Jintu Fan

List of Publications by Year
in descending order

149 papers	6,866 citations	50276 46 h-index	71685 76 g-index
156 all docs	156 docs citations	156 times ranked	7269 citing authors

#	Article	IF	Citations
1	High Dielectric Permittivity and Low Percolation Threshold in Nanocomposites Based on Poly(vinylidene fluoride) and Exfoliated Graphite Nanoplates. Advanced Materials, 2009, 21, 710-715.	21.0	650
2	The attachment of Fe3O4 nanoparticles to graphene oxide by covalent bonding. Carbon, 2010, 48, 3139-3144.	10.3	428
3	Photocatalytic antifouling PVDF ultrafiltration membranes based on synergy of graphene oxide and TiO2 for water treatment. Journal of Membrane Science, 2016, 520, 281-293.	8.2	331
4	Graphyne as the membrane for water desalination. Nanoscale, 2014, 6, 1865-1870.	5.6	230
5	Heat and moisture transfer with sorption and condensation in porous clothing assemblies and numerical simulation. International Journal of Heat and Mass Transfer, 2000, 43, 2989-3000.	4.8	158
6	Electrospinning of small diameter 3-D nanofibrous tubular scaffolds with controllable nanofiber orientations for vascular grafts. Journal of Materials Science: Materials in Medicine, 2010, 21, 3207-3215.	3.6	141
7	Designing a retrievable and scalable cell encapsulation device for potential treatment of type 1 diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E263-E272.	7.1	137
8	â€œSkin-likeâ€•fabric for personal moisture management. Science Advances, 2020, 6, eaaz0013.	10.3	134
9	Development of a new chinese bra sizing system based on breast anthropometric measurements. International Journal of Industrial Ergonomics, 2007, 37, 697-705.	2.6	116
10	An improved model of heat and moisture transfer with phase change and mobile condensates in fibrous insulation and comparison with experimental results. International Journal of Heat and Mass Transfer, 2004, 47, 2343-2352.	4.8	104
11	Personal thermal management using portable thermoelectrics for potential building energy saving. Applied Energy, 2018, 218, 282-291.	10.1	100
12	Personal thermal management by thermally conductive composites: A review. Composites Communications, 2021, 23, 100595.	6.3	97
13	Modeling heat and moisture transfer through fibrous insulation with phase change and mobile condensates. International Journal of Heat and Mass Transfer, 2002, 45, 4045-4055.	4.8	91
14	Prediction of Relative Permeability of Unsaturated Porous Media Based on Fractal Theory and Monte Carlo Simulation. Energy & Fuels, 2012, 26, 6971-6978.	5.1	91
15	Breathable and Flexible Piezoelectric ZnO@PVDF Fibrous Nanogenerator for Wearable Applications. Polymers, 2018, 10, 745.	4.5	89
16	Physical properties of silk fibroin/cellulose blend films regenerated from the hydrophilic ionic liquid. Carbohydrate Polymers, 2011, 86, 462-468.	10.2	84
17	Prediction of facial attractiveness from facial proportions. Pattern Recognition, 2012, 45, 2326-2334.	8.1	83
18	Fractal analysis of effective thermal conductivity for three-phase (unsaturated) porous media. Journal of Applied Physics, 2009, 106, .	2.5	81

