Shiyan Chen

List of Publications by Year in Descending Order

75 papers	3,406 citations	33 h-index	57 g-index
81 ext. papers	4,049 ext. citations	8.3 avg, IF	5.39 L-index

#	Paper	IF	Citations
75	Toward continuous high-performance bacterial cellulose macrofibers by implementing grading-stretching in spinning.. *Carbohydrate Polymers*, **2022**, 282, 119133	10.3	1
74	Continuous and integrated PEDOT@Bacterial cellulose/CNT hybrid helical fiber with reinforced cement-sand structure for self-stretchable solid supercapacitor. *Chemical Engineering Journal*, **2022**, 427, 131904	14.7	3
73	Hydrophobic, breathable cellulose nonwoven fabrics for disposable hygiene applications.. *Carbohydrate Polymers*, **2022**, 288, 119367	10.3	0
72	High-Strength Superstretchable Helical Bacterial Cellulose Fibers with a "Self-Fiber-Reinforced Structure". *ACS Applied Materials & Interfaces*, **2021**, 13, 1545-1554	9.5	4
71	High Sensitivity Polyurethane-Based Fiber Strain Sensor with Porous Structure via Incorporation of Bacterial Cellulose Nanofibers. *Advanced Electronic Materials*, **2021**, 7, 2001235	6.4	7
70	TEMPO-Oxidized Bacterial Cellulose Nanofibers/Graphene Oxide Fibers for Osmotic Energy Conversion. *ACS Applied Materials & Interfaces*, **2021**, 13, 22416-22425	9.5	13
69	Bacterial cellulose nanofiber distribution on gelatin and silk fibroin scaffolds and the cell behavior. *Cellulose*, **2021**, 28, 91-102	5.5	1
68	Scalable, self-cleaning and self-floating bi-layered bacterial cellulose biofoam for efficient solar evaporator with photocatalytic purification. *Desalination*, **2021**, 500, 114899	10.3	23
67	Oppositely charged aligned bacterial cellulose biofilm with nanofluidic channels for osmotic energy harvesting. *Nano Energy*, **2021**, 80, 105554	17.1	15
66	Durable and Flexible Bio-assembled RGO-BC/BC Bilayer Electrodes for Pressure Sensing. *Advanced Fiber Materials*, **2021**, 3, 128-137	10.9	8
65	Bacterial cellulose nanofiber reinforced poly(glycerol-sebacate) biomimetic matrix for 3D cell culture. *Cellulose*, **2021**, 28, 8483-8492	5.5	3
64	Scalable bacterial cellulose biofilms with improved ion transport for high osmotic power generation. *Nano Energy*, **2021**, 88, 106275	17.1	4
63	Anisotropic bacterial cellulose hydrogels with tunable high mechanical performances, non-swelling and bionic nanofluidic ion transmission behavior. *Nanoscale*, **2021**, 13, 8126-8136	7.7	8
62	Scalable, Flexible, Durable, and Salt-Tolerant CuS/Bacterial Cellulose Gel Membranes for Efficient Interfacial Solar Evaporation. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 9017-9026	8.3	14
61	A 3D-printable TEMPO-oxidized bacterial cellulose/alginate hydrogel with enhanced stability via nanoclay incorporation. *Carbohydrate Polymers*, **2020**, 238, 116207	10.3	39
60	All-natural injectable hydrogel with self-healing and antibacterial properties for wound dressing. *Cellulose*, **2020**, 27, 2637-2650	5.5	24
59	Urethra-inspired biomimetic scaffold: A therapeutic strategy to promote angiogenesis for urethral regeneration in a rabbit model. *Acta Biomaterialia*, **2020**, 102, 247-258	10.8	22

