

# Guowei Yang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8206218/publications.pdf>

Version: 2024-02-01

221  
papers

12,401  
citations

23500

58  
h-index

30010

103  
g-index

223  
all docs

223  
docs citations

223  
times ranked

15324  
citing authors

#	ARTICLE	IF	CITATIONS
1	Amorphous nickel hydroxide nanospheres with ultrahigh capacitance and energy density as electrochemical pseudocapacitor materials. <i>Nature Communications</i> , 2013, 4, 1894.	5.8	1,041
2	All-Solid-State Symmetric Supercapacitor Based on $\text{Co}_3\text{O}_4$ Nanoparticles on Vertically Aligned Graphene. <i>ACS Nano</i> , 2015, 9, 5310-5317.	7.3	653
3	Fabrication of a $\text{SnO}_2$ Nanowire Gas Sensor and Sensor Performance for Hydrogen. <i>Journal of Physical Chemistry C</i> , 2008, 112, 6643-6647.	1.5	408
4	Half-unit-cell $\text{ZnIn}_2\text{S}_4$ monolayer with sulfur vacancies for photocatalytic hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2019, 248, 193-201.	10.8	369
5	Stable, highly-responsive and broadband photodetection based on large-area multilayered $\text{WS}_2$ films grown by pulsed-laser deposition. <i>Nanoscale</i> , 2015, 7, 14974-14981.	2.8	274
6	Flexible, transparent and ultra-broadband photodetector based on large-area $\text{WSe}_2$ film for wearable devices. <i>Nanotechnology</i> , 2016, 27, 225501.	1.3	254
7	All-Layered 2D Optoelectronics: A High-Performance UV-Vis-NIR Broadband $\text{SnSe}$ Photodetector with $\text{Bi}_2\text{Te}_3$ Topological Insulator Electrodes. <i>Advanced Functional Materials</i> , 2017, 27, 1701823.	7.8	222
8	Ultra-broadband and high response of the $\text{Bi}_2\text{Te}_3$ - $\text{Si}$ heterojunction and its application as a photodetector at room temperature in harsh working environments. <i>Nanoscale</i> , 2015, 7, 12535-12541.	2.8	214
9	Surface Energy of Nanostructural Materials with Negative Curvature and Related Size Effects. <i>Chemical Reviews</i> , 2009, 109, 4221-4247.	23.0	211
10	A flexible, transparent and super-long-life supercapacitor based on ultrafine $\text{Co}_3\text{O}_4$ nanocrystal electrodes. <i>Nanoscale</i> , 2016, 8, 4227-4235.	2.8	205
11	Directional Fano Resonance in a Silicon Nanosphere Dimer. <i>ACS Nano</i> , 2015, 9, 2968-2980.	7.3	198
12	A Simple Electrochemical Route to Access Amorphous Mixed-Metal Hydroxides for Supercapacitor Electrode Materials. <i>Advanced Energy Materials</i> , 2015, 5, 1401767.	10.2	182
13	$\text{Ti}_3\text{C}_2\text{T}_x$ MXene for electrode materials of supercapacitors. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11501-11529.	5.2	181
14	Two-dimensional amorphous $\text{NiO}$ as a plasmonic photocatalyst for solar $\text{H}_2$ evolution. <i>Nature Communications</i> , 2018, 9, 4036.	5.8	174
15	2D material broadband photodetectors. <i>Nanoscale</i> , 2020, 12, 454-476.	2.8	167
16	The optical duality of tellurium nanoparticles for broadband solar energy harvesting and efficient photothermal conversion. <i>Science Advances</i> , 2018, 4, eaas9894.	4.7	159
17	Light-controlling, flexible and transparent ethanol gas sensor based on $\text{ZnO}$ nanoparticles for wearable devices. <i>Scientific Reports</i> , 2015, 5, 11070.	1.6	157
18	Nanozymatic Antioxidant System Based on $\text{MoS}_2$ Nanosheets. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 12453-12462.	4.0	148

