Song Jin

List of Publications by Year
in descending order

251 papers	39,021 citations	2675 95 h-index	2684 193 g-index
257 all docs	257 docs citations	257 times ranked	37805 citing authors

#	Article	IF	Citations
1	Enhanced Hydrogen Evolution Catalysis from Chemically Exfoliated Metallic MoS₂ Nanosheets. Journal of the American Chemical Society, 2013, 135, 10274-10277.	13.7	3,022
2	Lead halide perovskite nanowire lasers with low lasing thresholds and high quality factors. Nature Materials, 2015, 14, 636-642.	27.5	2,392
3	High-Performance Electrocatalysis Using Metallic Cobalt Pyrite (CoS₂) Micro- and Nanostructures. Journal of the American Chemical Society, 2014, 136, 10053-10061.	13.7	1,211
4	Nanostructured silicon for high capacity lithium battery anodes. Energy and Environmental Science, 2011, 4, 56-72.	30.8	1,190
5	Efficient hydrogen evolution catalysis using ternary pyrite-type cobalt phosphosulphide. Nature Materials, 2015, 14, 1245-1251.	27.5	1,162
6	Earth-abundant inorganic electrocatalysts and their nanostructures for energy conversion applications. Energy and Environmental Science, 2014, 7, 3519-3542.	30.8	1,151
7	Contributions of Phase, Sulfur Vacancies, and Edges to the Hydrogen Evolution Reaction Catalytic Activity of Porous Molybdenum Disulfide Nanosheets. Journal of the American Chemical Society, 2016, 138, 7965-7972.	13.7	1,055
8	Hydrothermal Continuous Flow Synthesis and Exfoliation of NiCo Layered Double Hydroxide Nanosheets for Enhanced Oxygen Evolution Catalysis. Nano Letters, 2015, 15, 1421-1427.	9.1	933
9	Are Metal Chalcogenides, Nitrides, and Phosphides Oxygen Evolution Catalysts or Bifunctional Catalysts?. ACS Energy Letters, 2017, 2, 1937-1938.	17.4	894
10	Operando Analysis of NiFe and Fe Oxyhydroxide Electrocatalysts for Water Oxidation: Detection of Fe⁴⁺ by MÃ¶ssbauer Spectroscopy. Journal of the American Chemical Society, 2015, 137, 15090-15093.	13.7	684
11	Highly active hydrogen evolution catalysis from metallic WS₂ nanosheets. Energy and Environmental Science, 2014, 7, 2608-2613.	30.8	660
12	Screening in crystalline liquids protects energetic carriers in hybrid perovskites. Science, 2016, 353, 1409-1413.	12.6	655
13	Metal halide perovskite nanostructures for optoelectronic applications and the study of physical properties. Nature Reviews Materials, 2019, 4, 169-188.	48.7	598
14	Earth-Abundant Metal Pyrites (FeS₂, CoS₂, NiS₂, and Their Alloys) for Highly Efficient Hydrogen Evolution and Polysulfide Reduction Electrocatalysis. Journal of Physical Chemistry C, 2014, 118, 21347-21356.	3.1	548
15	Highly Active Trimetallic NiFeCr Layered Double Hydroxide Electrocatalysts for Oxygen Evolution Reaction. Advanced Energy Materials, 2018, 8, 1703189.	19.5	509
16	Broad Wavelength Tunable Robust Lasing from Single-Crystal Nanowires of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). ACS Nano, 2016, 10, 7963-7972.	14.6	507
17	Dislocation-Driven Nanowire Growth and Eshelby Twist. Science, 2008, 320, 1060-1063.	12.6	490
18	Efficient Electrocatalytic and Photoelectrochemical Hydrogen Generation Using MoS2 and Related Compounds. CheM, 2016, 1, 699-726.	11.7	462

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19	Synergistic Phase and Disorder Engineering in 1Tâ€MoSe₂ Nanosheets for Enhanced Hydrogenâ€Evolution Reaction. Advanced Materials, 2017, 29, 1700311.	21.0	411