58	Zn-loaded TOBC nanofiber-reinforced biomimetic calcium alginate hydrogel for antibacterial wound dressing. *International Journal of Biological Macromolecules*, **2020**, 143, 235-242	7.9	26
57	Top-down peeling bacterial cellulose to high strength ultrathin films and multifunctional fibers. *Chemical Engineering Journal*, **2020**, 391, 123527	14.7	16
56	Silver Nanowire-Bacterial Cellulose Composite Fiber-Based Sensor for Highly Sensitive Detection of Pressure and Proximity. *ACS Nano*, **2020**, 14, 15428-15439	16.7	50
55	Highly Mineralized Biomimetic Polysaccharide Nanofiber Materials Using Enzymatic Mineralization. *Biomacromolecules*, **2020**, 21, 2176-2186	6.9	10
54	Polypyrrole@TEMPO-oxidized bacterial cellulose/reduced graphene oxide macrofibers for flexible all-solid-state supercapacitors. *Chemical Engineering Journal*, **2019**, 368, 1022-1032	14.7	52
53	A simple method for controlling the bacterial cellulose nanofiber density in 3D scaffolds and its effect on the cell behavior. *Cellulose*, **2019**, 26, 7411-7421	5.5	3
52	A strategy of tailoring polymorphs and nanostructures to construct self-reinforced nonswelling high-strength bacterial cellulose hydrogels. *Nanoscale*, **2019**, 11, 15347-15358	7.7	17
51	3D printing of biomimetic vasculature for tissue regeneration. *Materials Horizons*, **2019**, 6, 1197-1206	14.4	62
50	Simultaneous 3D cell distribution and bioactivity enhancement of bacterial cellulose (BC) scaffold for articular cartilage tissue engineering. *Cellulose*, **2019**, 26, 2513-2528	5.5	21
49	Mechanically robust reduced graphene oxide/bacterial cellulose film obtained via biosynthesis for flexible supercapacitor. *Chemical Engineering Journal*, **2019**, 360, 829-837	14.7	46
48	Use of heparinized bacterial cellulose based scaffold for improving angiogenesis in tissue regeneration. *Carbohydrate Polymers*, **2018**, 181, 948-956	10.3	32
47	Color-tunable luminescent macrofibers based on CdTe QDs-loaded bacterial cellulose nanofibers for pH and glucose sensing. *Sensors and Actuators B: Chemical*, **2018**, 254, 110-119	8.5	44
46	Hierarchical core-sheath polypyrrole@carbon nanotube/bacterial cellulose macrofibers with high electrochemical performance for all-solid-state supercapacitors. *Electrochimica Acta*, **2018**, 283, 1578-1588	6.7	32
45	A smart bilayered scaffold supporting keratinocytes and muscle cells in micro/nano-scale for urethral reconstruction. *Theranostics*, **2018**, 8, 3153-3163	12.1	31
44	Patterned bacterial cellulose wound dressing for hypertrophic scar inhibition behavior. *Cellulose*, **2018**, 25, 6705-6717	5.5	17
43	Hybrid scaffolds enhanced by nanofibers improve in vitro cell behavior for tissue regeneration. *Cellulose*, **2018**, 25, 7113-7125	5.5	5
42	Macrofibers with High Mechanical Performance Based on Aligned Bacterial Cellulose Nanofibers. *ACS Applied Materials & Interfaces*, **2017**, 9, 20330-20339	9.5	93
41	TEMPO-oxidized bacterial cellulose nanofibers-supported gold nanoparticles with superior catalytic properties. *Carbohydrate Polymers*, **2017**, 160, 34-42	10.3	49

40	Bacterial cellulose/gelatin scaffold loaded with VEGF-silk fibroin nanoparticles for improving angiogenesis in tissue regeneration. *Cellulose*, **2017**, 24, 5013-5024	5.5	22
39	In vitro biodegradability of bacterial cellulose by cellulase in simulated body fluid and compatibility in vivo. *Cellulose*, **2016**, 23, 3187-3198	5.5	33
38	Structural and functional evaluation of oxygenating keratin/silk fibroin scaffold and initial assessment of their potential for urethral tissue engineering. *Biomaterials*, **2016**, 84, 99-110	15.6	73
37	ZnS/Bacterial Cellulose/Epoxy Resin (ZnS/BC/E56) Nanocomposites with Good Transparency and Flexibility. *Journal of Materials Science and Technology*, **2016**, 32, 153-157	9.1	16
36	Improving the mechanical properties of cellulose diacetate fibers via using an ionic liquid as processing solvent. *RSC Advances*, **2016**, 6, 1-7	3.7	79
35	Bacterial Cellulose-Based Biomimetic Nanofibrous Scaffold with Muscle Cells for Hollow Organ Tissue Engineering. *ACS Biomaterials Science and Engineering*, **2016**, 2, 19-29	5.5	46
34	Flexible X-ray radiation protection membrane PVA/pb(NO3)2 microcapsule composites supported by bacterial cellulose. *Journal of Applied Polymer Science*, **2016**, 133, n/a-n/a	2.9	4
33	Improved cell infiltration and vascularization of three-dimensional bacterial cellulose nanofibrous scaffolds by template biosynthesis. *RSC Advances*, **2016**, 6, 42229-42239	3.7	23
32	An air-stable microwire radial heterojunction with high photoconductivity based on a new building block. *Journal of Materials Chemistry C*, **2015**, 3, 5933-5939	7.1	12
31	Color-tunable luminescent CdTe quantum dot membranes based on bacterial cellulose (BC) and application in ion detection. *RSC Advances*, **2015**, 5, 55756-55761	3.7	14
30	Thermal behavior of cellulose diacetate melt using ionic liquids as plasticizers. *RSC Advances*, **2015**, 5, 901-907	3.7	19
29	Flexible conductive polypyrrole nanocomposite membranes based on bacterial cellulose with amphiphobicity. *Carbohydrate Polymers*, **2015**, 117, 230-235	10.3	45
28	Facilely green synthesis of silver nanoparticles into bacterial cellulose. *Cellulose*, **2015**, 22, 373-383	5.5	59
27	Functionalized bacterial cellulose derivatives and nanocomposites. *Carbohydrate Polymers*, **2014**, 101, 1043-60	10.3	290
26	Free-standing zirconia nanofibrous membranes with robust flexibility for corrosive liquid filtration. *RSC Advances*, **2014**, 4, 2756-2763	3.7	25
25	In situ fabrication of a microporous bacterial cellulose/potato starch composite scaffold with enhanced cell compatibility. *Cellulose*, **2014**, 21, 1823-1835	5.5	42
24	Tuning the Charge Transport Property of Naphthalene Diimide Derivatives by Changing the Substituted Position of Fluorine Atom on Molecular Backbone. *Chinese Journal of Chemistry*, **2014**, 32, 1057-1064	4.9	9
23	Zinc sulfide nanoparticles template by bacterial cellulose and their optical properties. *Journal of Applied Polymer Science*, **2014**, 131, n/a-n/a	2.9	8