#	ARTICLE	IF	CITATIONS
19	Amorphous transitional metal borides as substitutes for Pt cocatalysts for photocatalytic water splitting. <i>Nano Energy</i> , 2016, 27, 103-113.	8.2	142
20	Reduced TiO <sub>2</sub> -Graphene Oxide Heterostructure As Broad Spectrum-Driven Efficient Water-Splitting Photocatalysts. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 8536-8545.	4.0	140
21	Layered-material WS <sub>2</sub> /topological insulator Bi <sub>2</sub> Te <sub>3</sub> heterostructure photodetector with ultrahigh responsivity in the range from 370 to 1550 nm. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7831-7840.	2.7	135
22	Promoting the Performance of Layered-Material Photodetectors by Alloy Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 12915-12924.	4.0	133
23	Electronic Reconstruction of $\sqrt{2} \times \sqrt{2}$ Ag <sub>2</sub> WO <sub>4</sub> Nanorods for Visible-Light Photocatalysis. <i>ACS Nano</i> , 2015, 9, 7256-7265.	7.3	131
24	Carbyne with finite length: The one-dimensional <i>sp</i> carbon. <i>Science Advances</i> , 2015, 1, e1500857.	4.7	131
25	Enhanced carrier separation and increased electron density in 2D heavily N-doped ZnIn <sub>2</sub> S <sub>4</sub> for photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2020, 8, 207-217.	5.2	131
26	Flexible and High-Performance All-2D Photodetector for Wearable Devices. <i>Small</i> , 2018, 14, e1704524.	5.2	128
27	A 2D self-assembled MoS <sub>2</sub> /ZnIn <sub>2</sub> S <sub>4</sub> heterostructure for efficient photocatalytic hydrogen evolution. <i>Nanoscale</i> , 2017, 9, 18290-18298.	2.8	121
28	Reversible Nanodiamond-Carbon Onion Phase Transformations. <i>Nano Letters</i> , 2014, 14, 3645-3652.	4.5	113
29	Self-integrated effects of 2D ZnIn <sub>2</sub> S <sub>4</sub> and amorphous Mo <sub>2</sub> C nanoparticles composite for promoting solar hydrogen generation. <i>Nano Energy</i> , 2020, 76, 105031.	8.2	106
30	Recent progress in inkjet-printed solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13873-13902.	5.2	102
31	Promoting Photosensitivity and Detectivity of the Bi/Si Heterojunction Photodetector by Inserting a WS <sub>2</sub> Layer. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 26701-26708.	4.0	98
32	WSe <sub>2</sub> few layers with enzyme mimic activity for high-sensitive and high-selective visual detection of glucose. <i>Nanoscale</i> , 2017, 9, 11806-11813.	2.8	97
33	Magnetically induced forward scattering at visible wavelengths in silicon nanosphere oligomers. <i>Nature Communications</i> , 2015, 6, 7042.	5.8	95
34	Self-Assembly High-Performance UV-Vis-NIR Broadband $\sqrt{2} \times \sqrt{2}$ -In <sub>2</sub> Se <sub>3</sub> /Si Photodetector Array for Weak Signal Detection. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 43830-43837.	4.0	95
35	Layered tin monoselenide as advanced photothermal conversion materials for efficient solar energy-driven water evaporation. <i>Nanoscale</i> , 2018, 10, 2876-2886.	2.8	94
36	Ag/AgCl plasmonic cubes with ultrahigh activity as advanced visible-light photocatalysts for photodegrading dyes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7649-7658.	5.2	88

#	ARTICLE	IF	CITATIONS
37	Stable, Fast UV-Vis-NIR Photodetector with Excellent Responsivity, Detectivity, and Sensitivity Based on $\text{In}_2\text{Te}_3$ Films with a Direct Bandgap. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 20872-20879.	4.0	85
38	Synthesis of Body-Centered Cubic Carbon Nanocrystals. <i>Crystal Growth and Design</i> , 2008, 8, 581-586.	1.4	83
39	Growth of centimeter-scale high-quality $\text{In}_2\text{Se}_3$ films for transparent, flexible and high performance photodetectors. <i>Journal of Materials Chemistry C</i> , 2016, 4, 8094-8103.	2.7	83
40	Few-layered $\text{MoSe}_2$ nanosheets as an efficient peroxidase nanozyme for highly sensitive colorimetric detection of $\text{H}_2\text{O}_2$ and xanthine. <i>Journal of Materials Chemistry B</i> , 2018, 6, 105-111.	2.9	83
41	In Situ Growth of the $\text{Ni}_3\text{V}_2\text{O}_8$ @PANI Composite Electrode for Flexible and Transparent Symmetric Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 20688-20695.	4.0	83
42	Super adsorption capability from amorphousization of metal oxide nanoparticles for dye removal. <i>Scientific Reports</i> , 2015, 5, 9028.	1.6	81
43	Nanodiamond-Embedded p-Type Copper(I) Oxide Nanocrystals for Broad-Spectrum Photocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2016, 6, 1501865.	10.2	81
44	Fluorescence Origin of Nanodiamonds. <i>Journal of Physical Chemistry C</i> , 2015, 119, 2239-2248.	1.5	79
45	Ultra-broadband and high-responsive photodetectors based on bismuth film at room temperature. <i>Scientific Reports</i> , 2015, 5, 12320.	1.6	79
46	Constructing Built-in Electric Field in Ultrathin Graphitic Carbon Nitride Nanosheets by N and O Codoping for Enhanced Photocatalytic Hydrogen Evolution Activity. <i>Small</i> , 2020, 16, e1905700.	5.2	79
47	Self-Supporting, Binder-Free, and Flexible $\text{Ti}_3\text{C}_2\text{T}_x$ MXene-Based Supercapacitor Electrode with Improved Electrochemical Performance. <i>ACS Nano</i> , 2022, 16, 9713-9727.	7.3	76
48	A Floating Sheet for Efficient Photocatalytic Water Splitting. <i>Advanced Energy Materials</i> , 2016, 6, 1600510.	10.2	74
49	Centimeter-Scale Deposition of $\text{Mo}_{0.5}\text{W}_{0.5}\text{Se}_2$ Alloy Film for High-Performance Photodetectors on Versatile Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 14920-14928.	4.0	74
50	An efficient solar-enabled 2D layered alloy material evaporator for seawater desalination. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3869-3876.	5.2	72
51	Anomalous Photoelectric Effect of a Polycrystalline Topological Insulator Film. <i>Scientific Reports</i> , 2014, 4, 5876.	1.6	71
52	Plasmonic near-touching titanium oxide nanoparticles to realize solar energy harvesting and effective local heating. <i>Nanoscale</i> , 2016, 8, 8826-8838.	2.8	69
53	Manipulating the hydrogen evolution pathway on composition-tunable CuNi nanoalloys. <i>Journal of Materials Chemistry A</i> , 2017, 5, 773-781.	5.2	68
54	$\text{Pn-PdPSe}$ : A New 2D Pentagonal Material with Highly In-Plane Optical, Electronic, and Optoelectronic Anisotropy. <i>Advanced Materials</i> , 2021, 33, e2102541.	11.1	66

