Shinsuke Ifuku

List of Publications by Year in Descending Order

93 papers	3,686 citations	29 h-index	59 g-index
98 ext. papers	4,140 ext. citations	6.8 avg, IF	5.56 L-index

#	Paper	IF	Citations
93	Disease resistance and growth promotion activities of chitin/cellulose nanofiber from spent mushroom substrate to plant.. *Carbohydrate Polymers*, **2022**, 284, 119233	10.3	3
92	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	10.3	1
91	Production of chitin nanoparticles by bottom-up approach from alkaline chitin solution.. *International Journal of Biological Macromolecules*, **2022**, 210, 123-127	7.9	0
90	Optically transparent silk fibroin nanofiber paper maintaining native β-sheet secondary structure obtained by cyclic mechanical nanofibrillation process. *Materials Today Communications*, **2021**, 29, 102895	3.5	0
89	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	3.9	1
88	Preparation of Chitin Nanofiber and Its Derivatives from Crab Shell and Their Efficient Biological Properties. *Advances in Polymer Science*, **2021**, 301-318	1.3	
87	Surface Wrinkles Induced on Oriented Chitosan Films via Horseradish Peroxidase-catalyzed Reaction and Drying. *Chemistry Letters*, **2021**, 50, 252-255	1.7	1
86	Thermo-mechanically improved polyvinyl alcohol composite films using maleated chitin nanofibers as nano-reinforcement. *Cellulose*, **2021**, 28, 2965-2980	5.5	3
85	Optimum Preparation Conditions for Highly Individualized Chitin Nanofibers Using Ultrasonic Generator. *Polymers*, **2021**, 13,	4.5	1
84	Biological Properties of the Aggregated Form of Chitosan Magnetic Nanoparticle. *In Vivo*, **2020**, 34, 1729-1738	2.5	0
83	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	
82	Improving nitrogen uptake efficiency by chitin nanofiber promotes growth in tomato. *International Journal of Biological Macromolecules*, **2020**, 151, 1322-1331	7.9	13
81	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	7.9	7
80	Biomedical Applications of Chitin Nanofibers **2020**, 841-854		
79	Highly Mineralized Biomimetic Polysaccharide Nanofiber Materials Using Enzymatic Mineralization. *Biomacromolecules*, **2020**, 21, 2176-2186	6.9	10
78	Nanofibrillation enhances the protective effect of crab shells against Fusarium wilt disease in tomato. *International Journal of Biological Macromolecules*, **2019**, 128, 22-27	7.9	8
77	Polysaccharide-based wrinkled surfaces induced by polyion complex skin layers upon drying. *Polymer Journal*, **2019**, 51, 675-683	2.7	6