20	Nanowire Lasers of Formamidinium Lead Halide Perovskites and Their Stabilized Alloys with Improved Stability. Nano Letters, 2016, 16, 1000-1008.	9.1	391
21	Efficient Photoelectrochemical Hydrogen Generation Using Heterostructures of Si and Chemically Exfoliated Metallic MoS₂. Journal of the American Chemical Society, 2014, 136, 8504-8507.	13.7	379
22	Color-Pure Violet-Light-Emitting Diodes Based on Layered Lead Halide Perovskite Nanoplates. ACS Nano, 2016, 10, 6897-6904.	14.6	378
23	Allâ€Inorganic Bismuthâ€Based Perovskite Quantum Dots with Bright Blue Photoluminescence and Excellent Stability. Advanced Functional Materials, 2018, 28, 1704446.	14.9	375
24	Solution Growth of Single Crystal Methylammonium Lead Halide Perovskite Nanostructures for Optoelectronic and Photovoltaic Applications. Journal of the American Chemical Society, 2015, 137, 5810-5818.	13.7	368
25	Electrochemical Oxidation of 5-Hydroxymethylfurfural with NiFe Layered Double Hydroxide (LDH) Nanosheet Catalysts. ACS Catalysis, 2018, 8, 5533-5541.	11.2	340
26	Potential applications of hierarchical branching nanowires in solar energy conversion. Energy and Environmental Science, 2009, 2, 1050.	30.8	339
27	Scalable Interconnection and Integration of Nanowire Devices without Registration. Nano Letters, 2004, 4, 915-919.	9.1	337
28	Enhancement of the thermoelectric properties in nanoscale and nanostructured materials. Journal of Materials Chemistry, 2011, 21, 4037-4055.	6.7	333
29	Porous Two-Dimensional Nanosheets Converted from Layered Double Hydroxides and Their Applications in Electrocatalytic Water Splitting. Chemistry of Materials, 2015, 27, 5702-5711.	6.7	291
30	Efficient electrochemical production of glucaric acid and H2 via glucose electrolysis. Nature Communications, 2020, 11, 265.	12.8	280
31	Screw Dislocation Driven Growth of Nanomaterials. Accounts of Chemical Research, 2013, 46, 1616-1626.	15.6	275
32	Mechanism and Kinetics of Spontaneous Nanotube Growth Driven by Screw Dislocations. Science, 2010, 328, 476-480.	12.6	271
33	Tuning Mixed Nickel Iron Phosphosulfide Nanosheet Electrocatalysts for Enhanced Hydrogen and Oxygen Evolution. ACS Catalysis, 2017, 7, 8549-8557.	11.2	268
34	Modifying redox properties and local bonding of Co3O4 by CeO2 enhances oxygen evolution catalysis in acid. Nature Communications, 2021, 12, 3036.	12.8	262
35	Amorphous Cobaltâ€“Iron Hydroxide Nanosheet Electrocatalyst for Efficient Electrochemical and Photoâ€Electrochemical Oxygen Evolution. Advanced Functional Materials, 2017, 27, 1603904.	14.9	260
36	High-Performance Electrocatalysis for Hydrogen Evolution Reaction Using Se-Doped Pyrite-Phase Nickel Diphosphide Nanostructures. ACS Catalysis, 2015, 5, 6355-6361.	11.2	258

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37	Vapor-Phase Epitaxial Growth of Aligned Nanowire Networks of Cesium Lead Halide Perovskites (CsPbX₃, X = Cl, Br, I). Nano Letters, 2017, 17, 460-466.	9.1	255
38	High-Capacity Lithium-Ion Battery Conversion Cathodes Based on Iron Fluoride Nanowires and Insights into the Conversion Mechanism. Nano Letters, 2012, 12, 6030-6037.	9.1	225
