Xiao-Hong Qin

List of Publications by Citations

114 papers	2,782 citations	27 h-index	48 g-index
121 ext. papers	3,594 ext. citations	6.3 avg, IF	5.77 L-index

#	Paper	IF	Citations
114	Filtration properties of electrospinning nanofibers. *Journal of Applied Polymer Science*, **2006**, 102, 1285-1290	2.9	289
113	A low filtration resistance three-dimensional composite membrane fabricated via free surface electrospinning for effective PM2.5 capture. *Environmental Science: Nano*, **2017**, 4, 864-875	7.1	108
112	Electrospun nanofibers from crosslinked poly(vinyl alcohol) and its filtration efficiency. *Journal of Applied Polymer Science*, **2008**, 109, 951-956	2.9	107
111	Thin MoS2 nanosheets grafted MOFs-derived porous CoNC flakes grown on electrospun carbon nanofibers as self-supported bifunctional catalysts for overall water splitting. *Journal of Materials Chemistry A*, **2017**, 5, 23898-23908	13	98
110	Design of 3-Dimensional Hierarchical Architectures of Carbon and Highly Active Transition Metals (Fe, Co, Ni) as Bifunctional Oxygen Catalysts for Hybrid Lithium–Air Batteries. *Chemistry of Materials*, **2017**, 29, 1665-1675	9.6	91
109	Effect of LiCl on electrospinning of PAN polymer solution: theoretical analysis and experimental verification. *Polymer*, **2004**, 45, 6409-6413	3.9	89
108	Hierarchical catalytic electrodes of cobalt-embedded carbon nanotube/carbon flakes arrays for flexible solid-state zinc-air batteries. *Carbon*, **2019**, 142, 379-387	10.4	82
107	Synthesis and characterization of arginine-NIPAAm hybrid hydrogel as wound dressing: In vitro and in vivo study. *Acta Biomaterialia*, **2018**, 65, 305-316	10.8	79
106	Fabrication of Aligned Nanofiber Polymer Yarn Networks for Anisotropic Soft Tissue Scaffolds. *ACS Applied Materials & Interfaces*, **2016**, 8, 16950-60	9.5	76
105	Flexible and conductive nanofiber-structured single yarn sensor for smart wearable devices. *Sensors and Actuators B: Chemical*, **2017**, 252, 697-705	8.5	70
104	High throughput of quality nanofibers via one stepped pyramid-shaped spinneret. *Materials Letters*, **2013**, 106, 56-58	3.3	66
103	Living nano-micro fibrous woven fabric/hydrogel composite scaffolds for heart valve engineering. *Acta Biomaterialia*, **2017**, 51, 89-100	10.8	62
102	Peptide-Functionalized Amino Acid-Derived Pseudoprotein-Based Hydrogel with Hemorrhage Control and Antibacterial Activity for Wound Healing. *Chemistry of Materials*, **2019**, 31, 4436-4450	9.6	60
101	Design and synthesis of porous channel-rich carbon nanofibers for self-standing oxygen reduction reaction and hydrogen evolution reaction bifunctional catalysts in alkaline medium. *Journal of Materials Chemistry A*, **2017**, 5, 7507-7515	13	59
100	Inherent Guanidine Nanogels with Durable Antibacterial and Bacterially Antiadhesive Properties. *Advanced Functional Materials*, **2019**, 29, 1806594	15.6	59
99	Uniaxially aligned polyacrylonitrile nanofiber yarns prepared by a novel modified electrospinning method. *Materials Letters*, **2013**, 106, 204-207	3.3	59
98	Biocomposite scaffolds for bone regeneration: Role of chitosan and hydroxyapatite within poly-3-hydroxybutyrate-co-3-hydroxyvalerate on mechanical properties and in vitro evaluation. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 51, 88-98	4.1	52

