

Xianfeng Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/931795/publications.pdf>

Version: 2024-02-01

82
papers

6,161
citations

87723

38
h-index

69108

77
g-index

83
all docs

83
docs citations

83
times ranked

6785
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomimetic electrospun nanofibrous structures for tissue engineering. <i>Materials Today</i> , 2013, 16, 229-241.	8.3	645
2	Electrospun nanomaterials for ultrasensitive sensors. <i>Materials Today</i> , 2010, 13, 16-27.	8.3	562
3	Electro-spinning/netting: A strategy for the fabrication of three-dimensional polymer nano-fiber/nets. <i>Progress in Materials Science</i> , 2013, 58, 1173-1243.	16.0	440
4	Engineering biomimetic superhydrophobic surfaces of electrospun nanomaterials. <i>Nano Today</i> , 2011, 6, 510-530.	6.2	417
5	Electrospun nanofibrous materials: a versatile medium for effective oil/water separation. <i>Materials Today</i> , 2016, 19, 403-414.	8.3	369
6	Continuous, Spontaneous, and Directional Water Transport in the Trilayered Fibrous Membranes for Functional Moisture Wicking Textiles. <i>Small</i> , 2018, 14, e1801527.	5.2	213
7	A highly sensitive humidity sensor based on a nanofibrous membrane coated quartz crystal microbalance. <i>Nanotechnology</i> , 2010, 21, 055502.	1.3	153
8	Super hygroscopic nanofibrous membrane-based moisture pump for solar-driven indoor dehumidification. <i>Nature Communications</i> , 2020, 11, 3302.	5.8	143
9	Fluorine-Free Waterborne Coating for Environmentally Friendly, Robustly Water-Resistant, and Highly Breathable Fibrous Textiles. <i>ACS Nano</i> , 2020, 14, 1045-1054.	7.3	131
10	Biomimetic Fibrous Murray Membranes with Ultrafast Water Transport and Evaporation for Smart Moisture-Wicking Fabrics. <i>ACS Nano</i> , 2019, 13, 1060-1070.	7.3	120
11	Amino Acid-Functionalized Ionic Liquid Solid Sorbents for Post-Combustion Carbon Capture. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 8670-8677.	4.0	107
12	Immobilization of amino acid ionic liquids into nanoporous microspheres as robust sorbents for CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2978.	5.2	104
13	Environmentally Friendly and Breathable Fluorinated Polyurethane Fibrous Membranes Exhibiting Robust Waterproof Performance. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 29302-29310.	4.0	101
14	Biomimicry via Electrospinning. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2012, 37, 94-114.	6.8	100
15	Breathable and Colorful Cellulose Acetate-Based Nanofibrous Membranes for Directional Moisture Transport. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22866-22875.	4.0	100
16	A Biomimetic Transpiration Textile for Highly Efficient Personal Drying and Cooling. <i>Advanced Functional Materials</i> , 2021, 31, 2008705.	7.8	98
17	Thermal inter-fiber adhesion of the polyacrylonitrile/fluorinated polyurethane nanofibrous membranes with enhanced waterproof-breathable performance. <i>Separation and Purification Technology</i> , 2016, 158, 53-61.	3.9	93
18	Integration of Janus Wettability and Heat Conduction in Hierarchically Designed Textiles for All-Day Personal Radiative Cooling. <i>Nano Letters</i> , 2022, 22, 680-687.	4.5	93