39	Electrocatalytic Oxidation of Glycerol to Formic Acid by CuCo₂O₄ Spinel Oxide Nanostructure Catalysts. ACS Catalysis, 2020, 10, 6741-6752.	11.2	221
40	Facile post-growth doping of nanostructured hematite photoanodes for enhanced photoelectrochemical water oxidation. Energy and Environmental Science, 2013, 6, 500-512.	30.8	220
41	Advanced 3D Current Collectors for Lithiumâ€Based Batteries. Advanced Materials, 2018, 30, e1802014.	21.0	218
42	Origins of Large Voltage Hysteresis in High-Energy-Density Metal Fluoride Lithium-Ion Battery Conversion Electrodes. Journal of the American Chemical Society, 2016, 138, 2838-2848.	13.7	212
43	Single-Crystal Thin Films of Cesium Lead Bromide Perovskite Epitaxially Grown on Metal Oxide Perovskite (SrTiO₃). Journal of the American Chemical Society, 2017, 139, 13525-13532.	13.7	209
44	Quantum dot nanoscale heterostructures for solar energy conversion. Chemical Society Reviews, 2013, 42, 2963-2985.	38.1	204
45	Stabilization of the Metastable Lead Iodide Perovskite Phase via Surface Functionalization. Nano Letters, 2017, 17, 4405-4414.	9.1	204
46	Facile Solution Synthesis of Î±-FeF₃Â·3H₂O Nanowires and Their Conversion to Î±-Fe₂O₃ Nanowires for Photoelectrochemical Application. Nano Letters, 2012, 12, 724-731.	9.1	198
47	Earth-Abundant Cobalt Pyrite (CoS₂) Thin Film on Glass as a Robust, High-Performance Counter Electrode for Quantum Dot-Sensitized Solar Cells. Journal of Physical Chemistry Letters, 2013, 4, 1843-1849.	4.6	197
48	Torsion strained iridium oxide for efficient acidic water oxidation in proton exchange membrane electrolyzers. Nature Nanotechnology, 2021, 16, 1371-1377.	31.5	197
49	Synthesis and applications of metal silicidenanowires. Journal of Materials Chemistry, 2010, 20, 223-235.	6.7	194
50	Covalently Connected Carbon Nanostructures for Current Collectors in Both the Cathode and Anode of Liâ€“S Batteries. Advanced Materials, 2016, 28, 9094-9102.	21.0	184
51	Amorphous MoS_xCl_y electrocatalyst supported by vertical graphene for efficient electrochemical and photoelectrochemical hydrogen generation. Energy and Environmental Science, 2015, 8, 862-868.	30.8	183
52	Screw Dislocation-Driven Growth of Two-Dimensional Nanoplates. Nano Letters, 2011, 11, 4449-4455.	9.1	173
53	Selective Stabilization and Photophysical Properties of Metastable Perovskite Polymorphs of CsPbI₃ in Thin Films. Chemistry of Materials, 2017, 29, 8385-8394.	6.7	170
54	Semiconductor Photocatalysis: â€œTell Us the Complete Story!â€• ACS Energy Letters, 2018, 3, 622-623.	17.4	167

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55	Electrocatalytic Production of H₂O₂ by Selective Oxygen Reduction Using Earth-Abundant Cobalt Pyrite (CoS₂). ACS Catalysis, 2019, 9, 8433-8442.	11.2	167
56	Organic Cations Might Not Be Essential to the Remarkable Properties of Band Edge Carriers in Lead Halide Perovskites. Advanced Materials, 2017, 29, 1603072.	21.0	166
57	Synthesis and Properties of Semiconducting Iron Pyrite (FeS₂) Nanowires. Nano Letters, 2012, 12, 1977-1982.	9.1	164
58	A p-Si/NiCoSe_x core/shell nanopillar array photocathode for enhanced photoelectrochemical hydrogen production. Energy and Environmental Science, 2016, 9, 3113-3119.	30.8	162