97	An improved free surface electrospinning for high throughput manufacturing of core-shell nanofibers. *Materials Letters*, **2014**, 128, 259-262	3.3	49
96	Functional nanofibers embedded into textiles for durable antibacterial properties. *Chemical Engineering Journal*, **2020**, 384, 123241	14.7	49
95	Mass production of nanofibers from needleless electrospinning by a novel annular spinneret. *Materials and Design*, **2019**, 179, 107885	8.1	47
94	Enhanced electrochemical properties of hierarchically sheath-core aligned carbon nanofibers coated carbon fiber yarn electrode-based supercapacitor via polyaniline nanowire array modification. *Journal of Power Sources*, **2018**, 399, 406-413	8.9	44
93	Guiding the orientation of smooth muscle cells on random and aligned polyurethane/collagen nanofibers. *Journal of Biomaterials Applications*, **2014**, 29, 364-77	2.9	44
92	3D printing of silk fibroin-based hybrid scaffold treated with platelet rich plasma for bone tissue engineering. *Bioactive Materials*, **2019**, 4, 256-260	16.7	42
91	The effect of different surfactants on the electrospinning poly(vinyl alcohol) (PVA) nanofibers. *Journal of Thermal Analysis and Calorimetry*, **2013**, 112, 595-605	4.1	38
90	Biocompatibility evaluation of protein-incorporated electrospun polyurethane-based scaffolds with smooth muscle cells for vascular tissue engineering. *Journal of Materials Science*, **2013**, 48, 5113-5124	4.3	34
89	Effects of the stabilization temperature on the structure and properties of polyacrylonitrile-based stabilized electrospun nanofiber microyarns. *Journal of Thermal Analysis and Calorimetry*, **2014**, 116, 303-308	4.1	28
88	An improved free surface electrospinning with micro-bubble solution system for massive production of nanofibers. *Materials Letters*, **2015**, 144, 22-25	3.3	27
87	A Fast Response Ammonia Sensor Based on Coaxial PPy-PAN Nanofiber Yarn. *Nanomaterials*, **2016**, 6,	5.4	27
86	Graphene oxide-silver nanocomposites embedded nanofiber core-spun yarns for durable antibacterial textiles. *Journal of Colloid and Interface Science*, **2021**, 584, 164-173	9.3	27
85	Electrospun nanofiber fabric: an efficient, breathable and wearable moist-electric generator. *Journal of Materials Chemistry A*, **2021**, 9, 7085-7093	13	27
84	Raising Nanofiber Output: The Progress, Mechanisms, Challenges, and Reasons for the Pursuit. *Macromolecular Materials and Engineering*, **2018**, 303, 1700269	3.9	26
83	High-throughput nanofiber produced by needleless electrospinning using a metal dish as the spinneret. *Textile Reseach Journal*, **2018**, 88, 80-88	1.7	25
82	Facile synthesis of electrospun C@NiO/Ni nanofibers as an electrocatalyst for hydrogen evolution reaction. *International Journal of Hydrogen Energy*, **2018**, 43, 15217-15224	6.7	25
81	Polyacrylonitrile nanofiber yarns and fabrics produced using a novel electrospinning method combined with traditional textile techniques. *Textile Reseach Journal*, **2016**, 86, 1716-1727	1.7	24
80	A reversible colorimetric chemosensor for naked-eye detection of copper ions using poly (aspartic acid) nanofibrous hydrogel. *Dyes and Pigments*, **2015**, 123, 380-385	4.6	22

