Y-L Chueh

List of Publications by Year
in descending order

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351 papers	17,423 citations	19608 61 h-index	19690 117 g-index
358 all docs	358 docs citations	358 times ranked	23800 citing authors

#	Article	IF	Citations
1	Three-dimensional nanopillar-array photovoltaics on low-cost and flexible substrates. Nature Materials, 2009, 8, 648-653.	13.3	997
2	Ultrahigh-Gain Photodetectors Based on Atomically Thin Graphene-MoS2 Heterostructures. Scientific Reports, 2014, 4, 3826.	1.6	771
3	A review of rechargeable batteries for portable electronic devices. InformaÄnÃ-MateriÃ¡ly, 2019, 1, 6-32.	8.5	694
4	Fiber-Based All-Solid-State Flexible Supercapacitors for Self-Powered Systems. ACS Nano, 2012, 6, 9200-9206.	7.3	596
5	Dual-Gated MoS₂/WSe₂ van der Waals Tunnel Diodes and Transistors. ACS Nano, 2015, 9, 2071-2079.	7.3	560
6	Ultrathin compound semiconductor on insulator layers for high-performance nanoscale transistors. Nature, 2010, 468, 286-289.	13.7	373
7	Polarization-resolved black phosphorus/molybdenum disulfide mid-wave infrared photodiodes with high detectivity at room temperature. Nature Photonics, 2018, 12, 601-607.	15.6	366
8	Toward the Development of Printable Nanowire Electronics and Sensors. Advanced Materials, 2009, 21, 3730-3743.	11.1	363
9	Diameter-Dependent Electron Mobility of InAs Nanowires. Nano Letters, 2009, 9, 360-365.	4.5	353
10	Ordered Arrays of Dual-Diameter Nanopillars for Maximized Optical Absorption. Nano Letters, 2010, 10, 3823-3827.	4.5	269
11	pâ€Type InP Nanopillar Photocathodes for Efficient Solarâ€Driven Hydrogen Production. Angewandte Chemie - International Edition, 2012, 51, 10760-10764.	7.2	245
12	Systematic Study of the Growth of Aligned Arrays of Î±-Fe2O3 and Fe3O4 Nanowires by a Vaporâ€“Solid Process. Advanced Functional Materials, 2006, 16, 2243-2251.	7.8	238
13	Metal-catalyzed crystallization of amorphous carbon to graphene. Applied Physics Letters, 2010, 96, .	1.5	234
14	Lead-Free Perovskite Nanowire Array Photodetectors with Drastically Improved Stability in Nanoengineering Templates. Nano Letters, 2017, 17, 523-530.	4.5	232
15	Direct Synthesis and Practical Bandgap Estimation of Multilayer Arsenene Nanoribbons. Chemistry of Materials, 2016, 28, 425-429.	3.2	220
16	Honeycomb-like Porous Carbonâ€“Cobalt Oxide Nanocomposite for High-Performance Enzymeless Glucose Sensor and Supercapacitor Applications. ACS Applied Materials & Interfaces, 2015, 7, 15812-15820.	4.0	216
17	Wafer Scale Phaseâ€Engineered 1Tâ€•and 2Hâ€MoSe₂/Mo Coreâ€“Shell 3Dâ€Hierarchical Nanostructures toward Efficient Electrocatalytic Hydrogen Evolution Reaction. Advanced Materials, 2016, 28, 9831-9838.	11.1	208
18	13% Efficiency Hybrid Organic/Silicon-Nanowire Heterojunction Solar Cell via Interface Engineering. ACS Nano, 2013, 7, 10780-10787.	7.3	194

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19	Oxygen defect and Si nanocrystal dependent white-light and near-infrared electroluminescence of Si-implanted and plasma-enhanced chemical-vapor deposition-grown Si-rich SiO2. Journal of Applied Physics, 2005, 97, 094306.	1.1	178
20	Low-temperature growth and interface characterization of BiFeO3 thin films with reduced leakage current. Applied Physics Letters, 2005, 87, 172901.	1.5	152
