Jiajie Liang

List of Publications by Year
in descending order

78 papers	12,605 citations	41344 49 h-index	66911 78 g-index
80 all docs	80 docs citations	80 times ranked	16472 citing authors

#	Article	IF	Citations
1	An auxetic cellular structure as a universal design for enhanced piezoresistive sensitivity. Matter, 2022, 5, 1547-1562.	10.0	23
2	Pushing detectability and sensitivity for subtle force to new limits with shrinkable nanochannel structured aerogel. Nature Communications, 2022, 13, 1119.	12.8	79
3	Tailoring Silver Nanowire Nanocomposite Interfaces to Achieve Superior Stretchability, Durability, and Stability in Transparent Conductors. Nano Letters, 2022, 22, 3784-3792.	9.1	57
4	Highly Sensitive Temperatureâ€“Pressure Bimodal Aerogel with Stimulus Discriminability for Human Physiological Monitoring. Nano Letters, 2022, 22, 4459-4467.	9.1	21
5	Improved High-Temperature Electrical Properties of Polymeric Material by Grafting Modification. ACS Sustainable Chemistry and Engineering, 2022, 10, 8685-8693.	6.7	32
6	An in situ and rapid self-healing strategy enabling a stretchable nanocomposite with extremely durable and highly sensitive sensing features. Materials Horizons, 2021, 8, 250-258.	12.2	24
7	Polysiloxane Crossâ€Linked Mechanically Stable MXeneâ€Based Lithium Host for Ultrastable Lithium Metal Anodes with Ultrahigh Current Densities and Capacities. Advanced Functional Materials, 2021, 31, 2008044.	14.9	57
8	Self-healing of internal damage in mechanically robust polymers utilizing a reversibly convertible molecular network. Journal of Materials Chemistry A, 2021, 9, 15975-15984.	10.3	34
9	Highly Stretchable Carbon Nanotubes/Polymer Thermoelectric Fibers. Nano Letters, 2021, 21, 1047-1055.	9.1	60
10	Electrostatic Actuating Doubleâ€Unit Electrocaloric Cooling Device with High Efficiency. Advanced Energy Materials, 2021, 11, 2003771.	19.5	16
11	In situ identification of the metallic state of Ag nanoclusters in oxidative dispersion. Nature Communications, 2021, 12, 1406.	12.8	42
12	Rupture stress of liquid metal nanoparticles and their applications in stretchable conductors and dielectrics. Npj Flexible Electronics, 2021, 5, .	10.7	37
13	Highly Stretchable Shape Memory Self-Soldering Conductive Tape with Reversible Adhesion Switched by Temperature. Nano-Micro Letters, 2021, 13, 124.	27.0	8
14	Nanoscale mapping of electric polarizability in a heterogeneous dielectric material with surface irregularities. Nanotechnology, 2021, 32, 505711.	2.6	3
15	Recent Development of Printed Microâ€Supercapacitors: Printable Materials, Printing Technologies, and Perspectives. Advanced Materials, 2020, 32, e1805864.	21.0	142
16	3D printing nanocomposite gel-based thick electrode enabling both high areal capacity and rate performance for lithium-ion battery. Chemical Engineering Journal, 2020, 381, 122641.	12.7	89
17	Ti₃C₂T_x MXene Interface Layer Driving Ultra-Stable Lithium-Iodine Batteries with Both High Iodine Content and Mass Loading. ACS Nano, 2020, 14, 1176-1184.	14.6	105
18	Printable and Stretchable Temperature-Strain Dual-Sensing Nanocomposite with High Sensitivity and Perfect Stimulus Discriminability. Nano Letters, 2020, 20, 6176-6184.	9.1	96

