Yongmei Xu

List of Publications by Year
in descending order

58 papers	2,399 citations	257450 24 h-index	214800 47 g-index
59 all docs	59 docs citations	59 times ranked	2353 citing authors

#	Article	IF	Citations
1	Chemoenzymatic Synthesis of Homogeneous Ultralow Molecular Weight Heparins. Science, 2011, 334, 498-501.	12.6	353
2	Green Solvents in Carbohydrate Chemistry: From Raw Materials to Fine Chemicals. Chemical Reviews, 2015, 115, 6811-6853.	47.7	296
3	Homogeneous low-molecular-weight heparins with reversible anticoagulant activity. Nature Chemical Biology, 2014, 10, 248-250.	8.0	173
4	An Atlas of Î²-Glucuronidases in the Human Intestinal Microbiome. Structure, 2017, 25, 967-977.e5.	3.3	172
5	Chemoenzymatic Design of Heparan Sulfate Oligosaccharides*. Journal of Biological Chemistry, 2010, 285, 34240-34249.	3.4	138
6	Synthetic oligosaccharides can replace animal-sourced lowâ€“molecular weight heparins. Science Translational Medicine, 2017, 9, .	12.4	82
7	Synthesis of 3-<i>O</i>-Sulfated Oligosaccharides to Understand the Relationship between Structures and Functions of Heparan Sulfate. Journal of the American Chemical Society, 2017, 139, 5249-5256.	13.7	79
8	3â€<i>O</i>â€Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie - International Edition, 2020, 59, 1818-1827.	13.8	71
9	Hs3st3-Modified Heparan Sulfate Controls KIT+ Progenitor Expansion by Regulating 3-O-Sulfotransferases. Developmental Cell, 2014, 29, 662-673.	7.0	64
10	Design of anti-inflammatory heparan sulfate to protect against acetaminophen-induced acute liver failure. Science Translational Medicine, 2020, 12, .	12.4	60
11	Expanding the 3-<i>O</i>-Sulfate Proteomeâ€"Enhanced Binding of Neuropilin-1 to 3-<i>O</i>-Sulfated Heparan Sulfate Modulates Its Activity. ACS Chemical Biology, 2016, 11, 971-980.	3.4	57
12	Chemoenzymatic Synthesis of Heparin Oligosaccharides with both Anti-factor Xa and Anti-factor IIa Activities. Journal of Biological Chemistry, 2012, 287, 29054-29061.	3.4	51
13	Divergent Synthesis of Heparan Sulfate Oligosaccharides. Journal of Organic Chemistry, 2015, 80, 12265-12279.	3.2	50
14	Controlled Chemoenzymatic Synthesis of Heparan Sulfate Oligosaccharides. Angewandte Chemie - International Edition, 2018, 57, 5340-5344.	13.8	49
15	Circulating heparin oligosaccharides rapidly target the hippocampus in sepsis, potentially impacting cognitive functions. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9208-9213.	7.1	45
16	Epitope mapping by a Wnt-blocking antibody: evidence of the Wnt binding domain in heparan sulfate. Scientific Reports, 2016, 6, 26245.	3.3	44
17	Heparan Sulfate Domains Required for Fibroblast Growth Factor 1 and 2 Signaling through Fibroblast Growth Factor Receptor 1c. Journal of Biological Chemistry, 2017, 292, 2495-2509.	3.4	43
18	Construction and characterisation of a heparan sulphate heptasaccharide microarray. Chemical Communications, 2017, 53, 1743-1746.	4.1	40

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19	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. Nature Communications, 2020, 11, 1481.	12.8	39
20	Structure Based Substrate Specificity Analysis of Heparan Sulfate 6-<i>O</i>-Sulfotransferases. ACS Chemical Biology, 2017, 12, 73-82.	3.4	36
21	Mouse Gut Microbiome-Encoded Î²-Glucuronidases Identified Using Metagenome Analysis Guided by Protein Structure. MSystems, 2019, 4, .	3.8	34
22	Role of Deacetylase Activity of N-Deacetylase/N-Sulfotransferase 1 in Forming N-Sulfated Domain in Heparan Sulfate. Journal of Biological Chemistry, 2015, 290, 20427-20437.	3.4	32
23	Chemoenzymatic synthesis and structural characterization of 2-O-sulfated glucuronic acid-containing heparan sulfate hexasaccharides. Glycobiology, 2014, 24, 681-692.	2.5	29
24	A Computational Framework for Heparan Sulfate Sequencing Using High-resolution Tandem Mass Spectra. Molecular and Cellular Proteomics, 2014, 13, 2490-2502.	3.8	25
25	Enzymatic Synthesis of Chondroitin Sulfate E to Attenuate Bacteria Lipopolysaccharide-Induced Organ Damage. ACS Central Science, 2020, 6, 1199-1207.	11.3	23
26	Directing the biological activities of heparan sulfate oligosaccharides using a chemoenzymatic approach. Glycobiology, 2012, 22, 96-106.	2.5	22
27	Active site flexibility revealed in crystal structures of <i>Parabacteroides merdae</i> Î²â€glucuronidase from the human gut microbiome. Protein Science, 2018, 27, 2010-2022.	7.6	20
28	Gas-Phase Analysis of the Complex of Fibroblast GrowthFactor 1 with Heparan Sulfate: A Traveling Wave Ion Mobility Spectrometry (TWIMS) and Molecular Modeling Study. Journal of the American Society for Mass Spectrometry, 2017, 28, 96-109.	2.8	18
29	Chemical synthesis of human syndecan-4 glycopeptide bearing O-, N-sulfation and multiple aspartic acids for probing impacts of the glycan chain and the core peptide on biological functions. Chemical Science, 2020, 11, 6393-6404.	7.4	18
30	Chemoenzymatic synthesis of unmodified heparin oligosaccharides: cleavage of p-nitrophenyl glucuronide by alkaline and Smith degradation. Organic and Biomolecular Chemistry, 2017, 15, 1222-1227.	2.8	16
31	Quantitative analysis of heparan sulfate using isotopically labeled calibrants. Communications Biology, 2020, 3, 425.	4.4	16
32	Construction of heparan sulfate microarray for investigating the binding of specific saccharide sequences to proteins. Glycobiology, 2021, 31, 188-199.	2.5	16
33	Investigation of the biological functions of heparan sulfate using a chemoenzymatic synthetic approach. RSC Chemical Biology, 2021, 2, 702-712.	4.1	16
34	Synthetic anticoagulant heparan sulfate attenuates liver ischemia reperfusion injury. Scientific Reports, 2020, 10, 17187.	3.3	13
35	A Traveling Wave Ion Mobility Spectrometry (TWIMS) Study of the Robo1-Heparan Sulfate Interaction. Journal of the American Society for Mass Spectrometry, 2018, 29, 1153-1165.	2.8	12
36	Characterization of the interaction between platelet factor 4 and homogeneous synthetic low molecular weight heparins. Journal of Thrombosis and Haemostasis, 2020, 18, 390-398.	3.8	12

