Xiaojuan Xu

List of Publications by Citations

109 papers	3,565 citations	34 h-index	56 g-index
112 ext. papers	4,195 ext. citations	6.4 avg, IF	5.63 L-index

#	Paper	IF	Citations
109	Dynamic Self-Assembly Induced Rapid Dissolution of Cellulose at Low Temperatures. *Macromolecules*, **2008**, 41, 9345-9351	5.5	322
108	Correlation between antitumor activity, molecular weight, and conformation of lentinan. *Carbohydrate Research*, **2005**, 340, 1515-21	2.9	224
107	Intermolecular interaction and the extended wormlike chain conformation of chitin in NaOH/urea aqueous solution. *Biomacromolecules*, **2015**, 16, 1410-7	6.9	139
106	Preparation and antimicrobial activity of hydroxypropyl chitosan. *Carbohydrate Research*, **2005**, 340, 1846-51	2.9	120
105	Effects of molecular structure on antitumor activities of (1->3)-β-d-glucans from different Lentinus Edodes. *Carbohydrate Polymers*, **2006**, 63, 97-104	10.3	110
104	Chain conformation and anti-tumor activities of phosphorylated (1->3)-β-d-glucan from Poria cocos. *Carbohydrate Polymers*, **2009**, 78, 581-587	10.3	109
103	Branching structure and chain conformation of water-soluble glucan extracted from Auricularia auricula-judae. *Journal of Agricultural and Food Chemistry*, **2012**, 60, 3498-506	5.7	94
102	Construction of selenium nanoparticles/β-glucan composites for enhancement of the antitumor activity. *Carbohydrate Polymers*, **2015**, 117, 434-442	10.3	89
101	Thermally induced conformation transition of triple-helical lentinan in NaCl aqueous solution. *Journal of Physical Chemistry B*, **2008**, 112, 10343-51	3.4	88
100	Inclusion Interaction of Highly Densely PEO Grafted Polymer Brush and β-Cyclodextrin. *Macromolecules*, **2005**, 38, 3845-3851	5.5	85
99	Triple helical polysaccharide-induced good dispersion of silver nanoparticles in water. *Biomacromolecules*, **2011**, 12, 2864-71	6.9	64
98	Rheological behavior of Aeromonas gum in aqueous solutions. *Food Hydrocolloids*, **2006**, 20, 723-729	10.6	61
97	Morphologies and conformation transition of lentinan in aqueous NaOH solution. *Biopolymers*, **2004**, 75, 187-95	2.2	59
96	Chain conformation and anti-tumor activity of derivatives of polysaccharide from Rhizoma Panacis Japonici. *Carbohydrate Polymers*, **2014**, 105, 308-16	10.3	58
95	Chain structures of glucans from Lentinus edodes and their effects on NO production from RAW 264.7 macrophages. *Carbohydrate Polymers*, **2012**, 87, 1855-1862	10.3	58
94	β-Glucan from Lentinus edodes inhibits nitric oxide and tumor necrosis factor-α production and phosphorylation of mitogen-activated protein kinases in lipopolysaccharide-stimulated murine RAW 264.7 macrophages. *Journal of Biological Chemistry*, **2012**, 287, 871-8	5.4	58
93	Construction of high strength hollow fibers by self-assembly of a stiff polysaccharide with short branches in water. *Journal of Materials Chemistry A*, **2013**, 1, 4198	13	57

