Lih-juann Chen

List of Publications by Year
in descending order

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	Solarâ€Driven Hydrogen Evolution with Superior Efficiency by a Lowâ€Cost, Largeâ€Scale Synergetic Hybrid of 1Dâ€Si Nanowires/0Dâ€Au Nanoparticles/2Dâ€MoS₂ Nanofilms. Solar Rrl, 2024, 8, .	6.0	0
2	Enhancing photocatalytic properties of continuous few-layer MoS2 thin films for hydrogen production by water splitting through defect engineering with Ar plasma treatment. Nano Energy, 2023, 109, 108295.	16.5	16
3	Superb Low Threshold Surface-Plasmon Polariton ZnO Nanolasers on an Aluminum Film with Tailored MoO₃ and Ta₂O₅ Dielectric Interlayers of Varied Thickness. Journal of Physical Chemistry C, 2022, 126, 11779-11787.	3.3	2
4	Uphill Diffusion Induced Point Contact Reaction in Si Nanowires. Nano Letters, 2022, 22, 6895-6899.	9.5	2
5	Distinct Carrier Transport Properties Across Horizontally vs Vertically Oriented Heterostructures of 2D/3D Perovskites. Journal of the American Chemical Society, 2021, 143, 4969-4978.	14.6	60
6	Very Robust Spray-Synthesized CsPbI₃ Quantum Emitters with Ultrahigh Room-Temperature Cavity-Free Brightness and Self-Healing Ability. ACS Nano, 2021, 15, 11358-11368.	15.3	24
7	Facet-Dependent and Adjacent Facet-Related Electrical Conductivity Properties of SrTiO₃ Crystals. Journal of Physical Chemistry C, 2021, 125, 10051-10056.	3.3	26
8	Organic Lead Halide Nanocrystals Providing an Ultra-Wide Color Gamut with Almost-Unity Photoluminescence Quantum Yield. ACS Applied Materials & Interfaces, 2021, 13, 25202-25213.	8.3	13
9	Plasmonic enhancement of hydrogen production by water splitting with CdS nanowires protected by metallic TiN overlayers as highly efficient photocatalysts. Nano Energy, 2021, 89, 106407.	16.5	26
10	Facet-dependent electrical conductivity properties of GaN wafers. Journal of Materials Chemistry C, 2021, 9, 15354-15358.	5.6	10
11	Green Treatment of Phosphate from Wastewater Using a Porous Bio-Templated Graphene Oxide/MgMn-Layered Double Hydroxide Composite. IScience, 2020, 23, 101065.	4.1	22
12	Aluminum Plasmonics Enriched Ultraviolet GaN Photodetector with Ultrahigh Responsivity, Detectivity, and Broad Bandwidth. Advanced Science, 2020, 7, 2002274.	12.4	72
13	ZnO Nanowires on Single-Crystalline Aluminum Film Coupled with an Insulating WO3 Interlayer Manifesting Low Threshold SPP Laser Operation. Nanomaterials, 2020, 10, 1680.	4.2	8
14	Large Facet-Specific Built-in Potential Differences Affecting Trap State Densities and Carrier Lifetimes of GaAs Wafers. Journal of Physical Chemistry C, 2020, 124, 21577-21582.	3.3	16
15	Strain Control of a NO Gas Sensor Based on Ga-Doped ZnO Epilayers. ACS Applied Electronic Materials, 2020, 2, 1365-1372.	4.4	24
16	Advanced Room Temperature Single-Electron Transistor of a Germanium Nanochain with Two and Multitunnel Junctions. ACS Applied Electronic Materials, 2020, 2, 1843-1848.	4.4	4
17	Germanium Possessing Facet-Specific Trap States and Carrier Lifetimes. Journal of Physical Chemistry C, 2020, 124, 13304-13309.	3.3	15
18	Power Saving High Performance Deep-Ultraviolet Phototransistors Made of ZnGa₂O₄ Epilayers. ACS Applied Electronic Materials, 2020, 2, 590-596.	4.4	13

