Shinsuke Ifuku

List of Publications by Year
in descending order

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94	4,648	32	66
papers	citations	h-index	g-index
		136740	102304

98	98	98	4680
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Preparation of Chitin Nanofibers with a Uniform Width as Î±-Chitin from Crab Shells. Biomacromolecules, 2009, 10, 1584-1588.	2.6	441
2	Chitin nanofibers: preparations, modifications, and applications. Nanoscale, 2012, 4, 3308-3318.	2.8	391
3	Surface Modification of Bacterial Cellulose Nanofibers for Property Enhancement of Optically Transparent Composites:Â Dependence on Acetyl-Group DS. Biomacromolecules, 2007, 8, 1973-1978.	2.6	389
4	Chitin, Chitosan, and Its Derivatives for Wound Healing: Old and New Materials. Journal of Functional Biomaterials, 2015, 6, 104-142.	1.8	279
5	Bioactive Gyroid Scaffolds Formed by Sacrificial Templating of Nanocellulose and Nanochitin Hydrogels as Instructive Platforms for Biomimetic Tissue Engineering. Advanced Materials, 2015, 27, 2989-2995.	11.1	195
6	Chitin and Chitosan Nanofibers: Preparation and Chemical Modifications. Molecules, 2014, 19, 18367-18380.	1.7	191
7	Fibrillation of dried chitin into 10â€“20nm nanofibers by a simple grinding method under acidic conditions. Carbohydrate Polymers, 2010, 81, 134-139.	5.1	185
8	Preparation of Chitin Nanofibers from Mushrooms. Materials, 2011, 4, 1417-1425.	1.3	173
9	Preparation of high-strength transparent chitosan film reinforced with surface-deacetylated chitin nanofibers. Carbohydrate Polymers, 2013, 98, 1198-1202.	5.1	135
10	Acetylation of Chitin Nanofibers and their Transparent Nanocomposite Films. Biomacromolecules, 2010, 11, 1326-1330.	2.6	115
11	Simple preparation method of chitin nanofibers with a uniform width of 10â€“20nm from prawn shell under neutral conditions. Carbohydrate Polymers, 2011, 84, 762-764.	5.1	115
12	Preparation and characterization of optically transparent chitin nanofiber/(meth)acrylic resin composites. Green Chemistry, 2011, 13, 1708.	4.6	95
13	Biological adhesive based on carboxymethyl chitin derivatives and chitin nanofibers. Biomaterials, 2015, 42, 20-29.	5.7	94
14	Fabrication of optically transparent chitin nanocomposites. Applied Physics A: Materials Science and Processing, 2011, 102, 325-331.	1.1	80
15	Tough and Catalytically Active Hybrid Biofibers Wet-Spun From Nanochitin Hydrogels. Biomacromolecules, 2012, 13, 4205-4212.	2.6	61
16	Favorable effects of superficially deacetylated chitin nanofibrils on the wound healing process. Carbohydrate Polymers, 2015, 123, 461-467.	5.1	61
17	Facile preparation of silver nanoparticles immobilized on chitin nanofiber surfaces to endow antifungal activities. Carbohydrate Polymers, 2015, 117, 813-817.	5.1	60
18	Effect of a silane coupling agent on the mechanical properties of a microfibrillated cellulose composite. International Journal of Biological Macromolecules, 2015, 74, 428-432.	3.6	60