79	Nanofibers reinforced injectable hydrogel with self-healing, antibacterial, and hemostatic properties for chronic wound healing. *Journal of Colloid and Interface Science*, **2021**, 596, 312-323	9.3	22
78	Synthesis of carbonized-cellulose nanowhisker/FeS2@reduced graphene oxide composite for highly efficient counter electrodes in dye-sensitized solar cells. *Solar Energy*, **2018**, 166, 71-79	6.8	21
77	Large-Scale and Rapid Preparation of Nanofibrous Meshes and Their Application for Drug-Loaded Multilayer Mucoadhesive Patch Fabrication for Mouth Ulcer Treatment. *ACS Applied Materials & Interfaces*, **2019**, 11, 28740-28751	9.5	20
76	Poly-3-hydroxybutyrate-co-3-hydroxyvalerate containing scaffolds and their integration with osteoblasts as a model for bone tissue engineering. *Journal of Biomaterials Applications*, **2015**, 29, 1394-406	2.9	20
75	Tree-like structure driven water transfer in 1D fiber assemblies for Functional Moisture-Wicking Fabrics. *Materials and Design*, **2020**, 186, 108305	8.1	20
74	Hierarchically tunable structure of polystyrene-based microfiber membranes for separation and selective adsorption of oil-water. *Applied Surface Science*, **2020**, 532, 147400	6.7	19
73	Sandwich-structured fibrous membranes with low filtration resistance for effective PM2.5 capture via one-step needleless electrospinning. *Materials Research Express*, **2019**, 6, 035027	1.7	19
72	3-Dimensional MWCNT/CuO nanostructures use as an electrochemical catalyst for oxygen evolution reaction. *Journal of Alloys and Compounds*, **2018**, 735, 2311-2317	5.7	19
71	Evaluation of electrospun biomimetic substrate surface-decorated with nanohydroxyapatite precipitation for osteoblasts behavior. *Materials Science and Engineering C*, **2017**, 79, 687-696	8.3	18
70	Facile fabrication of novel pH-sensitive poly(aspartic acid) hydrogel by crosslinking nanofibers. *Materials Letters*, **2014**, 132, 393-396	3.3	18
69	Effect of processing parameters on free surface electrospinning from a stepped pyramid stage. *Journal of Industrial Textiles*, **2016**, 45, 483-494	1.6	17
68	Influence of the processing parameters on needleless electrospinning from double ring slits spinneret using response surface methodology. *Journal of Applied Polymer Science*, **2018**, 135, 46407	2.9	16
67	Nanofiber based origami evaporator for multifunctional and omnidirectional solar steam generation. *Carbon*, **2021**, 177, 199-206	10.4	16
66	Fabricated narrow diameter distribution nanofiber for an air filtration membrane using a double rings slit spinneret. *Textile Reseach Journal*, **2019**, 89, 936-947	1.7	16
65	One-step fabrication of a stretchable and anti-oil-fouling nanofiber membrane for solar steam generation. *Materials Chemistry Frontiers*, **2021**, 5, 3673-3680	7.8	16
64	Multiple-Jet Needleless Electrospinning Approach via a Linear Flume Spinneret. *Polymers*, **2019**, 11,	4.5	15
63	Mass production of high-quality nanofibers via constructing pre-Taylor cones with high curvature on needleless electrospinning. *Materials and Design*, **2021**, 197, 109247	8.1	15
62	Polyacrylonitrile/polyimide composite sub-micro fibrous membranes for precise filtration of PM pollutants. *Journal of Colloid and Interface Science*, **2020**, 578, 195-206	9.3	14

61	An efficient hybrid strategy for composite yarns of micro-/nano-fibers. *Materials and Design*, **2019**, 184, 108196	8.1	13
60	Wettability Control in Tree Structure-Based 1D Fiber Assemblies for Moisture Wicking Functionality. *ACS Applied Materials & Interfaces*, **2019**, 11, 44682-44690	9.5	13
59	Nanofiber-structured hydrogel yarns with pH-response capacity and cardiomyocyte-drivability for bio-microactuator application. *Acta Biomaterialia*, **2017**, 60, 144-153	10.8	13
58	A novel approach for fabricating antibacterial nanofiber/cotton hybrid yarns. *Fibers and Polymers*, **2017**, 18, 987-992	2	13
57	The study on the air volume fraction of electrospun nanofiber nonwoven mats. *Fibers and Polymers*, **2010**, 11, 632-637	2	13
56	Large-scale preparation of micro-gradient structured sub-micro fibrous membranes with narrow diameter distributions for high-efficiency air purification. *Environmental Science: Nano*, **2019**, 6, 3560-3578	7.1	13
55	Photocatalytic Activity of TiO Nanofibers: The Surface Crystalline Phase Matters. *Nanomaterials*, **2019**, 9,	5.4	12
54	High-Performance Solar Steam Generator Based on Polypyrrole-Coated Fabric via 3D Macro- and Microstructure Design. *ACS Applied Materials & Interfaces*, **2021**, 13, 40664-40672	9.5	12
53	Nanofiber fabric based ion-gradient-enhanced moist-electric generator with a sustained voltage output of 1.1 volts. *Materials Horizons*, **2021**, 8, 2303-2309	14.4	12
52	Stretchable Thermoelectric-Based Self-Powered Dual-Parameter Sensors with Decoupled Temperature and Strain Sensing. *ACS Applied Materials & Interfaces*, **2021**,	9.5	12
51	Textile waste derived cellulose based composite aerogel for efficient solar steam generation. *Composites Communications*, **2021**, 28, 100936	6.7	10
50	Fiber-intercepting-particle structured MOF fabrics for simultaneous solar vapor generation and organic pollutant adsorption. *Chemical Engineering Journal*, **2022**, 428, 131365	14.7	10
49	Facile fabrication and transistor properties of mixed crystalline TiO2 nanofibers FET devices. *Materials Letters*, **2019**, 246, 99-102	3.3	9
48	Stable-jet length controlling electrospun fiber radius: Model and experiment. *Polymer*, **2019**, 180, 121763	3.9	9
47	pH-triggered sustained drug release of multilayer encapsulation system with hollow mesoporous silica nanoparticles/chitosan/polyacrylic acid. *Materials Letters*, **2020**, 260, 126907	3.3	9
46	PEDOT:PSS/CNT composites based ultra-stretchable thermoelectrics and their application as strain sensors. *Composites Communications*, **2021**, 27, 100822	6.7	9
45	Preparation and characterization of microporous sodium poly(aspartic acid) nanofibrous hydrogel. *Journal of Porous Materials*, **2017**, 24, 75-84	2.4	8
44	Sustainable Cellulose Aerogel from Waste Cotton Fabric for High-Performance Solar Steam Generation. *ACS Applied Materials & Interfaces*, **2021**, 13, 49860-49867	9.5	8