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19	Facet-Dependent Surface Trap States and Carrier Lifetimes of Silicon. Nano Letters, 2020, 20, 1952-1958.	9.5	22
20	GaAs wafers possessing facet-dependent electrical conductivity properties. Journal of Materials Chemistry C, 2020, 8, 5456-5460.	5.6	21
21	Vastly improved solar-light induced water splitting catalyzed by few-layer MoS2 on Au nanoparticles utilizing localized surface plasmon resonance. Nano Energy, 2020, 77, 105267.	16.5	30
22	A Facile Microwaveâ€Assisted Method to Prepare Highly Electrosorptive Reduced Graphene Oxide/Activated Carbon Composite Electrode for Capacitive Deionization. Advanced Materials Technologies, 2019, 4, 1900213.	6.2	17
23	Titanium Nitride Epitaxial Films as a Plasmonic Material Platform: Alternative to Gold. ACS Photonics, 2019, 6, 1848-1854.	6.9	96
24	Tunable MoirÃ© Superlattice of Artificially Twisted Monolayers. Advanced Materials, 2019, 31, e1901077.	24.3	28
25	Electro-assisted selective uptake/release of phosphate using a graphene oxide/MgMn-layered double hydroxide composite. Journal of Materials Chemistry A, 2019, 7, 3962-3970.	10.5	34
26	Low threshold room-temperature UV surface plasmon polariton lasers with ZnO nanowires on single-crystal aluminum films with Al₂O₃ interlayers. RSC Advances, 2019, 9, 13600-13607.	3.7	18
27	Shape-Tunable SrTiO₃ Crystals Revealing Facet-Dependent Optical and Photocatalytic Properties. Journal of Physical Chemistry C, 2019, 123, 13664-13671.	3.3	67
28	Efficient electrocatalytic conversion of carbon monoxide to propanol using fragmented copper. Nature Catalysis, 2019, 2, 251-258.	28.3	209
29	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. Nano Energy, 2018, 48, 383-390.	16.5	126
30	Epitaxial Aluminum-on-Sapphire Films as a Plasmonic Material Platform for Ultraviolet and Full Visible Spectral Regions. ACS Photonics, 2018, 5, 2624-2630.	6.9	47
31	In Situ Investigation of Defect-Free Copper Nanowire Growth. Nano Letters, 2018, 18, 778-784.	9.5	15
32	Copper nanocavities confine intermediates for efficient electrosynthesis of C3 alcohol fuels from carbon monoxide. Nature Catalysis, 2018, 1, 946-951.	28.3	395
33	Germanium Wafers Possessing Facetâ€Dependent Electrical Conductivity Properties. Angewandte Chemie, 2018, 130, 16394-16397.	2.1	3
34	Germanium Wafers Possessing Facetâ€Dependent Electrical Conductivity Properties. Angewandte Chemie - International Edition, 2018, 57, 16162-16165.	14.8	23
35	Copper-on-nitride enhances the stable electrosynthesis of multi-carbon products from CO2. Nature Communications, 2018, 9, 3828.	13.2	306
36	Defect Engineering: Polycrystalline TiO2 Nanofibers with H2 Plasma Treatment Tuning Grain to Grain Boundary Potential for Photochemical Antibacterial Agents. ECS Meeting Abstracts, 2018, , .	0.0	0

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37	Omnidirectional Harvesting of Weak Light Using a Graphene Quantum Dot-Modified Organic/Silicon Hybrid Device. ACS Nano, 2017, 11, 4564-4570.	15.3	41
38	A leaf-molded transparent triboelectric nanogenerator for smart multifunctional applications. Nano Energy, 2017, 32, 180-186.	16.5	92
39	Silicon Wafers with Facetâ€Dependent Electrical Conductivity Properties. Angewandte Chemie, 2017, 129, 15541-15545.	2.1	12
40	Silicon Wafers with Facetâ€Dependent Electrical Conductivity Properties. Angewandte Chemie - International Edition, 2017, 56, 15339-15343.	14.8	46
41	Single Atomically Sharp Lateral Monolayer pâ€n Heterojunction Solar Cells with Extraordinarily High Power Conversion Efficiency. Advanced Materials, 2017, 29, 1701168.	24.3	112
42	Magnetic MoS₂ Interface Monolayer on a CdS Nanowire by Cation Exchange. Journal of Physical Chemistry C, 2016, 120, 23055-23060.	3.3	24
43	Nanoscale Copper and Copper Compounds for Advanced Device Applications. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 5845-5851.	2.2	7
44	Optimization of the nanotwin-induced zigzag surface of copper by electromigration. Nanoscale, 2016, 8, 2584-2588.	5.8	17
45	Facet-Dependent Electrical Conductivity Properties of PbS Nanocrystals. Chemistry of Materials, 2016, 28, 1574-1580.	7.1	56
46	Thermal dewetting with a chemically heterogeneous nano-template for self-assembled L1₀FePt nanoparticle arrays. Nanoscale, 2016, 8, 3926-3935.	5.8	10
47	Plasmonic enhancement of Au nanoparticleâ€"embedded single-crystalline ZnO nanowire dye-sensitized solar cells. Nano Energy, 2016, 20, 264-271.	16.5	49
48	Si Hybrid Solar Cells with 13% Efficiency via Concurrent Improvement in Optical and Electrical Properties by Employing Graphene Quantum Dots. ACS Nano, 2016, 10, 815-821.	15.3	79
49	Efficiency Enhancement of Silicon Heterojunction Solar Cells via Photon Management Using Graphene Quantum Dot as Downconverters. Nano Letters, 2016, 16, 309-313.	9.5	118
50	Intermediates in the cation reactions in solution probed by an in situ surface enhanced Raman scattering method. Scientific Reports, 2015, 5, 13759.	3.4	6
51	Facet-Dependent Electrical Conductivity Properties of Cu₂O Crystals. Nano Letters, 2015, 15, 2155-2160.	9.5	212
52	Role of Carbon Nanotube Interlayer in Enhancing the Electron Field Emission Behavior of Ultrananocrystalline Diamond Coated Si-Tip Arrays. ACS Applied Materials & Interfaces, 2015, 7, 7732-7740.	8.3	10
53	Direct Observation of Sublimation Behaviors in One-Dimensional In2Se3/In2O3 Nanoheterostructures. Analytical Chemistry, 2015, 87, 5584-5588.	6.8	10
54	Multibit Programmable Optoelectronic Nanowire Memory with Subâ€femtojoule Optical Writing Energy. Advanced Functional Materials, 2014, 24, 2967-2974.	16.5	29