21	Probing Surface Band Bending of Surface-Engineered Metal Oxide Nanowires. ACS Nano, 2012, 6, 9366-9372.	7.3	149
22	Room temperature multiplexed gas sensing using chemical-sensitive 3.5-nm-thin silicon transistors. Science Advances, 2017, 3, e1602557.	4.7	142
23	Hollow NiCo₂S₄ Nanospheres Hybridized with 3D Hierarchical Porous rGO/Fe₂O₃ Composites toward Highâ€Performance Energy Storage Device. Advanced Energy Materials, 2018, 8, 1703453.	10.2	142
24	RuO2 Nanowires and RuO2/TiO2 Core/Shell Nanowires: From Synthesis to Mechanical, Optical, Electrical, and Photoconductive Properties. Advanced Materials, 2007, 19, 143-149.	11.1	139
25	ZnO_{1â€“x} Nanorod Arrays/ZnO Thin Film Bilayer Structure: From Homojunction Diode and High-Performance Memristor to Complementary 1D1R Application. ACS Nano, 2012, 6, 8407-8414.	7.3	132
26	Manipulated Transformation of Filamentary and Homogeneous Resistive Switching on ZnO Thin Film Memristor with Controllable Multistate. ACS Applied Materials & Interfaces, 2013, 5, 6017-6023.	4.0	129
27	Van der Waals heteroepitaxial AZO/NiO/AZO/muscovite (ANA/muscovite) transparent flexible memristor. Nano Energy, 2019, 56, 322-329.	8.2	125
28	Single CuO_x Nanowire Memristor: Forming-Free Resistive Switching Behavior. ACS Applied Materials & Interfaces, 2014, 6, 16537-16544.	4.0	124
29	Electrostatically Charged MoS₂/Graphene Oxide Hybrid Composites for Excellent Electrochemical Energy Storage Devices. ACS Applied Materials & Interfaces, 2018, 10, 35571-35579.	4.0	113
30	pâ€Type Î±â€Fe₂O₃ Nanowires and their nâ€Type Transition in a Reductive Ambient. Small, 2007, 3, 1356-1361.	5.2	110
31	Controlled growth of carbon nanotubeâ€“graphene hybrid materials for flexible and transparent conductors and electron field emitters. Nanoscale, 2012, 4, 632-638.	2.8	110
32	Nitrogen-Doped Tungsten Oxide Nanowires: Low-Temperature Synthesis on Si, and Electrical, Optical, and Field-Emission Properties. Small, 2007, 3, 658-664.	5.2	109
33	Monolithic 3D CMOS Using Layered Semiconductors. Advanced Materials, 2016, 28, 2547-2554.	11.1	107
34	Magnetic and Electrical Characterizations of Halfâ€Metallic Fe₃O₄ Nanowires. Advanced Materials, 2007, 19, 2290-2294.	11.1	105
35	Single-Crystalline Branched Zinc Phosphide Nanostructures:Â Synthesis, Properties, and Optoelectronic Devices. Nano Letters, 2007, 7, 269-275.	4.5	104
36	TaSi2 Nanowires:â€‰ A Potential Field Emitter and Interconnect. Nano Letters, 2006, 6, 1637-1644.	4.5	102

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37	Wafer-Scale Growth of WSe₂ Monolayers Toward Phase-Engineered Hybrid WO_x/WSe₂ Films with Sub-ppb NO_x Gas Sensing by a Low-Temperature Plasma-Assisted Selenization Process. Chemistry of Materials, 2017, 29, 1587-1598.	3.2	99
38	Quantum Confinement Effects in Nanoscale-Thickness InAs Membranes. Nano Letters, 2011, 11, 5008-5012.	4.5	97
39	An ultrasensitive flexible pressure sensor for multimodal wearable electronic skins based on large-scale polystyrene ball@reduced graphene-oxide coreâ€“shell nanoparticles. Journal of Materials Chemistry C, 2018, 6, 5514-5520.	2.7	88
40	A superior dye adsorbent towards the hydrogen evolution reaction combining active sites and phase-engineering of (1T/2H) MoS₂/Î±-MoO₃ hybrid heterostructured nanoflowers. Journal of Materials Chemistry A, 2018, 6, 15320-15329.	5.2	86
