

# Zongyou Yin

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

180  
papers

24,452  
citations

62  
h-index

156  
g-index

195  
ext. papers

27,036  
ext. citations

12.7  
avg, IF

7.02  
L-index

#	Paper	IF	Citations
180	Single-layer MoS <sub>2</sub> phototransistors. <i>ACS Nano</i> , <b>2012</b> , 6, 74-80	16.7	2704
179	Graphene-based materials: synthesis, characterization, properties, and applications. <i>Small</i> , <b>2011</b> , 7, 1876-1902	11.2	1968
178	Single-layer semiconducting nanosheets: high-yield preparation and device fabrication. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 11093-7	16.4	1349
177	Fabrication of single- and multilayer MoS <sub>2</sub> film-based field-effect transistors for sensing NO at room temperature. <i>Small</i> , <b>2012</b> , 8, 63-7	11	1213
176	Preparation and applications of mechanically exfoliated single-layer and multilayer MoS <sub>2</sub> and WSe <sub>2</sub> nanosheets. <i>Accounts of Chemical Research</i> , <b>2014</b> , 47, 1067-75	24.3	1089
175	Synthesis of few-layer MoS <sub>2</sub> nanosheet-coated TiO <sub>2</sub> nanobelt heterostructures for enhanced photocatalytic activities. <i>Small</i> , <b>2013</b> , 9, 140-7	11	1059
174	Fabrication of flexible MoS <sub>2</sub> thin-film transistor arrays for practical gas-sensing applications. <i>Small</i> , <b>2012</b> , 8, 2994-9	11	725
173	Three-dimensional graphene materials: preparation, structures and application in supercapacitors. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 1850-1865	35.4	705
172	Graphene-based electronic sensors. <i>Chemical Science</i> , <b>2012</b> , 3, 1764	9.4	582
171	Electrochemical deposition of ZnO nanorods on transparent reduced graphene oxide electrodes for hybrid solar cells. <i>Small</i> , <b>2010</b> , 6, 307-12	11	579
170	Graphene and graphene-based materials for energy storage applications. <i>Small</i> , <b>2014</b> , 10, 3480-98	11	546
169	Centimeter-long and large-scale micropatterns of reduced graphene oxide films: fabrication and sensing applications. <i>ACS Nano</i> , <b>2010</b> , 4, 3201-8	16.7	529
168	25th anniversary article: hybrid nanostructures based on two-dimensional nanomaterials. <i>Advanced Materials</i> , <b>2014</b> , 26, 2185-204	24	514
167	Organic photovoltaic devices using highly flexible reduced graphene oxide films as transparent electrodes. <i>ACS Nano</i> , <b>2010</b> , 4, 5263-8	16.7	514
166	Carbon fiber aerogel made from raw cotton: a novel, efficient and recyclable sorbent for oils and organic solvents. <i>Advanced Materials</i> , <b>2013</b> , 25, 5916-21	24	513
165	An effective method for the fabrication of few-layer-thick inorganic nanosheets. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 9052-6	16.4	453
164	Mechanical exfoliation and characterization of single- and few-layer nanosheets of WSe <sub>2</sub> , TaS <sub>2</sub> and TaSe <sub>2</sub> . <i>Small</i> , <b>2013</b> , 9, 1974-81	11	449