43	Bioinspired design of electrospun nanofiber based aerogel for efficient and cost-effective solar vapor generation. *Chemical Engineering Journal*, **2022**, 427, 131539	14.7	8
42	Asymmetric water affinity on antibacterial electrospun sub-micro cellulose acetate Janus membrane. *Materials Letters*, **2019**, 256, 126607	3.3	7
41	Scalable and hierarchically designed MOF fabrics by netting MOFs into nanofiber networks for high-performance solar-driven water purification. *Journal of Materials Chemistry A*, **2021**, 9, 21005-21012	13	7
40	3D structure design and simulation for efficient particles capture: The influence of nanofiber diameter and distribution. *Materials Today Communications*, **2020**, 23, 100897	2.5	6
39	Hydrophilic and degradable polyesters based on l-aspartic acid with antibacterial properties for potential application in hernia repair. *Biomaterials Science*, **2019**, 7, 5404-5413	7.4	6
38	Electrospun nanofibers of polyelectrolyte-surfactant complexes for antibacterial wound dressing application. *Soft Matter*, **2019**, 15, 10020-10028	3.6	6
37	Light scattering tunability of nanofiber membrane for enhancing color yield. *Dyes and Pigments*, **2021**, 193, 109462	4.6	6
36	Slip effect based bimodal nanofibrous membrane for high-efficiency and low-resistance air purification. *Separation and Purification Technology*, **2021**, 275, 119258	8.3	6
35	Modified polyacrylonitrile nanofibers for improved dyeability using anionic dyes. *Applied Nanoscience (Switzerland)*, **2020**, 10, 2025-2035	3.3	5
34	Diameter Refinement of Electrospun Nanofibers: From Mechanism, Strategies to Applications. *Advanced Fiber Materials*,1	10.9	5
33	Tailoring body surface infrared radiation behavior through colored nanofibers for efficient passive radiative heating textiles. *Chemical Engineering Journal*, **2021**, 133093	14.7	5
32	Plasmonic silver nanoparticle-decorated electrospun nanofiber membrane for interfacial solar vapor generation. *Textile Reseach Journal*,004051752110149	1.7	5
31	Electrospun cellulose acetate nanofiber upscaling with a metal plate needleless spinneret. *Materials Research Express*, **2019**, 6, 1250e4	1.7	5
30	Theoretical analysis and of three dimensional free surface of electrospinning. *Journal of King Saud University - Science*, **2019**, 31, 460-463	3.6	5
29	Experimental investigation of process parameters for the filtration property of nanofiber membrane fabricated by needleless electrospinning apparatus. *Journal of Industrial Textiles*, **2021**, 50, 1528-1541	1.6	5
28	Asymptotic decay of velocity of whipping jet in electrospinning. *Polymer*, **2021**, 217, 123456	3.9	5
27	A rotary spinneret for high output of electrospun fibers with bimodal distribution. *European Polymer Journal*, **2021**, 159, 110707	5.2	5
26	Guanidine Nanogels: Inherent Guanidine Nanogels with Durable Antibacterial and Bacterially Antiadhesive Properties (Adv. Funct. Mater. 12/2019). *Advanced Functional Materials*, **2019**, 29, 1970077	15.6	4