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55	All-Color Plasmonic Nanolasers with Ultralow Thresholds: Autotuning Mechanism for Single-Mode Lasing. Nano Letters, 2014, 14, 4381-4388.	9.5	205
56	Sequential Cation Exchange Generated Superlattice Nanowires Forming Multiple pâ€“n Heterojunctions. ACS Nano, 2014, 8, 9422-9426.	15.3	30
57	Electron Field Emission Enhancement of Vertically Aligned Ultrananocrystalline Diamond-Coated ZnO Coreâ€“Shell Heterostructured Nanorods. Small, 2014, 10, 179.	11.2	1
58	Triboelectric nanogenerator built inside shoe insole for harvesting walking energy. Nano Energy, 2013, 2, 856-862.	16.5	342
59	Integrated optical waveguide and photodetector arrays based on comb-like ZnO structures. Nanoscale, 2013, 5, 12185.	5.8	30
60	Large area controllable hexagonal close-packed single-crystalline metal nanocrystal arrays with localized surface plasmon resonance response. Journal of Materials Chemistry C, 2013, 1, 3593.	5.6	9
61	Three-dimensional heterostructured ZnSe nanoparticles/Si wire arrays with enhanced photodetection and photocatalytic performances. Journal of Materials Chemistry C, 2013, 1, 1345-1351.	5.6	17
62	Magnetic anisotropy in nanostructured gadolinium. Journal of Applied Physics, 2012, 111, .	2.3	15
63	Ge nanowire transistors with high-quality interfaces by atomic-scale thermal annealing. , 2012, , .		0
64	Large scale two-dimensional nanobowl array high efficiency polymer solar cell. RSC Advances, 2012, 2, 1314.	3.7	15
65	Highly sensitive metalâ€“insulatorâ€“semiconductor UV photodetectors based on ZnO/SiO2 coreâ€“shell nanowires. Journal of Materials Chemistry, 2012, 22, 8420.	6.7	52
66	Low temperature synthesis of copper telluride nanostructures: phase formation, growth, and electrical transport properties. Journal of Materials Chemistry, 2012, 22, 7098.	6.7	41
67	Low-temperature electrodeposited Co-doped ZnO nanorods with enhanced ethanol and CO sensing properties. Sensors and Actuators B: Chemical, 2012, 161, 734-739.	8.0	108
68	Controlled growth of the silicide nanostructures on Si bicrystal nanotemplate at a precision of a few nanometres. CrystEngComm, 2011, 13, 3967.	2.4	8
69	Chromium-Doped Germanium Nanotowers: Growth Mechanism and Room Temperature Ferromagnetism. Crystal Growth and Design, 2011, 11, 2957-2963.	3.2	8
70	Heterogeneous and Homogeneous Nucleation of Epitaxial NiSi₂ in [110] Si Nanowires. Journal of Physical Chemistry C, 2011, 115, 397-401.	3.3	25
71	Anomalous adhesive superhydrophobicity on aligned ZnO nanowire arrays grown on a lotus leaf. Journal of Materials Chemistry, 2011, 21, 18061.	6.7	21
72	Direct growth of Î²-FeSi2 nanowires with infrared emission, ferromagnetism at room temperature and high magnetoresistance via a spontaneous chemical reaction method. Journal of Materials Chemistry, 2011, 21, 5704.	6.7	24