163	Hierarchical hollow spheres composed of ultrathin Fe <sub>2</sub> O <sub>3</sub> nanosheets for lithium storage and photocatalytic water oxidation. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 987	35.4	384
162	Surface strategies for catalytic CO reduction: from two-dimensional materials to nanoclusters to single atoms. <i>Chemical Society Reviews</i> , <b>2019</b> , 48, 5310-5349	58.5	365
161	A general method for the large-scale synthesis of uniform ultrathin metal sulphide nanocrystals. <i>Nature Communications</i> , <b>2012</b> , 3, 1177	17.4	334
160	Electrochemically reduced single-layer MoS <sub>2</sub> nanosheets: characterization, properties, and sensing applications. <i>Small</i> , <b>2012</b> , 8, 2264-70	11	333
159	Graphene-Based Materials for Solar Cell Applications. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1300574	21.8	325
158	Transparent, flexible, all-reduced graphene oxide thin film transistors. <i>ACS Nano</i> , <b>2011</b> , 5, 5038-44	16.7	284
157	MoS <sub>2</sub> nanoflower-decorated reduced graphene oxide paper for high-performance hydrogen evolution reaction. <i>Nanoscale</i> , <b>2014</b> , 6, 5624-9	7.7	281
156	Optical identification of single- and few-layer MoS <sub>2</sub> sheets. <i>Small</i> , <b>2012</b> , 8, 682-6	11	249
155	Au nanoparticle-modified MoS <sub>2</sub> nanosheet-based photoelectrochemical cells for water splitting. <i>Small</i> , <b>2014</b> , 10, 3537-43	11	234
154	Surface enhanced Raman scattering of Ag or Au nanoparticle-decorated reduced graphene oxide for detection of aromatic molecules. <i>Chemical Science</i> , <b>2011</b> , 2, 1817	9.4	230
153	Bulk heterojunction polymer memory devices with reduced graphene oxide as electrodes. <i>ACS Nano</i> , <b>2010</b> , 4, 3987-92	16.7	195
152	Fabrication of flexible, all-reduced graphene oxide non-volatile memory devices. <i>Advanced Materials</i> , <b>2013</b> , 25, 233-8	24	186
151	All-carbon electronic devices fabricated by directly grown single-walled carbon nanotubes on reduced graphene oxide electrodes. <i>Advanced Materials</i> , <b>2010</b> , 22, 3058-61	24	186
150	Single-Layer Semiconducting Nanosheets: High-Yield Preparation and Device Fabrication. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 11289-11293	3.6	183
149	Layer thinning and etching of mechanically exfoliated MoS <sub>2</sub> nanosheets by thermal annealing in air. <i>Small</i> , <b>2013</b> , 9, 3314-9	11	179
148	Carbon microbelt aerogel prepared by waste paper: an efficient and recyclable sorbent for oils and organic solvents. <i>Small</i> , <b>2014</b> , 10, 3544-50	11	176
147	A universal, rapid method for clean transfer of nanostructures onto various substrates. <i>ACS Nano</i> , <b>2014</b> , 8, 6563-70	16.7	170
146	Fabrication of graphene nanomesh by using an anodic aluminum oxide membrane as a template. <i>Advanced Materials</i> , <b>2012</b> , 24, 4138-42	24	169

