

# Zhong-Ming Wei

## List of Publications by Year in descending order

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181  
papers

9,467  
citations

29994

54  
h-index

46693

89  
g-index

188  
all docs

188  
docs citations

188  
times ranked

10178  
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning in materials science. <i>Informa</i> Mater, 2019, 1, 338-358.	8.5	427
2	Novel and Enhanced Optoelectronic Performances of Multilayer MoS <sub>2</sub> /WS <sub>2</sub> Heterostructure Transistors. <i>Advanced Functional Materials</i> , 2014, 24, 7025-7031.	7.8	388
3	Photoresponsive and Gas Sensing Field-Effect Transistors based on Multilayer WS <sub>2</sub> Nanoflakes. <i>Scientific Reports</i> , 2014, 4, 5209.	1.6	377
4	A two-dimensional Fe-doped SnS <sub>2</sub> magnetic semiconductor. <i>Nature Communications</i> , 2017, 8, 1958.	5.8	315
5	Short-Wave Near-Infrared Linear Dichroism of Two-Dimensional Germanium Selenide. <i>Journal of the American Chemical Society</i> , 2017, 139, 14976-14982.	6.6	286
6	Recent Advances in the Functional 2D Photonic and Optoelectronic Devices. <i>Advanced Optical Materials</i> , 2019, 7, 1801274.	3.6	209
7	Van der Waals epitaxial growth of air-stable CrSe <sub>2</sub> nanosheets with thickness-tunable magnetic order. <i>Nature Materials</i> , 2021, 20, 818-825.	13.3	206
8	Electric-Field Tunable Band Offsets in Black Phosphorus and MoS <sub>2</sub> van der Waals p-n Heterostructure. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2483-2488.	2.1	193
9	Band-like transport in small-molecule thin films toward high mobility and ultrahigh detectivity phototransistor arrays. <i>Nature Communications</i> , 2019, 10, 12.	5.8	172
10	Black Arsenic: A Layered Semiconductor with Extreme In-plane Anisotropy. <i>Advanced Materials</i> , 2018, 30, e1800754.	11.1	161
11	Perpendicular Optical Reversal of the Linear Dichroism and Polarized Photodetection in 2D GeAs. <i>ACS Nano</i> , 2018, 12, 12416-12423.	7.3	157
12	Graphyne and Its Family: Recent Theoretical Advances. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 2692-2706.	4.0	156
13	Direct Vapor Phase Growth and Optoelectronic Application of Large Band Offset SnS <sub>2</sub> /MoS <sub>2</sub> Vertical Bilayer Heterostructures with High Lattice Mismatch. <i>Advanced Electronic Materials</i> , 2016, 2, 1600298.	2.6	155
14	Nanowire Crystals of a Rigid Rod Conjugated Polymer. <i>Journal of the American Chemical Society</i> , 2009, 131, 17315-17320.	6.6	141
15	A type-II GeSe/SnS heterobilayer with a suitable direct gap, superior optical absorption and broad spectrum for photovoltaic applications. <i>Journal of Materials Chemistry A</i> , 2017, 5, 13400-13410.	5.2	138
16	Enhanced rectification, transport property and photocurrent generation of multilayer ReSe <sub>2</sub> /MoS <sub>2</sub> p-n heterojunctions. <i>Nano Research</i> , 2016, 9, 507-516.	5.8	132
17	Thickness-Dependent Carrier Transport Characteristics of a New 2D Elemental Semiconductor: Black Arsenic. <i>Advanced Functional Materials</i> , 2018, 28, 1802581.	7.8	125
18	Recent Advances of 2D Materials in Nonlinear Photonics and Fiber Lasers. <i>Advanced Optical Materials</i> , 2020, 8, 1901631.	3.6	122

