

# Lih-juann Chen

## List of Publications by Year in descending order

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96  
papers

6,529  
citations

92079

37  
h-index

63582

80  
g-index

100  
all docs

100  
docs citations

100  
times ranked

11369  
citing authors

#	ARTICLE	IF	CITATIONS
1	Copper nanocavities confine intermediates for efficient electrosynthesis of C3 alcohol fuels from carbon monoxide. <i>Nature Catalysis</i> , 2018, 1, 946-951.	28.3	395
2	Direct Growth of Aligned Zinc Oxide Nanorods on Paper Substrates for Low-Cost Flexible Electronics. <i>Advanced Materials</i> , 2010, 22, 4059-4063.	24.3	347
3	Triboelectric nanogenerator built inside shoe insole for harvesting walking energy. <i>Nano Energy</i> , 2013, 2, 856-862.	16.5	342
4	Copper-on-nitride enhances the stable electrosynthesis of multi-carbon products from CO <sub>2</sub> . <i>Nature Communications</i> , 2018, 9, 3828.	13.2	306
5	Facet-Dependent Electrical Conductivity Properties of Cu <sub>2</sub> O Crystals. <i>Nano Letters</i> , 2015, 15, 2155-2160.	9.5	212
6	Efficient electrocatalytic conversion of carbon monoxide to propanol using fragmented copper. <i>Nature Catalysis</i> , 2019, 2, 251-258.	28.3	209
7	All-Color Plasmonic Nanolasers with Ultralow Thresholds: Autotuning Mechanism for Single-Mode Lasing. <i>Nano Letters</i> , 2014, 14, 4381-4388.	9.5	205
8	Direct growth of high-rate capability and high capacity copper sulfide nanowire array cathodes for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 6638.	6.7	175
9	Single-Nanowire Nanogenerator with Upto 1 V Output Voltage. <i>Advanced Materials</i> , 2010, 22, 4008-4013.	24.3	170
10	Oriented growth of large-scale nickel sulfide nanowire arrays via a general solution route for lithium-ion battery cathode applications. <i>Journal of Materials Chemistry</i> , 2009, 19, 7277.	6.7	133
11	A flexible transparent one-structure tribo-piezo-pyroelectric hybrid energy generator based on bio-inspired silver nanowires network for biomechanical energy harvesting and physiological monitoring. <i>Nano Energy</i> , 2018, 48, 383-390.	16.5	126
12	Large enhancement in photon detection sensitivity via Schottky-gated CdS nanowire nanosensors. <i>Applied Physics Letters</i> , 2010, 96, .	3.2	124
13	Elastic Properties and Buckling of Silicon Nanowires. <i>Advanced Materials</i> , 2008, 20, 3919-3923.	24.3	122
14	Efficiency Enhancement of Silicon Heterojunction Solar Cells via Photon Management Using Graphene Quantum Dot as Downconverters. <i>Nano Letters</i> , 2016, 16, 309-313.	9.5	118
15	Single Atomically Sharp Lateral Monolayer Heterojunction Solar Cells with Extraordinarily High Power Conversion Efficiency. <i>Advanced Materials</i> , 2017, 29, 1701168.	24.3	112
16	Low-temperature electrodeposited Co-doped ZnO nanorods with enhanced ethanol and CO sensing properties. <i>Sensors and Actuators B: Chemical</i> , 2012, 161, 734-739.	8.0	108
17	Direct Conversion of Single-Layer SnO Nanoplates to Multi-Layer SnO <sub>2</sub> Nanoplates with Enhanced Ethanol Sensing Properties. <i>Advanced Functional Materials</i> , 2009, 19, 2453-2456.	16.5	96
18	Titanium Nitride Epitaxial Films as a Plasmonic Material Platform: Alternative to Gold. <i>ACS Photonics</i> , 2019, 6, 1848-1854.	6.9	96

