Xiao-Hong Qin

List of Publications by Year
in descending order

120	4,627	87843	118793
papers	citations	38 h-index	62 g-index

121	121	121	5139
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Filtration properties of electrospinning nanofibers. Journal of Applied Polymer Science, 2006, 102, 1285-1290.	1.3	334
2	A low filtration resistance three-dimensional composite membrane fabricated via free surface electrospinning for effective PM_{2.5} capture. Environmental Science: Nano, 2017, 4, 864-875.	2.2	131
3	Thin MoS₂ nanosheets grafted MOFs-derived porous Coâ€“Nâ€“C flakes grown on electrospun carbon nanofibers as self-supported bifunctional catalysts for overall water splitting. Journal of Materials Chemistry A, 2017, 5, 23898-23908.	5.2	131
4	Electrospun nanofibers from crosslinked poly(vinyl alcohol) and its filtration efficiency. Journal of Applied Polymer Science, 2008, 109, 951-956.	1.3	124
5	Peptide-Functionalized Amino Acid-Derived Pseudoprotein-Based Hydrogel with Hemorrhage Control and Antibacterial Activity for Wound Healing. Chemistry of Materials, 2019, 31, 4436-4450.	3.2	115
6	Hierarchical catalytic electrodes of cobalt-embedded carbon nanotube/carbon flakes arrays for flexible solid-state zinc-air batteries. Carbon, 2019, 142, 379-387.	5.4	111
7	Synthesis and characterization of arginine-NIPAAm hybrid hydrogel as wound dressing: In vitro and in vivo study. Acta Biomaterialia, 2018, 65, 305-316.	4.1	107
8	Design of 3-Dimensional Hierarchical Architectures of Carbon and Highly Active Transition Metals (Fe,) Tj ETQq0 0 0 rgBT /Overlock 10 T 2017, 29, 1665-1675.	3.2	104
9	Flexible and conductive nanofiber-structured single yarn sensor for smart wearable devices. Sensors and Actuators B: Chemical, 2017, 252, 697-705.	4.0	104
10	Effect of LiCl on electrospinning of PAN polymer solution: theoretical analysis and experimental verification. Polymer, 2004, 45, 6409-6413.	1.8	102
11	Fabrication of Aligned Nanofiber Polymer Yarn Networks for Anisotropic Soft Tissue Scaffolds. ACS Applied Materials & Interfaces, 2016, 8, 16950-16960.	4.0	102
12	Inherent Guanidine Nanogels with Durable Antibacterial and Bacterially Antiadhesive Properties. Advanced Functional Materials, 2019, 29, 1806594.	7.8	93
13	Functional nanofibers embedded into textiles for durable antibacterial properties. Chemical Engineering Journal, 2020, 384, 123241.	6.6	91
14	Mass production of nanofibers from needleless electrospinning by a novel annular spinneret. Materials and Design, 2019, 179, 107885.	3.3	82
15	Continuous manufacture of stretchable and integratable thermoelectric nanofiber yarn for human body energy harvesting and self-powered motion detection. Chemical Engineering Journal, 2022, 450, 137937.	6.6	82
16	Living nano-micro fibrous woven fabric/hydrogel composite scaffolds for heart valve engineering. Acta Biomaterialia, 2017, 51, 89-100.	4.1	81
17	High throughput of quality nanofibers via one stepped pyramid-shaped spinneret. Materials Letters, 2013, 106, 56-58.	1.3	79
18	Electrospun nanofiber fabric: an efficient, breathable and wearable moist-electric generator. Journal of Materials Chemistry A, 2021, 9, 7085-7093.	5.2	78