22	Synthesis of flexible magnetic nanohybrid based on bacterial cellulose under ultrasonic irradiation. *Materials Science and Engineering C*, **2013**, 33, 2407-12	8.3	46
21	Polyol mediated synthesis of ZnO nanoparticles templated by bacterial cellulose. *Carbohydrate Polymers*, **2013**, 92, 1953-9	10.3	68
20	Porous bacterial cellulose prepared by a facile surfactant-assisted foaming method in azodicarbonamide-NaOH aqueous solution. *Materials Letters*, **2012**, 81, 131-134	3.3	28
19	Solution-processed and air-stable n-type organic thin-film transistors based on thiophene-fused dicyanoquinonediimine (DCNQI) deriatives. *ACS Applied Materials & Interfaces*, **2012**, 4, 3994-4000	9.5	13
18	Flexible luminescent CdSe/bacterial cellulose nanocomoposite membranes. *Carbohydrate Polymers*, **2012**, 88, 173-178	10.3	60
17	Flexible electrically conductive nanocomposite membrane based on bacterial cellulose and polyaniline. *Journal of Physical Chemistry B*, **2011**, 115, 8453-7	3.4	257
16	Highly stable and sensitive humidity sensors based on quartz crystal microbalance coated with bacterial cellulose membrane. *Sensors and Actuators B: Chemical*, **2011**, 159, 301-306	8.5	57
15	Facile fabrication of flexible magnetic nanohybrid membrane with amphiphobic surface based on bacterial cellulose. *Carbohydrate Polymers*, **2011**, 86, 1760-1767	10.3	54
14	Preparation and properties of photochromic bacterial cellulose nanofibrous membranes. *Cellulose*, **2011**, 18, 655-661	5.5	55
13	Solvent-free acetylation of bacterial cellulose under moderate conditions. *Carbohydrate Polymers*, **2011**, 83, 1575-1581	10.3	92
12	Formaldehyde sensors based on nanofibrous polyethyleneimine/bacterial cellulose membranes coated quartz crystal microbalance. *Sensors and Actuators B: Chemical*, **2011**, 157, 554-559	8.5	75
11	Preparation of amidoximated bacterial cellulose and its adsorption mechanism for Cu2+ and Pb2+. *Journal of Applied Polymer Science*, **2010**, 117, NA-NA	2.9	8
10	Facile synthesis of ZnO nanoparticles based on bacterial cellulose. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2010**, 170, 88-92	3.1	70
9	Biomimetic mineralization synthesis of calcium-deficient carbonate-containing hydroxyapatite in a three-dimensional network of bacterial cellulose. *Journal of Chemical Technology and Biotechnology* , **2009**, 84, 285-290	3.5	39
8	Kinetic and thermodynamic studies of adsorption of Cu2+ and Pb2+ onto amidoximated bacterial cellulose. *Polymer Bulletin*, **2009**, 63, 283-297	2.4	41
7	In situ synthesis of silver chloride nanoparticles into bacterial cellulose membranes. *Materials Science and Engineering C*, **2009**, 29, 1216-1219	8.3	133
6	Carboxymethylated-bacterial cellulose for copper and lead ion removal. *Journal of Hazardous Materials*, **2009**, 161, 1355-9	12.8	196
5	Adsorption of Cu(II) and Pb(II) onto diethylenetriamine-bacterial cellulose. *Carbohydrate Polymers*, **2009**, 75, 110-114	10.3	217

4	In situ synthesis of CdS nanoparticles on bacterial cellulose nanofibers. *Carbohydrate Polymers*, **2009**, 76, 509-512	10.3	131
3	Biosynthesis of bacterial cellulose/multi-walled carbon nanotubes in agitated culture. *Carbohydrate Polymers*, **2008**, 74, 659-665	10.3	113
2	Synthesis and Non-isothermal Crystallization Behavior of PET/Surface-treated TiO 2 Nanocomposites. *Journal of Macromolecular Science - Physics*, **2008**, 47, 1117-1129	1.4	20
1	Spinning continuous high-strength bacterial cellulose hydrogel fibers for multifunctional bioelectronic interfaces. *Journal of Materials Chemistry A*,	13	5