#	ARTICLE	IF	CITATIONS
19	Thermoconductive, Moisture-Permeable, and Superhydrophobic Nanofibrous Membranes with Interpenetrated Boron Nitride Network for Personal Cooling Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32078-32089.	4.0	90
20	One-Step Electrospinning/netting Technique for Controllably Preparing Polyurethane Nano-fiber/net. <i>Macromolecular Rapid Communications</i> , 2011, 32, 1729-1734.	2.0	87
21	Ultrahigh Metal-Organic Framework Loading and Flexible Nanofibrous Membranes for Efficient CO ₂ Capture with Long-Term, Ultrastable Recyclability. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34802-34810.	4.0	87
22	Electrospun nanofibrous chitosan membranes modified with polyethyleneimine for formaldehyde detection. <i>Carbohydrate Polymers</i> , 2014, 108, 192-199.	5.1	86
23	Highly flexible NiCo ₂ O ₄ /CNTs doped carbon nanofibers for CO ₂ adsorption and supercapacitor electrodes. <i>Journal of Colloid and Interface Science</i> , 2016, 476, 87-93.	5.0	74
24	Waterproof and Breathable Electrospun Nanofibrous Membranes. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1800931.	2.0	70
25	Large-scale fabrication of two-dimensional spider-web-like gelatin nano-nets via electro-netting. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 86, 345-352.	2.5	65
26	Multi-scaled interconnected inter- and intra-fiber porous janus membranes for enhanced directional moisture transport. <i>Journal of Colloid and Interface Science</i> , 2020, 565, 426-435.	5.0	65
27	Investigation of silica nanoparticle distribution in nanoporous polystyrene fibers. <i>Soft Matter</i> , 2011, 7, 8376.	1.2	63
28	Human Skin-Like, Robust Waterproof, and Highly Breathable Fibrous Membranes with Short Perfluorobutyl Chains for Eco-Friendly Protective Textiles. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 30887-30894.	4.0	63
29	Balsam-Pear-Skin-Like Porous Polyacrylonitrile Nanofibrous Membranes Grafted with Polyethyleneimine for Postcombustion CO ₂ Capture. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 41087-41098.	4.0	60
30	Development of amino acid and amino acid-complex based solid sorbents for CO ₂ capture. <i>Applied Energy</i> , 2013, 109, 112-118.	5.1	57
31	Multifunctional, Waterproof, and Breathable Nanofibrous Textiles Based on Fluorine-Free, All-Water-Based Coatings. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 15911-15918.	4.0	57
32	Flexible Fe ₃ O ₄ @Carbon Nanofibers Hierarchically Assembled with MnO ₂ Particles for High-Performance Supercapacitor Electrodes. <i>Scientific Reports</i> , 2017, 7, 15153.	1.6	56
33	Fluorescent sensor for indirect measurement of methyl parathion based on alkaline-induced hydrolysis using N-doped carbon dots. <i>Talanta</i> , 2019, 192, 368-373.	2.9	54
34	Recent advances in the biotoxicity of metal oxide nanoparticles: Impacts on plants, animals and microorganisms. <i>Chemosphere</i> , 2019, 237, 124403.	4.2	53
35	Free-standing, spider-web-like polyamide/carbon nanotube composite nanofibrous membrane impregnated with polyethyleneimine for CO ₂ capture. <i>Composites Communications</i> , 2017, 6, 41-47.	3.3	51
36	Electrospun carbon nanofibers with multi-aperture/opening porous hierarchical structure for efficient CO ₂ adsorption. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 659-667.	5.0	48