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19	Toward High-Performance Photodetectors Based on 2D Materials: Strategy on Methods. <i>Small Methods</i> , 2018, 2, 1700349.	4.6	118
20	Tunable Polarity Behavior and Self-Driven Photoswitching in $\text{WSe}_2/\text{WS}_2$ Heterojunctions. <i>Small</i> , 2015, 11, 5430-5438.	5.2	114
21	Two-dimensional $\text{InSe}/\text{GeSe}(\text{SnS})$ van der Waals heterojunctions: High carrier mobility and broadband performance. <i>Physical Review B</i> , 2018, 97, .	1.1	113
22	High-performance single crystalline UV photodetectors of $\text{In}_2\text{Ga}_2\text{O}_3$ . <i>Journal of Alloys and Compounds</i> , 2015, 619, 572-575.	2.8	109
23	Spin-Valve Effect in $\text{Fe}_3\text{GeTe}_2/\text{MoS}_2/\text{Fe}_3\text{GeTe}_2$ van der Waals Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 43921-43926.	4.0	109
24	Various Structures of 2D Transition-Metal Dichalcogenides and Their Applications. <i>Small Methods</i> , 2018, 2, 1800094.	4.6	107
25	Recent advances in low-dimensional semiconductor nanomaterials and their applications in high-performance photodetectors. <i>Information Materials</i> , 2020, 2, 291-317.	8.5	103
26	Thickness-dependent Raman spectra, transport properties and infrared photoresponse of few-layer black phosphorus. <i>Journal of Materials Chemistry C</i> , 2015, 3, 10974-10980.	2.7	98
27	Large-scale $\text{PbI}_2$ monolayers: experimental realization and their indirect band-gap related properties. <i>Nanoscale</i> , 2017, 9, 3736-3741.	2.8	98
28	Flexible photodetectors based on phase dependent $\text{PbI}_2$ single crystals. <i>Journal of Materials Chemistry C</i> , 2016, 4, 6492-6499.	2.7	93
29	Strain induced piezoelectric effect in black phosphorus and $\text{MoS}_2$ van der Waals heterostructure. <i>Scientific Reports</i> , 2015, 5, 16448.	1.6	88
30	Tunable electronic and optical properties of $\text{InSe}/\text{InTe}$ van der Waals heterostructures toward optoelectronic applications. <i>Journal of Materials Chemistry C</i> , 2018, 6, 7201-7206.	2.7	87
31	Gas-dependent photoresponse of $\text{SnS}$ nanoparticles-based photodetectors. <i>Journal of Materials Chemistry C</i> , 2015, 3, 1397-1402.	2.7	86
32	Solution-Processed Ultrathin Chemically Derived Graphene Films as Soft Top Contacts for Solid-State Molecular Electronic Junctions. <i>Advanced Materials</i> , 2012, 24, 1333-1339.	11.1	82
33	Co-nucleus 1D/2D Heterostructures with $\text{Bi}_2\text{S}_3$ Nanowire and $\text{MoS}_2$ Monolayer: One-Step Growth and Defect-Induced Formation Mechanism. <i>ACS Nano</i> , 2016, 10, 8938-8946.	7.3	82
34	Electronic structure and exciton shifts in Sb-doped $\text{MoS}_2$ monolayer. <i>Npj 2D Materials and Applications</i> , 2019, 3, .	3.9	82
35	Composition-tunable $2\text{D SnSe}_{(1-x)}\text{S}_{2x}$ alloys towards efficient bandgap engineering and high performance (opto)electronics. <i>Journal of Materials Chemistry C</i> , 2017, 5, 84-90.	2.7	81
36	Synthesis and Transport Properties of Large-Scale Alloy $\text{Co}_{0.16}\text{Mo}_{0.84}\text{S}_2$ Bilayer Nanosheets. <i>ACS Nano</i> , 2015, 9, 1257-1262.	7.3	79

