

Deterministic transfer of two-dimensional materials by

2D Materials

1, 011002

DOI: [10.1088/2053-1583/1/1/011002](https://doi.org/10.1088/2053-1583/1/1/011002)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Preparation of graphene samples for its integration in graphene-based terahertz devices. , 2014, , .		1
2	Single-layer MoS ₂ roughness and sliding friction quenching by interaction with atomically flat substrates. Applied Physics Letters, 2014, 105, .	1.5	64
3	Thickness Scaling Effect on Interfacial Barrier and Electrical Contact to Two-Dimensional MoS ₂ Layers. ACS Nano, 2014, 8, 12836-12842.	7.3	149
4	Time-domain response of atomically thin MoS ₂ nanomechanical resonators. Applied Physics Letters, 2014, 105, .	1.5	37
5	Photovoltaic and Photothermoelectric Effect in a Double-Gated WSe ₂ Device. Nano Letters, 2014, 14, 5846-5852.	4.5	232
6	Optomechanical coupling between a multilayer graphene mechanical resonator and a superconducting microwave cavity. Nature Nanotechnology, 2014, 9, 820-824.	15.6	217
7	Nanometric Resolved Luminescence in h-BN Flakes: Excitons and Stacking Order. ACS Photonics, 2014, 1, 857-862.	3.2	80
8	Photovoltaic effect in few-layer black phosphorus PN junctions defined by local electrostatic gating. Nature Communications, 2014, 5, 4651.	5.8	643
9	Fast and Broadband Photoresponse of Few-Layer Black Phosphorus Field-Effect Transistors. Nano Letters, 2014, 14, 3347-3352.	4.5	1,510
10	Isolation and characterization of few-layer black phosphorus. 2D Materials, 2014, 1, 025001.	2.0	1,411
11	Identification of excitons, trions and biexcitons in single-layer WS ₂ . Physica Status Solidi - Rapid Research Letters, 2015, 9, 457-461.	1.2	282
12	Polarization and Thickness Dependent Absorption Properties of Black Phosphorus: New Saturable Absorber for Ultrafast Pulse Generation. Scientific Reports, 2015, 5, 15899.	1.6	268
13	Strain-dependent damping in nanomechanical resonators from thin MoS ₂ crystals. Applied Physics Letters, 2015, 107, .	1.5	23
14	Point contacts in encapsulated graphene. Applied Physics Letters, 2015, 107, .	1.5	6
15	Silicon-nitride photonic circuits interfaced with monolayer MoS ₂ . Applied Physics Letters, 2015, 107, .	1.5	34
16	High-quality-factor tantalum oxide nanomechanical resonators by laser oxidation of TaSe ₂ . Nano Research, 2015, 8, 2842-2849.	5.8	27
17	Nonvolatile Floating-Gate Memories Based on Stacked Black Phosphorus/Boron Nitride/MoS ₂ Heterostructures. Advanced Functional Materials, 2015, 25, 7360-7365.	7.8	129
18	Exciton and Trion Dynamics in Bilayer MoS ₂ . Small, 2015, 11, 6384-6390.	5.2	87

#	ARTICLE	IF	CITATIONS
19	Interfacing Monolayer MoS ₂ with Silicon-Nitride Integrated Photonics. , 2015, , .		2
20	Enhanced Visibility of MoS ₂ , MoSe ₂ , WSe ₂ and Black-Phosphorus: Making Optical Identification of 2D Semiconductors Easier. Electronics (Switzerland), 2015, 4, 847-856.	1.8	44
21	Graphene related magnetic materials: micromechanical exfoliation of 2D layered magnets based on bimetallic anilate complexes with inserted [Fe ^{III} (acac) ₂ -trien] ⁺ and [Fe ^{III} (sal) ₂ -trien] ⁺ molecules. Chemical Science, 2015, 6, 4665-4673.	3.7	123
22	Hydrogenated Graphene as a Homoepitaxial Tunnel Barrier for Spin and Charge Transport in Graphene. ACS Nano, 2015, 9, 6747-6755.	7.3	36
23	Robust Excitons and Trions in Monolayer MoTe ₂ . ACS Nano, 2015, 9, 6603-6609.	7.3	148
24	van der Waals junctions of layered 2D materials for functional devices. , 2015, , .		0
25	Chemical Vapor Deposition Growth of Graphene and Related Materials. Journal of the Physical Society of Japan, 2015, 84, 121013.	0.7	24
26	Optoelectric properties of gate-tunable MoS ₂ /WSe ₂ heterojunction. , 2015, , .		0
27	Self-Limiting Layer-by-Layer Oxidation of Atomically Thin WSe ₂ . Nano Letters, 2015, 15, 2067-2073.	4.5	204
28	Exfoliated layers of black phosphorus as saturable absorber for ultrafast solid-state laser. Optics Letters, 2015, 40, 3691.	1.7	107
29	Spin and charge transport in graphene-based spin transport devices with Co/MgO spin injection and spin detection electrodes. Synthetic Metals, 2015, 210, 42-55.	2.1	10
30	Resonant internal quantum transitions and femtosecond radiative decay of excitons in monolayer WSe ₂ . Nature Materials, 2015, 14, 889-893.	13.3	298
31	Direct and Scalable Deposition of Atomically Thin Low-Noise MoS ₂ Membranes on Apertures. ACS Nano, 2015, 9, 7352-7359.	7.3	79
32	Photocurrent generation with two-dimensional van der Waals semiconductors. Chemical Society Reviews, 2015, 44, 3691-3718.	18.7	802
33	Surface treatment of polyimide substrates for the transfer and multitransfer of graphene films. Applied Surface Science, 2015, 349, 101-107.	3.1	12
34	Quantum oscillations in a two-dimensional electron gas in black phosphorus thin films. Nature Nanotechnology, 2015, 10, 608-613.	15.6	282
35	Confining Crack Propagation in Defective Graphene. Nano Letters, 2015, 15, 2050-2054.	4.5	66
36	TiS ₃ Transistors with Tailored Morphology and Electrical Properties. Advanced Materials, 2015, 27, 2595-2601.	11.1	193

#	ARTICLE	IF	CITATIONS
37	Single photon emitters in exfoliated WSe ₂ structures. Nature Nanotechnology, 2015, 10, 503-506.	15.6	677
38	Pick-up and drop transfer of diamond nanosheets. Nanotechnology, 2015, 26, 125706.	1.3	10
39	Plasmonic whispering-gallery modes in a semiconductor-insulator-metal hybrid structure. , 2015, , .		0
40	Observing the semiconducting band-gap alignment of MoS ₂ layers of different atomic thicknesses using a MoS ₂ /SiO ₂ /Si heterojunction tunnel diode. Applied Physics Letters, 2015, 107, .	1.5	8
41	Strain-Induced Spatial and Spectral Isolation of Quantum Emitters in Mono- and Bilayer WSe ₂ . Nano Letters, 2015, 15, 7567-7573.	4.5	229
42	Atomic and electronic structure of exfoliated black phosphorus. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	0.9	73
43	Polarization and time-resolved photoluminescence spectroscopy of excitons in MoSe ₂ monolayers. Applied Physics Letters, 2015, 106, .	1.5	136
44	Gate-tunable diode and photovoltaic effect in an organicâ€“2D layered material pâ€“n junction. Nanoscale, 2015, 7, 15442-15449.	2.8	84
45	Probing the anisotropic behaviors of black phosphorus by transmission electron microscopy, angular-dependent Raman spectra, and electronic transport measurements. Applied Physics Letters, 2015, 107, .	1.5	44
46	Near-infrared photodetectors utilizing MoS ₂ -based heterojunctions. Journal of Applied Physics, 2015, 118, 044504.	1.1	17
47	Direct observation of ultraslow hyperbolic polariton propagation with negative phase velocity. Nature Photonics, 2015, 9, 674-678.	15.6	268
48	Esaki Diodes in van der Waals Heterojunctions with Broken-Gap Energy Band Alignment. Nano Letters, 2015, 15, 5791-5798.	4.5	319
49	Strong Optical Absorption and Photocurrent Relaxation in 2-D Semiconductors. IEEE Journal of Quantum Electronics, 2015, 51, 1-6.	1.0	21
50	Construction of van der Waals magnetic tunnel junction using ferromagnetic layered dichalcogenide. Applied Physics Letters, 2015, 107, .	1.5	47
51	Next generation field-effect transistors based on 2D black phosphorus crystal. , 2015, , .		2
52	Gate Controlled Photocurrent Generation Mechanisms in High-Gain In ₂ Se ₃ Phototransistors. Nano Letters, 2015, 15, 7853-7858.	4.5	347
53	Photocatalytic Stability of Single- and Few-Layer MoS ₂ . ACS Nano, 2015, 9, 11302-11309.	7.3	197
54	Exciton band structure in layered MoSe ₂ : from a monolayer to the bulk limit. Nanoscale, 2015, 7, 20769-20775.	2.8	163

#	ARTICLE	IF	CITATIONS
55	Mechanics of freely suspended ultrathin layered materials. <i>Annalen Der Physik</i> , 2015, 527, 27-44.	0.9	145
56	Resonant laser spectroscopy of localized excitons in monolayer WSe ₂ . <i>Optica</i> , 2016, 3, 882.	4.8	55
57	Observation of anisotropic interlayer Raman modes in few-layer ReS ₂ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2016, 10, 185-189.	1.2	48
58	Nanoscale Positioning of Single-Photon Emitters in Atomically Thin WSe ₂ . <i>Advanced Materials</i> , 2016, 28, 7101-7105.	11.1	162
59	Heterostructured hBN-p-hBN Nanodetectors at Terahertz Frequencies. <i>Advanced Materials</i> , 2016, 28, 7390-7396.	11.1	85
60	One-Minute Room-Temperature Transfer-Free Production of Mono- and Few-Layer Polycrystalline Graphene on Various Substrates. <i>Scientific Reports</i> , 2016, 6, 19313.	1.6	18
61	Simple Specimen Preparation Method for In Situ Heating Experiments. <i>Microscopy and Microanalysis</i> , 2016, 22, 132-133.	0.2	1
62	Discrete quantum dot like emitters in monolayer MoSe ₂ : Spatial mapping, magneto-optics, and charge tuning. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	95
63	Characterization of Electronic Properties of Two-dimensional Refractory Selenides and Tellurides. <i>MRS Advances</i> , 2016, 1, 3229-3234.	0.5	0
64	Distance-dependent energy transfer between CdSe/CdS quantum dots and a two-dimensional semiconductor. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	54
65	MoS ₂ synthesis and high-performance broadband photodetector. , 2016, , .		0
66	Chemically and mechanically exfoliated MoS ₂ for electronic & opto-electronic devices. , 2016, , .		1
67	Graphene mediated Stark shifting of quantum dot energy levels. <i>Applied Physics Letters</i> , 2016, 108, 211905.	1.5	4
68	Ultraviolet-Ozone Treatment for Effectively Removing Adhesive Residue on Graphene. <i>Nano</i> , 2016, 11, 1650141.	0.5	7
69	Planar cold cathode based on a multilayer-graphene/SiO ₂ /Si heterodevice. <i>Applied Physics Express</i> , 2016, 9, 105101.	1.1	5
70	Contact gating at GHz frequency in graphene. <i>Scientific Reports</i> , 2016, 6, 21085.	1.6	19
71	Well separated trion and neutral excitons on superacid treated MoS ₂ monolayers. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	51
72	Current crowding in two-dimensional black-phosphorus field-effect transistors. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	14

#	ARTICLE	IF	CITATIONS
73	Elastic properties of suspended multilayer WSe ₂ . Applied Physics Letters, 2016, 108, .	1.5	121
74	Making one-dimensional electrical contacts to molybdenum disulfide-based heterostructures through plasma etching. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1358-1364.	0.8	32
75	Centimeter-Scale Synthesis of Ultrathin Layered MoO ₃ by van der Waals Epitaxy. Chemistry of Materials, 2016, 28, 4042-4051.	3.2	100
76	Single Defect Light-Emitting Diode in a van der Waals Heterostructure. Nano Letters, 2016, 16, 3944-3948.	4.5	115
77	Optoelectric Properties of Gate-Tunable MoS ₂ /WSe ₂ Heterojunction. IEEE Nanotechnology Magazine, 2016, 15, 499-505.	1.1	16
78	Conductance Quantization at Zero Magnetic Field in InSb Nanowires. Nano Letters, 2016, 16, 3482-3486.	4.5	85
79	Optoelectronic devices based on two-dimensional transition metal dichalcogenides. Nano Research, 2016, 9, 1543-1560.	5.8	186
80	Black Phosphorus-Based Nanodevices. Semiconductors and Semimetals, 2016, 95, 279-303.	0.4	5
81	Universal Transfer and Stacking of Chemical Vapor Deposition Grown Two-Dimensional Atomic Layers with Water-Soluble Polymer Mediator. ACS Nano, 2016, 10, 5237-5242.	7.3	70
82	Complete analysis of a transmission electron diffraction pattern of a MoS ₂ "graphite heterostructure. Ultramicroscopy, 2016, 166, 9-15.	0.8	8
83	Valley Zeeman Splitting and Valley Polarization of Neutral and Charged Excitons in Monolayer MoTe ₂ at High Magnetic Fields. Nano Letters, 2016, 16, 3624-3629.	4.5	102
84	Two-dimensional van der Waals nanosheet devices for future electronics and photonics. Nano Today, 2016, 11, 626-643.	6.2	71
85	Reconfigurable van der Waals Heterostructured Devices with Metal "Insulator Transition. Nano Letters, 2016, 16, 6746-6754.	4.5	35
86	Localized emission from defects in MoSe ₂ layers. Optical Materials Express, 2016, 6, 2081.	1.6	55
87	High-Performance MoS ₂ /CuO Nanosheet-on-One-Dimensional Heterojunction Photodetectors. ACS Applied Materials & Interfaces, 2016, 8, 33955-33962.	4.0	64
88	Excitonic Valley Effects in Monolayer WS ₂ under High Magnetic Fields. Nano Letters, 2016, 16, 7899-7904.	4.5	114
89	The hot pick-up technique for batch assembly of van der Waals heterostructures. Nature Communications, 2016, 7, 11894.	5.8	446
90	Phosphorene and Phosphorene-Based Materials " Prospects for Future Applications. Advanced Materials, 2016, 28, 8586-8617.	11.1	378

#	ARTICLE	IF	CITATIONS
91	Van der Waals heterostructures and devices. Nature Reviews Materials, 2016, 1, .	23.8	1,897
92	Photonic Crystals for Enhanced Light Extraction from 2D Materials. ACS Photonics, 2016, 3, 2515-2520.	3.2	48
93	Effect of Uniaxial Strain on Low Frequency Raman Modes in Few Layers Molybdenum Disulfide. ECS Journal of Solid State Science and Technology, 2016, 5, Q3033-Q3037.	0.9	2
94	Trion fine structure and coupled spin-valley dynamics in monolayer tungsten disulfide. Nature Communications, 2016, 7, 12715.	5.8	239
95	Cascaded emission of single photons from the biexciton in monolayered WSe ₂ . Nature Communications, 2016, 7, 13409.	5.8	86
96	A two-dimensional spin field-effect switch. Nature Communications, 2016, 7, 13372.	5.8	168
97	Protecting the properties of monolayer MoS ₂ on silicon based substrates with an atomically thin buffer. Scientific Reports, 2016, 6, 20890.	1.6	64
98	Observing the interplay between surface and bulk optical nonlinearities in thin van der Waals crystals. Scientific Reports, 2016, 6, 22620.	1.6	42
99	Recent progress of photodetectors based on MX ₂ /graphene van der Waals heterostructures. , 2016, , .		1
100	Excitonic properties of semiconducting monolayer and bilayer MoT . Physical Review B, 2016, 94, .	1.1	60
101	Black Phosphorus Transistors with Near Band Edge Contact Schottky Barrier. Scientific Reports, 2016, 5, 18000.	1.6	37
102	Engineering the optoelectronic properties of MoS ₂ photodetectors through reversible noncovalent functionalization. Chemical Communications, 2016, 52, 14365-14368.	2.2	37
103	Even-odd layer-dependent magnetotransport of high-mobility Q-valley electrons in transition metal disulfides. Nature Communications, 2016, 7, 12955.	5.8	82
104	Environmental Effects on Hysteresis of Transfer Characteristics in Molybdenum Disulfide Field-Effect Transistors. Scientific Reports, 2016, 6, 30084.	1.6	34
105	Supercurrent in van der Waals Josephson junction. Nature Communications, 2016, 7, 10616.	5.8	65
106	Highly responsive UV-photodetectors based on single electrospun TiO ₂ nanofibres. Journal of Materials Chemistry C, 2016, 4, 10707-10714.	2.7	41
107	Utilizing self-assembled-monolayer-based gate dielectrics to fabricate molybdenum disulfide field-effect transistors. Applied Physics Letters, 2016, 108, .	1.5	30
108	Engineering Bandgaps of Monolayer MoS ₂ and WS ₂ on Fluoropolymer Substrates by Electrostatically Tuned Many-Body Effects. Advanced Materials, 2016, 28, 6457-6464.	11.1	116