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19	3D printing of silk fibroin-based hybrid scaffold treated with platelet rich plasma for bone tissue engineering. Bioactive Materials, 2019, 4, 256-260.	8.6	76
20	Highly stretchable, durable, and breathable thermoelectric fabrics for human body energy harvesting and sensing. , 2022, 4, 621-632.		74
21	Uniaxially aligned polyacrylonitrile nanofiber yarns prepared by a novel modified electrospinning method. Materials Letters, 2013, 106, 204-207.	1.3	69
22	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.	5.2	69
23	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.	5.0	64
24	Graphene oxide-silver nanocomposites embedded nanofiber core-spun yarns for durable antibacterial textiles. Journal of Colloid and Interface Science, 2021, 584, 164-173.	5.0	63
25	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.	1.5	62
26	Nanofiber fabric based ion-gradient-enhanced moist-electric generator with a sustained voltage output of 1.1 volts. Materials Horizons, 2021, 8, 2303-2309.	6.4	59
27	Stretchable Thermoelectric-Based Self-Powered Dual-Parameter Sensors with Decoupled Temperature and Strain Sensing. ACS Applied Materials & Interfaces, 2021, 13, 60498-60507.	4.0	59
28	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.	4.0	58
29	An improved free surface electrospinning for high throughput manufacturing of coreâ€“shell nanofibers. Materials Letters, 2014, 128, 259-262.	1.3	56
30	Nanofiber based origami evaporator for multifunctional and omnidirectional solar steam generation. Carbon, 2021, 177, 199-206.	5.4	56
31	The effect of different surfactants on the electrospinning poly(vinyl alcohol) (PVA) nanofibers. Journal of Thermal Analysis and Calorimetry, 2013, 112, 595-605.	2.0	55
32	Emerging design principles, materials, and applications for moisture-enabled electric generation. EScience, 2022, 2, 32-46.	25.0	53
33	PEDOT:PSS/CNT composites based ultra-stretchable thermoelectrics and their application as strain sensors. Composites Communications, 2021, 27, 100822.	3.3	52
34	Bioinspired design of electrospun nanofiber based aerogel for efficient and cost-effective solar vapor generation. Chemical Engineering Journal, 2022, 427, 131539.	6.6	51
35	Guiding the orientation of smooth muscle cells on random and aligned polyurethane/collagen nanofibers. Journal of Biomaterials Applications, 2014, 29, 364-377.	1.2	47
36	Tree-like structure driven water transfer in 1D fiber assemblies for Functional Moisture-Wicking Fabrics. Materials and Design, 2020, 186, 108305.	3.3	46

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37	High-Performance Solar Steam Generator Based on Polypyrrole-Coated Fabric via 3D Macro- and Microstructure Design. ACS Applied Materials & Interfaces, 2021, 13, 40664-40672.	4.0	45
38	Textile waste derived cellulose based composite aerogel for efficient solar steam generation. Composites Communications, 2021, 28, 100936.	3.3	45
39	Raising Nanofiber Output: The Progress, Mechanisms, Challenges, and Reasons for the Pursuit. Macromolecular Materials and Engineering, 2018, 303, 1700269.	1.7	43
40	Stretchable Thermoelectrics: Strategies, Performances, and Applications. Advanced Functional Materials, 2022, 32, .	7.8	40
41	Sustainable Cellulose Aerogel from Waste Cotton Fabric for High-Performance Solar Steam Generation. ACS Applied Materials & Interfaces, 2021, 13, 49860-49867.	4.0	39
42	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.	1.7	37
43	Fiber-intercepting-particle structured MOF fabrics for simultaneous solar vapor generation and organic pollutant adsorption. Chemical Engineering Journal, 2022, 428, 131365.	6.6	37
44	Hierarchically tunable structure of polystyrene-based microfiber membranes for separation and selective adsorption of oil-water. Applied Surface Science, 2020, 532, 147400.	3.1	36
45	Mass production of high-quality nanofibers via constructing pre-Taylor cones with high curvature on needleless electrospinning. Materials and Design, 2021, 197, 109247.	3.3	36
46	Multiâ€Scale Nanoarchitectured Fibrous Networks for Highâ€Performance, Selfâ€Sterilization, and Recyclable Face Masks. Small, 2022, 18, e2105570.	5.2	36
47	An improved free surface electrospinning with micro-bubble solution system for massive production of nanofibers. Materials Letters, 2015, 144, 22-25.	1.3	35
48	Slip effect based bimodal nanofibrous membrane for high-efficiency and low-resistance air purification. Separation and Purification Technology, 2021, 275, 119258.	3.9	33
49	Polyacrylonitrile/polyimide composite sub-micro fibrous membranes for precise filtration of PM0.26 pollutants. Journal of Colloid and Interface Science, 2020, 578, 195-206.	5.0	33
50	A Fast Response Ammonia Sensor Based on Coaxial PPyâ€“PAN Nanofiber Yarn. Nanomaterials, 2016, 6, 121.	1.9	32
51	Polyacrylonitrile nanofiber yarns and fabrics produced using a novel electrospinning method combined with traditional textile techniques. Textile Reseach Journal, 2016, 86, 1716-1727.	1.1	32
52	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.	4.0	32
53	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.	2.2	31
54	Tailoring body surface infrared radiation behavior through colored nanofibers for efficient passive radiative heating textiles. Chemical Engineering Journal, 2022, 430, 133093.	6.6	31