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19	A leaf-molded transparent triboelectric nanogenerator for smart multifunctional applications. <i>Nano Energy</i> , 2017, 32, 180-186.	16.5	92
20	Si Hybrid Solar Cells with 13% Efficiency <i>via</i> Concurrent Improvement in Optical and Electrical Properties by Employing Graphene Quantum Dots. <i>ACS Nano</i> , 2016, 10, 815-821.	15.3	79
21	Aluminum Plasmonics Enriched Ultraviolet GaN Photodetector with Ultrahigh Responsivity, Detectivity, and Broad Bandwidth. <i>Advanced Science</i> , 2020, 7, 2002274.	12.4	72
22	Intercrossed Sheet-Like Ga-Doped ZnS Nanostructures with Superb Photocatalytic Activity and Photoresponse. <i>Journal of Physical Chemistry C</i> , 2009, 113, 12878-12882.	3.3	71
23	Shape-Tunable SrTiO <sub>3</sub> Crystals Revealing Facet-Dependent Optical and Photocatalytic Properties. <i>Journal of Physical Chemistry C</i> , 2019, 123, 13664-13671.	3.3	67
24	Distinct Carrier Transport Properties Across Horizontally vs Vertically Oriented Heterostructures of 2D/3D Perovskites. <i>Journal of the American Chemical Society</i> , 2021, 143, 4969-4978.	14.6	60
25	Facet-Dependent Electrical Conductivity Properties of PbS Nanocrystals. <i>Chemistry of Materials</i> , 2016, 28, 1574-1580.	7.1	56
26	Highly sensitive metal-insulator-semiconductor UV photodetectors based on ZnO/SiO <sub>2</sub> core-shell nanowires. <i>Journal of Materials Chemistry</i> , 2012, 22, 8420.	6.7	52
27	Controlled Growth of ZnO Nanopagoda Arrays with Varied Lamination and Apex Angles. <i>Crystal Growth and Design</i> , 2009, 9, 3161-3167.	3.2	51
28	Plasmonic enhancement of Au nanoparticle-embedded single-crystalline ZnO nanowire dye-sensitized solar cells. <i>Nano Energy</i> , 2016, 20, 264-271.	16.5	49
29	Epitaxial Aluminum-on-Sapphire Films as a Plasmonic Material Platform for Ultraviolet and Full Visible Spectral Regions. <i>ACS Photonics</i> , 2018, 5, 2624-2630.	6.9	47
30	Silicon Wafers with Facet-Dependent Electrical Conductivity Properties. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15339-15343.	14.8	46
31	Tunable electric and magnetic properties of CoxZn <sup>x</sup> S nanowires. <i>Applied Physics Letters</i> , 2008, 93, .	3.2	44
32	High-Sensitivity Solid-State Pb(Core)/ZnO(Shell) Nanothermometers Fabricated by a Facile Galvanic Displacement Method. <i>Advanced Materials</i> , 2008, 20, 4789-4792.	24.3	41
33	Low temperature synthesis of copper telluride nanostructures: phase formation, growth, and electrical transport properties. <i>Journal of Materials Chemistry</i> , 2012, 22, 7098.	6.7	41
34	Omnidirectional Harvesting of Weak Light Using a Graphene Quantum Dot-Modified Organic/Silicon Hybrid Device. <i>ACS Nano</i> , 2017, 11, 4564-4570.	15.3	41
35	Vertically well-aligned epitaxial Ni <sub>3</sub> Si <sub>2</sub> nanowire arrays with excellent field emission properties. <i>Applied Physics Letters</i> , 2008, 93, 113109.	3.2	37
36	Highly luminescent, homogeneous ZnO nanoparticles synthesized via semiconductive polyalkyloxylthiophene template. <i>Journal of Materials Chemistry</i> , 2009, 19, 7284.	6.7	36