#	ARTICLE	IF	CITATIONS
109	In situ TEM visualization of superior nanomechanical flexibility of shear-exfoliated phosphorene. <i>Nanoscale</i> , 2016, 8, 13603-13610.	2.8	23
110	Spatial conductivity mapping of unprotected and capped black phosphorus using microwave microscopy. <i>2D Materials</i> , 2016, 3, 021002.	2.0	31
111	Producing air-stable monolayers of phosphorene and their defect engineering. <i>Nature Communications</i> , 2016, 7, 10450.	5.8	443
112	Study of Graphene-based 2D-Heterostructure Device Fabricated by All-Dry Transfer Process. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 3072-3078.	4.0	48
113	In situ observation of electrical property of thin-layer black phosphorus based on dry transfer method. <i>Applied Physics Express</i> , 2016, 9, 045202.	1.1	3
114	Visualizing the Motion of Graphene Nanodrums. <i>Nano Letters</i> , 2016, 16, 2768-2773.	4.5	74
115	Multimodal Nonlinear Optical Imaging of MoS ₂ and MoS ₂ -Based van der Waals Heterostructures. <i>ACS Nano</i> , 2016, 10, 3766-3775.	7.3	127
116	Two-step heating synthesis of sub-3 millimeter-sized orthorhombic black phosphorus single crystal by chemical vapor transport reaction method. <i>Science China Materials</i> , 2016, 59, 122-134.	3.5	69
117	Electron Doping of Ultrathin Black Phosphorus with Cu Adatoms. <i>Nano Letters</i> , 2016, 16, 2145-2151.	4.5	196
118	Extraordinarily Bound Quasi-One-Dimensional Trions in Two-Dimensional Phosphorene Atomic Semiconductors. <i>ACS Nano</i> , 2016, 10, 2046-2053.	7.3	92
119	Fabrication and <i>In Situ</i> Transmission Electron Microscope Characterization of Free-Standing Graphene Nanoribbon Devices. <i>ACS Nano</i> , 2016, 10, 1475-1480.	7.3	31
120	Electromechanical control of nitrogen-vacancy defect emission using graphene NEMS. <i>Nature Communications</i> , 2016, 7, 10218.	5.8	56
121	Graphene Squeeze-Film Pressure Sensors. <i>Nano Letters</i> , 2016, 16, 568-571.	4.5	143
122	Layer-dependent surface potential of phosphorene and anisotropic/layer-dependent charge transfer in phosphorene-gold hybrid systems. <i>Nanoscale</i> , 2016, 8, 129-135.	2.8	65
123	Elastic and Inelastic Light-Matter Interactions in 2D Materials. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 206-213.	1.9	6
124	Giant Anisotropic Raman Response of Encapsulated Ultrathin Black Phosphorus by Uniaxial Strain. <i>Advanced Functional Materials</i> , 2017, 27, 1600986.	7.8	100
125	Brightening of dark excitons in monolayers of semiconducting transition metal dichalcogenides. <i>2D Materials</i> , 2017, 4, 021003.	2.0	192
126	Gate tunable photovoltaic effect in MoS ₂ vertical p-n homostructures. <i>Journal of Materials Chemistry C</i> , 2017, 5, 854-861.	2.7	50

#	ARTICLE	IF	CITATIONS
127	Three-Dimensional Integration of Black Phosphorus Photodetector with Silicon Photonics and Nanoplasmonics. Nano Letters, 2017, 17, 985-991.	4.5	111
128	Magnetoresistance and Hall resistivity of semimetal WTe ₂ ultrathin flakes. Nanotechnology, 2017, 28, 145704.	1.3	7
129	Optical contrast of 2D InSe on SiO ₂ /Si and transparent substrates using bandpass filters. Nanotechnology, 2017, 28, 115706.	1.3	18
130	A review on mechanics and mechanical properties of 2D materials—Graphene and beyond. Extreme Mechanics Letters, 2017, 13, 42-77.	2.0	920
131	Quantum dot behavior in transition metal dichalcogenides nanostructures. Frontiers of Physics, 2017, 12, 1.	2.4	25
132	Franckeite as a naturally occurring van der Waals heterostructure. Nature Communications, 2017, 8, 14409.	5.8	103
133	Nanobubble induced formation of quantum emitters in monolayer semiconductors. 2D Materials, 2017, 4, 021019.	2.0	76
134	Valley-Polarized Exciton Dynamics in Exfoliated Monolayer WSe ₂ . Journal of Physical Chemistry C, 2017, 121, 6409-6413.	1.5	25
135	Emerging Trends in Phosphorene Fabrication towards Next Generation Devices. Advanced Science, 2017, 4, 1600305.	5.6	285
136	Ultrafast photocurrent measurements of a black phosphorus photodetector. Applied Physics Letters, 2017, 110, .	1.5	44
137	Direct Observation of Ultrafast Exciton Formation in a Monolayer of WSe ₂ . Nano Letters, 2017, 17, 1455-1460.	4.5	171
138	Reducing graphene-metal contact resistance via laser nano-welding. Proceedings of SPIE, 2017, , .	0.8	1
139	Anomalous Raman Scattering In Few Monolayer MoTe ₂ . MRS Advances, 2017, 2, 1539-1544.	0.5	1
140	Quantum-Confined Stark Effect of Individual Defects in a van der Waals Heterostructure. Nano Letters, 2017, 17, 2253-2258.	4.5	81
141	Resonant quenching of Raman scattering due to out-of-plane A _{1g} /A _{2g} modes in few-layer MoTe ₂ . Nanophotonics, 2017, 6, 1281-1288.	2.9	16
142	Interfacial Engineering of Van der Waals Coupled 2D Layered Materials. Advanced Materials Interfaces, 2017, 4, 1601054.	1.9	26
143	Gate-Tunable Giant Stark Effect in Few-Layer Black Phosphorus. Nano Letters, 2017, 17, 1970-1977.	4.5	144
144	Strain Gated Bilayer Molybdenum Disulfide Field Effect Transistor with Edge Contacts. Scientific Reports, 2017, 7, 41593.	1.6	17

#	ARTICLE	IF	CITATIONS
145	Spectral focusing of broadband silver electroluminescence in nanoscopic FRET-LEDs. <i>Nature Nanotechnology</i> , 2017, 12, 637-641.	15.6	18
146	Split-gated point-contact for electrostatic confinement of transport in MoS ₂ /h-BN hybrid structures. <i>Scientific Reports</i> , 2017, 7, 735.	1.6	15
147	Influence of the substrate material on the optical properties of tungsten diselenide monolayers. <i>2D Materials</i> , 2017, 4, 025045.	2.0	80
148	High performance graphene oxide-based humidity sensor integrated on a photonic crystal cavity. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	33
149	High Photoresponsivity in Graphene Nanoribbon Field-Effect Transistor Devices Contacted with Graphene Electrodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 10620-10625.	1.5	45
150	Location-specific growth and transfer of arrayed MoS ₂ monolayers with controllable size. <i>2D Materials</i> , 2017, 4, 025093.	2.0	40
151	Control of threshold voltage by gate metal electrode in molybdenum disulfide field-effect transistors. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	13
152	Dielectrophoretic assembly of liquid-phase-exfoliated TiS ₃ nanoribbons for photodetecting applications. <i>Chemical Communications</i> , 2017, 53, 6164-6167.	2.2	22
153	Lithography-free electrical transport measurements on 2D materials by direct microprobing. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11252-11258.	2.7	6
154	Few-layered PtS ₂ Phototransistor on h-BN with High Gain. <i>Advanced Functional Materials</i> , 2017, 27, 1701011.	7.8	176
155	Hydrogen evolution activity of individual mono-, bi-, and few-layer MoS ₂ towards photocatalysis. <i>Applied Materials Today</i> , 2017, 8, 132-140.	2.3	32
156	Substrate-Friendly Growth of Large-Sized Ni(OH) ₂ Nanosheets for Flexible Electrochromic Films. <i>Small</i> , 2017, 13, 1700084.	5.2	39
157	Analysis of multilayer black phosphorus for photodetector applications. , 2017, , .		0
158	Coulomb engineering of the bandgap and excitons in two-dimensional materials. <i>Nature Communications</i> , 2017, 8, 15251.	5.8	526
159	Direct Growth of Al ₂ O ₃ on Black Phosphorus by Plasma-Enhanced Atomic Layer Deposition. <i>Nanoscale Research Letters</i> , 2017, 12, 282.	3.1	14
160	Optical Nanoimaging of Hyperbolic Surface Polaritons at the Edges of van der Waals Materials. <i>Nano Letters</i> , 2017, 17, 228-235.	4.5	107
161	Photodiodes based in La _{0.7} Sr _{0.3} MnO ₃ /single layer MoS ₂ hybrid vertical heterostructures. <i>2D Materials</i> , 2017, 4, 034002.	2.0	5
162	Platinum-functionalized black phosphorus hydrogen sensors. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	49

#	ARTICLE	IF	CITATIONS
163	Laser-Assisted Nanowelding of Graphene to Metals: An Optical Approach toward Ultralow Contact Resistance. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700294.	1.9	12
164	Low-Threshold Plasmonic Lasers on a Single-Crystalline Epitaxial Silver Platform at Telecom Wavelength. <i>ACS Photonics</i> , 2017, 4, 1431-1439.	3.2	27
165	Valley dynamics of excitons in monolayer dichalcogenides. <i>Physica Status Solidi - Rapid Research Letters</i> , 2017, 11, 1700131.	1.2	19
166	Biaxial strain tuning of the optical properties of single-layer transition metal dichalcogenides. <i>Npj 2D Materials and Applications</i> , 2017, 1, .	3.9	191
167	Phase-Defined van der Waals Schottky Junctions with Significantly Enhanced Thermoelectric Properties. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2887-2894.	2.1	30
168	High Photovoltaic Quantum Efficiency in Ultrathin van der Waals Heterostructures. <i>ACS Nano</i> , 2017, 11, 7230-7240.	7.3	193
169	Nanoimaging of resonating hyperbolic polaritons in linear boron nitride antennas. <i>Nature Communications</i> , 2017, 8, 15624.	5.8	121
170	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. <i>Applied Physics Reviews</i> , 2017, 4, .	5.5	476
171	Large-scale quantum-emitter arrays in atomically thin semiconductors. <i>Nature Communications</i> , 2017, 8, 15093.	5.8	406
172	Deterministic strain-induced arrays of quantum emitters in a two-dimensional semiconductor. <i>Nature Communications</i> , 2017, 8, 15053.	5.8	350
173	Progress in 2D semiconductor optoelectronics. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
174	Investigation of structural morphology and electrical properties of graphene-C60hybrids. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017, 35, 03D111.	0.6	1
175	Nanostructured Materials and Architectures for Advanced Infrared Photodetection. <i>Advanced Materials Technologies</i> , 2017, 2, 1700005.	3.0	87
176	Optical coupling between atomically thin black phosphorus and a two dimensional photonic crystal nanocavity. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	13
177	Transfer Printing of Micron-Size Graphene for Photonic Integrated Circuits and Devices. <i>ECS Journal of Solid State Science and Technology</i> , 2017, 6, P435-P439.	0.9	7
178	Two-dimensional non-volatile programmable p-n junctions. <i>Nature Nanotechnology</i> , 2017, 12, 901-906.	15.6	278
179	Deriving phosphorus atomic chains from few-layer black phosphorus. <i>Nano Research</i> , 2017, 10, 2519-2526.	5.8	26
180	Coupling graphene nanomechanical motion to a single-electron transistor. <i>Nanoscale</i> , 2017, 9, 5608-5614.	2.8	21

#	ARTICLE	IF	CITATIONS
181	The Prospect of Two-Dimensional Heterostructures: A Review of Recent Breakthroughs. IEEE Nanotechnology Magazine, 2017, 11, 6-17.	0.9	27
182	Cyclical Thinning of Black Phosphorus with High Spatial Resolution for Heterostructure Devices. ACS Applied Materials & Interfaces, 2017, 9, 12654-12662.	4.0	17
183	Periodic potentials in hybrid van der Waals heterostructures formed by supramolecular lattices on graphene. Nature Communications, 2017, 8, 14767.	5.8	68
184	Ion-beam modification of 2-D materials - single implant atom analysis via annular dark-field electron microscopy. Ultramicroscopy, 2017, 176, 31-36.	0.8	27
185	Solution processing of two-dimensional black phosphorus. Chemical Communications, 2017, 53, 1445-1458.	2.2	63
186	Van der Waals MoS ₂ /VO ₂ heterostructure junction with tunable rectifier behavior and efficient photoresponse. Scientific Reports, 2017, 7, 14250.	1.6	37
187	Interface-Confined Doubly Anisotropic Oxidation of Two-Dimensional MoS ₂ . Nano Letters, 2017, 17, 7267-7273.	4.5	22
188	Floating-Gate Manipulated Graphene-Black Phosphorus Heterojunction for Nonvolatile Ambipolar Schottky Junction Memories, Memory Inverter Circuits, and Logic Rectifiers. Nano Letters, 2017, 17, 6353-6359.	4.5	87
189	Coupling Emission from Single Localized Defects in Two-Dimensional Semiconductor to Surface Plasmon Polaritons. Nano Letters, 2017, 17, 6564-6568.	4.5	57
190	Surface State Mediated Interlayer Excitons in a 2D Nonlayered "Layered Semiconductor Heterojunction. Advanced Electronic Materials, 2017, 3, 1700373.	2.6	15
191	Cross-plane Thermoelectric and Thermionic Transport across Au/h-BN/Graphene Heterostructures. Scientific Reports, 2017, 7, 14148.	1.6	18
192	Nonlinear dynamic characterization of two-dimensional materials. Nature Communications, 2017, 8, 1253.	5.8	96
193	Direct exciton emission from atomically thin transition metal dichalcogenide heterostructures near the lifetime limit. Scientific Reports, 2017, 7, 12383.	1.6	122
194	Weakly Trapped, Charged, and Free Excitons in Single-Layer MoS ₂ in the Presence of Defects, Strain, and Charged Impurities. ACS Nano, 2017, 11, 11206-11216.	7.3	44
195	Highly Efficient and Air-Stable Infrared Photodetector Based on 2D Layered Graphene "Black Phosphorus Heterostructure. ACS Applied Materials & Interfaces, 2017, 9, 36137-36145.	4.0	185
196	Centimeter-Scale 2D van der Waals Vertical Heterostructures Integrated on Deformable Substrates Enabled by Gold Sacrificial Layer-Assisted Growth. Nano Letters, 2017, 17, 6157-6165.	4.5	28
197	Dry-transferred CVD graphene for inverted spin valve devices. Applied Physics Letters, 2017, 111, .	1.5	17
198	Characterization of Few layer Tungsten diselenide based FET under Thermal Excitation. MRS Advances, 2017, 2, 3721-3726.	0.5	0

#	ARTICLE	IF	CITATIONS
199	Long-lived spin polarization in n-doped MoSe ₂ monolayers. Applied Physics Letters, 2017, 111, .	1.5	12
200	Excitonic Linewidth Approaching the Homogeneous Limit in MoS_2 -Based van der Waals Heterostructures. Physical Review X, 2017, 7, .	2.8	389
201	Approaching ultrastrong coupling in transmon circuit QED using a high-impedance resonator. Physical Review B, 2017, 95, .	1.1	24
202	Hybrid Zero-Dimensional C ₆₀ clusters with Graphene "Synthesis, Fabrication and Transport Characteristics. MRS Advances, 2017, 2, 3727-3732.	0.5	0
203	Highly Localized Strain in a MoS ₂ /Au Heterostructure Revealed by Tip-Enhanced Raman Spectroscopy. Nano Letters, 2017, 17, 6027-6033.	4.5	91
204	Giant Enhancement of Cathodoluminescence of Monolayer Transitional Metal Dichalcogenides Semiconductors. Nano Letters, 2017, 17, 6475-6480.	4.5	44
205	Large room temperature spin-to-charge conversion signals in a few-layer graphene/Pt lateral heterostructure. Nature Communications, 2017, 8, 661.	5.8	46
206	Interlayer tunnel field-effect transistor (ITFET): physics, fabrication and applications. Journal Physics D: Applied Physics, 2017, 50, 383002.	1.3	11
207	Interfacial Thermal Conductance between Mechanically Exfoliated Black Phosphorus and SiO ₂ : Effect of Thickness and Temperature. Advanced Materials Interfaces, 2017, 4, 1700233.	1.9	16
208	Strong and anisotropic third-harmonic generation in monolayer and multilayer ReS_2 . Physical Review B, 2017, 95, .	2.1	62
209	Tunable bandgap in few-layer black phosphorus by electrical field. 2D Materials, 2017, 4, 031009.	2.0	30
210	Long-Lived Direct and Indirect Interlayer Excitons in van der Waals Heterostructures. Nano Letters, 2017, 17, 5229-5237.	4.5	281
211	Pressure-Dependent Light Emission of Charged and Neutral Excitons in Monolayer MoSe ₂ . Journal of Physical Chemistry Letters, 2017, 8, 3556-3563.	2.1	36
212	Scanning tunneling spectroscopy of van der Waals graphene/semiconductor interfaces: absence of Fermi level pinning. 2D Materials, 2017, 4, 035019.	2.0	52
213	Imaging of Interlayer Coupling in van der Waals Heterostructures Using a Bright-Field Optical Microscope. Nano Letters, 2017, 17, 5342-5349.	4.5	74
214	Photodoping-Driven Crossover in the Low-Frequency Noise of MoS ₂ Transistors. Physical Review Applied, 2017, 7, .	1.5	6
215	Direct Observation of the Band Gap Transition in Atomically Thin ReS ₂ . Nano Letters, 2017, 17, 5187-5192.	4.5	65
216	Probing low-energy hyperbolic polaritons in van der Waals crystals with an electron microscope. Nature Communications, 2017, 8, 95.	5.8	111