#	ARTICLE	IF	CITATIONS
55	CuMnO <sub>2</sub> nanoflakes as pH-switchable catalysts with multiple enzyme-like activities for cysteine detection. <i>Sensors and Actuators B: Chemical</i> , 2019, 279, 374-384.	4.0	65
56	Second harmonic generation in 2D layered materials. <i>2D Materials</i> , 2020, 7, 042002.	2.0	62
57	Tin dioxide quantum dots coupled with graphene for high-performance bulk-silicon Schottky photodetector. <i>Materials Horizons</i> , 2018, 5, 727-737.	6.4	61
58	Resistive switching properties and physical mechanism of cobalt ferrite thin films. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	60
59	Amorphous mixed-metal hydroxide nanostructures for advanced water oxidation catalysts. <i>Nanoscale</i> , 2016, 8, 5015-5023.	2.8	60
60	Controllable Fabrication and Cathodoluminescence Performance of High-index Facets GeO <sub>2</sub> Micro- and Nanocubes and Spindles upon Electrical-field-assisted Laser Ablation in Liquid. <i>Journal of Physical Chemistry C</i> , 2008, 112, 13450-13456.	1.5	59
61	Synergistic Effect of Hybrid Multilayer In <sub>2</sub> Se <sub>3</sub> and Nanodiamonds for Highly Sensitive Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 20200-20211.	4.0	59
62	Alloying-assisted phonon engineering of layered BiInSe <sub>3</sub> @nickel foam for efficient solar-enabled water evaporation. <i>Nanoscale</i> , 2017, 9, 16396-16403.	2.8	59
63	Structure evolution and ferroelectric and dielectric properties of Bi <sub>3.5</sub> Nd <sub>0.5</sub> Ti <sub>3</sub> O <sub>12</sub> thin films under a moderate temperature annealing. <i>Applied Physics Letters</i> , 2004, 85, 5661-5663.	1.5	58
64	Polarization dependent photocurrent in the Bi <sub>2</sub> Te <sub>3</sub> topological insulator film for multifunctional photodetection. <i>Scientific Reports</i> , 2015, 5, 14184.	1.6	57
65	Matching energy levels between TiO <sub>2</sub> and Fe <sub>2</sub> O <sub>3</sub> in a core-shell nanoparticle for visible-light photocatalysis. <i>Journal of Materials Chemistry A</i> , 2015, 3, 14853-14863.	5.2	57
66	Self-Assembly of the Lateral In <sub>2</sub> Se <sub>3</sub> /CuInSe <sub>2</sub> Heterojunction for Enhanced Photodetection. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7288-7296.	4.0	57
67	Amorphous Nickel Hydroxide Nanosheets with Ultrahigh Activity and Super-Long-Term Cycle Stability as Advanced Water Oxidation Catalysts. <i>Crystal Growth and Design</i> , 2015, 15, 4475-4483.	1.4	51
68	New type high-index dielectric nanosensors based on the scattering intensity shift. <i>Nanoscale</i> , 2016, 8, 5996-6007.	2.8	50
69	Nanosize confinement induced enhancement of spontaneous polarization in a ferroelectric nanowire. <i>Applied Physics Letters</i> , 2009, 95, 232901.	1.5	49
70	Band Gap Tunability in Semiconductor Nanocrystals by Strain: Size and Temperature Effect. <i>Journal of Physical Chemistry C</i> , 2011, 115, 6462-6466.	1.5	49
71	Ultrahigh-Capacity Molecular Hydrogen Storage of a Lithium-Decorated Boron Monolayer. <i>Journal of Physical Chemistry C</i> , 2015, 119, 19681-19688.	1.5	49
72	Surface rippling on bulk metallic glass under nanosecond pulse laser ablation. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	48