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37	Ultrasensitive small molecule fluorogenic probe for human heparanase. Chemical Science, 2021, 12, 239-246.	7.4	12
38	Downstream Products are Potent Inhibitors of the Heparan Sulfate 2-O-Sulfotransferase. Scientific Reports, 2018, 8, 11832.	3.3	11
39	Analysis of 3-<i>O</i>-Sulfated Heparan Sulfate Using Isotopically Labeled Oligosaccharide Calibrants. Analytical Chemistry, 2022, 94, 2950-2957.	6.5	11
40	Chemoenzymatic synthesis of heparan sulfate and heparin. Biocatalysis and Biotransformation, 2012, 30, 296-308.	2.0	10
41	Controlled Chemoenzymatic Synthesis of Heparan Sulfate Oligosaccharides. Angewandte Chemie, 2018, 130, 5438-5442.	2.0	10
42	Specificity and action pattern of heparanase Bp, a Î²-glucuronidase from Burkholderia pseudomallei. Glycobiology, 2019, 29, 572-581.	2.5	10
43	Design and synthesis of active heparan sulfate-based probes. Chemical Communications, 2015, 51, 11019-11021.	4.1	9
44	Comparison of angiopoietin-like protein 3 and 4 reveals structural and mechanistic similarities. Journal of Biological Chemistry, 2021, 296, 100312.	3.4	8
45	Synthesis of 3-<i>O</i>-Sulfated Heparan Sulfate Oligosaccharides Using 3-<i>O</i>-Sulfotransferase Isoform 4. ACS Chemical Biology, 2021, 16, 2026-2035.	3.4	8
46	In vitro and in vivo characterization of a reversible synthetic heparin analog. Thrombosis Research, 2016, 138, 121-129.	1.7	7
47	3- O sulfation of heparin leads to hepatotropism and longer circulatory half-life. Thrombosis Research, 2018, 167, 80-87.	1.7	7
48	Using engineered 6-<i>O</i>-sulfotransferase to improve the synthesis of anticoagulant heparin. Organic and Biomolecular Chemistry, 2020, 18, 8094-8102.	2.8	7
49	Deciphering the substrate recognition mechanisms of the heparan sulfate 3-<i>O</i>-sulfotransferase-3. RSC Chemical Biology, 2021, 2, 1239-1248.	4.1	6
50	Modernization of Enoxaparin Molecular Weight Determination Using Homogeneous Standards. Pharmaceuticals, 2017, 10, 66.	3.8	5
51	Structural and Substrate Specificity Analysis of 3-<i>O</i>-Sulfotransferase Isoform 5 to Synthesize Heparan Sulfate. ACS Catalysis, 2021, 11, 14956-14966.	11.2	5
52	Chemoenzymatic Synthesis of Homogeneous Heparan Sulfate and Chondroitin Sulfate Chimeras. ACS Chemical Biology, 2022, 17, 1207-1214.	3.4	5
53	3â€•O â€Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie, 2020, 132, 1834-1843.	2.0	2
54	Inside Cover: Preactivation-Based, One-Pot Combinatorial Synthesis of Heparin-like Hexasaccharides for the Analysis of Heparin-Protein Interactions (Chem. Eur. J. 28/2010). Chemistry - A European Journal, 2010, 16, 8218-8218.	3.3	1

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55	Enzyme-Based Methods to Synthesize Homogeneous Glycosaminoglycan Oligosaccharides. , 2021, , 706-714.		1
56	Frontispiz: 3â€<i>O</i>â€Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie, 2020, 132, .	2.0	0
57	Frontispiece: 3â€<i>O</i>â€Sulfation of Heparan Sulfate Enhances Tau Interaction and Cellular Uptake. Angewandte Chemie - International Edition, 2020, 59, .	13.8	0
58	Abstract 594: Characterization of Anti-thrombotic and Anti-inflammatory Properties of New Synthetic, Protamine Reversible Low Molecular Weight Heparin. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, .	2.4	0