41	Nanoscale InGaSb Heterostructure Membranes on Si Substrates for High Hole Mobility Transistors. Nano Letters, 2012, 12, 2060-2066.	4.5	85
42	A critical review on two-dimensional quantum dots (2D QDs): From synthesis toward applications in energy and optoelectronics. Progress in Quantum Electronics, 2019, 68, 100226.	3.5	85
43	Perovskite Quantum Dots with Near Unity Solution and Neatâ€Film Photoluminescent Quantum Yield by Novel Spray Synthesis. Advanced Materials, 2018, 30, 1705532.	11.1	84
44	Phaseâ€Engineered PtSe₂â€Layered Films by a Plasmaâ€Assisted Selenization Process toward All PtSe₂â€Based Field Effect Transistor to Highly Sensitive, Flexible, and Wideâ€Spectrum Photoresponse Photodetectors. Small, 2018, 14, e1800032.	5.2	83
45	Significant Efficiency Enhancement of Hybrid Solar Cells Using Coreâ€“Shell Nanowire Geometry for Energy Harvesting. ACS Nano, 2011, 5, 9501-9510.	7.3	80
46	Supersensitive, Ultrafast, and Broad-Band Light-Harvesting Scheme Employing Carbon Nanotube/TiO₂ Coreâ€“Shell Nanowire Geometry. ACS Nano, 2012, 6, 6687-6692.	7.3	80
47	Graphene-coated copper nanowire networks as a highly stable transparent electrode in harsh environments toward efficient electrocatalytic hydrogen evolution reactions. Journal of Materials Chemistry A, 2017, 5, 13320-13328.	5.2	77
48	Synthesis of taperlike Si nanowires with strong field emission. Applied Physics Letters, 2005, 86, 133112.	1.5	76
49	Ultra-Fast Synthesis of Graphene and Highly Oriented Graphite by Rapid Microwave Heating Process. Science of Advanced Materials, 2014, 6, 1-8.	0.1	75
50	Highly stable nitrogen-doped carbon nanotubes derived from carbon dots and metal-organic frameworks toward excellent efficient electrocatalyst for oxygen reduction reaction. Nano Energy, 2019, 63, 103788.	8.2	74
51	Hybridizing Plasmonic Materials with 2Dâ€Transition Metal Dichalcogenides toward Functional Applications. Small, 2020, 16, e1904271.	5.2	74
52	Ultrasensitive and light-activated NO2 gas sensor based on networked MoS2/ZnO nanohybrid with adsorption/desorption kinetics study. Applied Surface Science, 2021, 536, 147933.	3.1	72
53	Nanoscale doping of InAs via sulfur monolayers. Applied Physics Letters, 2009, 95, .	1.5	71
54	Near-ideal electrical properties of InAs/WSe2 van der Waals heterojunction diodes. Applied Physics Letters, 2013, 102, .	1.5	71

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55	Monolayer Resist for Patterned Contact Printing of Aligned Nanowire Arrays. Journal of the American Chemical Society, 2009, 131, 2102-2103.	6.6	70
56	Ultra-fast photodetectors based on high-mobility indium gallium antimonide nanowires. Nature Communications, 2019, 10, 1664.	5.8	70
57	Low-Temperature Chemical Synthesis of CoWO₄ Nanospheres for Sensitive Nonenzymatic Glucose Sensor. Journal of Physical Chemistry C, 2016, 120, 17024-17028.	1.5	69
58	A Critical Review on Enhancement of Photocatalytic Hydrogen Production by Molybdenum Disulfide: From Growth to Interfacial Activities. Small, 2019, 15, e1900578.	5.2	69
59	Black Ge Based on Crystalline/Amorphous Core/Shell Nanoneedle Arrays. Nano Letters, 2010, 10, 520-523.	4.5	68
