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	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
2	An Overview of the Applications of Grapheneâ€Based Materials in Supercapacitors. Small, 2012, 8, 1805-1834.	10.0	1,210
3	Elastomeric polymer light-emitting devices and displays. Nature Photonics, 2013, 7, 817-824.	31.4	859
4	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
5	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
6	Size-controlled synthesis of graphene oxide sheets on a large scale using chemical exfoliation. Carbon, 2009, 47, 3365-3368.	10.3	414
7	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
8	Flexible and Transparent Electrothermal Film Heaters Based on Graphene Materials. Small, 2011, 7, 3186-3192.	10.0	371
9	Infrared-Triggered Actuators from Graphene-Based Nanocomposites. Journal of Physical Chemistry C, 2009, 113, 9921-9927.	3.1	355
10	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
11	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
12	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
13	Polymer/molecular semiconductor all-organic composites for high-temperature dielectric energy storage. Nature Communications, 2020, 11, 3919.	12.8	268
14	Flexible organic photovoltaics based on water-processed silver nanowire electrodes. Nature Electronics, 2019, 2, 513-520.	26.0	255
15	Plasmonic Ti₃C₂T_x MXene Enables Highly Efficient Photothermal Conversion for Healable and Transparent Wearable Device. ACS Nano, 2019, 13, 8124-8134.	14.6	247
16	Ultraâ€Broadband Wideâ€Angle Terahertz Absorption Properties of 3D Graphene Foam. Advanced Functional Materials, 2018, 28, 1704363.	14.9	223
17	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
18	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

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19	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
20	A Healable, Semitransparent Silver Nanowireâ€Polymer Composite Conductor. Advanced Materials, 2013, 25, 4186-4191.	21.0	182
21	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
22	3Dâ€Printed Stretchable Microâ€Supercapacitor with Remarkable Areal Performance. Advanced Energy Materials, 2020, 10, 1903794.	19.5	177
23	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
24	Electromechanical Actuators Based on Graphene and Graphene/Fe₃O₄ Hybrid Paper. Advanced Functional Materials, 2011, 21, 3778-3784.	14.9	170
25	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
26	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
27	Highly Conducting MXeneâ€“Silver Nanowire Transparent Electrodes for Flexible Organic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 25330-25337.	8.0	156
28	Recent Development of Printed Microâ€Supercapacitors: Printable Materials, Printing Technologies, and Perspectives. Advanced Materials, 2020, 32, e1805864.	21.0	142
29	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
30	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
31	The application of graphene based materials for actuators. Journal of Materials Chemistry, 2012, 22, 3671.	6.7	137
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	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
34	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
35	A Solution Processed Flexible Nanocomposite Electrode with Efficient Light Extraction for Organic Light Emitting Diodes. Scientific Reports, 2014, 4, 4307.	3.3	96
36	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

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37	Printable and Stretchable Temperature-Strain Dual-Sensing Nanocomposite with High Sensitivity and Perfect Stimulus Discriminability. Nano Letters, 2020, 20, 6176-6184.	9.1	96
38	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
39	Pushing detectability and sensitivity for subtle force to new limits with shrinkable nanochannel structured aerogel. Nature Communications, 2022, 13, 1119.	12.8	79
40	Grapheneâ€Based Composites Combining Both Excellent Terahertz Shielding and Stealth Performance. Advanced Optical Materials, 2018, 6, 1801165.	7.3	60
41	Highly Stretchable Carbon Nanotubes/Polymer Thermoelectric Fibers. Nano Letters, 2021, 21, 1047-1055.	9.1	60
42	Synthesizing a Healable Stretchable Transparent Conductor. ACS Applied Materials & Interfaces, 2015, 7, 14140-14149.	8.0	59
43	Fully Solution-Based Fabrication of Flexible Light-Emitting Device at Ambient Conditions. Journal of Physical Chemistry C, 2013, 117, 16632-16639.	3.1	58
44	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
45	Tailoring Silver Nanowire Nanocomposite Interfaces to Achieve Superior Stretchability, Durability, and Stability in Transparent Conductors. Nano Letters, 2022, 22, 3784-3792.	9.1	57
46	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
47	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
48	Efficient white polymer light-emitting electrochemical cells. Materials Horizons, 2015, 2, 338-343.	12.2	54
49	Biomimetic printable nanocomposite for healable, ultrasensitive, stretchable and ultradurable strain sensor. Nano Energy, 2019, 63, 103898.	16.0	53
50	Flexible and stretchable electrodes for next generation polymer electronics: a review. Science China Chemistry, 2016, 59, 659-671.	8.2	47
51	A Solid-State Intrinsically Stretchable Polymer Solar Cell. ACS Applied Materials & Interfaces, 2017, 9, 40523-40532.	8.0	45
52	In situ identification of the metallic state of Ag nanoclusters in oxidative dispersion. Nature Communications, 2021, 12, 1406.	12.8	42
53	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
54	Elastomeric Light Emitting Polymer Enhanced by Interpenetrating Networks. ACS Applied Materials & Interfaces, 2016, 8, 32504-32511.	8.0	38

