Zhong-Ming Wei

List of Publications by Citations

172	6,200	46	72
papers	citations	h-index	g-index
188	7,783	9.1	6.16
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
172	Novel and Enhanced Optoelectronic Performances of Multilayer MoS2–WS2 Heterostructure Transistors. *Advanced Functional Materials*, **2014**, 24, 7025-7031	15.6	320
171	Photoresponsive and gas sensing field-effect transistors based on multilayer WS2 nanoflakes. *Scientific Reports*, **2014**, 4, 5209	4.9	313
170	A two-dimensional Fe-doped SnS magnetic semiconductor. *Nature Communications*, **2017**, 8, 1958	17.4	214
169	Short-Wave Near-Infrared Linear Dichroism of Two-Dimensional Germanium Selenide. *Journal of the American Chemical Society*, **2017**, 139, 14976-14982	16.4	191
168	Recent Advances in the Functional 2D Photonic and Optoelectronic Devices. *Advanced Optical Materials*, **2019**, 7, 1801274	8.1	158
167	Electric-Field Tunable Band Offsets in Black Phosphorus and MoS2 van der Waals p-n Heterostructure. *Journal of Physical Chemistry Letters*, **2015**, 6, 2483-8	6.4	153
166	Machine learning in materials science. *Informatics Materials*, **2019**, 1, 338-358	23.1	141
165	Direct Vapor Phase Growth and Optoelectronic Application of Large Band Offset SnS2/MoS2 Vertical Bilayer Heterostructures with High Lattice Mismatch. *Advanced Electronic Materials*, **2016**, 2, 1600298	6.4	128
164	Nanowire crystals of a rigid rod conjugated polymer. *Journal of the American Chemical Society*, **2009**, 131, 17315-20	16.4	123
163	Black Arsenic: A Layered Semiconductor with Extreme In-Plane Anisotropy. *Advanced Materials*, **2018**, 30, e1800754	24	109
162	A type-II GeSe/SnS heterobilayer with a suitable direct gap, superior optical absorption and broad spectrum for photovoltaic applications. *Journal of Materials Chemistry A*, **2017**, 5, 13400-13410	13	108
161	Enhanced rectification, transport property and photocurrent generation of multilayer ReSe2/MoS2 p–n heterojunctions. *Nano Research*, **2016**, 9, 507-516	10	107
160	Band-like transport in small-molecule thin films toward high mobility and ultrahigh detectivity phototransistor arrays. *Nature Communications*, **2019**, 10, 12	17.4	107
159	Perpendicular Optical Reversal of the Linear Dichroism and Polarized Photodetection in 2D GeAs. *ACS Nano*, **2018**, 12, 12416-12423	16.7	100
158	High-performance single crystalline UV photodetectors of β-Ga2O3. *Journal of Alloys and Compounds*, **2015**, 619, 572-575	5.7	90
157	Thickness-dependent Raman spectra, transport properties and infrared photoresponse of few-layer black phosphorus. *Journal of Materials Chemistry C*, **2015**, 3, 10974-10980	7.1	85
156	Tunable Polarity Behavior and Self-Driven Photoswitching in p-WSe2/n-WS2 Heterojunctions. *Small*, **2015**, 11, 5430-8	11	84

155	Toward High-Performance Photodetectors Based on 2D Materials: Strategy on Methods. *Small Methods*, **2018**, 2, 1700349	12.8	83
154	Graphyne and Its Family: Recent Theoretical Advances. *ACS Applied Materials & Interfaces*, **2019**, 11, 2692-2706	9.5	82
153	Thickness-Dependent Carrier Transport Characteristics of a New 2D Elemental Semiconductor: Black Arsenic. *Advanced Functional Materials*, **2018**, 28, 1802581	15.6	80