92	Dynamic viscoelastic behavior of triple helical Lentinan in water: Effects of concentration and molecular weight. *Polymer*, **2007**, 48, 6681-6690	3.9	57
91	Recent Advances in Chain Conformation and Bioactivities of Triple-Helix Polysaccharides. *Biomacromolecules*, **2020**, 21, 1653-1677	6.9	55
90	Rheology of triple helical Lentinan in solution: Steady shear viscosity and dynamic oscillatory behavior. *Food Hydrocolloids*, **2008**, 22, 735-741	10.6	53
89	Construction of blood compatible lysine-immobilized chitin/carbon nanotube microspheres and potential applications for blood purified therapy. *Journal of Materials Chemistry B*, **2017**, 5, 2952-2963	7.3	49
88	Immunomodulatory beta-glucan from Lentinus edodes activates mitogen-activated protein kinases and nuclear factor-kappaB in murine RAW 264.7 macrophages. *Journal of Biological Chemistry*, **2011**, 286, 31194-8	5.4	47
87	Structural characterization, chain conformation, and morphology of a beta-(1-->3)-D-glucan isolated from the fruiting body of Dictyophora indusiata. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 5918-24	5.7	47
86	Effect of quinoa flour on baking performance, antioxidant properties and digestibility of wheat bread. *Food Chemistry*, **2019**, 294, 87-95	8.5	46
85	Structural changes of waxy and normal maize starches modified by heat moisture treatment and their relationship with starch digestibility. *Carbohydrate Polymers*, **2017**, 177, 232-240	10.3	46
84	Hypoglycemic activity of the Baker□s yeast □glucan in obese/type 2 diabetic mice and the underlying mechanism. *Molecular Nutrition and Food Research*, **2016**, 60, 2678-2690	5.9	41
83	Collapse and association of denatured lentinan in water/dimethlysulfoxide solutions. *Biomacromolecules*, **2004**, 5, 1893-8	6.9	40
82	Anti-tumor effect of □glucan from Lentinus edodes and the underlying mechanism. *Scientific Reports*, **2016**, 6, 28802	4.9	39
81	Progress in rigid polysaccharide-based nanocomposites with therapeutic functions. *Journal of Materials Chemistry B*, **2017**, 5, 5690-5713	7.3	37
80	Orally Administered Baker□s Yeast □Glucan Promotes Glucose and Lipid Homeostasis in the Livers of Obesity and Diabetes Model Mice. *Journal of Agricultural and Food Chemistry*, **2017**, 65, 9665-9674	5.7	36
79	Synthesis and stabilization of gold nanoparticles induced by denaturation and renaturation of triple helical □glucan in water. *Biomacromolecules*, **2013**, 14, 1787-94	6.9	36
78	Renaturation of triple helical polysaccharide lentinan in water-diluted dimethylsulfoxide solution. *Carbohydrate Research*, **2010**, 345, 419-24	2.9	36
77	Inhibition of dextran sodium sulfate-induced colitis in mice by baker□s yeast polysaccharides. *Carbohydrate Polymers*, **2019**, 207, 371-381	10.3	36
76	Different variations in structures of A- and B-type starches subjected to microwave treatment and their relationships with digestibility. *LWT - Food Science and Technology*, **2019**, 99, 179-187	5.4	36
75	Highly Efficient One-Step Purification of Sulfated Polysaccharides via Chitosan Microspheres Adsorbents. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 3195-3203	8.3	33

