Yimin Fan

List of Publications by Year in Descending Order

82 papers	2,528 citations	25 h-index	49 g-index
88 ext. papers	3,163 ext. citations	7.9 avg, IF	5.51 L-index

#	Paper	IF	Citations
82	A honeycomb-like hydrogel in-situ constructed by Streptococcus zooepidemicus and TOCN for the proliferation of bacteria.. *Carbohydrate Polymers*, **2022**, 281, 119099	10.3	0
81	Re-dispersible chitin nanofibrils with improved stability in green solvents for fabricating hydrophobic aerogels.. *Carbohydrate Polymers*, **2022**, 283, 119138	10.3	1
80	Shape-recoverable, piezoresistive, and thermally insulated xerogels based on nanochitin-stabilized Pickering foams.. *Carbohydrate Polymers*, **2022**, 278, 118934	10.3	0
79	A high-throughput microfluidic diploid yeast long-term culturing (DYLC) chip capable of bud reorientation and concerted daughter dissection for replicative lifespan determination.. *Journal of Nanobiotechnology*, **2022**, 20, 171	9.4	1
78	Facile route to tri-carboxyl chitin nanocrystals from di-aldehyde chitin modified by selective periodate oxidation.. *International Journal of Biological Macromolecules*, **2022**, 211, 281-288	7.9	0
77	Removal of inhibitory furan aldehydes in lignocellulosic hydrolysates via chitosan-chitin nanofiber hybrid hydrogel beads.. *Bioresource Technology*, **2021**, 346, 126563	11	0
76	Real-Time Monitoring of Dissection Events of Single Budding Yeast in a Microfluidic Cell-Culturing Device Integrated With Electrical Impedance Biosensor. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 783428	5.8	0
75	Top-down extraction of surface carboxylated-silk nanocrystals and application in hydrogel preparation. *International Journal of Biological Macromolecules*, **2021**, 174, 162-174	7.9	1
74	Fabrication of glycerophosphate-based nanochitin hydrogels for prolonged release under in vitro physiological conditions. *Cellulose*, **2021**, 28, 4887-4897	5.5	2
73	Rate-Limited Reaction in TEMPO/Laccase/O Oxidation of Cellulose. *Macromolecular Rapid Communications*, **2021**, 42, e2000501	4.8	2
72	Facile and sustainable etherification of ethyl cellulose towards excellent UV blocking and fluorescence properties. *Green Chemistry*, **2021**, 23, 479-489	10	9
71	Preparation of Amyloid Fibrils Using Recombinant Technology. *Methods in Molecular Biology*, **2021**, 2347, 113-121	1.4	
70	Methods to Synthesize and Assemble Recombinant Keratins. *Methods in Molecular Biology*, **2021**, 2347, 105-112	1.4	
69	A combination of aqueous counter collision and TEMPO-mediated oxidation for doubled carboxyl contents of □chitin nanofibers. *Cellulose*, **2021**, 28, 2167-2181	5.5	6
68	Structure of Keratin. *Methods in Molecular Biology*, **2021**, 2347, 41-53	1.4	3
67	A microfluidic single-cell array for in situ laminar-flow-based comparative culturing of budding yeast cells. *Talanta*, **2021**, 231, 122401	6.2	3
66	Contribution of lignin in esterified lignocellulose nanofibers (LCNFs) prepared by deep eutectic solvent treatment to the interface compatibility of LCNF/PLA composites. *Industrial Crops and Products*, **2021**, 166, 113460	5.9	7

