Xiang Wang

List of Publications by Year
in descending order

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75 papers	1,046 citations	394421 19 h-index	454955 30 g-index
77 all docs	77 docs citations	77 times ranked	973 citing authors

#	Article	IF	Citations
1	Precision deposition of a nanofibre by near-field electrospinning. Journal Physics D: Applied Physics, 2010, 43, 415501.	2.8	119
2	Spectroscopic evidence for a high fraction of ferroelectric phase induced in electrospun polyvinylidene fluoride fibers. RSC Advances, 2013, 3, 24952.	3.6	85
3	Zein Increases the Cytoaffinity and Biodegradability of Scaffolds 3D-Printed with Zein and Poly(îµ-caprolactone) Composite Ink. ACS Applied Materials & Interfaces, 2018, 10, 18551-18559.	8.0	60
4	Electrohydrodynamic Deposition of Polymeric Droplets under Low-Frequency Pulsation. Langmuir, 2011, 27, 6541-6548.	3.5	50
5	Multistage-Split Ultrafine Fluffy Nanofibrous Membrane for High-Efficiency Antibacterial Air Filtration. ACS Applied Materials & Interfaces, 2022, 14, 18989-19001.	8.0	42
6	Fabrication of nanochannels via near-field electrospinning. Applied Physics A: Materials Science and Processing, 2012, 108, 825-828.	2.3	40
7	Pulsed electrohydrodynamic printing of conductive silver patterns on demand. Science China Technological Sciences, 2012, 55, 1603-1607.	4.0	40
8	Self-Powered Electrospun Composite Nanofiber Membrane for Highly Efficient Air Filtration. Nanomaterials, 2020, 10, 1706.	4.1	39
9	Electrohydrodynamic direct-writing ZnO nanofibers for device applications. Materials Letters, 2013, 109, 58-61.	2.6	36
10	Electrohydrodynamic direct-writing microfiber patterns under stretching. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	31
11	Direct-writing organic three-dimensional nanofibrous structure. Applied Physics A: Materials Science and Processing, 2011, 102, 457-461.	2.3	27
12	Nanofiber membranes by multi-jet electrospinning arranged as arc-array with sheath gas for electrodialysis applications. Materials and Design, 2020, 189, 108504.	7.0	27
13	Self-cleaning threaded rod spinneret for high-efficiency needleless electrospinning. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	26
14	High-aspect-ratio three-dimensional electrospinning via a tip guiding electrode. Materials and Design, 2021, 198, 109304.	7.0	26
15	Multinozzle high efficiency electrospinning with the constraint of sheath gas. Journal of Applied Polymer Science, 2019, 136, 47574.	2.6	24
16	Directional Transportation in a Self-Pumping Dressing Based on a Melt Electrospinning Hydrophobic Mesh. ACS Biomaterials Science and Engineering, 2021, 7, 5918-5926.	5.2	23
17	Directional Water Transport Janus Composite Nanofiber Membranes for Comfortable Bioprotection. Langmuir, 2022, 38, 309-319.	3.5	23
18	Electrohydrodynamic directâ€”writing of conductorâ€”insulator-conductor multi-layer interconnection. Chinese Physics B, 2014, 23, 066102.	1.4	21

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19	Thin film zinc oxide gas sensor fabricated using near-field electrospray. AIP Advances, 2016, 6, 125306.	1.3	21
20	An improved tip-less electrospinning with strip-distributed solution delivery for massive production of uniform polymer nanofibers. Materials Letters, 2013, 99, 21-23.	2.6	20
21	Electrospray Deposition of ZnO Thin Films and Its Application to Gas Sensors. Micromachines, 2018, 9, 66.	2.9	18
22	Arced Multi-Nozzle Electrospinning Spinneret for High-Throughput Production of Nanofibers. Micromachines, 2020, 11, 27.	2.9	18
23	Electrohydrodynamic Direct-Writing Micropatterns with Assisted Airflow. Micromachines, 2018, 9, 456.	2.9	16
24	Three-dimensional composite electrospun nanofibrous membrane by multi-jet electrospinning with sheath gas for high-efficiency antibiosis air filtration. Nanotechnology, 2021, 32, 245707.	2.6	15
25	Self-Supporting Three-Dimensional Electrospun Nanofibrous Membrane for Highly Efficient Air Filtration. Nanomaterials, 2021, 11, 2567.	4.1	15
26	Directly electrospun ultrafine nanofibres with Cu grid spinneret. Journal Physics D: Applied Physics, 2011, 44, 135502.	2.8	14
27	Electrospinning jet behaviors under the constraints of a sheath gas. AIP Advances, 2016, 6, .	1.3	14
28	Current characteristics of various ejection modes in electrohydrodynamic printing. AIP Advances, 2015, 5, 127120.	1.3	11
29	Study on the air filtration performance of nanofibrous membranes compared with conventional fibrous filters. , 2010, , .		9
30	Controlling of Electrospray Deposition for Micropatterns. Micromachines, 2018, 9, 72.	2.9	9
31	Measurement and Time Response of Electrohydrodynamic Direct-Writing Current. Micromachines, 2019, 10, 90.	2.9	9
32	Electrohydrodynamic Direct-Write Orderly Micro/Nanofibrous Structure on Flexible Insulating Substrate. Journal of Nanomaterials, 2014, 2014, 1-7.	2.7	8
33	Jet behaviors and ejection mode recognition of electrohydrodynamic direct-write. AIP Advances, 2018, 8, 015122.	1.3	8
34	Electrospun Three-Dimensional Nanofibrous Structure via Probe Arrays Inducing. Micromachines, 2018, 9, 427.	2.9	8
35	Current characteristics of stable coneâ€“jet in electrohydrodynamic printing process. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	8
36	Fabrication of micro-patterns via near-field electrospray. AIP Advances, 2016, 6, 115002.	1.3	7