76	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,	5.9	1
75	Chitin biological extraction from shrimp wastes and its fibrillation for elastic nanofiber sheets preparation. *Carbohydrate Polymers*, **2019**, 213, 112-120	10.3	14
74	Hair growth-promoting activities of chitosan and surface-deacetylated chitin nanofibers. *International Journal of Biological Macromolecules*, **2019**, 126, 11-17	7.9	18
73	Guanidinylated chitosan inspired by arginine-rich cell-penetrating peptides. *International Journal of Biological Macromolecules*, **2019**, 125, 901-905	7.9	3
72	Sustainable Chitin Nanofibrils Provide Outstanding Flame-Retardant Nanopapers. *Biomacromolecules*, **2019**, 20, 1098-1108	6.9	24
71	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	7.9	6
70	Robust Nanofibrillated Cellulose Hydro/Aerogels from Benign Solution/Solvent Exchange Treatment. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 6624-6634	8.3	22
69	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	7.9	18
68	Application of Bio-Based Wrinkled Surfaces as Cell Culture Scaffolds. *Colloids and Interfaces*, **2018**, 2, 15	3	11
67	Retraction: Azuma, K. et al. Chitin, Chitosan, and Its Derivatives for Wound Healing: Old and New Materials. J. Funct. Biomater. 2015, 6, 104?142. *Journal of Functional Biomaterials*, **2018**, 9,	4.8	5
66	Discrimination of Anionic Polysaccharides via Monomer-Excimer Switching and Photo-Induced Colorimetric Reaction of 1-Methyl-3-(N-(1,8-naphthalimidyl)ethyl)imidazolium. *Bulletin of the Chemical Society of Japan*, **2018**, 91, 1220-1225	5.1	7
65	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	10.3	24
64	Preparation and biocompatibility of a chitin nanofiber/gelatin composite film. *International Journal of Biological Macromolecules*, **2017**, 104, 1882-1889	7.9	29
63	Wood-mimetic skins prepared using horseradish peroxidase catalysis to induce surface wrinkling of chitosan film upon drying. *Carbohydrate Polymers*, **2017**, 173, 519-525	10.3	6
62	Crystal defects induced by chitin and chitinolytic enzymes in the prismatic layer of Pinctada fucata. *Biochemical and Biophysical Research Communications*, **2017**, 489, 89-95	3.4	16
61	Effect of Grinder Pretreatment for Easy Disintegration of Chitin into Nanofiber. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 5037-5041	1.3	10
60	Oral Administration of Surface-Deacetylated Chitin Nanofibers and Chitosan Inhibit 5-Fluorouracil-Induced Intestinal Mucositis in Mice. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	16
59	Surface-deacetylated chitin nanofibers reinforced with a sulfobutyl ether Ecyclodextrin gel loaded with prednisolone as potential therapy for inflammatory bowel disease. *Carbohydrate Polymers*, **2017**, 174, 1087-1094	10.3	10

58	Salinity-dependent toxicity of water-dispersible, single-walled carbon nanotubes to Japanese medaka embryos. *Journal of Applied Toxicology*, **2017**, 37, 408-416	4.1	7
57	Facile preparation of cyclodextrin-grafted chitosans and their conversion into nanoparticles for an anticancer drug delivery system. *Polymer Journal*, **2016**, 48, 203-207	2.7	8
56	Preparation of chitin nanofibers by surface esterification of chitin with maleic anhydride and mechanical treatment. *Carbohydrate Polymers*, **2016**, 153, 55-59	10.3	34
55	Nanofibers based on chitin: a new functional food. *Pure and Applied Chemistry*, **2016**, 88, 605-619	2.1	7
54	Fully Biobased Oligophenolic Nanoparticle Prepared by Horseradish Peroxidase-catalyzed Polymerization. *Chemistry Letters*, **2016**, 45, 631-633	1.7	7
53	Bio-based epoxy/chitin nanofiber composites cured with amine-type hardeners containing chitosan. *Carbohydrate Polymers*, **2016**, 144, 89-97	10.3	18
52	Enzymatic hydrolysis of chitin pretreated by rapid depressurization from supercritical 1,1,1,2-tetrafluoroethane toward highly acetylated oligosaccharides. *Bioresource Technology*, **2016**, 209, 180-6	11	26
51	Biomineralization of calcium phosphate crystals on chitin nanofiber hydrogel for bone regeneration material. *Carbohydrate Polymers*, **2016**, 136, 964-9	10.3	43
50	Protein/CaCO$_3$/Chitin Nanofiber Complex Prepared from Crab Shells by Simple Mechanical Treatment and Its Effect on Plant Growth. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	23
49	Biobased Wrinkled Surfaces Induced by Wood Mimetic Skins upon Drying: Effect of Mechanical Properties on Wrinkle Morphology. *Langmuir*, **2016**, 32, 12799-12804	4	15
48	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	0.2	
47	Chitin nanofibrils suppress skin inflammation in atopic dermatitis-like skin lesions in NC/Nga mice. *Carbohydrate Polymers*, **2016**, 146, 320-7	10.3	22
46	Biomaterials based on freeze dried surface-deacetylated chitin nanofibers reinforced with sulfobutyl ether β-cyclodextrin gel in wound dressing applications. *International Journal of Pharmaceutics*, **2016**, 511, 1080-7	6.5	20
45	Effect of a silane coupling agent on the mechanical properties of a microfibrillated cellulose composite. *International Journal of Biological Macromolecules*, **2015**, 74, 428-32	7.9	46
44	Favorable effects of superficially deacetylated chitin nanofibrils on the wound healing process. *Carbohydrate Polymers*, **2015**, 123, 461-7	10.3	50
43	Bioactive gyroid scaffolds formed by sacrificial templating of nanocellulose and nanochitin hydrogels as instructive platforms for biomimetic tissue engineering. *Advanced Materials*, **2015**, 27, 2989-95	24	169
42	Preparation of a protein–chitin nanofiber complex from crab shells and its application as a reinforcement filler or substrate for biomineralization. *RSC Advances*, **2015**, 5, 64196-64201	3.7	12
41	Biological adhesive based on carboxymethyl chitin derivatives and chitin nanofibers. *Biomaterials*, **2015**, 42, 20-9	15.6	73