#	ARTICLE	IF	CITATIONS
73	Non-layered 2D materials toward advanced photoelectric devices: progress and prospects. <i>Materials Horizons</i> , 2020, 7, 2185-2207.	6.4	47
74	Light-controlled C <sub>2</sub> H <sub>2</sub> gas sensing based on Au@ZnO nanowires with plasmon-enhanced sensitivity at room temperature. <i>Journal of Materials Chemistry C</i> , 2015, 3, 7067-7074.	2.7	44
75	Promoting photocatalytic hydrogen evolution by introducing hot islands: SnSe nanoparticles on ZnIn <sub>2</sub> S <sub>4</sub> monolayer. <i>Chemical Engineering Journal</i> , 2021, 404, 126477.	6.6	44
76	Ternary Ta <sub>2</sub> Pd <sub>6</sub> Atomic Layers for an Ultrahigh Broadband Photoresponsive Phototransistor. <i>Advanced Materials</i> , 2021, 33, e2005607.	11.1	44
77	Synthesis and characterization of copper vanadate nanostructures via electrochemistry assisted laser ablation in liquid and the optical multi-absorptions performance. <i>CrystEngComm</i> , 2012, 14, 3291.	1.3	43
78	Hydrogen-interstitial CuWO <sub>4</sub> nanomesh: A single-component full spectrum-active photocatalyst for hydrogen evolution. <i>Applied Catalysis B: Environmental</i> , 2018, 227, 35-43.	10.8	41
79	Oxygen Vacancy-Engineered PEGylated MoO <sub>3</sub> Nanoparticles with Superior Sulfite Oxidase Mimetic Activity for Vitamin B1 Detection. <i>Small</i> , 2019, 15, e1903153.	5.2	41
80	Europium (II)-Doped All-Inorganic CsPbBr <sub>3</sub> Perovskite Solar Cells with Carbon Electrodes. <i>Solar Rrl</i> , 2020, 4, 2000390.	3.1	41
81	Nanodiamonds as pH-switchable oxidation and reduction catalysts with enzyme-like activities for immunoassay and antioxidant applications. <i>Nanoscale</i> , 2017, 9, 15673-15684.	2.8	40
82	Amorphous Fe <sub>2</sub> O <sub>3</sub> for photocatalytic hydrogen evolution. <i>Catalysis Science and Technology</i> , 2019, 9, 5582-5592.	2.1	40
83	Tunable Control of Interlayer Excitons in WS <sub>2</sub> /MoS <sub>2</sub> Heterostructures via Strong Coupling with Enhanced Mie Resonances. <i>Advanced Science</i> , 2019, 6, 1802092.	5.6	40
84	Plasmon-Induced Energy Transfer and Photoluminescence Manipulation in MoS <sub>2</sub> with a Different Number of Layers. <i>ACS Photonics</i> , 2017, 4, 1092-1100.	3.2	39
85	Ultrasensitive 2D/3D Heterojunction Multicolor Photodetectors: A Synergy of Laterally and Vertically Aligned 2D Layered Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 38166-38172.	4.0	39
86	Promoting the yield of nanoparticles from laser ablation in liquid. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 105, 903-907.	1.1	38
87	Nanodiamonds from coal under ambient conditions. <i>Nanoscale</i> , 2015, 7, 6114-6125.	2.8	38
88	Facile and scalable production of amorphous nickel borate for high performance hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19689-19695.	5.2	38
89	2D Layered Material Alloys: Synthesis and Application in Electronic and Optoelectronic Devices. <i>Advanced Science</i> , 2022, 9, e2103036.	5.6	38
90	Atomically Dispersed Cu Nanozyme with Intensive Ascorbate Peroxidase Mimic Activity Capable of Alleviating ROS-Mediated Oxidation Damage. <i>Advanced Science</i> , 2022, 9, e2103977.	5.6	38

#	ARTICLE	IF	CITATIONS
91	Directional Scattering in a Germanium Nanosphere in the Visible Light Region. <i>Advanced Optical Materials</i> , 2017, 5, 1700761.	3.6	37
92	Trapping High-Pressure Nanophase of Ge upon Laser Ablation in Liquid. <i>Crystal Growth and Design</i> , 2009, 9, 1390-1393.	1.4	36
93	Phase Transition of II <sup>VI</sup> Semiconductor Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15054-15060.	1.5	36
94	Giant nonlinear optical responses of carbyne. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4692-4698.	2.7	36
95	Modifying photocatalysts for solar hydrogen evolution based on the electron behavior. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5235-5259.	5.2	36
96	Photoluminescence manipulation of WS <sub>2</sub> flakes by an individual Si nanoparticle. <i>Materials Horizons</i> , 2019, 6, 97-106.	6.4	36
97	Experimental evidence of the nanoscaled topological metallic surface state of Bi <sub>2</sub> Te <sub>3</sub> and Sb <sub>2</sub> Te <sub>3</sub> films. <i>Europhysics Letters</i> , 2011, 95, 56002.	0.7	35
98	Edge effect on band gap shift in Si nanowires with polygonal cross-sections. <i>Applied Physics Letters</i> , 2011, 98, 263112.	1.5	35
99	Fabrication of One-Dimensional Chain of Iron-Based Bimetallic Alloying Nanoparticles with Unique Magnetizations. <i>Crystal Growth and Design</i> , 2014, 14, 5847-5855.	1.4	35
100	Modified Ti <sub>3</sub> C <sub>2</sub> nanosheets as peroxidase mimetics for use in colorimetric detection and immunoassays. <i>Journal of Materials Chemistry B</i> , 2020, 8, 2650-2659.	2.9	35
101	Co <sub>2</sub> P@NiCo <sub>2</sub> O <sub>4</sub> bi-functional electrocatalyst with low overpotential for water splitting in wide range pH electrolytes. <i>Journal of Colloid and Interface Science</i> , 2019, 534, 55-63.	5.0	34
102	W-doping induced antiferroelectric to ferroelectric phase transition in PbZrO <sub>3</sub> thin films prepared by chemical solution deposition. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	33
103	Enhanced second harmonic generation in individual barium titanate nanoparticles driven by Mie resonances. <i>Journal of Materials Chemistry C</i> , 2017, 5, 4810-4819.	2.7	33
104	Research Progress on the Application of Lanthanide-Ion-Doped Phosphor Materials in Perovskite Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 1035-1060.	3.2	33
105	Generating scattering dark states through the Fano interference between excitons and an individual silicon nanogroove. <i>Light: Science and Applications</i> , 2017, 6, e16197-e16197.	7.7	31
106	Nanowire formation during catalyst assisted chemical vapor deposition. <i>Physical Review B</i> , 2005, 72, .	1.1	30
107	Indium Oxide/zinc Oxide Nanosized Heterostructure and Whispering Gallery Mode Luminescence Emission. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15480-15483.	1.5	30
108	Enhancing electron density of bulk g-C <sub>3</sub> N <sub>4</sub> through phosphorus doping for promoting photocatalytic hydrogen evolution reaction. <i>Applied Surface Science</i> , 2021, 570, 151186.	3.1	30