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55	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.	2.0	30
56	Facile synthesis of electrospun C@NiO/Ni nanofibers as an electrocatalyst for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2018, 43, 15217-15224.	3.8	30
57	Multiple-Jet Needleless Electrospinning Approach via a Linear Flume Spinneret. Polymers, 2019, 11, 2052.	2.0	30
58	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.	2.9	28
59	One-step fabrication of a stretchable and anti-oil-fouling nanofiber membrane for solar steam generation. Materials Chemistry Frontiers, 2021, 5, 3673-3680.	3.2	28
60	Diameter Refinement of Electrospun Nanofibers: From Mechanism, Strategies to Applications. Advanced Fiber Materials, 2022, 4, 145-161.	7.9	28
61	Multifunctional hydrogel platform for biofilm scavenging and O2 generating with photothermal effect on diabetic chronic wound healing. Journal of Colloid and Interface Science, 2022, 617, 542-556.	5.0	28
62	A reversible colorimetric chemosensor for naked-eye detection of copper ions using poly (aspartic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.0	27
63	High-throughput nanofiber produced by needleless electrospinning using a metal dish as the spinneret. Textile Reseach Journal, 2018, 88, 80-88.	1.1	27
64	3-Dimensional MWCNT/CuO nanostructures use as an electrochemical catalyst for oxygen evolution reaction. Journal of Alloys and Compounds, 2018, 735, 2311-2317.	2.8	27
65	Facile fabrication of novel pH-sensitive poly(aspartic acid) hydrogel by crosslinking nanofibers. Materials Letters, 2014, 132, 393-396.	1.3	24
66	Sandwich-structured fibrous membranes with low filtration resistance for effective PM2.5 capture via one-step needleless electrospinning. Materials Research Express, 2019, 6, 035027.	0.8	24
67	Wettability Control in Tree Structure-Based 1D Fiber Assemblies for Moisture Wicking Functionality. ACS Applied Materials & Interfaces, 2019, 11, 44682-44690.	4.0	23
68	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, 1394-1406.	1.2	22
69	Photocatalytic Activity of TiO2 Nanofibers: The Surface Crystalline Phase Matters. Nanomaterials, 2019, 9, 535.	1.9	22
70	Evaluation of electrospun biomimetic substrate surface-decorated with nanohydroxyapatite precipitation for osteoblasts behavior. Materials Science and Engineering C, 2017, 79, 687-696.	3.8	21
71	Effect of processing parameters on free surface electrospinning from a stepped pyramid stage. Journal of Industrial Textiles, 2016, 45, 483-494.	1.1	19
72	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.	1.3	19