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19	Preparation of zwitterionically charged nanocrystals by surface TEMPO-mediated oxidation and partial deacetylation of Î±-chitin. Carbohydrate Polymers, 2015, 122, 1-4.	5.1	56
20	Chitin Nanofiber Elucidates the Elicitor Activity of Polymeric Chitin in Plants. Frontiers in Plant Science, 2015, 6, 1098.	1.7	55
21	Preparation of chitin nanofibers by surface esterification of chitin with maleic anhydride and mechanical treatment. Carbohydrate Polymers, 2016, 153, 55-59.	5.1	55
22	Beneficial and preventive effect of chitin nanofibrils in a dextran sulfate sodium-induced acute ulcerative colitis model. Carbohydrate Polymers, 2012, 87, 1399-1403.	5.1	52
23	Mineralization of hydroxyapatite upon a unique xanthan gum hydrogel by an alternate soaking process. Carbohydrate Polymers, 2014, 102, 846-851.	5.1	52
24	Biomineralization of calcium phosphate crystals on chitin nanofiber hydrogel for bone regeneration material. Carbohydrate Polymers, 2016, 136, 964-969.	5.1	50
25	Preparation of tough hydrogels based on Î²-chitin nanofibers via NaOH treatment. Cellulose, 2014, 21, 535-540.	2.4	45
26	Î±-Chitin nanofibrils improve inflammatory and fibrosis responses in inflammatory bowel disease mice model. Carbohydrate Polymers, 2012, 90, 197-200.	5.1	42
27	Preparation and biocompatibility of a chitin nanofiber/gelatin composite film. International Journal of Biological Macromolecules, 2017, 104, 1882-1889.	3.6	41
28	Robust Nanofibrillated Cellulose Hydro/Aerogels from Benign Solution/Solvent Exchange Treatment. ACS Sustainable Chemistry and Engineering, 2018, 6, 6624-6634.	3.2	41
29	Protein/CaCO3/Chitin Nanofiber Complex Prepared from Crab Shells by Simple Mechanical Treatment and Its Effect on Plant Growth. International Journal of Molecular Sciences, 2016, 17, 1600.	1.8	39
30	Control of mechanical properties of chitin nanofiber film using glycerol without losing its characteristics. Carbohydrate Polymers, 2014, 101, 714-717.	5.1	37
31	Sustainable Chitin Nanofibrils Provide Outstanding Flame-Retardant Nanopapers. Biomacromolecules, 2019, 20, 1098-1108.	2.6	35
32	Hair growth-promoting activities of chitosan and surface-deacetylated chitin nanofibers. International Journal of Biological Macromolecules, 2019, 126, 11-17.	3.6	33
33	An oral absorbent, surface-deacetylated chitin nano-fiber ameliorates renal injury and oxidative stress in 5/6 nephrectomized rats. Carbohydrate Polymers, 2017, 161, 21-25.	5.1	32
34	Optimization of nanofibrillation degree of chitin for induction of plant disease resistance: Elicitor activity and systemic resistance induced by chitin nanofiber in cabbage and strawberry. International Journal of Biological Macromolecules, 2018, 118, 2185-2192.	3.6	32
35	Graft polymerization of acrylic acid onto chitin nanofiber to improve dispersibility in basic water. Carbohydrate Polymers, 2012, 90, 623-627.	5.1	31
36	Chitin nanofibrils suppress skin inflammation in atopic dermatitis-like skin lesions in NC/Nga mice. Carbohydrate Polymers, 2016, 146, 320-327.	5.1	31

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37	Enzymatic hydrolysis of chitin pretreated by rapid depressurization from supercritical 1,1,1,2-tetrafluoroethane toward highly acetylated oligosaccharides. Bioresource Technology, 2016, 209, 180-186.	4.8	31
38	Preparation of highly chemoselective N-phthaloyl chitosan in aqueous media. Green Chemistry, 2011, 13, 1499.	4.6	30
39	Crystal defects induced by chitin and chitinolytic enzymes in the prismatic layer of Pinctada fucata. Biochemical and Biophysical Research Communications, 2017, 489, 89-95.	1.0	30
40	Preparation of polysilsesquioxane-urethaneacrylate copolymer film reinforced with chitin nanofibers. Carbohydrate Polymers, 2012, 89, 865-869.	5.1	29
41	Depolymerization of sulfated polysaccharides under hydrothermal conditions. Carbohydrate Research, 2014, 384, 56-60.	1.1	28
42	A short synthesis of highly soluble chemoselective chitosan derivatives via â€œclick chemistryâ€. Carbohydrate Polymers, 2012, 90, 1182-1186.	5.1	27
43	Oral Administration of Surface-Deacetylated Chitin Nanofibers and Chitosan Inhibit 5-Fluorouracil-Induced Intestinal Mucositis in Mice. International Journal of Molecular Sciences, 2017, 18, 279.	1.8	24
44	Improving nitrogen uptake efficiency by chitin nanofiber promotes growth in tomato. International Journal of Biological Macromolecules, 2020, 151, 1322-1331.	3.6	24
45	Highly Mineralized Biomimetic Polysaccharide Nanofiber Materials Using Enzymatic Mineralization. Biomacromolecules, 2020, 21, 2176-2186.	2.6	24
46	Bio-based epoxy/chitin nanofiber composites cured with amine-type hardeners containing chitosan. Carbohydrate Polymers, 2016, 144, 89-97.	5.1	23
47	Effects of Surface-Deacetylated Chitin Nanofibers in an Experimental Model of Hypercholesterolemia. International Journal of Molecular Sciences, 2015, 16, 17445-17455.	1.8	22
48	Biomaterials based on freeze dried surface-deacetylated chitin nanofibers reinforced with sulfobutyl ether Î²-cyclodextrin gel in wound dressing applications. International Journal of Pharmaceutics, 2016, 511, 1080-1087.	2.6	22
49	Chitin biological extraction from shrimp wastes and its fibrillation for elastic nanofiber sheets preparation. Carbohydrate Polymers, 2019, 213, 112-120.	5.1	22
50	Preparation of Chitin Nanofibers from Dry Chitin Powder by Star Burst System: Dependence on Number of Passes. Journal of Chitin and Chitosan Science, 2013, 1, 59-64.	0.3	22
51	Characterization of Chitosan Nanofiber Sheets for Antifungal Application. International Journal of Molecular Sciences, 2015, 16, 26202-26210.	1.8	19
52	Nanofibrillation enhances the protective effect of crab shells against Fusarium wilt disease in tomato. International Journal of Biological Macromolecules, 2019, 128, 22-27.	3.6	19
53	Preparation of highly regioselective amphiprotic chitosan derivative via â€œclick chemistryâ€. International Journal of Biological Macromolecules, 2013, 52, 72-76.	3.6	18
54	Disease resistance and growth promotion activities of chitin/cellulose nanofiber from spent mushroom substrate to plant. Carbohydrate Polymers, 2022, 284, 119233.	5.1	18