59	The Origin of Improved Electrical Doubleâ€Layer Capacitance by Inclusion of Topological Defects and Dopants in Graphene for Supercapacitors. Angewandte Chemie - International Edition, 2016, 55, 13822-13827.	13.8	161
60	Continuousâ€Wave Lasing in Cesium Lead Bromide Perovskite Nanowires. Advanced Optical Materials, 2018, 6, 1700982.	7.3	161
61	Significantly Increased Raman Enhancement on MoX₂ (X = S, Se) Monolayers upon Phase Transition. Advanced Functional Materials, 2017, 27, 1606694.	14.9	158
62	Surface Passivation of Bismuth-Based Perovskite Variant Quantum Dots To Achieve Efficient Blue Emission. Nano Letters, 2018, 18, 6076-6083.	9.1	157
63	Nanolithography Using Hierarchically Assembled Nanowire Masks. Nano Letters, 2003, 3, 951-954.	9.1	151
64	High-purity iron pyrite (FeS₂) nanowires as high-capacity nanostructured cathodes for lithium-ion batteries. Nanoscale, 2014, 6, 2112-2118.	5.6	149
65	High Areal Capacity and Lithium Utilization in Anodes Made of Covalently Connected Graphite Microtubes. Advanced Materials, 2017, 29, 1700783.	21.0	148
66	Higher Manganese Silicide Nanowires of Nowotny Chimney Ladder Phase. Journal of the American Chemical Society, 2008, 130, 16086-16094.	13.7	144
67	Incorporating Large A Cations into Lead Iodide Perovskite Cages: Relaxed Goldschmidt Tolerance Factor and Impact on Excitonâ€“Phonon Interaction. ACS Central Science, 2019, 5, 1377-1386.	11.3	142
68	Screw Dislocation-Driven Epitaxial Solution Growth of ZnO Nanowires Seeded by Dislocations in GaN Substrates. Nano Letters, 2010, 10, 3459-3463.	9.1	140
69	A robust hydrogen evolution catalyst based on crystalline nickel phosphide nanoflakes on three-dimensional graphene/nickel foam: high performance for electrocatalytic hydrogen production from pH 0â€“14. Journal of Materials Chemistry A, 2015, 3, 1941-1946.	10.3	138
70	A New Twist on Nanowire Formation: Screw-Dislocation-Driven Growth of Nanowires and Nanotubes. Journal of Physical Chemistry Letters, 2010, 1, 1472-1480.	4.6	136
71	Visualization and Studies of Ion-Diffusion Kinetics in Cesium Lead Bromide Perovskite Nanowires. Nano Letters, 2018, 18, 1807-1813.	9.1	136
72	Vertical Heterostructures of Layered Metal Chalcogenides by van der Waals Epitaxy. Nano Letters, 2014, 14, 3047-3054.	9.1	135

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73	Ultralong Single-Crystal Metallic Ni2Si Nanowires with Low Resistivity. Nano Letters, 2007, 7, 965-969.	9.1	134
74	Stable and selective electrosynthesis of hydrogen peroxide and the electro-Fenton process on CoSe₂ polymorph catalysts. Energy and Environmental Science, 2020, 13, 4189-4203.	30.8	134
75	Air-Stable Porous Fe₂N Encapsulated in Carbon Microboxes with High Volumetric Lithium Storage Capacity and a Long Cycle Life. Nano Letters, 2017, 17, 5740-5746.	9.1	132
76	Improving Electrocatalysts for Oxygen Evolution Using Ni_xFe_{3â€“x}O₄/Ni Hybrid Nanostructures Formed by Solvothermal Synthesis. ACS Energy Letters, 2018, 3, 1698-1707.	17.4	132
77	Determination of Transport Properties in Chromium Disilicide Nanowires via Combined Thermoelectric and Structural Characterizations. Nano Letters, 2007, 7, 1649-1654.	9.1	131
78	The Solution Growth of Copper Nanowires and Nanotubes is Driven by Screw Dislocations. Nano Letters, 2012, 12, 234-239.	9.1	131