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73	An efficient hybrid strategy for composite yarns of micro-/nano-fibers. Materials and Design, 2019, 184, 108196.	3.3	17
74	Fabricated narrow diameter distribution nanofiber for an air filtration membrane using a double rings slit spinneret. Textile Reseach Journal, 2019, 89, 936-947.	1.1	17
75	Nanofiber-structured hydrogel yarns with pH-response capacity and cardiomyocyte-drivability for bio-microactuator application. Acta Biomaterialia, 2017, 60, 144-153.	4.1	16
76	A novel approach for fabricating antibacterial nanofiber/cotton hybrid yarns. Fibers and Polymers, 2017, 18, 987-992.	1.1	16
77	pH-triggered sustained drug release of multilayer encapsulation system with hollow mesoporous silica nanoparticles/chitosan/polyacrylic acid. Materials Letters, 2020, 260, 126907.	1.3	16
78	Plasmonic silver nanoparticle-decorated electrospun nanofiber membrane for interfacial solar vapor generation. Textile Reseach Journal, 2021, 91, 2624-2634.	1.1	16
79	The study on the air volume fraction of electrospun nanofiber nonwoven mats. Fibers and Polymers, 2010, 11, 632-637.	1.1	15
80	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.	5.2	15
81	Light scattering tunability of nanofiber membrane for enhancing color yield. Dyes and Pigments, 2021, 193, 109462.	2.0	15
82	Silane-functionalized polyionenes-coated cotton fabrics with potent antimicrobial and antiviral activities. Biomaterials, 2022, 284, 121470.	5.7	15
83	Electrospun nanofibers of polyelectrolyteâ€“surfactant complexes for antibacterial wound dressing application. Soft Matter, 2019, 15, 10020-10028.	1.2	14
84	Facile fabrication of reinforced sub-micron fibrous media with hierarchical structure compounded thermally for effective air purification in application. Separation and Purification Technology, 2022, 289, 120726.	3.9	14
85	Preparation and characterization of microporous sodium poly(aspartic acid) nanofibrous hydrogel. Journal of Porous Materials, 2017, 24, 75-84.	1.3	13
86	Ceramic Nanofiber-Based Water-Induced Electric Generator. ACS Applied Materials & Interfaces, 2021, 13, 56226-56232.	4.0	13
87	Stable-jet length controlling electrospun fiber radius: Model and experiment. Polymer, 2019, 180, 121762.	1.8	10
88	Facile fabrication and transistor properties of mixed crystalline TiO2 nanofibers FET devices. Materials Letters, 2019, 246, 99-102.	1.3	10
89	Modified polyacrylonitrile nanofibers for improved dyeability using anionic dyes. Applied Nanoscience (Switzerland), 2020, 10, 2025-2035.	1.6	10
90	Electrospun cellulose acetate nanofiber upscaling with a metal plate needleless spinneret. Materials Research Express, 2019, 6, 1250e4.	0.8	9