#	ARTICLE	IF	CITATIONS
217	Growth of high-quality Bi ₂ Sr ₂ CaCu ₂ O ₈ + $\hat{\Gamma}$ whiskers and electrical properties of resulting exfoliated flakes. Scientific Reports, 2017, 7, 3295.	1.6	8
218	Raman scattering excitation spectroscopy of monolayer WS ₂ . Scientific Reports, 2017, 7, 5036.	1.6	63
219	Realisation of topological zero-energy mode in bilayer graphene in zero magnetic field. Scientific Reports, 2017, 7, 6466.	1.6	13
220	Infrared detection and photon energy up-conversion in graphene layer infrared photodetectors integrated with LEDs based on van der Waals heterostructures: Concept, device model, and characteristics. Infrared Physics and Technology, 2017, 85, 307-314.	1.3	3
221	The optical response of monolayer, few-layer and bulk tungsten disulfide. Nanoscale, 2017, 9, 13128-13141.	2.8	97
222	van der Waals Bonded Co/h-BN Contacts to Ultrathin Black Phosphorus Devices. Nano Letters, 2017, 17, 5361-5367.	4.5	48
223	On-Chip Waveguide Coupling of a Layered Semiconductor Single-Photon Source. Nano Letters, 2017, 17, 5446-5451.	4.5	72
224	Field-Effect Transistors Using Thin Flakes of Misfit Layer Compound (LaS) _{1.20} CrS ₂ . Advanced Materials Interfaces, 2017, 4, 1700631.	1.9	3
225	Identifying the Crystalline Orientation of Black Phosphorus by Using Optothermal Raman Spectroscopy. ChemPhysChem, 2017, 18, 2828-2834.	1.0	12
226	Origin of bias-independent conductance plateaus and zero-bias conductance peaks in Bi ₂ Se ₃ /NbSe ₂ hybrid structures. Physical Review B, 2017, 96, .	1.1	17
227	Charged excitons in monolayer WSe_2 : Experiment and theory. Physical Review B, 2017, 96, .	1.1	20
228	Germanium-doped Metallic Ohmic Contacts in Black Phosphorus Field-Effect Transistors with Ultra-low Contact Resistance. Scientific Reports, 2017, 7, 16857.	1.6	16
229	Giant magnetic splitting inducing near-unity valley polarization in van der Waals heterostructures. Nature Communications, 2017, 8, 1551.	5.8	105
230	Static Capacitive Pressure Sensing Using a Single Graphene Drum. ACS Applied Materials & Interfaces, 2017, 9, 43205-43210.	4.0	47
231	Contact morphology and revisited photocurrent dynamics in monolayer MoS ₂ . Npj 2D Materials and Applications, 2017, 1, .	3.9	16
232	Parametric amplification in MoS ₂ drum resonator. Nanoscale, 2017, 9, 18299-18304.	2.8	29
233	Synthesis, structure and applications of graphene-based 2D heterostructures. Chemical Society Reviews, 2017, 46, 4572-4613.	18.7	275
234	Tunneling devices over van der Waals bonded hetero-interface. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
235	Electric and photovoltaic characteristics of a multi-layer ReS ₂ /ReSe ₂ heterostructure. APL Materials, 2017, 5, .	2.2	61
236	Photo-tunable transfer characteristics in MoTe ₂ /MoS ₂ vertical heterostructure. Npj 2D Materials and Applications, 2017, 1, .	3.9	35
237	Mechanical characterization and cleaning of CVD single-layer h-BN resonators. Npj 2D Materials and Applications, 2017, 1, .	3.9	40
238	Quantitative measurement of mean inner potential and specimen thickness from high-resolution off-axis electron holograms of ultra-thin layered WSe ₂ . Ultramicroscopy, 2017, 178, 38-47.	0.8	23
239	Measuring DNA Translocation Forces through MoS ₂ Nanopores with Optical Tweezers. Materials Today: Proceedings, 2017, 4, S168-S173.	0.9	5
240	Fabrication of hybrid self-assembled monolayer/hafnium oxide gate dielectric by radical oxidation for molybdenum disulfide field-effect transistors. Applied Physics Letters, 2017, 111, 202904.	1.5	0
241	Experimental characterization of graphene by electrostatic resonance frequency tuning. Journal of Applied Physics, 2017, 122, 234302.	1.1	20
242	Efros-Shklovskii variable range hopping and nonlinear transport in $1D$ sp^2 semiconductors. Physical Review B, 2017, 96, .		
243	MoS ₂ /VO ₂ /vdW heterojunction devices: Tunable rectifiers, photodiodes and field effect transistors. , 2017, , .		4
244	Fast photo-response of black phosphorus photodetectors. , 2017, , .		0
245	Substrate engineering for high-quality emission of free and localized excitons from atomic monolayers in hybrid architectures. Optica, 2017, 4, 669.	4.8	26
246	Recent Advances on Anilato-Based Molecular Materials with Magnetic and/or Conducting Properties. Magnetochemistry, 2017, 3, 17.	1.0	70
247	Magnetoresistance Effect in NiFe/BP/NiFe Vertical Spin Valve Devices. Advances in Condensed Matter Physics, 2017, 2017, 1-6.	0.4	11
248	Optical contrast and refractive index of natural van der Waals heterostructure nanosheets of frackteite. Beilstein Journal of Nanotechnology, 2017, 8, 2357-2362.	1.5	27
249	Infrared hyperbolic metasurface based on nanostructured van der Waals materials. Science, 2018, 359, 892-896.	6.0	344
250	Device physics of van der Waals heterojunction solar cells. Npj 2D Materials and Applications, 2018, 2, .	3.9	100
251	Suspension and simple optical characterization of two-dimensional membranes. Materials Research Express, 2018, 5, 035023.	0.8	2
252	Two-Dimensionally Layered p-Black Phosphorus/n-MoS ₂ /p-Black Phosphorus Heterojunctions. ACS Applied Materials & Interfaces, 2018, 10, 10347-10352.	4.0	43

#	ARTICLE	IF	CITATIONS
253	Recent Advances in Black Phosphorus-Based Photonics and Optoelectronics Devices. <i>Small Methods</i> , 2018, 2, 1700315.	4.6	36
254	Coupling-Assisted Renormalization of Excitons and Vibrations in Compressed MoSe ₂ /WSe ₂ Heterostructure. <i>Journal of Physical Chemistry C</i> , 2018, 122, 5820-5828.	1.5	19
255	Recent progress in Van der Waals (vdW) heterojunction-based electronic and optoelectronic devices. <i>Carbon</i> , 2018, 133, 78-89.	5.4	83
256	Chalcogenide glass waveguide-integrated black phosphorus mid-infrared photodetectors. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 044004.	1.0	40
257	Effects of Al ₂ O ₃ Capping and Post-Annealing on the Conduction Behavior in Few-Layer Black Phosphorus Field-Effect Transistors. <i>IEEE Journal of the Electron Devices Society</i> , 2018, 6, 320-324.	1.2	6
258	Atomically thin p-n junctions based on two-dimensional materials. <i>Chemical Society Reviews</i> , 2018, 47, 3339-3358.	18.7	231
259	On-chip Heaters for Tension Tuning of Graphene Nanodrums. <i>Nano Letters</i> , 2018, 18, 2852-2858.	4.5	27
260	Manifold Coupling Mechanisms of Transition Metal Dichalcogenides to Plasmonic Gold Nanoparticle Arrays. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9663-9670.	1.5	12
261	Chemical Doping Effects of Gas Molecules on Black Phosphorus Field-Effect Transistors. <i>ECS Journal of Solid State Science and Technology</i> , 2018, 7, Q3065-Q3069.	0.9	10
262	Spontaneous Emission Enhancement in Strain-Induced WSe ₂ Monolayer-Based Quantum Light Sources on Metallic Surfaces. <i>ACS Photonics</i> , 2018, 5, 1919-1926.	3.2	78
263	<i>Colloquium</i> : Excitons in atomically thin transition metal dichalcogenides. <i>Reviews of Modern Physics</i> , 2018, 90, .	16.4	1,292
264	Excitonic Emission of Monolayer Semiconductors Near-Field Coupled to High-Q Microresonators. <i>Nano Letters</i> , 2018, 18, 3138-3146.	4.5	48
265	Fabrication and Deterministic Transfer of High-Quality Quantum Emitters in Hexagonal Boron Nitride. <i>ACS Photonics</i> , 2018, 5, 2305-2312.	3.2	100
266	Boron nitride nanoresonators for phonon-enhanced molecular vibrational spectroscopy at the strong coupling limit. <i>Light: Science and Applications</i> , 2018, 7, 17172-17172.	7.7	257
267	Characterization of anisotropic thermal conductivity of suspended nm-thick black phosphorus with frequency-resolved Raman spectroscopy. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	23
268	Autonomous robotic searching and assembly of two-dimensional crystals to build van der Waals superlattices. <i>Nature Communications</i> , 2018, 9, 1413.	5.8	212
269	Deterministic and Etching-Free Transfer of Large-Scale 2D Layered Materials for Constructing Interlayer Coupled van der Waals Heterostructures. <i>Advanced Materials Technologies</i> , 2018, 3, 1700282.	3.0	26
270	Microwatts continuous-wave pumped second harmonic generation in few- and mono-layer GaSe. <i>Light: Science and Applications</i> , 2018, 7, 17126-17126.	7.7	68

#	ARTICLE	IF	CITATIONS
271	2D Photovoltaic Devices: Progress and Prospects. <i>Small Methods</i> , 2018, 2, 1700294.	4.6	135
272	Observation of Tunable Charged Exciton Polaritons in Hybrid Monolayer WS ₂ Plasmonic Nanoantenna System. <i>Nano Letters</i> , 2018, 18, 1777-1785.	4.5	200
273	2D materials in electro-optic modulation: energy efficiency, electrostatics, mode overlap, material transfer and integration. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	9
274	Strain Control of Exciton-Phonon Coupling in Atomically Thin Semiconductors. <i>Nano Letters</i> , 2018, 18, 1751-1757.	4.5	177
275	NaCl-Assisted CVD Synthesis, Transfer and Persistent Photoconductivity Properties of Two-Dimensional Transition Metal Dichalcogenides. <i>MRS Advances</i> , 2018, 3, 365-371.	0.5	12
276	Comparison of Intersubband Quantum-Well and Interband Graphene-Layer Infrared Photodetectors. <i>IEEE Journal of Quantum Electronics</i> , 2018, 54, 1-8.	1.0	9
277	Spectroscopy of bulk and few-layer superconducting NbSe ₂ with van der Waals tunnel junctions. <i>Nature Communications</i> , 2018, 9, 598.	5.8	84
278	When 2D Materials Meet Molecules: Opportunities and Challenges of Hybrid Organic/Inorganic van der Waals Heterostructures. <i>Advanced Materials</i> , 2018, 30, e1706103.	11.1	194
279	Charge Versus Energy Transfer in Atomically Thin Graphene-Transition Metal Dichalcogenide van der Waals Heterostructures. <i>Physical Review X</i> , 2018, 8, .	2.8	63
280	Ultra-high Photoresponsivity in Suspended Metal-Semiconductor-Metal Mesoscopic Multilayer MoS ₂ Broadband Detector from UV-to-IR with Low Schottky Barrier Contacts. <i>Scientific Reports</i> , 2018, 8, 1276.	1.6	44
281	Ultrafast quantum beats of anisotropic excitons in atomically thin ReS ₂ . <i>Nature Communications</i> , 2018, 9, 351.	5.8	49
282	Dielectric Engineering of Electronic Correlations in a van der Waals Heterostructure. <i>Nano Letters</i> , 2018, 18, 1402-1409.	4.5	39
283	Recent progress in 2D group-VA semiconductors: from theory to experiment. <i>Chemical Society Reviews</i> , 2018, 47, 982-1021.	18.7	697
284	Lithium ion intercalation in thin crystals of hexagonal TaSe ₂ gated by a polymer electrolyte. <i>Applied Physics Letters</i> , 2018, 112, 023502.	1.5	16
285	Synthesis of Crystalline Black Phosphorus Thin Film on Sapphire. <i>Advanced Materials</i> , 2018, 30, 1703748.	11.1	86
286	Novel Optoelectronic Devices: Transition-Metal Dichalcogenide-Based 2D Heterostructures. <i>Advanced Electronic Materials</i> , 2018, 4, 1700335.	2.6	91
287	Light Sources and Photodetectors Enabled by 2D Semiconductors. <i>Small Methods</i> , 2018, 2, 1800019.	4.6	35
288	Momentum-space indirect interlayer excitons in transition-metal dichalcogenide van der Waals heterostructures. <i>Nature Physics</i> , 2018, 14, 801-805.	6.5	229

#	ARTICLE	IF	CITATIONS
289	Exciton diffusion in WSe ₂ monolayers embedded in a van der Waals heterostructure. Applied Physics Letters, 2018, 112, .	1.5	114
290	Strain transfer across grain boundaries in MoS ₂ monolayers grown by chemical vapor deposition. 2D Materials, 2018, 5, 031003.	2.0	23
291	Suspended SnS ₂ Layers by Light Assistance for Ultrasensitive Ammonia Detection at Room Temperature. Advanced Functional Materials, 2018, 28, 1801035.	7.8	81
292	Air-Stable Room-Temperature Mid-Infrared Photodetectors Based on hBN/Black Arsenic Phosphorus/hBN Heterostructures. Nano Letters, 2018, 18, 3172-3179.	4.5	145
293	Simultaneous assembly of van der Waals heterostructures into multiple nanodevices. Nanoscale, 2018, 10, 7966-7970.	2.8	17
294	3D Localized Trions in Monolayer WSe ₂ in a Charge Tunable van der Waals Heterostructure. Nano Letters, 2018, 18, 2859-2863.	4.5	36
295	Graphene-supported high-efficient modulation based on electromagnetically induced transparency in silica microcavity. Optics Communications, 2018, 420, 40-45.	1.0	5
296	High breakdown voltage quasi-two-dimensional $\text{In}^2\text{-Ga}_2\text{O}_3$ field-effect transistors with a boron nitride field plate. Applied Physics Letters, 2018, 112, .	1.5	90
297	Transfer and patterning of chemical vapor deposited graphene by a multifunctional polymer film. Applied Physics Letters, 2018, 112, .	1.5	7
298	Recent Progress on Antimonene: A New Bidimensional Material. Advanced Materials, 2018, 30, 1703771.	11.1	245
299	Dipole-Aligned Energy Transfer between Excitons in Two-Dimensional Transition Metal Dichalcogenide and Organic Semiconductor. ACS Photonics, 2018, 5, 100-104.	3.2	29
300	Applications of Phosphorene and Black Phosphorus in Energy Conversion and Storage Devices. Advanced Energy Materials, 2018, 8, 1702093.	10.2	385
301	Pronounced Photovoltaic Effect in Electrically Tunable Lateral Blackâ€œPhosphorus Heterojunction Diode. Advanced Electronic Materials, 2018, 4, 1700442.	2.6	27
302	Giant gap-plasmon tip-enhanced Raman scattering of MoS ₂ monolayers on Au nanocluster arrays. Nanoscale, 2018, 10, 2755-2763.	2.8	70
303	Strongly anisotropic spin relaxation in grapheneâ€œtransition metal dichalcogenide heterostructures at room temperature. Nature Physics, 2018, 14, 303-308.	6.5	193
304	Recent progress in the assembly of nanodevices and van der Waals heterostructures by deterministic placement of 2D materials. Chemical Society Reviews, 2018, 47, 53-68.	18.7	473
305	Chemical vapor deposition growth of two-dimensional heterojunctions. Science China: Physics, Mechanics and Astronomy, 2018, 61, 1.	2.0	52
306	Layered material GeSe and vertical GeSe/MoS ₂ p-n heterojunctions. Nano Research, 2018, 11, 420-430.	5.8	74

#	ARTICLE	IF	CITATIONS
307	Raman scattering from the bulk inactive out-of-plane E_{2g} mode in few-layer MoTe ₂ . Scientific Reports, 2018, 8, 17745.	1.6	12
308	Measurement of the thermal conductivities of suspended MoS ₂ and MoSe ₂ by nanosecond ET-Raman without temperature calibration and laser absorption evaluation. Nanoscale, 2018, 10, 23087-23102.	2.8	51
309	Humidity-Controlled Ultralow Power Layer-by-Layer Thinning, Nanopatterning and Bandgap Engineering of MoTe ₂ . Advanced Functional Materials, 2018, 28, 1804434.	7.8	23
310	2D Material Printing for Cavity Integration. , 2018, , .		0
311	Low-frequency noise in irradiated graphene FETs. Applied Physics Letters, 2018, 113, .	1.5	6
312	Combined Ultra High Vacuum Raman and Electronic Transport Characterization of Large-Area Graphene on SiO ₂ . Physica Status Solidi (B): Basic Research, 2018, 255, 1800456.	0.7	4
313	Ultrasensitive Heterojunctions of Graphene and 2D Perovskites Reveal Spontaneous Iodide Loss. Joule, 2018, 2, 2133-2144.	11.7	39
314	Coupling quantum emitters in WSe ₂ monolayers to a metal-insulator-metal waveguide. Applied Physics Letters, 2018, 113, .	1.5	19
316	Deterministic Arrays of Single-Photon Sources. Springer Theses, 2018, , 47-70.	0.0	0
317	Frictional Characteristics of Suspended MoS ₂ . Journal of Physical Chemistry C, 2018, 122, 26922-26927.	1.5	16
318	Moiré Intralayer Excitons in a MoSe ₂ /MoS ₂ Heterostructure. Nano Letters, 2018, 18, 7651-7657.	4.5	113
319	Quartz Tuning-Fork Based Carbon Nanotube Transfer into Quantum Device Geometries. Physica Status Solidi (B): Basic Research, 2018, 255, 1800118.	0.7	7
320	Performance Improvement in Hydrogenated Few-Layer Black Phosphorus Field-Effect Transistors. Chinese Physics Letters, 2018, 35, 127302.	1.3	3
321	Graphene gas pumps. , 2018, , .		3
322	Perspective: Ga ₂ O ₃ for ultra-high power rectifiers and MOSFETS. Journal of Applied Physics, 2018, 124, .	1.1	416
323	Progress of Graphene-Silicon Heterojunction Photovoltaic Devices. Advanced Materials Interfaces, 2018, 5, 1801520.	1.9	22
324	Double carrier transport in electron-doped region in black phosphorus FET. Applied Physics Letters, 2018, 113, .	1.5	6
325	Toward Air Stability of Thin GaSe Devices: Avoiding Environmental and Laser-Induced Degradation by Encapsulation. Advanced Functional Materials, 2018, 28, 1805304.	7.8	49