152	Two-dimensional n-InSe/p-GeSe(SnS) van der Waals heterojunctions: High carrier mobility and broadband performance. *Physical Review B*, **2018**, 97,	3.3	79
151	Recent Advances of 2D Materials in Nonlinear Photonics and Fiber Lasers. *Advanced Optical Materials*, **2020**, 8, 1901631	8.1	78
150	Flexible photodetectors based on phase dependent PbI2 single crystals. *Journal of Materials Chemistry C*, **2016**, 4, 6492-6499	7.1	77
149	Gas-dependent photoresponse of SnS nanoparticles-based photodetectors. *Journal of Materials Chemistry C*, **2015**, 3, 1397-1402	7.1	76
148	Large-scale 2D PbI monolayers: experimental realization and their indirect band-gap related properties. *Nanoscale*, **2017**, 9, 3736-3741	7.7	75
147	Solution-processed ultrathin chemically derived graphene films as soft top contacts for solid-state molecular electronic junctions. *Advanced Materials*, **2012**, 24, 1333-9	24	75
146	Strain induced piezoelectric effect in black phosphorus and MoS2 van der Waals heterostructure. *Scientific Reports*, **2015**, 5, 16448	4.9	73
145	Ultrathin reduced graphene oxide films as transparent top-contacts for light switchable solid-state molecular junctions. *Advanced Materials*, **2013**, 25, 4164-70	24	68
144	Van der Waals epitaxial growth of air-stable CrSe nanosheets with thickness-tunable magnetic order. *Nature Materials*, **2021**, 20, 818-825	27	68
143	Synthesis and transport properties of large-scale alloy Co(0.16)Mo(0.84)S2 bilayer nanosheets. *ACS Nano*, **2015**, 9, 1257-62	16.7	64
142	Composition-tunable 2D SnSe2(1□)S2x alloys towards efficient bandgap engineering and high performance (opto)electronics. *Journal of Materials Chemistry C*, **2017**, 5, 84-90	7.1	64
141	Tunable electronic and optical properties of InSe/InTe van der Waals heterostructures toward optoelectronic applications. *Journal of Materials Chemistry C*, **2018**, 6, 7201-7206	7.1	63
140	Ultrasensitive water-processed monolayer photodetectors. *Chemical Science*, **2011**, 2, 796	9.4	60
139	Anti-Ambipolar Field-Effect Transistors Based On Few-Layer 2D Transition Metal Dichalcogenides. *ACS Applied Materials & Interfaces*, **2016**, 8, 15574-81	9.5	56
138	Electronic structure and exciton shifts in Sb-doped MoS2 monolayer. *Npj 2D Materials and Applications*, **2019**, 3,	8.8	56

137	Co-nucleus 1D/2D Heterostructures with Bi2S3 Nanowire and MoS2 Monolayer: One-Step Growth and Defect-Induced Formation Mechanism. *ACS Nano*, **2016**, 10, 8938-46	16.7	55
136	Recent advances in low-dimensional semiconductor nanomaterials and their applications in high-performance photodetectors. *Informa Materly*, **2020**, 2, 291-317	23.1	54
135	Turning a disadvantage into an advantage: synthesizing high-quality organometallic halide perovskite nanosheet arrays for humidity sensors. *Journal of Materials Chemistry C*, **2017**, 5, 2504-2508	7.1	52
134	High-performance photodetectors based on SbS nanowires: wavelength dependence and wide temperature range utilization. *Nanoscale*, **2017**, 9, 12364-12371	7.7	52
133	Novel Optical and Electrical Transport Properties in Atomically Thin WSe2/MoS2 p Heterostructures. *Advanced Electronic Materials*, **2015**, 1, 1400066	6.4	52
132	Tunable Schottky barrier width and enormously enhanced photoresponsivity in Sb doped SnS2 monolayer. *Nano Research*, **2019**, 12, 463-468	10	50