145	Real-time DNA detection using Pt nanoparticle-decorated reduced graphene oxide field-effect transistors. <i>Nanoscale</i> , <b>2012</b> , 4, 293-7	7.7	164
144	Periodic stacking of 2D charged sheets: Self-assembled superlattice of NiAl layered double hydroxide (LDH) and reduced graphene oxide. <i>Nano Energy</i> , <b>2016</b> , 20, 185-193	17.1	162
143	A facile, relative green, and inexpensive synthetic approach toward large-scale production of SnS <sub>2</sub> nanoplates for high-performance lithium-ion batteries. <i>Nanoscale</i> , <b>2013</b> , 5, 1456-9	7.7	158
142	A general salt-resistant hydrophilic/hydrophobic nanoporous double layer design for efficient and stable solar water evaporation distillation. <i>Materials Horizons</i> , <b>2018</b> , 5, 1143-1150	14.4	150
141	Electrochemical Deposition of Semiconductor Oxides on Reduced Graphene Oxide-Based Flexible, Transparent, and Conductive Electrodes. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 11816-11821	3.8	142
140	Memory devices using a mixture of MoS <sub>2</sub> and graphene oxide as the active layer. <i>Small</i> , <b>2013</b> , 9, 727-31	11	130
139	Anion-redox nanolithia cathodes for Li-ion batteries. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	125
138	Synthesis of Fe <sub>3</sub> O <sub>4</sub> and Pt nanoparticles on reduced graphene oxide and their use as a recyclable catalyst. <i>Nanoscale</i> , <b>2012</b> , 4, 2478-83	7.7	124
137	Full solution-processed synthesis of all metal oxide-based tree-like heterostructures on fluorine-doped tin oxide for water splitting. <i>Advanced Materials</i> , <b>2012</b> , 24, 5374-8	24	123
136	Enhancement of photogenerated electron transport in dye-sensitized solar cells with introduction of a reduced graphene oxide-TiO <sub>2</sub> junction. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 10832-7	4.8	122
135	Coupling and Stacking Order of ReS <sub>2</sub> Atomic Layers Revealed by Ultralow-Frequency Raman Spectroscopy. <i>Nano Letters</i> , <b>2016</b> , 16, 1404-9	11.5	115
134	Postchemistry of organic particles: when TTF microparticles meet TCNQ microstructures in aqueous solution. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 6926-8	16.4	113
133	Crystal structure and phototransistor behavior of N-substituted heptacene. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 1883-6	9.5	109
132	Regulating the active species of Ni(OH) <sub>2</sub> using CeO <sub>2</sub> : 3D CeO <sub>2</sub> /Ni(OH) <sub>2</sub> /carbon foam as an efficient electrode for the oxygen evolution reaction. <i>Chemical Science</i> , <b>2017</b> , 8, 3211-3217	9.4	105
131	Preparation, characterization, and photoswitching/light-emitting behaviors of coronene nanowires. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 1423-1427		104
130	Multilayer stacked low-temperature-reduced graphene oxide films: preparation, characterization, and application in polymer memory devices. <i>Small</i> , <b>2010</b> , 6, 1536-42	11	104
129	Rare-earth-containing perovskite nanomaterials: design, synthesis, properties and applications. <i>Chemical Society Reviews</i> , <b>2020</b> , 49, 1109-1143	58.5	96
128	Synthesis, characterization, and physical properties of a conjugated heteroacene: 2-methyl-1,4,6,7,8,9-hexaphenylbenz(g)isoquinolin-3(2H)-one (BIQ). <i>Chemistry - an Asian Journal</i> , <b>2011</b> , 6, 856-62	4.5	92

127	Aminosilane micropatterns on hydroxyl-terminated substrates: fabrication and applications. <i>Langmuir</i> , <b>2010</b> , 26, 5603-9	4	91
126	MnO <sub>2</sub> -Based Materials for Environmental Applications. <i>Advanced Materials</i> , <b>2021</b> , 33, e2004862	24	90
125	Chemical reaction between Ag nanoparticles and TCNQ microparticles in aqueous solution. <i>Small</i> , <b>2011</b> , 7, 1242-6	11	89
124	Electrochemical deposition of Cl-doped n-type Cu <sub>2</sub> O on reduced graphene oxide electrodes. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 3467-3470		78
123	Colloidal synthesis of 1T phase dominated WS <sub>2</sub> towards durable electrocatalysis. <i>Nano Energy</i> , <b>2018</b> , 50, 176-181	17.1	77
122	Fabrication of nanoelectrode ensembles by electrodeposition of Au nanoparticles on single-layer graphene oxide sheets. <i>Nanoscale</i> , <b>2012</b> , 4, 2728-33	7.7	72
121	Photoanode current of large-area MoS <sub>2</sub> ultrathin nanosheets with vertically mesh-shaped structure on indium tin oxide. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 5983-7	9.5	67
120	Preparation of MoS <sub>2</sub> -MoO <sub>3</sub> hybrid nanomaterials for light-emitting diodes. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 12560-5	16.4	62
119	Nanolithography of single-layer graphene oxide films by atomic force microscopy. <i>Langmuir</i> , <b>2010</b> , 26, 6164-6	4	62
118	Oriented molecular attachments through sol-gel chemistry for synthesis of ultrathin hydrated vanadium pentoxide nanosheets and their applications. <i>Small</i> , <b>2013</b> , 9, 716-21	11	57
117	Low-Temperature in Situ Growth of Graphene on Metallic Substrates and Its Application in Anticorrosion. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 502-10	9.5	56
116	Bottom-up preparation of porous metal-oxide ultrathin sheets with adjustable composition/phases and their applications. <i>Small</i> , <b>2011</b> , 7, 3458-64	11	51
115	Room temperature stable CO <sub>2</sub> -free H <sub>2</sub> production from methanol with magnesium oxide nanophotocatalysts. <i>Science Advances</i> , <b>2016</b> , 2, e1501425	14.3	49
114	A review of energy bandgap engineering in III-V semiconductor alloys for mid-infrared laser applications. <i>Solid-State Electronics</i> , <b>2007</b> , 51, 6-15	1.7	45
113	Lanthanide doping induced electrochemical enhancement of NaTiO anodes for sodium-ion batteries. <i>Chemical Science</i> , <b>2018</b> , 9, 3421-3425	9.4	42
112	Noble-Metal-Free Multicomponent Nanointegration for Sustainable Energy Conversion. <i>Chemical Reviews</i> , <b>2021</b> , 121, 10271-10366	68.1	41
111	Oxygen vacancies activating surface reactivity to favor charge separation and transfer in nanoporous BiVO <sub>4</sub> photoanodes. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 281, 119477	21.8	41
110	Nucleation Mechanism of Electrochemical Deposition of Cu on Reduced Graphene Oxide Electrodes. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 15973-15979	3.8	40

