machine learning facilitate the development of solid-state nanopore analysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	10
631	Geometrical characteristics of eggs from 3 poultry species. <i>Poultry Science</i> , 2021 , 100, 100965	3.9	0
630	Oral fate and stabilization technologies of lactoferrin: a systematic review. <i>Critical Reviews in Food Science and Nutrition</i> , 2021 , 1-18	11.5	3
629	Recent advances on the one-pot synthesis to assemble size-controlled glycans and glycoconjugates and polysaccharides. <i>Carbohydrate Polymers</i> , 2021 , 258, 117672	10.3	5
628	Cultivation of fractionated cells from a bioactive-alkaloid-bearing marine sponge <i>Axinella</i> sp. <i>In Vitro Cellular and Developmental Biology - Animal</i> , 2021 , 57, 539-549	2.6	0
627	The Sulfation Code of Tauopathies: Heparan Sulfate Proteoglycans in the Prion Like Spread of Tau Pathology. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 671458	5.6	3
626	Heparan sulfates from bat and human lung and their binding to the spike protein of SARS-CoV-2 virus. <i>Carbohydrate Polymers</i> , 2021 , 260, 117797	10.3	13
625	Heparan Sulfate Facilitates Spike Protein-Mediated SARS-CoV-2 Host Cell Invasion and Contributes to Increased Infection of SARS-CoV-2 G614 Mutant and in Lung Cancer. <i>Frontiers in Molecular Biosciences</i> , 2021 , 8, 649575	5.6	12
624	Recent progress and advanced technology in carbohydrate-based drug development. <i>Current Opinion in Biotechnology</i> , 2021 , 69, 191-198	11.4	7
623	Synthesis of MnO/C/CoO nanocomposites by a Mn-oxidizing bacterium as a biotemplate for lithium-ion batteries. <i>Science and Technology of Advanced Materials</i> , 2021 , 22, 429-440	7.1	4
622	Prolonged release and shelf-life of anticoagulant sulfated polysaccharides encapsulated with ZIF-8. <i>International Journal of Biological Macromolecules</i> , 2021 , 183, 1174-1183	7.9	7
621	Red Algal Sulfated Galactan Binds and Protects Neural Cells from HIV-1 gp120 and Tat. <i>Pharmaceuticals</i> , 2021 , 14,	5.2	2
620	Isolation, Characterization, and Genome Sequence Analysis of a Novel Lytic Phage, Xoo-sp15 Infecting <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Current Microbiology</i> , 2021 , 78, 3192-3200	2.4	3
619	Analysis of the Glycosaminoglycan Chains of Proteoglycans. <i>Journal of Histochemistry and Cytochemistry</i> , 2021 , 69, 121-135	3.4	18
618	Extraction temperature is a decisive factor for the properties of pectin. <i>Food Hydrocolloids</i> , 2021 , 112, 106160	10.6	27
617	Synthesis of selected unnatural sugar nucleotides for biotechnological applications. <i>Critical Reviews in Biotechnology</i> , 2021 , 41, 47-62	9.4	1
616	Construction of heparan sulfate microarray for investigating the binding of specific saccharide sequences to proteins. <i>Glycobiology</i> , 2021 , 31, 188-199	5.8	3
615	Heparosan Chain Characterization: Sequential Depolymerization of E. Coli K5 Heparosan by a Bacterial Eliminate Heparin Lyase III and a Bacterial Hydrolase Heparanase Bp to Prepare Defined Oligomers. <i>Biotechnology Journal</i> , 2021 , 16, e2000336	5.6	1

614	Expression and functional identification of two homologous nicotine dehydrogenases, NicA2 and Nox, from <i>Pseudomonas</i> sp. JY-Q. <i>Protein Expression and Purification</i> , 2021 , 178, 105767	2	6
613	Effective Inhibition of SARS-CoV-2 Entry by Heparin and Enoxaparin Derivatives. <i>Journal of Virology</i> , 2021 , 95,	6.6	82
612	A rolling circle amplification based platform for ultrasensitive detection of heparin. <i>Analyst, The</i> , 2021 , 146, 714-720	5	5
611	Heparin-mediated dimerization of follistatin. <i>Experimental Biology and Medicine</i> , 2021 , 246, 467-482	3.7	2
610	Polyaniline-polycaprolactone fibers for neural applications: Electroconductivity enhanced by pseudo-doping. <i>Materials Science and Engineering C</i> , 2021 , 120, 111680	8.3	9
609	Structural and immunological studies on the polysaccharide from spores of a medicinal entomogenous fungus <i>Paecilomyces cicadae</i> . <i>Carbohydrate Polymers</i> , 2021 , 254, 117462	10.3	14
608	The abnormal accumulation of heparan sulfate in patients with mucopolysaccharidosis prevents the elastolytic activity of cathepsin V. <i>Carbohydrate Polymers</i> , 2021 , 253, 117261	10.3	5
607	Oral Administration of Fucosylated Chondroitin Sulfate Oligomers in Gastro-Resistant Microcapsules Exhibits a Safe Antithrombotic Activity. <i>Thrombosis and Haemostasis</i> , 2021 , 121, 15-26	7	3
606	MAPK/HOG signaling pathway induced stress-responsive damage repair is a mechanism for <i>Pichia pastoris</i> to survive from hyperosmotic stress. <i>Journal of Chemical Technology and Biotechnology</i> , 2021 , 96, 412-422	3.5	0
605	Bioengineered production of glycosaminoglycans and their analogues. <i>Systems Microbiology and Biomanufacturing</i> , 2021 , 1, 123-130		3
604	Effects of glycosaminoglycan supplementation in the chondrogenic differentiation of bone marrow- and synovial- derived mesenchymal stem/stromal cells on 3D-extruded poly (ε-caprolactone) scaffolds. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2021 , 70, 207-222	3	0
603	Differential Effects of Homologous Transcriptional Regulators NicR2A, NicR2B1, and NicR2B2 and Endogenous Ectopic Strong Promoters on Nicotine Metabolism in sp. Strain JY-Q. <i>Applied and Environmental Microbiology</i> , 2021 , 87,	4.8	3
602	Enzymatically synthesised MnO nanoparticles for efficient near-infrared photothermal therapy and dual-responsive magnetic resonance imaging. <i>Nanoscale</i> , 2021 , 13, 11093-11103	7.7	6
601	Electrical stimulation of neural-differentiating iPSCs on novel coaxial electroconductive nanofibers. <i>Biomaterials Science</i> , 2021 , 9, 5359-5382	7.4	3
600	High density fermentation of probiotic <i>E. coli</i> Nissle 1917 towards heparosan production, characterization, and modification. <i>Applied Microbiology and Biotechnology</i> , 2021 , 105, 1051-1062	5.7	5
599	Strong Reduction of the Chain Rigidity of Hyaluronan by Selective Binding of Ca Ions. <i>Macromolecules</i> , 2021 , 54, 1137-1146	5.5	6
598	Comparative study on the mechanisms of anti-lung cancer activities of three sulfated galactofucans. <i>Food and Function</i> , 2021 , 12, 10644-10657	6.1	1
597	Characterization of Glycosaminoglycan Disaccharide Composition in Astrocyte Primary Cultures and the Cortex of Neonatal Rats. <i>Neurochemical Research</i> , 2021 , 46, 595-610	4.6	1

596	Probing Amyloid Interactions with Synthetic Heparan Sulfate Oligosaccharides. <i>ACS Chemical Biology</i> , 2021 , 16, 1894-1899	4.9	2
595	Additional Role of Nicotinic Acid Hydroxylase for the Transformation of 3-Succinoyl-Pyridine by sp. Strain JY-Q. <i>Applied and Environmental Microbiology</i> , 2021 , 87,	4.8	2
594	Genomic analysis of bacteriophage Xoo-sp13 infecting <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Archives of Virology</i> , 2021 , 166, 1263-1265	2.6	6
593	Dietary pectic substances enhance gut health by its polycomponent: A review. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2021 , 20, 2015-2039	16.4	11
592	Preparation of Low Molecular Weight Heparin from a Remodeled Bovine Intestinal Heparin. <i>Journal of Medicinal Chemistry</i> , 2021 , 64, 2242-2253	8.3	1
591	Effect of Electrical Stimulation Conditions on Neural Stem Cells Differentiation on Cross-Linked PEDOT:PSS Films. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021 , 9, 591838	5.8	9
590	Synthesis of MnO/C/NiO-Doped Porous Multiphase Composites for Lithium-Ion Batteries by Biomaterialized Mn Oxides from Engineered Cells. <i>Nanomaterials</i> , 2021 , 11,	5.4	3
589	The Application of Seaweed Polysaccharides and Their Derived Products with Potential for the Treatment of Alzheimer's Disease. <i>Marine Drugs</i> , 2021 , 19,	6	17
588	PEDOT:PSS-Coated Polybenzimidazole Electroconductive Nanofibers for Biomedical Applications. <i>Polymers</i> , 2021 , 13,	4.5	2
587	The degree of polymerization and sulfation patterns in heparan sulfate are critical determinants of cytomegalovirus entry into host cells. <i>PLoS Pathogens</i> , 2021 , 17, e1009803	7.6	2
586	Platelet factor 4 polyanion immune complexes: heparin induced thrombocytopenia and vaccine-induced immune thrombotic thrombocytopenia. <i>Thrombosis Journal</i> , 2021 , 19, 66	5.6	3
585	Structural Study of Aavrh.10 Receptor and Antibody Interactions. <i>Journal of Virology</i> , 2021 , 95, e01249216.6	6.6	0
584	Structural and kinetic analyses of holothurian sulfated glycans suggest potential treatment for SARS-CoV-2 infection. <i>Journal of Biological Chemistry</i> , 2021 , 297, 101207	5.4	7
583	Targeting lipid metabolism in multiple myeloma cells: Rational development of a synergistic strategy with proteasome inhibitors. <i>British Journal of Pharmacology</i> , 2021 , 178, 4741-4757	8.6	2
582	Challenges of pectic polysaccharides as a prebiotic from the perspective of fermentation characteristics and anti-colitis activity. <i>Carbohydrate Polymers</i> , 2021 , 270, 118377	10.3	3
581	In situ synthesis of fluorescent polydopamine on biogenic MnO nanoparticles as stimuli responsive multifunctional theranostics. <i>Biomaterials Science</i> , 2021 , 9, 5897-5906	7.4	2
580	Lipase-Catalyzed Synthesis and Characterization of Poly(glycerol sebacate).. <i>Biomacromolecules</i> , 2021 ,	6.9	2
579	Structural Features of Heparin and Its Interactions With Cellular Prion Protein Measured by Surface Plasmon Resonance. <i>Frontiers in Molecular Biosciences</i> , 2020 , 7, 594497	5.6	3

578	Review on the Impact of Polyols on the Properties of Bio-Based Polyesters. <i>Polymers</i> , 2020 , 12,	4.5	11
577	Amphiphilic mPEG-Modified Oligo-Phenylalanine Nanoparticles Chemoenzymatically Synthesized via Papain. <i>ACS Omega</i> , 2020 , 5, 30336-30347	3.9	3
576	Rational identification and characterisation of peptide ligands for targeting polysialic acid. <i>Scientific Reports</i> , 2020 , 10, 7697	4.9	0
575	Structural characterization of a clinically described heparin-like substance in plasma causing bleeding. <i>Carbohydrate Polymers</i> , 2020 , 244, 116443	10.3	5
574	Interactions of fibroblast growth factors with sulfated galactofucan from <i>Saccharina japonica</i> . <i>International Journal of Biological Macromolecules</i> , 2020 , 160, 26-34	7.9	5
573	Colon-targeted delivery systems for nutraceuticals: A review of current vehicles, evaluation methods and future prospects. <i>Trends in Food Science and Technology</i> , 2020 , 102, 203-222	15.3	22
572	Enzymatic Polymerization of Poly(glycerol-1,8-octanediol-sebacate): Versatile Poly(glycerol sebacate) Analogues that Form Monocomponent Biodegradable Fiber Scaffolds. <i>Biomacromolecules</i> , 2020 , 21, 3197-3206	6.9	12
571	Characterization and application of a putative transcription factor (SUT2) in <i>Pichia pastoris</i> . <i>Molecular Genetics and Genomics</i> , 2020 , 295, 1295-1304	3.1	2
570	Structure-activity relationship of Citrus segment membrane RG-I pectin against Galectin-3: The galactan is not the only important factor. <i>Carbohydrate Polymers</i> , 2020 , 245, 116526	10.3	20
569	Recent advances in biotechnology for heparin and heparan sulfate analysis. <i>Talanta</i> , 2020 , 219, 121270	6.2	7
568	Biotechnology progress for removal of indoor gaseous formaldehyde. <i>Applied Microbiology and Biotechnology</i> , 2020 , 104, 3715-3727	5.7	7
567	Loss and rescue of osteocalcin and osteopontin modulate osteogenic and angiogenic features of mesenchymal stem/stromal cells. <i>Journal of Cellular Physiology</i> , 2020 , 235, 7496-7515	7	8
566	Design of anti-inflammatory heparan sulfate to protect against acetaminophen-induced acute liver failure. <i>Science Translational Medicine</i> , 2020 , 12,	17.5	20
565	Manganese(II) Oxidizing Bacteria as Whole-Cell Catalyst for β Keto Ester Oxidation. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	2
564	Expression of enzymes for 3Rphosphoadenosine-5Rphosphosulfate (PAPS) biosynthesis and their preparation for PAPS synthesis and regeneration. <i>Applied Microbiology and Biotechnology</i> , 2020 , 104, 7067-7078	5.7	5
563	Enzymatic Synthesis of Chondroitin Sulfate E to Attenuate Bacteria Lipopolysaccharide-Induced Organ Damage. <i>ACS Central Science</i> , 2020 , 6, 1199-1207	16.8	10
562	Antimicrobial effects of positively charged, conductive electrospun polymer fibers. <i>Materials Science and Engineering C</i> , 2020 , 116, 111247	8.3	4
561	End-functionalised glycopolymers as glycosaminoglycan mimetics inhibit HeLa cell proliferation. <i>Polymer Chemistry</i> , 2020 , 11, 4714-4722	4.9	3