#	Article	IF	Citations
19	Mapping the Space Charge at Nanoscale in Dielectric Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 53425-53434.	8.0	32
20	Polymer/molecular semiconductor all-organic composites for high-temperature dielectric energy storage. Nature Communications, 2020, 11, 3919.	12.8	268
21	A MXeneâ€Based Hierarchical Design Enabling Highly Efficient and Stable Solarâ€Water Desalination with Good Salt Resistance. Advanced Functional Materials, 2020, 30, 2007110.	14.9	215
22	Dual-functional ion redistributor for dendrite-free lithium metal anodes. Rare Metals, 2020, 39, 861-862.	7.1	26
23	Printed Wearable Electronics: Recent Development of Printed Microâ€Supercapacitors: Printable Materials, Printing Technologies, and Perspectives (Adv. Mater. 3/2020). Advanced Materials, 2020, 32, 2070023.	21.0	12
24	Microâ€Supercapacitors: 3Dâ€Printed Stretchable Microâ€Supercapacitor with Remarkable Areal Performance (Adv. Energy Mater. 14/2020). Advanced Energy Materials, 2020, 10, 2070064.	19.5	4
25	3Dâ€Printed Stretchable Microâ€Supercapacitor with Remarkable Areal Performance. Advanced Energy Materials, 2020, 10, 1903794.	19.5	177
26	Superlithiophilic Amorphous SiO₂â€“TiO₂ Distributed into Porous Carbon Skeleton Enabling Uniform Lithium Deposition for Stable Lithium Metal Batteries. Advanced Science, 2019, 6, 1900943.	11.2	96
27	Biomimetic printable nanocomposite for healable, ultrasensitive, stretchable and ultradurable strain sensor. Nano Energy, 2019, 63, 103898.	16.0	53
28	Self-Healing Hyper-Cross-Linked Metalâ€“Organic Polyhedra (HCMOPs) Membranes with Antimicrobial Activity and Highly Selective Separation Properties. Journal of the American Chemical Society, 2019, 141, 12064-12070.	13.7	124
29	Screen-printing fabrication of high volumetric energy density micro-supercapacitors based on high-resolution thixotropic-ternary hybrid interdigital micro-electrodes. Materials Chemistry Frontiers, 2019, 3, 626-635.	5.9	41
30	Plasmonic Ti₃C₂T_x MXene Enables Highly Efficient Photothermal Conversion for Healable and Transparent Wearable Device. ACS Nano, 2019, 13, 8124-8134.	14.6	247
31	Highly Conducting MXeneâ€“Silver Nanowire Transparent Electrodes for Flexible Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 25330-25337.	8.0	156
32	PolyCOFs: A New Class of Freestanding Responsive Covalent Organic Framework Membranes with High Mechanical Performance. ACS Central Science, 2019, 5, 1352-1359.	11.3	126
33	Microâ€Supercapacitors: Hydrous RuO 2 â€Decorated MXene Coordinating with Silver Nanowire Inks Enabling Fully Printed Microâ€Supercapacitors with Extraordinary Volumetric Performance (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock	21.4	1
34	Intrinsically stretchable conductors and interconnects for electronic applications. Materials Chemistry Frontiers, 2019, 3, 1032-1051.	5.9	21
35	Hydrous RuO₂â€Decorated MXene Coordinating with Silver Nanowire Inks Enabling Fully Printed Microâ€Supercapacitors with Extraordinary Volumetric Performance. Advanced Energy Materials, 2019, 9, 1803987.	19.5	188
36	Flexible organic photovoltaics based on water-processed silver nanowire electrodes. Nature Electronics, 2019, 2, 513-520.	26.0	255