65	An optimized preparation of nanofiber hydrogels derived from natural carbohydrate polymers and their drug release capacity under different pH surroundings. *Carbohydrate Polymers*, **2021**, 265, 118008	10.3	12
64	One-Step Preparation of Chitin Nanofiber Dispersion in Full pH Surroundings Using Recyclable Solid Oxalic Acid and Evaluation of Redispersed Performance. *Biomacromolecules*, **2021**, 22, 4373-4382	6.9	2
63	TEMPO-oxidized nanochitin based hydrogels and inter-structure tunable cryogels prepared by sequential chemical and physical crosslinking. *Carbohydrate Polymers*, **2021**, 272, 118495	10.3	3
62	Structure of Animal Silks. *Methods in Molecular Biology*, **2021**, 2347, 3-15	1.4	
61	Chirality from Cryo-Electron Tomograms of Nanocrystals Obtained by Lateral Disassembly and Surface Etching of Never-Dried Chitin. *ACS Nano*, **2020**, 14, 6921-6930	16.7	17
60	Visualization and improvement of the physical gelation process during gas phase coagulation through acid–base indicator staining, monitoring and optimization. *Cellulose*, **2020**, 27, 6871-6886	5.5	4
59	Facile preparation of nanochitins via acid assisted colloid milling in glycerol. *Cellulose*, **2020**, 27, 6935-6944	5.5	3
58	Preparation of Silk Nanowhisker-Composited Amphoteric Cellulose/Chitin Nanofiber Membranes. *Biomacromolecules*, **2020**, 21, 1625-1635	6.9	13
57	Preparation of Natural Multicompatible Silk Nanofibers by Green Deep Eutectic Solvent Treatment. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 4499-4510	8.3	11
56	Comparison of cast films and hydrogels based on chitin nanofibers prepared using TEMPO/NaBr/NaClO and TEMPO/NaClO/NaClO systems. *Carbohydrate Polymers*, **2020**, 237, 116125	10.3	16
55	Lignin-Directed Control of Silver Nanoparticles with Tunable Size in Porous Lignocellulose Hydrogels and Their Application in Catalytic Reduction. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 12655-12663	8.3	29
54	Influence of Chemical and Enzymatic TEMPO-Mediated Oxidation on Chemical Structure and Nanofibrillation of Lignocellulose. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 14198-14206	8.3	10
53	Arabinogalactans from Larix principis-rupprechtii: An investigation into the structure-function contribution of side-chain structures. *Carbohydrate Polymers*, **2020**, 227, 115354	10.3	9
52	Strengthened cellulosic gels by the chemical gelation of cellulose via crosslinking with TEOS. *Cellulose*, **2019**, 26, 9819-9829	5.5	8
51	Construction of arabinogalactans/selenium nanoparticles composites for enhancement of the antitumor activity. *International Journal of Biological Macromolecules*, **2019**, 128, 444-451	7.9	35
50	High Axial Ratio Nanochitins for Ultrastrong and Shape-Recoverable Hydrogels and Cryogels via Ice Templating. *ACS Nano*, **2019**, 13, 2927-2935	16.7	41
49	Multiplexing microelectrodes for dielectrophoretic manipulation and electrical impedance measurement of single particles and cells in a microfluidic device. *Electrophoresis*, **2019**, 40, 1436-1445	3.6	3
48	Preparation of natural amphoteric silk nanofibers by acid hydrolysis. *Journal of Materials Chemistry B*, **2019**, 7, 1450-1459	7.3	17