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55	Biobased Wrinkled Surfaces Induced by Wood Mimetic Skins upon Drying: Effect of Mechanical Properties on Wrinkle Morphology. Langmuir, 2016, 32, 12799-12804.	1.6	17
56	Fabrication of Cellulose Nanofibers from Parenchyma Cells of Pears and Apples. Journal of Fiber Science and Technology, 2011, 67, 86-90.	0.0	16
57	Effects of Oral Administration of Chitin Nanofiber on Plasma Metabolites and Gut Microorganisms. International Journal of Molecular Sciences, 2015, 16, 21931-21949.	1.8	16
58	Preparation of a proteinâ€"chitin nanofiber complex from crab shells and its application as a reinforcement filler or substrate for biomineralization. RSC Advances, 2015, 5, 64196-64201.	1.7	16
59	Bioâ€based Wrinkled Surfaces Harnessed from Biological Design Principles of Wood and Peroxidase Activity. ChemSusChem, 2015, 8, 3892-3896.	3.6	15
60	Protective Effect of Chitin Urocanate Nanofibers against Ultraviolet Radiation. Marine Drugs, 2015, 13, 7463-7475.	2.2	15
61	Surface-deacetylated chitin nanofibers reinforced with a sulfobutyl ether Î²-cyclodextrin gel loaded with prednisolone as potential therapy for inflammatory bowel disease. Carbohydrate Polymers, 2017, 174, 1087-1094.	5.1	15
62	Application of Bio-Based Wrinkled Surfaces as Cell Culture Scaffolds. Colloids and Interfaces, 2018, 2, 15.	0.9	15
63	Thermo-mechanically improved polyvinyl alcohol composite films using maleated chitin nanofibers as nano-reinforcement. Cellulose, 2021, 28, 2965-2980.	2.4	15
64	Effect of Grinder Pretreatment for Easy Disintegration of Chitin into Nanofiber. Journal of Nanoscience and Nanotechnology, 2017, 17, 5037-5041.	0.9	14
65	Surface-Deacetylated Chitin Nano-Fiber/Hyaluronic Acid Composites as Potential Antioxidative Compounds for Use in Extended-Release Matrix Tablets. International Journal of Molecular Sciences, 2015, 16, 24707-24717.	1.8	13
66	Facile preparation of cyclodextrin-grafted chitosans and their conversion into nanoparticles for an anticancer drug delivery system. Polymer Journal, 2016, 48, 203-207.	1.3	13
67	Production of chitin nanoparticles by bottom-up approach from alkaline chitin solution. International Journal of Biological Macromolecules, 2022, 210, 123-127.	3.6	12
68	Effects of surface-deacetylated chitin nanofibers on non-alcoholic steatohepatitis model rats and their gut microbiota. International Journal of Biological Macromolecules, 2020, 164, 659-666.	3.6	11
69	Formation of Elastic Gels from Deacetylated Chitin Nanofibers Reinforced with Sulfobutyl Ether Î²-Cyclodextrin. Chemistry Letters, 2015, 44, 285-287.	0.7	10
70	Salinityâ€dependent toxicity of waterâ€dispersible, singleâ€walled carbon nanotubes to Japanese medaka embryos. Journal of Applied Toxicology, 2017, 37, 408-416.	1.4	10
71	Polysaccharide-based wrinkled surfaces induced by polyion complex skin layers upon drying. Polymer Journal, 2019, 51, 675-683.	1.3	9
72	Nanofibers based on chitin: a new functional food. Pure and Applied Chemistry, 2016, 88, 605-619.	0.9	8