131	Various Structures of 2D Transition-Metal Dichalcogenides and Their Applications. *Small Methods*, **2018**, 2, 1800094	12.8	49
130	Wavelength dependent UV-Vis photodetectors from SnS2 flakes. *RSC Advances*, **2016**, 6, 422-427	3.7	48
129	Organic single crystal field-effect transistors based on 6H-pyrrolo[3,2-b:4,5-b]bis[1,4]benzothiazine and its derivatives. *Advanced Materials*, **2010**, 22, 2458-62	24	48
128	Light induced double n state anti-ambipolar behavior and self-driven photoswitching in p-WSe 2 /n-SnS 2 heterostructures. *2D Materials*, **2017**, 4, 025097	5.9	46
127	Large-Size 2D Cu S Nanosheets with Giant Phase Transition Temperature Lowering (120 K) Synthesized by a Novel Method of Super-Cooling Chemical-Vapor-Deposition. *Advanced Materials*, **2016**, 28, 8271-8276	24	46
126	Tunable Electronic Structures of GeSe Nanosheets and Nanoribbons. *Journal of Physical Chemistry C* , **2017**, 121, 14373-14379	3.8	44
125	Biphase micro/nanometer sized single crystals of organic semiconductors: Control synthesis and their strong phase dependent optoelectronic properties. *Applied Physics Letters*, **2010**, 96, 143302	3.4	44
124	Optical and electrical properties of two-dimensional anisotropic materials. *Journal of Semiconductors*, **2019**, 40, 061001	2.3	42
123	Chemical vapor deposition growth of two-dimensional heterojunctions. *Science China: Physics, Mechanics and Astronomy*, **2018**, 61, 1	3.6	42
122	Highly polarization sensitive photodetectors based on quasi-1D titanium trisulfide (TiS). *Nanotechnology*, **2018**, 29, 184002	3.4	40
121	Synthesis, experimental and theoretical characterization, and field-effect transistor properties of a new class of dibenzothiophene derivatives: From linear to cyclic architectures. *Journal of Materials Chemistry*, **2012**, 22, 1313-1325		40
120	Spin-Valve Effect in FeGeTe/MoS/FeGeTe van der Waals Heterostructures. *ACS Applied Materials & Interfaces*, **2020**, 12, 43921-43926	9.5	39

119	Type-II InSe/MoSe2(WSe2) van der Waals heterostructures: vertical strain and electric field effects. *Journal of Materials Chemistry C*, **2018**, 6, 10010-10019	7.1	38
118	Versatile Crystal Structures and (Opto)electronic Applications of the 2D Metal Mono-, Di-, and Tri-Chalcogenide Nanosheets. *Advanced Functional Materials*, **2019**, 29, 1900040	15.6	37
117	Role of redox centre in charge transport investigated by novel self-assembled conjugated polymer molecular junctions. *Nature Communications*, **2015**, 6, 7478	17.4	37
116	Tetrathia[22]annulene[2,1,2,1]: physical properties, crystal structure and application in organic field-effect transistors. *Journal of Materials Chemistry*, **2007**, 17, 4377		37
115	Saturable absorption properties and femtosecond mode-locking application of titanium trisulfide. *Applied Physics Letters*, **2020**, 116, 061901	3.4	36
114	Direct Wide Bandgap 2D GeSe2 Monolayer toward Anisotropic UV Photodetection. *Advanced Optical Materials*, **2019**, 7, 1900622	8.1	36
113	From MoS2 Microspheres to □MoO3 Nanoplates: Growth Mechanism and Photocatalytic Activities. *European Journal of Inorganic Chemistry*, **2014**, 2014, 3245-3251	2.3	36
112	Thickness-Dependent Ultrafast Photonics of SnS2 Nanolayers for Optimizing Fiber Lasers. *ACS Applied Nano Materials*, **2019**, 2, 2697-2705	5.6	35