560	Highly Branched RG-I Domain Enrichment Is Indispensable for Pectin Mitigating against High-Fat Diet-Induced Obesity. <i>Journal of Agricultural and Food Chemistry</i> , 2020 , 68, 8688-8701	5.7	24
559	Structural analysis of a glucoglucuronan derived from laminarin and the mechanisms of its anti-lung cancer activity. <i>International Journal of Biological Macromolecules</i> , 2020 , 163, 776-787	7.9	2
558	Characterization of heparin and severe acute respiratory syndrome-related coronavirus 2 (SARS-CoV-2) spike glycoprotein binding interactions. <i>Antiviral Research</i> , 2020 , 181, 104873	10.8	148
557	Polysaccharide Sequence Influences the Specificity and Catalytic Activity of Glucuronyl C5-Epimerase. <i>Biochemistry</i> , 2020 , 59, 2576-2584	3.2	1
556	Structural characteristics and anti-complement activities of polysaccharides from Sargassum hemiphyllum. <i>Glycoconjugate Journal</i> , 2020 , 37, 553-563	3	4
555	Comprehensive Glycomic Analysis Reveals That Human Serum Albumin Glycation Specifically Affects the Pharmacokinetics and Efficacy of Different Anticoagulant Drugs in Diabetes. <i>Diabetes</i> , 2020 , 69, 760-770	0.9	13
554	Chondrogenic differentiation of mesenchymal stem/stromal cells on 3D porous poly (ε-caprolactone) scaffolds: Effects of material alkaline treatment and chondroitin sulfate supplementation. <i>Journal of Bioscience and Bioengineering</i> , 2020 , 129, 756-764	3.3	12
553	Extraction Methods Affect the Structure of Goji () Polysaccharides. <i>Molecules</i> , 2020 , 25,	4.8	15
552	Autophagic degradation of HAS2 in endothelial cells: A novel mechanism to regulate angiogenesis. <i>Matrix Biology</i> , 2020 , 90, 1-19	11.4	17
551	Glycosaminoglycan remodeling during chondrogenic differentiation of human bone marrow-/synovial-derived mesenchymal stem/stromal cells under normoxia and hypoxia. <i>Glycoconjugate Journal</i> , 2020 , 37, 345-360	3	5
550	Chemical, enzymatic and biological synthesis of hyaluronic acids. <i>International Journal of Biological Macromolecules</i> , 2020 , 152, 199-206	7.9	21
549	Synthesis, Characterization, and In Vivo Evaluation of Desmethyl Anethole Trithione Phosphate Prodrug for Ameliorating Cerebral Ischemia-Reperfusion Injury in Rats. <i>ACS Omega</i> , 2020 , 5, 4595-4602	3.9	2
548	Molecular mechanisms of bioactive polysaccharides from Ganoderma lucidum (Lingzhi), a review. <i>International Journal of Biological Macromolecules</i> , 2020 , 150, 765-774	7.9	59
547	Encapsulation of phycocyanin by prebiotics and polysaccharides-based electrospun fibers and improved colon cancer prevention effects. <i>International Journal of Biological Macromolecules</i> , 2020 , 149, 672-681	7.9	23
546	Structural analysis of a novel sulfated galacto-fuco-xylo-glucurono-mannan from Sargassum fusiforme and its anti-lung cancer activity. <i>International Journal of Biological Macromolecules</i> , 2020 , 149, 450-458	7.9	8
545	Non-anticoagulant Heparin as a Pre-exposure Prophylaxis Prevents Lyme Disease Infection. <i>ACS Infectious Diseases</i> , 2020 , 6, 503-514	5.5	4
544	Mass spectrometric evidence for the mechanism of free-radical depolymerization of various types of glycosaminoglycans. <i>Carbohydrate Polymers</i> , 2020 , 233, 115847	10.3	3
543	Digestibility of squash polysaccharide under simulated salivary, gastric and intestinal conditions and its impact on short-chain fatty acid production in type-2 diabetic rats. <i>Carbohydrate Polymers</i> , 2020 , 235, 115904	10.3	11

542	Structural characterization and anti-lung cancer activity of a sulfated glucurono-xylo-rhamnan from <i>Enteromorpha prolifera</i> . <i>Carbohydrate Polymers</i> , 2020 , 237, 116143	10.3	6
541	High-Conductivity and High-Capacitance Electrospun Fibers for Supercapacitor Applications. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 19369-19376	9.5	27
540	Unique Cell Surface Mannan of Yeast Pathogen with Selective Binding to IgG. <i>ACS Infectious Diseases</i> , 2020 , 6, 1018-1031	5.5	14
539	Sequence Analysis of a Jumbo Bacteriophage, That Infects <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Microbiology Resource Announcements</i> , 2020 , 9,	1.3	6
538	N-glycolyl chondroitin synthesis using metabolically engineered <i>E. coli</i> . <i>AMB Express</i> , 2020 , 10, 144	4.1	1
537	Effective Inhibition of SARS-CoV-2 Entry by Heparin and Enoxaparin Derivatives 2020 ,		21
536	3-O-Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. <i>Angewandte Chemie</i> , 2020 , 132, 1834-1843	3.6	0
535	3-O-Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 1818-1827	16.4	40
534	Storage stability studies on interesterified blend-based fast-frozen special fats for oxidative stability, crystallization characteristics and physical properties. <i>Food Chemistry</i> , 2020 , 306, 125563	8.5	5
533	Evaluating Heparin Products for Heparin-Induced Thrombocytopenia Using Surface Plasmon Resonance. <i>Journal of Pharmaceutical Sciences</i> , 2020 , 109, 975-980	3.9	5
532	Fermented Cassava Residue Lignin Prepared by Sequential Acid Steam-Explosion and Hot-Alkaline Treatment and Its Antioxidant Properties. <i>Waste and Biomass Valorization</i> , 2020 , 11, 6115-6124	3.2	2
531	Chemoenzymatic Synthesis of Glycosaminoglycans. <i>Accounts of Chemical Research</i> , 2020 , 53, 335-346	24.3	53
530	Extracellular matrix decorated polycaprolactone scaffolds for improved mesenchymal stem/stromal cell osteogenesis towards a patient-tailored bone tissue engineering approach. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2020 , 108, 2153-2166	3.5	28
529	Glycosaminoglycan disaccharide compositional analysis of cell-derived extracellular matrices using liquid chromatography-tandem mass spectrometry. <i>Methods in Cell Biology</i> , 2020 , 156, 85-106	1.8	
528	Regulation of PTP1B activation through disruption of redox-complex formation. <i>Nature Chemical Biology</i> , 2020 , 16, 122-125	11.7	10
527	Urinary metabolomics analysis reveals the anti-diabetic effect of stachyose in high-fat diet/streptozotocin-induced type 2 diabetic rats. <i>Carbohydrate Polymers</i> , 2020 , 229, 115534	10.3	8
526	Interactions between Sclerostin and Glycosaminoglycans. <i>Glycoconjugate Journal</i> , 2020 , 37, 119-128	3	2
525	Preparation of Highly Reactive Lignin by Ozone Oxidation: Application as Surfactants with Antioxidant and Anti-UV Properties. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 22-28	8.3	14

524	Designer DNA architecture offers precise and multivalent spatial pattern-recognition for viral sensing and inhibition. <i>Nature Chemistry</i> , 2020 , 12, 26-35	17.6	82
523	A novel route for double-layered encapsulation of probiotics with improved viability under adverse conditions. <i>Food Chemistry</i> , 2020 , 310, 125977	8.5	43
522	Extraction, structure and bioactivities of the polysaccharides from <i>Pleurotus eryngii</i> : A review. <i>International Journal of Biological Macromolecules</i> , 2020 , 150, 1342-1347	7.9	28
521	Functional role of glycosaminoglycans in decellularized lung extracellular matrix. <i>Acta Biomaterialia</i> , 2020 , 102, 231-246	10.8	24
520	Site-selective reactions for the synthesis of glycoconjugates in polysaccharide vaccine development. <i>Carbohydrate Polymers</i> , 2020 , 230, 115643	10.3	16
519	A Novel Laminin-Binding Protein Mediates Microbial-Endothelial Cell Interactions and Facilitates Dissemination of Lyme Disease Pathogens. <i>Journal of Infectious Diseases</i> , 2020 , 221, 1438-1447	7	4
518	Identification, repair and characterization of a benzyl alcohol-inducible promoter for recombinant proteins overexpression in <i>Corynebacterium glutamicum</i> . <i>Enzyme and Microbial Technology</i> , 2020 , 141, 109651	3.8	2
517	Poly-ion complex (PIC) formation of heparin and polyamines: PIC with tetrakis (3-aminopropyl) ammonium allows sustained release of heparin. <i>Heliyon</i> , 2020 , 6, e05168	3.6	1
516	Xylosyltransferase 2 deficiency and organ homeostasis. <i>Glycoconjugate Journal</i> , 2020 , 37, 755-765	3	3
515	Advances in the preparation and synthesis of heparin and related products. <i>Drug Discovery Today</i> , 2020 , 25, 2095-2109	8.8	14
514	FAM20B-catalyzed glycosaminoglycans control murine tooth number by restricting FGFR2b signaling. <i>BMC Biology</i> , 2020 , 18, 87	7.3	3
513	A Revised Structure for the Glycolipid Terminus of K5 Heparosan Capsular Polysaccharide. <i>Biomolecules</i> , 2020 , 10,	5.9	3
512	Functionalization of Electrospun Nanofibers and Fiber Alignment Enhance Neural Stem Cell Proliferation and Neuronal Differentiation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 580135	5.8	17
511	Chemical O-sulfation of N-sulfoheparosan: a route to rare N-sulfo-3-O-sulfoglucosamine and 2-O-sulfoglucuronic acid. <i>Glycoconjugate Journal</i> , 2020 , 37, 589-597	3	
510	Prominent members of the human gut microbiota express endo-acting O-glycanases to initiate mucin breakdown. <i>Nature Communications</i> , 2020 , 11, 4017	17.4	34
509	Inhibition of glucuronomannan hexamer on the proliferation of lung cancer through binding with immunoglobulin G. <i>Carbohydrate Polymers</i> , 2020 , 248, 116785	10.3	2
508	Sulfated polysaccharides effectively inhibit SARS-CoV-2 in vitro. <i>Cell Discovery</i> , 2020 , 6, 50	22.3	144
507	Filter-entrapment enrichment pull-down assay for glycosaminoglycan structural characterization and protein interaction. <i>Carbohydrate Polymers</i> , 2020 , 245, 116623	10.3	3

506	Fabrication of homotypic neural ribbons as a multiplex platform optimized for spinal cord delivery. <i>Scientific Reports</i> , 2020 , 10, 12939	4.9	4
505	Fucosylated Chondroitin Sulfate 9-18 Oligomers Exhibit Molecular Size-Independent Antithrombotic Activity while Circulating in the Blood. <i>ACS Chemical Biology</i> , 2020 , 15, 2232-2246	4.9	4
504	Quantitative analysis of heparan sulfate using isotopically labeled calibrants. <i>Communications Biology</i> , 2020 , 3, 425	6.7	5
503	Combined genomic and transcriptomic analysis of the dibutyl phthalate metabolic pathway in <i>Arthrobacter</i> sp. ZJUTW. <i>Biotechnology and Bioengineering</i> , 2020 , 117, 3712-3726	4.9	8
502	<i>Candida auris</i> Mannans and Pathogen-Host Interplay. <i>Trends in Microbiology</i> , 2020 , 28, 954-956	12.4	1
501	The structure-activity relationship of the interactions of SARS-CoV-2 spike glycoproteins with glucuronomannan and sulfated galactofucan from <i>Saccharina japonica</i> . <i>International Journal of Biological Macromolecules</i> , 2020 , 163, 1649-1658	7.9	30
500	Ischemic stroke disrupts the endothelial glycocalyx through activation of proHPSE via acrolein exposure. <i>Journal of Biological Chemistry</i> , 2020 , 295, 18614-18624	5.4	6
499	Mapping the Structural and Dynamic Determinants of pH-Sensitive Heparin Binding to Granulocyte Macrophage Colony Stimulating Factor. <i>Biochemistry</i> , 2020 , 59, 3541-3553	3.2	3
498	Rethinking the impact of RG-I mainly from fruits and vegetables on dietary health. <i>Critical Reviews in Food Science and Nutrition</i> , 2020 , 60, 2938-2960	11.5	36
497	Structural analysis of urinary glycosaminoglycans from healthy human subjects. <i>Glycobiology</i> , 2020 , 30, 143-151	5.8	11
496	Extruded Bioreactor Perfusion Culture Supports the Chondrogenic Differentiation of Human Mesenchymal Stem/Stromal Cells in 3D Porous Poly(ϵ -Caprolactone) Scaffolds. <i>Biotechnology Journal</i> , 2020 , 15, e1900078	5.6	3
495	Kartogenin-loaded coaxial PGS/PCL aligned nanofibers for cartilage tissue engineering. <i>Materials Science and Engineering C</i> , 2020 , 107, 110291	8.3	47
494	Alveolar heparan sulfate shedding impedes recovery from bleomycin-induced lung injury. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2020 , 318, L1198-L1210	5.8	10
493	Glycocalyx-Like Hydrogel Coatings for Small Diameter Vascular Grafts. <i>Advanced Functional Materials</i> , 2020 , 30, 1908963	15.6	13
492	Elucidating the unusual reaction kinetics of D-glucuronyl C5-epimerase. <i>Glycobiology</i> , 2020 , 30, 847-858	5.8	4
491	Recovery of High Value-Added Nutrients from Fruit and Vegetable Industrial Wastewater. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2019 , 18, 1388-1402	16.4	25
490	Loss of endothelial sulfatase-1 after experimental sepsis attenuates subsequent pulmonary inflammatory responses. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2019 , 317, L667-L677	5.8	4
489	Metabolic engineering of <i>Bacillus megaterium</i> for heparosan biosynthesis using <i>Pasteurella multocida</i> heparosan synthase, PmHS2. <i>Microbial Cell Factories</i> , 2019 , 18, 132	6.4	15