47	DDA (degree of deacetylation) and pH-dependent antibacterial properties of chitin nanofibers against Escherichia coli. *Cellulose*, **2019**, 26, 2279-2290	5.5	11
46	Physical nanochitin/microemulsion composite hydrogels for hydrophobic Nile Red release under in vitro physiological conditions. *Cellulose*, **2019**, 26, 1221-1230	5.5	5
45	Contribution of hemicellulose to cellulose nanofiber-based nanocomposite films with enhanced strength, flexibility and UV-blocking properties. *Cellulose*, **2019**, 26, 6023-6034	5.5	29
44	Biocatalyzed route for the preparation of surface-deacetylated chitin nanofibers. *Green Chemistry*, **2019**, 21, 3143-3151	10	18
43	A comparative study of lignocellulosic nanofibrils isolated from celery using oxalic acid hydrolysis followed by sonication and mechanical fibrillation. *Cellulose*, **2019**, 26, 5237-5246	5.5	15
42	Sulfated modification of arabinogalactans from Larix principis-rupprechtii and their antitumor activities. *Carbohydrate Polymers*, **2019**, 215, 207-212	10.3	14
41	High-purity lignin isolated from poplar wood meal through dissolving treatment with deep eutectic solvents. *Royal Society Open Science*, **2019**, 6, 181757	3.3	43
40	Self-Assembled Networks of Short and Long Chitin Nanoparticles for Oil/Water Interfacial Superstabilization. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 6497-6511	8.3	61
39	Improving the enzymatic hydrolysis of larch by coupling water pre-extraction with alkaline hydrogen peroxide post-treatment and adding enzyme cocktail. *Bioresource Technology*, **2019**, 285, 121322	11	6
38	Oxidizing and Nano-dispersing the Natural Silk Fibers. *Nanoscale Research Letters*, **2019**, 14, 250	5	3
37	Investigation of Pretreatment Methods for Improving TEMPO-Mediated Oxidation and Nanofibrillation Efficiency of □Chitin. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 19463-19473	8.3	14
36	High-yield preparation of cellulose nanofiber by small quantity acid assisted milling in glycerol. *Cellulose*, **2019**, 26, 3735-3745	5.5	12
35	Preparation of High-Strength Sustainable Lignocellulose Gels and Their Applications for Antiultraviolet Weathering and Dye Removal. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 2998-3009	8.3	41
34	Preparation of nanocellulose/filter paper (NC/FP) composite membranes for high-performance filtration. *Cellulose*, **2019**, 26, 1183-1194	5.5	24
33	Contribution of lignin to the microstructure and physical performance of three-dimensional lignocellulose hydrogels. *Cellulose*, **2019**, 26, 2375-2388	5.5	24
32	Upgrading Pectin Production from Apple Pomace by Acetic Acid Extraction. *Applied Biochemistry and Biotechnology*, **2019**, 187, 1300-1311	3.2	18
31	Synthesis and Characterization of an Antioxidative Galactomannan?Iron(III) Complex from Seed. *Polymers*, **2018**, 11,	4.5	8
30	Chitin nanocrystals prepared by oxidation of □chitin using the O/laccase/TEMPO system. *Carbohydrate Polymers*, **2018**, 189, 178-183	10.3	37