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37	Motion planning implemented in ROS for mobile robot. , 2017, , .		7
38	Jet Mode Recognition of Electrohydrodynamic Direct-Writing Based on Micro/Nano Current. Micromachines, 2020, 11, 128.	2.9	7
39	Melt electrowriting stacked architectures with high aspect ratio. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	7
40	Experiment and simulation of coiled nanofiber deposition behavior from near-field electrospinning. , 2010, , .		6
41	Rheology behaviors of stable electrohydrodynamic direct-write jet. AIP Advances, 2016, 6, .	1.3	6
42	Printing of highly conductive solution by alternating current electrohydrodynamic direct-write. Journal of Physics: Conference Series, 2018, 986, 012027.	0.4	6
43	Formation of suspending beads-on-a-string structure in electrohydrodynamic printing process. Materials and Design, 2021, 204, 109692.	7.0	6
44	Precise Electrohydrodynamic Direct-Write Micro-Droplets Based on a Designed Sinusoidal High-Voltage AC Power. Instruments, 2020, 4, 7.	1.8	4
45	Surfaced-modified TiO2 Nanofibers with Enhanced Photodegradation Under Visible Light. Chemical Research in Chinese Universities, 2022, 38, 1475-1481.	2.6	4
46	Design and Fabrication of an Improved MEMS-Based Piezoresistive Pressure Sensor. Advanced Materials Research, 2012, 482-484, 318-321.	0.3	3
47	Electrospun nickel oxide nanofibers for gas sensor application. , 2013, , .		3
48	Alternating Current Electrohydrodynamic Printing of Microdroplets. Journal of Nanomaterials, 2014, 2014, 1-7.	2.7	3
49	Fabrication and morphological control of electrospun ethyl cellulose nanofibers. , 2013, , .		2
50	Initial Jet Before the Onset of Effective Electrospinning of Polymeric Nanofibers. The Open Mechanical Engineering Journal, 2015, 9, 666-669.	0.3	2
51	Jetting frequency vs voltage frequency in the low-frequency pulsation mode of electrohydrodynamic printing. , 2010, , .		1
52	Buckling nanofiber on patterned substrate from near-field electrospinning. , 2010, , .		1
53	Fabrication of micro/nanometer-channel by Near-Field ElectroSpinning. , 2011, , .		1
54	Conductive micro silver wires via aerosol deposition. , 2012, , .		1

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55	Ejection and Motion Behaviors Simulation for Multi-Jet Electrospinning. Key Engineering Materials, 0, 645-646, 281-286.	0.4	1
56	A Highly Robust Out-of-Plane Electrostatic Vibration Energy Harvester with Wide Bandwidth. , 2018, , .		1
57	Fabrication of Solder Balls via Electromagnetic Jetting. , 2018, , .		1
58	Continuous Near-Field Electrospraying Using a Glass Capillary Nozzle. Micromachines, 2018, 9, 56.	2.9	1
59	Research on Melt Electrowriting TPU Hydrophobic Microfiber Mesh for Directional Water Transport. , 2021, , .		1
60	Sinusoidal AC-induced electrohydrodynamic direct-writing nanofibers on insulating collector. Modern Physics Letters B, 2021, 35, 2140009.	1.9	1
61	Recognition of jet modes in electrohydrodynamic direct-writing based on image segmentation. Modern Physics Letters B, 2022, 36, .	1.9	1
62	Research on the figure of merit for PVA nanofibrous membrane filters. , 2010, , .		0
63	Stresses dominate pulsated electrohydrodynamic spraying modes in near field. , 2011, , .		0
64	Electrohydrodynamic Printing of Conductive Patterns on Glass Slides. Key Engineering Materials, 0, 483, 251-254.	0.4	0
65	Pattern stretchable micro-nano thin film via Electrohydrodynamic Direct-Writing. , 2013, , .		0
66	A piezoelectric vibration energy harvester using multiple nonlinear techniques. , 2016, , .		0
67	Design of Airflow Assisted Spinneret for Electrohydrodynamic Direct-Writing. , 2018, , .		0
68	Fabrication of Uniform Patterns via Constant-Current Electrohydrodynamic Printing. , 2018, , .		0
69	A Highly Robust Out-of-Plane Electrostatic Vibration Energy Harvester with Wide Bandwidth. , 2018, , .		0
70	Electrospun Three-Dimensional Nanofibrous Structure via Probe Arrays Inducing. , 2018, , .		0
71	Orderly Multi-Layer Nanofibrous Membrane Direct-Written by Electrohydrodynamic Printing. , 2018, , .		0
72	Orderly deposition of multiâ€layer nanofibrous membrane by electrohydrodynamic direct writing. Micro and Nano Letters, 2019, 14, 458-461.	1.3	0

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73	Fabrication of Multi-oriented Composite Nanofibrous Membrane by Electrospinning. , 2021, , .		0
74	Electrospun Polyimide Nanofiber Separators for Lithium-ion Batteries. , 2021, , .		0
75	Preparation of Flame-retardant Lithium-ion Battery Separator by Coaxial Electrospinning. , 2021, , .		0