74	The linear structure of -glucan from baker's yeast and its activation of macrophage-like RAW264.7 cells. *Carbohydrate Polymers*, **2016**, 148, 61-8	10.3	33
73	-Glucan from Saccharomyces cerevisiae reduces lipopolysaccharide-induced inflammatory responses in RAW264.7 macrophages. *Biochimica Et Biophysica Acta - General Subjects*, **2012**, 1820, 1656-63	4	31
72	The -glucan from suppresses cell proliferation and promotes apoptosis in estrogen receptor positive breast cancers. *Oncotarget*, **2017**, 8, 86693-86709	3.3	30
71	Flexible chain conformation of (1 -> 3)--d-glucan from Poria cocos sclerotium in NaOH/urea aqueous solution. *Carbohydrate Polymers*, **2009**, 75, 586-591	10.3	29
70	A novel cationic polyelectrolyte microsphere for ultrafast and ultra-efficient removal of heavy metal ions and dyes. *Chemical Engineering Journal*, **2021**, 410, 128404	14.7	29
69	Construction of highly stable selenium nanoparticles embedded in hollow nanofibers of polysaccharide and their antitumor activities. *Nano Research*, **2017**, 10, 3775-3789	10	28
68	Orally Delivered Antisense Oligodeoxyribonucleotides of TNF- via Polysaccharide-Based Nanocomposites Targeting Intestinal Inflammation. *Advanced Healthcare Materials*, **2019**, 8, e1801389	10.1	28
67	Anti-hepatoma activity of the stiff branched -d-glucan and effects of molecular weight. *Journal of Materials Chemistry B*, **2016**, 4, 4565-4573	7.3	28
66	Yeast -Glucan Suppresses the Chronic Inflammation and Improves the Microenvironment in Adipose Tissues of ob/ob Mice. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 621-629	5.7	27
65	Determination of the triple helical chain conformation of -glucan by facile and reliable triple-detector size exclusion chromatography. *Journal of Physical Chemistry B*, **2014**, 118, 668-75	3.4	27
64	Extended chain conformation of -glucan and its effect on antitumor activity. *Journal of Materials Chemistry B*, **2017**, 5, 5623-5631	7.3	27
63	Triple-Helix Conformation of a Polysaccharide Determined with Light Scattering, AFM, and Molecular Dynamics Simulation. *Macromolecules*, **2018**, 51, 10150-10159	5.5	27
62	A novel gene carrier prepared from triple helical -glucan and polydeoxyadenylic acid. *Journal of Materials Chemistry B*, **2014**, 2, 933-944	7.3	26
61	Antitumor activities of O-sulfonated derivatives of (1-->3)-alpha-D-glucan from different Lentinus edodes. *Bioscience, Biotechnology and Biochemistry*, **2006**, 70, 38-46	2.1	26
60	Dendritic nanotubes self-assembled from stiff polysaccharides as drug and probe carriers. *Journal of Materials Chemistry B*, **2017**, 5, 2616-2624	7.3	25
59	Gel formation and low-temperature intramolecular conformation transition of a triple-helical polysaccharide lentinan in water. *Biopolymers*, **2008**, 89, 852-61	2.2	25
58	Chain conformation and biological activities of hyperbranched fucoidan derived from brown algae and its desulfated derivative. *Carbohydrate Polymers*, **2019**, 208, 86-96	10.3	25
57	Inhibition of tumor growth by -glucans through promoting CD4 T cell immunomodulation and neutrophil-killing in mice. *Carbohydrate Polymers*, **2019**, 213, 370-381	10.3	22

56	Effect of heating on chain conformation of branched β-glucan in water. *Journal of Physical Chemistry B*, **2013**, 117, 8370-7	3.4	22
55	Chain conformation and rheological behavior of an extracellular heteropolysaccharide Erwinia gum in aqueous solution. *Carbohydrate Research*, **2009**, 344, 113-9	2.9	22
54	Self-assembly of graphene oxide on the surface of aluminum foil. *New Journal of Chemistry*, **2013**, 37, 181-187	3.6	20
53	Interaction between polydeoxyadenylic acid and β-glucan from Lentinus edodes. *European Polymer Journal*, **2012**, 48, 1329-1338	5.2	20
52	Dynamic viscoelastic behavior of triple helical Lentinan in water: Effect of temperature. *Carbohydrate Polymers*, **2008**, 73, 26-34	10.3	19
51	Transfection efficiency and internalization of the gene carrier prepared from a triple-helical β-glucan and polydeoxyadenylic acid in macrophage RAW264.7 cells. *Journal of Materials Chemistry B*, **2015**, 3, 3789-3798	7.3	18
50	Anti-leukemia activities of selenium nanoparticles embedded in nanotube consisted of triple-helix β-d-glucan. *Carbohydrate Polymers*, **2020**, 240, 116329	10.3	17
49	Changes in shape and size of the stiff branched β-glucan in dimethlysulfoxide/water solutions. *Carbohydrate Polymers*, **2016**, 138, 86-93	10.3	17
48	Natural polysaccharides with different conformations: extraction, structure and anti-tumor activity. *Journal of Materials Chemistry B*, **2020**, 8, 9652-9667	7.3	17
47	Single chain morphology and nanofiber-like aggregates of branched β(1 -> 3)-D-glucan in water/dimethylsulfoxide solution. *Carbohydrate Polymers*, **2016**, 137, 287-294	10.3	16
46	Molecular weight and chain conformation of amylopectin from rice starch. *Journal of Applied Polymer Science*, **2007**, 104, 3124-3128	2.9	16
45	Effect of molecular mass on antitumor activity of heteropolysaccharide from Poria cocos. *Bioscience, Biotechnology and Biochemistry*, **2005**, 69, 631-4	2.1	16
44	Microstructure, gelatinization and pasting properties of rice starch under acid and heat treatments. *International Journal of Biological Macromolecules*, **2020**, 149, 1098-1108	7.9	15
43	Variable chain conformations of renatured β-glucan in dimethylsulfoxide/water mixture. *Biopolymers*, **2012**, 97, 988-97	2.2	15
42	Chain conformation and rheological behavior of exopolysaccharide from Bacillus mucilaginosus SM-01. *Food Hydrocolloids*, **2017**, 65, 165-174	10.6	14
41	A Novel Strategy for Treating Inflammatory Bowel Disease by Targeting Delivery of Methotrexate through Glucan Particles. *Advanced Healthcare Materials*, **2020**, 9, e1901805	10.1	14
40	Chemical structure of aeromonas gum--extracellular polysaccharide from Aeromonas nichidenii 5797. *Carbohydrate Research*, **2004**, 339, 1631-6	2.9	14
39	Solution properties of water-insoluble polysaccharides from the mycelium of Ganoderma tsugae. *Carbohydrate Polymers*, **2005**, 59, 351-356	10.3	14