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37	Electro-assisted selective uptake/release of phosphate using a graphene oxide/MgMn-layered double hydroxide composite. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3962-3970.	10.5	34
38	Single-Crystalline Pb Nanowires Grown by Galvanic Displacement Reactions of Pb Ions on Zinc Foils and Their Superconducting Properties. <i>Journal of Physical Chemistry C</i> , 2007, 111, 6215-6219.	3.3	33
39	Integrated optical waveguide and photodetector arrays based on comb-like ZnO structures. <i>Nanoscale</i> , 2013, 5, 12185.	5.8	30
40	Sequential Cation Exchange Generated Superlattice Nanowires Forming Multiple p-n Heterojunctions. <i>ACS Nano</i> , 2014, 8, 9422-9426.	15.3	30
41	Vastly improved solar-light induced water splitting catalyzed by few-layer MoS <sub>2</sub> on Au nanoparticles utilizing localized surface plasmon resonance. <i>Nano Energy</i> , 2020, 77, 105267.	16.5	30
42	Multibit Programmable Optoelectronic Nanowire Memory with Sub-femtojoule Optical Writing Energy. <i>Advanced Functional Materials</i> , 2014, 24, 2967-2974.	16.5	29
43	Tunable Moiré Superlattice of Artificially Twisted Monolayers. <i>Advanced Materials</i> , 2019, 31, e1901077.	24.3	28
44	Direct observation of electromigration-induced surface atomic steps in Cu lines by in situ transmission electron microscopy. <i>Applied Physics Letters</i> , 2007, 90, 203101.	3.2	26
45	Facet-Dependent and Adjacent Facet-Related Electrical Conductivity Properties of SrTiO <sub>3</sub> Crystals. <i>Journal of Physical Chemistry C</i> , 2021, 125, 10051-10056.	3.3	26
46	Plasmonic enhancement of hydrogen production by water splitting with CdS nanowires protected by metallic TiN overlayers as highly efficient photocatalysts. <i>Nano Energy</i> , 2021, 89, 106407.	16.5	26
47	Heterogeneous and Homogeneous Nucleation of Epitaxial NiSi <sub>2</sub> in [110] Si Nanowires. <i>Journal of Physical Chemistry C</i> , 2011, 115, 397-401.	3.3	25
48	Direct growth of FeSi <sub>2</sub> nanowires with infrared emission, ferromagnetism at room temperature and high magnetoresistance via a spontaneous chemical reaction method. <i>Journal of Materials Chemistry</i> , 2011, 21, 5704.	6.7	24
49	Magnetic MoS <sub>2</sub> Interface Monolayer on a CdS Nanowire by Cation Exchange. <i>Journal of Physical Chemistry C</i> , 2016, 120, 23055-23060.	3.3	24
50	Strain Control of a NO Gas Sensor Based on Ga-Doped ZnO Epilayers. <i>ACS Applied Electronic Materials</i> , 2020, 2, 1365-1372.	4.4	24
51	Very Robust Spray-Synthesized CsPbI <sub>3</sub> Quantum Emitters with Ultrahigh Room-Temperature Cavity-Free Brightness and Self-Healing Ability. <i>ACS Nano</i> , 2021, 15, 11358-11368.	15.3	24
52	Germanium Wafers Possessing Facet-Dependent Electrical Conductivity Properties. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16162-16165.	14.8	23
53	Green Treatment of Phosphate from Wastewater Using a Porous Bio-Templated Graphene Oxide/MgMn-Layered Double Hydroxide Composite. <i>IScience</i> , 2020, 23, 101065.	4.1	22
54	Facet-Dependent Surface Trap States and Carrier Lifetimes of Silicon. <i>Nano Letters</i> , 2020, 20, 1952-1958.	9.5	22

