Hao Shao

List of Publications by Year
in descending order

46 papers	1,909 citations	279798 23 h-index	254184 43 g-index
46 all docs	46 docs citations	46 times ranked	2496 citing authors

#	Article	IF	Citations
1	High-sensitivity acoustic sensors from nanofibre webs. Nature Communications, 2016, 7, 11108.	12.8	259
2	Effect of electrospinning parameters and polymer concentrations on mechanical-to-electrical energy conversion of randomly-oriented electrospun poly(vinylidene fluoride) nanofiber mats. RSC Advances, 2015, 5, 14345-14350.	3.6	182
3	High-performance supercapacitor electrode from cellulose-derived, inter-bonded carbon nanofibers. Journal of Power Sources, 2016, 324, 302-308.	7.8	124
4	Unexpectedly high piezoelectricity of electrospun polyacrylonitrile nanofiber membranes. Nano Energy, 2019, 56, 588-594.	16.0	117
5	Preparation of MoS2 nanofibers by electrospinning. Materials Letters, 2012, 73, 223-225.	2.6	112
6	Polymerâ€“Metal Schottky Contact with Directâ€Current Outputs. Advanced Materials, 2016, 28, 1461-1466.	21.0	99
7	High-output acoustoelectric power generators from poly(vinylidenefluoride-co-trifluoroethylene) electrospun nano-nonwovens. Nano Energy, 2017, 35, 146-153.	16.0	61
8	Argon Plasma Treatment of Fluorineâ€Free Silane Coatings: A Facile, Environmentâ€Friendly Method to Prepare Durable, Superhydrophobic Fabrics. Advanced Materials Interfaces, 2017, 4, 1700027.	3.7	60
9	Durable, self-healing, superhydrophobic fabrics from fluorine-free, waterborne, polydopamine/alkyl silane coatings. RSC Advances, 2017, 7, 33986-33993.	3.6	58
10	Efficient conversion of sound noise into electric energy using electrospun polyacrylonitrile membranes. Nano Energy, 2020, 75, 104956.	16.0	57
11	Robust Mechanical-to-Electrical Energy Conversion from Short-Distance Electrospun Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlo	8.0	54
12	Argonâ€Plasma Reinforced Superamphiphobic Fabrics. Small, 2017, 13, 1701891.	10.0	51
13	Friction and Wear Behaviors of Ag/MoS2/G Composite in Different Atmospheres and at Different Temperatures. Tribology Letters, 2012, 47, 139-148.	2.6	48
14	Highly sensitive detection of subtle movement using a flexible strain sensor from helically wrapped carbon yarns. Journal of Materials Chemistry C, 2019, 7, 10049-10058.	5.5	44
15	Mechanically stretchable piezoelectric polyvinylidene fluoride (PVDF)/Boron nitride nanosheets (BNNSs) polymer nanocomposites. Composites Part B: Engineering, 2019, 175, 107157.	12.0	43
16	Amphibious superamphiphilic fabrics with self-healing underwater superoleophilicity. Materials Horizons, 2019, 6, 122-129.	12.2	42
17	Novel Water Harvesting Fibrous Membranes with Directional Water Transport Capability. Advanced Materials Interfaces, 2019, 6, 1801529.	3.7	41
18	Direct current energy generators from a conducting polymerâ€“inorganic oxide junction. Journal of Materials Chemistry A, 2017, 5, 8267-8273.	10.3	40

