

Le Cai

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

3,913
citations

147566

31
h-index

189595

50
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all docs

53
docs citations

53
times ranked

7311
citing authors

#	ARTICLE	IF	CITATIONS
1	Super-stretchable, Transparent Carbon Nanotube-Based Capacitive Strain Sensors for Human Motion Detection. <i>Scientific Reports</i> , 2013, 3, 3048.	1.6	573
2	Caffeine Improves the Performance and Thermal Stability of Perovskite Solar Cells. <i>Joule</i> , 2019, 3, 1464-1477.	11.7	448
3	A "skeleton/skin" strategy for preparing ultrathin free-standing single-walled carbon nanotube/polyaniline films for high performance supercapacitor electrodes. <i>Energy and Environmental Science</i> , 2012, 5, 8726.	15.6	312
4	High-performance and compact-designed flexible thermoelectric modules enabled by a reticulate carbon nanotube architecture. <i>Nature Communications</i> , 2017, 8, 14886.	5.8	257
5	Highly Transparent and Conductive Stretchable Conductors Based on Hierarchical Reticulate Single-Walled Carbon Nanotube Architecture. <i>Advanced Functional Materials</i> , 2012, 22, 5238-5244.	7.8	148
6	Stretchable Light-Emitting Diodes with Organometal-Halide Perovskite-Polymer Composite Emitters. <i>Advanced Materials</i> , 2017, 29, 1607053.	11.1	147
7	Superfast-Response and Ultrahigh-Power-Density Electromechanical Actuators Based on Hierarchical Carbon Nanotube Electrodes and Chitosan. <i>Nano Letters</i> , 2011, 11, 4636-4641.	4.5	142
8	Wireless and battery-free technologies for neuroengineering. <i>Nature Biomedical Engineering</i> , 2023, 7, 405-423.	11.6	141
9	Ultrashort Channel Length Black Phosphorus Field-Effect Transistors. <i>ACS Nano</i> , 2015, 9, 9236-9243.	7.3	138
10	Carbon Nanotube Flexible and Stretchable Electronics. <i>Nanoscale Research Letters</i> , 2015, 10, 1013.	3.1	119
11	Fully Printed Stretchable Thin-Film Transistors and Integrated Logic Circuits. <i>ACS Nano</i> , 2016, 10, 11459-11468.	7.3	118
12	Photothermal Effect Induced Negative Photoconductivity and High Responsivity in Flexible Black Phosphorus Transistors. <i>ACS Nano</i> , 2017, 11, 6048-6056.	7.3	104
13	Wireless, battery-free subdermally implantable photometry systems for chronic recording of neural dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 2835-2845.	3.3	94
14	Air-Stable Humidity Sensor Using Few-Layer Black Phosphorus. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 10019-10026.	4.0	92
15	Ultrahigh-Power-Factor Carbon Nanotubes and an Ingenious Strategy for Thermoelectric Performance Evaluation. <i>Small</i> , 2016, 12, 3407-3414.	5.2	76
16	Fully Printed Silver-Nanoparticle-Based Strain Gauges with Record High Sensitivity. <i>Advanced Electronic Materials</i> , 2017, 3, 1700067.	2.6	75
17	Direct Printing for Additive Patterning of Silver Nanowires for Stretchable Sensor and Display Applications. <i>Advanced Materials Technologies</i> , 2018, 3, 1700232.	3.0	68
18	Hydro-actuation of hybrid carbon nanotube yarn muscles. <i>Nanoscale</i> , 2016, 8, 17881-17886.	2.8	60