#	ARTICLE	IF	CITATIONS
326	Position sensitivity of optical nano-antenna arrays on optoelectronic devices. Nano Energy, 2018, 53, 734-744.	8.2	13
327	Recent Advances in Synthesis and Assembly of van der Waals Materials. Journal of the Korean Physical Society, 2018, 73, 805-816.	0.3	11
328	Deterministic coupling of quantum emitters in WSe_2 monolayers to plasmonic nanocavities. Optics Express, 2018, 26, 25944.	1.7	33
329	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS_2 . Nano Letters, 2018, 18, 6882-6891.	4.5	82
330	Nonvolatile and Programmable Photodoping in $MoTe_2$ for Photoresist-Free Complementary Electronic Devices. Advanced Materials, 2018, 30, e1804470.	11.1	70
331	Bias- and Gate-Tunable Gas Sensor Response Originating from Modulation in the Schottky Barrier Height of a Graphene/ MoS_2 van der Waals Heterojunction. ACS Applied Materials & Interfaces, 2018, 10, 38387-38393.	4.0	56
332	Waterproof Perovskite-Hexagonal Boron Nitride Hybrid Nanolasers with Low Lasing Thresholds and High Operating Temperature. ACS Photonics, 2018, 5, 4520-4528.	3.2	30
333	Coating two-dimensional MoS_2 with polymer creates a corrosive non-uniform interface. Npj 2D Materials and Applications, 2018, 2, .	3.9	19
334	Efficient generation of neutral and charged biexcitons in encapsulated WSe_2 monolayers. Nature Communications, 2018, 9, 3718.	5.8	133
335	Comparison of Electrical and Photoelectrical Properties of ReS_2 Field-Effect Transistors on Different Dielectric Substrates. ACS Applied Materials & Interfaces, 2018, 10, 32501-32509.	4.0	44
336	Multiple Optical Frequency Conversions in Few-Layer $GaSe$ Assisted by a Photonic Crystal Cavity. Advanced Optical Materials, 2018, 6, 1800698.	3.6	15
337	Helical Hole State in Multiple Conduction Modes in Ge/Si Core/Shell Nanowire. Nano Letters, 2018, 18, 6144-6149.	4.5	19
338	Optical harmonic generation in monolayer group-VI transition metal dichalcogenides. Physical Review B, 2018, 98, .	1.1	92
339	Efficient and Layer-Dependent Exciton Pumping across Atomically Thin Organic-Inorganic Type-II Heterostructures. Advanced Materials, 2018, 30, e1803986.	11.1	79
340	Control of Strong Light-Matter Interaction in Monolayer WS_2 through Electric Field Gating. Nano Letters, 2018, 18, 6455-6460.	4.5	72
341	Exfoliation of Transition Metal Dichalcogenides by a High-Power Femtosecond Laser. Scientific Reports, 2018, 8, 12957.	1.6	48
342	Controllable one-step growth of bilayer MoS_2 WS_2/WS_2 heterostructures by chemical vapor deposition. Nanotechnology, 2018, 29, 455707.	1.3	26
343	Spatial extent of the excited exciton states in WS_2 monolayers from diamagnetic shifts. Physical Review B, 2018, 98, .	1.1	10

#	ARTICLE	IF	CITATIONS
344	Exciton Diffusion and Halo Effects in Monolayer Semiconductors. Physical Review Letters, 2018, 120, 207401.	2.9	193
345	Microcavity enhanced single photon emission from two-dimensional WSe ₂ . Applied Physics Letters, 2018, 112, .	1.5	35
346	Room-temperature ferroelectricity and a switchable diode effect in two-dimensional In_2Se_3 thin layers. Nanoscale, 2018, 10, 14885-14892.	2.8	173
347	Ferroelectric Field-Effect Transistors Based on MoS ₂ and CuInP ₂ S ₆ Two-Dimensional van der Waals Heterostructure. ACS Nano, 2018, 12, 6700-6705.	7.3	246
348	Electronic transport modulation on suspended few-layer MoS_2 under strain. Physical Review B, 2018, 97, .	2.9	70
349	Black Phosphorus Radio Frequency Electronics at Cryogenic Temperatures. Advanced Electronic Materials, 2018, 4, 1800138.	2.6	15
350	Enhancing ambipolar carrier transport of black phosphorus field-effect transistors with Ni ₃ P alloy contacts. Physical Chemistry Chemical Physics, 2018, 20, 22439-22444.	1.3	4
351	Zeeman Splitting and Inverted Polarization of Biexciton Emission in Monolayer WS_2 . Physical Review Letters, 2018, 121, 057402.	2.9	70
352	Investigating Laser-Induced Phase Engineering in MoS ₂ Transistors. IEEE Transactions on Electron Devices, 2018, 65, 4053-4058.	1.6	8
353	Two-dimensional multibit optoelectronic memory with broadband spectrum distinction. Nature Communications, 2018, 9, 2966.	5.8	211
354	Polarization-Sensitive and Broadband Photodetection Based on a Mixed-Dimensionality TiS ₃ /Si ₃ N ₄ Junction. Advanced Optical Materials, 2018, 6, 1800351.	3.6	64
355	Sensitivity of high-k encapsulated MoS ₂ transistors to I-V measurement execution time. , 2018, , .		0
356	Various Structures of 2D Transition-Metal Dichalcogenides and Their Applications. Small Methods, 2018, 2, 1800094.	4.6	107
357	Tunable WSe ₂ -CdS mixed-dimensional van der Waals heterojunction with a piezo-phototronic effect for an enhanced flexible photodetector. Nanoscale, 2018, 10, 14472-14479.	2.8	53
358	Production Methods of Van der Waals Heterostructures Based on Transition Metal Dichalcogenides. Crystals, 2018, 8, 35.	1.0	47
359	Dielectric-induced interface states in black phosphorus and tungsten diselenide capacitors. Applied Physics Letters, 2018, 113, 013103.	1.5	10
360	Mapping of the dark exciton landscape in transition metal dichalcogenides. Physical Review B, 2018, 98, .	1.1	53
361	Multilayer Black Phosphorus Near-Infrared Photodetectors. Sensors, 2018, 18, 1668.	2.1	26

#	ARTICLE	IF	CITATIONS
362	Heat transfer at the van der Waals interface between graphene and NbSe ₂ . Physical Review B, 2018, 98, .	1.1	3
363	2D library beyond graphene and transition metal dichalcogenides: a focus on photodetection. Chemical Society Reviews, 2018, 47, 6296-6341.	18.7	207
364	Spectrally narrow exciton luminescence from monolayer MoS ₂ and MoSe ₂ exfoliated onto epitaxially grown hexagonal BN. Applied Physics Letters, 2018, 113, .	1.5	22
365	Electrical spin injection, transport, and detection in graphene-hexagonal boron nitride van der Waals heterostructures: progress and perspectives. 2D Materials, 2018, 5, 032004.	2.0	56
366	[Hg ₄ Te ₈ (Te ₂) ₄] ⁸⁺ : A Heavy Metal Porphyrinoid Embedded in a Lamellar Structure. Angewandte Chemie - International Edition, 2018, 57, 8770-8774.	7.2	26
367	Large, non-saturating magnetoresistance in single layer chemical vapor deposition graphene with an h-BN capping layer. Carbon, 2018, 136, 211-216.	5.4	12
368	1305Ånm Few-Layer MoTe ₂ on Silicon Laser-Like Emission. Laser and Photonics Reviews, 2018, 12, 1800015.	4.4	39
369	Observation of bosonic condensation in a hybrid monolayer MoSe ₂ -GaAs microcavity. Nature Communications, 2018, 9, 3286.	5.8	49
370	Enhancement of Exciton-Phonon Scattering from Monolayer to Bilayer WS ₂ . Nano Letters, 2018, 18, 6135-6143.	4.5	50
371	Interlayer valley excitons in heterobilayers of transition metal dichalcogenides. Nature Nanotechnology, 2018, 13, 1004-1015.	15.6	373
372	Stable and scalable 1T MoS ₂ with low temperature-coefficient of resistance. Scientific Reports, 2018, 8, 12463.	1.6	31
373	Three dimensionally-ordered 2D MoS ₂ vertical layers integrated on flexible substrates with stretch-tunable functionality and improved sensing capability. Nanoscale, 2018, 10, 17525-17533.	2.8	31
374	Coupling Single Photons from Discrete Quantum Emitters in WSe ₂ to Lithographically Defined Plasmonic Slot Waveguides. Nano Letters, 2018, 18, 6812-6819.	4.5	53
375	Radiative Enhancement of Single Quantum Emitters in WSe ₂ Monolayers Using Site-Controlled Metallic Nanopillars. ACS Photonics, 2018, 5, 3466-3471.	3.2	51
376	Superconductor-Insulator Transitions in Exfoliated Bi ₂ Sr ₂ CaCu ₂ O ₈ Flakes. Nano Letters, 2018, 18, 5660-5665.	4.5	50
377	Recent advances in the preparation, characterization, and applications of two-dimensional heterostructures for energy storage and conversion. Journal of Materials Chemistry A, 2018, 6, 21747-21784.	5.2	85
378	Synthesis and Characterization of Zirconium Disulfide Single Crystals and Thin Film Transistors Based on Multilayer Zirconium Disulfide Flakes. ChemNanoMat, 2018, 4, 1078-1082.	1.5	10
379	Reliability of next-generation field-effect transistors with transition metal dichalcogenides. , 2018, , .		2

#	ARTICLE	IF	CITATIONS
380	Large birefringence and linear dichroism in TiS_3 nanosheets. <i>Nanoscale</i> , 2018, 10, 12424-12429.	2.8	40
381	$[\text{Hg}_4\text{Te}_8(\text{Te}_2)_4]^{8+}$: ein Schwermetall-Porphyrinoid in einer lamellaren Struktur. <i>Angewandte Chemie</i> , 2018, 130, 8906-8910.	1.6	9
382	Moiré-Modulated Conductance of Hexagonal Boron Nitride Tunnel Barriers. <i>Nano Letters</i> , 2018, 18, 4241-4246.	4.5	19
383	Beam Steering with a Nonlinear Optical Phased Array Antenna. <i>Nano Letters</i> , 2019, 19, 6097-6103.	4.5	24
384	Gate Tunable Cooperativity between Vibrational Modes. <i>Nano Letters</i> , 2019, 19, 5862-5867.	4.5	16
385	Highly Anisotropic Mechanical and Optical Properties of 2D Layered As_2S_3 Membranes. <i>ACS Nano</i> , 2019, 13, 10845-10851.	7.3	60
386	Light-Assisted Charge Propagation in Networks of Organic Semiconductor Crystallites on Hexagonal Boron Nitride. <i>Advanced Functional Materials</i> , 2019, 29, 1903816.	7.8	6
387	Second Harmonic and Sum-Frequency Generations from a Silicon Metasurface Integrated with a Two-Dimensional Material. <i>ACS Photonics</i> , 2019, 6, 2252-2259.	3.2	52
388	Ultracompact Photodetection in Atomically Thin MoSe_2 . <i>ACS Photonics</i> , 2019, 6, 1902-1909.	3.2	15
389	Supercontinuum second harmonic generation spectroscopy of atomically thin semiconductors. <i>Review of Scientific Instruments</i> , 2019, 90, 083102.	0.6	16
390	Control of the Exciton Radiative Lifetime in van der Waals Heterostructures. <i>Physical Review Letters</i> , 2019, 123, 067401.	2.9	85
391	Giant gate-tunable bandgap renormalization and excitonic effects in a 2D semiconductor. <i>Science Advances</i> , 2019, 5, eaaw2347.	4.7	80
392	Van der Waals negative capacitance transistors. <i>Nature Communications</i> , 2019, 10, 3037.	5.8	144
393	Scanning Tunneling Microscope-Induced Excitonic Luminescence of a Two-Dimensional Semiconductor. <i>Physical Review Letters</i> , 2019, 123, 027402.	2.9	36
394	Clean Transfer of 2D Transition Metal Dichalcogenides Using Cellulose Acetate for Atomic Resolution Characterizations. <i>ACS Applied Nano Materials</i> , 2019, 2, 5320-5328.	2.4	33
395	Optical valley Hall effect for highly valley-coherent exciton-polaritons in an atomically thin semiconductor. <i>Nature Nanotechnology</i> , 2019, 14, 770-775.	15.6	87
396	Launching of hyperbolic phonon-polaritons in h-BN slabs by resonant metal plasmonic antennas. <i>Nature Communications</i> , 2019, 10, 3242.	5.8	56
397	Sealing Graphene Nanodrums. <i>Nano Letters</i> , 2019, 19, 5313-5318.	4.5	41

#	ARTICLE	IF	CITATIONS
398	Lateral Bilayer MoS ₂ /WS ₂ Heterostructure Photodetectors with High Responsivity and Detectivity. <i>Advanced Optical Materials</i> , 2019, 7, 1900815.	3.6	65
399	Conductance interference effects in an electron-beam-resist-free chemical vapor deposition graphene device sandwiched between two h-BN sheets. <i>Carbon</i> , 2019, 154, 238-243.	5.4	8
400	Niobium diselenide superconducting photodetectors. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	28
401	Chemical Identification of Interlayer Contaminants within van der Waals Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 25578-25585.	4.0	43
402	Direct Wide Bandgap 2D GeSe Monolayer toward Anisotropic UV Photodetection. <i>Advanced Optical Materials</i> , 2019, 7, 1900622.	3.6	70
403	Multilevel MoS ₂ Optical Memory with Photoresponsive Top Floating Gates. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 25306-25312.	4.0	65
404	Excited-State Trions in Monolayer WS ₂ . <i>Physical Review Letters</i> , 2019, 123, 167401.	4.0	65
405	Dual Selective Gas Sensing Characteristics of 2D $\hat{\pm}$ -MoO ₃ via a Facile Transfer Process. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 40189-40195.	4.0	47
406	Integration of single photon emitters in 2D layered materials with a silicon nitride photonic chip. <i>Nature Communications</i> , 2019, 10, 4435.	5.8	168
407	Visualizing Spatial Variations of Plasmon-Exciton Polaritons at the Nanoscale Using Electron Microscopy. <i>Nano Letters</i> , 2019, 19, 8171-8181.	4.5	77
408	Elastic properties of few unit cell thick superconducting crystals of Bi ₂ Sr ₂ CaCu ₂ O ₈ . <i>Applied Physics Letters</i> , 2019, 115, .	1.5	3
409	Broadband polarized photodetector based on p-BP/n-ReS ₂ heterojunction. <i>Journal of Semiconductors</i> , 2019, 40, 092001.	2.0	46
410	Interlayer Excitons in Transition-Metal Dichalcogenide Heterobilayers. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1900308.	0.7	15
411	Anti-Stokes Photoluminescence of Monolayer WS ₂ . <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1900419.	0.7	5
412	Low-Noise Mid-Infrared Photodetection in BP/h-BN/Graphene van der Waals Heterojunctions. <i>Materials</i> , 2019, 12, 2532.	1.3	14
413	Enhanced light-matter interaction in an atomically thin semiconductor coupled with dielectric nano-antennas. <i>Nature Communications</i> , 2019, 10, 5119.	5.8	87
414	Growth and characterization of two-dimensional crystals for communication and energy applications. <i>Progress in Crystal Growth and Characterization of Materials</i> , 2019, 65, 100465.	1.8	5
415	Passivation of Layered Gallium Telluride by Double Encapsulation with Graphene. <i>ACS Omega</i> , 2019, 4, 18002-18010.	1.6	15

