Zhanyong Guo

List of Publications by Year in descending order

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105 papers	4,371 citations	101543 36 h-index	123424 61 g-index
105 all docs	105 docs citations	105 times ranked	3784 citing authors

#	Article	IF	Citations
1	Antifungal properties of Schiff bases of chitosan, N-substituted chitosan and quaternized chitosan. Carbohydrate Research, 2007, 342, 1329-1332.	2.3	299
2	Relevance of molecular weight of chitosan and its derivatives and their antioxidant activities in vitro. Bioorganic and Medicinal Chemistry, 2005, 13, 1573-1577.	3.0	253
3	The synthesis and antioxidant activity of the Schiff bases of chitosan and carboxymethyl chitosan. Bioorganic and Medicinal Chemistry Letters, 2005, 15, 4600-4603.	2.2	251
4	Novel derivatives of chitosan and their antifungal activities in vitro. Carbohydrate Research, 2006, 341, 351-354.	2.3	153
5	Preparation of high-molecular weight and high-sulfate content chitosans and their potential antioxidant activity in vitro. Carbohydrate Polymers, 2005, 61, 148-154.	10.2	118
6	The influence of molecular weight of quaternized chitosan on antifungal activity. Carbohydrate Polymers, 2008, 71, 694-697.	10.2	107
7	Cationic chitosan derivatives as potential antifungals: A review of structural optimization and applications. Carbohydrate Polymers, 2020, 236, 116002.	10.2	106
8	The antioxidant and antifungal activity of chitosan derivatives bearing Schiff bases and quaternary ammonium salts. Carbohydrate Polymers, 2019, 226, 115256.	10.2	99
9	The antioxidant activity of glucosamine hydrochloride in vitro. Bioorganic and Medicinal Chemistry, 2006, 14, 1706-1709.	3.0	98
10	Hydroxyl radicals scavenging activity of N-substituted chitosan and quaternized chitosan. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 6348-6350.	2.2	94
11	Extraction, degree of polymerization determination and prebiotic effect evaluation of inulin from Jerusalem artichoke. Carbohydrate Polymers, 2015, 121, 315-319.	10.2	90
12	Synthesis, characterization, and antioxidant properties of novel inulin derivatives with amino-pyridine group. International Journal of Biological Macromolecules, 2014, 70, 44-49.	7.5	82
13	Synthesis and hydroxyl radicals scavenging activity of quaternized carboxymethyl chitosan. Carbohydrate Polymers, 2008, 73, 173-177.	10.2	75
14	Synthesis and antioxidant property of novel 1,2,3-triazole-linked starch derivatives via â€˜click chemistryâ€™. International Journal of Biological Macromolecules, 2016, 82, 404-410.	7.5	73
15	The influence of the cationic of quaternized chitosan on antifungal activity. International Journal of Food Microbiology, 2007, 118, 214-217.	4.7	70
16	Phenolic antioxidants-functionalized quaternized chitosan: Synthesis and antioxidant properties. International Journal of Biological Macromolecules, 2013, 53, 77-81.	7.5	67
17	The hydroxyl radical scavenging activity of chitosan, hyaluronan, starch and their O-carboxymethylated derivatives. Carbohydrate Polymers, 2010, 82, 1043-1045.	10.2	65
18	Novel cationic chitosan derivative bearing 1,2,3-triazolium and pyridinium: Synthesis, characterization, and antifungal property. Carbohydrate Polymers, 2018, 182, 180-187.	10.2	65

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19	Enhanced antioxidant and antifungal activity of chitosan derivatives bearing 6-O-imidazole-based quaternary ammonium salts. Carbohydrate Polymers, 2019, 206, 493-503.	10.2	65
20	Synthesis and antifungal properties of sulfanilamide derivatives of chitosan. Carbohydrate Research, 2007, 342, 2390-2395.	2.3	64