79	Current-driven dynamics of skyrmions stabilized in MnSi nanowires revealed by topological Hall effect. Nature Communications, 2015, 6, 8217.	12.8	124
80	Direct Synthesis and Anion Exchange of Noncarbonate-Intercalated NiFe-Layered Double Hydroxides and the Influence on Electrocatalysis. Chemistry of Materials, 2018, 30, 4321-4330.	6.7	123
81	Self-cleaning, broadband and quasi-omnidirectional antireflective structures based on mesocrystalline rutile TiO2 nanorod arrays. Energy and Environmental Science, 2012, 5, 7575.	30.8	122
82	Layer-Controlled Chemical Vapor Deposition Growth of MoS₂ Vertical Heterostructures via van der Waals Epitaxy. ACS Nano, 2016, 10, 7039-7046.	14.6	122
83	Synthesis and Properties of Single-Crystal FeSi Nanowires. Nano Letters, 2006, 6, 1617-1621.	9.1	120
84	How to Effectively Utilize MOFs for Electrocatalysis. ACS Energy Letters, 2019, 4, 1443-1445.	17.4	119
85	Direct Vapor Growth of Perovskite CsPbBr₃ Nanoplate Electroluminescence Devices. ACS Nano, 2017, 11, 9869-9876.	14.6	117
86	Synthesis, Characterization, and Variable Range Hopping Transport of Pyrite (FeS₂) Nanorods, Nanobelts, and Nanoplates. ACS Nano, 2013, 7, 1731-1739.	14.6	116
87	Rapid control of phase growth by nanoparticles. Nature Communications, 2014, 5, 3879.	12.8	116
88	Basal-Plane Ligand Functionalization on Semiconducting 2H-MoS₂ Monolayers. ACS Applied Materials & Interfaces, 2017, 9, 12734-12742.	8.0	112
89	Observation of the Magnetic Skyrmion Lattice in a MnSi Nanowire by Lorentz TEM. Nano Letters, 2013, 13, 3755-3759.	9.1	110
90	Single-crystal microplates of two-dimensional organicâ€“inorganic lead halide layered perovskites for optoelectronics. Nano Research, 2017, 10, 2117-2129.	10.4	109

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91	Top-Down Proteomics of Large Proteins up to 223 kDa Enabled by Serial Size Exclusion Chromatography Strategy. Analytical Chemistry, 2017, 89, 5467-5475.	6.5	108
92	Rational Solution Growth of Î±-FeOOH Nanowires Driven by Screw Dislocations and Their Conversion to Î±-Fe₂O₃ Nanowires. Journal of the American Chemical Society, 2011, 133, 8408-8411.	13.7	103
93	Novel Strategies to Address the Challenges in Top-Down Proteomics. Journal of the American Society for Mass Spectrometry, 2021, 32, 1278-1294.	2.8	102
94	Integrated Photoelectrochemical Solar Energy Conversion and Organic Redox Flow Battery Devices. Angewandte Chemie - International Edition, 2016, 55, 13104-13108.	13.8	98
95	Controlled Synthesis of Layered Double Hydroxide Nanoplates Driven by Screw Dislocations. Nano Letters, 2015, 15, 3403-3409.	9.1	97
96	Nitrogen-Doped Hollow Carbon Nanospheres for High-Performance Li-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 14180-14186.	8.0	97
97	Ionization of High-Density Deep Donor Defect States Explains the Low Photovoltage of Iron Pyrite Single Crystals. Journal of the American Chemical Society, 2014, 136, 17163-17179.	13.7	95
98	Multicolor Heterostructures of Two-Dimensional Layered Halide Perovskites that Show Interlayer Energy Transfer. Journal of the American Chemical Society, 2018, 140, 15675-15683.	13.7	95
99	Highly Stable Skyrmion State in Helimagnetic MnSi Nanowires. Nano Letters, 2014, 14, 2026-2032.	9.1	94