#	ARTICLE	IF	CITATIONS
19	Single Pixel Black Phosphorus Photodetector for Near-Infrared Imaging. <i>Small</i> , 2018, 14, 1702082.	5.2	56
20	Biaxially stretchable supercapacitors based on the buckled hybrid fiber electrode array. <i>Nanoscale</i> , 2015, 7, 12492-12497.	2.8	53
21	Fully Printed Foldable Integrated Logic Gates with Tunable Performance Using Semiconducting Carbon Nanotubes. <i>Advanced Functional Materials</i> , 2015, 25, 5698-5705.	7.8	52
22	Epidermal Supercapacitor with High Performance. <i>Advanced Functional Materials</i> , 2016, 26, 8178-8184.	7.8	52
23	Black Phosphorus Schottky Diodes: Channel Length Scaling and Application as Photodetectors. <i>Advanced Electronic Materials</i> , 2016, 2, 1500346.	2.6	51
24	Highly stretchable pseudocapacitors based on buckled reticulate hybrid electrodes. <i>Nano Research</i> , 2014, 7, 1680-1690.	5.8	47
25	Optical visualization and polarized light absorption of the single-wall carbon nanotube to verify intrinsic thermal applications. <i>Light: Science and Applications</i> , 2015, 4, e318-e318.	7.7	43
26	Fully Printed Flexible Dual-Gate Carbon Nanotube Thin-Film Transistors with Tunable Ambipolar Characteristics for Complementary Logic Circuits. <i>ACS Nano</i> , 2018, 12, 11572-11578.	7.3	42
27	Wireless and battery-free platforms for collection of biosignals. <i>Biosensors and Bioelectronics</i> , 2021, 178, 113007.	5.3	40
28	High performance bipolar resistive switching memory devices based on Zn ₂ SnO ₄ nanowires. <i>Nanoscale</i> , 2012, 4, 2571.	2.8	38
29	Temperature dependent Raman spectra of isolated suspended single-walled carbon nanotubes. <i>Nanoscale</i> , 2014, 6, 3949-3953.	2.8	33
30	High Performance Indium-Gallium-Zinc Oxide Thin Film Transistor via Interface Engineering. <i>Advanced Functional Materials</i> , 2020, 30, 2003285.	7.8	33
31	High performance, freestanding and superthin carbon nanotube/epoxy nanocomposite films. <i>Nanoscale</i> , 2011, 3, 3731.	2.8	31
32	Surface modification effect on photoluminescence of individual ZnO nanorods with different diameters. <i>Nanoscale</i> , 2013, 5, 4443.	2.8	30
33	Osseosurface electronics—thin, wireless, battery-free and multimodal musculoskeletal biointerfaces. <i>Nature Communications</i> , 2021, 12, 6707.	5.8	29
34	Fully printed flexible carbon nanotube photodetectors. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	23
35	CNT-based sensor arrays for local strain measurements in soft pneumatic actuators. <i>International Journal of Intelligent Robotics and Applications</i> , 2017, 1, 157-166.	1.6	22
36	Bolometric-Effect-Based Wavelength-Selective Photodetectors Using Sorted Single Chirality Carbon Nanotubes. <i>Scientific Reports</i> , 2015, 5, 17883.	1.6	20

#	ARTICLE	IF	CITATIONS
37	Field-Dependent Mobility Enhancement and Contact Resistance in a-IGZO TFTs. IEEE Transactions on Electron Devices, 2019, 66, 5166-5169.	1.6	16
38	Soft, wireless and subdermally implantable recording and neuromodulation tools. Journal of Neural Engineering, 2021, 18, 041001.	1.8	13
39	Capacitance-Voltage Characteristics of Thin-film Transistors Fabricated with Solution-Processed Semiconducting Carbon Nanotube Networks. Nanoscale Research Letters, 2015, 10, 999.	3.1	12
40	Nicotine Sensors for Wearable Battery-Free Monitoring of Vaping. ACS Sensors, 2022, 7, 82-88.	4.0	9
41	Substrate-induced effects on the optical properties of individual ZnO nanorods with different diameters. Nanoscale, 2014, 6, 483-491.	2.8	8
42	Radiation effects in printed flexible single-walled carbon nanotube thin-film transistors. AIP Advances, 2019, 9, .	0.6	7
43	Cluster Size Control toward High Performance Solution Processed InGaZnO Thin Film Transistors. ACS Applied Electronic Materials, 2019, 1, 2483-2488.	2.0	6
44	<l>In-Situ</l> Raman Spectra of Single-Walled Carbon Nanotube/Epoxy Nanocomposite Film Under Strain. Journal of Nanoscience and Nanotechnology, 2013, 13, 1145-1148.	0.9	5
45	A Facile Method to Fabricate Ultrathin Vertical ZnO Nanowall Arrays. Journal of Nanoscience and Nanotechnology, 2013, 13, 1291-1294.	0.9	4
46	Indium Tin Oxide Nanowires Grown by One-Step Thermal Evaporation-Deposition Process at Low Temperature. Journal of Nanoscience and Nanotechnology, 2013, 13, 1300-1303.	0.9	3
47	Optical and Electrical Performance of HfO₂ Coated ZnO Nanorod Arrays. Journal of Nanoscience and Nanotechnology, 2013, 13, 1082-1086.	0.9	2
48	Positive-Bias Stress Stability of Solution-Processed Oxide Semiconductor Thin-Film Transistor. IEEE Transactions on Electron Devices, 2022, 69, 3727-3731.	1.6	2
49	Comparison of transport scattering and singleâ€particle relaxation times in modulationâ€doped heterostructures. Journal of Applied Physics, 1994, 76, 390-394.	1.1	0
50	Temperature Dependent Resistance of As-Grown and Chemical Treated Single Walled Carbon Nanotubes Films. Journal of Nanoscience and Nanotechnology, 2013, 13, 1327-1330.	0.9	0