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37	Ferroelectric-tuned van der Waals heterojunction with band alignment evolution. <i>Nature Communications</i> , 2021, 12, 4030.	5.8	79
38	Anti-Ambipolar Field-Effect Transistors Based On Few-Layer 2D Transition Metal Dichalcogenides. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 15574-15581.	4.0	77
39	Ultrathin Reduced Graphene Oxide Films as Transparent Top-Contacts for Light Switchable Solid-State Molecular Junctions. <i>Advanced Materials</i> , 2013, 25, 4164-4170.	11.1	75
40	Turning a disadvantage into an advantage: synthesizing high-quality organometallic halide perovskite nanosheet arrays for humidity sensors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 2504-2508.	2.7	74
41	High-performance photodetectors based on Sb <sub>2</sub> S <sub>3</sub> nanowires: wavelength dependence and wide temperature range utilization. <i>Nanoscale</i> , 2017, 9, 12364-12371.	2.8	72
42	Ultrasensitive water-processed monolayer photodetectors. <i>Chemical Science</i> , 2011, 2, 796.	3.7	71
43	Tunable Schottky barrier width and enormously enhanced photoresponsivity in Sb doped SnS <sub>2</sub> monolayer. <i>Nano Research</i> , 2019, 12, 463-468.	5.8	71
44	Direct Wide Bandgap 2D GeSe Monolayer toward Anisotropic UV Photodetection. <i>Advanced Optical Materials</i> , 2019, 7, 1900622.	3.6	70
45	Novel Optical and Electrical Transport Properties in Atomically Thin WSe <sub>2</sub> /MoS <sub>2</sub> p-n Heterostructures. <i>Advanced Electronic Materials</i> , 2015, 1, 1400066.	2.6	67
46	Highly polarization sensitive photodetectors based on quasi-1D titanium trisulfide (TiS <sub>3</sub> ). <i>Nanotechnology</i> , 2018, 29, 184002.	1.3	67
47	Optical and electrical properties of two-dimensional anisotropic materials. <i>Journal of Semiconductors</i> , 2019, 40, 061001.	2.0	65
48	Tunable Electronic Structures of GeSe Nanosheets and Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2017, 121, 14373-14379.	1.5	62
49	Relieving the Photosensitivity of Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2020, 32, e1906122.	11.1	61
50	Light induced double spin state anti-ambipolar behavior and self-driven photoswitching in p-WSe <sub>2</sub> /n-SnS <sub>2</sub> heterostructures. <i>2D Materials</i> , 2017, 4, 025097.	2.0	59
51	Type-II InSe/MoSe <sub>2</sub> (WSe <sub>2</sub> ) van der Waals heterostructures: vertical strain and electric field effects. <i>Journal of Materials Chemistry C</i> , 2018, 6, 10010-10019.	2.7	59
52	Versatile Crystal Structures and (Opto)electronic Applications of the 2D Metal Mono-, Di-, and Tri-Chalcogenide Nanosheets. <i>Advanced Functional Materials</i> , 2019, 29, 1900040.	7.8	58
53	Large-Size 2D $\text{Cu}_2\text{S}$ Nanosheets with Giant Phase Transition Temperature Lowering (120 K) Synthesized by a Novel Method of Super-Cooling Chemical Vapor Deposition. <i>Advanced Materials</i> , 2016, 28, 8271-8276.	11.1	57
54	Wavelength dependent UV-Vis photodetectors from SnS <sub>2</sub> flakes. <i>RSC Advances</i> , 2016, 6, 422-427.	1.7	57