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73	Room-temperature ferromagnetism in CrSi2(core)/SiO2(shell) semiconducting nanocables. Applied Physics Letters, 2011, 98, 193104.	3.2	12
74	Nanothermometers for Transmission Electron Microscopy â€“ Fabrication and Characterization. European Journal of Inorganic Chemistry, 2010, 2010, 4298-4303.	2.2	6
75	Singleâ€InNâ€Nanowire Nanogenerator with Upto 1 V Output Voltage. Advanced Materials, 2010, 22, 4008-4013.	24.3	170
76	Direct Growth of Aligned Zinc Oxide Nanorods on Paper Substrates for Lowâ€Cost Flexible Electronics. Advanced Materials, 2010, 22, 4059-4063.	24.3	347
77	Stability of nanoscale twins in copper under electric current stressing. Journal of Applied Physics, 2010, 108, .	2.3	14
78	Large enhancement in photon detection sensitivity via Schottky-gated CdS nanowire nanosensors. Applied Physics Letters, 2010, 96, .	3.2	124
79	In-situ transmission electron microscopy study of nanotwinned copper under electromigration. , 2010, , .		1
80	Direct growth of high-rate capability and high capacity copper sulfide nanowire array cathodes for lithium-ion batteries. Journal of Materials Chemistry, 2010, 20, 6638.	6.7	175
81	Direct Conversion of Singleâ€Layer SnO Nanoplates to Multiâ€Layer SnO₂ Nanoplates with Enhanced Ethanol Sensing Properties. Advanced Functional Materials, 2009, 19, 2453-2456.	16.5	96
82	Oriented growth of large-scale nickel sulfide nanowire arrays via a general solution route for lithium-ion battery cathode applications. Journal of Materials Chemistry, 2009, 19, 7277.	6.7	133
83	Controlled Growth of ZnO Nanopagoda Arrays with Varied Lamination and Apex Angles. Crystal Growth and Design, 2009, 9, 3161-3167.	3.2	51
84	Nd-doped silicon nanowires with room temperature ferromagnetism and infrared photoemission. Applied Physics Letters, 2009, 94, 263117.	3.2	5
85	Highly luminescent, homogeneous ZnO nanoparticles synthesized via semiconductive polyalkyloxylthiophene template. Journal of Materials Chemistry, 2009, 19, 7284.	6.7	36
86	Intercrossed Sheet-Like Ga-Doped ZnS Nanostructures with Superb Photocatalytic Actvitiy and Photoresponse. Journal of Physical Chemistry C, 2009, 113, 12878-12882.	3.3	71
87	Facile synthesis of large scale Erâ€doped ZnO flowerâ€like structures with enhanced 1.54 Î¼m infrared emission. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1190-1195.	1.9	17
88	Highâ€Sensitivity Solidâ€State Pb(Core)/ZnO(Shell) Nanothermometers Fabricated by a Facile Galvanic Displacement Method. Advanced Materials, 2008, 20, 4789-4792.	24.3	41
89	Elastic Properties and Buckling of Silicon Nanowires. Advanced Materials, 2008, 20, 3919-3923.	24.3	122
90	Vertically well-aligned epitaxial Ni31Si12 nanowire arrays with excellent field emission properties. Applied Physics Letters, 2008, 93, 113109.	3.2	37

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91	Tunable electric and magnetic properties of CoxZn1â^'xS nanowires. Applied Physics Letters, 2008, 93, .	3.2	44
92	Direct observation of electromigration-induced surface atomic steps in Cu lines by in situ transmission electron microscopy. Applied Physics Letters, 2007, 90, 203101.	3.2	26
93	Single-Crystalline Pb Nanowires Grown by Galvanic Displacement Reactions of Pb Ions on Zinc Foils and Their Superconducting Properties. Journal of Physical Chemistry C, 2007, 111, 6215-6219.	3.3	33
94	Supramolecular nanotubes with high thermal stability: a rigidity enhanced structure transformation induced by electron-beam irradiation and heat. Journal of Materials Chemistry, 2007, 17, 2307.	6.7	10
95	Dislocation multiplication inside contact holes. , 0, , .		0
96	Advances in the heterostructures for enhanced hydrogen production efficiency: a comprehensive review. Nanoscale, 0, , .	5.8	0