488	Circulating heparan sulfate fragments mediate septic cognitive dysfunction. <i>Journal of Clinical Investigation</i> , 2019 , 129, 1779-1784	15.9	52
487	Comparison of the Interactions of Different Growth Factors and Glycosaminoglycans. <i>Molecules</i> , 2019 , 24,	4.8	29
486	POLYBENZIMIDAZOLE NANOFIBERS FOR NEURAL STEM CELL CULTURE. <i>Materials Today Chemistry</i> , 2019 , 14,	6.2	11
485	Online Capillary Zone Electrophoresis Negative Electron Transfer Dissociation Tandem Mass Spectrometry of Glycosaminoglycan Mixtures. <i>International Journal of Mass Spectrometry</i> , 2019 , 445, 116209-116209	1.9	12
484	High-throughput method for in process monitoring of 3-O-sulfotransferase catalyzed sulfonation in bioengineered heparin synthesis. <i>Analytical Biochemistry</i> , 2019 , 586, 113419	3.1	3
483	Ultrasound-assisted fast preparation of low molecular weight fucosylated chondroitin sulfate with antitumor activity. <i>Carbohydrate Polymers</i> , 2019 , 209, 82-91	10.3	13
482	Complete degradation of bisphenol A and nonylphenol by a composite of biogenic manganese oxides and Escherichia coli cells with surface-displayed multicopper oxidase CotA. <i>Chemical Engineering Journal</i> , 2019 , 362, 897-908	14.7	13
481	Preparation of salidroside with n-butyl β -D-glucoside as the glycone donor via a two-step enzymatic synthesis catalyzed by immobilized β -glucosidase from bitter almonds. <i>Biocatalysis and Biotransformation</i> , 2019 , 37, 246-260	2.5	3
480	Glycosaminoglycan Compositional Analysis of Relevant Tissues in Zika Virus Pathogenesis and in Vitro Evaluation of Heparin as an Antiviral against Zika Virus Infection. <i>Biochemistry</i> , 2019 , 58, 1155-1166	3.2	17
479	Chemical composition and biological activities of essential oil isolated by HS-SPME and UAHD from fruits of bergamot. <i>LWT - Food Science and Technology</i> , 2019 , 104, 38-44	5.4	16
478	Co-culture cell-derived extracellular matrix loaded electrospun microfibrinous scaffolds for bone tissue engineering. <i>Materials Science and Engineering C</i> , 2019 , 99, 479-490	8.3	52
477	Determination of cerebrospinal fluid leakage by selective deletion of transferrin glycoform using an immunochromatographic assay. <i>Theranostics</i> , 2019 , 9, 4182-4191	12.1	6
476	Increased 3RPhosphoadenosine-5Rphosphosulfate Levels in Engineered Escherichia coli Cell Lysate Facilitate the In Vitro Synthesis of Chondroitin Sulfate A. <i>Biotechnology Journal</i> , 2019 , 14, e1800436	5.6	13
475	Dose-dependent neuroprotective effect of oriental phyto-derived glycyrrhizin on experimental neuroterminal norepinephrine depletion in a rat brain model. <i>Chemico-Biological Interactions</i> , 2019 , 308, 279-287	5	3
474	Specificity and action pattern of heparanase Bp, a β -glucuronidase from Burkholderia pseudomallei. <i>Glycobiology</i> , 2019 , 29, 572-581	5.8	8
473	Comparison of Low-Molecular-Weight Heparins Prepared From Ovine Heparins With Enoxaparin. <i>Clinical and Applied Thrombosis/Hemostasis</i> , 2019 , 25, 1076029619840701	3.3	3
472	Circulating heparin oligosaccharides rapidly target the hippocampus in sepsis, potentially impacting cognitive functions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 9208-9213	11.5	32
471	Major Differences between the Self-Assembly and Seeding Behavior of Heparin-Induced and in Vitro Phosphorylated Tau and Their Modulation by Potential Inhibitors. <i>ACS Chemical Biology</i> , 2019 , 14, 1363-1379	4.9	21

470	Polyaniline-polycaprolactone blended nanofibers for neural cell culture. <i>European Polymer Journal</i> , 2019 , 117, 28-37	5.2	36
469	Systematic analysis of enoxaparins from different sources with online one- and two-dimensional chromatography. <i>Analyst, The</i> , 2019 , 144, 3746-3755	5	3
468	Endothelial Glycocalyx Shedding Predicts Donor Organ Acceptability and Is Associated With Primary Graft Dysfunction in Lung Transplant Recipients. <i>Transplantation</i> , 2019 , 103, 1277-1285	1.8	11
467	Coconut oil-cellulose beaded microfibers by coaxial electrospinning: An eco-model system to study thermoregulation of confined phase change materials. <i>Cellulose</i> , 2019 , 26, 1855-1868	5.5	13
466	Heavy Heparin: A Stable Isotope-Enriched, Chemoenzymatically-Synthesized, Poly-Component Drug. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 5962-5966	16.4	27
465	Chemically modified polysaccharides: Synthesis, characterization, structure activity relationships of action. <i>International Journal of Biological Macromolecules</i> , 2019 , 132, 970-977	7.9	73
464	Development of low molecular weight heparin by HO/ascorbic acid with ultrasonic power and its anti-metastasis property. <i>International Journal of Biological Macromolecules</i> , 2019 , 133, 101-109	7.9	12
463	Glycosaminoglycans compositional analysis of Urodele axolotl (<i>Ambystoma mexicanum</i>) and Porcine Retina. <i>Glycoconjugate Journal</i> , 2019 , 36, 165-174	3	4
462	Novel Cellulose-Halloysite Hemostatic Nanocomposite Fibers with a Dramatic Reduction in Human Plasma Coagulation Time. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 15447-15456	9.5	26
461	A Molecular Hero Suit for In Vitro and In Vivo DNA Nanostructures. <i>Small</i> , 2019 , 15, e1805386	11	15
460	Celastrol induce apoptosis of human multiple myeloma cells involving inhibition of proteasome activity. <i>European Journal of Pharmacology</i> , 2019 , 853, 184-192	5.3	9
459	Chemoenzymatic synthesis of heparan sulfate tetrasaccharide from a N-acetyl- β -glucosamine-O-methylglycoside acceptor. <i>Tetrahedron Letters</i> , 2019 , 60, 911-915	2	5
458	Characterization and comparative analysis of toxin-antitoxin systems in <i>Acetobacter pasteurianus</i> . <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019 , 46, 869-882	4.2	9
457	Targeted delivery of phycocyanin for the prevention of colon cancer using electrospun fibers. <i>Food and Function</i> , 2019 , 10, 1816-1825	6.1	15
456	Fast preparation of rhamnogalacturonan I enriched low molecular weight pectic polysaccharide by ultrasonically accelerated metal-free Fenton reaction. <i>Food Hydrocolloids</i> , 2019 , 95, 551-561	10.6	36
455	Glycan Markers of Human Stem Cells Assigned with Beam Search Arrays. <i>Molecular and Cellular Proteomics</i> , 2019 , 18, 1981-2002	7.6	6
454	1D and 2D-HSQC NMR: Two Methods to Distinguish and Characterize Heparin From Different Animal and Tissue Sources. <i>Frontiers in Medicine</i> , 2019 , 6, 142	4.9	9
453	Intravenous fluid resuscitation is associated with septic endothelial glycocalyx degradation. <i>Critical Care</i> , 2019 , 23, 259	10.8	67

452	Bottom-up analysis using liquid chromatography-Fourier transform mass spectrometry to characterize fucosylated chondroitin sulfates from sea cucumbers. <i>Glycobiology</i> , 2019 , 29, 755-764	5.8	8
451	DNA Nanostructures: A Molecular Hero Suit for In Vitro and In Vivo DNA Nanostructures (Small 26/2019). <i>Small</i> , 2019 , 15, 1970141	11	
450	Interesterified blend-based and physical blend-based special fats: storage stability under fluctuating temperatures. <i>Journal of the Science of Food and Agriculture</i> , 2019 , 99, 6219-6226	4.3	1
449	Bottom-up and top-down profiling of pentosan polysulfate. <i>Analyst, The</i> , 2019 , 144, 4781-4786	5	13
448	Highly purified fucosylated chondroitin sulfate oligomers with selective intrinsic factor Xase complex inhibition. <i>Carbohydrate Polymers</i> , 2019 , 222, 115025	10.3	10
447	Reconsidering conventional and innovative methods for pectin extraction from fruit and vegetable waste: Targeting rhamnogalacturonan I. <i>Trends in Food Science and Technology</i> , 2019 , 94, 65-78	15.3	54
446	Identification and characterization of the Cucurbitacins, a novel class of small-molecule inhibitors of Tropomyosin receptor kinase a. <i>BMC Complementary and Alternative Medicine</i> , 2019 , 19, 295	4.7	1
445	Heavy Heparin: A Stable Isotope-Enriched, Chemoenzymatically-Synthesized, Poly-Component Drug. <i>Angewandte Chemie</i> , 2019 , 131, 6023-6027	3.6	1
444	Expedient Synthesis of Core Disaccharide Building Blocks from Natural Polysaccharides for Heparan Sulfate Oligosaccharide Assembly. <i>Angewandte Chemie</i> , 2019 , 131, 18750-18756	3.6	4
443	Expedient Synthesis of Core Disaccharide Building Blocks from Natural Polysaccharides for Heparan Sulfate Oligosaccharide Assembly. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 18577-18583	16.4	21
442	Production and Characterization of Recombinant Collagen-Binding Resilin Nanocomposite for Regenerative Medicine Applications. <i>Regenerative Engineering and Translational Medicine</i> , 2019 , 5, 362-374	3.7	1
441	Glycoconjugate synthesis using chemoselective ligation. <i>Organic and Biomolecular Chemistry</i> , 2019 , 17, 2646-2650	3.9	7
440	Depolymerized RG-I-enriched pectin from citrus segment membranes modulates gut microbiota, increases SCFA production, and promotes the growth of Bifidobacterium spp., Lactobacillus spp. and Faecalibaculum spp. <i>Food and Function</i> , 2019 , 10, 7828-7843	6.1	43
439	Glycosaminoglycans in human cerebrospinal fluid determined by LC-MS/MS MRM. <i>Analytical Biochemistry</i> , 2019 , 567, 82-84	3.1	12
438	Tip-Enhanced Raman Imaging of Single-Stranded DNA with Single Base Resolution. <i>Journal of the American Chemical Society</i> , 2019 , 141, 753-757	16.4	81
437	Remodeling of Glycosaminoglycans During Differentiation of Adult Human Bone Mesenchymal Stromal Cells Toward Hepatocytes. <i>Stem Cells and Development</i> , 2019 , 28, 278-289	4.4	7
436	Chemometric analysis of porcine, bovine and ovine heparins. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2019 , 164, 345-352	3.5	10
435	Preparation of low molecular weight heparin using an ultrasound-assisted Fenton-system. <i>Ultrasonics Sonochemistry</i> , 2019 , 52, 184-192	8.9	7

434	Fucosylated chondroitin sulfate from <i>Isostichopus badionotus</i> alleviates metabolic syndromes and gut microbiota dysbiosis induced by high-fat and high-fructose diet. <i>International Journal of Biological Macromolecules</i> , 2019 , 124, 377-388	7.9	22
433	Development of a method to analyze the complexes of enoxaparin and platelet factor 4 with size-exclusion chromatography. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2019 , 164, 668-671	3.5	2
432	Non-Anticoagulant Low Molecular Weight Heparins for Pharmaceutical Applications. <i>Journal of Medicinal Chemistry</i> , 2019 , 62, 1067-1073	8.3	5
431	Compositional and structural analysis of glycosaminoglycans in cell-derived extracellular matrices. <i>Glycoconjugate Journal</i> , 2019 , 36, 141-154	3	21
430	Structure, bioactivities and applications of the polysaccharides from <i>Tremella fuciformis</i> mushroom: A review. <i>International Journal of Biological Macromolecules</i> , 2019 , 121, 1005-1010	7.9	56
429	Negative-Ion Mode Capillary Isoelectric Focusing Mass Spectrometry for Charge-Based Separation of Acidic Oligosaccharides. <i>Analytical Chemistry</i> , 2019 , 91, 846-853	7.8	10
428	Amphiphilic bromelain-synthesized oligo-phenylalanine grafted with methoxypolyethylene glycol possessing stabilizing thermo-responsive emulsion properties. <i>Journal of Colloid and Interface Science</i> , 2019 , 538, 1-14	9.3	5
427	Pectic oligosaccharides hydrolyzed from citrus canning processing water by Fenton reaction and their antiproliferation potentials. <i>International Journal of Biological Macromolecules</i> , 2019 , 124, 1025-1032	7.9	14
426	Structural characterization and anti-proliferative activities of partially degraded polysaccharides from peach gum. <i>Carbohydrate Polymers</i> , 2019 , 203, 193-202	10.3	25
425	Mechanism of enhanced oral absorption of akebia saponin D by a self-nanoemulsifying drug delivery system loaded with phospholipid complex. <i>Drug Development and Industrial Pharmacy</i> , 2019 , 45, 124-129	3.6	9
424	-stimulated crosslinking of catechol-conjugated hydroxyethyl chitosan as a tissue adhesive. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2019 , 107, 582-593	3.5	11
423	Heparin/heparan sulfate analysis by covalently modified reverse polarity capillary zone electrophoresis-mass spectrometry. <i>Journal of Chromatography A</i> , 2018 , 1545, 75-83	4.5	22
422	Structure and conformation of β -glucan extracted from <i>Agaricus blazei</i> Murill by high-speed shearing homogenization. <i>International Journal of Biological Macromolecules</i> , 2018 , 113, 558-564	7.9	20
421	Purification and structural elucidation of a water-soluble polysaccharide from the fruiting bodies of the <i>Grifola frondosa</i> . <i>International Journal of Biological Macromolecules</i> , 2018 , 115, 221-226	7.9	31
420	On-line capillary electrophoresis/laser-induced fluorescence/mass spectrometry analysis of glycans labeled with Teal fluorescent dye using an electrokinetic sheath liquid pump-based nanospray ion source. <i>Rapid Communications in Mass Spectrometry</i> , 2018 , 32, 882-888	2.2	15
419	Antithrombin III-Binding Site Analysis of Low-Molecular-Weight Heparin Fractions. <i>Journal of Pharmaceutical Sciences</i> , 2018 , 107, 1290-1295	3.9	13
418	Detection of catechol using an electrochemical biosensor based on engineered <i>Escherichia coli</i> cells that surface-display laccase. <i>Analytica Chimica Acta</i> , 2018 , 1009, 65-72	6.6	28
417	Identification and characterization of the <i>Streptococcus pneumoniae</i> type 3 capsule-specific glycoside hydrolase of <i>Paenibacillus</i> species 32352. <i>Glycobiology</i> , 2018 , 28, 90-99	5.8	10

416	Comprehensive analysis of glycosaminoglycans from the edible shellfish. <i>Carbohydrate Polymers</i> , 2018 , 184, 269-276	10.3	5
415	Full recovery of value-added compounds from citrus canning processing water. <i>Journal of Cleaner Production</i> , 2018 , 176, 959-965	10.3	11
414	Stabilizing Leaf and Branch Compost Cutinase (LCC) with Glycosylation: Mechanism and Effect on PET Hydrolysis. <i>Biochemistry</i> , 2018 , 57, 1190-1200	3.2	72
413	Glycosaminoglycans from bovine eye vitreous humour and interaction with collagen type II. <i>Glycoconjugate Journal</i> , 2018 , 35, 119-128	3	16
412	Interaction of Neisseria meningitidis Group X N-acetylglucosamine-1-phosphotransferase with its donor substrate. <i>Glycobiology</i> , 2018 , 28, 100-107	5.8	11
411	The road to animal-free glycosaminoglycan production: current efforts and bottlenecks. <i>Current Opinion in Biotechnology</i> , 2018 , 53, 85-92	11.4	38
410	Structural and Functional Components of the Skate Sensory Organ Ampullae of Lorenzini. <i>ACS Chemical Biology</i> , 2018 , 13, 1677-1685	4.9	10
409	Epithelial Heparan Sulfate Contributes to Alveolar Barrier Function and Is Shed during Lung Injury. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2018 , 59, 363-374	5.7	24
408	Structural elucidation of fucosylated chondroitin sulfates from sea cucumber using FTICR-MS/MS. <i>European Journal of Mass Spectrometry</i> , 2018 , 24, 157-167	1.1	14
407	Akebia saponin D reverses corticosterone hypersecretion in an Alzheimer's disease rat model. <i>Biomedicine and Pharmacotherapy</i> , 2018 , 107, 219-225	7.5	10
406	Fucosylated chondroitin sulfate oligosaccharides from <i>Isostichopus badionotus</i> regulates lipid disorder in C57BL/6 mice fed a high-fat diet. <i>Carbohydrate Polymers</i> , 2018 , 201, 634-642	10.3	14
405	Structural Characterization and Interaction with RCA of a Highly Sulfated Keratan Sulfate from Blue Shark (<i>Prionace glauca</i>) Cartilage. <i>Marine Drugs</i> , 2018 , 16,	6	3
404	Polymorphic factor H-binding activity of CspA protects <i>Lyme borreliae</i> from the host complement in feeding ticks to facilitate tick-to-host transmission. <i>PLoS Pathogens</i> , 2018 , 14, e1007106	7.6	31
403	BReshith. <i>Journal of Controlled Release</i> , 2018 , 285, 252-257	11.7	
402	A flexible carbon/sulfur-cellulose core-shell structure for advanced lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2018 , 15, 388-395	19.4	23
401	Xylosyltransferase 1 and the GAG Attachment Site. <i>Structure</i> , 2018 , 26, 797-799	5.2	3
400	Increased soluble heterologous expression of a rat brain 3-O-sulfotransferase 1 - A key enzyme for heparin biosynthesis. <i>Protein Expression and Purification</i> , 2018 , 151, 23-29	2	4
399	Synthesis of coumarin derivatives and their cytoprotective effects on t-BHP-induced oxidative damage in HepG2 cells. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018 , 28, 2422-2425	2.9	9