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55	Organic Single Crystal Field-effect Transistors Based on 6 <i>H</i> -pyrrolo[3,2- <i>b</i> :4,5- <i>b'</i> ]bis[1,4]benzothiazine and its Derivatives. <i>Advanced Materials</i> , 2010, 22, 2458-2462.	11.1	56
56	Integrated polarization-sensitive amplification system for digital information transmission. <i>Nature Communications</i> , 2021, 12, 6476.	5.8	53
57	Chemical vapor deposition growth of two-dimensional heterojunctions. <i>Science China: Physics, Mechanics and Astronomy</i> , 2018, 61, 1.	2.0	52
58	Direct Polarimetric Image Sensor and Wide Spectral Response Based on Quasi-1D Sb <sub>2</sub> S <sub>3</sub> Nanowire. <i>Advanced Functional Materials</i> , 2021, 31, 2006601.	7.8	52
59	Effectively modulating thermal activated charge transport in organic semiconductors by precise potential barrier engineering. <i>Nature Communications</i> , 2021, 12, 21.	5.8	51
60	Biphase micro/nanometer sized single crystals of organic semiconductors: Control synthesis and their strong phase dependent optoelectronic properties. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	50
61	Highly anisotropic solar-blind UV photodetector based on large-size two-dimensional $\pm$ -MoO <sub>3</sub> atomic crystals. <i>2D Materials</i> , 2018, 5, 035033.	2.0	49
62	Saturable absorption properties and femtosecond mode-locking application of titanium trisulfide. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	49
63	Thickness-Dependent Ultrafast Photonics of SnS <sub>2</sub> Nanolayers for Optimizing Fiber Lasers. <i>ACS Applied Nano Materials</i> , 2019, 2, 2697-2705.	2.4	48
64	Low-Noise Dual-Band Polarimetric Image Sensor Based on 1D Bi <sub>2</sub> S <sub>3</sub> Nanowire. <i>Advanced Science</i> , 2021, 8, e2100075.	5.6	48
65	Tunable Schottky Barrier at MoSe <sub>2</sub> /Metal Interfaces with a Buffer Layer. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9305-9311.	1.5	45
66	Highly Polarized Photoelectrical Response in vdW ZrS <sub>3</sub> Nanoribbons. <i>Advanced Electronic Materials</i> , 2019, 5, 1900419.	2.6	45
67	Large tunneling magnetoresistance in magnetic tunneling junctions based on two-dimensional CrX <sub>3</sub> (X = Br, I) monolayers. <i>Nanoscale</i> , 2018, 10, 22196-22202.	2.8	44
68	Role of redox centre in charge transport investigated by novel self-assembled conjugated polymer molecular junctions. <i>Nature Communications</i> , 2015, 6, 7478.	5.8	43
69	Flexible Sensors Based on Organic-Inorganic Hybrid Materials. <i>Advanced Materials Technologies</i> , 2021, 6, 2000889.	3.0	43
70	Synthesis, experimental and theoretical characterization, and field-effect transistor properties of a new class of dibenzothiophene derivatives: From linear to cyclic architectures. <i>Journal of Materials Chemistry</i> , 2012, 22, 1313-1325.	6.7	41
71	Type-I Transition Metal Dichalcogenides Lateral Homojunctions: Layer Thickness and External Electric Field Effects. <i>Small</i> , 2018, 14, e1800365.	5.2	41
72	In-Plane Optical and Electrical Anisotropy of 2D Black Arsenic. <i>ACS Nano</i> , 2021, 15, 1701-1709.	7.3	41