#	ARTICLE	IF	CITATIONS
37	Tailoring Differential Moisture Transfer Performance of Nonwoven/Polyacrylonitrile/SiO ₂ Nanofiber Composite Membranes. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700062.	1.9	46
38	Environmentally benign modification of breathable nanofibrous membranes exhibiting superior waterproof and photocatalytic self-cleaning properties. <i>Nanoscale Horizons</i> , 2019, 4, 867-873.	4.1	41
39	Environmentally Friendly, Durably Waterproof, and Highly Breathable Fibrous Fabrics Prepared by One-Step Fluorine-Free Waterborne Coating. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8613-8622.	4.0	41
40	Facile fabrication of fluorine-free breathable poly(methylhydrosiloxane)/polyurethane fibrous membranes with enhanced water-resistant capability. <i>Journal of Colloid and Interface Science</i> , 2019, 556, 541-548.	5.0	40
41	Novel fluorinated polybenzoxazine-silica films: chemical synthesis and superhydrophobicity. <i>RSC Advances</i> , 2012, 2, 12804.	1.7	39
42	Corncoblike, Superhydrophobic, and Phase-Changeable Nanofibers for Intelligent Thermoregulating and Water-Repellent Fabrics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 39324-39333.	4.0	39
43	Assembly of silica aerogels within silica nanofibers: towards a super-insulating flexible hybrid aerogel membrane. <i>RSC Advances</i> , 2015, 5, 91813-91820.	1.7	38
44	Tailoring waterproof and breathable properties of environmentally friendly electrospun fibrous membranes by optimizing porous structure and surface wettability. <i>Composites Communications</i> , 2019, 15, 40-45.	3.3	38
45	Sandwich-Structured textiles with hierarchically nanofibrous network and Janus wettability for outdoor personal thermal and moisture management. <i>Chemical Engineering Journal</i> , 2022, 450, 138012.	6.6	37
46	Polyaniline Enriched Flexible Carbon Nanofibers with Core-Shell Structure for High-Performance Wearable Supercapacitors. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700855.	1.9	36
47	One-step fabrication of multi-scaled, inter-connected hierarchical fibrous membranes for directional moisture transport. <i>Journal of Colloid and Interface Science</i> , 2020, 577, 207-216.	5.0	35
48	Robust and Flexible Carbon Nanofibers Doped with Amine Functionalized Carbon Nanotubes for Efficient CO ₂ Capture. <i>Advanced Sustainable Systems</i> , 2017, 1, 1600028.	2.7	34
49	Porous, flexible, and core-shell structured carbon nanofibers hybridized by tin oxide nanoparticles for efficient carbon dioxide capture. <i>Journal of Colloid and Interface Science</i> , 2020, 560, 379-387.	5.0	34
50	Cobalt oxide nanoparticles embedded in flexible carbon nanofibers: attractive material for supercapacitor electrodes and CO ₂ adsorption. <i>RSC Advances</i> , 2016, 6, 52171-52179.	1.7	33
51	Multi-bioinspired and Multistructural Integrated Patterned Nanofibrous Surface for Spontaneous and Efficient Fog Collection. <i>Nano Letters</i> , 2021, 21, 7806-7814.	4.5	33
52	In situ synthesis of carbon nanotube doped metal-organic frameworks for CO ₂ capture. <i>RSC Advances</i> , 2016, 6, 4382-4386.	1.7	32
53	A Trilayered Composite Fabric with Directional Water Transport and Resistance to Blood Penetration for Medical Protective Clothing. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 18944-18953.	4.0	26
54	Electrospun bamboo-like Fe ₃ C encapsulated Fe-Si-N co-doped nanofibers for efficient oxygen reduction. <i>Journal of Colloid and Interface Science</i> , 2019, 546, 231-239.	5.0	25