398	Cocaine Exposure Modulates Perineuronal Nets and Synaptic Excitability of Fast-Spiking Interneurons in the Medial Prefrontal Cortex. <i>ENeuro</i> , 2018 , 5,	3.9	33
397	Recent Progress of Marine Polypeptides as Anticancer Agents. <i>Recent Patents on Anti-Cancer Drug Discovery</i> , 2018 , 13, 445-454	2.6	11
396	A method for characterising human intervertebral disc glycosaminoglycan disaccharides using liquid chromatography-mass spectrometry with multiple reaction monitoring. <i>European Cells and Materials</i> , 2018 , 35, 117-131	4.3	11
395	Isolation and characterization of a novel phage Xoo-sp2 that infects <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> . <i>Journal of General Virology</i> , 2018 , 99, 1453-1462	4.9	16
394	Extraction and characterization of RG-I enriched pectic polysaccharides from mandarin citrus peel. <i>Food Hydrocolloids</i> , 2018 , 79, 579-586	10.6	72
393	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	10.3	51
392	Repurposing paper by-product liginosulfonate as a sulfur donor/acceptor for high performance lithium-sulfur batteries. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 422-429	5.8	18
391	Sequencing the oligosaccharide pool in the low molecular weight heparin dalteparin with offline HPLC and ESI-MS/MS. <i>Carbohydrate Polymers</i> , 2018 , 183, 81-90	10.3	17
390	Glycosaminoglycans from fish swim bladder: isolation, structural characterization and bioactive potential. <i>Glycoconjugate Journal</i> , 2018 , 35, 87-94	3	10
389	Metabolic engineering of capsular polysaccharides. <i>Emerging Topics in Life Sciences</i> , 2018 , 2, 337-348	3.5	8
388	Polyamines stimulate the CHSY1 synthesis through the unfolding of the RNA G-quadruplex at the 5' untranslated region. <i>Biochemical Journal</i> , 2018 , 475, 3797-3812	3.8	7
387	Dimerization interface of osteoprotegerin revealed by hydrogen-deuterium exchange mass spectrometry. <i>Journal of Biological Chemistry</i> , 2018 , 293, 17523-17535	5.4	3
386	Improved Viability and Thermal Stability of the Probiotics Encapsulated in a Novel Electrospun Fiber Mat. <i>Journal of Agricultural and Food Chemistry</i> , 2018 , 66, 10890-10897	5.7	48
385	Production of Deuterated Cyanidin 3-Glucoside from Recombinant. <i>ACS Omega</i> , 2018 , 3, 11643-11648	3.9	12
384	PBN11-8, a Cytotoxic Polypeptide Purified from Marine , Suppresses Invasion and Migration of Human Hepatocellular Carcinoma Cells by Targeting Focal Adhesion Kinase Pathways. <i>Polymers</i> , 2018 , 10,	4.5	4
383	Impact of Temperature on Heparin and Protein Interactions. <i>Biochemistry & Physiology</i> , 2018 , 7,		9
382	Bacteriophage T7 transcription system: an enabling tool in synthetic biology. <i>Biotechnology Advances</i> , 2018 , 36, 2129-2137	17.8	35
381	RNA Aptamers with Specificity for Heparosan and Chondroitin Glycosaminoglycans. <i>ACS Omega</i> , 2018 , 3, 13667-13675	3.9	7

380	Metabolic bioengineering: glycans and glycoconjugates. <i>Emerging Topics in Life Sciences</i> , 2018 , 2, 333-335	5	2
379	A mutant-cell library for systematic analysis of heparan sulfate structure-function relationships. <i>Nature Methods</i> , 2018 , 15, 889-899	21.6	42
378	A fucoidan from sea cucumber <i>Pearsonothuria graeffei</i> with well-repeated structure alleviates gut microbiota dysbiosis and metabolic syndromes in HFD-fed mice. <i>Food and Function</i> , 2018 , 9, 5371-5380	6.1	41
377	Copper regulates the interactions of antimicrobial piscidin peptides from fish mast cells with formyl peptide receptors and heparin. <i>Journal of Biological Chemistry</i> , 2018 , 293, 15381-15396	5.4	22
376	Decline in arylsulfatase B expression increases EGFR expression by inhibiting the protein-tyrosine phosphatase SHP2 and activating JNK in prostate cells. <i>Journal of Biological Chemistry</i> , 2018 , 293, 11076-11087	5.1	13
375	Preparation of low molecular weight heparins from bovine and ovine heparins using nitrous acid degradation. <i>Carbohydrate Polymers</i> , 2018 , 197, 83-91	10.3	7
374	Analysis of heparin oligosaccharides by capillary electrophoresis-negative-ion electrospray ionization mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2017 , 409, 411-420	4.4	34
373	CRISPRi-mediated metabolic engineering of <i>E. coli</i> for O-methylated anthocyanin production. <i>Microbial Cell Factories</i> , 2017 , 16, 10	6.4	87
372	Liquid to liquid extraction and liquid chromatography-tandem mass spectrometry determination of hainanmycin in feed. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2017 , 1046, 98-101	3.2	1
371	Chemoenzymatic synthesis of unmodified heparin oligosaccharides: cleavage of p-nitrophenyl glucuronide by alkaline and Smith degradation. <i>Organic and Biomolecular Chemistry</i> , 2017 , 15, 1222-1227	3.9	13
370	Isolation of a lectin binding rhamnogalacturonan-I containing pectic polysaccharide from pumpkin. <i>Carbohydrate Polymers</i> , 2017 , 163, 330-336	10.3	64
369	mutations cause skeletal dysplasia, immune deficiency, and developmental delay. <i>Journal of Experimental Medicine</i> , 2017 , 214, 623-637	16.6	54
368	Parent heparin and daughter LMW heparin correlation analysis using LC-MS and NMR. <i>Analytica Chimica Acta</i> , 2017 , 961, 91-99	6.6	13
367	Interaction of Zika Virus Envelope Protein with Glycosaminoglycans. <i>Biochemistry</i> , 2017 , 56, 1151-1162	3.2	81
366	Construction and characterisation of a heparan sulphate heptasaccharide microarray. <i>Chemical Communications</i> , 2017 , 53, 1743-1746	5.8	29
365	Chemoenzymatic Synthesis of 4-Fluoro-N-Acetylhexosamine Uridine Diphosphate Donors: Chain Terminators in Glycosaminoglycan Synthesis. <i>Journal of Organic Chemistry</i> , 2017 , 82, 2243-2248	4.2	18
364	A simple strategy for the separation and purification of water-soluble polysaccharides from the fresh <i>Spirulina platensis</i> . <i>Separation Science and Technology</i> , 2017 , 52, 456-466	2.5	10
363	A comparative secretome analysis of industrial <i>Aspergillus oryzae</i> and its spontaneous mutant ZJGS-LZ-21. <i>International Journal of Food Microbiology</i> , 2017 , 248, 1-9	5.8	12

362	-glycans released from glycoproteins using a commercial kit and comprehensively analyzed with a hypothetical database. <i>Journal of Pharmaceutical Analysis</i> , 2017 , 7, 87-94	14	13
361	Comparison of Low-Molecular-Weight Heparins Prepared From Bovine Heparins With Enoxaparin. <i>Clinical and Applied Thrombosis/Hemostasis</i> , 2017 , 23, 542-553	3.3	14
360	4-O-Sulfation in sea cucumber fucodians contribute to reversing dyslipidaemia caused by HFD. <i>International Journal of Biological Macromolecules</i> , 2017 , 99, 96-104	7.9	14
359	Intein-Promoted Cyclization of Aspartic Acid Flanking the Intein Leads to Atypical N-Terminal Cleavage. <i>Biochemistry</i> , 2017 , 56, 1042-1050	3.2	8
358	Engineered heparins as new anticoagulant drugs. <i>Bioengineering and Translational Medicine</i> , 2017 , 2, 17-30	14.8	23
357	In vitro fermentation behaviors of fucosylated chondroitin sulfate from <i>Pearsonothuria graeffei</i> by human gut microflora. <i>International Journal of Biological Macromolecules</i> , 2017 , 102, 1195-1201	7.9	21
356	Expanding glycosaminoglycan chemical space: towards the creation of sulfated analogs, novel polymers and chimeric constructs. <i>Glycobiology</i> , 2017 , 27, 646-656	5.8	8
355	Fast preparation of RG-I enriched ultra-low molecular weight pectin by an ultrasound accelerated Fenton process. <i>Scientific Reports</i> , 2017 , 7, 541	4.9	48
354	Mechanistic insights into manganese oxidation of a soil-borne Mn(II)-oxidizing <i>Escherichia coli</i> strain by global proteomic and genetic analyses. <i>Scientific Reports</i> , 2017 , 7, 1352	4.9	6
353	Hydrophilic interaction chromatography-multiple reaction monitoring mass spectrometry method for basic building block analysis of low molecular weight heparins prepared through nitrous acid depolymerization. <i>Journal of Chromatography A</i> , 2017 , 1479, 121-128	4.5	19
352	Complete Biosynthesis of Anthocyanins Using Polycultures. <i>MBio</i> , 2017 , 8,	7.8	117
351	Macromolecular properties and hypolipidemic effects of four sulfated polysaccharides from sea cucumbers. <i>Carbohydrate Polymers</i> , 2017 , 173, 330-337	10.3	55
350	Naringenin-responsive riboswitch-based fluorescent biosensor module for <i>Escherichia coli</i> co-cultures. <i>Biotechnology and Bioengineering</i> , 2017 , 114, 2235-2244	4.9	65
349	Factors Released from Endothelial Cells Exposed to Flow Impact Adhesion, Proliferation, and Fate Choice in the Adult Neural Stem Cell Lineage. <i>Stem Cells and Development</i> , 2017 , 26, 1199-1213	4.4	9
348	The 2.8 Å Electron Microscopy Structure of Adeno-Associated Virus-DJ Bound by a Heparinoid Pentasaccharide. <i>Molecular Therapy - Methods and Clinical Development</i> , 2017 , 5, 1-12	6.4	19
347	Glycan Determinants of Heparin-Tau Interaction. <i>Biophysical Journal</i> , 2017 , 112, 921-932	2.9	47
346	Heparin and homogeneous model heparin oligosaccharides form distinct complexes with protamine: Light scattering and zeta potential analysis. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017 , 140, 113-121	3.5	9
345	Novel method for measurement of heparin anticoagulant activity using SPR. <i>Analytical Biochemistry</i> , 2017 , 526, 39-42	3.1	15

344	New insights into the action of bacterial chondroitinase AC I and hyaluronidase on hyaluronic acid. <i>Carbohydrate Polymers</i> , 2017 , 158, 85-92	10.3	21
343	Structural Analysis of Heparin-Derived 3-O-Sulfated Tetrasaccharides: Antithrombin Binding Site Variants. <i>Journal of Pharmaceutical Sciences</i> , 2017 , 106, 973-981	3.9	33
342	Heparan Sulfate Domains Required for Fibroblast Growth Factor 1 and 2 Signaling through Fibroblast Growth Factor Receptor 1c. <i>Journal of Biological Chemistry</i> , 2017 , 292, 2495-2509	5.4	29
341	Green recovery of pectic polysaccharides from citrus canning processing water. <i>Journal of Cleaner Production</i> , 2017 , 144, 459-469	10.3	31
340	Top-down and bottom-up analysis of commercial enoxaparins. <i>Journal of Chromatography A</i> , 2017 , 1480, 32-40	4.5	14
339	Expression and secretion of glycosylated heparin biosynthetic enzymes using <i>Komagataella pastoris</i> . <i>Applied Microbiology and Biotechnology</i> , 2017 , 101, 2843-2851	5.7	11
338	Enzymatic Generation of Highly Anticoagulant Bovine Intestinal Heparin. <i>Journal of Medicinal Chemistry</i> , 2017 , 60, 8673-8679	8.3	16
337	Biodegradable and Bioactive PCL-PGS Core-Shell Fibers for Tissue Engineering. <i>ACS Omega</i> , 2017 , 2, 6321-6328	3.9	24
336	Molecular size is important for the safety and selective inhibition of intrinsic factor Xase for fucosylated chondroitin sulfate. <i>Carbohydrate Polymers</i> , 2017 , 178, 180-189	10.3	25
335	Encapsulation of Bioactive Compound in Electrospun Fibers and Its Potential Application. <i>Journal of Agricultural and Food Chemistry</i> , 2017 , 65, 9161-9179	5.7	97
334	Qualitative and quantitative analysis of heparin and low molecular weight heparins using size exclusion chromatography with multiple angle laser scattering/refractive index and inductively coupled plasma/mass spectrometry detectors. <i>Journal of Chromatography A</i> , 2017 , 1522, 56-61	4.5	13
333	Structural and activity variability of fractions with different charge density and chain length from pharmaceutical heparins. <i>Glycoconjugate Journal</i> , 2017 , 34, 545-552	3	2
332	<i>Borrelia burgdorferi</i> glycosaminoglycan-binding proteins: a potential target for new therapeutics against Lyme disease. <i>Microbiology (United Kingdom)</i> , 2017 , 163, 1759-1766	2.9	18
331	Glycosaminoglycans and glycolipids as potential biomarkers in lung cancer. <i>Glycoconjugate Journal</i> , 2017 , 34, 661-669	3	19
330	Chemoenzymatic synthesis of heparan sulfate and heparin oligosaccharides and NMR analysis: paving the way to a diverse library for glycobiochemists. <i>Chemical Science</i> , 2017 , 8, 7932-7940	9.4	58
329	Synthetic oligosaccharides can replace animal-sourced low-molecular weight heparins. <i>Science Translational Medicine</i> , 2017 , 9,	17.5	60
328	Construction and functional characterization of truncated versions of recombinant keratanase II from <i>Bacillus circulans</i> . <i>Glycoconjugate Journal</i> , 2017 , 34, 643-649	3	10
327	Expression of chondroitin-4-O-sulfotransferase in <i>Escherichia coli</i> and <i>Pichia pastoris</i> . <i>Applied Microbiology and Biotechnology</i> , 2017 , 101, 6919-6928	5.7	17