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55	Anomalous adhesive superhydrophobicity on aligned ZnO nanowire arrays grown on a lotus leaf. <i>Journal of Materials Chemistry</i> , 2011, 21, 18061.	6.7	21
56	GaAs wafers possessing facet-dependent electrical conductivity properties. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5456-5460.	5.6	21
57	Low threshold room-temperature UV surface plasmon polariton lasers with ZnO nanowires on single-crystal aluminum films with Al <sub>2</sub> O <sub>3</sub> interlayers. <i>RSC Advances</i> , 2019, 9, 13600-13607.	3.7	18
58	Facile synthesis of large scale Er-doped ZnO flower-like structures with enhanced 1.54 $\mu$ m infrared emission. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 1190-1195.	1.9	17
59	Three-dimensional heterostructured ZnSe nanoparticles/Si wire arrays with enhanced photodetection and photocatalytic performances. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1345-1351.	5.6	17
60	Optimization of the nanotwin-induced zigzag surface of copper by electromigration. <i>Nanoscale</i> , 2016, 8, 2584-2588.	5.8	17
61	A Facile Microwave-Assisted Method to Prepare Highly Electrosorptive Reduced Graphene Oxide/Activated Carbon Composite Electrode for Capacitive Deionization. <i>Advanced Materials Technologies</i> , 2019, 4, 1900213.	6.2	17
62	Large Facet-Specific Built-in Potential Differences Affecting Trap State Densities and Carrier Lifetimes of GaAs Wafers. <i>Journal of Physical Chemistry C</i> , 2020, 124, 21577-21582.	3.3	16
63	Enhancing photocatalytic properties of continuous few-layer MoS <sub>2</sub> thin films for hydrogen production by water splitting through defect engineering with Ar plasma treatment. <i>Nano Energy</i> , 2023, 109, 108295.	16.5	16
64	Magnetic anisotropy in nanostructured gadolinium. <i>Journal of Applied Physics</i> , 2012, 111, .	2.3	15
65	Large scale two-dimensional nanobowl array high efficiency polymer solar cell. <i>RSC Advances</i> , 2012, 2, 1314.	3.7	15
66	<i>In Situ</i> Investigation of Defect-Free Copper Nanowire Growth. <i>Nano Letters</i> , 2018, 18, 778-784.	9.5	15
67	Germanium Possessing Facet-Specific Trap States and Carrier Lifetimes. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13304-13309.	3.3	15
68	Stability of nanoscale twins in copper under electric current stressing. <i>Journal of Applied Physics</i> , 2010, 108, .	2.3	14
69	Power Saving High Performance Deep-Ultraviolet Phototransistors Made of ZnGa <sub>2</sub> O <sub>4</sub> Epilayers. <i>ACS Applied Electronic Materials</i> , 2020, 2, 590-596.	4.4	13
70	Organic Lead Halide Nanocrystals Providing an Ultra-Wide Color Gamut with Almost-Unity Photoluminescence Quantum Yield. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 25202-25213.	8.3	13
71	Room-temperature ferromagnetism in CrSi <sub>2</sub> (core)/SiO <sub>2</sub> (shell) semiconducting nanocables. <i>Applied Physics Letters</i> , 2011, 98, 193104.	3.2	12
72	Silicon Wafers with Facet-Dependent Electrical Conductivity Properties. <i>Angewandte Chemie</i> , 2017, 129, 15541-15545.	2.1	12