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19	Intermolecular interactions between natural polysaccharides and silk fibroin protein. Carbohydrate Polymers, 2013, 93, 561-573.	10.2	78
20	Electricity Resonance-Induced Fast Transport of Water through Nanochannels. Nano Letters, 2014, 14, 4931-4936.	9.1	78
21	OPTIMIZATION OF THE FRACTAL-LIKE ARCHITECTURE OF POROUS FIBROUS MATERIALS RELATED TO PERMEABILITY, DIFFUSIVITY AND THERMAL CONDUCTIVITY. Fractals, 2017, 25, 1750030.	3.7	73
22	A difference-fractal model for the permeability of fibrous porous media. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 1201-1204.	2.1	71
23	Nanoporous two-dimensional MoS₂ membranes for fast saline solution purification. Physical Chemistry Chemical Physics, 2016, 18, 22210-22216.	2.8	68
24	Hydraulic permeability of fibrous porous media. International Journal of Heat and Mass Transfer, 2011, 54, 4009-4018.	4.8	67
25	High flux and rejection of hierarchical composite membranes based on carbon nanotube network and ultrathin electrospun nanofibrous layer for dye removal. Journal of Membrane Science, 2017, 535, 94-102.	8.2	67
26	New functions and applications of Walter, the sweating fabric manikin. European Journal of Applied Physiology, 2004, 92, 641-644.	2.5	65
27	A fractal analytical model for the permeabilities of fibrous gas diffusion layer in proton exchange membrane fuel cells. Electrochimica Acta, 2014, 134, 222-231.	5.2	65
28	Fabrication of graphene nanosheet (GNS)â€“Fe3O4 hybrids and GNSâ€“Fe3O4/syndiotactic polystyrene composites with high dielectric permittivity. Carbon, 2013, 58, 175-184.	10.3	63
29	Design of Nanofibrous and Microfibrous Channels for Fast Capillary Flow. Langmuir, 2018, 34, 1235-1241.	3.5	60
30	Thermoelectric air conditioning undergarment for personal thermal management and HVAC energy saving. Energy and Buildings, 2020, 226, 110374.	6.7	59
31	Study of heat and moisture transfer within multi-layer clothing assemblies consisting of different types of battings. International Journal of Thermal Sciences, 2008, 47, 641-647.	4.9	58
32	Water permeation through single-layer graphyne membrane. Journal of Chemical Physics, 2013, 139, 064705.	3.0	58
33	Heat and Moisture Transfer with Sorption and Phase Change Through Clothing Assemblies. Textile Reseach Journal, 2005, 75, 187-196.	2.2	57
34	A genetic-algorithm-based optimization model for scheduling flexible assembly lines. International Journal of Advanced Manufacturing Technology, 2008, 36, 156-168.	3.0	57
35	Optimal Design of Porous Structures for the Fastest Liquid Absorption. Langmuir, 2014, 30, 149-155.	3.5	57
36	An analytical model for gas diffusion though nanoscale and microscale fibrous media. Microfluidics and Nanofluidics, 2014, 16, 381-389.	2.2	57

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37	An experimental investigation of moisture absorption and condensation in fibrous insulations under low temperature. Experimental Thermal and Fluid Science, 2003, 27, 723-729.	2.7	56
38	A transient thermal model of the human bodyâ€“clothingâ€“environment system. Journal of Thermal Biology, 2008, 33, 87-97.	2.5	55
39	Geometry-Induced Asymmetric Capillary Flow. Langmuir, 2014, 30, 5448-5454.	3.5	55
40	Heat and Moisture Transfer with Sorption and Phase Change Through Clothing Assemblies. Textile Reseach Journal, 2005, 75, 99-105.	2.2	53
41	A Genetic-Algorithm-Based Optimization Model for Solving the Flexible Assembly Line Balancing Problem With Work Sharing and Workstation Revisiting. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2008, 38, 218-228.	2.9	52
42	Design of an outstanding super-hydrophobic surface by electro-spinning. Applied Surface Science, 2011, 257, 7003-7009.	6.1	50
43	Optimal structure of tree-like branching networks for fluid flow. Physica A: Statistical Mechanics and Its Applications, 2014, 393, 527-534.	2.6	50
44	Characterizing the transplanar and in-plane water transport properties of fabrics under different sweat rate: Forced Flow Water Transport Tester. Scientific Reports, 2015, 5, 17012.	3.3	48
45	Thermal resistance matching for thermoelectric cooling systems. Energy Conversion and Management, 2018, 169, 186-193.	9.2	48
46	An All Hydrophilic Fluid Diode for Unidirectional Flow in Porous Systems. Advanced Functional Materials, 2018, 28, 1800269.	14.9	48
47	Electromanipulating Water Flow in Nanochannels. Angewandte Chemie - International Edition, 2015, 54, 2351-2355.	13.8	47
48	Simulation of heat and moisture transfer with phase change and mobile condensates in fibrous insulation. International Journal of Thermal Sciences, 2004, 43, 665-676.	4.9	46
49	Gas transport properties of electrospun polymer nanofibers. Polymer, 2014, 55, 3149-3155.	3.8	45
50	Preparation and characterization of porous poly(vinylidene fluoride-trifluoroethylene) copolymer membranes via electrospinning and further hot pressing. Polymer Testing, 2011, 30, 436-441.	4.8	44
51	Improved dielectric properties for chemically functionalized exfoliated graphite nanoplates/syndiotactic polystyrene composites prepared by a solution-blending method. Carbon, 2014, 80, 496-503.	10.3	39
52	FRACTAL ANALYSIS OF GAS DIFFUSION IN POROUS NANOFIBERS. Fractals, 2015, 23, 1540011.	3.7	37
53	Superhydrophilic Wrinkle-Free Cotton Fabrics via Plasma and Nanofluid Treatment. ACS Applied Materials & Interfaces, 2017, 9, 38109-38116.	8.0	36
54	Effective diffusivity of gas diffusion layer in proton exchange membrane fuel cells. Journal of Power Sources, 2013, 225, 179-186.	7.8	35