60	Highly Stable Three-Dimensional Nickelâ€“Cobalt Hydroxide Hierarchical Heterostructures Hybridized with Carbon Nanotubes for High-Performance Energy Storage Devices. ACS Nano, 2019, 13, 11235-11248.	7.3	67
61	Thermally Strained Band Gap Engineering of Transition-Metal Dichalcogenide Bilayers with Enhanced Lightâ€“Matter Interaction toward Excellent Photodetectors. ACS Nano, 2017, 11, 8768-8776.	7.3	66
62	Epitaxial Photostrictionâ€“Magnetostriction Coupled Self-Assembled Nanostructures. ACS Nano, 2012, 6, 6952-6959.	7.3	63
63	Formation and Characterization of NixInAs/InAs Nanowire Heterostructures by Solid Source Reaction. Nano Letters, 2008, 8, 4528-4533.	4.5	61
64	Hybrid Coreâ^'Shell Nanowire Forests as Self-Selective Chemical Connectors. Nano Letters, 2009, 9, 2054-2058.	4.5	59
65	Interface enhanced well-dispersed Co9S8 nanocrystals as an efficient polysulfide host in lithiumâ€“sulfur batteries. Journal of Energy Chemistry, 2020, 48, 109-115.	7.1	59
66	Oxide-Confined Formation of Germanium Nanowire Heterostructures for High-Performance Transistors. ACS Nano, 2011, 5, 6008-6015.	7.3	58
67	Pentacene organic thin-film transistors with solution-based gelatin dielectric. Organic Electronics, 2013, 14, 1170-1176.	1.4	58
68	Recycling and recovery of perovskite solar cells. Materials Today, 2021, 43, 185-197.	8.3	58
69	SiO2/Ta2O5 Coreâ€“Shell Nanowires and Nanotubes. Angewandte Chemie - International Edition, 2006, 45, 7773-7778.	7.2	57
70	Patterned p-Doping of InAs Nanowires by Gas-Phase Surface Diffusion of Zn. Nano Letters, 2010, 10, 509-513.	4.5	57
71	Three-Dimensional Molybdenum Diselenide Helical Nanorod Arrays for High-Performance Aluminum-Ion Batteries. ACS Nano, 2020, 14, 8539-8550.	7.3	57
72	An Emerging Energy Storage System: Advanced Naâ€“Se Batteries. ACS Nano, 2021, 15, 5876-5903.	7.3	56

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73	Large Scale Single-Crystal Cu(In,Ga)Se₂Nanotip Arrays For High Efficiency Solar Cell. Nano Letters, 2011, 11, 4443-4448.	4.5	54
74	A solar-thermal energy harvesting scheme: enhanced heat capacity of molten HITEC salt mixed with Sn/SiOx coreâ€“shell nanoparticles. Nanoscale, 2014, 6, 4555.	2.8	54
75	Ferroelectricity of HfZrO₂ in Energy Landscape With Surface Potential Gain for Low-Power Steep-Slope Transistors. IEEE Journal of the Electron Devices Society, 2015, 3, 377-381.	1.2	54
76	Pressure Welding of Silver Nanowires Networks at Room Temperature as Transparent Electrodes for Efficient Organic Lightâ€Emitting Diodes. Small, 2018, 14, e1800541.	5.2	54
77	New Simultaneous Exfoliation and Doping Process for Generating MX₂ Nanosheets for Electrocatalytic Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 14786-14795.	4.0	54
78	Resistive switching of Au/ZnO/Au resistive memory: an in situ observation of conductive bridge formation. Nanoscale Research Letters, 2012, 7, 559.	3.1	53
79	Hydrothermally grown bismuth ferrites: controllable phases and morphologies in a mixed KOH/NaOH mineralizer. Journal of Materials Chemistry, 2012, 22, 17432.	6.7	52
80	Stability scheme of ZnO-thin film resistive switching memory: influence of defects by controllable oxygen pressure ratio. Nanoscale Research Letters, 2013, 8, 483.	3.1	52
81	Toward Efficient and Omnidirectional n-Type Si Solar Cells: Concurrent Improvement in Optical and Electrical Characteristics by Employing Microscale Hierarchical Structures. ACS Nano, 2014, 8, 2959-2969.	7.3	52