#	ARTICLE	IF	CITATIONS
416	Atomic-Precision Fabrication of Quasi-Full-Space Grain Boundaries in Two-Dimensional Hexagonal Boron Nitride. Nano Letters, 2019, 19, 8581-8589.	4.5	14
417	Acoustic Actuation of Suspended Graphene For Linear Excitation of 2D NEMS. , 2019, , .		0
418	Measurement of local optomechanical properties of a direct bandgap 2D semiconductor. APL Materials, 2019, 7, .	2.2	18
419	Spectral Responsivity and Photoconductive Gain in Thin Film Black Phosphorus Photodetectors. ACS Photonics, 2019, 6, 3092-3099.	3.2	21
420	Polymer Coatings Tune Electromagnetically Induced Transparency in Two-Dimensional Semiconductors. ACS Photonics, 2019, 6, 3115-3119.	3.2	7
421	All WSe ₂ 1T1R resistive RAM cell for future monolithic 3D embedded memory integration. Nature Communications, 2019, 10, 5201.	5.8	107
422	Topological Magnetic-Spin Textures in Two-Dimensional van der Waals Cr ₂ Ge ₂ Te ₆ . Nano Letters, 2019, 19, 7859-7865.	4.5	116
423	Molecularly Thin Electrolyte for All Solid-State Nonvolatile Two-Dimensional Crystal Memory. Nano Letters, 2019, 19, 8911-8919.	4.5	6
424	Controllable Interlayer Charge and Energy Transfer in Perovskite Quantum Dots/ Transition Metal Dichalcogenide Heterostructures. Advanced Materials Interfaces, 2019, 6, 1901263.	1.9	17
425	$\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mi} \text{FeTe} \text{/mml:mi} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} 0.55 \text{/mml:mn} \rangle \text{/mml:mrow} \rangle \text{ van der Waals tunneling devices. Physical Review B, 2019, 100, .}$		
426	Anisotropic Strain-Induced Soliton Movement Changes Stacking Order and Band Structure of Graphene Multilayers: Implications for Charge Transport. ACS Applied Nano Materials, 2019, 2, 6067-6075.	2.4	24
427	Probing and Manipulating Valley Coherence of Dark Excitons in Monolayer $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mi} \text{WSe} \text{/mml:mi} \rangle \text{/mml:mrow} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} 2 \text{/mml:mn} \rangle \langle \text{mml:mn} 49 \text{/mml:mn} \rangle \text{/mml:mrow} \rangle \text{/mml:math}$ Physical Review Letters, 2019, 123, 096803.	2.9	49
428	Charge Accumulation Effect in Transition Metal Dichalcogenide Heterobilayers. Small, 2019, 15, e1902424.	5.2	30
429	Strain-Tunable Single Photon Sources in WSe ₂ Monolayers. Nano Letters, 2019, 19, 6931-6936.	4.5	71
430	Position and Frequency Control of Strain-Induced Quantum Emitters in WSe ₂ Monolayers. Nano Letters, 2019, 19, 7534-7539.	4.5	36
431	Contact-Lifted Thickness-Modulated MoS ₂ Diodes for Gate-Controlled Electronic Applications. ACS Applied Electronic Materials, 2019, 1, 2150-2156.	2.0	7
432	Long-Term Stabilization of Two-Dimensional Perovskites by Encapsulation with Hexagonal Boron Nitride. Nanomaterials, 2019, 9, 1120.	1.9	31
433	High-Frequency Elastic Coupling at the Interface of van der Waals Nanolayers Imaged by Picosecond Ultrasonics. ACS Nano, 2019, 13, 11530-11537.	7.3	24

#	ARTICLE	IF	CITATIONS
434	Exciton Propagation and Halo Formation in Two-Dimensional Materials. Nano Letters, 2019, 19, 7317-7323.	4.5	64
435	Barrier Formation at the Contacts of Vanadium Dioxide and Transition-Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2019, 11, 36871-36879.	4.0	9
436	Highly nonlinear BiOBr nanoflakes for hybrid integrated photonics. APL Photonics, 2019, 4, .	3.0	31
437	Magnetic-field-induced splitting and polarization of monolayer-based valley exciton polaritons. Physical Review B, 2019, 100, .	1.1	12
438	Floating magnetic microrobots for fiber functionalization. Science Robotics, 2019, 4, .	9.9	48
439	Detection of cyclotron resonance using photo-induced thermionic emission at graphene/MoS ₂ van der Waals interface. Applied Physics Letters, 2019, 115, 143101.	1.5	1
440	Quantum defects by design. Nanophotonics, 2019, 8, 1867-1888.	2.9	58
441	Hexagonal Boron Nitride for Surface Passivation of Two-Dimensional van der Waals Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 39765-39771.	4.0	42
442	Twist Angle mapping in layered WS ₂ by Polarization-Resolved Second Harmonic Generation. Scientific Reports, 2019, 9, 14285.	1.6	31
443	Energy Spectrum of Two-Dimensional Excitons in a Nonuniform Dielectric Medium. Physical Review Letters, 2019, 123, 136801.	2.9	56
444	Single silicon nanostripe gated suspended monolayer and bilayer WS ₂ to realize abnormal electro-optical modulation. Materials Horizons, 2019, 6, 334-342.	6.4	17
445	A vapor-phase-assisted growth route for large-scale uniform deposition of MoS ₂ monolayer films. RSC Advances, 2019, 9, 107-113.	1.7	4
446	Mild Covalent Functionalization of Transition Metal Dichalcogenides with Maleimides: A "Click" Reaction for 2H-MoS ₂ and WS ₂ . Journal of the American Chemical Society, 2019, 141, 3767-3771.	6.6	72
447	Laser-writable high-k dielectric for van der Waals nanoelectronics. Science Advances, 2019, 5, eaau0906.	4.7	51
448	Fast Yet Quantum-Efficient Few-Layer Vertical MoS ₂ Photodetectors. Advanced Electronic Materials, 2019, 5, 1900141.	2.6	16
449	Performance improvement of a p-MoS ₂ /HfS ₂ van der Waals heterostructure tunneling FET by UV-O ₃ treatment. Applied Physics Express, 2019, 12, 065005.	1.1	9
450	Ionic Glass-Gated 2D Material-Based Phototransistor: MoSe ₂ over LaF ₃ as Case Study. Advanced Functional Materials, 2019, 29, 1902723.	7.8	24
451	Sign-Reversing Hall Effect in Atomically Thin High-Temperature $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> < \text{mml:mrow} < \text{mml:mrow} < \text{mml:msub} < \text{mml:mrow} < \text{mml:mi} \text{Bi} / \text{mml:mi} > < / \text{mml:mrow} > < \text{mml:mrow} < \text{mml:mn} > 2. \langle / \text{mml:math} \rangle$ Physical Review Letters, 2019, 122, 247001.	2.9	57

#	ARTICLE	IF	CITATIONS
452	Efficient Gate Modulation in a Screening-Engineered MoS ₂ /Single-Walled Carbon Nanotube Network Heterojunction Vertical Field-Effect Transistor. ACS Applied Materials & Interfaces, 2019, 11, 25516-25523.	4.0	20
453	Interlayer excitons in bilayer MoS ₂ under uniaxial tensile strain. Nanoscale, 2019, 11, 12788-12792.	2.8	47
454	Gate-Tunable Tunneling Transistor Based on a Thin Black Phosphorus/SnSe ₂ Heterostructure. ACS Applied Materials & Interfaces, 2019, 11, 20973-20978.	4.0	29
455	Electrical and geometrical tuning of MoS ₂ field effect transistors via direct nanopatterning. Nanoscale, 2019, 11, 11152-11158.	2.8	7
456	Improvement of Performance of HfS ₂ Transistors Using a Self-Assembled Monolayer as Gate Dielectric*. Chinese Physics Letters, 2019, 36, 067301.	1.3	5
457	Inkjet printed graphene as an interconnect for optoelectronic devices. Journal of Materials Science: Materials in Electronics, 2019, 30, 12500-12509.	1.1	7
458	Magneto-spectroscopy of exciton Rydberg states in a CVD grown WSe ₂ monolayer. Applied Physics Letters, 2019, 114, .	1.5	17
459	Devices and Circuits Using Novel 2-D Materials: A Perspective for Future VLSI Systems. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2019, 27, 1486-1503.	2.1	30
460	Ambipolar MoS ₂ Field-Effect Transistor by Spatially Controlled Chemical Doping. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900208.	1.2	15
461	Dry release transfer of graphene and few-layer h-BN by utilizing thermoplasticity of polypropylene carbonate. Npj 2D Materials and Applications, 2019, 3, .	3.9	60
462	Spin States Protected from Intrinsic Electron-Phonon Coupling Reaching 100 ns Lifetime at Room Temperature in MoSe ₂ . Nano Letters, 2019, 19, 4083-4090.	4.5	27
463	Thickness-Dependent Refractive Index of 1L, 2L, and 3L MoS ₂ , MoSe ₂ , WS ₂ , and WSe ₂ . Advanced Optical Materials, 2019, 7, 1900239.	3.6	155
464	Hybrid metal nanoantenna 2D-material photovoltaic device. Solar Energy Materials and Solar Cells, 2019, 200, 109918.	3.0	9
465	Thickness determination of MoS ₂ , MoSe ₂ , WS ₂ and WSe ₂ on transparent stamps used for deterministic transfer of 2D materials. Nano Research, 2019, 12, 1691-1695.	5.8	46
466	Ultra-Long Lifetimes of Single Quantum Emitters in Monolayer WSe ₂ /hBN Heterostructures. Advanced Quantum Technologies, 2019, 2, 1900022.	1.8	13
467	Mechanical and liquid phase exfoliation of cylindrite: a natural van der Waals superlattice with intrinsic magnetic interactions. 2D Materials, 2019, 6, 035023.	2.0	38
468	Transition metal dichalcogenide nanodisks as high-index dielectric Mie nanoresonators. Nature Nanotechnology, 2019, 14, 679-683.	15.6	235
469	Boundary Lubricating Properties of Black Phosphorus Nanosheets in Polyalphaolefin Oil. Journal of Tribology, 2019, 141, .	1.0	23

#	ARTICLE	IF	CITATIONS
470	Type- ϵ Switchable Inverter and Amplifier Based on High-Performance Ambipolar Black-Phosphorus Transistors. <i>Advanced Electronic Materials</i> , 2019, 5, 1900133.	2.6	9
471	Enhanced Photoresponse in MoTe ₂ Photodetectors with Asymmetric Graphene Contacts. <i>Advanced Optical Materials</i> , 2019, 7, 1900190.	3.6	65
472	Single Plasmon Generation in an InAs/GaAs Quantum Dot in a Transfer-Printed Plasmonic Microring Resonator. <i>ACS Photonics</i> , 2019, 6, 1106-1110.	3.2	15
473	Gate-tunable ReS ₂ /MoTe ₂ heterojunction with high-performance photodetection. <i>Optical and Quantum Electronics</i> , 2019, 51, 1.	1.5	15
474	Laterally confined photonic crystal surface emitting laser incorporating monolayer tungsten disulfide. <i>Npj 2D Materials and Applications</i> , 2019, 3, .	3.9	31
475	Fabrication and the Interlayer Coupling Effect of Twisted Stacked Black Phosphorus for Optical Applications. <i>ACS Applied Nano Materials</i> , 2019, 2, 3138-3145.	2.4	23
476	Van der Waals integration before and beyond two-dimensional materials. <i>Nature</i> , 2019, 567, 323-333.	13.7	946
477	Fabrication and practical applications of molybdenum disulfide nanopores. <i>Nature Protocols</i> , 2019, 14, 1130-1168.	5.5	84
478	Electrical control of spatial resolution in mixed-dimensional heterostructured photodetectors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 6586-6593.	3.3	20
479	Å...ngstrom-Scale, Atomically Thin 2D Materials for Corrosion Mitigation and Passivation. <i>Coatings</i> , 2019, 9, 133.	1.2	22
480	Characteristics of vertically stacked graphene-layer infrared photodetectors. <i>Solid-State Electronics</i> , 2019, 155, 123-128.	0.8	1
481	Layer number dependence of the work function and optical properties of single and few layers MoS ₂ : effect of substrate. <i>Nanotechnology</i> , 2019, 30, 245708.	1.3	38
482	Negative transconductance and negative differential resistance in asymmetric narrow bandgap 2D-3D heterostructures. <i>Nanoscale</i> , 2019, 11, 4701-4706.	2.8	20
483	Preparations, properties and applications of low-dimensional black phosphorus. <i>Chemical Engineering Journal</i> , 2019, 370, 120-135.	6.6	71
484	Exciton Radiative Recombination Dynamics and Nonradiative Energy Transfer in Two-Dimensional Transition-Metal Dichalcogenides. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10087-10093.	1.5	31
485	Role of Crack Deflection on Rate Dependent Mechanical Transfer of Multilayer Graphene and Its Application to Transparent Electrodes. <i>ACS Applied Nano Materials</i> , 2019, 2, 1980-1985.	2.4	13
486	Ultrafast transition between exciton phases in van der Waals heterostructures. <i>Nature Materials</i> , 2019, 18, 691-696.	13.3	168
487	Cohesive zone models to understand the interface mechanics of thin film transfer printing. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	8

#	ARTICLE	IF	CITATIONS
488	High-temperature electronic devices enabled by hBN-encapsulated graphene. Applied Physics Letters, 2019, 114, .	1.5	32
489	Analog Circuit Applications Based on All-2D Ambipolar ReSe ₂ Field-Effect Transistors. Advanced Functional Materials, 2019, 29, 1809011.	7.8	36
490	Improvements in the Performance of a Visible-NIR Photodetector Using Horizontally Aligned TiS ₃ Nanoribbons. ACS Omega, 2019, 4, 6180-6191.	1.6	33
491	Neutral and defect-induced exciton annihilation in defective monolayer WS ₂ . Nanoscale, 2019, 11, 7913-7920.	2.8	36
492	Tunable Control of Interlayer Excitons in WS ₂ /MoS ₂ Heterostructures via Strong Coupling with Enhanced Mie Resonances. Advanced Science, 2019, 6, 1802092.	5.6	40
493	Optomechanical Measurement of Thermal Transport in Two-Dimensional MoSe ₂ Lattices. Nano Letters, 2019, 19, 3143-3150.	4.5	43
494	Ultrasensitive flexible near-infrared photodetectors based on Van der Waals Bi ₂ Te ₃ nanoplates. Applied Surface Science, 2019, 484, 542-550.	3.1	50
495	Phase slip lines in superconducting few-layer NbSe ₂ crystals. 2D Materials, 2019, 6, 025039.	2.0	21
496	High-resolution, spatially-resolved surface potential investigations of high-strength metallurgical graphene using scanning tunnelling potentiometry. Microelectronic Engineering, 2019, 212, 1-8.	1.1	1
497	Multiple parameter dynamic photoresponse microscopy for data-intensive optoelectronic measurements of van der Waals heterostructures. Review of Scientific Instruments, 2019, 90, 023702.	0.6	1
498	Elastomeric Waveguide on-Chip Coupling of an Encapsulated MoS ₂ Monolayer. ACS Photonics, 2019, 6, 595-599.	3.2	11
499	Nonvolatile Ferroelectric Memory Effect in Ultrathin In ₂ Se ₃ . Advanced Functional Materials, 2019, 29, 1808606.	7.8	137
500	Coherence and Density Dynamics of Excitons in a Single-Layer MoS ₂ Reaching the Homogeneous Limit. ACS Nano, 2019, 13, 3500-3511.	7.3	26
501	Electrostatically Induced Phononic Crystal. Physical Review Applied, 2019, 11, .	1.5	26
502	A dielectric-defined lateral heterojunction in a monolayer semiconductor. Nature Electronics, 2019, 2, 60-65.	13.1	95
503	Dynamic radiative tailoring based on mid-refractive dielectric nanoantennas. Nanoscale Horizons, 2019, 4, 712-719.	4.1	11
504	Evidence for moiré excitons in van der Waals heterostructures. Nature, 2019, 567, 71-75.	13.7	933
505	Growth of vanadium dioxide thin films on hexagonal boron nitride flakes as transferrable substrates. Scientific Reports, 2019, 9, 2857.	1.6	13

#	ARTICLE	IF	CITATIONS
506	Hysteresis and its impact on characterization of mechanical properties of suspended monolayer molybdenum-disulfide sheets. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 7454-7461.	1.3	6
507	Recent Progress in the Fabrication, Properties, and Devices of Heterostructures Based on 2D Materials. <i>Nano-Micro Letters</i> , 2019, 11, 13.	14.4	157
508	An Experimental Setup for Combined In-Vacuo Raman Spectroscopy and Cavity-Interferometry Measurements on TMDC Nano-resonators. <i>Experimental Mechanics</i> , 2019, 59, 349-359.	1.1	6
509	Tuning carrier concentration in a superacid treated MoS ₂ monolayer. <i>Scientific Reports</i> , 2019, 9, 1989.	1.6	18
510	Plasmon-Enhanced Near-Field Optical Spectroscopy of Multicomponent Semiconductor Nanostructures. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2019, 55, 488-494.	0.2	2
511	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS ₂ . , 2019, , .		3
512	Tellurene based chemical sensor. <i>Journal of Materials Chemistry A</i> , 2019, 7, 26326-26333.	5.2	95
513	Reliable Postprocessing Improvement of van der Waals Heterostructures. <i>ACS Nano</i> , 2019, 13, 14182-14190.	7.3	33
514	Atomic-scale patterning in two-dimensional van der waals superlattices. <i>Nanotechnology</i> , 2019, 31, 105302.	1.3	8
515	Probing the edge-related properties of atomically thin MoS ₂ at nanoscale. <i>Nature Communications</i> , 2019, 10, 5544.	5.8	108
516	Infrared Interlayer Exciton Emission in MoS_2/BN Heterostructures. <i>Physical Review Letters</i> , 2019, 123, 247402.	2.9	10
517	Evolution of inter-layer coupling in artificially stacked bilayer MoS ₂ . <i>Nanoscale Advances</i> , 2019, 1, 4398-4405.	2.2	8
518	A high-pressure enhanced coupling effect between graphene electrical contacts and two-dimensional materials thereby improving the performance of their constituent FET devices. <i>Journal of Materials Chemistry C</i> , 2019, 7, 15171-15178.	2.7	9
519	Nonlinear dynamic identification of graphene's elastic modulus via reduced order modeling of atomistic simulations. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 122, 161-176.	2.3	17
520	Pressure-Engineered Structural and Optical Properties of Two-Dimensional (C ₄ H ₉ NH ₃) ₂ PbI ₄ Perovskite Exfoliated nm-Thin Flakes. <i>Journal of the American Chemical Society</i> , 2019, 141, 1235-1241.	6.6	95
521	Wafer-Scale van der Waals Heterostructures with Ultraclean Interfaces via the Aid of Viscoelastic Polymer. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 1579-1586.	4.0	17
522	Excitonic Complexes and Emerging Interlayer Electron-Phonon Coupling in BN Encapsulated Monolayer Semiconductor Alloy: WS _{0.6} Se _{1.4} . <i>Nano Letters</i> , 2019, 19, 299-307.	4.5	20
523	Emerging opportunities for black phosphorus in energy applications. <i>Materials Today Energy</i> , 2019, 12, 1-25.	2.5	88