326	Fucosylated chondroitin sulfate oligosaccharides exert anticoagulant activity by targeting at intrinsic tenase complex with low FXII activation: Importance of sulfation pattern and molecular size. <i>European Journal of Medicinal Chemistry</i> , 2017 , 139, 191-200	6.8	33
325	Comparative proteomics of matrix fractions between pimples and normal chicken eggshells. <i>Journal of Proteomics</i> , 2017 , 167, 1-11	3.9	3
324	Synthesis of 4-Azido-N-acetylhexosamine Uridine Diphosphate Donors: Clickable Glycosaminoglycans. <i>Journal of Organic Chemistry</i> , 2017 , 82, 9910-9915	4.2	8
323	Cloning and Expression of Recombinant Chondroitinase ACII and Its Comparison to the <i>Arthrobacter aurescens</i> Enzyme. <i>Biotechnology Journal</i> , 2017 , 12, 1700239	5.6	13
322	Improved octyl glucoside synthesis using immobilized β -glucosidase on PA-M with reduced glucose surplus inhibition. <i>Biocatalysis and Biotransformation</i> , 2017 , 35, 349-362	2.5	10
321	Sequencing the Dermatan Sulfate Chain of Decorin. <i>Journal of the American Chemical Society</i> , 2017 , 139, 16986-16995	16.4	32
320	Glycan Activation of a Sheddase: Electrostatic Recognition between Heparin and proMMP-7. <i>Structure</i> , 2017 , 25, 1100-1110.e5	5.2	7
319	Efficient, environmentally-friendly and specific valorization of lignin: promising role of non-radical lignolytic enzymes. <i>World Journal of Microbiology and Biotechnology</i> , 2017 , 33, 125	4.4	18
318	Surprising absence of heparin in the intestinal mucosa of baby pigs. <i>Glycobiology</i> , 2017 , 27, 57-63	5.8	11
317	Glycosaminoglycans from chicken muscular stomach or gizzard. <i>Glycoconjugate Journal</i> , 2017 , 34, 119-126		1
316	Nanostructured glycan architecture is important in the inhibition of influenza A virus infection. <i>Nature Nanotechnology</i> , 2017 , 12, 48-54	28.7	98
315	Impact of degree of oxidation on the physicochemical properties of microcrystalline cellulose. <i>Carbohydrate Polymers</i> , 2017 , 155, 483-490	10.3	20
314	Quantitative analysis of the major linkage region tetrasaccharides in heparin. <i>Carbohydrate Polymers</i> , 2017 , 157, 244-250	10.3	8
313	Gas-Phase Analysis of the Complex of Fibroblast Growth Factor 1 with Heparan Sulfate: A Traveling Wave Ion Mobility Spectrometry (TWIMS) and Molecular Modeling Study. <i>Journal of the American Society for Mass Spectrometry</i> , 2017 , 28, 96-109	3.5	17
312	Conformational flexibility of PL12 family heparinases: structure and substrate specificity of heparinase III from <i>Bacteroides thetaiotaomicron</i> (BT4657). <i>Glycobiology</i> , 2017 , 27, 176-187	5.8	10
311	Characteristics of global organic matrix in normal and pimples chicken eggshells. <i>Poultry Science</i> , 2017 , 96, 3775-3784	3.9	4
310	Pathogenesis and Inhibition of Flaviviruses from a Carbohydrate Perspective. <i>Pharmaceuticals</i> , 2017 , 10,	5.2	32
309	Comparative Genomics Reveals Specific Genetic Architectures in Nicotine Metabolism of sp. JY-Q. <i>Frontiers in Microbiology</i> , 2017 , 8, 2085	5.7	19

308	Synthesis of Heparin-Immobilized, Magnetically Addressable Cellulose Nanofibers for Biomedical Applications. <i>ACS Biomaterials Science and Engineering</i> , 2016 , 2, 1905-1913	5.5	37
307	Heparin ^B solution structure determined by small-angle neutron scattering. <i>Biopolymers</i> , 2016 , 105, 905-113		8
306	Structure and bioactivity of a polysaccharide containing uronic acid from <i>Polyporus umbellatus sclerotia</i> . <i>Carbohydrate Polymers</i> , 2016 , 152, 222-230	10.3	54
305	New Functional Tools for Antithrombogenic Activity Assessment of Live Surface Glycocalyx. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2016 , 36, 1847-53	9.4	15
304	Kinetic and Structural Studies of Interactions between Glycosaminoglycans and Langerin. <i>Biochemistry</i> , 2016 , 55, 4552-9	3.2	22
303	Polyamines release the let-7b-mediated suppression of initiation codon recognition during the protein synthesis of EXT2. <i>Scientific Reports</i> , 2016 , 6, 33549	4.9	17
302	Mechanistic insights into the effect of imidazolium ionic liquid on lipid production by. <i>Biotechnology for Biofuels</i> , 2016 , 9, 266	7.8	8
301	Synthesis and characterization of an adipic acid-derived epoxy resin. <i>Journal of Polymer Science Part A</i> , 2016 , 54, 2625-2631	2.5	8
300	The US regulatory and pharmacopeia response to the global heparin contamination crisis. <i>Nature Biotechnology</i> , 2016 , 34, 625-30	44.5	77
299	Complete biodegradation of chlorpyrifos by engineered <i>Pseudomonas putida</i> cells expressing surface-immobilized laccases. <i>Chemosphere</i> , 2016 , 157, 200-7	8.4	34
298	Recombinant <i>Escherichia coli</i> K5 strain with the deletion of waaR gene decreases the molecular weight of the heparosan capsular polysaccharide. <i>Applied Microbiology and Biotechnology</i> , 2016 , 100, 7877-85	5.7	6
297	Abnormally High Content of Free Glucosamine Residues Identified in a Preparation of Commercially Available Porcine Intestinal Heparan Sulfate. <i>Analytical Chemistry</i> , 2016 , 88, 6648-52	7.8	7
296	Development of hydrophilic interaction chromatography with quadruple time-of-flight mass spectrometry for heparin and low molecular weight heparin disaccharide analysis. <i>Rapid Communications in Mass Spectrometry</i> , 2016 , 30, 277-84	2.2	17
295	Can natural fibers be a silver bullet? Antibacterial cellulose fibers through the covalent bonding of silver nanoparticles to electrospun fibers. <i>Nanotechnology</i> , 2016 , 27, 055102	3.4	27
294	Examination of Glycosaminoglycan Binding Sites on the XCL1 Dimer. <i>Biochemistry</i> , 2016 , 55, 1214-25	3.2	14
293	Surface modification of a polyethylene film for anticoagulant and anti-microbial catheter. <i>Reactive and Functional Polymers</i> , 2016 , 100, 142-150	4.6	20
292	Keratan sulfate glycosaminoglycan from chicken egg white. <i>Glycobiology</i> , 2016 , 26, 693-700	5.8	12
291	Changes in composition and sulfation patterns of glycoaminoglycans in renal cell carcinoma. <i>Glycoconjugate Journal</i> , 2016 , 33, 103-12	3	22

290	Capillary Electrophoresis-Mass Spectrometry for the Analysis of Heparin Oligosaccharides and Low Molecular Weight Heparin. <i>Analytical Chemistry</i> , 2016 , 88, 1937-43	7.8	39
289	Bioengineered heparins and heparan sulfates. <i>Advanced Drug Delivery Reviews</i> , 2016 , 97, 237-49	18.5	81
288	The Role of Porcine Monocyte Derived Dendritic Cells (MoDC) in the Inflammation Storm Caused by Streptococcus suis Serotype 2 Infection. <i>PLoS ONE</i> , 2016 , 11, e0151256	3.7	3
287	Structural Characterization of Oligochitosan Elicitor from <i>Fusarium sambucinum</i> and Its Elicitation of Defensive Responses in <i>Zanthoxylum bungeanum</i> . <i>International Journal of Molecular Sciences</i> , 2016 , 17,	6.3	21
286	Depolymerization of Fucosylated Chondroitin Sulfate with a Modified Fenton-System and Anticoagulant Activity of the Resulting Fragments. <i>Marine Drugs</i> , 2016 , 14,	6	31
285	Heparin: Past, Present, and Future. <i>Pharmaceuticals</i> , 2016 , 9,	5.2	119
284	GlycCompSoft: Software for Automated Comparison of Low Molecular Weight Heparins Using Top-Down LC/MS Data. <i>PLoS ONE</i> , 2016 , 11, e0167727	3.7	10
283	Heparin and anticoagulation. <i>Frontiers in Bioscience - Landmark</i> , 2016 , 21, 1372-92	2.8	95
282	Comprehensive Identification and Quantitation of Basic Building Blocks for Low-Molecular Weight Heparin. <i>Analytical Chemistry</i> , 2016 , 88, 7738-44	7.8	20
281	Characteristics of glycosaminoglycans in chicken eggshells and the influence of disaccharide composition on eggshell properties. <i>Poultry Science</i> , 2016 , 95, 2879-2888	3.9	8
280	Identification of keratan sulfate disaccharide at C-3 position of glucuronate of chondroitin sulfate from <i>Mactra chinensis</i> . <i>Biochemical Journal</i> , 2016 , 473, 4145-4158	3.8	11
279	Comparison of Low-Molecular-Weight Heparins Prepared From Bovine Lung Heparin and Porcine Intestine Heparin. <i>Journal of Pharmaceutical Sciences</i> , 2016 , 105, 1843-1850	3.9	22
278	Analysis of Heparins Derived From Bovine Tissues and Comparison to Porcine Intestinal Heparins. <i>Clinical and Applied Thrombosis/Hemostasis</i> , 2016 , 22, 520-7	3.3	31
277	Rapid generation of CRISPR/dCas9-regulated, orthogonally repressible hybrid T7-lac promoters for modular, tuneable control of metabolic pathway fluxes in <i>Escherichia coli</i> . <i>Nucleic Acids Research</i> , 2016 , 44, 4472-85	20.1	58
276	Specific oxidation pattern of soluble starch with TEMPO-NaBr-NaClO system. <i>Carbohydrate Polymers</i> , 2016 , 146, 238-44	10.3	22
275	Synthesis and biological evaluation of 5,7-dihydroxyflavanone derivatives as antimicrobial agents. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2016 , 26, 3089-3092	2.9	18
274	Effect of Sophorolipid n-Alkyl Ester Chain Length on Its Interfacial Properties at the Almond Oil-Water Interface. <i>Langmuir</i> , 2016 , 32, 5562-72	4	27
273	Structural elucidation of polysaccharide containing 3-O-methyl galactose from fruiting bodies of <i>Pleurotus citrinopileatus</i> . <i>Carbohydrate Research</i> , 2016 , 434, 72-76	2.9	13

272	Selective, switchable fluorescent probe for heparin based on aggregation-induced emission. <i>Analytical Biochemistry</i> , 2016 , 514, 48-54	3.1	11
271	Heavy chain transfer by tumor necrosis factor-stimulated gene 6 to the bikunin proteoglycan. <i>Journal of Biological Chemistry</i> , 2015 , 290, 5156-5166	5.4	8
270	Heparin and related polysaccharides: synthesis using recombinant enzymes and metabolic engineering. <i>Applied Microbiology and Biotechnology</i> , 2015 , 99, 7465-79	5.7	49
269	Production of a low molecular weight heparin using recombinant glycuronidase [corrected]. <i>Carbohydrate Polymers</i> , 2015 , 134, 151-7	10.3	3
268	Surface Mn(II) oxidation actuated by a multicopper oxidase in a soil bacterium leads to the formation of manganese oxide minerals. <i>Scientific Reports</i> , 2015 , 5, 10895	4.9	34
267	Profiling analysis of low molecular weight heparins by multiple heart-cutting two dimensional chromatography with quadruple time-of-flight mass spectrometry. <i>Analytical Chemistry</i> , 2015 , 87, 8957-63	7.8	32
266	Analysis of Total Human Urinary Glycosaminoglycan Disaccharides by Liquid Chromatography-Tandem Mass Spectrometry. <i>Analytical Chemistry</i> , 2015 , 87, 6220-7	7.8	58
265	2-O-Sulfated Domains in Syndecan-1 Heparan Sulfate Inhibit Neutrophil Cathelicidin and Promote Staphylococcus aureus Corneal Infection. <i>Journal of Biological Chemistry</i> , 2015 , 290, 16157-67	5.4	19
264	Green solvents in carbohydrate chemistry: from raw materials to fine chemicals. <i>Chemical Reviews</i> , 2015 , 115, 6811-53	68.1	236
263	High cell density cultivation of recombinant Escherichia coli strains expressing 2-O-sulfotransferase and C5-epimerase for the production of bioengineered heparin. <i>Applied Biochemistry and Biotechnology</i> , 2015 , 175, 2986-95	3.2	12
262	CRISPathBrick: Modular Combinatorial Assembly of Type II-A CRISPR Arrays for dCas9-Mediated Multiplex Transcriptional Repression in E. coli. <i>ACS Synthetic Biology</i> , 2015 , 4, 987-1000	5.7	117
261	Profiling pneumococcal type 3-derived oligosaccharides by high resolution liquid chromatography-tandem mass spectrometry. <i>Journal of Chromatography A</i> , 2015 , 1397, 43-51	4.5	7
260	Regulating malonyl-CoA metabolism via synthetic antisense RNAs for enhanced biosynthesis of natural products. <i>Metabolic Engineering</i> , 2015 , 29, 217-226	9.7	121
259	The Responses of Hyperglycemic Dividing Mesangial Cells to Heparin Are Mediated by the Non-reducing Terminal Trisaccharide. <i>Journal of Biological Chemistry</i> , 2015 , 290, 29045-50	5.4	5
258	Sensitive cells: enabling tools for static and dynamic control of microbial metabolic pathways. <i>Current Opinion in Biotechnology</i> , 2015 , 36, 205-14	11.4	63
257	Qualitative and quantitative analysis of branches in dextran using high-performance anion exchange chromatography coupled to quadrupole time-of-flight mass spectrometry. <i>Journal of Chromatography A</i> , 2015 , 1423, 79-85	4.5	17
256	High structural resolution hydroxyl radical protein footprinting reveals an extended Robo1-heparin binding interface. <i>Journal of Biological Chemistry</i> , 2015 , 290, 10729-40	5.4	46
255	Functional chondroitin sulfate from Enterococcus faecalis containing a 3-O-sulfo glucuronic acid residue. <i>Carbohydrate Polymers</i> , 2015 , 134, 557-65	10.3	29