82	Recent Challenges in Perovskite Solar Cells Toward Enhanced Stability, Less Toxicity, and Largeâ€Area Mass Production. Advanced Materials Interfaces, 2019, 6, 1801758.	1.9	52
83	Antisymmetric Magnetoresistance in a van der Waals Antiferromagnetic/Ferromagnetic Layered MnPS₃/Fe₃GeTe₂ Stacking Heterostructure. ACS Nano, 2020, 14, 12037-12044.	7.3	52
84	Hierarchical Bi-doped BiOBr microspheres assembled from nanosheets with (0Â0Â1) facet exposed via crystal facet engineering toward highly efficient visible light photocatalysis. Applied Surface Science, 2020, 514, 145927.	3.1	52
85	Synthesis of ethanol-soluble few-layer graphene nanosheets for flexible and transparent conducting composite films. Nanotechnology, 2011, 22, 295606.	1.3	51
86	Design of Lamellar Mo₂C Nanosheets Assembled by Mo₂C Nanoparticles as an Anode Material toward Excellent Sodium-Ion Capacitors. ACS Sustainable Chemistry and Engineering, 2019, 7, 18375-18383.	3.2	51
87	Opportunities and Challenges in Precise Synthesis of Transition Metal Singleâ€Atom Supported by 2D Materials as Catalysts toward Oxygen Reduction Reaction. Advanced Functional Materials, 2021, 31, 2103558.	7.8	51
88	Design of Coreâ€“Shell Quantum Dotsâ€“3D WS₂ Nanowall Hybrid Nanostructures with High-Performance Bifunctional Sensing Applications. ACS Nano, 2020, 14, 12668-12678.	7.3	49
89	Diamine molecules double lock-link structured graphene oxide sheets for high-performance sodium ions storage. Energy Storage Materials, 2021, 34, 45-52.	9.5	48
90	Plasma-Assisted Synthesis of High-Mobility Atomically Layered Violet Phosphorus. ACS Applied Materials & Interfaces, 2015, 7, 13723-13727.	4.0	47

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91	Recent developments in the synthesis of nanostructured chalcopyrite materials and their applications: a review. RSC Advances, 2016, 6, 60643-60656.	1.7	47
92	Artificial Synapse Based on a 2D-SnO₂ Memtransistor with Dynamically Tunable Analog Switching for Neuromorphic Computing. ACS Applied Materials & Interfaces, 2021, 13, 52822-52832.	4.0	47
93	Electricity generation based on vertically aligned PbZr0.2Ti0.8O3 nanowire arrays. Nano Energy, 2012, 1, 424-428.	8.2	46
94	RuO2/MnO2 coreâ€“shell nanorods for supercapacitors. Journal of Materials Chemistry A, 2013, 1, 8753.	5.2	46
95	Tunable endothermic plateau for enhancing thermal energy storage obtained using binary metal alloy particles. Nano Energy, 2016, 25, 218-224.	8.2	46
96	High-Performance Rechargeable Aluminumâ€“Selenium Battery with a New Deep Eutectic Solvent Electrolyte: Thiourea-AlCl₃. ACS Applied Materials & Interfaces, 2020, 12, 27064-27073.	4.0	46
97	High Uniformity of Resistive Switching Characteristics in a Cr/ZnO/Pt Device. Journal of the Electrochemical Society, 2012, 159, G29-G32.	1.3	45
98	Highly Effective Field-Effect Mobility Amorphous InGaZnO TFT Mediated by Directional Silver Nanowire Arrays. ACS Applied Materials & Interfaces, 2015, 7, 232-240.	4.0	45
99	Direct growth of single-crystalline IIIâ€“V semiconductors on amorphous substrates. Nature Communications, 2016, 7, 10502.	5.8	45
100	Flexible Carbonâ€Nanofiber Connectors with Anisotropic Adhesion Properties. Small, 2010, 6, 22-26.	5.2	44