#	ARTICLE	IF	CITATIONS
524	Waveguide-Integrated Black Phosphorus Photodetector for Mid-Infrared Applications. ACS Nano, 2019, 13, 913-921.	7.3	164
525	Deeply subwavelength phonon-polaritonic crystal made of a van der Waals material. Nature Communications, 2019, 10, 42.	5.8	51
526	Even denominator fractional quantum Hall states in higher Landau levels of graphene. Nature Physics, 2019, 15, 154-158.	6.5	76
527	The Stability of Exfoliated FeSe Nanosheets During in-air Device Fabrication Processes. IEEE Nanotechnology Magazine, 2019, 18, 37-41.	1.1	8
528	Gate-Tunable Thermal Metal-Insulator Transition in VO ₂ Monolithically Integrated into a WSe ₂ Field-Effect Transistor. ACS Applied Materials & Interfaces, 2019, 11, 3224-3230.	4.0	29
529	Quantum interference in second-harmonic generation from monolayer WSe ₂ . Nature Physics, 2019, 15, 242-246.	6.5	77
530	New Floating Gate Memory with Excellent Retention Characteristics. Advanced Electronic Materials, 2019, 5, 1800726.	2.6	48
531	Growth Order-Dependent Strain Variations of Lateral Transition Metal Dichalcogenide Heterostructures. ACS Applied Electronic Materials, 2019, 1, 113-121.	2.0	16
532	Room temperature multi-phonon upconversion photoluminescence in monolayer semiconductor WS ₂ . Nature Communications, 2019, 10, 107.	5.8	66
533	Dimensional reduction and ionic gating induced enhancement of superconductivity in atomically thin crystals of 2H-TaSe ₂ . Nanotechnology, 2019, 30, 035702.	1.3	17
534	Entanglement of single-photons and chiral phonons in atomically thin WSe ₂ . Nature Physics, 2019, 15, 221-227.	6.5	80
535	Second harmonic generation in strained transition metal dichalcogenide monolayers: MoS ₂ , MoSe ₂ , WS ₂ , and WSe ₂ . APL Photonics, 2019, 4, .	3.0	92
536	Self-Hybridized Exciton-Polaritons in Multilayers of Transition Metal Dichalcogenides for Efficient Light Absorption. ACS Photonics, 2019, 6, 139-147.	3.2	80
537	Effect of Substrate Coupling on the Performance and Variability of Monolayer MoS ₂ Transistors. IEEE Electron Device Letters, 2019, 40, 135-138.	2.2	11
538	Collective Strong Light-Matter Coupling in Hierarchical Microcavity-Plasmon-Exciton Systems. Nano Letters, 2019, 19, 189-196.	4.5	92
539	Probing the Electronic Properties of Monolayer MoS ₂ via Interaction with Molecular Hydrogen. Advanced Electronic Materials, 2019, 5, 1800591.	2.6	22
540	Nanoenvelopes: Wrapping a Single-Walled Carbon Nanotube with Graphene using an Atomic Force Microscope. Advanced Materials, 2019, 31, 1804918.	11.1	6
541	Electronic transport and optoelectronic applications of a new layered semiconductor CuTaS ₃ . Applied Surface Science, 2020, 499, 143932.	3.1	9

#	ARTICLE	IF	CITATIONS
542	Optical Properties and Light-Emission Device Applications of 2-D Layered Semiconductors. Proceedings of the IEEE, 2020, 108, 676-703.	16.4	19
543	Biaxial strain tuning of interlayer excitons in bilayer MoS ₂ . JPhys Materials, 2020, 3, 015003.	1.8	20
544	Air tightness of hBN encapsulation and its impact on Raman spectroscopy of van der Waals materials. 2D Materials, 2020, 7, 015012.	2.0	10
545	Two-dimensional materials toward future photovoltaic devices. , 2020, , 117-158.		2
546	Au-InSe van der Waals Schottky junctions with ultralow reverse current and high photosensitivity. Nanoscale, 2020, 12, 4094-4100.	2.8	31
547	Electrical Control of Hybrid Monolayer Tungsten Disulfide Plasmonic Nanoantenna Light-Matter States at Cryogenic and Room Temperatures. ACS Nano, 2020, 14, 1196-1206.	7.3	41
548	Light-triggered two-dimensional lateral homogeneous p-n diodes for opto-electrical interconnection circuits. Science Bulletin, 2020, 65, 293-299.	4.3	29
549	Tuning inelastic light scattering via symmetry control in the two-dimensional magnet CrI ₃ . Nature Nanotechnology, 2020, 15, 212-216.	15.6	90
550	Assembly of van der Waals heterostructures: exfoliation, searching, and stacking of 2D materials. Japanese Journal of Applied Physics, 2020, 59, 010101.	0.8	41
551	Fabrication and Imaging of Monolayer Phosphorene with Preferred Edge Configurations via Graphene-Assisted Layer-by-Layer Thinning. Nano Letters, 2020, 20, 559-566.	4.5	22
552	Direct Visualization of Exciton Transport in Defective Few-Layer WS ₂ by Ultrafast Microscopy. Advanced Materials, 2020, 32, e1906540.	11.1	50
553	High-speed residue-free transfer of two-dimensional materials using PDMS stamp and water infiltration. Current Applied Physics, 2020, 20, 1190-1194.	1.1	7
554	Crossover between weak antilocalization and weak localization in few-layer WTe_2 : Role of electron-electron interactions. Physical Review B, 2020, 102, .	1.1	11
555	High magnetic field spin-valley-split Shubnikov-de Haas oscillations in a WSe_2 monolayer. Physical Review B, 2020, 102, .	1.1	0
556	Unveiling the Optical Emission Channels of Monolayer Semiconductors Coupled to Silicon Nanoantennas. ACS Photonics, 2020, 7, 3106-3115.	3.2	16
557	Ultrathin complex oxide nanomechanical resonators. Communications Physics, 2020, 3, .	2.0	24
558	Strain tuning of the Stokes shift in atomically thin semiconductors. Nanoscale, 2020, 12, 20786-20796.	2.8	17
559	Electron transport and the effect of current annealing in a two-point contacted hBN/graphene/hBN heterostructure device. Journal of Applied Physics, 2020, 128, 124302.	1.1	0

#	ARTICLE	IF	CITATIONS
560	Spatial mapping of exciton transition energy and strain in composition graded WS ₂ (1-x)Se _{2x} monolayer. Journal of Applied Physics, 2020, 128, 124304.	1.1	8
561	Electric field tuning of strain-induced quantum emitters in WSe ₂ . AIP Advances, 2020, 10, .	0.6	11
562	Low-frequency Raman scattering in WSe ₂ /MoSe ₂ heterobilayers: Evidence for atomic reconstruction. Applied Physics Letters, 2020, 117, .	1.5	30
563	Recent Advances in Twisted Structures of Flatland Materials and Crafting Moiré Superlattices. Advanced Functional Materials, 2020, 30, 2000878.	7.8	41
564	Light-matter coupling and non-equilibrium dynamics of exchange-split trions in monolayer WS ₂ . Journal of Chemical Physics, 2020, 153, 034706.	1.2	9
565	Second-Harmonic Young's Interference in Atom-Thin Heterocrystals. Nano Letters, 2020, 20, 8825-8831.	4.5	18
566	Isotopically Enhanced Thermal Conductivity in Few-Layer Hexagonal Boron Nitride: Implications for Thermal Management. ACS Applied Nano Materials, 2020, 3, 12148-12156.	2.4	12
567	Preparation and multiferroicity of a novel two-dimensional material NiH ₂ SeO ₄ . Journal of Materials Chemistry C, 2020, 8, 14812-14818.	2.7	5
568	Engineering Dielectric Screening for Potential-well Arrays of Excitons in 2D Materials. ACS Applied Materials & Interfaces, 2020, 12, 55134-55140.	4.0	15
569	Making van der Waals Heterostructures Assembly Accessible to Everyone. Nanomaterials, 2020, 10, 2305.	1.9	12
570	Excitonic Energy Transfer in Heterostructures of Quasi-2D Perovskite and Monolayer WS ₂ . ACS Nano, 2020, 14, 11482-11489.	7.3	31
571	Perfect Absorption by an Atomically Thin Crystal. Physical Review Applied, 2020, 14, .	1.5	29
572	2D Material Enabled Offset-Patterning with Atomic Resolution. Advanced Functional Materials, 2020, 30, 2004370.	7.8	6
573	Electron-Transparent Thermoelectric Coolers Demonstrated with Nanoparticle and Condensation Thermometry. ACS Nano, 2020, 14, 11510-11517.	7.3	11
574	Dielectric Nanoantennas for Strain Engineering in Atomically Thin Two-Dimensional Semiconductors. ACS Photonics, 2020, 7, 2413-2422.	3.2	26
575	The optical signature of few-layer ReSe ₂ . Journal of Applied Physics, 2020, 128, .	1.1	17
576	Preparation of Twisted Bilayer Graphene via the Wetting Transfer Method. ACS Applied Materials & Interfaces, 2020, 12, 40958-40967.	4.0	35
577	Controlling Atomic Layer Deposition of 2D Semiconductor SnS ₂ by the Choice of Substrate. Advanced Materials Interfaces, 2020, 7, 2001046.	1.9	10

#	ARTICLE	IF	CITATIONS
578	Dielectric Transfer Process for 3D Printed Metal Microsystems. <i>Journal of Microelectromechanical Systems</i> , 2020, 29, 972-977.	1.7	6
579	Towards Scalable Fabrications and Applications of 2D Layered Material-based Vertical and Lateral Heterostructures. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 525-550.	1.3	6
580	Mechanics at the interfaces of 2D materials: Challenges and opportunities. <i>Current Opinion in Solid State and Materials Science</i> , 2020, 24, 100837.	5.6	61
581	Strain-dependent luminescence and piezoelectricity in monolayer transition metal dichalcogenides. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020, 38, 042205.	0.6	4
582	Twistronics in Graphene, from Transfer Assembly to Epitaxy. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4690.	1.3	9
583	Reduced Inhomogeneous Broadening in Hexagonal Boron Nitride-Encapsulated MoTe_2 Monolayers by Thermal Treatment. <i>ACS Applied Electronic Materials</i> , 2020, 2, 2739-2744.	2.0	4
584	Spin filtering in germanium/silicon core/shell nanowires with pseudo-helical gap. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	3
585	Evaluation of the discrete thickness of exfoliated artificially synthesized mica nanosheets on silicon substrates: Toward characterization of the tunneling current through the nanosheets. <i>Applied Surface Science</i> , 2020, 532, 147388.	3.1	14
586	Strain-Induced Trapping of Indirect Excitons in $\text{MoSe}_2/\text{WSe}_2$ Heterostructures. <i>ACS Photonics</i> , 2020, 7, 2460-2467.	3.2	29
587	Valley polarization of singlet and triplet trions in a WS_2 monolayer in magnetic fields. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 19155-19161.	1.3	16
588	Ultrabroadband, Fast, and Flexible Photodetector Based on HfTe_5 Crystal. <i>Advanced Optical Materials</i> , 2020, 8, 2000833.	3.6	25
589	A cleanroom in a glovebox. <i>Review of Scientific Instruments</i> , 2020, 91, 073909.	0.6	13
590	Light-Induced Anisotropic Morphological Dynamics of Black Phosphorus Membranes Visualized by Dark-Field Ultrafast Electron Microscopy. <i>ACS Nano</i> , 2020, 14, 11383-11393.	7.3	21
591	Two-dimensional organic-inorganic superlattice-like heterostructures for energy storage applications. <i>Energy and Environmental Science</i> , 2020, 13, 4834-4853.	15.6	64
592	Manipulation of Valley Pseudospin by Selective Spin Injection in Chiral Two-Dimensional Perovskite/Monolayer Transition Metal Dichalcogenide Heterostructures. <i>ACS Nano</i> , 2020, 14, 15154-15160.	7.3	49
593	Naturally occurring van der Waals materials. <i>Npj 2D Materials and Applications</i> , 2020, 4, .	3.9	75
594	Exciton-to-trion conversion as a control mechanism for valley polarization in room-temperature monolayer WS_2 . <i>Scientific Reports</i> , 2020, 10, 17389.	1.6	23
595	Two-Dimensional Black Phosphorus Nanomaterials: Emerging Advances in Electrochemical Energy Storage Science. <i>Nano-Micro Letters</i> , 2020, 12, 179.	14.4	82

#	ARTICLE	IF	CITATIONS
596	All-Dry Transferred ReS ₂ Nanosheets for Ultrasensitive Room-Temperature NO ₂ Sensing under Visible Light Illumination. ACS Sensors, 2020, 5, 3172-3181.	4.0	34
597	Integrated single photon emitters. AVS Quantum Science, 2020, 2, .	1.8	40
599	Transition metal dichalcogenide metamaterials with atomic precision. Nature Communications, 2020, 11, 4604.	5.8	69
600	Fluorescence and Electroluminescence of J-Aggregated Polythiophene Monolayers on Hexagonal Boron Nitride. ACS Nano, 2020, 14, 13886-13893.	7.3	9
601	On-Chip Integration of Energy-Tunable Quantum Dot Based Single-Photon Sources via Strain Tuning of GaAs Waveguides. ACS Photonics, 2020, 7, 2723-2730.	3.2	12
602	Emergence of Highly Linearly Polarized Interlayer Exciton Emission in MoSe ₂ /WSe ₂ Heterobilayers with Transfer-Induced Layer Corrugation. ACS Nano, 2020, 14, 11110-11119.	7.3	26
603	Desolvation-Triggered Versatile Transfer-Printing of Pure BN Films with Thermal-Optical Dual Functionality. Advanced Materials, 2020, 32, 2002099.	11.1	5
604	Giant Piezoresistive Effect and Strong Bandgap Tunability in Ultrathin InSe upon Biaxial Strain. Advanced Science, 2020, 7, 2001645.	5.6	22
605	Neutral and charged dark excitons in monolayer WS ₂ . Nanoscale, 2020, 12, 18153-18159.	2.8	22
606	Ferroelectric-Gated InSe Photodetectors with High On/Off Ratios and Photoresponsivity. Nano Letters, 2020, 20, 6666-6673.	4.5	53
607	Hexagonal Boron Nitride Encapsulation of Organic Microcrystals and Energy-Transfer Dynamics. Journal of Physical Chemistry C, 2020, 124, 21170-21177.	1.5	1
608	Emerging Artificial Two-Dimensional van der Waals Heterostructures for Optoelectronics. , 2020, , .		2
609	Time-Domain Investigations of Coherent Phonons in van der Waals Thin Films. Nanomaterials, 2020, 10, 2543.	1.9	25
610	Controllable Thermal Oxidation and Photoluminescence Enhancement in Quasi-1D van der Waals ZrS ₃ Flakes. ACS Applied Electronic Materials, 2020, 2, 3756-3764.	2.0	12
611	Room-Temperature Synthesis of 2D Janus Crystals and their Heterostructures. Advanced Materials, 2020, 32, e2006320.	11.1	138
612	InSe Schottky Diodes Based on Van Der Waals Contacts. Advanced Functional Materials, 2020, 30, 2001307.	7.8	44
613	Light-matter interactions in two-dimensional layered WSe ₂ for gauging evolution of phonon dynamics. Beilstein Journal of Nanotechnology, 2020, 11, 782-797.	1.5	20
614	Determining bandgap of black phosphorus using capacitance. Applied Physics Letters, 2020, 116, .	1.5	4

#	ARTICLE	IF	CITATIONS
615	Infrared Nanoimaging of Surface Plasmons in Type-II Dirac Semimetal PtTe ₂ Nanoribbons. ACS Nano, 2020, 14, 6276-6284.	7.3	20
616	Wafer-scale Fabrication of Nanopore Devices for Single-molecule DNA Biosensing using MoS ₂ . Small Methods, 2020, 4, 2000072.	4.6	32
617	WSe ₂ /SnSe ₂ vdW heterojunction Tunnel FET with subthermionic characteristic and MOSFET co-integrated on same WSe ₂ flake. Npj 2D Materials and Applications, 2020, 4, .	3.9	50
618	Controlling interlayer excitons in MoS ₂ layers grown by chemical vapor deposition. Nature Communications, 2020, 11, 2391.	5.8	73
619	Anharmonicity in Raman-active phonon modes in atomically thin MoS_2 . Physical Review B, 2020, 101, .	4.1	18
620	Magnetic and electronic phase transitions probed by nanomechanical resonators. Nature Communications, 2020, 11, 2698.	5.8	69
621	Microheater Actuators as a Versatile Platform for Strain Engineering in 2D Materials. Nano Letters, 2020, 20, 5339-5345.	4.5	29
622	Synthesis Techniques, Optoelectronic Properties, and Broadband Photodetection of Thin-film Black Phosphorus. Advanced Optical Materials, 2020, 8, 2000045.	3.6	39
623	Antiferromagnet-semiconductor Van Der Waals Heterostructures: Interlayer Interplay of Exciton with Magnetic Ordering. Nano Letters, 2020, 20, 4625-4630.	4.5	26
624	Direct Transformation of Crystalline MoO ₃ into Few-Layers MoS ₂ . Materials, 2020, 13, 2293.	1.3	2
625	Carbon annealed HPHT-hexagonal boron nitride: Exploring defect levels using 2D materials combined through van der Waals interface. Carbon, 2020, 167, 785-791.	5.4	10
626	Distinguishing Optical and Acoustic Phonon Temperatures and Their Energy Coupling Factor under Photon Excitation in nm 2D Materials. Advanced Science, 2020, 7, 2000097.	5.6	34
627	Twisted Nano-Optics: Manipulating Light at the Nanoscale with Twisted Phonon Polaritonic Slabs. Nano Letters, 2020, 20, 5323-5329.	4.5	126
628	Electro-optic Upconversion in van der Waals Heterostructures via Nonequilibrium Photocarrier Tunneling. Advanced Materials, 2020, 32, e2001543.	11.1	14
629	Orthogonal Electric Control of the Out-of-plane Field-effect in 2D Ferroelectric In_2Se_3 . Advanced Electronic Materials, 2020, 6, 2000061.	2.6	56
630	Versatile construction of van der Waals heterostructures using a dual-function polymeric film. Nature Communications, 2020, 11, 3029.	5.8	41
631	Gate controllable spin transistor with semiconducting tunneling barrier. Nano Research, 2020, 13, 2192-2196.	5.8	1
632	Reconstructing Local Profile of Exciton Emission Wavelengths across a WS ₂ Bubble beyond the Diffraction Limit. ACS Nano, 2020, 14, 6931-6937.	7.3	15