109	Spontaneous Formation of Noble- and Heavy-Metal-Free Alloyed Semiconductor Quantum Rods for Efficient Photocatalysis. <i>Advanced Materials</i> , <b>2018</b> , 30, e1803351	24	38
108	Atomically Dispersed Indium Sites for Selective CO Electroreduction to Formic Acid. <i>ACS Nano</i> , <b>2021</b> , 15, 5671-5678	16.7	38
107	Solution-processed nanocrystalline TiO <sub>2</sub> buffer layer used for improving the performance of organic photovoltaics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2011</b> , 3, 1063-7	9.5	37
106	Preparation, characterization, physical properties, and photoconducting behaviour of anthracene derivative nanowires. <i>Nanoscale</i> , <b>2011</b> , 3, 4720-3	7.7	36
105	Heterogeneous bimetallic sulfides based seawater electrolysis towards stable industrial-level large current density. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 291, 120071	21.8	36
104	High-Yield Electrochemical Production of Large-Sized and Thinly Layered NiPS Flakes for Overall Water Splitting. <i>Small</i> , <b>2019</b> , 15, e1902427	11	35
103	Assembly of Graphene Oxide and Au <sub>0.7</sub> Ag <sub>0.3</sub> Alloy Nanoparticles on SiO <sub>2</sub> : A New Raman Substrate with Ultrahigh Signal-to-Background Ratio. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 24080-24084	3.8	34
102	Enhanced transport in transistor by tuning transition-metal oxide electronic states interfaced with diamond. <i>Science Advances</i> , <b>2018</b> , 4, eaau0480	14.3	33
101	Structural-Phase Catalytic Redox Reactions in Energy and Environmental Applications. <i>Advanced Materials</i> , <b>2020</b> , 32, e1905739	24	31
100	An Effective Method for the Fabrication of Few-Layer-Thick Inorganic Nanosheets. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 9186-9190	3.6	31
99	Preparation of MoS <sub>2</sub> /MoO <sub>3</sub> Hybrid Nanomaterials for Light-Emitting Diodes. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 12768-12773	3.6	30
98	2D Materials Based on Main Group Element Compounds: Phases, Synthesis, Characterization, and Applications. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2001127	15.6	30
97	Solid Nanoporosity Governs Catalytic CO and N Reduction. <i>ACS Nano</i> , <b>2020</b> , 14, 7734-7759	16.7	29
96	Sustainable Nanoplasmon-Enhanced Photoredox Reactions: Synthesis, Characterization, and Applications. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2002402	21.8	29
95	A carbon monoxide gas sensor using oxygen plasma modified carbon nanotubes. <i>Nanotechnology</i> , <b>2012</b> , 23, 425502	3.4	26
94	Waterproof molecular monolayers stabilize 2D materials. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 20844-20849	11.5	24
93	A Diamond:H/WO <sub>3</sub> Metal Oxide Semiconductor Field-Effect Transistor. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 540-543	4.4	24
92	Colloidal Single-Layer Photocatalysts for Methanol-Storable Solar H Fuel. <i>Advanced Materials</i> , <b>2019</b> , 31, e1905540	24	23