100	Designing Efficient Solarâ€Driven Hydrogen Evolution Photocathodes Using Semitransparent MoQ_xCl_y (Q = S, Se) Catalysts on Si Micropyramids. Advanced Materials, 2015, 27, 6511-6518.	21.0	93
101	Metallic Single-Crystal CoSi Nanowires via Chemical Vapor Deposition of Single-Source Precursor. Journal of Physical Chemistry B, 2006, 110, 18142-18146.	2.6	91
102	Facile and mild solution synthesis of Cu₂O nanowires and nanotubes driven by screw dislocations. Chemical Communications, 2012, 48, 1174-1176.	4.1	90
103	High-performance solar flow battery powered by a perovskite/silicon tandem solar cell. Nature Materials, 2020, 19, 1326-1331.	27.5	90
104	Deterministic fabrication of arbitrary vertical heterostructures of two-dimensional Ruddlesdenâ€“Popper halide perovskites. Nature Nanotechnology, 2021, 16, 159-165.	31.5	90
105	Controllable Growth and Formation Mechanisms of Dislocated WS₂ Spirals. Nano Letters, 2018, 18, 3885-3892.	9.1	88
106	Improved Synthesis and Electrical Properties of Si-Doped Î±-Fe₂O₃ Nanowires. Journal of Physical Chemistry C, 2011, 115, 12388-12395.	3.1	86
107	Direct Chemical Vapor Deposition Synthesis of Phase-Pure Iron Pyrite (FeS₂) Thin Films. Chemistry of Materials, 2015, 27, 3108-3114.	6.7	85
108	Two-dimensional lithium diffusion behavior and probable hybrid phase transformation kinetics in olivine lithium iron phosphate. Nature Communications, 2017, 8, 1194.	12.8	85

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109	Tin(IV)-Tolerant Vapor-Phase Growth and Photophysical Properties of Aligned Cesium Tin Halide Perovskite (CsSnX₃; X = Br, I) Nanowires. ACS Energy Letters, 2019, 4, 1045-1052.	17.4	84
110	Formation of PbS Nanowire Pine Trees Driven by Screw Dislocations. Journal of the American Chemical Society, 2009, 131, 16461-16471.	13.7	83
111	Electrical probing of field-driven cascading quantized transitions of skyrmion cluster states in MnSi nanowires. Nature Communications, 2015, 6, 7637.	12.8	83
112	A photocleavable surfactant for top-down proteomics. Nature Methods, 2019, 16, 417-420.	19.0	82
113	Complex and Noncentrosymmetric Stacking of Layered Metal Dichalcogenide Materials Created by Screw Dislocations. Journal of the American Chemical Society, 2017, 139, 3496-3504.	13.7	81
114	Lowâ€Temperature Moltenâ€Salt Production of Silicon Nanowires by the Electrochemical Reduction of CaSiO₃. Angewandte Chemie - International Edition, 2017, 56, 14453-14457.	13.8	81
115	Visualization of electrochemically driven solid-state phase transformations using operando hard X-ray spectro-imaging. Nature Communications, 2015, 6, 6883.	12.8	80
116	Atom-Thick Interlayer Made of CVD-Grown Graphene Film on Separator for Advanced Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2017, 9, 43696-43703.	8.0	79
117	14.1% Efficient Monolithically Integrated Solar Flow Battery. CheM, 2018, 4, 2644-2657.	11.7	79
118	Plasma-induced oxygen vacancies in amorphous MnOx boost catalytic performance for electrochemical CO2 reduction. Nano Energy, 2021, 79, 105492.	16.0	78
119	Signature of Helimagnetic Ordering in Single-Crystal MnSi Nanowires. Nano Letters, 2010, 10, 1605-1610.	9.1	76
120	Twisting phonons in complex crystals with quasi-one-dimensional substructures. Nature Communications, 2015, 6, 6723.	12.8	75