101	Large-Scale Production of NbS2 Nanowires and Their Performance in Electronic Field Emission. Angewandte Chemie - International Edition, 2004, 43, 5670-5674.	7.2	42
102	Direct growth of self-crystallized graphene and graphite nanoballs with Ni vapor-assisted growth: From controllable growth to material characterization. Scientific Reports, 2014, 4, 4739.	1.6	42
103	Phase-modulated 3D-hierarchical 1T/2H WSe₂ nanoscrews by a plasma-assisted selenization process as high performance NO gas sensors with a ppb-level detection limit. Journal of Materials Chemistry A, 2019, 7, 22314-22322.	5.2	42
104	A critical review on flexible Cu(In, Ga)Se2 (CIGS) solar cells. Materials Chemistry and Physics, 2019, 234, 329-344.	2.0	42
105	An indoor light-activated 3D cone-shaped MoS₂ bilayer-based NO gas sensor with PPb-level detection at room-temperature. Nanoscale, 2019, 11, 10410-10419.	2.8	42
106	Quantum Size Effects on the Chemical Sensing Performance of Two-Dimensional Semiconductors. Journal of Physical Chemistry C, 2012, 116, 9750-9754.	1.5	41
107	GaAs Nanowires: From Manipulation of Defect Formation to Controllable Electronic Transport Properties. ACS Nano, 2013, 7, 9138-9146.	7.3	41
108	Low Temperature Growth of Graphene on Glass by Carbon-Enclosed Chemical Vapor Deposition Process and Its Application as Transparent Electrode. Chemistry of Materials, 2015, 27, 1646-1655.	3.2	41

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109	Benchmarking the performance of ultrathin body InAs-on-insulator transistors as a function of body thickness. Applied Physics Letters, 2011, 99, .	1.5	40
110	Direct formation of large-scale multi-layered germanene on Si substrate. Physical Chemistry Chemical Physics, 2015, 17, 21389-21393.	1.3	40
111	Self-Selecting Resistive Switching Scheme Using TiO2 Nanorod Arrays. Scientific Reports, 2017, 7, 2066.	1.6	40
112	Manipulating the Crystallographic Texture of Nanotwinned Cu Films by Electrodeposition. Crystal Growth and Design, 2011, 11, 4970-4974.	1.4	39
113	Dynamic Observation of Phase Transformation Behaviors in Indium(III) Selenide Nanowire Based Phase Change Memory. ACS Nano, 2014, 8, 9457-9462.	7.3	39
114	Ultrafast and Low Temperature Synthesis of Highly Crystalline and Patternable Few-Layers Tungsten Diselenide by Laser Irradiation Assisted Selenization Process. ACS Nano, 2015, 9, 4346-4353.	7.3	39
115	Environmentally and Mechanically Stable Selenium 1D/2D Hybrid Structures for Broad-Range Photoresponse from Ultraviolet to Infrared Wavelengths. ACS Applied Materials & Interfaces, 2018, 10, 35477-35486.	4.0	39
116	Hierarchically Interconnected Ni₃S₂ Nanofibers as Binder-Free Electrodes for High-Performance Sodium-Ion Energy-Storage Devices. ACS Applied Nano Materials, 2019, 2, 2634-2641.	2.4	39
117	Engineered tunneling layer with enhanced impact ionization for detection improvement in graphene/silicon heterojunction photodetectors. Light: Science and Applications, 2021, 10, 113.	7.7	39
118	Recent Advances in Two-Dimensional Quantum Dots and Their Applications. Nanomaterials, 2021, 11, 1549.	1.9	39
119	Low temperature synthesis of copper telluride nanostructures: phase formation, growth, and electrical transport properties. Journal of Materials Chemistry, 2012, 22, 7098.	6.7	36