91	Low temperature growth of graphene on Cu-Ni alloy nanofibers for stable, flexible electrodes. <i>Nanoscale</i> , <b>2014</b> , 6, 5110-5	7.7	22
90	Gold nanotip array for ultrasensitive electrochemical sensing and spectroscopic monitoring. <i>Small</i> , <b>2013</b> , 9, 2260-5	11	22
89	Growth of dandelion-shaped CuInSe <sub>2</sub> nanostructures by a two-step solvothermal process. <i>Nanotechnology</i> , <b>2011</b> , 22, 195607	3.4	21
88	Quantifying Quasi-Fermi Level Splitting and Mapping its Heterogeneity in Atomically Thin Transition Metal Dichalcogenides. <i>Advanced Materials</i> , <b>2019</b> , 31, e1900522	24	20
87	Mechanisms and Applications of Steady-State Photoluminescence Spectroscopy in Two-Dimensional Transition-Metal Dichalcogenides. <i>ACS Nano</i> , <b>2020</b> , 14, 14579-14604	16.7	20
86	Nonepitaxial Gold-Tipped ZnSe Hybrid Nanorods for Efficient Photocatalytic Hydrogen Production. <i>Small</i> , <b>2020</b> , 16, e1902231	11	20
85	Phosphine-free, low-temperature synthesis of tetrapod-shaped CdS and its hybrid with Au nanoparticles. <i>Small</i> , <b>2014</b> , 10, 4727-34	11	19
84	Rational synthesis of triangular Au-Ag <sub>2</sub> S hybrid nanoframes with effective photoresponses. <i>Chemistry - A European Journal</i> , <b>2014</b> , 20, 2742-5	4.8	19
83	Rare-Earth Incorporated Alloy Catalysts: Synthesis, Properties, and Applications. <i>Advanced Materials</i> , <b>2021</b> , 33, e2005988	24	19
82	Photoactivity and Stability Co-Enhancement: When Localized Plasmons Meet Oxygen Vacancies in MgO. <i>Small</i> , <b>2018</b> , 14, e1803233	11	18
81	Synergizing Phase and Cavity in CoMoO <sub>4</sub> S-Yolk-Shell Anodes to Co-Enhance Capacity and Rate Capability in Sodium Storage. <i>Small</i> , <b>2020</b> , 16, e2002487	11	17
80	Periodic AuAg-Ag <sub>2</sub> S heterostructured nanowires. <i>Small</i> , <b>2014</b> , 10, 479-82	11	17
79	A new method of two-step growth of InAs/GaAs quantum dots with higher density and more size uniformity. <i>Nanotechnology</i> , <b>2006</b> , 17, 295-299	3.4	16
78	Periodic nanostructures: preparation, properties and applications. <i>Chemical Society Reviews</i> , <b>2021</b> , 50, 6423-6482	58.5	16
77	Emission Control from Transition Metal Dichalcogenide Monolayers by Aggregation-Induced Molecular Rotors. <i>ACS Nano</i> , <b>2020</b> , 14, 7444-7453	16.7	15
76	Mesoporous ZnAlSiO <sub>4</sub> nanofertilizers enable high yield of <i>Oryza sativa</i> L. <i>Scientific Reports</i> , <b>2020</b> , 10, 108419	4.9	15
75	ZnIn <sub>2</sub> S <sub>4</sub> -Based Photocatalysts for Energy and Environmental Applications.. <i>Small Methods</i> , <b>2021</b> , 5, e2100887	12.7	15
74	Effects of In <sub>x</sub> Ga <sub>1-x</sub> As matrix layer on InAs quantum dot formation and their emission wavelength. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 033109	2.5	14