#	ARTICLE	IF	CITATIONS
633	Thermodynamic, Structural, and Piezoelectric Properties of Adatom-Doped Phosphorene and Its Applications in Smart Surfaces. <i>Physical Review Applied</i> , 2020, 13, .	1.5	4
634	Asymmetric electrode incorporated 2D GeSe for self-biased and efficient photodetection. <i>Scientific Reports</i> , 2020, 10, 9374.	1.6	38
635	2D materials for spintronic devices. <i>Npj 2D Materials and Applications</i> , 2020, 4, .	3.9	269
636	Polar coupling enabled nonlinear optical filtering at MoS ₂ /ferroelectric heterointerfaces. <i>Nature Communications</i> , 2020, 11, 1422.	5.8	31
637	Hybridizing Plasmonic Materials with 2D Transition Metal Dichalcogenides toward Functional Applications. <i>Small</i> , 2020, 16, e1904271.	5.2	74
638	Fundamental limitations in transferred CVD graphene caused by Cu catalyst surface morphology. <i>Carbon</i> , 2020, 163, 95-104.	5.4	40
639	Filtering the photoluminescence spectra of atomically thin semiconductors with graphene. <i>Nature Nanotechnology</i> , 2020, 15, 283-288.	15.6	76
640	Coherent phonon dynamics in spatially separated graphene mechanical resonators. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 5582-5587.	3.3	40
641	Breaking symmetry in device design for self-driven 2D material based photodetectors. <i>Nanoscale</i> , 2020, 12, 8109-8118.	2.8	29
642	Locally-triggered hydrophobic collapse induces global interface self-cleaning in van-der-Waals heterostructures at room-temperature. <i>2D Materials</i> , 2020, 7, 035002.	2.0	4
643	The effect of metallic substrates on the optical properties of monolayer MoSe ₂ . <i>Scientific Reports</i> , 2020, 10, 4981.	1.6	10
644	Van der waals heterojunctions for catalysis. <i>Materials Today Advances</i> , 2020, 6, 100059.	2.5	23
645	Control of the orbital character of indirect excitons in MoS ₂ /WS ₂ heterobilayers. <i>Physical Review B</i> , 2020, 101, .		37
646	Active tuning of Mie resonances to realize sensitive photothermal measurement of single nanoparticles. <i>Materials Horizons</i> , 2020, 7, 1542-1551.	6.4	12
647	Exciton diffusion in monolayer semiconductors with suppressed disorder. <i>Physical Review B</i> , 2020, 101, .	1.1	74
648	Ultrafast Electron Cooling and Decay in Monolayer WS ₂ Revealed by Time- and Energy-Resolved Photoemission Electron Microscopy. <i>Nano Letters</i> , 2020, 20, 3747-3753.	4.5	35
649	3D Manipulation of 2D Materials Using Microdome Polymer. <i>Nano Letters</i> , 2020, 20, 2486-2492.	4.5	38
650	Tunable Optoelectronic Properties of WS ₂ by Local Strain Engineering and Folding. <i>Advanced Electronic Materials</i> , 2020, 6, 1901381.	2.6	38

#	ARTICLE	IF	CITATIONS
651	Ultrafast machine vision with 2D material neural network image sensors. <i>Nature</i> , 2020, 579, 62-66.	13.7	546
652	Thermal conductivity of van der Waals hetero-bilayer of MoS ₂ /MoSe ₂ . <i>Applied Physics Express</i> , 2020, 13, 075001.	1.1	3
653	Gate-switchable rectification in isotype van der Waals heterostructure of multilayer MoTe ₂ /SnS ₂ with large band offsets. <i>Npj 2D Materials and Applications</i> , 2020, 4, .	3.9	14
654	Towards Understanding the Raman Spectrum of Graphene Oxide: The Effect of the Chemical Composition. <i>Coatings</i> , 2020, 10, 524.	1.2	42
655	Few-Layered MoS ₂ Field-Effect Transistors with a Vertical Channel of Sub-10 nm. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32943-32950.	4.0	23
656	Black phosphorus-based van der Waals heterostructures for mid-infrared light-emission applications. <i>Light: Science and Applications</i> , 2020, 9, 114.	7.7	100
657	Localized Excitons in NbSe ₂ -MoSe ₂ Heterostructures. <i>ACS Nano</i> , 2020, 14, 8528-8538.	7.3	26
658	Dark trions govern the temperature-dependent optical absorption and emission of doped atomically thin semiconductors. <i>Physical Review B</i> , 2020, 101, .	1.1	39
659	Tellurene Nanoflake-Based Gas Sensors for the Detection of Decomposition Products of SF ₆ . <i>ACS Applied Nano Materials</i> , 2020, 3, 7587-7594.	2.4	13
660	Photothermal Sensing of Nano-Devices Made of Graphene Materials. <i>Sensors</i> , 2020, 20, 3671.	2.1	2
661	Anomalous Behavior of 2D Janus Excitonic Layers under Extreme Pressures. <i>Advanced Materials</i> , 2020, 32, e2002401.	11.1	36
662	Bubble-Free Transfer Technique for High-Quality Graphene/Hexagonal Boron Nitride van der Waals Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 8533-8538.	4.0	49
663	Atomically Precise PdSe ₂ Pentagonal Nanoribbons. <i>ACS Nano</i> , 2020, 14, 1951-1957.	7.3	21
664	Superconducting proximity effect in a $\text{NbSe}_2/\text{Bi}_2\text{Te}_3$ van der Waals junction. <i>Physical Review B</i> , 2020, 101, .		
665	Manufacturing strategies for wafer-scale two-dimensional transition metal dichalcogenide heterolayers. <i>Journal of Materials Research</i> , 2020, 35, 1350-1368.	1.2	12
666	Dynamics and efficient conversion of excitons to trions in non-uniformly strained monolayer WS ₂ . <i>Nature Photonics</i> , 2020, 14, 324-329.	15.6	96
667	An Experimental Study on Mixed-Dimensional 1D-2D van der Waals Single-Walled Carbon Nanotube-WSe ₂ Hetero-Junction. <i>IEEE Electron Device Letters</i> , 2020, 41, 645-648.	2.2	10
668	Origin of selective enhancement of sharp defect emission lines in monolayer WSe ₂ on rough metal substrate. <i>Journal of Applied Physics</i> , 2020, 127, 073105.	1.1	4

#	ARTICLE	IF	CITATIONS
669	Resonant tunnelling into the two-dimensional subbands of InSe layers. <i>Communications Physics</i> , 2020, 3, .	2.0	22
670	Fluidic Flow Assisted Deterministic Folding of Van der Waals Materials. <i>Advanced Functional Materials</i> , 2020, 30, 1908691.	7.8	5
671	Symmetry Breakdown in Franckeite: Spontaneous Strain, Rippling, and Interlayer Moiré. <i>Nano Letters</i> , 2020, 20, 1141-1147.	4.5	25
672	An inexpensive system for the deterministic transfer of 2D materials. <i>JPhys Materials</i> , 2020, 3, 016001.	1.8	25
673	How Clean Is Clean? Recipes for van der Waals Heterostructure Cleanliness Assessment. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 7701-7709.	4.0	20
674	Spectrally Tunable, Large Raman Enhancement from Nonradiative Energy Transfer in the van der Waals Heterostructure. <i>ACS Photonics</i> , 2020, 7, 519-527.	3.2	11
675	Molybdenum Disulfide Nanoflakes Grown by Chemical Vapor Deposition on Graphite: Nucleation, Orientation, and Charge Transfer. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2689-2697.	1.5	9
676	Valley phenomena in the candidate phase change material $WSe_2(1-x)Te_2x$. <i>Communications Physics</i> , 2020, 3, .	2.0	10
677	Preparation and Characterization of Freely-Suspended Graphene Nanomechanical Membrane Devices with Quantum Dots for Point-of-Care Applications. <i>Micromachines</i> , 2020, 11, 104.	1.4	5
678	Nanoscale Guiding of Infrared Light with Hyperbolic Volume and Surface Polaritons in van der Waals Material Ribbons. <i>Advanced Materials</i> , 2020, 32, e1906530.	11.1	29
679	Resonant Tunneling Spectroscopy to Probe the Giant Stark Effect in Atomically Thin Materials. <i>Advanced Materials</i> , 2020, 32, e1906942.	11.1	18
680	Twist-tailoring Coulomb correlations in van der Waals homobilayers. <i>Nature Communications</i> , 2020, 11, 2167.	5.8	63
681	Stacking of Exfoliated 2D Materials: A Review. <i>Chinese Journal of Chemistry</i> , 2020, 38, 981-995.	2.6	30
682	Functional hetero-interfaces in atomically thin materials. <i>Materials Today</i> , 2020, 37, 74-92.	8.3	21
683	Tunable Photodetectors via In Situ Thermal Conversion of TiS_3 to TiO_2 . <i>Nanomaterials</i> , 2020, 10, 711.	1.9	14
684	Tunable Current Transport in $PdSe_2$ via Layer-by-Layer Thickness Modulation by Mild Plasma. <i>Advanced Electronic Materials</i> , 2020, 6, 2000008.	2.6	17
685	Nonvolatile Programmable WSe_2 Photodetector. <i>Advanced Optical Materials</i> , 2020, 8, 2000417.	3.6	16
686	InSe/hBN/graphite heterostructure for high-performance 2D electronics and flexible electronics. <i>Nano Research</i> , 2020, 13, 1127-1132.	5.8	48

#	ARTICLE	IF	CITATIONS
687	Line-Scan Hyperspectral Imaging Microscopy with Linear Unmixing for Automated Two-Dimensional Crystals Identification. ACS Photonics, 2020, 7, 1216-1225.	3.2	13
688	Integration of two-dimensional transition metal dichalcogenides with Mie-resonant dielectric nanostructures. Advances in Physics: X, 2020, 5, 1734083.	1.5	26
689	<p>Advanced Black Phosphorus Nanomaterials for Bone Regeneration</p>. International Journal of Nanomedicine, 2020, Volume 15, 2045-2058.	3.3	50
690	Classical and quantum phases in hexagonal boron nitride&€combined van der Waals heterostructures. InformaÃMateriÃly, 2021, 3, 252-270.	8.5	5
691	Strain engineering in single-, bi- and tri-layer MoS2, MoSe2, WS2 and WSe2. Nano Research, 2021, 14, 1698-1703.	5.8	63
692	Recent progress in contact, mobility, and encapsulation engineering of InSe and GaSe. InformaÃMateriÃly, 2021, 3, 662-693.	8.5	49
693	Two-dimensional materials for light emitting applications: Achievement, challenge and future perspectives. Nano Research, 2021, 14, 1912-1936.	5.8	34
694	Direct observation of two-dimensional magnons in atomically thin CrI3. Nature Physics, 2021, 17, 20-25.	6.5	106
695	Stacking of 2D Materials. Advanced Functional Materials, 2021, 31, 2007810.	7.8	123
696	A fresh-bias photoresponse of graphene field-effect transistor: An electrical tunable fast dipole moment generation. Carbon, 2021, 173, 322-328.	5.4	5
697	Covalent Cross&€Linking of 2H&€MoS₂ Nanosheets. Chemistry - A European Journal, 2021, 27, 2993-2996.	1.7	6
698	Ambipolar 2D Semiconductors and Emerging Device Applications. Small Methods, 2021, 5, e2000837.	4.6	39
699	<sc>Wafer&€scale</sc> vertical van der <sc>Waals</sc> heterostructures. InformaÃMateriÃly, 2021, 3, 3-21.	8.5	70
700	Weak Distance Dependence of Hot-Electron-Transfer Rates at the Interface between Monolayer MoS₂ and Gold. ACS Nano, 2021, 15, 819-828.	7.3	27
701	Gate&€Switchable Photovoltaic Effect in BP/MoTe₂ van der Waals Heterojunctions for Self&€Driven Logic Optoelectronics. Advanced Optical Materials, 2021, 9, 2001802.	3.6	32
702	Monolayer Excitonic Semiconductors Integrated with Au Quasi-Periodic Nanoterrace Morphology on Fused Silica Substrates for Light-Emitting Devices. ACS Applied Nano Materials, 2021, 4, 84-93.	2.4	2
703	Guide to optical spectroscopy of layered semiconductors. Nature Reviews Physics, 2021, 3, 39-54.	11.9	41
704	Recent Advances in Electrochemical Water Splitting and Reduction of CO₂ into Green Fuels on 2D Phosphorene&€Based Catalyst. Energy Technology, 2021, 9, .	1.8	14

#	ARTICLE	IF	CITATIONS
705	Vibrating FRET-Based Nanomechanical Sensor Preparation and Characterization for Environmental Monitoring Applications. IEEE Sensors Journal, 2021, 21, 3871-3878.	2.4	1
706	Excitons Bound to Defect States in Two-Dimensional (2D) MoS ₂ . IEEE Nanotechnology Magazine, 2021, 20, 400-403.	1.1	0
707	A Tunable Resonant Circuit Based on Graphene Quantum Capacitor. Advanced Electronic Materials, 2021, 7, 2001009.	2.6	1
708	Plasmon-Enhanced Photovoltaic Characteristics of Black Phosphorus-MoS ₂ Heterojunction. IEEE Open Journal of Nanotechnology, 2021, 2, 41-51.	0.9	4
709	Two-dimensional WS ₂ /MoS ₂ heterostructures: properties and applications. Nanoscale, 2021, 13, 5594-5619.	2.8	73
710	Solution-processed two-dimensional materials for next-generation photovoltaics. Chemical Society Reviews, 2021, 50, 11870-11965.	18.7	96
711	Excitons in Bilayer MoS_2 Displaying a Colossal Electric Field Splitting and Tunable Magnetic Response. Physical Review Letters, 2021, 126, 037401.	2.9	30
712	Tunnel barrier engineering of spin-polarized mild band gap vertical ternary heterostructures. Physical Chemistry Chemical Physics, 2021, 23, 22418-22422.	1.3	1
713	Tunable parametric amplification of a graphene nanomechanical resonator in the nonlinear regime. Nanotechnology, 2021, 32, 155203.	1.3	3
714	Methods of transferring two-dimensional materials. Wuli Xuebao/Acta Physica Sinica, 2021, 70, 028201.	0.2	4
715	Entering a Two-Dimensional Materials World. Springer Series in Solid-state Sciences, 2021, , 17-59.	0.3	0
716	Second-harmonic generation enhancement in monolayer transition-metal dichalcogenides by using an epsilon-near-zero substrate. Nanoscale Advances, 2021, 3, 272-278.	2.2	15
717	Interaction of edge exciton polaritons with engineered defects in the hyperbolic material Bi ₂ Se ₃ . Communications Materials, 2021, 2, .	2.9	13
718	Achieving Low Resistance Ohmic Contacts to Transition Metal Dichalcogenides (TMDCs). , 2021, , 185-196.		0
719	Polarization Control of Deterministic Single-Photon Emitters in Monolayer WSe ₂ . Nano Letters, 2021, 21, 1546-1554.	4.5	37
720	Linearly Polarized Electroluminescence from MoS ₂ Monolayers Deposited on Metal Nanoparticles: Toward Tunable Room-Temperature Single-Photon Sources. Small, 2021, 17, e2006425.	5.2	11
721	Graphene nanogaps for the directed assembly of single-nanoparticle devices. Nanoscale, 2021, 13, 6513-6520.	2.8	8
722	Fluence-dependent dynamics of localized excited species in monolayer versus bulk MoS_2 . Physical Review B, 2021, 103, .	1.1	8