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73	Preparation and evaluation of freeze dried surface-deacetylated chitin nanofiber/sacran pellets for use as an extended-release excipient. International Journal of Biological Macromolecules, 2019, 124, 888-894.	3.6	8
74	Preparation of chitosan nanofibers from completely deacetylated chitosan powder by a downsizing process. International Journal of Biological Macromolecules, 2015, 72, 1191-1195.	3.6	7
75	Fully Biobased Oligophenolic Nanoparticle Prepared by Horseradish Peroxidase-catalyzed Polymerization. Chemistry Letters, 2016, 45, 631-633.	0.7	7
76	Wood-mimetic skins prepared using horseradish peroxidase catalysis to induce surface wrinkling of chitosan film upon drying. Carbohydrate Polymers, 2017, 173, 519-525.	5.1	7
77	Discrimination of Anionic Polysaccharides via Monomer-Excimer Switching and Photo-Induced Colorimetric Reaction of 1-Methyl-3-(<i>N</i>-(1,8-naphthalimidyl)ethyl)imidazolium. Bulletin of the Chemical Society of Japan, 2018, 91, 1220-1225.	2.0	7
78	Hierarchical surface wrinkles and bumps generated on chitosan films having double-skin layers comprising topmost carrageenan layers and polyion complex layers. Carbohydrate Polymers, 2022, 284, 119224.	5.1	7
79	Guanidinylation of Chitooligosaccharides Involving Internal Cyclization of the Guanidino Group on the Reducing End and Effect of Guanidinylation on Protein Binding Ability. Biomolecules, 2019, 9, 259.	1.8	6
80	Guanidinylated chitosan inspired by arginine-rich cell-penetrating peptides. International Journal of Biological Macromolecules, 2019, 125, 901-905.	3.6	6
81	Unique Photophysical Properties of 1,8-Naphthalimide Derivatives: Generation of Semi-stable Radical Anion Species by Photo-Induced Electron Transfer from a Carboxy Group. ACS Omega, 2021, 6, 13456-13465.	1.6	6
82	Optimum Preparation Conditions for Highly Individualized Chitin Nanofibers Using Ultrasonic Generator. Polymers, 2021, 13, 2501.	2.0	6
83	Nanofibrillation is an Effective Method to Produce Chitin Derivatives for Induction of Plant Responses in Soybean. Plants, 2020, 9, 810.	1.6	5
84	Dyeing of chitin nanofibers with reactive dyes and preparation of their sheets and nanofiber/resin composites. Cellulose, 2022, 29, 2829-2837.	2.4	5
85	Biological Properties of the Aggregated Form of Chitosan Magnetic Nanoparticle. In Vivo, 2020, 34, 1729-1738.	0.6	3
86	Optically transparent silk fibroin nanofiber paper maintaining native Î2-sheet secondary structure obtained by cyclic mechanical nanofibrillation process. Materials Today Communications, 2021, 29, 102895.	0.9	3
87	Preparation and recycling property of nanofiber-reinforced polystyrene molded product using the emulsion-forming ability of chitin nanofibers. Polymer Journal, 2022, 54, 615-621.	1.3	3
88	Surface Wrinkles Induced on Oriented Chitosan Films via Horseradish Peroxidase-catalyzed Reaction and Drying. Chemistry Letters, 2021, 50, 252-255.	0.7	2
89	Optimization of Chitin Nanofiber Preparation by Ball Milling as Filler for Composite Resin. Journal of Composites Science, 2022, 6, 197.	1.4	1
90	Improvement of Bread-Making Quality by Chitin-Nanofibers Added to Wheat Flour. Journal of the Japanese Society for Food Science and Technology, 2016, 63, 18-24.	0.1	0

#	Article	IF	Citations
91	Preparation of Chitin Nanofiber and Its Derivatives from Crab Shell and Their Efficient Biological Properties. Advances in Polymer Science, 2021, , 301-318.	0.4	0
92	Synthesis of Metal Nanoparticles Templated by Bio-nanofibers. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2010, 18, 108-113.	0.0	0
93	Biological Properties and Commercial Applications of Chitin Nanofibers from Crab Shell. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2020, 71, 405-407.	0.1	0
94	Drying-Induced Surface Wrinkles Generated on Chitosan Films Having Polyion Complex Skin Layers: Effects of Physical Properties of Skin Layers and Substrates on Surface Wrinkling upon Drying. Bulletin of the Chemical Society of Japan, 2022, 95, 1289-1295.	2.0	0