73	2D materials inks toward smart flexible electronics. <i>Materials Today</i> , <b>2021</b> , 50, 116-116	21.8	14
72	Effect of rapid thermal annealing on the ordering of AlInP grown by metal-organic vapor-phase epitaxy. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 181906	3.4	13
71	Nano Polymorphism-Enabled Redox Electrodes for Rechargeable Batteries. <i>Advanced Materials</i> , <b>2021</b> , 33, e2004920	24	13
70	TaS <sub>2</sub> nanosheet-based room-temperature dosage meter for nitric oxide. <i>APL Materials</i> , <b>2014</b> , 2, 092506	5.7	12
69	Advancement of Bismuth-Based Materials for Electrocatalytic and Photo(electro)catalytic Ammonia Synthesis. <i>Advanced Functional Materials</i> , <b>2019</b> , 9, 2106713	15.6	12
68	Generation of dual patterns of metal oxide nanomaterials based on seed-mediated selective growth. <i>Langmuir</i> , <b>2010</b> , 26, 4616-9	4	11
67	Controlled CVD growth of Cu-Sb alloy nanostructures. <i>Nanotechnology</i> , <b>2011</b> , 22, 325602	3.4	10
66	Thickness-tunable growth of ultra-large, continuous and high-dielectric h-BN thin films. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 1871-1879	7.1	9
65	Effects of growth conditions on InAs quantum dot formation by metal-organic chemical vapor deposition using tertiarybutylarsine in pure N <sub>2</sub> ambient. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 124306	2.5	9
64	Twist-driven wide freedom of indirect interlayer exciton emission in MoS <sub>2</sub> /WS <sub>2</sub> heterobilayers. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100509	6.1	9
63	Colloidal quasi-one-dimensional dual semiconductor core/shell nanorod couple heterostructures with blue fluorescence. <i>Nanoscale</i> , <b>2019</b> , 11, 10190-10197	7.7	8
62	Rod-coating all-solution fabrication of double functional graphene oxide films for flexible alternating current (AC)-driven light-emitting diodes. <i>RSC Advances</i> , <b>2014</b> , 4, 55671-55676	3.7	8
61	Machine Learning-Aided Crystal Facet Rational Design with Ionic Liquid Controllable Synthesis. <i>Small</i> , <b>2021</b> , 17, e2100024	11	8
60	Organic Rare Earth Hybrid Anode with Superior Cyclability for Lithium Ion Battery. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 1902168	4.6	7
59	Mid-infrared emissive InAsSb quantum dots grown by metal-organic chemical vapor deposition. <i>CrystEngComm</i> , <b>2013</b> , 15, 604-608	3.3	7
58	Boosting Thermoelectric Performance of 2D Transition-Metal Dichalcogenides by Complex Cluster Substitution: The Role of Octahedral Au <sub>6</sub> Clusters. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 1902168	6.1	7
57	InVO <sub>4</sub> -based photocatalysts for energy and environmental applications. <i>Chemical Engineering Journal</i> , <b>2022</b> , 428, 131145	14.7	7
56	Thermal annealing effect on GaNAs epilayers with different nitrogen compositions grown by MOCVD. <i>Journal of Crystal Growth</i> , <b>2007</b> , 307, 229-234	1.6	6