111	Relieving the Photosensitivity of Organic Field-Effect Transistors. *Advanced Materials*, **2020**, 32, e1906122	24	34
110	Molecular junctions based on SAMs of cruciform oligo(phenylene ethynylene)s. *Langmuir*, **2012**, 28, 4016-23		33
109	Highly anisotropic solar-blind UV photodetector based on large-size two-dimensional □MoO 3 atomic crystals. *2D Materials*, **2018**, 5, 035033	5.9	32
108	Tunable Schottky Barrier at MoSe2/Metal Interfaces with a Buffer Layer. *Journal of Physical Chemistry C*, **2017**, 121, 9305-9311	3.8	31
107	Langmuir-Blodgett monolayer as an efficient p-conducting channel of ambipolar organic transistors and a template for n-type molecular alignment. *Langmuir*, **2009**, 25, 3349-51	4	31
106	Type-I Transition Metal Dichalcogenides Lateral Homojunctions: Layer Thickness and External Electric Field Effects. *Small*, **2018**, 14, e1800365	11	30
105	High-Performance Langmuir□Blodgett Monolayer Transistors with High Responsivity. *Angewandte Chemie*, **2010**, 122, 6463-6467	3.6	30
104	Highly Polarized Photoelectrical Response in vdW ZrS3 Nanoribbons. *Advanced Electronic Materials*, **2019**, 5, 1900419	6.4	29
103	6H-Pyrrolo[3,2-b:4,5-b?]bis[1,4]benzothiazines: facilely synthesized semiconductors for organic field-effect transistors. *Journal of Materials Chemistry*, **2008**, 18, 4814		27
102	Inkjet-Printed Organic Electrodes for Bottom-Contact Organic Field-Effect Transistors. *Advanced Functional Materials*, **2011**, 21, 786-791	15.6	26

101	Blending induced stack-ordering and performance improvement in a solution-processed n-type organic field-effect transistor. *Journal of Materials Chemistry*, **2010**, 20, 1203-1207		26
100	Large tunneling magnetoresistance in magnetic tunneling junctions based on two-dimensional CrX (X = Br, I) monolayers. *Nanoscale*, **2018**, 10, 22196-22202	7.7	26
99	Low temperature electrical transport and photoresponsive properties of H-doped MoO3 nanosheets. *Journal of Materials Chemistry C*, **2014**, 2, 1034-1040	7.1	25
98	Gate-Tunable Ultrahigh Photoresponsivity of 2D Heterostructures Based on Few Layer MoS2 and Solution-Processed rGO. *Advanced Electronic Materials*, **2015**, 1, 1500267	6.4	25
97	Molecular Heterojunctions of Oligo(phenylene ethynylene)s with Linear to Cruciform Framework. *Advanced Functional Materials*, **2015**, 25, 1700-1708	15.6	25
96	Electrostatic gating dependent multiple-band alignments in a high-temperature ferromagnetic Mg(OH)2/VS2 heterobilayer. *Physical Review B*, **2017**, 95,	3.3	24
95	Triazatriangulene as binding group for molecular electronics. *Langmuir*, **2014**, 30, 14868-76	4	24
94	Development of organic field-effect properties by introducing aryl-acetylene into benzodithiophene. *Journal of Materials Chemistry*, **2010**, 20, 10931		24
93	Gate-tunable diode-like current rectification and ambipolar transport in multilayer van der Waals ReSe/WS p-n heterojunctions. *Physical Chemistry Chemical Physics*, **2016**, 18, 27750-27753	3.6	23
92	An Efficient and Low-Cost Photolithographic-Pattern-Transfer Technique to Fabricate Electrode Arrays for Micro-/Nanoelectronics. *Advanced Materials Technologies*, **2016**, 1, 1600001	6.8	23
91	Electric field induced electronic properties modification of ZrS2/HfS2 van der Waals heterostructure. *RSC Advances*, **2017**, 7, 14625-14630	3.7	22