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73	Supramolecular nanotubes with high thermal stability: a rigidity enhanced structure transformation induced by electron-beam irradiation and heat. <i>Journal of Materials Chemistry</i> , 2007, 17, 2307.	6.7	10
74	Role of Carbon Nanotube Interlayer in Enhancing the Electron Field Emission Behavior of Ultrananocrystalline Diamond Coated Si-Tip Arrays. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 7732-7740.	8.3	10
75	Direct Observation of Sublimation Behaviors in One-Dimensional In <sub>2</sub> Se <sub>3</sub> /In <sub>2</sub> O <sub>3</sub> Nanoheterostructures. <i>Analytical Chemistry</i> , 2015, 87, 5584-5588.	6.8	10
76	Thermal dewetting with a chemically heterogeneous nano-template for self-assembled L1<sub>0</sub>FePt nanoparticle arrays. <i>Nanoscale</i> , 2016, 8, 3926-3935.	5.8	10
77	Facet-dependent electrical conductivity properties of GaN wafers. <i>Journal of Materials Chemistry C</i> , 2021, 9, 15354-15358.	5.6	10
78	Large area controllable hexagonal close-packed single-crystalline metal nanocrystal arrays with localized surface plasmon resonance response. <i>Journal of Materials Chemistry C</i> , 2013, 1, 3593.	5.6	9
79	Controlled growth of the silicide nanostructures on Si bicrystal nanotemplate at a precision of a few nanometres. <i>CrystEngComm</i> , 2011, 13, 3967.	2.4	8
80	Chromium-Doped Germanium Nanotowers: Growth Mechanism and Room Temperature Ferromagnetism. <i>Crystal Growth and Design</i> , 2011, 11, 2957-2963.	3.2	8
81	ZnO Nanowires on Single-Crystalline Aluminum Film Coupled with an Insulating WO <sub>3</sub> Interlayer Manifesting Low Threshold SPP Laser Operation. <i>Nanomaterials</i> , 2020, 10, 1680.	4.2	8
82	Nanoscale Copper and Copper Compounds for Advanced Device Applications. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2016, 47, 5845-5851.	2.2	7
83	Nanothermometers for Transmission Electron Microscopy “ Fabrication and Characterization. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 4298-4303.	2.2	6
84	Intermediates in the cation reactions in solution probed by an in situ surface enhanced Raman scattering method. <i>Scientific Reports</i> , 2015, 5, 13759.	3.4	6
85	Nd-doped silicon nanowires with room temperature ferromagnetism and infrared photoemission. <i>Applied Physics Letters</i> , 2009, 94, 263117.	3.2	5
86	Advanced Room Temperature Single-Electron Transistor of a Germanium Nanochain with Two and Multitunnel Junctions. <i>ACS Applied Electronic Materials</i> , 2020, 2, 1843-1848.	4.4	4
87	Germanium Wafers Possessing Facet-Dependent Electrical Conductivity Properties. <i>Angewandte Chemie</i> , 2018, 130, 16394-16397.	2.1	3
88	Superb Low Threshold Surface-Plasmon Polariton ZnO Nanolasers on an Aluminum Film with Tailored MoO <sub>3</sub> and Ta <sub>2</sub> O <sub>5</sub> Dielectric Interlayers of Varied Thickness. <i>Journal of Physical Chemistry C</i> , 2022, 126, 11779-11787.	3.3	2
89	Uphill Diffusion Induced Point Contact Reaction in Si Nanowires. <i>Nano Letters</i> , 2022, 22, 6895-6899.	9.5	2
90	In-situ transmission electron microscopy study of nanotwinned copper under electromigration. , 2010, , .		1

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91	Electron Field Emission Enhancement of Vertically Aligned Ultrananocrystalline Diamond-Coated ZnO Core-Shell Heterostructured Nanorods. <i>Small</i> , 2014, 10, 179.	11.2	1
92	Dislocation multiplication inside contact holes. , 0, , .		0
93	Ge nanowire transistors with high-quality interfaces by atomic-scale thermal annealing. , 2012, , .		0
94	Defect Engineering: Polycrystalline TiO <sub>2</sub> Nanofibers with H <sub>2</sub> Plasma Treatment Tuning Grain to Grain Boundary Potential for Photochemical Antibacterial Agents. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
95	Solar-Driven Hydrogen Evolution with Superior Efficiency by a Low-Cost, Large-Scale Synergetic Hybrid of 1D-Si Nanowires/0D-Au Nanoparticles/2D-MoS <sub>2</sub> Nanofilms. <i>Solar Rrl</i> , 2024, 8, .	6.0	0
96	Advances in the heterostructures for enhanced hydrogen production efficiency: a comprehensive review. <i>Nanoscale</i> , 0, , .	5.8	0