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73	Cross-Substitution Promoted Ultrawide Bandgap up to 4.5 eV in a 2D Semiconductor: Gallium Thiophosphate. <i>Advanced Materials</i> , 2021, 33, e2008761.	11.1	41
74	Polarization Sensitive Solar-Blind Ultraviolet Photodetectors Based on Ultrawide Bandgap $\text{KNb}_3\text{O}_8$ Nanobelt with Fringe-Like Atomic Lattice. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	41
75	Tetrathia[2,2]annulene[2,1,2,1]: physical properties, crystal structure and application in organic field-effect transistors. <i>Journal of Materials Chemistry</i> , 2007, 17, 4377.	6.7	40
76	From $\text{MoS}_2$ Microspheres to $\text{MoO}_3$ Nanoplates: Growth Mechanism and Photocatalytic Activities. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 3245-3251.	1.0	40
77	Electrostatic gating dependent multiple-band alignments in a high-temperature ferromagnetic Mg(OH) heterobilayer. <i>Physical Review B</i> , 2017, 95, .	1.1	39
78	Mixed-Valence-Driven Quasi-1D $\text{Sn}^{\text{II}}\text{Sn}^{\text{IV}}\text{S}_3$ with Highly Polarization Sensitive UV-Vis-NIR Photoresponse. <i>Advanced Functional Materials</i> , 2019, 29, 1904416.	7.8	39
79	Molecular Junctions Based on SAMs of Cruciform Oligo(phenylene ethynylene)s. <i>Langmuir</i> , 2012, 28, 4016-4023.	1.6	38
80	Reversible Half Wave Rectifier Based on 2D InSe/GeSe Heterostructure with Near-Broken Band Alignment. <i>Advanced Science</i> , 2021, 8, 1903252.	5.6	38
81	Langmuir-Blodgett Monolayer as an Efficient p-Conducting Channel of Ambipolar Organic Transistors and a Template for n-Type Molecular Alignment. <i>Langmuir</i> , 2009, 25, 3349-3351.	1.6	33
82	6H-Pyrrolo[3,2-b:4,5-b']bis[1,4]benzothiazines: facilely synthesized semiconductors for organic field-effect transistors. <i>Journal of Materials Chemistry</i> , 2008, 18, 4814.	6.7	32
83	Symmetry-Reduction Enhanced Polarization Sensitive Photodetection in Core-Shell $\text{SbI}_3/\text{Sb}_2\text{O}_3$ van der Waals Heterostructure. <i>Small</i> , 2020, 16, e1907172.	5.2	32
84	Short-Wave Near-Infrared Polarization Sensitive Photodetector Based on GaSb Nanowire. <i>IEEE Electron Device Letters</i> , 2021, 42, 549-552.	2.2	31
85	Gate-tunable diode-like current rectification and ambipolar transport in multilayer van der Waals $\text{ReSe}_2/\text{WS}_2$ p-n heterojunctions. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 27750-27753.	1.3	30
86	Iron-doping induced multiferroic in two-dimensional $\text{In}_2\text{Se}_3$ . <i>Science China Materials</i> , 2020, 63, 421-428.	3.5	30
87	Electric-Field-Induced Room-Temperature Antiferroelectric-Ferroelectric Phase Transition in van der Waals Layered GeSe. <i>ACS Nano</i> , 2022, 16, 1308-1317.	7.3	30
88	Inkjet-Printed Organic Electrodes for Bottom-Contact Organic Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2011, 21, 786-791.	7.8	29
89	Triazatriangulene as Binding Group for Molecular Electronics. <i>Langmuir</i> , 2014, 30, 14868-14876.	1.6	29
90	Molecular Heterojunctions of Oligo(phenylene ethynylene)s with Linear to Cruciform Framework. <i>Advanced Functional Materials</i> , 2015, 25, 1700-1708.	7.8	29