120	Thermal hysteresis in phase-change materials: Encapsulated metal alloy core-shell microparticles. Nano Energy, 2018, 51, 563-570.	8.2	36
121	Highly stable Pd/HNb₃O₈-based flexible humidity sensor for perdurable wireless wearable applications. Nanoscale Horizons, 2021, 6, 260-270.	4.1	36
122	Synthesis and characterization of metallic TaSi2 nanowires. Applied Physics Letters, 2005, 87, 223113.	1.5	35
123	Enhanced Photocarrier Generation with Selectable Wavelengths by Mâ€Đecoratedâ€CuInS₂ Nanocrystals (M = Au and Pt) Synthesized in a Single Surfactant Process on MoS₂ Bilayers. Small, 2019, 15, e1803529.	5.2	35
124	Scalable graphene synthesised by plasma-assisted selective reaction on silicon carbide for device applications. Nanoscale, 2014, 6, 13861-13869.	2.8	34
125	Resistive Memory for Harsh Electronics: Immunity to Surface Effect and High Corrosion Resistance via Surface Modification. Scientific Reports, 2014, 4, 4402.	1.6	34
126	Three-Dimensional Interconnected Reticular Porous Carbon From Corn Starch By a Sample Solâ€“Gel Method Toward High-Performance Supercapacitors With Aqueous and Ionic Liquid Electrolytes. ACS Sustainable Chemistry and Engineering, 2019, 7, 18690-18699.	3.2	34

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127	Niâ€“Moâ€“S@Niâ€“P composite materials as binder-free electrodes for aqueous asymmetric supercapacitors with enhanced performance. Journal of Power Sources, 2020, 477, 229022.	4.0	34
128	Direct Observation of Field Emission in a Single TaSi2Nanowire. Nano Letters, 2007, 7, 2243-2247.	4.5	33
129	High-performance indium phosphide nanowires synthesized on amorphous substrates: from formation mechanism to optical and electrical transport measurements. Journal of Materials Chemistry, 2012, 22, 10704.	6.7	33
130	Facile synthesis and characterization of high temperature phase FeS2 pyrite nanocrystals. Materials Letters, 2012, 75, 152-154.	1.3	33
131	Highly sensitive, selective and stable NO₂ gas sensors with a ppb-level detection limit on 2D-platinum diselenide films. Journal of Materials Chemistry C, 2020, 8, 4851-4858.	2.7	33
132	InGaAs Nanomembrane/Si van der Waals Heterojunction Photodiodes with Broadband and High Photoresponsivity. ACS Applied Materials & Interfaces, 2016, 8, 26105-26111.	4.0	32
133	Phaseâ€Engineered Typeâ€II Multimetalâ€“Selenide Heterostructures toward Lowâ€Power Consumption, Flexible, Transparent, and Wideâ€Spectrum Photoresponse Photodetectors. Small, 2018, 14, e1704052.	5.2	32
134	Coffee grounds-derived carbon as high performance anode materials for energy storage applications. Journal of the Taiwan Institute of Chemical Engineers, 2019, 97, 178-188.	2.7	32
135	Wet and Dry Adhesion Properties of Selfâ€Selective Nanowire Connectors. Advanced Functional Materials, 2009, 19, 3098-3102.	7.8	31
136	Solution-based silk fibroin dielectric in n-type C60 organic field-effect transistors: Mobility enhancement by the pentacene interlayer. Applied Physics Letters, 2013, 103, .	1.5	31
137	Fabrication of a Highly Stable White Light-Emitting Diode With Multiple-Layer Colloidal Quantum Dots. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-9.	1.9	31
138	Resistive switching of Sn-doped In₂O₃/HfO₂ coreâ€“shell nanowire: geometry architecture engineering for nonvolatile memory. Nanoscale, 2017, 9, 6920-6928.	2.8	31