#	ARTICLE	IF	CITATIONS
109	Fullerene-like MoS <sub>2</sub> Nanoparticles as Cascade Catalysts Improving Lubricant and Antioxidant Abilities of Artificial Synovial Fluid. ACS Biomaterials Science and Engineering, 2019, 5, 3079-3088.	2.6	29
110	All-dielectric materials and related nanophotonic applications. Materials Science and Engineering Reports, 2020, 141, 100563.	14.8	28
111	Uniaxial strain modulated band gap of ZnO nanostructures. Applied Physics Letters, 2010, 96, 213101.	1.5	27
112	Midrefractive Dielectric Modulator for Broadband Unidirectional Scattering and Effective Radiative Tailoring in the Visible Region. ACS Applied Materials & Interfaces, 2016, 8, 22468-22476.	4.0	26
113	Cross-linked bond accelerated interfacial charge transfer in monolayer zinc indium sulfide (ZnIn <sub>2</sub> S <sub>4</sub> )/reduced graphene oxide (RGO) heterostructure for photocatalytic hydrogen production with mechanistic insight. Catalysis Science and Technology, 2019, 9, 4066-4076.	2.1	26
114	Improvement of Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> Solar Cells by Adding N-Dimethylformamide to the Dimethyl Sulfoxide-Based Precursor Ink. ChemSusChem, 2019, 12, 1692-1699.	3.6	26
115	A facile and green large-scale fabrication of single atom catalysts for high photocatalytic H <sub>2</sub> evolution activity. Chemical Engineering Journal, 2022, 427, 131795.	6.6	26
116	Dual-functional photocatalysis for hydrogen evolution from industrial wastewaters. Physical Chemistry Chemical Physics, 2017, 19, 8356-8362.	1.3	25
117	A flexible, transparent and high-performance gas sensor based on layer-materials for wearable technology. Nanotechnology, 2017, 28, 415501.	1.3	25
118	Fabrication of a high performance ZnIn <sub>2</sub> S <sub>4</sub> /Si heterostructure photodetector array for weak signal detection. Journal of Materials Chemistry C, 2018, 6, 12928-12939.	2.7	25
119	Surprising Efficiency Enhancement of Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> Solar Cells with Abnormal Zn/Sn Ratios. Solar Rrl, 2020, 4, 2000325.	3.1	25
120	Bandgap shift in SnO <sub>2</sub> nanostructures induced by lattice strain and coordination imperfection. Journal of Applied Physics, 2010, 108, .	1.1	24
121	CdS Nanorod-Amorphous Molybdenum Oxide Nanocomposite for Photocatalytic Hydrogen Evolution. ACS Applied Nano Materials, 2019, 2, 6783-6792.	2.4	24
122	Cubic boron nitride with an intrinsic peroxidase-like activity. RSC Advances, 2016, 6, 70124-70132.	1.7	23
123	Amorphous cobalt hydroxide nanostructures and magnetism from green electrochemistry. RSC Advances, 2013, 3, 26412.	1.7	21
124	Super low threshold plasmonic WGM lasing from an individual ZnO hexagonal microrod on an Au substrate for plasmon lasers. Scientific Reports, 2015, 5, 8776.	1.6	21
125	Photothermal conversion assisted photocatalytic hydrogen evolution from amorphous carbon nitrogen nanosheets with nitrogen vacancies. Physical Chemistry Chemical Physics, 2020, 22, 4453-4463.	1.3	21
126	Explosion Phase Formation of Nanocrystalline Boron Nitrides Upon Pulsed-Laser-Induced Liquid/Solid Interfacial Reaction. Journal of Materials Research, 2003, 18, 2774-2778.	1.2	20