38	Aggregation of Aeromonas Gum in Aqueous Solution. *Polymer Journal*, **1999**, 31, 150-153	2.7	14
37	New approaches for the synthesis of hindered C60-containing polyphosphazenes via functionalized intermediates. *Journal of Polymer Science Part A*, **2004**, 42, 2877-2885	2.5	12
36	Nanoplatform Constructed from a β-Glucan and Polydeoxyadenylic Acid for Cancer Chemotherapy and Imaging. *Biomacromolecules*, **2019**, 20, 1567-1577	6.9	11
35	Construction of size-controllable gold nanoparticles immobilized on polysaccharide nanotubes by in situ one-pot synthesis. *International Journal of Biological Macromolecules*, **2018**, 113, 240-247	7.9	11
34	Lentinan greatly enhances the dispersibility of single-walled carbon nanotubes in water and decreases the cytotoxicity. *Bioactive Carbohydrates and Dietary Fibre*, **2013**, 1, 111-119	3.4	11
33	Hypoglycemic Effects of Pyrodextrins with Different Molecular Weights and Digestibilities in Mice with Diet-Induced Obesity. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 2988-2995	5.7	10
32	Dilute-solution behavior of aeromonas gum, a heteropolysaccharide. *Polymer Bulletin*, **2002**, 48, 491-498	2.4	10
31	A novel self-assembly Lentinan-tetraphenylethylene composite with strong blue fluorescence in water and its properties. *Carbohydrate Polymers*, **2017**, 174, 13-24	10.3	9
30	The LiCl effect on the conformation of lentinan in DMSO. *Biopolymers*, **2012**, 97, 840-5	2.2	9
29	Viscoelastic properties of an exopolysaccharide: Aeromonas gum, produced by Aeromonas nichidenii 5797. *Biorheology*, **2007**, 44, 387-401	1.7	9
28	Uptake of intraperitoneally administrated triple helical β-glucan for antitumor activity in murine tumor models. *Journal of Materials Chemistry B*, **2017**, 5, 9337-9345	7.3	8
27	Aggregation and disaggregation ofAeromonas gum in an aqueous solution under different conditions. *Journal of Polymer Science, Part B: Polymer Physics*, **2000**, 38, 2644-2651	2.6	8
26	SOLUTION PROPERTIES OF PACHYMAN FROM PORIA COCOS MYCELIA IN DIMETHYL SULFOXIDE. *Journal of Macromolecular Science - Physics*, **2001**, 40, 147-156	1.4	8
25	Assembly of single-stranded polydeoxyadenylic acid and β-glucan probed by the sensing platform of graphene oxide based on the fluorescence resonance energy transfer and fluorescence anisotropy. *Analyst, The*, **2013**, 138, 2661-8	5	7
24	Chain conformation transition induced host-guest assembly between triple helical curdlan and β-CD for drug delivery. *Biomaterials Science*, **2020**, 8, 1638-1648	7.4	7
23	Heat-induced conformation transition of the comb-branched β-glucan in dimethyl sulfoxide/water mixture. *Carbohydrate Polymers*, **2017**, 157, 1404-1412	10.3	6
22	Chain stiffness of heteropolysaccharide from Aeromonas gum in dilute solution by dynamic light scattering. *Biopolymers*, **2002**, 65, 387-94	2.2	5
21	Effects of the thermal history and concentration on the aggregation of Erwinia gum in an aqueous solution. *Journal of Polymer Science, Part B: Polymer Physics*, **2000**, 38, 1352-1358	2.6	5