21	The influence of the cation of quaternized chitosans on antioxidant activity. Carbohydrate Polymers, 2009, 78, 439-443.	10.2	61
22	Synthesis, characterization, and antifungal activity of novel quaternary chitosan derivatives. Carbohydrate Research, 2010, 345, 1896-1900.	2.3	60
23	Preparation and Characterization of Quaternized Chitosan Derivatives and Assessment of Their Antioxidant Activity. Molecules, 2018, 23, 516.	3.8	59
24	Synthesis of water soluble chitosan derivatives with halogeno-1,2,3-triazole and their antifungal activity. International Journal of Biological Macromolecules, 2016, 91, 623-629.	7.5	58
25	Synthesis and antifungal activity of thiadiazole-functionalized chitosan derivatives. Carbohydrate Research, 2013, 373, 103-107.	2.3	52
26	Physical and Antioxidant Properties of Edible Chitosan Ascorbate Films. Journal of Agricultural and Food Chemistry, 2019, 67, 2530-2539.	5.2	52
27	Design, synthesis of novel chitosan derivatives bearing quaternary phosphonium salts and evaluation of antifungal activity. International Journal of Biological Macromolecules, 2017, 102, 704-711.	7.5	51
28	Synthesis, characterization, and antibacterial property of novel starch derivatives with 1,2,3-triazole. Carbohydrate Polymers, 2016, 142, 1-7.	10.2	50
29	Synthesis, characterization, and the antioxidant activity of N,N,N-trimethyl chitosan salts. International Journal of Biological Macromolecules, 2018, 118, 9-14.	7.5	49
30	Preparation and physicochemical properties of antioxidant chitosan ascorbate/methylcellulose composite films. International Journal of Biological Macromolecules, 2020, 146, 53-61.	7.5	47
31	Synthesis, characterization, and antifungal property of chitosan ammonium salts with halogens. International Journal of Biological Macromolecules, 2016, 92, 293-298.	7.5	45
32	Novel Amino-Pyridine Functionalized Chitosan Quaternary Ammonium Derivatives: Design, Synthesis, and Antioxidant Activity. Molecules, 2017, 22, 156.	3.8	43
33	New synthetic chitosan derivatives bearing benzenoid/heterocyclic moieties with enhanced antioxidant and antifungal activities. Carbohydrate Polymers, 2020, 249, 116847.	10.2	43
34	Synthesis, characterization, and antifungal activity of novel inulin derivatives with chlorinated benzene. Carbohydrate Polymers, 2014, 99, 469-473.	10.2	42
35	Synthesis and antioxidant action of chitosan derivatives with amino-containing groups via azide-alkyne click reaction and N-methylation. Carbohydrate Polymers, 2018, 199, 583-592.	10.2	41
36	Significantly enhanced antioxidant activity of chitosan through chemical modification with coumarins. Polymer Chemistry, 2019, 10, 1480-1488.	3.9	40

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37	Antifungal activity of double Schiff bases of chitosan derivatives bearing active halogeno-benzenes. International Journal of Biological Macromolecules, 2021, 179, 292-298.	7.5	40
38	Synthesis of urea-functionalized chitosan derivatives for potential antifungal and antioxidant applications. Carbohydrate Polymers, 2019, 215, 108-118.	10.2	37
39	Synthesis, characterization, and evaluation of antifungal and antioxidant properties of cationic chitosan derivative via azide-alkyne click reaction. International Journal of Biological Macromolecules, 2018, 120, 318-324.	7.5	35
40	Preparation of 2,6-diurea-chitosan oligosaccharide derivatives for efficient antifungal and antioxidant activities. Carbohydrate Polymers, 2020, 234, 115903.	10.2	35
41	Synthesis and antifungal properties of 6-amino-6-deoxyinulin, a kind of precursors for facile chemical modifications of inulin. Carbohydrate Polymers, 2012, 87, 1744-1748.	10.2	34