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55	A general gelation strategy for 1D nanowires: dynamically stable functional gels for 3D printing flexible electronics. Nanoscale, 2018, 10, 20096-20107.	5.6	38
56	Rupture stress of liquid metal nanoparticles and their applications in stretchable conductors and dielectrics. Npj Flexible Electronics, 2021, 5, .	10.7	37
57	Rollerballâ€Penâ€Drawing Technology for Extremely Foldable Paperâ€Based Electronics. Advanced Electronic Materials, 2017, 3, 1700098.	5.1	35
58	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
59	Dynamic Agitationâ€Induced Centrifugal Purification of Nanowires Enabling Transparent Electrodes with 99.2% Transmittance. Advanced Functional Materials, 2018, 28, 1804479.	14.9	32
60	Mapping the Space Charge at Nanoscale in Dielectric Polymer Nanocomposites. ACS Applied Materials & Interfaces, 2020, 12, 53425-53434.	8.0	32
61	Improved High-Temperature Electrical Properties of Polymeric Material by Grafting Modification. ACS Sustainable Chemistry and Engineering, 2022, 10, 8685-8693.	6.7	32
62	Dual-functional ion redistributor for dendrite-free lithium metal anodes. Rare Metals, 2020, 39, 861-862.	7.1	26
63	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
64	An auxetic cellular structure as a universal design for enhanced piezoresistive sensitivity. Matter, 2022, 5, 1547-1562.	10.0	23
65	Intrinsically stretchable conductors and interconnects for electronic applications. Materials Chemistry Frontiers, 2019, 3, 1032-1051.	5.9	21
66	Highly Sensitive Temperatureâ€“Pressure Bimodal Aerogel with Stimulus Discriminability for Human Physiological Monitoring. Nano Letters, 2022, 22, 4459-4467.	9.1	21
67	The use of graphene oxide membranes for the softening of hard water. Science China Technological Sciences, 2014, 57, 284-287.	4.0	16
68	Electrostatic Actuating Doubleâ€Unit Electrocaloric Cooling Device with High Efficiency. Advanced Energy Materials, 2021, 11, 2003771.	19.5	16
69	The Feasibility of Healable Electronics and Mechanical Behavior of Silver Nanowire (AgNW)/Healable Polymer Composite. Advanced Materials Technologies, 2018, 3, 1700364.	5.8	12
70	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
71	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 /Overloc	31.4	10
72	Intrinsically stretchable field-effect transistors. MRS Bulletin, 2017, 42, 131-137.	3.5	10

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73	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
74	Highly Stretchable Shape Memory Self-Soldering Conductive Tape with Reversible Adhesion Switched by Temperature. Nano-Micro Letters, 2021, 13, 124.	27.0	8
75	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
76	Nanoscale mapping of electric polarizability in a heterogeneous dielectric material with surface irregularities. Nanotechnology, 2021, 32, 505711.	2.6	3
77	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
78	Intrinsically Elastomeric Polymer Lightâ€Emitting Devices. Information Display, 2014, 30, 12-18.	0.2	0