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55	Nature-inspired moisture management fabric for unidirectional liquid transport and surface repellence and resistance. Energy and Buildings, 2021, 248, 111203.	6.7	35
56	Numerical study of a novel Single-loop pulsating heat pipe with separating walls within the flow channel. Applied Thermal Engineering, 2021, 196, 117246.	6.0	34
57	Interactions of the surface heat and moisture transfer from the human body under varying climatic conditions and walking speeds. Applied Ergonomics, 2006, 37, 685-693.	3.1	33
58	Transplanar water transport tester for fabrics. Measurement Science and Technology, 2007, 18, 1465-1471.	2.6	33
59	An improved model of heat transfer through penguin feathers and down. Journal of Theoretical Biology, 2007, 248, 727-735.	1.7	33
60	Effects of athletic T-shirt designs on thermal comfort. Fibers and Polymers, 2008, 9, 503-508.	2.1	33
61	Brain responses to facial attractiveness induced by facial proportions: evidence from an fMRI study. Scientific Reports, 2016, 6, 35905.	3.3	33
62	Thermal energy transport within porous polymer materials: Effects of fiber characteristics. Journal of Applied Polymer Science, 2007, 106, 576-583.	2.6	32
63	Optimum porosity of fibrous porous materials for thermal insulation. Fibers and Polymers, 2008, 9, 27-33.	2.1	32
64	Transverse permeability determination of dual-scale fibrous materials. International Journal of Heat and Mass Transfer, 2013, 58, 532-539.	4.8	32
65	Piezoelectric Properties of Three Types of PVDF and ZnO Nanofibrous Composites. Advanced Fiber Materials, 2021, 3, 160-171.	16.1	32
66	Advanced materials for personal thermal and moisture management of health care workers wearing PPE. Materials Science and Engineering Reports, 2021, 146, 100639.	31.8	32
67	Measurement of thermal radiative properties of penguin down and other fibrous materials using FTIR. Polymer Testing, 2009, 28, 673-679.	4.8	31
68	A quasi-physical model for predicting the thermal insulation and moisture vapour resistance of clothing. Applied Ergonomics, 2009, 40, 577-590.	3.1	31
69	Thermal radiative properties of electrospun superfine fibrous PVA films. Materials Letters, 2008, 62, 828-831.	2.6	30
70	Treelike networks accelerating capillary flow. Physical Review E, 2014, 89, 053007.	2.1	30
71	Accumulation behaviors of methane in the aqueous environment with organic matters. Fuel, 2019, 236, 836-842.	6.4	29
72	Prediction of Clothing Thermal Insulation and Moisture Vapour Resistance of the Clothed Body Walking in Wind. Annals of Occupational Hygiene, 2006, 50, 833-42.	1.9	27