254	Production of chondroitin in metabolically engineered E. coli. <i>Metabolic Engineering</i> , 2015 , 27, 92-100	9.7	93
253	High cell density cultivation of a recombinant Escherichia coli strain expressing a 6-O-sulfotransferase for the production of bioengineered heparin. <i>Journal of Applied Microbiology</i> , 2015 , 118, 92-8	4.7	7
252	Rapid and accurate determination of the lignin content of lignocellulosic biomass by solid-state NMR. <i>Fuel</i> , 2015 , 141, 39-45	7.1	67
251	Polysaccharide-based nanocomposites and their applications. <i>Carbohydrate Research</i> , 2015 , 405, 23-32	2.9	157
250	ePathOptimize: A Combinatorial Approach for Transcriptional Balancing of Metabolic Pathways. <i>Scientific Reports</i> , 2015 , 5, 11301	4.9	98
249	Differentiating chondroitin sulfate glycosaminoglycans using collision-induced dissociation; uronic acid cross-ring diagnostic fragments in a single stage of tandem mass spectrometry. <i>European Journal of Mass Spectrometry</i> , 2015 , 21, 275-85	1.1	15
248	Antimicrobial mechanism of resveratrol-trans-dihydrodimer produced from peroxidase-catalyzed oxidation of resveratrol. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 2417-28	4.9	36
247	A purification process for heparin and precursor polysaccharides using the pH responsive behavior of chitosan. <i>Biotechnology Progress</i> , 2015 , 31, 1348-59	2.8	6
246	Optimization of bioprocess conditions improves production of a CHO cell-derived, bioengineered heparin. <i>Biotechnology Journal</i> , 2015 , 10, 1067-81	5.6	21
245	Detection of cerebrospinal fluid leakage by specific measurement of transferrin glycoforms. <i>Electrophoresis</i> , 2015 , 36, 2425-32	3.6	8
244	SPR Biosensor Probing the Interactions between TIMP-3 and Heparin/GAGs. <i>Biosensors</i> , 2015 , 5, 500-12	5.9	17
243	Composition of glycosaminoglycans in elasmobranchs including several deep-sea sharks: identification of chondroitin/dermatan sulfate from the dried fins of <i>Isurus oxyrinchus</i> and <i>Prionace glauca</i> . <i>PLoS ONE</i> , 2015 , 10, e0120860	3.7	31
242	The Effect of Surface Modification of Aligned Poly-L-Lactic Acid Electrospun Fibers on Fiber Degradation and Neurite Extension. <i>PLoS ONE</i> , 2015 , 10, e0136780	3.7	27
241	Expanding the chemical space of polyketides through structure-guided mutagenesis of <i>Vitis vinifera</i> stilbene synthase. <i>Biochimie</i> , 2015 , 115, 136-43	4.6	23
240	Interactions between nattokinase and heparin/GAGs. <i>Glycoconjugate Journal</i> , 2015 , 32, 695-702	3	4
239	Click-coated, heparinized, decellularized vascular grafts. <i>Acta Biomaterialia</i> , 2015 , 13, 177-87	10.8	54
238	Impact of hydrolysis conditions on the detection of mannuronic to guluronic acid ratio in alginate and its derivatives. <i>Carbohydrate Polymers</i> , 2015 , 122, 180-8	10.3	28
237	Stable isotopic analysis of porcine, bovine, and ovine heparins. <i>Journal of Pharmaceutical Sciences</i> , 2015 , 104, 457-63	3.9	13

236	Combinatorial one-pot chemoenzymatic synthesis of heparin. <i>Carbohydrate Polymers</i> , 2015 , 122, 399-407	10.3	48
235	Glycosaminoglycanomics of cultured cells using a rapid and sensitive LC-MS/MS approach. <i>ACS Chemical Biology</i> , 2015 , 10, 1303-10	4.9	44
234	Circulating Endothelial Glycocalyx Fragments Impact Endothelial and Epithelial Repair after Septic Lung Injury. <i>FASEB Journal</i> , 2015 , 29, 863.9	0.9	
233	Biochemical strategies for enhancing the in vivo production of natural products with pharmaceutical potential. <i>Current Opinion in Biotechnology</i> , 2014 , 25, 86-94	11.4	39
232	Characterization of human placental glycosaminoglycans and regional binding to VAR2CSA in malaria infected erythrocytes. <i>Glycoconjugate Journal</i> , 2014 , 31, 109-16	3	11
231	Analysis of glycosaminoglycan-derived, precolumn, 2-aminoacridone-labeled disaccharides with LC-fluorescence and LC-MS detection. <i>Nature Protocols</i> , 2014 , 9, 541-58	18.8	88
230	Homogeneous low-molecular-weight heparins with reversible anticoagulant activity. <i>Nature Chemical Biology</i> , 2014 , 10, 248-50	11.7	147
229	Changes in glycosaminoglycan structure on differentiation of human embryonic stem cells towards mesoderm and endoderm lineages. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2014 , 1840, 1993-2003	10.3	34
228	Structure and activity of a new low-molecular-weight heparin produced by enzymatic ultrafiltration. <i>Journal of Pharmaceutical Sciences</i> , 2014 , 103, 1375-83	3.9	30
227	Quantitative analysis of anions in glycosaminoglycans and application in heparin stability studies. <i>Carbohydrate Polymers</i> , 2014 , 106, 343-50	10.3	10
226	Fluorous-assisted chemoenzymatic synthesis of heparan sulfate oligosaccharides. <i>Organic Letters</i> , 2014 , 16, 2240-3	6.2	47
225	Masquerading microbial pathogens: capsular polysaccharides mimic host-tissue molecules. <i>FEMS Microbiology Reviews</i> , 2014 , 38, 660-97	15.1	143
224	Chemoenzymatic synthesis of heparan sulfate and heparin. <i>Natural Product Reports</i> , 2014 , 31, 1676-85	15.1	142
223	Method to detect contaminants in heparin using radical depolymerization and liquid chromatography-mass spectrometry. <i>Analytical Chemistry</i> , 2014 , 86, 326-30	7.8	31
222	Uniform nanoparticle coating of cellulose fibers during wet electrospinning. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 15029-15034	13	44
221	Bottom-up low molecular weight heparin analysis using liquid chromatography-Fourier transform mass spectrometry for extensive characterization. <i>Analytical Chemistry</i> , 2014 , 86, 6626-32	7.8	63
220	Proteomics of old world camelid (<i>Camelus dromedarius</i>): Better understanding the interplay between homeostasis and desert environment. <i>Journal of Advanced Research</i> , 2014 , 5, 219-42	13	14
219	Quantitation of heparosan with heparin lyase III and spectrophotometry. <i>Analytical Biochemistry</i> , 2014 , 447, 46-8	3.1	8

218	Three dimensional cellular microarray platform for human neural stem cell differentiation and toxicology. <i>Stem Cell Research</i> , 2014 , 13, 36-47	1.6	50
217	Heparin stability by determining unsubstituted amino groups using hydrophilic interaction chromatography mass spectrometry. <i>Analytical Biochemistry</i> , 2014 , 461, 46-8	3.1	15
216	Divergent effect of glycosaminoglycans on the in vitro aggregation of serum amyloid A. <i>Biochimie</i> , 2014 , 104, 70-80	4.6	22
215	Microarray platform affords improved product analysis in mammalian cell growth studies. <i>Biotechnology Journal</i> , 2014 , 9, 386-395	5.6	5
214	Fibroblast growth factor-based signaling through synthetic heparan sulfate blocks copolymers studied using high cell density three-dimensional cell printing. <i>Journal of Biological Chemistry</i> , 2014 , 289, 9754-65	5.4	20
213	Analysis of 3-O-sulfo group-containing heparin tetrasaccharides in heparin by liquid chromatography-mass spectrometry. <i>Analytical Biochemistry</i> , 2014 , 455, 3-9	3.1	29
212	Composite polysaccharide fibers prepared by electrospinning and coating. <i>Carbohydrate Polymers</i> , 2014 , 102, 950-5	10.3	36
211	Assays for determining heparan sulfate and heparin O-sulfotransferase activity and specificity. <i>Analytical and Bioanalytical Chemistry</i> , 2014 , 406, 525-36	4.4	14
210	Isolation and structural characterization of glycosaminoglycans from heads of red salmon () 2014 , 1, 002		
209	New sulfonated aramide nanoparticles and their copper complexes with anomalous dielectric behavior. <i>Journal of Applied Polymer Science</i> , 2013 , 128, 310-321	2.9	8
208	Towards the chemoenzymatic synthesis of heparan sulfate oligosaccharides: Oxidative cleavage of -nitrophenyl group with ceric ammonium salts. <i>Tetrahedron Letters</i> , 2013 , 54, 4471-4474	2	17
207	Characterization of interactions between heparin/glycosaminoglycan and adeno-associated virus. <i>Biochemistry</i> , 2013 , 52, 6275-85	3.2	24
206	Immobilized enzymes to convert N-sulfo, N-acetyl heparosan to a critical intermediate in the production of bioengineered heparin. <i>Journal of Biotechnology</i> , 2013 , 167, 241-7	3.7	23
205	Structural characterization of pharmaceutical heparins prepared from different animal tissues. <i>Journal of Pharmaceutical Sciences</i> , 2013 , 102, 1447-57	3.9	80
204	Glycosaminoglycans in infectious disease. <i>Biological Reviews</i> , 2013 , 88, 928-43	13.5	110
203	Bioengineered Chinese hamster ovary cells with Golgi-targeted 3-O-sulfotransferase-1 biosynthesize heparan sulfate with an antithrombin-binding site. <i>Journal of Biological Chemistry</i> , 2013 , 288, 37308-18	5.4	23
202	Microscale separation of heparosan, heparan sulfate, and heparin. <i>Analytical Biochemistry</i> , 2013 , 434, 215-7	3.1	9
201	Preparation and application of a Clickable Receptor for enzymatic synthesis of heparin oligosaccharides. <i>Carbohydrate Research</i> , 2013 , 372, 30-4	2.9	11

200	On-line separation and characterization of hyaluronan oligosaccharides derived from radical depolymerization. <i>Carbohydrate Polymers</i> , 2013 , 96, 503-9	10.3	14
199	Capillary electrophoresis for the analysis of glycosaminoglycan-derived disaccharides. <i>Methods in Molecular Biology</i> , 2013 , 984, 67-77	1.4	3
198	Neoproteoglycans in tissue engineering. <i>FEBS Journal</i> , 2013 , 280, 2511-22	5.7	38
197	FGF-FGFR signaling mediated through glycosaminoglycans in microtiter plate and cell-based microarray platforms. <i>Biochemistry</i> , 2013 , 52, 9009-19	3.2	21
196	Tunable Thermo-Responsive Poly(N-vinylcaprolactam) Cellulose Nanofibers: Synthesis, Characterization, and Fabrication. <i>Macromolecular Materials and Engineering</i> , 2013 , 298, 447-453	3.9	26
195	Draft Genome Sequence of Escherichia coli Strain ATCC 23502 (Serovar O5:K4:H4). <i>Genome Announcements</i> , 2013 , 1, e0004613		8
194	Draft Genome Sequence of Escherichia coli Strain ATCC 23506 (Serovar O10:K5:H4). <i>Genome Announcements</i> , 2013 , 1, e0004913		8
193	Sequence analysis and domain motifs in the porcine skin decorin glycosaminoglycan chain. <i>Journal of Biological Chemistry</i> , 2013 , 288, 9226-37	5.4	21
192	Draft Genome Sequence of Escherichia coli Strain Nissle 1917 (Serovar O6:K5:H1). <i>Genome Announcements</i> , 2013 , 1, e0004713		25
191	Chemoenzymatic synthesis of glycosaminoglycans: re-creating, re-modeling and re-designing nature's longest or most complex carbohydrate chains. <i>Glycobiology</i> , 2013 , 23, 764-77	5.8	110
190	High Affinity Membranes for Cellulase Enzyme Detection in Subterranean Termites. <i>Materials Research Society Symposia Proceedings</i> , 2013 , 1569, 245-249		
189	Isolation of bovine corneal keratan sulfate and its growth factor and morphogen binding. <i>FEBS Journal</i> , 2013 , 280, 2285-93	5.7	46
188	Impact of high salt diet on Arylsulfatase B activity, glycosaminoglycans, kininogen, and bradykinin. <i>FASEB Journal</i> , 2013 , 27, 829.2	0.9	
187	Engineering of routes to heparin and related polysaccharides. <i>Applied Microbiology and Biotechnology</i> , 2012 , 93, 1-16	5.7	100
186	A structural analysis of glycosaminoglycans from lethal and nonlethal breast cancer tissues: toward a novel class of theragnostics for personalized medicine in oncology?. <i>OMICS A Journal of Integrative Biology</i> , 2012 , 16, 79-89	3.8	41
185	Application of Carbon Nanotubes to Wound Healing Biotechnology. <i>ACS Symposium Series</i> , 2012 , 155-174.	4.4	6
184	Signal Amplification by Glyco-qPCR for Ultrasensitive Detection of Carbohydrates: Applications in Glycobiology. <i>Angewandte Chemie</i> , 2012 , 124, 11970-11974	3.6	2
183	Addressing endotoxin issues in bioengineered heparin. <i>Biotechnology and Applied Biochemistry</i> , 2012 , 59, 420-8	2.8	5

182	Hexuronic acid stereochemistry determination in chondroitin sulfate glycosaminoglycan oligosaccharides by electron detachment dissociation. <i>Journal of the American Society for Mass Spectrometry</i> , 2012 , 23, 1488-97	3.5	39
181	Proteoglycan sequence. <i>Molecular BioSystems</i> , 2012 , 8, 1613-25		81
180	Chemoenzymatic synthesis of uridine diphosphate-GlcNAc and uridine diphosphate-GalNAc analogs for the preparation of unnatural glycosaminoglycans. <i>Journal of Organic Chemistry</i> , 2012 , 77, 1449-56	4.2	50
179	Cell-Based Microscale Isolation of Glycoaminoglycans for Glycomics Study. <i>Journal of Carbohydrate Chemistry</i> , 2012 , 31, 420-435	1.7	11
178	Intramolecular disulfide bond between catalytic cysteines in an intein precursor. <i>Journal of the American Chemical Society</i> , 2012 , 134, 2500-3	16.4	41
177	Top-down approach for the direct characterization of low molecular weight heparins using LC-FT-MS. <i>Analytical Chemistry</i> , 2012 , 84, 8822-9	7.8	93
176	Synthetic heparin. <i>Current Opinion in Pharmacology</i> , 2012 , 12, 217-9	5.1	66
175	Electrophoresis for the analysis of heparin purity and quality. <i>Electrophoresis</i> , 2012 , 33, 1531-7	3.6	31
174	Proteoglycans in stem cells. <i>Biotechnology and Applied Biochemistry</i> , 2012 , 59, 65-76	2.8	22
173	Recent advances in sulfotransferase enzyme activity assays. <i>Analytical and Bioanalytical Chemistry</i> , 2012 , 403, 1491-500	4.4	35
172	Disaccharide analysis of glycosaminoglycan mixtures by ultra-high-performance liquid chromatography-mass spectrometry. <i>Journal of Chromatography A</i> , 2012 , 1225, 91-8	4.5	86
171	Dissecting the substrate recognition of 3-O-sulfotransferase for the biosynthesis of anticoagulant heparin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 5265-70	11.5	42
170	Structure/function analysis of <i>Pasteurella multocida</i> heparosan synthases: toward defining enzyme specificity and engineering novel catalysts. <i>Journal of Biological Chemistry</i> , 2012 , 287, 7203-12	5.4	27
169	The proteoglycan bikunin has a defined sequence. <i>Nature Chemical Biology</i> , 2011 , 7, 827-33	11.7	141
168	Chemoenzymatic synthesis of homogeneous ultralow molecular weight heparins. <i>Science</i> , 2011 , 334, 498-501	33.3	303
167	Heparin mapping using heparin lyases and the generation of a novel low molecular weight heparin. <i>Journal of Medicinal Chemistry</i> , 2011 , 54, 603-10	8.3	79
166	Response surface optimization of the heparosan N-deacetylation in producing bioengineered heparin. <i>Journal of Biotechnology</i> , 2011 , 156, 188-96	3.7	26
165	Negative electron transfer dissociation Fourier transform mass spectrometry of glycosaminoglycan carbohydrates. <i>European Journal of Mass Spectrometry</i> , 2011 , 17, 167-76	1.1	36