121	Peptide tessellation yields micrometre-scale collagen triple helices. Nature Chemistry, 2016, 8, 1008-1014.	13.6	75
122	Approaching the Minimum Thermal Conductivity in Rheniumâ€Substituted Higher Manganese Silicides. Advanced Energy Materials, 2014, 4, 1400452.	19.5	74
123	Identification of the Active-Layer Structures for Acidic Oxygen Evolution from 9R-BaIrO₃ Electrocatalyst with Enhanced Iridium Mass Activity. Journal of the American Chemical Society, 2021, 143, 18001-18009.	13.7	73
124	Lowâ€Temperature Moltenâ€Salt Production of Silicon Nanowires by the Electrochemical Reduction of CaSiO₃. Angewandte Chemie, 2017, 129, 14645-14649.	2.0	71
125	Crystallographic Facet Dependence of the Hydrogen Evolution Reaction on CoPS: Theory and Experiments. ACS Catalysis, 2018, 8, 1143-1152.	11.2	71
126	Pressureâ€Suppressed Carrier Trapping Leads to Enhanced Emission in Twoâ€Dimensional Perovskite (HA)₂(GA)Pb₂I₇. Angewandte Chemie - International Edition, 2020, 59, 17533-17539.	13.8	71

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127	Single-Crystal Semiconducting Chromium Disilicide Nanowires Synthesized via Chemical Vapor Transport. Chemistry of Materials, 2007, 19, 3238-3243.	6.7	70
128	Chemical Synthesis and Magnetotransport of Magnetic Semiconducting Fe_{1â^'x}Co_xSi Alloy Nanowires. Nano Letters, 2008, 8, 810-815.	9.1	68
129	Supertwisted spirals of layered materials enabled by growth on non-Euclidean surfaces. Science, 2020, 370, 442-445.	12.6	65
130	Three Dimensional Liquid Chromatography Coupling Ion Exchange Chromatography/Hydrophobic Interaction Chromatography/Reverse Phase Chromatography for Effective Protein Separation in Top-Down Proteomics. Analytical Chemistry, 2015, 87, 5363-5371.	6.5	64
131	Ultrahigh-Performance Optoelectronics Demonstrated in Ultrathin Perovskite-Based Vertical Semiconductor Heterostructures. ACS Nano, 2019, 13, 7996-8003.	14.6	64
132	Specific Enrichment of Phosphoproteins Using Functionalized Multivalent Nanoparticles. Journal of the American Chemical Society, 2015, 137, 2432-2435.	13.7	61
133	Carrier Decay Properties of Mixed Cation Formamidiumâ€“Methylammonium Lead Iodide Perovskite [HC(NH2)2]1â€“x[CH3NH3]xPbI3 Nanorods. Journal of Physical Chemistry Letters, 2016, 7, 5036-5043.	4.6	61
134	Hierarchical Ni-Mo2C/N-doped carbon Mott-Schottky array for water electrolysis. Applied Catalysis B: Environmental, 2021, 292, 120168.	20.2	60
135	Biomimetic Assembly of Zinc Oxide Nanorods onto Flexible Polymers. Journal of the American Chemical Society, 2007, 129, 13776-13777.	13.7	59
136	Epitaxial growth of hierarchical PbS nanowires. Journal of Materials Chemistry, 2009, 19, 934.	6.7	59
137	Dislocation-Driven CdS and CdSe Nanowire Growth. ACS Nano, 2012, 6, 4461-4468.	14.6	58
138	Atomicâ€Resolution Imaging of Halide Perovskites Using Electron Microscopy. Advanced Energy Materials, 2020, 10, 1904006.	19.5	57
139	Photocurrent Mapping in Single-Crystal Methylammonium Lead Iodide Perovskite Nanostructures. Nano Letters, 2016, 16, 7710-7717.	9.1	56
140	Two-Dimensional Lead Halide Perovskites Templated by a Conjugated Asymmetric Diammonium. Inorganic Chemistry, 2017, 56, 14991-14998.	4.0	56
141	Stereochemical expression of ns2 electron pairs in metal halide perovskites. Nature Reviews Chemistry, 2021, 5, 838-852.	30.2	53