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73	Optimal porosity distribution of fibrous insulation. International Journal of Heat and Mass Transfer, 2009, 52, 4350-4357.	4.8	27
74	Effective permeability of gas diffusion layer in proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2013, 38, 10519-10526.	7.1	27
75	Differential spontaneous capillary flow through heterogeneous porous media. International Journal of Heat and Mass Transfer, 2011, 54, 3096-3099.	4.8	26
76	A vibration-charge-induced unidirectional transport of water molecules in confined nanochannels. Soft Matter, 2012, 8, 12111.	2.7	26
77	Unidirectional motion of a water nanodroplet subjected to a surface energy gradient. Physical Review E, 2012, 85, 056301.	2.1	26
78	Novel ventilation design of combining spacer and mesh structure in sports T-shirt significantly improves thermal comfort. Applied Ergonomics, 2015, 48, 138-147.	3.1	26
79	Psychophysical Measurement of Wet and Clingy Sensation of Fabrics by the Volar Forearm Test. Journal of Sensory Studies, 2015, 30, 329-347.	1.6	25
80	Structural optimization of porous media for fast and controlled capillary flows. Physical Review E, 2015, 91, 053021.	2.1	25
81	Filtration Efficiency of Non-Uniform Fibrous Filters. Aerosol Science and Technology, 2015, 49, 912-919.	3.1	24
82	Longitudinal permeability determination of dual-scale fibrous materials. Composites Part A: Applied Science and Manufacturing, 2015, 68, 42-46.	7.6	23
83	Heterogeneously engineered porous media for directional and asymmetric liquid transport. Cell Reports Physical Science, 2022, 3, 100710.	5.6	23
84	Thermoregulatory clothing with temperature-adaptive multimodal body heat regulation. Cell Reports Physical Science, 2022, 3, 100958.	5.6	23
85	The effect of added fullness and ventilation holes in T-shirt design on thermal comfort. Ergonomics, 2011, 54, 403-410.	2.1	22
86	Characterizing the transplanar and in-plane water transport of textiles with gravimetric and image analysis technique: Spontaneous Uptake Water Transport Tester. Scientific Reports, 2015, 5, 9689.	3.3	22
87	Softness measurements for open-cell foam materials and human soft tissue. Measurement Science and Technology, 2006, 17, 1785-1791.	2.6	21
88	Cold protective clothing with reflective nano-fibrous interlayers for improved comfort. International Journal of Clothing Science and Technology, 2013, 25, 380-388.	1.1	21
89	The fastest capillary flow under gravity. Applied Physics Letters, 2014, 104, 231602.	3.3	21
90	The fastest capillary penetration of power-law fluids. Chemical Engineering Science, 2015, 137, 583-589.	3.8	21

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91	Intelligent production planning for complex garment manufacturing. Journal of Intelligent Manufacturing, 2013, 24, 133-145.	7.3	20
92	Preparation and characterization of electrospun poly(vinylidene fluoride)/poly(methyl methacrylate) membrane. High Performance Polymers, 2014, 26, 817-825.	1.8	20
93	Electric field-induced gas dissolving in aqueous solutions. Journal of Chemical Physics, 2021, 154, 024705.	3.0	20
94	Differential superhydrophobicity and hydrophilicity on a thin cellulose layer. Thin Solid Films, 2010, 518, 5033-5039.	1.8	19
95	A controllable collapsed/circular nanoactuator based on carbon nanotube. Applied Physics Letters, 2013, 102, 123902.	3.3	19
96	Effect of posture positions on the evaporative resistance and thermal insulation of clothing. Ergonomics, 2011, 54, 301-313.	2.1	18
97	Measurement of radiative thermal properties of thin polymer films by FTIR. Polymer Testing, 2008, 27, 122-128.	4.8	17
98	Toward the hydrophobic state transition by the appropriate vibration of substrate. Europhysics Letters, 2011, 96, 56008.	2.0	17
99	A hydraulicâ€"photosynthetic model based on extended HLH and its application to Coast redwood (Sequoia sempervirens). Journal of Theoretical Biology, 2008, 253, 393-400.	1.7	16
100	Pressure evaluation of 3D seamless knitted bras and conventional wired bras. Fibers and Polymers, 2009, 10, 124-131.	2.1	16
101	Inverse Problem of Air Filtration of Nanoparticles: Optimal Quality Factors of Fibrous Filters. Journal of Nanomaterials, 2015, 2015, 1-11.	2.7	16
102	An analytical model for gas diffusion through fractal nanofibers in complex resources. Journal of Natural Gas Science and Engineering, 2016, 33, 1324-1329.	4.4	16
103	Development and characterization of light weight plant structured fabrics. Fibers and Polymers, 2009, 10, 343-350.	2.1	15
104	Are Happy Faces Attractive? The Roles of Early vs. Late Processing. Frontiers in Psychology, 2015, 6, 1812.	2.1	15
105	Advanced thermal regulating materials and systems for energy saving and thermal comfort in buildings. Materials Today Energy, 2022, 24, 100925.	4.7	14
106	Fabrication and characterization of a novel polypropylene/poly(vinyl alcohol)/aluminum hybrid layered assembly for highâ€performance fibrous insulation. Journal of Applied Polymer Science, 2008, 110, 2525-2530.	2.6	13
107	The gravitational effect on the geometric profiles of droplets on horizontal fibers. Soft Matter, 2013, 9, 10324.	2.7	13
108	Impact of electrical heating on effective thermal Insulation of a multi-layered winter clothing system for optimal heating efficiency. International Journal of Clothing Science and Technology, 2016, 28, .	1.1	13