#	Article	IF	Citations
37	Bioinspired Ultrasensitive and Stretchable MXene-Based Strain Sensor via Nacre-Mimetic Microscale â€œBrick-and-Mortarâ€•Architecture. ACS Nano, 2019, 13, 649-659.	14.6	320
38	Lowering Internal Friction of 0Dâ€“1Dâ€“2D Ternary Nanocompositeâ€Based Strain Sensor by Fullerene to Boost the Sensing Performance. Advanced Functional Materials, 2018, 28, 1800850.	14.9	179
39	Ultraâ€Broadband Wideâ€Angle Terahertz Absorption Properties of 3D Graphene Foam. Advanced Functional Materials, 2018, 28, 1704363.	14.9	223
40	A general gelation strategy for 1D nanowires: dynamically stable functional gels for 3D printing flexible electronics. Nanoscale, 2018, 10, 20096-20107.	5.6	38
41	A Hierarchical Silverâ€Nanowireâ€“Graphene Host Enabling Ultrahigh Rates and Superior Longâ€Term Cycling of Lithiumâ€Metal Composite Anodes. Advanced Materials, 2018, 30, e1804165.	21.0	221
42	Grapheneâ€Based Composites Combining Both Excellent Terahertz Shielding and Stealth Performance. Advanced Optical Materials, 2018, 6, 1801165.	7.3	60
43	Dynamic Agitationâ€Induced Centrifugal Purification of Nanowires Enabling Transparent Electrodes with 99.2% Transmittance. Advanced Functional Materials, 2018, 28, 1804479.	14.9	32
44	The Feasibility of Healable Electronics and Mechanical Behavior of Silver Nanowire (AgNW)/Healable Polymer Composite. Advanced Materials Technologies, 2018, 3, 1700364.	5.8	12
45	Intrinsically stretchable field-effect transistors. MRS Bulletin, 2017, 42, 131-137.	3.5	10
46	Rollerballâ€Penâ€Drawing Technology for Extremely Foldable Paperâ€Based Electronics. Advanced Electronic Materials, 2017, 3, 1700098.	5.1	35
47	12â€1: Invited Paper: Stretchable Transparent Electrodes Based on Silver Nanowires. Digest of Technical Papers SID International Symposium, 2017, 48, 139-142.	0.3	2
48	A Solid-State Intrinsically Stretchable Polymer Solar Cell. ACS Applied Materials & Interfaces, 2017, 9, 40523-40532.	8.0	45
49	A Waterâ€Based Silverâ€Nanowire Screenâ€Print Ink for the Fabrication of Stretchable Conductors and Wearable Thinâ€Film Transistors. Advanced Materials, 2016, 28, 5986-5996.	21.0	418
50	Elastomeric Light Emitting Polymer Enhanced by Interpenetrating Networks. ACS Applied Materials & Interfaces, 2016, 8, 32504-32511.	8.0	38
51	Flexible and stretchable electrodes for next generation polymer electronics: a review. Science China Chemistry, 2016, 59, 659-671.	8.2	47
52	Thermally Stable Silver Nanowireâ€“Polyimide Transparent Electrode Based on Atomic Layer Deposition of Zinc Oxide on Silver Nanowires. Advanced Functional Materials, 2015, 25, 7512-7520.	14.9	163
53	Intrinsically stretchable and transparent thin-film transistors based on printable silver nanowires, carbon nanotubes and an elastomeric dielectric. Nature Communications, 2015, 6, 7647.	12.8	268
54	Synthesizing a Healable Stretchable Transparent Conductor. ACS Applied Materials & Interfaces, 2015, 7, 14140-14149.	8.0	59