#	ARTICLE	IF	CITATIONS
127	A fluorescent and colorimetric probe of carbyne nanocrystals coated Au nanoparticles for selective and sensitive detection of ferrous ions. Carbon, 2020, 167, 196-201.	5.4	20
128	Promoting the Performance of 2D Material Photodetectors by Dielectric Engineering. Small Methods, 2022, 6, e2101046.	4.6	20
129	Experimental evidence and physical understanding of ZnO vapor-liquid-solid nanowire growth. Applied Physics A: Materials Science and Processing, 2011, 102, 319-323.	1.1	19
130	Second harmonic generation from an individual all-dielectric nanoparticle: resonance enhancement versus particle geometry. Journal of Materials Chemistry C, 2016, 4, 6063-6069.	2.7	19
131	An Innovative Postdeposition Annealing Approach Producing Centimeter-Scale In <sub>2</sub> O <sub>3</sub> /In <sub>2</sub> (TeO <sub>3</sub> ) <sub>3</sub> Bulk Heterojunction Thin Film for Room-Temperature Persistent Photoconductivity. Advanced Optical Materials, 2017, 5, 1600908.	3.6	19
132	Electrically Controlled Scattering in a Hybrid Dielectric-Plasmonic Nanoantenna. Nano Letters, 2017, 17, 4793-4800.	4.5	19
133	Determination of optimum optoelectronic properties in vertically stacked MoS <sub>2</sub> /h-BN/WSe <sub>2</sub> van der Waals heterostructures. Physical Chemistry Chemical Physics, 2019, 21, 23179-23186.	1.3	19
134	2D group 6 transition metal dichalcogenides toward wearable electronics and optoelectronics. Journal of Applied Physics, 2020, 127, .	1.1	19
135	Plasmon resonances in semiconductor materials for detecting photocatalysis at the single-particle level. Nanoscale, 2016, 8, 15001-15007.	2.8	18
136	Active tuning of the Fano resonance from a Si nanosphere dimer by the substrate effect. Nanoscale Horizons, 2019, 4, 148-157.	4.1	18
137	Millimeters long super flexible Mn <sub>5</sub> Si <sub>3</sub> @SiO <sub>2</sub> electrical nanocables applicable in harsh environments. Nature Communications, 2020, 11, 647.	5.8	18
138	Hot Carriers and Photothermal Effects of Monolayer MoO <sub>x</sub> for Promoting Sulfite Oxidase Mimetic Activity. ACS Applied Materials & Interfaces, 2020, 12, 19357-19368.	4.0	18
139	Oscillating current observed in field emission from a single zinc oxide nanostructure and the physical mechanism. Journal of Applied Physics, 2009, 106, .	1.1	17
140	Ag <sub>2</sub> V <sub>4</sub> O <sub>11</sub> nanostructures for highly ethanol sensitive performance. CrystEngComm, 2013, 15, 6131.	1.3	17
141	Ferroelectric functionality in SrTiO <sub>3</sub> /Si heterojunctions. Journal of Applied Physics, 2013, 114, .	1.1	17
142	Robust topological surface transport with weak localization bulk channels in polycrystalline Bi <sub>2</sub> Te <sub>3</sub> films. Journal Physics D: Applied Physics, 2016, 49, 095003.	1.3	17
143	Transparent, flexible, and high-performance supercapacitor based on ultrafine nickel cobaltite nanospheres. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	17
144	Single silicon nanostripe gated suspended monolayer and bilayer WS <sub>2</sub> to realize abnormal electro-optical modulation. Materials Horizons, 2019, 6, 334-342.	6.4	17

#	ARTICLE	IF	CITATIONS
145	Amorphous nickel hydroxide nanospheres by a green electrochemistry technique: structure, morphology and magnetism. <i>CrystEngComm</i> , 2013, 15, 4054.	1.3	16
146	A metallic metal oxide (Ti <sub>5</sub> O <sub>9</sub> )-metal oxide (TiO <sub>2</sub> ) nanocomposite as the heterojunction to enhance visible-light photocatalytic activity. <i>Nanotechnology</i> , 2015, 26, 255705.	1.3	16
147	Directional Fano Resonance in an Individual GaAs Nanospheroid. <i>Small</i> , 2019, 15, e1900546.	5.2	16
148	Pulsed Laser Deposition Fabricated ZnIn <sub>2</sub> S <sub>4</sub> Photodetectors with Excellent ON/OFF Switching Characteristics toward High Temperature Resistant Photodetection Applications. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	16
149	Molecular Luminescence of White Carbon. <i>Small</i> , 2017, 13, 1603495.	5.2	15
150	9.63% efficient flexible Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> solar cells fabricated <i>via</i> scalable doctor-blading under ambient conditions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25062-25072.	5.2	15
151	Electronic structure regulation of cobalt oxide clusters for promoting photocatalytic hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2022, 10, 1899-1908.	5.2	15
152	Growth, structure, and cathodoluminescence of Dy-doped ZnO nanowires. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 103, 73-79.	1.1	14
153	Cobalt decorated ultra-thin Ti <sub>3</sub> C <sub>2</sub> MXene electrocatalyst for high-efficiency hydrogen evolution reaction. <i>Materials Research Express</i> , 2019, 6, 025056.	0.8	14
154	Electrical field induced direct-to-indirect bandgap transition in ZnO nanowires. <i>Journal of Applied Physics</i> , 2010, 108, 024302.	1.1	13
155	A design of Si-based nanoplasmonic structure as an antenna and reception amplifier for visible light communication. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	13
156	Electrochemical route for accessing amorphous mixed-metal hydroxide nanospheres and magnetism. <i>RSC Advances</i> , 2015, 5, 45359-45367.	1.7	13
157	Inorganic fullerene-like molybdenum selenide with good biocompatibility synthesized by laser ablation in liquids. <i>Nanotechnology</i> , 2018, 29, 295604.	1.3	13
158	A Universal and Facile Method of Tailoring the Thickness of Mo(S <sub>x</sub> ,Se <sub>1-x</sub> ) <sub>2</sub> , Contributing to Highly Efficient Flexible Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100598.	3.1	13
159	Self-assembling solid-state hydrogen source for drylands photocatalytic hydrogen production. <i>Journal of Materials Chemistry A</i> , 2016, 4, 15920-15928.	5.2	12
160	Second harmonic generation from an individual amorphous selenium nanosphere. <i>Nanotechnology</i> , 2016, 27, 425206.	1.3	12
161	Active tuning of Mie resonances to realize sensitive photothermal measurement of single nanoparticles. <i>Materials Horizons</i> , 2020, 7, 1542-1551.	6.4	12
162	Giant Switching Effect and Spintronic Transport Properties in Cyclo[18]carbon-Based Molecular Devices. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2000582.	1.2	12