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109	Optimizing the design of nanostructures for improved thermal conduction within confined spaces. Nanoscale Research Letters, 2011, 6, 422.	5.7	12
110	Heat transfer through fibrous assemblies incorporating reflective interlayers. International Journal of Heat and Mass Transfer, 2012, 55, 8032-8037.	4.8	12
111	On the longitudinal permeability of aligned fiber arrays. Journal of Composite Materials, 2015, 49, 1753-1763.	2.4	12
112	Electrospun nylon 6 fibrous membrane coated with rice-like TiO2 nanoparticles by an ultrasonic-assistance method. Journal of Membrane Science, 2010, 355, 91-97.	8.2	11
113	Comparison of clothing thermal comfort properties measured on female and male sweating manikins. Textile Reseach Journal, 2017, 87, 2214-2223.	2.2	11
114	Effects of body positions and garment design on the performance of a personal air cooling/heating system. Indoor Air, 2022, 32, .	4.3	11
115	Preparation, crystallization behavior, and dynamic mechanical property of nanocomposites based on poly(vinylidene fluoride) and exfoliated graphite nanoplate. Journal of Applied Polymer Science, 2011, 119, 1166-1175.	2.6	10
116	Effect of softeners and crosslinking conditions on the performance of easy-care cotton fabrics with different weave constructions. Fibers and Polymers, 2013, 14, 822-831.	2.1	10
117	The comfort evaluation of weft knitted plant structured fabrics and garment. I. Objective evaluation of weft knitted plant structured fabrics. Fibers and Polymers, 2015, 16, 1788-1795.	2.1	10
118	The comfort evaluation of weft knitted plant structured fabrics and garment. II. Sweating manikin and wearer trial test on polo shirt. Fibers and Polymers, 2015, 16, 2077-2085.	2.1	10
119	Transient Analysis of Heat and Moisture Transfer with Sorption/Desorption and Phase Change in Fibrous Clothing Insulation. Numerical Heat Transfer; Part A: Applications, 2007, 51, 635-655.	2.1	9
120	Controlled deposition of electrospun nanofibers by electrohydrodynamic deflection. Journal of Applied Physics, 2019, 125, 054901.	2.5	9
121	Prediction of seamless knitted bra tension. Fibers and Polymers, 2008, 9, 785-792.	2.1	8
122	Development and characterization of plant structured warp knitted fabric and garment. Fibers and Polymers, 2015, 16, 1430-1440.	2.1	8
123	Perceived Body Size Affected by Garment and Body Mass Index. Perceptual and Motor Skills, 2006, 103, 253-264.	1.3	7
124	Measuring the thermal insulation and evaporative resistance of sleeping bags using a supine sweating fabric manikin. Measurement Science and Technology, 2009, 20, 095108.	2.6	6
125	Fabrication of the flower-like Zn5(OH)6(CO3)2 and ZnO microstructures consisting of the dendritic nanosheets. Materials Letters, 2012, 83, 115-117.	2.6	6
126	A comparative analysis of textile schools by journal publications listed in Web of Science^{TM}. Journal of the Textile Institute, 2021, 112, 1472-1481.	1.9	6