#	Article	IF	Citations
55	Efficient white polymer light-emitting electrochemical cells. Materials Horizons, 2015, 2, 338-343.	12.2	54
56	Intrinsically Elastomeric Polymer Lightâ€Emitting Devices. Information Display, 2014, 30, 12-18.	0.2	0
57	Healable Capacitive Touch Screen Sensors Based on Transparent Composite Electrodes Comprising Silver Nanowires and a Furan/Maleimide Dielsâ€“Alder Cycloaddition Polymer. ACS Nano, 2014, 8, 12874-12882.	14.6	163
58	The use of graphene oxide membranes for the softening of hard water. Science China Technological Sciences, 2014, 57, 284-287.	4.0	16
59	Silver Nanowire Percolation Network Soldered with Graphene Oxide at Room Temperature and Its Application for Fully Stretchable Polymer Light-Emitting Diodes. ACS Nano, 2014, 8, 1590-1600.	14.6	599
60	A Flexible and Transparent Thin Film Heater Based on a Silver Nanowire/Heatâ€resistant Polymer Composite. Macromolecular Materials and Engineering, 2014, 299, 1403-1409.	3.6	140
61	A Solution Processed Flexible Nanocomposite Electrode with Efficient Light Extraction for Organic Light Emitting Diodes. Scientific Reports, 2014, 4, 4307.	3.3	96
62	Fully Solution-Based Fabrication of Flexible Light-Emitting Device at Ambient Conditions. Journal of Physical Chemistry C, 2013, 117, 16632-16639.	3.1	58
63	Elastomeric polymer light-emitting devices and displays. Nature Photonics, 2013, 7, 817-824.	31.4	859
64	A Healable, Semitransparent Silver Nanowireâ€Polymer Composite Conductor. Advanced Materials, 2013, 25, 4186-4191.	21.0	182
65	Impact of Polymer Matrix on the Electromagnetic Interference Shielding Performance for Single-Walled Carbon Nanotubes-Based Composites. Journal of Nanoscience and Nanotechnology, 2013, 13, 1120-1124.	0.9	9
66	The application of graphene based materials for actuators. Journal of Materials Chemistry, 2012, 22, 3671.	6.7	137
67	Electromechanical Actuator with Controllable Motion, Fast Response Rate, and High-Frequency Resonance Based on Graphene and Polydiacetylene. ACS Nano, 2012, 6, 4508-4519.	14.6	141
68	An Overview of the Applications of Grapheneâ€Based Materials in Supercapacitors. Small, 2012, 8, 1805-1834.	10.0	1,210
69	Graphene-based conducting inks for direct inkjet printing of flexible conductive patterns and their applications in electric circuits and chemical sensors. Nano Research, 2011, 4, 675-684.	10.4	397
70	Flexible and Transparent Electrothermal Film Heaters Based on Graphene Materials. Small, 2011, 7, 3186-3192.	10.0	371
71	Electromechanical Actuators Based on Graphene and Graphene/Fe₃O₄ Hybrid Paper. Advanced Functional Materials, 2011, 21, 3778-3784.	14.9	170
72	Flexible, Magnetic, and Electrically Conductive Graphene/Fe₃O₄ Paper and Its Application for Magnetic-Controlled Switches. Journal of Physical Chemistry C, 2010, 114, 17465-17471.	3.1	176

#	Article	IF	Citations
73	Toward All-Carbon Electronics: Fabrication of Graphene-Based Flexible Electronic Circuits and Memory Cards Using Maskless Laser Direct Writing. ACS Applied Materials & Interfaces, 2010, 2, 3310-3317.	8.0	55
74	Molecularâ€Level Dispersion of Graphene into Poly(vinyl alcohol) and Effective Reinforcement of their Nanocomposites. Advanced Functional Materials, 2009, 19, 2297-2302.	14.9	1,481
75	A hybrid material of graphene and poly (3,4-ethyldioxythiophene) with high conductivity, flexibility, and transparency. Nano Research, 2009, 2, 343-348.	10.4	320
76	Size-controlled synthesis of graphene oxide sheets on a large scale using chemical exfoliation. Carbon, 2009, 47, 3365-3368.	10.3	414
77	Infrared-Triggered Actuators from Graphene-Based Nanocomposites. Journal of Physical Chemistry C, 2009, 113, 9921-9927.	3.1	355
78	Covalently Î²-cyclodextrin modified single-walled carbon nanotubes: a novel artificial receptor synthesized by â€˜clickâ€™ chemistry. Journal of Nanoparticle Research, 2008, 10, 1077-1083.	1.9	54