42	Novel 1,2,3-triazolium-functionalized starch derivatives: Synthesis, characterization, and evaluation of antifungal property. Carbohydrate Polymers, 2017, 160, 163-171.	10.2	34
43	Preparation and Characterization of Novel Cationic Chitosan Derivatives Bearing Quaternary Ammonium and Phosphonium Salts and Assessment of Their Antifungal Properties. Molecules, 2017, 22, 1438.	3.8	34
44	Novel triazolyl-functionalized chitosan derivatives with different chain lengths of aliphatic alcohol substituent: Design, synthesis, and antifungal activity. Carbohydrate Research, 2015, 418, 44-49.	2.3	33
45	Synthesis, characterization, and the antifungal activity of chitosan derivatives containing urea groups. International Journal of Biological Macromolecules, 2018, 109, 1061-1067.	7.5	33
46	Design, synthesis of novel starch derivative bearing 1,2,3-triazolium and pyridinium and evaluation of its antifungal activity. Carbohydrate Polymers, 2017, 157, 236-243.	10.2	32
47	Synthesis, Characterization, and the Antioxidant Activity of Double Quaternized Chitosan Derivatives. Molecules, 2017, 22, 501.	3.8	32
48	Antioxidant Activity and Antifungal Activity of Chitosan Derivatives with Propane Sulfonate Groups. Polymers, 2018, 10, 395.	4.5	32
49	Synthesis and hydroxyl radicals scavenging activity of N-(aminoethyl)inulin. Carbohydrate Polymers, 2011, 85, 268-271.	10.2	30
50	The evaluation of antioxidant and antifungal properties of 6-amino-6-deoxychitosan in vitro. International Journal of Biological Macromolecules, 2018, 107, 595-603.	7.5	30
51	Synthesis of inulin derivatives with quaternary phosphonium salts and their antifungal activity. International Journal of Biological Macromolecules, 2018, 113, 1273-1278.	7.5	29
52	Synthesis, Characterization, and Antifungal Property of Hydroxypropyltrimethyl Ammonium Chitosan Halogenated Acetates. Marine Drugs, 2018, 16, 315.	4.6	29
53	Comparative study of the influence of active groups of chitosan derivatives on antifungal activity. Journal of Applied Polymer Science, 2013, 127, 2553-2556.	2.6	28
54	Synthesis, characterization, and antifungal property of starch derivatives modified with quaternary phosphonium salts. Materials Science and Engineering C, 2017, 76, 1048-1056.	7.3	26

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55	Synthesis of Schiff bases modified inulin derivatives for potential antifungal and antioxidant applications. International Journal of Biological Macromolecules, 2020, 143, 714-723.	7.5	26
56	Phenolic-containing chitosan quaternary ammonium derivatives and their significantly enhanced antioxidant and antitumor properties. Carbohydrate Research, 2020, 498, 108169.	2.3	26
57	Highly efficient synthesis and antioxidant activity of O-(aminoethyl)inulin. Carbohydrate Polymers, 2011, 83, 1240-1244.	10.2	25
58	Enhanced antifungal activity of novel cationic chitosan derivative bearing triphenylphosphonium salt via azide-alkyne click reaction. International Journal of Biological Macromolecules, 2020, 165, 1765-1772.	7.5	25
59	Preparation of Cross-linked Chitosan Quaternary Ammonium Salt Hydrogel Films Loading Drug of Gentamicin Sulfate for Antibacterial Wound Dressing. Marine Drugs, 2021, 19, 479.	4.6	25
60	New synthetic adriamycin-incorporated chitosan nanoparticles with enhanced antioxidant, antitumor activities and pH-sensitive drug release. Carbohydrate Polymers, 2021, 273, 118623.	10.2	25
61	The influence of bioactive glyoxylate bearing Schiff base on antifungal and antioxidant activities to chitosan quaternary ammonium salts. Carbohydrate Polymers, 2022, 278, 118970.	10.2	25
62	Synthesis of amphiphilic aminated inulin via â€˜click chemistryâ€™ and evaluation for its antibacterial activity. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 4590-4593.	2.2	24