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91	3D structure design and simulation for efficient particles capture: The influence of nanofiber diameter and distribution. Materials Today Communications, 2020, 23, 100897.	0.9	9
92	Asymmetric water affinity on antibacterial electrospun sub-micro cellulose acetate Janus membrane. Materials Letters, 2019, 256, 126607.	1.3	8
93	Hydrophilic and degradable polyesters based on <scp>l</scp>-aspartic acid with antibacterial properties for potential application in hernia repair. Biomaterials Science, 2019, 7, 5404-5413.	2.6	8
94	A Rapidâ€Ab/Desorption and Portable Photothermal MILâ€101(Cr) Nanofibrous Composite Membrane Fabricated by Sprayâ€Electrospinning for Atmosphere Water Harvesting. Energy and Environmental Materials, 2023, 6, .	7.3	8
95	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, 2023, 36, 1847-1876.	2.6	8
96	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.	1.1	7
97	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.	1.1	7
98	Asymptotic decay of velocity of whipping jet in electrospinning. Polymer, 2021, 217, 123456.	1.8	7
99	Quaternary ammonium saltâ€“modified polyacrylonitrile/polycaprolactone electrospun nanofibers with enhanced antibacterial properties. Textile Reseach Journal, 2021, 91, 2194-2203.	1.1	7
100	A rotary spinneret for high output of electrospun fibers with bimodal distribution. European Polymer Journal, 2021, 159, 110707.	2.6	7
101	Flexible, self-cleaning, and high-performance ceramic nanofiber-based moist-electric generator enabled by interfacial engineering. Science China Technological Sciences, 2022, 65, 450-457.	2.0	7
102	Guanidine Nanogels: Inherent Guanidine Nanogels with Durable Antibacterial and Bacterially Antiadhesive Properties (Adv. Funct. Mater. 12/2019). Advanced Functional Materials, 2019, 29, 1970077.	7.8	6
103	Theoretical analysis and of three dimensional free surface of electrospinning. Journal of King Saud University - Science, 2019, 31, 460-463.	1.6	6
104	A Visually Observable Copper Ion Adsorption Membrane by Electrospinning Combined with Copper Ion Probe. Fibers and Polymers, 2021, 22, 1844-1852.	1.1	6
105	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.	2.0	6
106	Giving Penetrable Remote-Control Ability to Thermoresponsive Fibrous Composite Actuator with Fast Response Induced by Alternative Magnetic Field. Nanomaterials, 2022, 12, 53.	1.9	6
107	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, 6531.	1.8	5
108	Fiber-microsphere Binary Structured Composite Fibrous Membranes for Waterproof and Breathable Applications. Fibers and Polymers, 2022, 23, 1500-1509.	1.1	5

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109	Investigation on the processability, structure and properties of micro-/nano-fiber composite yarns produced by trans-scale spinning. Journal of Industrial Textiles, 2022, 51, 5409S-5426S.	1.1	4
110	Electrospun nanofiber/cotton composite yarn with enhanced moisture management ability. Textile Reseach Journal, 2021, 91, 1467-1477.	1.1	3
111	Contact force within electrospun nanofiber core-spun yarns and moisture management ability of their fabrics. Journal of the Textile Institute, 0, , 1-13.	1.0	3
112	Preparation and characterization of electrospun cellulose acetate sub-micro fibrous membranes. Textile Reseach Journal, 2021, 91, 2540-2550.	1.1	3
113	Numerical simulation of a two-dimensional flapping wing in advanced mode. Journal of Hydrodynamics, 2017, 29, 1076-1080.	1.3	2
114	Mass production of polyacrylonitrile sub-micron fibrous webs with different aligned degrees via free surface electrospinning for air purification. Textile Reseach Journal, 2022, 92, 2731-2741.	1.1	2
115	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.	1.1	2
116	Facile fabrication of polydopamine nanosphere-decorated fabric for solar steam generation. Textile Reseach Journal, 2022, 92, 3451-3461.	1.1	2
117	A Novel Concept to Produce Submicron-Cotton/Polyester Composite Core-Spun Yarn via Modified Apparatus. Journal of Natural Fibers, 2022, 19, 13232-13242.	1.7	2
118	Dyeing of polyacrylonitrile nanofibers with CI Reactive Red 2 enabled by the introduction of polyethyleneimine. Textile Reseach Journal, 0, , 004051752110642.	1.1	0
119	Jet diameter of the first coil in the electrospinning whipping region: the role of fluid viscosity. Textile Reseach Journal, 0, , 004051752210806.	1.1	0
120	A Precisely Designed Composite Actuator with Directionally Fast Actuation, Nonâ€Contact Operation, and Obstacleâ€Penetrating Triggering Ability Using Aligned Nanofibers and Alternating Magnetic Field. Macromolecular Materials and Engineering, 2022, 307, .	1.7	0