90	Mixed-Valence-Driven Quasi-1D SnIISnIVS3 with Highly Polarization-Sensitive UV□vis□NIR Photoresponse. *Advanced Functional Materials*, **2019**, 29, 1904416	15.6	22
89	Langmuir□Blogett monolayer transistors of copper phthalocyanine. *Applied Physics Letters*, **2009**, 95, 033304	3.4	21
88	Type-I Ca(OH)2/□MoTe2 vdW heterostructure for ultraviolet optoelectronic device applications: electric field effects. *Journal of Materials Chemistry C*, **2017**, 5, 12629-12634	7.1	20
87	Role of defects in enhanced Fermi level pinning at interfaces between metals and transition metal dichalcogenides. *Physical Review B*, **2017**, 96,	3.3	20
86	Electric field-tunable electronic structures of 2D alkaline-earth metal hydroxide□raphene heterostructures. *Journal of Materials Chemistry C*, **2017**, 5, 7230-7235	7.1	20
85	The Coulomb interaction in van der Waals heterostructures. *Science China: Physics, Mechanics and Astronomy*, **2019**, 62, 1	3.6	19
84	Symmetry-Reduction Enhanced Polarization-Sensitive Photodetection in Core-Shell SbI /Sb O van der Waals Heterostructure. *Small*, **2020**, 16, e1907172	11	18

83	Ferroelectric-tuned van der Waals heterojunction with band alignment evolution. *Nature Communications*, **2021**, 12, 4030	17.4	18
82	Effectively modulating thermal activated charge transport in organic semiconductors by precise potential barrier engineering. *Nature Communications*, **2021**, 12, 21	17.4	18
81	Abnormal low-temperature behavior of a continuous photocurrent in Bi2S3 nanowires. *Journal of Materials Chemistry C*, **2013**, 1, 5866	7.1	17
80	Effect of electrical contact on the performance of Bi□□single nanowire photodetectors. *ChemPhysChem*, **2014**, 15, 2510-6	3.2	17
79	Air-stable ambipolar organic field-effect transistor based on a novel bi-channel structure. *Journal of Materials Chemistry*, **2008**, 18, 2420		17
78	Nonvolatile memristor based on heterostructure of 2D room-temperature ferroelectric □n2Se3 and WSe2. *Science China Information Sciences*, **2019**, 62, 1	3.4	16
77	Iron-doping induced multiferroic in two-dimensional In2Se3. *Science China Materials*, **2020**, 63, 421-428	7.1	16
76	Low-Noise Dual-Band Polarimetric Image Sensor Based on 1D Bi S Nanowire. *Advanced Science*, **2021**, 8, e2100075	13.6	16
75	Multistate Logic Inverter Based on Black Phosphorus/SnSeS Heterostructure. *Advanced Electronic Materials*, **2019**, 5, 1800416	6.4	16
74	Direct Polarimetric Image Sensor and Wide Spectral Response Based on Quasi-1D Sb2S3 Nanowire. *Advanced Functional Materials*, **2021**, 31, 2006601	15.6	16
73	Improving the field-effect performance of Bi2S3 single nanowires by an asymmetric device fabrication. *ChemPhysChem*, **2015**, 16, 99-103	3.2	15
72	Perseverance of direct bandgap in multilayer 2D PbI 2 under an experimental strain up to 7.69%. *2D Materials*, **2019**, 6, 025014	5.9	14
71	Non-layered ZnSb nanoplates for room temperature infrared polarized photodetectors. *Journal of Materials Chemistry C*, **2020**, 8, 6388-6395	7.1	14
70	In-Plane Optical and Electrical Anisotropy of 2D Black Arsenic. *ACS Nano*, **2021**, 15, 1701-1709	16.7	14
69	Cross-Substitution Promoted Ultrawide Bandgap up to 4.5□eV in a 2D Semiconductor: Gallium Thiophosphate. *Advanced Materials*, **2021**, 33, e2008761	24	13