#	ARTICLE	IF	CITATIONS
55	Spunbonded needle-punched nonwoven geotextiles for filtration and drainage applications: Manufacturing and structural design. <i>Composites Communications</i> , 2021, 25, 100481.	3.3	25
56	Comparative research on selective adsorption of Pb(II) by biosorbents prepared by two kinds of modifying waste biomass: Highly-efficient performance, application and mechanism. <i>Journal of Environmental Management</i> , 2021, 288, 112388.	3.8	25
57	Highly Transparent Nanofibrous Membranes Used as Transparent Masks for Efficient PM _{2.5} Removal. <i>ACS Nano</i> , 2022, 16, 119-128.	7.3	25
58	Amine-impregnated porous nanofiber membranes for CO ₂ capture. <i>Composites Communications</i> , 2018, 10, 45-51.	3.3	21
59	High Fidelity Determination and Tracing of Small Extracellular Vesicle Cargoes. <i>Small</i> , 2020, 16, e2002800.	5.2	21
60	Nuclear Magnetic Resonance Studies of CO ₂ Absorption and Desorption in Aqueous Sodium Salt of Alanine. <i>Energy & Fuels</i> , 2015, 29, 3780-3784.	2.5	20
61	Colorimetric and fluorescent dual-identification of glutathione based on its inhibition on the 3D ball-flower shaped Cu-hemin-MOF's peroxidase-like activity. <i>Mikrochimica Acta</i> , 2020, 187, 601.	2.5	19
62	Lizard-Skin-Inspired Nanofibrous Capillary Network Combined with a Slippery Surface for Efficient Fog Collection. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 36587-36594.	4.0	18
63	Comparative study on enhanced pectinase and alkali-oxygen degummings of sisal fibers. <i>Cellulose</i> , 2021, 28, 8375-8386.	2.4	17
64	Biomimetic Aligned Micro-/Nanofibrous Composite Membranes with Ultrafast Water Transport and Evaporation for Efficient Indoor Humidification. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 1983-1993.	4.0	16
65	Effects of parameters of the shell formation process on the performance of microencapsulated phase change materials based on melamine-formaldehyde. <i>Textile Research Journal</i> , 2017, 87, 1848-1859.	1.1	15
66	How do proteins respond to common carbon nanomaterials?. <i>Advances in Colloid and Interface Science</i> , 2019, 270, 101-107.	7.0	13
67	Bifunctional Microcapsules with n-Octadecane/Thyme Oil Core and Polyurea Shell for High-Efficiency Thermal Energy Storage and Antibiosis. <i>Polymers</i> , 2020, 12, 2226.	2.0	13
68	Rapid Preparation of Activated Carbon Fiber Felt under Microwaves: Pore Structures, Adsorption of Tetracycline in Water, and Mechanism. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 146-153.	1.8	11
69	Tailoring high anti-UV performance polypropylene based geotextiles with homogeneous waterborne polyurethane-TiO ₂ composite emulsions. <i>Composites Communications</i> , 2020, 22, 100529.	3.3	11
70	Transformation of Fibrous Membranes from Opaque to Transparent under Mechanical Pressing. <i>Engineering</i> , 2022, 19, 84-92.	3.2	11
71	Honeycomb-Inspired Robust Hygroscopic Nanofibrous Cellular Networks. <i>Small Methods</i> , 2021, 5, e2101011.	4.6	11
72	A Feasible Method Applied to One-Bath Process of Wool/Acrylic Blended Fabrics with Novel Heterocyclic Reactive Dyes and Application Properties of Dyed Textiles. <i>Polymers</i> , 2020, 12, 285.	2.0	9

#	ARTICLE	IF	CITATIONS
73	Water electret charging based polypropylene/electret masterbatch composite melt-blown nonwovens with enhanced charge stability for efficient air filtration. Journal of the Textile Institute, 2022, 113, 2128-2134.	1.0	9
74	Preparation of Flexible Substrate Electrode for Supercapacitor With High-Performance MnO ₂ Stalagmite Nanorod Arrays. Frontiers in Chemistry, 2019, 7, 338.	1.8	5
75	Self-assembly of polyethylene oxide and its composite nanofibrous membranes with cellular network structure. Composites Communications, 2021, 27, 100759.	3.3	5
76	Novel nitrogen-doped carbon dots for "turn-on" sensing of ATP based on aggregation induced emission enhancement effect. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 273, 121044.	2.0	5
77	Introduction and Historical Overview. , 2019, , 3-20.		4
78	Electrospun Nanofibers for Carbon Dioxide Capture. , 2019, , 619-640.		4
79	Designing Unidirectional Moisture Transport Fabric Based on PA/CA Membrane Fabricated by Electrospinning. Fibers and Polymers, 2021, 22, 2404-2412.	1.1	3
80	Tailoring high efficiency polypropylene based composite geotextiles for dewatering fly ash slurries. Composites Communications, 2021, 26, 100794.	3.3	3
81	Macromol. Rapid Commun. 21/2011. Macromolecular Rapid Communications, 2011, 32, .	2.0	0
82	Moisture Transport: Tailoring Differential Moisture Transfer Performance of Nonwoven/Polyacrylonitrile-SiO ₂ Nanofiber Composite Membranes (Adv. Mater. Interfaces) Tj ETQq0.0 0 rgBTd/Overlock		