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127	Soft robotic fabric design, fabrication, and thermoregulation evaluation. Textile Reseach Journal, 2021, 91, 1763-1785.	2.2	5
128	Combining Resting-state fMRI and DTI Analysis for Early-onset Schizophrenia. International Journal of Computational Intelligence Systems, 2009, 2, 375-385.	2.7	4
129	Use of aluminumâ€coated interlayers to develop a coldâ€protective fibrous assembly. Journal of Applied Polymer Science, 2014, 131, .	2.6	4
130	Preparation and Properties of Split Microfiber Synthetic Leather. Journal of Engineered Fibers and Fabrics, 2018, 13, 155892501801300.	1.0	4
131	THERMOREGULATORY CLOTHING FOR PERSONAL THERMAL MANAGEMENT. Annual Review of Heat Transfer, 2018, 21, 205-244.	1.0	4
132	Development of Moisture Management Knitted Fabrics Integarated with Non-smooth Concave Surface and Mesh Structure. Fibers and Polymers, 2022, 23, 1142-1149.	2.1	4
133	Electric field direction-induced gas/water selectively entering nanochannel. Journal of Molecular Liquids, 2022, 363, 119852.	4.9	4
134	Silver polyhedron coated electrospun nylon 6 nanoâ€fibrous membrane with good infrared extinction, ultraviolet shielding and water vapor permeability. Journal of Applied Polymer Science, 2012, 124, 5138-5144.	2.6	3
135	Environmental Evaluation of Fabric Dyeing and Water Use for a Global Apparel Manufacturer. AATCC Journal of Research, 2017, 4, 1-13.	0.6	3
136	Development of tricot warp knitted fabrics with moisture management for casual shirt. Fashion and Textiles, 2022, 9, .	2.4	3
137	A facile method for fabrication of moisture-sensitive porous membrane with onâ€"off function. Materials Letters, 2011, 65, 2118-2120.	2.6	2
138	A comparative study on the effects of air gap wind and walking motion on the thermal properties of Arabian Thawbs and Chinese Cheongsams. Ergonomics, 2016, 59, 999-1008.	2.1	2
139	A controllable water signal transistor. Physical Chemistry Chemical Physics, 2017, 19, 9625-9629.	2.8	2
140	Heat and Mass Transport through Porous Fibrous Insulation: Modeling and Optimization. , 2010, , .		1
141	Effect of Body Image Presentation Format to Female Physical Attractiveness. Lecture Notes in Computer Science, 2012, , 239-247.	1.3	1
142	Oneâ€step fabrication of branched poly(vinyl alcohol) nanofibers by magnetic coaxial electrospinning. Journal of Applied Polymer Science, 2012, 125, 1425-1429.	2.6	1
143	Development and trial of athletic T-shirt using spacer blocks to enhance ventilation. International Journal of Clothing Science and Technology, 2017, 29, 706-715.	1.1	1
144	Design and Application of an Efficient 2-D FIR Filtering Based on Impulse Response Rounding. HKIE Transactions, 2000, 7, 40-42.	0.1	0

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145	Visual Perception of Surface Wrinkles. Perceptual and Motor Skills, 2005, 101, 925-934.	1.3	0
146	Heterogeneous porous structures for the fastest liquid absorption. , 2013, , .		0
147	Quantification of the porosity of membranes by digital images analysis techniques. , 2015, , .		0
148	Optimal Porosity of Fibrous Battings for Thermal Insulation. , 2007, , .		0
149	Development of an Automated Pressure Sensitive Thermesthesiometer and Its Application in Characterizing the Thermal Response of Human Tissue with Respect to Warm Surfaces. Advances in Intelligent Systems and Computing, 2018, , 383-394.	0.6	0