40	Formation of Elastic Gels from Deacetylated Chitin Nanofibers Reinforced with Sulfobutyl Ether β-Cyclodextrin. *Chemistry Letters*, **2015**, 44, 285-287	1.7	10
39	Bio-based Wrinkled Surfaces Harnessed from Biological Design Principles of Wood and Peroxidase Activity. *ChemSusChem*, **2015**, 8, 3892-6	8.3	14
38	Effects of Oral Administration of Chitin Nanofiber on Plasma Metabolites and Gut Microorganisms. *International Journal of Molecular Sciences*, **2015**, 16, 21931-49	6.3	13
37	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, 24707-17	6.3	11
36	Protective Effect of Chitin Urocanate Nanofibers against Ultraviolet Radiation. *Marine Drugs*, **2015**, 13, 7463-75	6	11
35	Effects of Surface-Deacetylated Chitin Nanofibers in an Experimental Model of Hypercholesterolemia. *International Journal of Molecular Sciences*, **2015**, 16, 17445-55	6.3	17
34	Chitin Nanofiber Elucidates the Elicitor Activity of Polymeric Chitin in Plants. *Frontiers in Plant Science*, **2015**, 6, 1098	6.2	34
33	Characterization of Chitosan Nanofiber Sheets for Antifungal Application. *International Journal of Molecular Sciences*, **2015**, 16, 26202-10	6.3	17
32	Chitin, chitosan, and its derivatives for wound healing: old and new materials. *Journal of Functional Biomaterials*, **2015**, 6, 104-42	4.8	227
31	Facile preparation of silver nanoparticles immobilized on chitin nanofiber surfaces to endow antifungal activities. *Carbohydrate Polymers*, **2015**, 117, 813-817	10.3	46
30	Preparation of zwitterionically charged nanocrystals by surface TEMPO-mediated oxidation and partial deacetylation of β-chitin. *Carbohydrate Polymers*, **2015**, 122, 1-4	10.3	36
29	Preparation of chitosan nanofibers from completely deacetylated chitosan powder by a downsizing process. *International Journal of Biological Macromolecules*, **2015**, 72, 1191-5	7.9	5
28	Control of mechanical properties of chitin nanofiber film using glycerol without losing its characteristics. *Carbohydrate Polymers*, **2014**, 101, 714-7	10.3	32
27	Preparation of tough hydrogels based on β-chitin nanofibers via NaOH treatment. *Cellulose*, **2014**, 21, 535-540	5.5	40
26	Depolymerization of sulfated polysaccharides under hydrothermal conditions. *Carbohydrate Research*, **2014**, 384, 56-60	2.9	22
25	Chitin and chitosan nanofibers: preparation and chemical modifications. *Molecules*, **2014**, 19, 18367-80	4.8	155
24	Mineralization of hydroxyapatite upon a unique xanthan gum hydrogel by an alternate soaking process. *Carbohydrate Polymers*, **2014**, 102, 846-51	10.3	42
23	Preparation of high-strength transparent chitosan film reinforced with surface-deacetylated chitin nanofibers. *Carbohydrate Polymers*, **2013**, 98, 1198-202	10.3	107