25	Stretchable Thermoelectrics: Strategies, Performances, and Applications. *Advanced Functional Materials*, **2022**, 32, 2109790	15.6	4
24	Multi-Scale Nanoarchitectured Fibrous Networks for High-Performance, Self-Sterilization, and Recyclable Face Masks. *Small*, **2021**, 18, e2105570	11	3
23	A Visually Observable Copper Ion Adsorption Membrane by Electrospinning Combined with Copper Ion Probe. *Fibers and Polymers*, **2021**, 22, 1844-1852	2	3
22	Analyzing the effect of nanofiber orientation on membrane filtration properties with the progressive increase in its thickness: a numerical and experimental approach. *Textile Reseach Journal*, **2020**, 90, 24-36	1.7	3
21	Effect of de-sizing on the structural and mechanical properties of carbon fiber reinforced polypropylene composites molded by the novel direct fiber feeding injection molding technology. *Journal of Thermoplastic Composite Materials*,089270572210778	1.9	3
20	Silane-functionalized polyionenes-coated cotton fabrics with potent antimicrobial and antiviral activities.. *Biomaterials*, **2022**, 284, 121470	15.6	3
19	Ceramic Nanofiber-Based Water-Induced Electric Generator. *ACS Applied Materials & Interfaces* , **2021**, 13, 56226-56232	9.5	2
18	Investigation on the processability, structure and properties of micro-/nano-fiber composite yarns produced by trans-scale spinning. *Journal of Industrial Textiles*, **2020**, 152808372094117	1.6	2
17	Electrospun nanofiber/cotton composite yarn with enhanced moisture management ability. *Textile Reseach Journal*, **2021**, 91, 1467-1477	1.7	2
16	The migration behavior of electrospun nanofibers within cotton slivers in roller drafting and their effects on composite yarn quality. *Textile Reseach Journal*, **2021**, 91, 1555-1564	1.7	2
15	Numerical simulation of a two-dimensional flapping wing in advanced mode. *Journal of Hydrodynamics*, **2017**, 29, 1076-1080	3.3	1
14	Contact/Release Coordinated Antibacterial Cotton Fabrics Coated with N-Halamine and Cationic Antibacterial Agent for Durable Bacteria-Killing Application. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
13	Contact force within electrospun nanofiber core-spun yarns and moisture management ability of their fabrics. *Journal of the Textile Institute*,1-13	1.5	1
12	Facile fabrication of reinforced sub-micron fibrous media with hierarchical structure compounded thermally for effective air purification in application.. *Separation and Purification Technology*, **2022**, 120726	8.2	1
11	Controllable diameter of electrospun nanofibers based on the velocity of whipping jets for high-efficiency air filtration. *Science China Technological Sciences*, **2022**, 65, 481-489	3.5	1
10	Giving Penetrable Remote-Control Ability to Thermoresponsive Fibrous Composite Actuator with Fast Response Induced by Alternative Magnetic Field.. *Nanomaterials*, **2021**, 12,	5.4	1
9	Quaternary ammonium salt modified polyacrylonitrile/polycaprolactone electrospun nanofibers with enhanced antibacterial properties. *Textile Reseach Journal*,004051752199718	1.7	0
8	Mass production of polyacrylonitrile sub-micron fibrous webs with different aligned degrees via free surface electrospinning for air purification. *Textile Reseach Journal*,004051752110106	1.7	0

7	Facile fabrication of polydopamine nanosphere-decorated fabric for solar steam generation. *Textile Reseach Journal*,004051752210770	1.7	0
6	Multifunctional hydrogel platform for biofilm scavenging and O generating with photothermal effect on diabetic chronic wound healing.. *Journal of Colloid and Interface Science*, **2022**, 617, 542-556	9.3	0
5	Flexible, self-cleaning, and high-performance ceramic nanofiber-based moist-electric generator enabled by interfacial engineering. *Science China Technological Sciences*, **2022**, 65, 450-457	3.5	0
4	Dyeing of polyacrylonitrile nanofibers with CI Reactive Red 2 enabled by the introduction of polyethyleneimine. *Textile Reseach Journal*,004051752110642	1.7	
3	Preparation and characterization of electrospun cellulose acetate sub-micro fibrous membranes. *Textile Reseach Journal*,004051752110117	1.7	
2	Jet diameter of the first coil in the electrospinning whipping region: the role of fluid viscosity. *Textile Reseach Journal*,004051752210806	1.7	
1	A Precisely Designed Composite Actuator with Directionally Fast Actuation, Non-Contact Operation, and Obstacle-Penetrating Triggering Ability Using Aligned Nanofibers and Alternating Magnetic Field. *Macromolecular Materials and Engineering*,2200219	3.9	