29	Adsorption of Reactive Blue 19 from aqueous solution by chitin nanofiber-/nanowhisker-based hydrogels.. *RSC Advances*, **2018**, 8, 15804-15812	3.7	26
28	Tensan Silk-Inspired Hierarchical Fibers for Smart Textile Applications. *ACS Nano*, **2018**, 12, 6968-6977	16.7	69
27	Characterization of arabinogalactans from Larix principis-rupprechtii and their effects on NO production by macrophages. *Carbohydrate Polymers*, **2018**, 200, 408-415	10.3	25
26	Salt-Induced Colloidal Destabilization, Separation, Drying, and Redispersion in Aqueous Phase of Cationic and Anionic Nanochitins. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 9189-9198	5.7	13
25	Hypolipidemic activities of partially deacetylated □chitin nanofibers/nanowhiskers in mice. *Food and Nutrition Research*, **2018**, 62,	3.1	8
24	Synthesis of lignocellulose-based composite hydrogel as a novel biosorbent for Cu2+ removal. *Cellulose*, **2018**, 25, 7315-7328	5.5	26
23	Preparation and Hydrogel Properties of pH-Sensitive Amphoteric Chitin Nanocrystals. *Journal of Agricultural and Food Chemistry*, **2018**, 66, 11372-11379	5.7	19
22	Self-assembling oxidized silk fibroin nanofibrils with controllable fractal dimensions. *Journal of Materials Chemistry B*, **2018**, 6, 4656-4664	7.3	9
21	Biopolymer nanofibrils: structure, modeling, preparation, and applications. *Progress in Polymer Science*, **2018**, 85, 1-56	29.6	183
20	Cellulose Nanofibers Prepared Using the TEMPO/Laccase/O System. *Biomacromolecules*, **2017**, 18, 288-294	5.9	58
19	TEMPO/Laccase/O2 Oxidation of Native Cellulose for the Preparation of Cellulose Nanofibers. *ACS Symposium Series*, **2017**, 191-201	0.4	1
18	Versatile protonic acid mediated preparation of partially deacetylated chitin nanofibers/nanowhiskers and their assembling of nano-structured hydro- and aero-gels. *Cellulose*, **2017**, 24, 5443-5454	5.5	8
17	Dissolution of Lignocelluloses with a High Lignin Content in a N-Methylmorpholine-N-oxide Monohydrate Solvent System via Simple Glycerol-Swelling and Mechanical Pretreatments. *Journal of Agricultural and Food Chemistry*, **2017**, 65, 9587-9594	5.7	30
16	Preparation of 3D printable micro/nanocellulose-polylactic acid (MNC/PLA) composite wire rods with high MNC constitution. *Industrial Crops and Products*, **2017**, 109, 889-896	5.9	46
15	Sustainable thermoplastic elastomers derived from cellulose, fatty acid and furfural via ATRP and click chemistry. *Carbohydrate Polymers*, **2017**, 176, 83-90	10.3	24
14	Fungal chitosan production using xylose rich of corn stover prehydrolysate by Rhizopus oryzae. *Biotechnology and Biotechnological Equipment*, **2017**, 31, 1160-1166	1.6	7
13	Cholesteric film of Cu(II)-doped cellulose nanocrystals for colorimetric sensing of ammonia gas. *Carbohydrate Polymers*, **2017**, 174, 531-539	10.3	38
12	Chemically Functionalized Silk for Human Bone Marrow-Derived Mesenchymal Stem Cells Proliferation and Differentiation. *ACS Applied Materials & Interfaces*, **2016**, 8, 14406-13	9.5	28

11	Robust Self-Standing Chitin Nanofiber/Nanowhisker Hydrogels with Designed Surface Charges and Ultralow Mass Content via Gas Phase Coagulation. *Biomacromolecules*, **2016**, 17, 3773-3781	6.9	72
10	Preparation, assessment, and comparison of β-chitin nano-fiber films with different surface charges. *Nanoscale Research Letters*, **2015**, 10, 226	5	23
9	Reinforced chitosan beads by chitin nanofibers for the immobilization of β-glucosidase. *RSC Advances*, **2015**, 5, 93331-93336	3.7	19
8	Improvement of nanofibrillation efficiency of β-chitin in water by selecting acid used for surface cationisation. *RSC Advances*, **2013**, 3, 2613	3.7	17
7	Comparative characterization of aqueous dispersions and cast films of different chitin nanowhiskers/nanofibers. *International Journal of Biological Macromolecules*, **2012**, 50, 69-76	7.9	144
6	Multifunctional coating films by layer-by-layer deposition of cellulose and chitin nanofibrils. *Biomacromolecules*, **2012**, 13, 553-8	6.9	88
5	Individual chitin nano-whiskers prepared from partially deacetylated β-chitin by fibril surface cationization. *Carbohydrate Polymers*, **2010**, 79, 1046-1051	10.3	226
4	TEMPO-mediated oxidation of β-chitin to prepare individual nanofibrils. *Carbohydrate Polymers*, **2009**, 77, 832-838	10.3	117
3	Preparation of chitin nanofibers from squid pen beta-chitin by simple mechanical treatment under acid conditions. *Biomacromolecules*, **2008**, 9, 1919-23	6.9	265
2	Chitin nanocrystals prepared by TEMPO-mediated oxidation of alpha-chitin. *Biomacromolecules*, **2008**, 9, 192-8	6.9	280
1	Nanochitin: Chemistry, Structure, Assembly, and Applications. *Chemical Reviews*,	68.1	4