164	ELECTRON DETACHMENT DISSOCIATION AND INFRARED MULTIPHOTON DISSOCIATION OF HEPARIN TETRASACCHARIDES. <i>International Journal of Mass Spectrometry</i> , 2011 , 308, 253-259	1.9	27
163	Lysostaphin-functionalized cellulose fibers with antistaphylococcal activity for wound healing applications. <i>Biomaterials</i> , 2011 , 32, 9557-67	15.6	134
162	Analysis of E. coli K5 capsular polysaccharide heparosan. <i>Analytical and Bioanalytical Chemistry</i> , 2011 , 399, 737-45	4.4	42
161	Hyphenated techniques for the analysis of heparin and heparan sulfate. <i>Analytical and Bioanalytical Chemistry</i> , 2011 , 399, 541-57	4.4	48
160	Structural characterization of heparins from different commercial sources. <i>Analytical and Bioanalytical Chemistry</i> , 2011 , 401, 2793-803	4.4	53
159	Preparation of synthetic wood composites using ionic liquids. <i>Wood Science and Technology</i> , 2011 , 45, 719-733	2.5	41
158	Control of the heparosan N-deacetylation leads to an improved bioengineered heparin. <i>Applied Microbiology and Biotechnology</i> , 2011 , 91, 91-9	5.7	46
157	Impact of autoclave sterilization on the activity and structure of formulated heparin. <i>Journal of Pharmaceutical Sciences</i> , 2011 , 100, 3396-3404	3.9	23
156	Ultra-performance ion-pairing liquid chromatography with on-line electrospray ion trap mass spectrometry for heparin disaccharide analysis. <i>Analytical Biochemistry</i> , 2011 , 415, 59-66	3.1	61
155	Escherichia coli K5 heparosan fermentation and improvement by genetic engineering. <i>Bioengineered Bugs</i> , 2011 , 2, 63-7		39
154	Comparative Studies on the HIT Antibody Mediated Platelet Aggregation / Serotonin Release by Synthetic Pentasaccharide and Two Chemoenzymatically Synthesized Heptasaccharides. <i>Blood</i> , 2011 , 118, 2231-2231	2.2	
153	Proteoglycomics: recent progress and future challenges. <i>OMICS A Journal of Integrative Biology</i> , 2010 , 14, 389-99	3.8	68
152	Catalytic mechanism of heparinase II investigated by site-directed mutagenesis and the crystal structure with its substrate. <i>Journal of Biological Chemistry</i> , 2010 , 285, 20051-61	5.4	39
151	Chemoenzymatic design of heparan sulfate oligosaccharides. <i>Journal of Biological Chemistry</i> , 2010 , 285, 34240-9	5.4	127
150	Domain structure elucidation of human decorin glycosaminoglycans. <i>Biochemical Journal</i> , 2010 , 431, 199-205	3.8	21
149	Glycosaminoglycan characterization by electrospray ionization mass spectrometry including fourier transform mass spectrometry. <i>Methods in Enzymology</i> , 2010 , 478, 79-108	1.7	19
148	Ionic liquid solvent properties as predictors of lignocellulose pretreatment efficacy. <i>Green Chemistry</i> , 2010 , 12, 1967	10	255
147	Glycosaminoglycans of the porcine central nervous system. <i>Biochemistry</i> , 2010 , 49, 9839-47	3.2	18

146	Negative electron transfer dissociation of glycosaminoglycans. <i>Analytical Chemistry</i> , 2010 , 82, 3460-6	7.8	111
145	Conductive cable fibers with insulating surface prepared by coaxial electrospinning of multiwalled nanotubes and cellulose. <i>Biomacromolecules</i> , 2010 , 11, 2440-5	6.9	73
144	Electrospinning from room temperature ionic liquids for biopolymer fiber formation. <i>Green Chemistry</i> , 2010 , 12, 1883	10	94
143	Preparation of Biopolymer-Based Materials Using Ionic Liquids for the Biomedical Application. <i>ACS Symposium Series</i> , 2010 , 115-134	0.4	11
142	E. coli K5 fermentation and the preparation of heparosan, a bioengineered heparin precursor. <i>Biotechnology and Bioengineering</i> , 2010 , 107, 964-73	4.9	93
141	Nuclear magnetic resonance quantification for monitoring heparosan K5 capsular polysaccharide production. <i>Analytical Biochemistry</i> , 2010 , 398, 275-7	3.1	16
140	Identification of a novel structure in heparin generated by potassium permanganate oxidation. <i>Carbohydrate Polymers</i> , 2010 , 82, 699-705	10.3	22
139	Antitumor effect of butanoylated heparin with low anticoagulant activity on lung cancer growth in mice and rats. <i>Current Cancer Drug Targets</i> , 2010 , 10, 229-41	2.8	18
138	Structural snapshots of heparin depolymerization by heparin lyase I. <i>Journal of Biological Chemistry</i> , 2009 , 284, 34019-27	5.4	44
137	Control of promatrilysin (MMP7) activation and substrate-specific activity by sulfated glycosaminoglycans. <i>Journal of Biological Chemistry</i> , 2009 , 284, 27924-27932	5.4	52
136	Orthogonal analytical approaches to detect potential contaminants in heparin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 16956-61	11.5	84
135	Oversulfated chondroitin sulfate interaction with heparin-binding proteins: new insights into adverse reactions from contaminated heparins. <i>Biochemical Pharmacology</i> , 2009 , 78, 292-300	6	67
134	Analysis of pharmaceutical heparins and potential contaminants using (1)H-NMR and PAGE. <i>Journal of Pharmaceutical Sciences</i> , 2009 , 98, 4017-26	3.9	63
133	Changes in cultured endothelial cell glycosaminoglycans under hyperglycemic conditions and the effect of insulin and heparin. <i>Cardiovascular Diabetology</i> , 2009 , 8, 46	8.7	21
132	Recent progress and applications in glycosaminoglycan and heparin research. <i>Current Opinion in Chemical Biology</i> , 2009 , 13, 633-40	9.7	88
131	Toward an artificial Golgi: redesigning the biological activities of heparan sulfate on a digital microfluidic chip. <i>Journal of the American Chemical Society</i> , 2009 , 131, 11041-8	16.4	59
130	Compositional analysis of heparin/heparan sulfate interacting with fibroblast growth factor.fibroblast growth factor receptor complexes. <i>Biochemistry</i> , 2009 , 48, 8379-86	3.2	61
129	Thin Layer Chromatography for the Separation and Analysis of Acidic Carbohydrates. <i>Journal of Liquid Chromatography and Related Technologies</i> , 2009 , 32, 1711-1732	1.3	23

128	Green glycosylation using ionic liquid to prepare alkyl glycosides for studying carbohydrate-protein interactions by SPR. <i>Green Chemistry</i> , 2009 , 11, 373-379	10	16
127	Quantification of heparan sulfate disaccharides using ion-pairing reversed-phase microflow high-performance liquid chromatography with electrospray ionization trap mass spectrometry. <i>Analytical Chemistry</i> , 2009 , 81, 4349-55	7.8	79
126	Lessons learned from the contamination of heparin. <i>Natural Product Reports</i> , 2009 , 26, 313-21	15.1	304
125	Oversulfated chondroitin sulfate is a contaminant in heparin associated with adverse clinical events. <i>Nature Biotechnology</i> , 2008 , 26, 669-75	44.5	492
124	Synthesis and Evaluation of Anticancer Vaccine Candidates, C-Glycoside Analogs of STn and PSA. <i>ACS Symposium Series</i> , 2008 , 216-238	0.4	4
123	Solution structures of chemoenzymatically synthesized heparin and its precursors. <i>Journal of the American Chemical Society</i> , 2008 , 130, 12998-3007	16.4	140
122	Synthesis of Floridoside. <i>Journal of Carbohydrate Chemistry</i> , 2008 , 27, 420-427	1.7	15
121	Structural analysis of bikunin glycosaminoglycan. <i>Journal of the American Chemical Society</i> , 2008 , 130, 2617-25	16.4	72
120	Oversulfated chondroitin sulfate: impact of a heparin impurity, associated with adverse clinical events, on low-molecular-weight heparin preparation. <i>Journal of Medicinal Chemistry</i> , 2008 , 51, 5498-501	8.3	56
119	Human follicular fluid heparan sulfate contains abundant 3-O-sulfated chains with anticoagulant activity. <i>Journal of Biological Chemistry</i> , 2008 , 283, 28115-24	5.4	48
118	Capillary electrophoresis of complex natural polysaccharides. <i>Electrophoresis</i> , 2008 , 29, 3095-106	3.6	85
117	Electron detachment dissociation of dermatan sulfate oligosaccharides. <i>Journal of the American Society for Mass Spectrometry</i> , 2008 , 19, 294-304	3.5	79
116	Synthesis of uridine 5Rdiphosphoiduronic acid: a potential substrate for the chemoenzymatic synthesis of heparin. <i>Journal of Organic Chemistry</i> , 2008 , 73, 7631-7	4.2	22
115	Synthesis of Tin(II) Phosphate Open Frameworks Using Isomers of 1,2-Diaminocyclohexane as Template. <i>European Journal of Inorganic Chemistry</i> , 2007 , 2007, 858-864	2.3	3
114	Combinatorial enzymatic synthesis of heparan sulfate. <i>Chemistry and Biology</i> , 2007 , 14, 972-3		5
113	Thin-layer chromatography for the analysis of glycosaminoglycan oligosaccharides. <i>Analytical Biochemistry</i> , 2007 , 371, 118-20	3.1	60
112	Electron detachment dissociation of glycosaminoglycan tetrasaccharides. <i>Journal of the American Society for Mass Spectrometry</i> , 2007 , 18, 234-44	3.5	153
111	Enzymatic Synthesis of Glycosaminoglycans: Improving on Nature. <i>ACS Symposium Series</i> , 2007 , 253-284	0.4	7

110	Heparin oligosaccharides as potential therapeutic agents in senile dementia. <i>Current Pharmaceutical Design</i> , 2007 , 13, 1607-16	3.3	27
109	Enzymatic synthesis of glycosaminoglycan heparin. <i>Seminars in Thrombosis and Hemostasis</i> , 2007 , 33, 453-65	5.3	40
108	Pharmacokinetics and pharmacodynamics of oral heparin solid dosage form in healthy human subjects. <i>Journal of Clinical Pharmacology</i> , 2007 , 47, 1508-20	2.9	38
107	Acceptor specificity of the Pasteurella hyaluronan and chondroitin synthases and production of chimeric glycosaminoglycans. <i>Journal of Biological Chemistry</i> , 2007 , 282, 337-44	5.4	26
106	Mosquito heparan sulfate and its potential role in malaria infection and transmission. <i>Journal of Biological Chemistry</i> , 2007 , 282, 25376-84	5.4	60
105	Pharmacokinetics and Pharmacodynamics of Oral Heparin Solid Dosage Form in Healthy Human Subjects.. <i>Blood</i> , 2007 , 110, 4009-4009	2.2	1
104	Enzymatic synthesis of heparin related polysaccharides on sensor chips: rapid screening of heparin-protein interactions. <i>Biochemical and Biophysical Research Communications</i> , 2006 , 339, 597-602	3.4	39
103	Preparation of biopolymer fibers by electrospinning from room temperature ionic liquids. <i>Biomacromolecules</i> , 2006 , 7, 415-8	6.9	230
102	Anti-metastatic effect of a non-anticoagulant low-molecular-weight heparin versus the standard low-molecular-weight heparin, enoxaparin. <i>Thrombosis and Haemostasis</i> , 2006 , 96, 816-21	7	90
101	Isolation and characterization of heparan sulfate from various murine tissues. <i>Glycoconjugate Journal</i> , 2006 , 23, 555-63	3	63
100	Mass Spectrometry for the Analysis of Highly Charged Sulfated Carbohydrates. <i>Current Analytical Chemistry</i> , 2005 , 1, 223-240	1.7	43
99	Enzymatic redesigning of biologically active heparan sulfate. <i>Journal of Biological Chemistry</i> , 2005 , 280, 42817-25	5.4	102
98	Synthesis of Neu5Ac, KDN, and KDO C-Glycosides. <i>ACS Symposium Series</i> , 2005 , 53-80	0.4	3
97	Structural analysis of the sulfotransferase (3-o-sulfotransferase isoform 3) involved in the biosynthesis of an entry receptor for herpes simplex virus 1. <i>Journal of Biological Chemistry</i> , 2004 , 279, 45185-93	5.4	69
96	Heparin-induced cancer cell death. <i>Chemistry and Biology</i> , 2004 , 11, 420-2		32
95	Role of glycosaminoglycans in cellular communication. <i>Accounts of Chemical Research</i> , 2004 , 37, 431-8	24.3	227
94	Liquid chromatography/mass spectrometry sequencing approach for highly sulfated heparin-derived oligosaccharides. <i>Journal of Biological Chemistry</i> , 2004 , 279, 2608-15	5.4	128
93	Kinetic model for FGF, FGFR, and proteoglycan signal transduction complex assembly. <i>Biochemistry</i> , 2004 , 43, 4724-30	3.2	134