55	An Experimentally Verified LC-MS Protocol toward an Economical, Reliable, and Quantitative Isotopic Analysis in Nitrogen Reduction Reactions.. <i>Small Methods</i> , <b>2021</b> , 5, e2000694	12.8	6
54	The data-intensive scientific revolution occurring where two-dimensional materials meet machine learning. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100482	6.1	6
53	Emerging Strategies for CO <sub>2</sub> Photoreduction to CH <sub>4</sub> : From Experimental to Data-Driven Design. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2200389	21.8	6
52	Argon-plasma-induced InAs/InGaAs/InP quantum dot intermixing. <i>Nanotechnology</i> , <b>2006</b> , 17, 4664-7	3.4	5
51	Rare earth element based single-atom catalysts: synthesis, characterization and applications in photo/electro-catalytic reactions. <i>Nanoscale Horizons</i> , <b>2021</b> ,	10.8	5
50	NIR-plasmon-enhanced Systems for Energy Conversion and Environmental Remediation. <i>Chemical Research in Chinese Universities</i> , <b>2020</b> , 36, 1000-1005	2.2	4
49	Layered Nanomaterials: Fabrication of Single- and Multilayer MoS <sub>2</sub> Film-Based Field-Effect Transistors for Sensing NO at Room Temperature (Small 1/2012). <i>Small</i> , <b>2012</b> , 8, 2-2	11	4
48	Formation of mid-infrared emissive InAs quantum dots on a graded In <sub>x</sub> Ga <sub>1-x</sub> As/InP matrix with a more uniform size and higher density under safer growth conditions. <i>Nanotechnology</i> , <b>2006</b> , 17, 1646-50 <sup>3-4</sup>	3.4	4
47	. <i>IEEE Nanotechnology Magazine</i> , <b>2008</b> , 7, 422-426	2.6	3
46	Mid-Infrared Emission From InAs Quantum Dots Grown by MetalOrganic Vapor Phase Epitaxy. <i>IEEE Nanotechnology Magazine</i> , <b>2006</b> , 5, 683-686	2.6	3
45	Plasmonically enhanced photoluminescence of monolayer MoS <sub>2</sub> via nanosphere lithography-templated gold metasurfaces. <i>Nanophotonics</i> , <b>2021</b> , 10, 1733-1740	6.3	3
44	Photo/electrochemical Carbon Dioxide Conversion into C <sub>3</sub> + Hydrocarbons: Reactivity and Selectivity. <i>ChemNanoMat</i> , <b>2021</b> , 7, 969-981	3.5	3
43	Selective N <sub>2</sub> /H <sub>2</sub> O adsorption onto 2D amphiphilic amorphous photocatalysts for ambient gas-phase nitrogen fixation. <i>Applied Catalysis B: Environmental</i> , <b>2021</b> , 294, 120240	21.8	3
42	High-Temperature Thermoelectric Monolayer Bi <sub>2</sub> TeSe <sub>2</sub> with High Power Factor and Ultralow Thermal Conductivity. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 2564-2572	6.1	3
41	Simulation-guided nanofabrication of high-quality practical tungsten probes.. <i>RSC Advances</i> , <b>2020</b> , 10, 24280-24287	3.7	2
40	Water Splitting: Au Nanoparticle-Modified MoS <sub>2</sub> Nanosheet-Based Photoelectrochemical Cells for Water Splitting (Small 17/2014). <i>Small</i> , <b>2014</b> , 10, 3536-3536	11	2
39	Study of InAs/GaAs quantum dots grown by MOVPE under the safer growth conditions. <i>Journal of Nanoparticle Research</i> , <b>2007</b> , 9, 877-884	2.3	2
38	Integration of data-intensive, machine learning and robotic experimental approaches for accelerated discovery of catalysts in renewable energy-related reactions. <i>Materials Reports Energy</i> , <b>2021</b> , 1, 100049		2

37	Machine learning accelerated calculation and design of electrocatalysts for CO <sub>2</sub> reduction. <i>SmartMat</i> , <b>2022</b> , 3, 68-83	22.8	2
36	Data-Driven Materials Innovation and Applications.. <i>Advanced Materials</i> , <b>2022</b> , e2104113	24	2
35	Solar Cells: Quantifying Quasi-Fermi Level Splitting and Mapping its Heterogeneity in Atomically Thin Transition Metal Dichalcogenides (Adv. Mater. 25/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970180	24	1
34	Lithium-Ion Batteries: Organic Rare Earth Hybrid Anode with Superior Cyclability for Lithium Ion Battery (Adv. Mater. Interfaces 9/2020). <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2070051	4.6	1
33	CdS: Phosphine-Free, Low-Temperature Synthesis of Tetrapod-Shaped CdS and Its Hybrid with Au Nanoparticles (Small 22/2014). <i>Small</i> , <b>2014</b> , 10, 4726-4726	11	1
32	Photoluminescence of InAs quantum dots embedded in graded InGaAs barriers. <i>Journal of Nanoparticle Research</i> , <b>2009</b> , 11, 1947-1955	2.3	1
31	First-step nucleation growth dependence of InAs/InGaAs/InP quantum dot formation in two-step growth. <i>Nanotechnology</i> , <b>2008</b> , 19, 085603	3.4	1
30	MOVPE growth of Al <sub>x</sub> In <sub>1-x</sub> P using tertiarybutylphosphine in pure N <sub>2</sub> ambient. <i>Thin Solid Films</i> , <b>2007</b> , 515, 4454-4458	2.2	1
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28	InAs self-assembled quantum dots on GaAs/InP by low-pressure metal-organic chemical vapour deposition. <i>Semiconductor Science and Technology</i> , <b>2001</b> , 16, 715-719	1.8	1
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