63	Synthesis, characterization, and antifungal evaluation of novel 1,2,3-triazolium-functionalized starch derivative. International Journal of Biological Macromolecules, 2017, 101, 845-851.	7.5	24
64	Modification of carboxymethyl inulin with heterocyclic compounds: Synthesis, characterization, antioxidant and antifungal activities. International Journal of Biological Macromolecules, 2021, 181, 572-581.	7.5	24
65	Novel 1,2,3-triazolium-functionalized inulin derivatives: synthesis, free radical-scavenging activity, and antifungal activity. RSC Advances, 2017, 7, 42225-42232.	3.6	23
66	Synthesis of Quaternary Ammonium Salts of Chitosan Bearing Halogenated Acetate for Antifungal and Antibacterial Activities. Polymers, 2018, 10, 530.	4.5	23
67	Synthesis, Characterization, and the Antioxidant Activity of Carboxymethyl Chitosan Derivatives Containing Thiourea Salts. Polymers, 2019, 11, 1810.	4.5	23
68	Synthesis, Characterization, and Antifungal Activity of Schiff Bases of Inulin Bearing Pyridine ring. Polymers, 2019, 11, 371.	4.5	22
69	Novel Water Soluble Chitosan Derivatives with 1,2,3-Triazolium and Their Free Radical-Scavenging Activity. Marine Drugs, 2018, 16, 107.	4.6	20
70	Evaluation of quaternary ammonium chitosan derivatives differing in the length of alkyl side-chain: Synthesis and antifungal activity. International Journal of Biological Macromolecules, 2019, 129, 1127-1132.	7.5	20
71	Enhanced antifungal and antioxidant activities of new chitosan derivatives modified with Schiff base bearing benzenoid/heterocyclic moieties. International Journal of Biological Macromolecules, 2022, 208, 586-595.	7.5	19
72	Synthesis, Characterization, and Antifungal Activity of Pyridine-Based Triple Quaternized Chitosan Derivatives. Molecules, 2018, 23, 2604.	3.8	18

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73	Highly efficient free radical-scavenging property of phenolic-functionalized chitosan derivatives: Chemical modification and activity assessment. International Journal of Biological Macromolecules, 2020, 164, 4279-4288.	7.5	18
74	Synthesis and characterization of Î±-lipoic acid grafted chitosan derivatives with antioxidant activity. Reactive and Functional Polymers, 2022, 172, 105205.	4.1	18
75	Antifungal properties of chitosan salts in laboratory media. Journal of Applied Polymer Science, 2012, 124, 2501-2507.	2.6	14
76	Synthesis and antioxidant activity of the inulin derivative bearing 1,2,3-triazole and diphenyl phosphate. International Journal of Biological Macromolecules, 2021, 186, 47-53.	7.5	14
77	Synthesis and Characterization of N,N,N-trimethyl-O-(ureidopyridinium)acetyl Chitosan Derivatives with Antioxidant and Antifungal Activities. Marine Drugs, 2020, 18, 163.	4.6	13
78	Synthesis, characterization, and the antioxidant activity of the acetylated chitosan derivatives containing sulfonium salts. International Journal of Biological Macromolecules, 2020, 152, 349-358.	7.5	13
79	Facile synthesis, characterization, antioxidant activity, and antibacterial activity of carboxymethyl inulin salt derivatives. International Journal of Biological Macromolecules, 2022, 199, 138-149.	7.5	13
80	Synthesis and antioxidant ability of 6,6â€²-diamino-6,6â€²-dideoxytrehalose. Bioorganic Chemistry, 2017, 74, 66-71.	4.1	12
81	Synthesis of aminopyridiniumâ€grafted starch derivatives and evaluation of their antioxidant property. Starch/Staerke, 2017, 69, 1600259.	2.1	11
82	Synthesis, Characterization, and Antioxidant Evaluation of Novel Pyridylurea-Functionalized Chitosan Derivatives. Polymers, 2019, 11, 951.	4.5	11