#	ARTICLE	IF	CITATIONS
163	Multielement 2D layered material photodetectors. <i>Nanotechnology</i> , 2021, 32, 392001.	1.3	12
164	Superior peroxidase mimetic activity induced by topological surface states of Weyl semimetal WTe <sub>2</sub> . <i>Nano Today</i> , 2022, 43, 101421.	6.2	12
165	Nanoscale Self-Wetting Driven Monatomization of Ag Nanoparticle for Excellent Photocatalytic Hydrogen Evolution. <i>Small</i> , 2022, 18, e2107840.	5.2	12
166	Physical origin of spontaneous interfacial alloying in immiscible W/Cu multilayers. <i>Journal of Materials Science</i> , 2007, 42, 7446-7450.	1.7	11
167	Active Pore-Edge Engineering of Single-Layer Niobium Diselenide Porous Nanosheets Electrode for Hydrogen Evolution. <i>Nanomaterials</i> , 2019, 9, 751.	1.9	11
168	Dynamic radiative tailoring based on mid-refractive dielectric nanoantennas. <i>Nanoscale Horizons</i> , 2019, 4, 712-719.	4.1	11
169	Visible-light-driven room-temperature gas sensor based on carbyne nanocrystals. <i>Sensors and Actuators B: Chemical</i> , 2020, 316, 128200.	4.0	11
170	Van der Waals heterostructures based on 2D layered materials: Fabrication, characterization, and application in photodetection. <i>Journal of Applied Physics</i> , 2022, 131, .	1.1	11
171	Formation of silver particles and silver oxide plume nanocomposites upon pulsed-laser induced liquid-solid interface reaction. <i>European Physical Journal B</i> , 2004, 41, 479-483.	0.6	10
172	Elimination of interface states of Co <sub>2</sub> MnSi/MgO/Co <sub>2</sub> MnSi magnetic tunneling junction by inserting an Al atomic layer. <i>Applied Physics Letters</i> , 2011, 98, 011910.	1.5	10
173	Size-dependent oxidation behavior for the anomalous initial thermal oxidation process of Si. <i>Applied Physics Letters</i> , 2009, 94, 083108.	1.5	9
174	Direct-indirect bandgap transition in monolayer MoS <sub>2</sub> induced by an individual Si nanoparticle. <i>Nanotechnology</i> , 2020, 31, 065204.	1.3	9
175	A hybrid gold-carbyne nanocrystals platform for light-induced crossover of redox enzyme-like activities. <i>Chemical Engineering Journal</i> , 2021, 408, 127244.	6.6	9
176	Single Polylactic Acid Nanowire for Highly Sensitive and Multifunctional Optical Biosensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 27983-27990.	4.0	9
177	A perspective on optimizing photoelectric conversion process in 2D transition-metal dichalcogenides and related heterostructures. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	9
178	Suspended Palladium/Polymer Bilayer for High-Contrast and Fast Hydrogen Sensors. <i>ACS Sensors</i> , 2022, 7, 116-122.	4.0	9
179	<i>In situ</i> integration of Te/Si 2D/3D heterojunction photodetectors toward UV-vis-IR ultra-broadband photoelectric technologies. <i>Nanoscale</i> , 2022, 14, 6228-6238.	2.8	9
180	Superheating and melting of nanocavities. <i>Applied Physics Letters</i> , 2008, 92, 051902.	1.5	8

#	ARTICLE	IF	CITATIONS
181	Interface relaxation and band gap shift in epitaxial layers. AIP Advances, 2012, 2, .	0.6	8
182	Transport and magnetic properties of the Co <sub>2</sub> MnSi/Al/Co <sub>2</sub> MnSi trilayer. Applied Physics Letters, 2012, 100, .	1.5	8
183	Ratiometric fluorescent sensor based on 2D MOF nanosheets modified by DNA for sensitive detection of Hg <sup>2+</sup> . Nanotechnology, 2021, 32, 505501.	1.3	8
184	Carbon nanotube-dependent synthesis of armchair graphene nanoribbons. Nano Research, 2022, 15, 1709-1714.	5.8	8
185	A flexibly switchable TaIrTe <sub>4</sub> WSe <sub>2</sub> van der Waals heterojunction photodetector with linear-polarization-dependent photosensitivity. Applied Physics Letters, 2022, 120, .	1.5	8
186	An All-Dielectric Metasurface Building Block for the Kerker Effect between Excitons and Nanocavities: Germanium Nanogroove. Advanced Optical Materials, 2018, 6, 1701176.	3.6	7
187	Scalable and green production of porous graphene nanosheets for flexible supercapacitors. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	7
188	Highly efficient Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> bifacial solar cell via a composition gradient strategy through the molecular ink. Science China Materials, 2022, 65, 612-619.	3.5	7
189	Individual Si Nanospheres Wrapped in a Suspended Monolayer WS <sub>2</sub> for Electromechanically Controlled Mie-Type Nanopixels. Advanced Optical Materials, 2021, 9, 2001954.	3.6	7
190	Carbyne Nanocrystal: One-Dimensional van der Waals Crystal. ACS Nano, 2021, 15, 16769-16776.	7.3	7
191	Construction of GQDs-Decorated Ultrathin Bi <sub>2</sub> WO <sub>6</sub> Nanosheets Hydrogel: a Recyclable-Flexible Platform with Excellent Piezo-Photocatalytic Activity for High-Performance Water Decontamination and its Theoretical Interpretation. Particle and Particle Systems Characterization, 2021, 38, .	1.2	7
192	A New Wide Bandgap Semiconductor: Carbyne Nanocrystals. Advanced Functional Materials, 2021, 31, 2104254.	7.8	6
193	Bifacial Cu <sub>2</sub> ZnSn(S,Se) <sub>4</sub> Thin Film Solar Cell Based on Molecular Ink and Rapid Thermal Processing. Advanced Materials Interfaces, 2021, 8, 2100971.	1.9	6
194	Enhancing local luminescence in a hollow ZnO microcolumn by antiresonant reflecting. Nanoscale, 2016, 8, 9226-9233.	2.8	5
195	Palladium-polymer bilayer on a soft substrate for optical hydrogen sensing. Nano Select, 2022, 3, 655-661.	1.9	5
196	First-principles calculations of structural, electronic and magnetic properties of SeNiO <sub>3</sub> . Applied Physics Letters, 2008, 92, 132914.	1.5	4
197	A new insight into the electrochemical growth of Ag nanodendrites without a strong electrolyte. RSC Advances, 2013, 3, 20532.	1.7	4
198	Electrically induced colossal capacitance enhancement in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> heterostructures. NPG Asia Materials, 2013, 5, e65-e65.	3.8	4