68	Reversible Half Wave Rectifier Based on 2D InSe/GeSe Heterostructure with Near-Broken Band Alignment. *Advanced Science*, **2021**, 8, 1903252	13.6	13
67	Two-dimensional X Se 2 (X = Mn, V) based magnetic tunneling junctions with high Curie temperature. *Chinese Physics B*, **2019**, 28, 107504	1.2	12
66	From negative to positive magnetoresistance in the intrinsic magnetic topological insulator MnBi2Te4. *Physical Review B*, **2020**, 101,	3.3	12

65	Growth of two-dimensional materials on hexagonal boron nitride (h-BN). *Nanotechnology*, **2019**, 30, 034003	3.4	11
64	Ultra-sensitive humidity sensors based on ZnSb2O4 nanoparticles. *RSC Advances*, **2015**, 5, 2429-2433	3.7	10
63	Oxygen-induced abnormal photoelectric behavior of a MoO3/graphene heterocomposite. *RSC Advances*, **2014**, 4, 49873-49878	3.7	10
62	Polarization Sensitive Solar-Blind Ultraviolet Photodetectors Based on Ultrawide Bandgap KNb 3 O 8 Nanobelt with Fringe-Like Atomic Lattice. *Advanced Functional Materials*,2111673	15.6	10
61	Integrated polarization-sensitive amplification system for digital information transmission. *Nature Communications*, **2021**, 12, 6476	17.4	10
60	Intercalation of Two-dimensional Layered Materials. *Chemical Research in Chinese Universities*, **2020**, 36, 584-596	2.2	10
59	Flexible Sensors Based on Organic□Inorganic Hybrid Materials. *Advanced Materials Technologies*, **2021**, 6, 2000889	6.8	10
58	Quasiparticle Band Structure and Optical Properties of the Janus Monolayer and Bilayer SnSSe. *Journal of Physical Chemistry C*, **2020**, 124, 23832-23838	3.8	9
57	The More, the Better□Recent Advances in Construction of 2D Multi-Heterostructures. *Advanced Functional Materials*, **2021**, 31, 2102049	15.6	9
56	Extrinsic Photoconduction Induced Short-Wavelength Infrared Photodetectors Based on Ge-Based Chalcogenides. *Small*, **2021**, 17, e2006765	11	9
55	Tunable electric properties of bilayer InSe with different interlayer distances and external electric field. *Semiconductor Science and Technology*, **2018**, 33, 034002	1.8	8
54	Polarimetric Image Sensor and Fermi Level Shifting Induced Multichannel Transition Based on 2D PdPS. *Advanced Materials*, **2021**, e2107206	24	8
53	Visible Phototransistors Based on Vertical Nanolayered Heterostructures of SnS/SnS2 p□ and SnSe2/SnS2 n□ Nanoflakes. *ACS Applied Nano Materials*, **2020**, 3, 6847-6854	5.6	7
52	p-MoS/n-InSe van der Waals heterojunctions and their applications in all-2D optoelectronic devices.. *RSC Advances*, **2019**, 9, 35039-35044	3.7	7
51	Strong Anisotropy and Piezo-Phototronic Effect in SnO2 Microwires. *Advanced Electronic Materials*, **2020**, 6, 1901441	6.4	7
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49	Diamine anchored molecular junctions of oligo(phenylene ethynylene) cruciform. *Chinese Chemical Letters*, **2018**, 29, 271-275	8.1	6
48	Intrinsic Linear Dichroism of Organic Single Crystals toward High-Performance Polarization-Sensitive Photodetectors. *Advanced Materials*, **2021**, e2105665	24	6

47	Polarizer-free polarimetric image sensor through anisotropic two-dimensional GeSe. *Science China Materials*, **2021**, 64, 1230-1237	7.1	6
46	Short-Wave Near-Infrared Polarization Sensitive Photodetector Based on GaSb Nanowire. *IEEE Electron Device Letters*, **2021**, 42, 549-552	4.4	6