83	Antimicrobial and Antioxidant Activities of N-2-Hydroxypropyltrimethyl Ammonium Chitosan Derivatives Bearing Amino Acid Schiff Bases. Marine Drugs, 2022, 20, 86.	4.6	11
84	Determination of chitosan content with ratio coefficient method and HPLC. International Journal of Biological Macromolecules, 2020, 164, 384-388.	7.5	10
85	Determination of chitosan content with Schiff base method and HPLC. International Journal of Biological Macromolecules, 2021, 182, 1537-1542.	7.5	10
86	Novel coumarin-functionalized inulin derivatives: Chemical modification and antioxidant activity assessment. Carbohydrate Research, 2022, 518, 108597.	2.3	10
87	Antioxidant activity of inulin derivatives with quaternary ammonium. Starch/Staerke, 2017, 69, 1700046.	2.1	9
88	Modification of Hydroxypropyltrimethyl Ammonium Chitosan with Organic Acid: Synthesis, Characterization, and Antioxidant Activity. Polymers, 2020, 12, 2460.	4.5	9
89	Synthesis and Antioxidant Activity of Cationic 1,2,3-Triazole Functionalized Starch Derivatives. Polymers, 2020, 12, 112.	4.5	9
90	The influence of starch derivatives with benzene or halogenated benzene on antibacterial activity. Starch/Staerke, 2017, 69, 1600350.	2.1	8

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91	Preparation of starch derivatives bearing urea groups and the evaluation of antioxidant, antifungal, and antibacterial activities. International Journal of Biological Macromolecules, 2019, 141, 1271-1279.	7.5	8
92	Synthesis of Novel Chitin Derivatives Bearing Amino Groups and Evaluation of Their Antifungal Activity. Marine Drugs, 2018, 16, 380.	4.6	7
93	Novel Inulin Derivatives Modified with Schiff Bases: Synthesis, Characterization, and Antifungal Activity. Polymers, 2019, 11, 998.	4.5	7
94	Novel 2-Hydroxypropyltrimethyl Ammonium Chitosan Derivatives: Synthesis, Characterization, Moisture Absorption and Retention Properties. Molecules, 2021, 26, 4238.	3.8	7
95	Preparation of Doxorubicin-Loaded Carboxymethyl-Î²-Cyclodextrin/Chitosan Nanoparticles with Antioxidant, Antitumor Activities and pH-Sensitive Release. Marine Drugs, 2022, 20, 278.	4.6	7
96	Synthesis and Characterization of Inulin Derivatives Bearing Urea Groups with Promising Antifungal Activity. Starch/Staerke, 2019, 71, 1800058.	2.1	5
97	Improved Antioxidant and Antifungal Activity of Chitosan Derivatives Bearing Urea Groups. Starch/Staerke, 2020, 72, 1900205.	2.1	5
98	Synthesis, Characterization, and Evaluation of Nanoparticles Loading Adriamycin Based on 2-Hydroxypropyltrimethyl Ammonium Chloride Chitosan Grafting Folic Acid. Polymers, 2021, 13, 2229.	4.5	5
99	Synthesis, characterization, and antioxidant activity of carboxymethyl chitosan derivatives containing sulfonium salt. Journal of Oceanology and Limnology, 0, , 1.	1.3	5
100	The Antioxidant and Antibacterial Activities of the Pyridineâ€4â€Aldehyde Schiff Bases Grafted Chloracetyl Chitosan Oligosaccharide Derivatives. Starch/Staerke, 2023, 75, .	2.1	5
101	Radical Scavenging Activities of Novel Cationic Inulin Derivatives. Polymers, 2018, 10, 1295.	4.5	3
102	Synthesis, Characterization, and Antifungal Activity of Nâ€Quaternized and Nâ€Diquaternized Chitin Derivatives. Starch/Staerke, 2018, 70, 1800026.	2.1	3
103	Synthesis, Characterization, and the Antifungal Property of Aminoethyl Chitosan Quaternary Ammonium Salts. Starch/Staerke, 2018, 70, 1700266.	2.1	2
104	Synthesis of Novel Amino Lactose and Evaluation of Its Antioxidant Property. Starch/Staerke, 2018, 70, 1700293.	2.1	1
105	Synthesis of Hydroxypropyltrimethyl Ammonium Chitosan Derivatives Bearing Thioctate and the Potential for Antioxidant Application. Molecules, 2022, 27, 2682.	3.8	1