#	Article	IF	Citations
19	Schottky direct-current energy harvesters with large current output density. Nano Energy, 2019, 62, 171-180.	16.0	38
20	Doping Effect on Conducting Polymerâ€Metal Schottky DC Generators. Advanced Electronic Materials, 2019, 5, 1800675.	5.1	36
21	Supported growth of inorganic-organic nanoflowers on 3D hierarchically porous nanofibrous membrane for enhanced enzymatic water treatment. Journal of Hazardous Materials, 2020, 381, 120947.	12.4	34
22	Curved convex slot: an effective needleless electrospinning spinneret. Journal of Materials Science, 2017, 52, 11749-11758.	3.7	26
23	Online stretching of directly electrospun nanofiber yarns. RSC Advances, 2016, 6, 30564-30569.	3.6	25
24	Highâ€Performance Voice Recognition Based on Piezoelectric Polyacrylonitrile Nanofibers. Advanced Electronic Materials, 2021, 7, 2100206.	5.1	22
25	Single-layer piezoelectric nanofiber membrane with substantially enhanced noise-to-electricity conversion from endogenous triboelectricity. Nano Energy, 2021, 89, 106427.	16.0	22
26	Durable superoleophobicâ€"superhydrophilic fabrics with high anti-oil-fouling property. RSC Advances, 2018, 8, 26939-26947.	3.6	20
27	Direct-current energy generators from polypyrrole-coated fabric/metal Schottky diodes with considerably improved output. Journal of Materials Chemistry A, 2020, 8, 24166-24174.	10.3	17
28	Schottky DC generators with considerable enhanced power output and energy conversion efficiency based on polypyrrole-TiO2 nanocomposite. Nano Energy, 2021, 89, 106367.	16.0	16
29	Superhydrophilic, Underwater Directional Oil-Transport Fabrics with a Novel Oil Trapping Function. ACS Applied Materials & Interfaces, 2019, 11, 27402-27409.	8.0	15
30	Energy generation from airborne noise: Improving electrical outputs of single-layer polyvinylidene difluoride nanofiber membranes by incorporating a small number of nylon-6 nanofibers. Nano Energy, 2021, 90, 106618.	16.0	15
31	High-precision detection of ordinary sound by electrospun polyacrylonitrile nanofibers. Journal of Materials Chemistry C, 2021, 9, 3477-3485.	5.5	14
32	High-temperature piezoelectric conversion using thermally stabilized electrospun polyacrylonitrile membranes. Journal of Materials Chemistry A, 2021, 9, 20395-20404.	10.3	14
33	Preparation of pure iron nanofibers via electrospinning. Materials Letters, 2011, 65, 1775-1777.	2.6	13
34	Improving Nanofiber Production and Application Performance by Electrospinning at Elevated Temperatures. Industrial & Engineering Chemistry Research, 2017, 56, 12337-12343.	3.7	13
35	Electro-aerodynamic field aided needleless electrospinning. Nanotechnology, 2018, 29, 235302.	2.6	12
36	Mechanical Energyâ€toâ€Electricity Conversion of Electron/Holeâ€Transfer Agentâ€Doped Poly(Vinylidene) Tj ETQq0 0 0 rgBT /Overlock	3.6	11

#	Article	IF	Citations
37	Preparation of Î±-Fe2O3 nanotubes via electrospinning and research on their catalytic properties. Applied Physics A: Materials Science and Processing, 2012, 108, 961-965.	2.3	10
38	A versatile, highly effective nanofibrous separation membrane. Nanoscale, 2020, 12, 2359-2365.	5.6	9
39	Motion sensors achieved from a conducting polymer-metal Schottky contact. RSC Advances, 2019, 9, 6576-6582.	3.6	7
40	An Easyâ€toâ€Install Textile Bending Sensor with High Sensitivity, Linearity, and Multidirection Direction Capability. Advanced Materials Technologies, 2022, 7, 2100830.	5.8	6
41	Electrospun Nano-nonwoven Acoustic Sensors. Materials Today: Proceedings, 2017, 4, 5306-5311.	1.8	5
42	Effect of static charges on mechanical-to-electrical energy conversion of electrospun PVDF nanofiber mats. Advanced Materials Letters, 2017, 8, 418-422.	0.6	5
43	Improvement of Air Filtration Performance Using Nanofibrous Membranes with a Periodic Variation in Packing Density. Advanced Materials Interfaces, 2022, 9, .	3.7	5
44	Effect of water and DMSO on mechanoelectrical conversion of Schottky DC generators. Journal of Materials Chemistry A, 2022, 10, 13055-13065.	10.3	5
45	Enhancement of Coil Electrospinning Using Two-Level Coil Structure. Industrial & Engineering Chemistry Research, 0, , .	3.7	1
46	Study of an acoustic energy harvester consisting of electro-spun polyvinylidene difluoride nanofibers. Journal of the Acoustical Society of America, 2022, 151, 3838-3846.	1.1	1