#	ARTICLE	IF	CITATIONS
199	Interface Engineering of Band Evolution and Transport Properties of Bilayer WSe <sub>2</sub> under Different Electric Fields. <i>Journal of Physical Chemistry C</i> , 2019, 123, 19812-19819.	1.5	4
200	Nanoporous silicon: Surface effect and bandgap blueshift. <i>Journal of Applied Physics</i> , 2011, 110, 033507.	1.1	3
201	The interface structure and magnetic and electronic properties of a Co <sub>2</sub> FeAl <sub>0.5</sub> Si <sub>0.5</sub> /MgO/Co <sub>2</sub> FeAl <sub>0.5</sub> Si <sub>0.5</sub> magnetic tunneling junction. <i>Journal of Applied Physics</i> , 2011, 109, 083509.	1.1	3
202	Surface effect on the bandgap of BN one-dimensional nanostructures. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	3
203	Prediction of stable ferroelectricity in epitaxial BaTiO <sub>3</sub> on Si. <i>Applied Physics Letters</i> , 2012, 101, 102903.	1.5	3
204	Loss-favored ultrasensitive refractive index sensor based on directional scattering from a single all-dielectric nanosphere. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6350-6357.	2.7	3
205	Mie resonant scattering-based refractive index sensor using a quantum dots-doped polylactic acid nanowire. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	3
206	Optically controlled coalescence and splitting of femtoliter/picoliter droplets for microreactors. <i>RSC Advances</i> , 2022, 12, 18311-18320.	1.7	3
207	Thermodynamic model of metal-induced self-assembly of Ge quantum dots on Si substrates. <i>European Physical Journal B</i> , 2008, 62, 295-298.	0.6	2
208	Physical mechanism of quantum dot to quantum ring transformation upon capping process. <i>Journal of Applied Physics</i> , 2011, 109, 083542.	1.1	2
209	Topological insulator-graphene junction for spin transport. <i>Applied Physics Letters</i> , 2012, 101, 243102.	1.5	2
210	Lasing from an individual ZnO hexagonal microrod on the Au surface coated by a nanometer-scaled SiO <sub>2</sub> layer. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 817-821.	1.1	2
211	Trapping and filtering of light by single Si nanospheres in a GaAs nanocavity. <i>Nanoscale</i> , 2019, 11, 16299-16307.	2.8	2
212	Directional radiation and photothermal effect enhanced control of 2D excitonic emission based on germanium nanoparticles. <i>Nanotechnology</i> , 2020, 31, 385201.	1.3	2
213	Light-Matter Interactions between Germanium Nanocavities and Quantum Dots at Visible Wavelengths. <i>Journal of Physical Chemistry C</i> , 2021, 125, 812-818.	1.5	2
214	Ultrafast dynamics of photoexcited carriers and coherent phonons in ultrathin Bi <sub>2</sub> Te <sub>3</sub> thermoelectric films. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, 1.	2.0	2
215	Creating a Nanoscale "Black Hole" to Trap Light by a Single Au Nanosphere in an All-Dielectric Nanocavity. <i>Advanced Optical Materials</i> , 2018, 6, 1800366.	3.6	1
216	Multiple resonance coupling in an individual germanium nanogroove with organic dyes. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 215103.	1.3	1

#	ARTICLE	IF	CITATIONS
217	Paramagnetism of carbyne nanocrystals. <i>Materials Today Communications</i> , 2021, 26, 102152.	0.9	1
218	Microsphere-assisted manipulation of a single Ag nanowire. <i>Nanophotonics</i> , 2021, 10, 2729-2736.	2.9	1
219	SILVER NANOPARTICLES SYNTHESIZED BY LASER ABLATION IN LIQUIDS AND APPLICATION FOR SURFACE-ENHANCED RAMAN SCATTERING. , 2013, , .		1
220	Fabrication of triode field emission display using metal-gate-plate. , 2007, , .		0
221	Nanodiamonds: Nanodiamond-Embedded p-Type Copper(I) Oxide Nanocrystals for Broad-Spectrum Photocatalytic Hydrogen Evolution ( <i>Adv. Energy Mater.</i> 4/2016). <i>Advanced Energy Materials</i> , 2016, 6, n/a-n/a.	10.2	0