142	Effective Protein Separation by Coupling Hydrophobic Interaction and Reverse Phase Chromatography for Top-down Proteomics. Analytical Chemistry, 2014, 86, 7899-7906.	6.5	52
143	Distinct Carrier Transport Properties Across Horizontally vs Vertically Oriented Heterostructures of 2D/3D Perovskites. Journal of the American Chemical Society, 2021, 143, 4969-4978.	13.7	52
144	Band Edge Tuning of Two-Dimensional Ruddlesdenâ€“Popper Perovskites by A Cation Size Revealed through Nanoplates. ACS Energy Letters, 2020, 5, 1430-1437.	17.4	51

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145	Photodetector Arrays Directly Assembled onto Polymer Substrates from Aqueous Solution. Journal of the American Chemical Society, 2007, 129, 14296-14302.	13.7	50
146	Ultrasonic-Assisted Synthesis of Surface-Clean TiB₂ Nanoparticles and Their Improved Dispersion and Capture in Al-Matrix Nanocomposites. ACS Applied Materials & Interfaces, 2013, 5, 8813-8819.	8.0	48
147	Thermoelectric Properties of Undoped High Purity Higher Manganese Silicides Grown by Chemical Vapor Transport. Chemistry of Materials, 2014, 26, 5097-5104.	6.7	48
148	Structural O-Glycoform Heterogeneity of the SARS-CoV-2 Spike Protein Receptor-Binding Domain Revealed by Top-Down Mass Spectrometry. Journal of the American Chemical Society, 2021, 143, 12014-12024.	13.7	48
149	Formation of Stacking Faults and the Screw Dislocation-Driven Growth: A Case Study of Aluminum Nitride Nanowires. ACS Nano, 2013, 7, 11369-11378.	14.6	44
150	Nanoproteomics enables proteoform-resolved analysis of low-abundance proteins in human serum. Nature Communications, 2020, 11, 3903.	12.8	43
151	Ferromagnetic Semiconducting EuO Nanorods. Advanced Materials, 2007, 19, 2677-2681.	21.0	42
152	Phenethylammonium Functionalization Enhances Near-Surface Carrier Diffusion in Hybrid Perovskites. Journal of the American Chemical Society, 2020, 142, 16254-16264.	13.7	42
153	Epitaxially-hyperbranched FeSinanowires exhibiting merohedral twinning. Journal of Materials Chemistry, 2010, 20, 1375-1382.	6.7	40
154	COVID-19, Climate Change, and Renewable Energy Research: We Are All in This Together, and the Time to Act Is Now. ACS Energy Letters, 2020, 5, 1709-1711.	17.4	40
155	Synthesis and properties of single-crystal Î²3-Ni3Si nanowires. Applied Physics Letters, 2007, 90, 173122.	3.3	38
156	Three-Dimensional Mesoscale Heterostructures of ZnO Nanowire Arrays Epitaxially Grown on CuGaO₂ Nanoplates as Individual Diodes. ACS Nano, 2013, 7, 8224-8232.	14.6	38
157	Gated Hall Effect of Nanoplate Devices Reveals Surface-State-Induced Surface Inversion in Iron Pyrite Semiconductor. Nano Letters, 2014, 14, 6754-6760.	9.1	38
158	A General Method To Measure the Hall Effect in Nanowires: Examples of FeS₂ and MnSi. Nano Letters, 2013, 13, 2704-2709.	9.1	37
159	Highâ€Throughput Proteomics Enabled by a Photocleavable Surfactant. Angewandte Chemie - International Edition, 2020, 59, 8406-8410.	13.8	37
160	Improved performance and stability of photoelectrochemical water-splitting Si system using a bifacial design to decouple light harvesting and electrocatalysis. Nano Energy, 2020, 70, 104478.	16.0	37
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