22	Preparation of highly regioselective amphiprotic chitosan derivative via "click chemistry". *International Journal of Biological Macromolecules*, **2013**, 52, 72-6	7.9	15
21	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		17
20	Preparation of polysilsesquioxane-urethaneacrylate copolymer film reinforced with chitin nanofibers. *Carbohydrate Polymers*, **2012**, 89, 865-9	10.3	28
19	Chitin nanofibrils improve inflammatory and fibrosis responses in inflammatory bowel disease mice model. *Carbohydrate Polymers*, **2012**, 90, 197-200	10.3	35
18	Graft polymerization of acrylic acid onto chitin nanofiber to improve dispersibility in basic water. *Carbohydrate Polymers*, **2012**, 90, 623-7	10.3	29
17	A short synthesis of highly soluble chemoselective chitosan derivatives via "click chemistry". *Carbohydrate Polymers*, **2012**, 90, 1182-6	10.3	23
16	Tough and catalytically active hybrid biofibers wet-spun from nanochitin hydrogels. *Biomacromolecules*, **2012**, 13, 4205-12	6.9	47
15	Chitin nanofibers: preparations, modifications, and applications. *Nanoscale*, **2012**, 4, 3308-3318	7.7	317
14	Beneficial and preventive effect of chitin nanofibrils in a dextran sulfate sodium-induced acute ulcerative colitis model. *Carbohydrate Polymers*, **2012**, 87, 1399-1403	10.3	47
13	Preparation and characterization of optically transparent chitin nanofiber/(meth)acrylic resin composites. *Green Chemistry*, **2011**, 13, 1708	10	86
12	Fabrication of Cellulose Nanofibers from Parenchyma Cells of Pears and Apples. *Journal of Fiber Science and Technology*, **2011**, 67, 86-90	0	14
11	Preparation of Chitin Nanofibers from Mushrooms. *Materials*, **2011**, 4, 1417-1425	3.5	139
10	Preparation of highly chemoselective N-phthaloyl chitosan in aqueous media. *Green Chemistry*, **2011**, 13, 1499	10	24
9	Fabrication of optically transparent chitin nanocomposites. *Applied Physics A: Materials Science and Processing*, **2011**, 102, 325-331	2.6	68
8	Simple preparation method of chitin nanofibers with a uniform width of 10–20nm from prawn shell under neutral conditions. *Carbohydrate Polymers*, **2011**, 84, 762-764	10.3	103
7	Acetylation of chitin nanofibers and their transparent nanocomposite films. *Biomacromolecules*, **2010**, 11, 1326-30	6.9	100
6	Fibrillation of dried chitin into 10–20nm nanofibers by a simple grinding method under acidic conditions. *Carbohydrate Polymers*, **2010**, 81, 134-139	10.3	165
5	Synthesis of Metal Nanoparticles Templated by Bio-nanofibers. *Hosokawa Powder Technology Foundation ANNUAL REPORT*, **2010**, 18, 108-113	0	

4	Preparation of chitin nanofibers with a uniform width as alpha-chitin from crab shells. *Biomacromolecules*, **2009**, 10, 1584-8	6.9	380
3	Surface modification of bacterial cellulose nanofibers for property enhancement of optically transparent composites: dependence on acetyl-group DS. *Biomacromolecules*, **2007**, 8, 1973-8	6.9	333
2	Preparation and recycling property of nanofiber-reinforced polystyrene molded product using the emulsion-forming ability of chitin nanofibers. *Polymer Journal*,	2.7	2
1	Dyeing of chitin nanofibers with reactive dyes and preparation of their sheets and nanofiber/resin composites. *Cellulose*,1	5.5	1