139	Characteristics of constrained ferroelectricity in PbZrO3âˆ•BaZrO3 superlattice films. Journal of Applied Physics, 2005, 97, 034105.	1.1	30
140	High performance Cu_2O/ZnO core-shell nanorod arrays synthesized using a nanoimprint GaN template by the hydrothermal growth technique. Optical Materials Express, 2014, 4, 1473.	1.6	30
141	Toward high efficiency and panel size 30Ã—40 cm 2 Cu(In,Ga)Se 2 solar cell: Investigation of modified stacking sequences of metallic precursors and pre-annealing process without Se vapor at low temperature. Nano Energy, 2014, 10, 28-36.	8.2	30
142	Toward Omnidirectional Light Absorption by Plasmonic Effect for High-Efficiency Flexible Nonvacuum Cu(In,Ga)Se₂ Thin Film Solar Cells. ACS Nano, 2014, 8, 9341-9348.	7.3	30
143	Low Vacuum Annealing of Cellulose Acetate on Nickel Towards Transparent Conductive CNTâ€“Graphene Hybrid Films. ACS Applied Materials & Interfaces, 2014, 6, 9071-9077.	4.0	30
144	The role of water in the device performance of n-type PTCDI-C8 organic field-effect transistors with solution-based gelatin dielectric. Organic Electronics, 2014, 15, 920-925.	1.4	30

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145	Fully integrated Ag nanoparticles/ZnO nanorods/graphene heterostructured photocatalysts for efficient conversion of solar to chemical energy. Journal of Catalysis, 2015, 329, 167-176.	3.1	30
146	Thermoresponsive Chemical Connectors Based on Hybrid Nanowire Forests. Angewandte Chemie - International Edition, 2010, 49, 616-619.	7.2	29
147	Taper PbZr_{0.2}Ti_{0.8}O₃ Nanowire Arrays: From Controlled Growth by Pulsed Laser Deposition to Piezopotential Measurements. ACS Nano, 2012, 6, 2826-2832.	7.3	29
148	Phase-engineered SnSex toward SnSe2/SnSe heterostructure with improved thermal conductance by a low-temperature plasma-assisted chemical vapor reaction. Nano Energy, 2018, 44, 419-429.	8.2	29
149	Platinum-Free Ternary Metallic Selenides as Nanostructured Counter Electrode for High-Efficiency Dye-Sensitized Solar Cell by Interface Engineering. ACS Applied Energy Materials, 2020, 3, 3704-3713.	2.5	29
150	Hybrid core-multishell nanowire forests for electrical connector applications. Applied Physics Letters, 2009, 94, 263110.	1.5	28
151	Ultrathin-Body High-Mobility InAsSb-on-Insulator Field-Effect Transistors. IEEE Electron Device Letters, 2012, 33, 504-506.	2.2	28
152	Non-antireflective Scheme for Efficiency Enhancement of Cu(In,Ga)Se₂ Nanotip Array Solar Cells. ACS Nano, 2013, 7, 7318-7329.	7.3	28
153	Hydrated bovine serum albumin as the gate dielectric material for organic field-effect transistors. Organic Electronics, 2013, 14, 2645-2651.	1.4	27
154	Growth of large-scale nanotwinned Cu nanowire arrays from anodic aluminum oxide membrane by electrochemical deposition process: controllable nanotwin density and growth orientation with enhanced electrical endurance performance. Nanoscale, 2014, 6, 7332-7338.	2.8	27
155	Selective n-type doping in graphene via the aluminium nanoparticle decoration approach. Journal of Materials Chemistry C, 2014, 2, 5417-5421.	2.7	27
156	Significant perpendicular magnetic anisotropy in room-temperature layered ferromagnet of Cr-intercalated CrTe₂. 2D Materials, 2021, 8, 031003.	2.0	27
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