20	Effects of potassium sulfate on swelling, gelatinizing and pasting properties of three rice starches from different sources. *Carbohydrate Polymers*, **2021**, 251, 117057	10.3	5
19	Source apportionment and health risk assessment of trace elements in the heavy industry areas of Tangshan, China. *Air Quality, Atmosphere and Health*, **2019**, 12, 1303-1315	5.6	4
18	Molecular weight and aggregation of Aeromonas gum treated with dimethyl sulfoxide in aqueous solution. *Journal of Polymer Science, Part B: Polymer Physics*, **2002**, 40, 2269-2276	2.6	4
17	Fabrication of tumor-targeting composites based on the triple helical glucan through conjugation of aptamer. *Carbohydrate Polymers*, **2021**, 254, 117476	10.3	4
16	New insights into the anti- hepatoma mechanism of triple-helix glucan by metabolomics profiling. *Carbohydrate Polymers*, **2021**, 269, 118289	10.3	4
15	Construction of silver nanoparticles by the triple helical polysaccharide from black fungus and the antibacterial activities. *International Journal of Biological Macromolecules*, **2021**, 182, 1170-1178	7.9	3
14	Detection of sialylated N-Linked glycans by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. *Wuhan University Journal of Natural Sciences*, **2014**, 19, 245-252	0.4	2
13	Molecular architectures of four-arm star-shaped styrene-butadiene copolymer. *Journal of Applied Polymer Science*, **2005**, 96, 961-965	2.9	2
12	Urea/NaOH aqueous solution as new solvent of aeromonas gum. *Journal of Applied Polymer Science* , **2005**, 97, 1710-1713	2.9	2
11	Molecular size and aggregation behavior of Erwinia gum in aqueous solution. *Journal of Applied Polymer Science*, **2000**, 75, 1083-1088	2.9	2
10	Neural Regeneration: A Novel Strategy for Treating Inflammatory Bowel Disease by Targeting Delivery of Methotrexate through Glucan Particles (Adv. Healthcare Mater. 6/2020). *Advanced Healthcare Materials*, **2020**, 9, 2070018	10.1	1
9	Targeted delivery of methotrexate by modified yeast glucan nanoparticles for rheumatoid arthritis therapy.. *Carbohydrate Polymers*, **2022**, 284, 119183	10.3	1
8	Specific glucans in chain conformations and their biological functions. *Polymer Journal*,	2.7	1
7	Pt(IV) Prodrugs Designed to Embed in Nanotubes of a Polysaccharide for Drug Delivery.. *ACS Applied Bio Materials*, **2021**, 4, 4841-4848	4.1	1
6	The environmental benefit of Beijing-Tianjin-Hebei coal banning area for North China.. *Journal of Environmental Management*, **2022**, 311, 114870	7.9	1
5	One-step synthesis of ultra-small silver nanoparticles-loaded triple-helix glucan nanocomposite for highly catalytic hydrogenation of 4-nitrophenol and dyes. *Chemical Engineering Journal*, **2022**, 442, 136114	14.7	1
4	The composites of triple-helix glucan nanotubes/selenium nanoparticles target hepatocellular carcinoma to enhance ferroptosisby depleting glutathione and augmenting redox imbalances. *Chemical Engineering Journal*, **2022**, 137110	14.7	1
3	Designing a Highly Stable Enzyme Graphene Oxide Biohybrid as a Sensitive Biorecognition Module for Biosensor Fabrication with Superior Performance and Stability. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 2971-2983	8.3	0

2	Chain conformations and steady-shear viscosity properties of pectic polysaccharides from apple and tomato.. *Food Chemistry: X*, **2022**, 14, 100296	4.7	0
1	Chemical structure of aeromonas gum??extracellular polysaccharide from Aeromonas nichidenii 5797. *Carbohydrate Research*, **2004**, 339, 1631-1631	2.9	