45	Tuned polarity and enhanced optoelectronic performances of few-layer Nb0.125Re0.875Se2 flakes. *Applied Physics Letters*, **2016**, 109, 112102	3.4	6
44	Nondegenerate P-Type In-Doped SnS2 Monolayer Transistor. *Advanced Electronic Materials*, **2021**, 7, 2001168	6.4	6
43	Multifunctional Photodetectors Based on Nanolayered Black Phosphorus/SnS0.5Se1.5 Heterostructures. *ACS Applied Nano Materials*, **2019**, 2, 3548-3555	5.6	5
42	Preparing two-dimensional crystalline conjugated polymer films by synergetic polymerization and self-assembly at air/water interface. *Polymer Chemistry*, **2020**, 11, 1572-1579	4.9	5
41	Recent progress in polarization-sensitive photodetectors based on low-dimensional semiconductors. *Wuli Xuebao/Acta Physica Sinica*, **2019**, 68, 163201	0.6	5
40	Birefringence and Dichroism in Quasi-1D Transition Metal Trichalcogenides: Direct Experimental Investigation. *Small*, **2021**, 17, e2100457	11	5
39	Application of transition metal dichalcogenides in mid-infrared fiber laser. *Nano Select*, **2021**, 2, 37-46	3.1	5
38	Tunable Alloying Improved Wide Spectrum UV-Vis-NIR and Polarization-Sensitive Photodetector Based on Sb□□e Nanowires. *IEEE Transactions on Electron Devices*, **2021**, 68, 3887-3893	2.9	5
37	A ternary SnSSe alloy for flexible broadband photodetectors.. *RSC Advances*, **2019**, 9, 14352-14359	3.7	4
36	Effect of the thickness of Bi2Se3 sheets on the morphologies of Bi2Se3□nS nanocomposites and improved photoresponsive characteristic. *Journal of Materials Science: Materials in Electronics*, **2013**, 24, 4197-4203	2.1	4
35	Synthesis and Properties of Heteroacenes Containing Pyrrole and Thiazine Rings as Promising n-Type Organic Semiconductor Candidates. *Chinese Journal of Chemistry*, **2009**, 27, 846-849	4.9	4
34	Gate-controlled ambipolar transport in b-AsP crystals and their VIS-NIF photodetection. *Nanoscale*, **2021**, 13, 10579-10586	7.7	4
33	Influence of solid-state electrolyte on 2D SnS2 field effect transistors. *Materials Research Express*, **2019**, 6, 086320	1.7	3
32	Excitons in two-dimensional van der Waals heterostructures. *Journal Physics D: Applied Physics*, **2021**, 54, 053001	3	3
31	When graphene meets white graphene - recent advances in the construction of graphene and h-BN heterostructures. *Nanoscale*, **2021**, 13, 13174-13194	7.7	3
30	Band-Like Charge Transport in Small-Molecule Thin Film toward High-Performance Organic Phototransistors at Low Temperature. *Advanced Optical Materials*, **2022**, 10, 2102484	8.1	3

29	Metal Chalcogenides: Versatile Crystal Structures and (Opto)electronic Applications of the 2D Metal Mono-, Di-, and Tri-Chalcogenide Nanosheets (Adv. Funct. Mater. 24/2019). *Advanced Functional Materials*, **2019**, 29, 1970161	15.6	2
28	Twist-angle two-dimensional superlattices and their application in (opto)electronics. *Journal of Semiconductors*, **2022**, 43, 011001	2.3	2
27	Polarization-sensitive and wide-spectrum photovoltaic detector based on quasi-1D ZrGeTe 4 nanoribbon. *Informa□□Materi□y*,	23.1	2
26	Temperature dependence of charge transport in solid-state molecular junctions based on oligo(phenylene ethynylene)s. *Nanotechnology*, **2020**, 31, 164001	3.4	2