92	Recent chemical and enzymatic approaches to the synthesis of glycosaminoglycan oligosaccharides. <i>Current Medicinal Chemistry</i> , 2003 , 10, 1993-2031	4.3	106
91	Capillary electrophoretic separation of heparin oligosaccharides under conditions amenable to mass spectrometric detection. <i>Journal of Chromatography A</i> , 2003 , 1014, 225-33	4.5	32
90	Turkey intestine as a commercial source of heparin? Comparative structural studies of intestinal avian and mammalian glycosaminoglycans. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 2003 , 134, 189-97	2.3	44
89	Characterization of glycosaminoglycans by capillary electrophoresis. <i>Methods in Molecular Biology</i> , 2003 , 213, 131-44	1.4	1
88	2003 Claude S. Hudson Award address in carbohydrate chemistry. Heparin: structure and activity. <i>Journal of Medicinal Chemistry</i> , 2003 , 46, 2551-64	8.3	419
87	Heparin-Protein-Wechselwirkungen. <i>Angewandte Chemie</i> , 2002 , 114, 426-450	3.6	100
86	Heparin-protein interactions. <i>Angewandte Chemie - International Edition</i> , 2002 , 41, 391-412	16.4	1487
85	Capillary electrophoresis for the analysis of glycosaminoglycans and glycosaminoglycan-derived oligosaccharides. <i>Biomedical Chromatography</i> , 2002 , 16, 77-94	1.7	83
84	Further evidence that periodate cleavage of heparin occurs primarily through the antithrombin binding site. <i>Carbohydrate Research</i> , 2002 , 337, 2239-43	2.9	39
83	Patents related to dengue virus infection. <i>Expert Opinion on Therapeutic Patents</i> , 2002 , 12, 1127-1143	6.8	6
82	Tech.Sight. Capillary electrophoresis. Ultra-high resolution separation comes of age. <i>Science</i> , 2002 , 298, 1441-2	33.3	49
81	ESTERASE MEDIATED REGIOSELECTIVE DEACETYLATION OF ULOSONIC ACID. <i>Synthetic Communications</i> , 2002 , 32, 1421-1426	1.7	3
80	Syntheses and applications of sucrose-based esters. <i>Journal of Surfactants and Detergents</i> , 2001 , 4, 415-421	4.1	133
79	Affinity purification of secreted alkaline phosphatase produced by baculovirus expression vector system. <i>Applied Biochemistry and Biotechnology</i> , 2001 , 90, 125-36	3.2	6
78	Interaction of the N-terminal domain of apolipoprotein E4 with heparin. <i>Biochemistry</i> , 2001 , 40, 2826-34	3.2	83
77	Analysis of glycosaminoglycans with polysaccharide lyases. <i>Current Protocols in Molecular Biology</i> , 2001 , Chapter 17, Unit 17.13B	2.9	30
76	Structural basis for interaction of FGF-1, FGF-2, and FGF-7 with different heparan sulfate motifs. <i>Biochemistry</i> , 2001 , 40, 14429-39	3.2	122
75	Separation of acid glycoprotein glycoforms using affinity-based reversed micellar extraction and separation. <i>Biotechnology and Bioengineering</i> , 2000 , 70, 484-490	4.9	9

74	Chemoenzymatic preparation of dermatan sulfate oligosaccharides as arylsulfatase B and alpha-L-iduronidase substrates. <i>Glycoconjugate Journal</i> , 2000 , 17, 829-34	3	7
73	Crystal structure of a ternary FGF-FGFR-heparin complex reveals a dual role for heparin in FGFR binding and dimerization. <i>Molecular Cell</i> , 2000 , 6, 743-50	17.6	919
72	Heparin dodecasaccharide binding to platelet factor-4 and growth-related protein-alpha. Induction of a partially folded state and implications for heparin-induced thrombocytopenia. <i>Journal of Biological Chemistry</i> , 1999 , 274, 25317-29	5.4	57
71	A new sulfated beta-galactan from clams with anti-HIV activity. <i>Carbohydrate Research</i> , 1999 , 321, 121-7.2.9		54
70	Affinity chromatography using enzymatically synthesized nucleotide-containing DNA binding polymers. <i>Biotechnology Letters</i> , 1999 , 13, 463-467		2
69	Interaction of heparin with annexin V. <i>FEBS Letters</i> , 1999 , 446, 327-30	3.8	44
68	Interaction of soluble and surface-bound heparin binding growth-associated molecule with heparin. <i>FEBS Letters</i> , 1999 , 454, 105-8	3.8	22
67	Production and chemical processing of low molecular weight heparins. <i>Seminars in Thrombosis and Hemostasis</i> , 1999 , 25 Suppl 3, 5-16	5.3	90
66	Conformational changes and anticoagulant activity of chondroitin sulfate following its O-sulfonation. <i>Carbohydrate Research</i> , 1998 , 306, 35-43	2.9	133
65	Affinity capillary electrophoresis employing immobilized glycosaminoglycan to resolve heparin-binding peptides. <i>Electrophoresis</i> , 1998 , 19, 437-41	3.6	31
64	Capillary affinity chromatography and affinity capillary electrophoresis of heparin binding proteins. <i>Electrophoresis</i> , 1998 , 19, 2650-3	3.6	17
63	Isolation and characterization of beta-cyclodextrin sulfates by preparative gradient polyacrylamide gel electrophoresis, capillary electrophoresis and electrospray ionization - mass spectrometry. <i>Electrophoresis</i> , 1998 , 19, 2677-81	3.6	8
62	Glycosaminoglycan-protein interactions: definition of consensus sites in glycosaminoglycan binding proteins. <i>BioEssays</i> , 1998 , 20, 156-67	4.1	457
61	Characterization of a Bacteroides species from human intestine that degrades glycosaminoglycans. <i>Canadian Journal of Microbiology</i> , 1998 , 44, 423-429	3.2	47
60	Thermodynamic analysis of the heparin interaction with a basic cyclic peptide using isothermal titration calorimetry. <i>Biochemistry</i> , 1998 , 37, 15231-7	3.2	69
59	Characterization of a Bacteroides species from human intestine that degrades glycosaminoglycans. <i>Canadian Journal of Microbiology</i> , 1998 , 44, 423-9	3.2	36
58	Structural Analysis of Heparan Sulfate and Heparan Sulfate Oligosaccharides.. <i>Trends in Glycoscience and Glycotechnology</i> , 1998 , 10, 125-136	0.1	7
57	Glycosaminoglycan-protein interactions: definition of consensus sites in glycosaminoglycan binding proteins 1998 , 20, 156		1

56	Preparation and structure of heparin lyase-derived heparan sulfate oligosaccharides. <i>Glycobiology</i> , 1997 , 7, 231-9	5.8	58
55	Structural differences and the presence of unsubstituted amino groups in heparan sulphates from different tissues and species. <i>Biochemical Journal</i> , 1997 , 322 (Pt 2), 499-506	3.8	148
54	Regioselective Synthesis of L-Idopyranuronic Acid Derivatives: Intermolecular Aglycon Transfer of Dithioacetal Under Standard Glycosylation Conditions. <i>Journal of Carbohydrate Chemistry</i> , 1997 , 16, 1327-1344 ¹³	1.7	13
53	Diastereocontrolled Synthesis of Carbon Glycosides of -Acetylneuraminic Acid Glycosyl Samarium(III) Intermediates. <i>Journal of the American Chemical Society</i> , 1997 , 119, 1480-1481	16.4	79
52	Dengue virus infectivity depends on envelope protein binding to target cell heparan sulfate. <i>Nature Medicine</i> , 1997 , 3, 866-71	50.5	795
51	Parameters affecting the efficiency of affinity-based reversed micellar extraction and separation (ARMES) in glycoprotein purification. <i>Biotechnology Progress</i> , 1997 , 13, 440-5	2.8	3
50	Polysulfated carbohydrates analyzed as ion-paired complexes with basic peptides and proteins using electrospray negative ionization mass spectrometry. <i>Journal of Mass Spectrometry</i> , 1997 , 32, 760-772 ²²	2.2	26
49	Heparin structure and interactions with basic fibroblast growth factor. <i>Science</i> , 1996 , 271, 1116-20	33.3	731
48	Separation of negatively charged carbohydrates by capillary electrophoresis. <i>Journal of Chromatography A</i> , 1996 , 720, 323-35	4.5	70
47	Detection of glycosaminoglycans as a copper (II) complex in capillary electrophoresis. <i>Electrophoresis</i> , 1996 , 17, 341-6	3.6	58
46	C-2 Epimerization of N-Acetylglucosamine in an Oligosaccharide Derived From Heparan Sulfate. <i>Journal of Carbohydrate Chemistry</i> , 1996 , 15, 351-360	1.7	27
45	Selective N-Sulfation of Glucosamine Derivatives using Phenyl Chlorosulfate in Non-Aqueous Solvent. <i>Synthetic Communications</i> , 1996 , 26, 2671-2680	1.7	5
44	Dermatan sulfate as a potential therapeutic agent. <i>General Pharmacology</i> , 1995 , 26, 443-51		58
43	Lectin affinity electrophoresis. <i>Molecular Biotechnology</i> , 1995 , 3, 191-7	3	8
42	Preparation and structural characterization of large heparin-derived oligosaccharides. <i>Glycobiology</i> , 1995 , 5, 83-95	5.8	184
41	Strategy for the sequence analysis of heparin. <i>Glycobiology</i> , 1995 , 5, 765-74	5.8	33
40	Differences in the interaction of heparin with arginine and lysine and the importance of these basic amino acids in the binding of heparin to acidic fibroblast growth factor. <i>Archives of Biochemistry and Biophysics</i> , 1995 , 323, 279-87	4.1	204
39	Isolation and characterization of heparan sulfate from crude porcine intestinal mucosal peptidoglycan heparin. <i>Carbohydrate Research</i> , 1995 , 276, 183-97	2.9	108

38	Action pattern of polysaccharide lyases on glycosaminoglycans. <i>Glycobiology</i> , 1994 , 4, 289-96	5.8	123
37	Directional immobilization of heparin onto beaded supports. <i>Analytical Biochemistry</i> , 1994 , 222, 59-67	3.1	43
36	Accelerated degradation of poly(epsilon-caprolactone) by organic amines. <i>Pharmaceutical Research</i> , 1994 , 11, 1030-4	4.5	34
35	Substrate specificity of the heparin lyases from <i>Flavobacterium heparinum</i> . <i>Archives of Biochemistry and Biophysics</i> , 1993 , 306, 461-8	4.1	126
34	Specificity studies on the heparin lyases from <i>Flavobacterium heparinum</i> . <i>Biochemistry</i> , 1993 , 32, 8140-53.2		154
33	Gradient polyacrylamide gel electrophoresis for determination of molecular weights of heparin preparations and low-molecular-weight heparin derivatives. <i>Journal of Pharmaceutical Sciences</i> , 1992 , 81, 823-7	3.9	136
32	Purification and characterization of heparin lyases from <i>Flavobacterium heparinum</i> . <i>Journal of Biological Chemistry</i> , 1992 , 267, 24347-55	5.4	147
31	Search for the heparin antithrombin III-binding site precursor. <i>Journal of Biological Chemistry</i> , 1992 , 267, 2380-7	5.4	39
30	Search for the heparin antithrombin III-binding site precursor.. <i>Journal of Biological Chemistry</i> , 1992 , 267, 2380-2387	5.4	45
29	Determination of the pKa of glucuronic acid and the carboxy groups of heparin by ¹³ C-nuclear-magnetic-resonance spectroscopy. <i>Biochemical Journal</i> , 1991 , 278 (Pt 3), 689-95	3.8	109
28	Capillary zone electrophoresis for the quantitation of oligosaccharides formed through the action of chitinase. <i>Electrophoresis</i> , 1991 , 12, 636-40	3.6	27
27	Electrophoresis and detection of nanogram quantities of exogenous and endogenous glycosaminoglycans in biological fluids. <i>Applied and Theoretical Electrophoresis: the Official Journal of the International Electrophoresis Society</i> , 1991 , 1, 305-12		7
26	Molecular profile and mapping of dermatan sulfates from different origins. <i>Seminars in Thrombosis and Hemostasis</i> , 1991 , 17 Suppl 1, 15-22	5.3	1
25	Randomness in the heparin polymer: computer simulations of alternative action patterns of heparin lyase. <i>Biopolymers</i> , 1990 , 30, 733-41	2.2	19
24	Isolation and recovery of acidic oligosaccharides from polyacrylamide gels by semi-dry electrotransfer. <i>Electrophoresis</i> , 1990 , 11, 23-8	3.6	45
23	Structure of amiprilose hydrochloride, a novel anti-inflammatory agent. <i>Journal of Pharmaceutical Sciences</i> , 1990 , 79, 158-62	3.9	2
22	Examination of the substrate specificity of heparin and heparan sulfate lyases. <i>Biochemistry</i> , 1990 , 29, 2611-7	3.2	258
21	Oligosaccharide mapping of low molecular weight heparins: structure and activity differences. <i>Journal of Medicinal Chemistry</i> , 1990 , 33, 1639-45	8.3	99

20	Study of structurally defined oligosaccharide substrates of heparin and heparan monosulfate lyases. <i>Carbohydrate Research</i> , 1989 , 190, 219-33	2.9	99
19	Analysis of glycosaminoglycan-derived oligosaccharides using reversed-phase ion-pairing and ion-exchange chromatography with suppressed conductivity detection. <i>Analytical Biochemistry</i> , 1989 , 181, 288-96	3.1	62
18	Microbially produced rhamnolipid as a source of rhamnose. <i>Biotechnology and Bioengineering</i> , 1989 , 33, 365-8	4.9	95
17	Mapping and quantification of the major oligosaccharide components of heparin. <i>Biochemical Journal</i> , 1988 , 254, 781-7	3.8	127
16	Homogeneous, structurally defined heparin-oligosaccharides with low anticoagulant activity inhibit the generation of the amplification pathway C3 convertase in vitro. <i>Journal of Biological Chemistry</i> , 1988 , 263, 13090-6	5.4	39
15	Homogeneous, structurally defined heparin-oligosaccharides with low anticoagulant activity inhibit the generation of the amplification pathway C3 convertase in vitro.. <i>Journal of Biological Chemistry</i> , 1988 , 263, 13090-13096	5.4	52
14	New approaches for anticoagulation in extracorporeal therapy. <i>Biomaterials, Artificial Cells, and Artificial Organs</i> , 1987 , 15, 91-100		2
13	DNA probes for clinical applications. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1986 , 12, 301-10	3.2	2
12	Protein engineering and site-directed mutagenesis. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1986 , 13, 75-83	3.2	
11	Microbial transformations and bioconversions. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1986 , 13, 249-62	3.2	
10	Mammalian cell culture. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1986 , 13, 167-74	3.2	1
9	Polysaccharide lyases. <i>Applied Biochemistry and Biotechnology</i> , 1986 , 12, 135-76	3.2	224
8	Monoclonal antibodies and immobilized antibodies. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1985 , 11, 233-48	3.2	
7	Immobilized biocatalysts. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1985 , 11, 153-67	3.2	1
6	Bioassays. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1985 , 11, 465-87	3.2	
5	Affinity separation. Patents and literature. <i>Applied Biochemistry and Biotechnology</i> , 1985 , 11, 409-26	3.2	1
4	An enzymatic system for removing heparin in extracorporeal therapy. <i>Science</i> , 1982 , 217, 261-3	33.3	115
3	Heparinase production by <i>Flavobacterium heparinum</i> . <i>Applied and Environmental Microbiology</i> , 1981 , 41, 360-5	4.8	84

2	Glycosaminoglycan binding motif at S1/S2 proteolytic cleavage site on spike glycoprotein may facilitate novel coronavirus (SARS-CoV-2) host cell entry	26
1	Designer DNA architecture offers precise and multivalent spatial pattern-recognition for viral sensing and inhibition	1