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91	Nonvolatile memristor based on heterostructure of 2D room-temperature ferroelectric $\text{In}_2\text{Se}_3$ and $\text{WSe}_2$ . <i>Science China Information Sciences</i> , 2019, 62, 1.	2.7	29
92	Polarimetric Image Sensor and Fermi Level Shifting Induced Multichannel Transition Based on 2D PdPS. <i>Advanced Materials</i> , 2022, 34, e2107206.	11.1	29
93	Gate-Tunable Ultrahigh Photoresponsivity of 2D Heterostructures Based on Few Layer $\text{MoS}_2$ and Solution-Processed rGO. <i>Advanced Electronic Materials</i> , 2015, 1, 1500267.	2.6	28
94	Electric field induced electronic properties modification of $\text{ZrS}_2/\text{HfS}_2$ van der Waals heterostructure. <i>RSC Advances</i> , 2017, 7, 14625-14630.	1.7	28
95	An Efficient and Low-Cost Photolithographic Pattern Transfer Technique to Fabricate Electrode Arrays for Micro/Nanoelectronics. <i>Advanced Materials Technologies</i> , 2016, 1, 1600001.	3.0	27
96	The More, the Better—Recent Advances in Construction of 2D Multi-Heterostructures. <i>Advanced Functional Materials</i> , 2021, 31, 2102049.	7.8	27
97	Development of organic field-effect properties by introducing aryl-acetylene into benzodithiophene. <i>Journal of Materials Chemistry</i> , 2010, 20, 10931.	6.7	26
98	Blending induced stack-ordering and performance improvement in a solution-processed n-type organic field-effect transistor. <i>Journal of Materials Chemistry</i> , 2010, 20, 1203-1207.	6.7	26
99	Low temperature electrical transport and photoresponsive properties of H-doped $\text{MoO}_3$ nanosheets. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1034-1040.	2.7	26
100	Role of defects in enhanced Fermi level pinning at interfaces between metals and transition metal dichalcogenides. <i>Physical Review B</i> , 2017, 96, .	1.1	26
101	Type-I $\text{Ca}(\text{OH})_2/\text{MoTe}_2$ vdW heterostructure for ultraviolet optoelectronic device applications: electric field effects. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12629-12634.	2.7	25
102	The Coulomb interaction in van der Waals heterostructures. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	2.0	25
103	Extrinsic Photoconduction Induced Short-Wavelength Infrared Photodetectors Based on Ge-Based Chalcogenides. <i>Small</i> , 2021, 17, e2006765.	5.2	25
104	Langmuir-Blogett monolayer transistors of copper phthalocyanine. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	24
105	Multistate Logic Inverter Based on Black Phosphorus/SnSeS Heterostructure. <i>Advanced Electronic Materials</i> , 2019, 5, 1800416.	2.6	24
106	Non-layered ZnSb nanoplates for room temperature infrared polarized photodetectors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6388-6395.	2.7	24
107	Quasiparticle Band Structure and Optical Properties of the Janus Monolayer and Bilayer SnSSe. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23832-23838.	1.5	23
108	From negative to positive magnetoresistance in the intrinsic magnetic topological insulator $\text{MnBi}_2\text{Te}_4$ . <i>Physical</i>	1.1	23

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109	Intrinsic Linear Dichroism of Organic Single Crystals toward High-Performance Polarization-Sensitive Photodetectors. <i>Advanced Materials</i> , 2022, 34, e2105665.	11.1	23
110	Abnormal low-temperature behavior of a continuous photocurrent in Bi <sub>2</sub> S <sub>3</sub> nanowires. <i>Journal of Materials Chemistry C</i> , 2013, 1, 5866.	2.7	22
111	Two-dimensional XSe <sub>2</sub> (X= Mn, V) based magnetic tunneling junctions with high Curie temperature*. <i>Chinese Physics B</i> , 2019, 28, 107504.	0.7	22
112	Near-Infrared Polarimetric Image Sensors Based on Ordered Sulfur-Passivation GaSb Nanowire Arrays. <i>ACS Nano</i> , 2022, 16, 8128-8140.	7.3	22
113	Electric field-tunable electronic structures of 2D alkaline-earth metal hydroxide-graphene heterostructures. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7230-7235.	2.7	21
114	Intercalation of Two-dimensional Layered Materials. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 584-596.	1.3	21
115	Direct Synthesis and Enhanced Rectification of Alloyed Alloy 2D Type-II MoS <sub>2</sub> (1-x)Se <sub>2x</sub> /SnS <sub>2</sub> (1-x)S <sub>2y</sub> /SnS <sub>2</sub> Heterostructures. <i>Advanced Materials</i> , 2021, 33, e2006908.		
116	Polarizer-free polarimetric image sensor through anisotropic two-dimensional GeSe. <i>Science China Materials</i> , 2021, 64, 1230-1237.	3.5	21
117	Perseverance of direct bandgap in multilayer 2D Pb <sub>2</sub> under an experimental strain up to 7.69%. <i>2D Materials</i> , 2019, 6, 025014.	2.0	20
118	Growth of two-dimensional materials on hexagonal boron nitride (h-BN). <i>Nanotechnology</i> , 2019, 30, 034003.	1.3	19
119	Visible Phototransistors Based on Vertical Nanolayered Heterostructures of SnS/SnS <sub>2</sub> p-n and SnSe <sub>2</sub> /SnS <sub>2</sub> n-n Nanoflakes. <i>ACS Applied Nano Materials</i> , 2020, 3, 6847-6854.	2.4	19
120	Air-stable ambipolar organic field-effect transistor based on a novel bi-channel structure. <i>Journal of Materials Chemistry</i> , 2008, 18, 2420.	6.7	18
121	Effect of Electrical Contact on the Performance of Bi <sub>2</sub> S <sub>3</sub> Single Nanowire Photodetectors. <i>ChemPhysChem</i> , 2014, 15, 2510-2516.	1.0	18
122	Oxygen-induced abnormal photoelectric behavior of a MoO <sub>3</sub> /graphene heterocomposite. <i>RSC Advances</i> , 2014, 4, 49873-49878.	1.7	18
123	Improving the Field-Effect Performance of Bi <sub>2</sub> S <sub>3</sub> Single Nanowires by an Asymmetric Device Fabrication. <i>ChemPhysChem</i> , 2015, 16, 99-103.	1.0	18
124	2D Ultrawide Bandgap Semiconductors: Odyssey and Challenges. <i>Small Methods</i> , 2022, 6, e2101348.	4.6	18
125	Birefringence and Dichroism in Quasi-1D Transition Metal Trichalcogenides: Direct Experimental Investigation. <i>Small</i> , 2021, 17, e2100457.	5.2	17
126	Polarization-sensitive and wide-spectrum photovoltaic detector based on quasi-1D ZrGeTe <sub>4</sub> nanoribbon. <i>Informa Mater</i> , 2022, 4, .	8.5	17