25	Magnetic and transport properties of a ferromagnetic layered semiconductor MnIn2Se4. *Applied Physics Letters*, **2019**, 115, 222101	3.4	2
24	Intermediate anomalous Hall states induced by noncollinear spin structure in the magnetic topological insulator MnBi2Te4. *Physical Review B*, **2021**, 104,	3.3	2
23	2D Ultrawide Bandgap Semiconductors: Odyssey and Challenges.. *Small Methods*, **2022**, e2101348	12.8	2
22	Orbital localization induced magnetization in nonmetal-doped phosphorene. *Journal Physics D: Applied Physics*, **2020**, 53, 155001	3	1
21	Electronic structures, magnetic properties and lattice strain effects of quaternary Heusler alloys RuMnCrZ (Z = P, As, Sb). *Journal Physics D: Applied Physics*, **2019**, 52, 505003	3	1
20	Recombination Time Mismatch and Spin Dependent Photocurrent at a Ferromagnetic-Metal-Semiconductor Tunnel Junction.. *Physical Review Letters*, **2022**, 128, 057701	7.4	1
19	Large Perpendicular Magnetic Anisotropy in Ta/CoFeB/MgO on Full-Coverage Monolayer MoS and First-Principles Study of Its Electronic Structure. *ACS Applied Materials & Interfaces*, **2021**, 13, 32579-32589	9.5	1
18	Press-engineered funnel effect in MoS2 monolayer homojunction. *Journal Physics D: Applied Physics* , **2019**, 52, 055103	3	1
17	Vertical Heterostructures: Direct Synthesis and Enhanced Rectification of Alloy-to-Alloy 2D Type-II MoS2(1-x)Se2x/SnS2(1-y)Se2y Heterostructures (Adv. Mater. 8/2021). *Advanced Materials*, **2021**, 33, 2170059	24	1
16	Field-Effect Transistors: Thickness-Dependent Carrier Transport Characteristics of a New 2D Elemental Semiconductor: Black Arsenic (Adv. Funct. Mater. 43/2018). *Advanced Functional Materials*, **2018**, 28, 1870312	15.6	1
15	Decoupling of the Electrical and Thermal Transports in Strongly Coupled Interlayer Materials. *Journal of Physical Chemistry Letters*, **2021**, 12, 7832-7839	6.4	1
14	Strain drived band aligment transition of the ferromagnetic VS2/C3N van derWaals heterostructure*. *Chinese Physics B*, **2021**, 30, 097507	1.2	1
13	Transport Properties of Two-Dimensional Materials **2020**, 55-78		1
12	Polarization-Sensitive Photodetectors: Symmetry-Reduction Enhanced Polarization-Sensitive Photodetection in Core□Shell SbI3/Sb2O3 van der Waals Heterostructure (Small 7/2020). *Small*, **2020**, 16, 2070036	11	0

List of Publications

11	Continuous orientated growth of scaled single-crystal 2D monolayer films. *Nanoscale Advances*, **2021**, 3, 6545-6567	5.1	0
10	Strain-engineering on GeSe: Raman spectroscopy study. *Physical Chemistry Chemical Physics*, **2021**, 23, 26997-27004	3.6	0
9	Quantum Confinement Effects on Excitonic Properties in the 2D vdW quantum system: The ZnO/WSe2 Case. *Advanced Photonics Research*, **2021**, 2, 2000114	1.9	0
8	Recent progress in optoelectronic applications of hybrid 2D/3D silicon-based heterostructures. *Science China Materials*, **2022**, 65, 876-895	7.1	0
7	Cation-Alloying-Induced Blue-Shifted and Wide-Spectrum Polarization-Sensitive Photodetection in Quasi-1D SbBiS 3. *Small Structures*,2200061	8.7	0
6	2D Functional Systems: Recent Advances in the Functional 2D Photonic and Optoelectronic Devices (Advanced Optical Materials 3/2019). *Advanced Optical Materials*, **2019**, 7, 1970010	8.1	
5	Preparation and Properties of 2D Semiconductors **2020**, 79-98		
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