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127	p-MoS <sub>2</sub> /n-InSe van der Waals heterojunctions and their applications in all-2D optoelectronic devices. RSC Advances, 2019, 9, 35039-35044.	1.7	15
128	Strong Anisotropy and Piezoelectric Phototronic Effect in SnO <sub>2</sub> Microwires. Advanced Electronic Materials, 2020, 6, 1901441.	2.6	15
129	Tunable Alloying Improved Wide Spectrum UV-Vis-NIR and Polarization-Sensitive Photodetector Based on Sb <sub>2</sub> Se Nanowires. IEEE Transactions on Electron Devices, 2021, 68, 3887-3893.	1.6	15
130	Gate-controlled ambipolar transport in b-AsP crystals and their VIS-NIR photodetection. Nanoscale, 2021, 13, 10579-10586.	2.8	15
131	Ultra-sensitive humidity sensors based on ZnSb <sub>2</sub> O <sub>4</sub> nanoparticles. RSC Advances, 2015, 5, 2429-2433.	1.7	14
132	Application of transition metal dichalcogenides in mid-infrared fiber laser. Nano Select, 2021, 2, 37-46.	1.9	13
133	Nondegenerate p-type In <sub>2</sub> O <sub>3</sub> -Doped SnS <sub>2</sub> Monolayer Transistor. Advanced Electronic Materials, 2021, 7, 2001168.	2.6	13
134	Large Perpendicular Magnetic Anisotropy in Ta/CoFeB/MgO on Full-Coverage Monolayer MoS <sub>2</sub> and First-Principles Study of Its Electronic Structure. ACS Applied Materials & Interfaces, 2021, 13, 32579-32589.	4.0	11
135	Recent progress in polarization-sensitive photodetectors based on low-dimensional semiconductors. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 163201.	0.2	11
136	Room-temperature Near-infrared Excitonic Lasing from Mechanically Exfoliated InSe Microflake. ACS Nano, 2022, 16, 1477-1485.	7.3	11
137	Engineering Near-Infrared Light Emission in Mechanically Exfoliated InSe Platelets through Hydrostatic Pressure for Multicolor Microlasing. Nano Letters, 2022, 22, 3840-3847.	4.5	11
138	Multifunctional Photodetectors Based on Nanolayered Black Phosphorus/SnS <sub>0.5</sub> Se <sub>1.5</sub> Heterostructures. ACS Applied Nano Materials, 2019, 2, 3548-3555.	2.4	10
139	Twist-angle two-dimensional superlattices and their application in (opto)electronics. Journal of Semiconductors, 2022, 43, 011001.	2.0	10
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