#	ARTICLE	IF	CITATIONS
723	Novel synthesis, properties and applications of emerging group VA two-dimensional monoelemental materials (2D-Xenes). <i>Materials Chemistry Frontiers</i> , 2021, 5, 6333-6391.	3.2	18
724	Load-dependent energy dissipation induced by the tip-membrane friction on suspended 2D materials. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 19819-19826.	1.3	3
725	Electrical and optical properties of transition metal dichalcogenides on talc dielectrics. <i>Nanoscale</i> , 2021, 13, 15853-15858.	2.8	14
726	Charged Exciton Kinetics in Monolayer MoSe ₂ near Ferroelectric Domain Walls in Periodically Poled LiNbO ₃ . <i>Nano Letters</i> , 2021, 21, 959-966.	4.5	7
727	Covalent modification of franckeite with maleimides: connecting molecules and van der Waals heterostructures. <i>Nanoscale Horizons</i> , 2021, 6, 551-558.	4.1	14
728	High elasticity and strength of ultra-thin metallic transition metal dichalcogenides. <i>Nanoscale Advances</i> , 2021, 3, 3894-3899.	2.2	8
729	Probing valley population imbalance in transition metal dichalcogenides via temperature-dependent second harmonic generation imaging. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	12
730	Semiconductor-less vertical transistor with ION/IOFF of 106. <i>Nature Communications</i> , 2021, 12, 1000.	5.8	18
731	Engineering symmetry breaking in 2D layered materials. <i>Nature Reviews Physics</i> , 2021, 3, 193-206.	11.9	135
732	End-Bonded Contacts of Tellurium Transistors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 7766-7772.	4.0	12
733	NIR self-powered photodetection and gate tunable rectification behavior in 2D GeSe/MoSe ₂ heterojunction diode. <i>Scientific Reports</i> , 2021, 11, 3688.	1.6	34
734	Measurement of Conduction and Valence Bands g -Factors in a Transition Metal Dichalcogenide Monolayer. <i>Physical Review Letters</i> , 2021, 126, 067403.	2.9	28
735	Strong localization effects in the photoluminescence of transition metal dichalcogenide heterobilayers. <i>2D Materials</i> , 2021, 8, 025028.	2.0	19
736	Van der Waals engineering of ferroelectric heterostructures for long-retention memory. <i>Nature Communications</i> , 2021, 12, 1109.	5.8	98
737	Ultra-broad spectral photo-response in FePS ₃ air-stable devices. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	35
738	Quantitative estimation of atom-scaled ripple structure using transmission electron microscopy images. <i>Nanotechnology</i> , 2021, 32, 185703.	1.3	3
739	Enhancing SiN waveguide optical nonlinearity via hybrid GaS integration. <i>Journal of Optics (United Kingdom)</i> , 2021, 10, 101000.	1.0	6
740	Spin-phonon coupling and magnon scattering in few-layer antiferromagnetic $FePS_3$. <i>Physical Review B</i> , 2021, 103, .	1.0	6

#	ARTICLE	IF	CITATIONS
741	Direct Observation of Charge Transfer between NO _x and Monolayer MoS ₂ by Operando Scanning Photoelectron Microscopy. ACS Applied Nano Materials, 2021, 4, 3319-3324.	2.4	11
742	Quantify point defects in monolayer tungsten diselenide. Nanotechnology, 2021, 32, 255701.	1.3	6
743	Stacking-Engineered Heterostructures in Transition Metal Dichalcogenides. Advanced Materials, 2021, 33, e2005735.	11.1	47
744	Quantitative probe for in-plane piezoelectric coupling in 2D materials. Scientific Reports, 2021, 11, 7066.	1.6	7
745	Single- and narrow-line photoluminescence in a boron nitride-supported MoSe ₂ /graphene heterostructure. Comptes Rendus Physique, 2021, 22, 77-88.	0.3	1
746	Superposition of intra- and inter-layer excitons in twistrionic MoSe ₂ /WSe ₂ bilayers probed by resonant Raman scattering. 2D Materials, 2021, 8, 035009.	2.0	25
747	Proximity control of interlayer exciton-phonon hybridization in van der Waals heterostructures. Nature Communications, 2021, 12, 1719.	5.8	5
748	Twist-angle engineering of excitonic quantum interference and optical nonlinearities in stacked 2D semiconductors. Nature Communications, 2021, 12, 1553.	5.8	28
749	Gate-Tunable Plasmon-Enhanced Photodetection in a Monolayer MoS ₂ Phototransistor with Ultrahigh Photoresponsivity. Nano Letters, 2021, 21, 3083-3091.	4.5	68
750	Reconfigurable electronics by disassembling and reassembling van der Waals heterostructures. Nature Communications, 2021, 12, 1825.	5.8	29
751	Tunable Linearity of High-Performance Vertical Dual-Gate vdW Phototransistors. Advanced Materials, 2021, 33, e2008080.	11.1	36
752	Biaxial versus uniaxial strain tuning of single-layer MoS ₂ . Nano Materials Science, 2022, 4, 44-51.	3.9	30
753	Reduced Fracture Strength of 2D Materials Induced by Interlayer Friction. Small, 2021, 17, e2005996.	5.2	9
754	Strain engineering of graphene nano-resonator. Journal of Micromechanics and Microengineering, 2021, 31, 045015.	1.5	4
755	Lowering the Contact Barriers of 2D Organic F ₁₆ CuPc Field-Effect Transistors by Introducing Van der Waals Contacts. Small, 2021, 17, e2007739.	5.2	7
756	Schottky barrier diode based on multilayer MoTe ₂ and the gate control of the direction of rectification. Journal of the Korean Physical Society, 2021, 78, 719-722.	0.3	1
757	Remote Phonon Control of Quantum Dots and Other Artificial Atoms. Advanced Quantum Technologies, 2021, 4, 2000128.	1.8	9
758	Twistronics: a turning point in 2D quantum materials. Electronic Structure, 2021, 3, 014004.	1.0	40

#	ARTICLE	IF	CITATIONS
759	Universal image segmentation for optical identification of 2D materials. Scientific Reports, 2021, 11, 5808.	1.6	19
760	Micro-mechanical assembly and characterization of high-quality Fabry-Pérot microcavities for the integration of two-dimensional materials. Applied Physics Letters, 2021, 118, .	1.5	18
761	In-plane anisotropic optical and mechanical properties of two-dimensional MoO ₃ . Npj 2D Materials and Applications, 2021, 5, .	3.9	33
762	Resonance Fluorescence from Waveguide-Coupled, Strain-Localized, Two-Dimensional Quantum Emitters. ACS Photonics, 2021, 8, 1069-1076.	3.2	33
763	Two-fold symmetric superconductivity in few-layer NbSe ₂ . Nature Physics, 2021, 17, 949-954.	6.5	65
764	A van der Waals interface that creates in-plane polarization and a spontaneous photovoltaic effect. Science, 2021, 372, 68-72.	6.0	109
765	Josephson junction infrared single-photon detector. Science, 2021, 372, 409-412.	6.0	45
766	Sonochemical exfoliation, characterization and photoresponse of MoS _{0.5} Se _{1.5} nanosheets. Journal of Materials Science: Materials in Electronics, 2021, 32, 11805-11812.	1.1	7
767	Hexagonal Boron Nitride Crystal Growth from Iron, a Single Component Flux. ACS Nano, 2021, 15, 7032-7039.	7.3	26
768	Bias-controlled multi-functional transport properties of InSe/BP van der Waals heterostructures. Scientific Reports, 2021, 11, 7843.	1.6	4
769	Exciton-Exciton Interaction beyond the Hydrogenic Picture in a MoSe_2 Monolayer in the Strong Light-Matter Coupling Regime. Physical Review Letters, 2021, 126, 167401.	2.9	26
770	Excitonic Emission in Atomically Thin Electroluminescent Devices. Laser and Photonics Reviews, 2021, 15, 2000587.	4.4	7
771	Edge-Oriented Dependent Nanoimaging of Mid-Infrared Waveguide Modes in High-Index PtSe ₂ . Advanced Optical Materials, 2021, 9, 2100294.	3.6	7
772	Energy Scaling of Compositional Disorder in Ternary Transition-Metal Dichalcogenide Monolayers. Advanced Electronic Materials, 2021, 7, 2100196.	2.6	11
773	Subcycle contact-free nanoscopy of ultrafast interlayer transport in atomically thin heterostructures. Nature Photonics, 2021, 15, 594-600.	15.6	55
774	Second Harmonic Generation Covering the Entire Visible Range from a 2D Material-Plasmon Hybrid Metasurface. Advanced Optical Materials, 2021, 9, 2100625.	3.6	22
775	Study of Mechanically Exfoliated Monolayer, Bilayer, Trilayer and Multilayer Graphene as Saturable Absorber for Passive Erbium-Doped Fiber Laser Mode-Locking. , 2021, , .		0
776	Thickness-Dependent Elastic Softening of Few-Layer Free-Standing MoSe ₂ . Advanced Materials, 2021, 33, 2008614.	11.1	13

#	ARTICLE	IF	CITATIONS
777	Bosonic condensation of exciton-polaritons in an atomically thin crystal. <i>Nature Materials</i> , 2021, 20, 1233-1239.	13.3	56
778	Atomically sharp interface enabled ultrahigh-speed non-volatile memory devices. <i>Nature Nanotechnology</i> , 2021, 16, 882-887.	15.6	105
779	Nonvolatile Electric Control of Exciton Complexes in Monolayer MoSe ₂ with Two-Dimensional Ferroelectric CuInP ₂ S ₆ . <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 24250-24257.	4.0	11
780	Moiré phonons in twisted MoSe ₂ /WSe ₂ heterobilayers and their correlation with interlayer excitons. <i>2D Materials</i> , 2021, 8, 035030.	2.0	29
781	Excited Rydberg states in MoSe ₂ /WSe ₂ heterostructures. <i>2D Materials</i> , 2021, 8, 035047.	2.0	5
782	Advanced tape-exfoliated method for preparing large-area 2D monolayers: a review. <i>2D Materials</i> , 2021, 8, 032002.	2.0	30
783	Intracavity second harmonic generation from a WSe ₂ monolayer in a passively mode-locked picosecond fiber laser. <i>Optical Materials Express</i> , 2021, 11, 1603.	1.6	4
784	Purcell-Enhanced Single Photon Source Based on a Deterministically Placed WSe ₂ Monolayer Quantum Dot in a Circular Bragg Grating Cavity. <i>Nano Letters</i> , 2021, 21, 4715-4720.	4.5	36
785	Thin-suspended 2D materials: facile, versatile, and deterministic transfer assembly. <i>2D Materials</i> , 2021, 8, 035028.	2.0	4
786	Multibit tribotronic nonvolatile memory based on van der Waals heterostructures. <i>Nano Energy</i> , 2021, 83, 105785.	8.2	21
787	Study of charge density waves in suspended 2H-TaS ₂ and 2H-TaSe ₂ by nanomechanical resonance. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	14
788	Evidence for Moiré Trions in Twisted MoSe ₂ Homobilayers. <i>Nano Letters</i> , 2021, 21, 4461-4468.	4.5	31
789	Imaging Off-Resonance Nanomechanical Motion as Modal Superposition. <i>Advanced Science</i> , 2021, 8, 2005041.	5.6	2
790	Transfer of large-scale two-dimensional semiconductors: challenges and developments. <i>2D Materials</i> , 2021, 8, 032001.	2.0	81
791	Recent mechanical processing techniques of two-dimensional layered materials: A review. <i>Journal of Science: Advanced Materials and Devices</i> , 2021, 6, 135-152.	1.5	11
792	Spatiotemporal imaging of 2D polariton wave packet dynamics using free electrons. <i>Science</i> , 2021, 372, 1181-1186.	6.0	56
793	Efficient ReSe ₂ Photodetectors with CVD Single-Crystal Graphene Contacts. <i>Nanomaterials</i> , 2021, 11, 1650.	1.9	10
794	Broadband, High-Sensitivity Graphene Photodetector Based on Ferroelectric Polarization of Lithium Niobate. <i>Advanced Optical Materials</i> , 2021, 9, 2100245.	3.6	35

#	ARTICLE	IF	CITATIONS
795	Observation of Single-Electron Transport and Charging on Individual Point Defects in Atomically Thin WSe ₂ . Journal of Physical Chemistry C, 2021, 125, 14056-14064.	1.5	5
796	Piezoelectric Modulation of Excitonic Properties in Monolayer WSe ₂ under Strong Dielectric Screening. ACS Nano, 2021, 15, 12334-12341.	7.3	14
797	Heated Assembly and Transfer of Van der Waals Heterostructures with Common Nail Polish. Nanomanufacturing, 2021, 1, 49-56.	1.8	6
798	High performance WSe ₂ p-MOSFET with intrinsic n-channel based on back-to-back p-n junctions. Applied Physics Letters, 2021, 118, .	1.5	26
799	Flexo-photovoltaic effect in MoS ₂ . Nature Nanotechnology, 2021, 16, 894-901.	15.6	107
800	Light Absorption and Emission Dominated by Trions in the Type-I van der Waals Heterostructures. ACS Photonics, 2021, 8, 1972-1978.	3.2	10
801	Hyperspectral study of the coupling between trions in WSe ₂ monolayers to a circular Bragg grating cavity. Comptes Rendus Physique, 2021, 22, 97-105.	0.3	0
802	MoTe ₂ PN Homojunction Constructed on a Silicon Photonic Crystal Cavity for High-Performance Photodetector. ACS Photonics, 2021, 8, 2431-2439.	3.2	22
803	Quantized exciton-exciton annihilation in monolayer WS ₂ on SrTiO ₃ substrate with atomically flat terraces. Physical Review B, 2021, 103, .	1.1	2
804	Electrical tuning of optically active interlayer excitons in bilayer MoS ₂ . Nature Nanotechnology, 2021, 16, 888-893.	15.6	60
805	Liquid-assisted adhesion control of graphene-copper interface for damage-free mechanical transfer. Applied Surface Science, 2021, 551, 149229.	3.1	9
806	Extraordinary Photostability and Davydov Splitting in BN-Sandwiched Single-Layer Tetracene Molecular Crystals. Nano Letters, 2021, 21, 6600-6608.	4.5	5
807	Microwave photoassisted dissipation and supercurrent of a phase-biased graphene-superconductor ring. Physical Review Research, 2021, 3, .	1.3	6
808	Two-dimensional Nb ₃ Cl ₈ memristor based on desorption and adsorption of O ₂ molecules. Rare Metals, 2022, 41, 325-332.	3.6	5
809	Towards practical applications of quantum emitters in boron nitride. Scientific Reports, 2021, 11, 15506.	1.6	6
810	Versatile, Low-Cost, and Portable 2D Material Transfer Setup with a Facile and Highly Efficient DIY Inert-Atmosphere Glove Compartment Option. ACS Omega, 2021, 6, 17952-17964.	1.6	2
811	Local field effects in ultrafast light-matter interaction measured by pump-probe spectroscopy of monolayer MoSe ₂ . Nanophotonics, 2021, 10, 2717-2728.	2.9	9
812	Planar refraction and lensing of highly confined polaritons in anisotropic media. Nature Communications, 2021, 12, 4325.	5.8	48

#	ARTICLE	IF	CITATIONS
813	Black Phosphorus/Molybdenum Diselenide Heterojunction-Based Photodetector. Journal of Electronic Materials, 2021, 50, 5713-5720.	1.0	5
814	SnSe field-effect transistors with improved electrical properties. Nano Research, 2022, 15, 1532-1537.	5.8	11
815	Lateral and Vertical p-n Homojunctions Formed in Few-Layer MoTe ₂ with In Surface Charge-Transfer Doping. ACS Applied Electronic Materials, 2021, 3, 3428-3435.	2.0	3
816	Interplay of crystal thickness and in-plane anisotropy and evolution of quasi-one-dimensional electronic character in ReSe ₂ . Physical Review B, 2021, 104, .	1.1	5
817	Electrical Control of Valley-Zeeman Spin-Orbit-Coupling-Induced Spin Precession at Room Temperature. Physical Review Letters, 2021, 127, 047202.	2.9	35
818	Ultrafast optical melting of trimer superstructure in layered 1Tâ€²-TaTe ₂ . Communications Physics, 2021, 4, .	2.0	15
819	Enhancing and quantifying spatial homogeneity in monolayer WS ₂ . Scientific Reports, 2021, 11, 14831.	1.6	7
820	Large-scale Mapping of Moiré Superlattices by Hyperspectral Raman Imaging. Advanced Materials, 2021, 33, e2008333.	11.1	41
821	Evolution of defect formation during atomically precise desulfurization of monolayer MoS ₂ . Communications Materials, 2021, 2, .	2.9	23
822	Plasmonic hot electron induced layer dependent anomalous Fröhlich interaction in InSe. Communications Physics, 2021, 4, .	2.0	13
823	Experimental Adhesion Energy in van der Waals Crystals and Heterostructures from Atomically Thin Bubbles. Physical Review Letters, 2021, 127, 046101.	2.9	36
824	Recent progress of black phosphorus and its emerging multifunction applications in biomedicine. JPhys Materials, 2021, 4, 042004.	1.8	3
825	Large-Scale Uniform-Patterned Arrays of Ultrathin All-2D Vertical Stacked Photodetector Devices. ACS Applied Materials & Interfaces, 2021, 13, 34696-34704.	4.0	2
826	Optical Imaging of Chemically and Geometrically Controlled Interfacial Diffusion and Redox in 2D van der Waals Space. Journal of Physical Chemistry C, 2021, 125, 16819-16826.	1.5	4
827	Superconducting Quantum Interference in Twisted van der Waals Heterostructures. Nano Letters, 2021, 21, 6725-6731.	4.5	21
828	Identifying atomically thin crystals with diffusively reflected light. 2D Materials, 2021, 8, 045016.	2.0	2
829	Rational Design on Wrinkle-less Transfer of Transition Metal Dichalcogenide Monolayer by Adjustable Wettability-assisted Transfer Method. Advanced Functional Materials, 2021, 31, 2104978.	7.8	17
830	Two-Dimensional Hybrid Perovskite-Based van der Waals Heterostructures. Journal of Physical Chemistry Letters, 2021, 12, 8178-8187.	2.1	18

#	ARTICLE	IF	CITATIONS
831	Actively variable-spectrum optoelectronics with black phosphorus. <i>Nature</i> , 2021, 596, 232-237.	13.7	132
832	Imaging Seebeck drift of excitons and trions in MoSe ₂ monolayers. <i>2D Materials</i> , 2021, 8, 045014.	2.0	4
833	Fiber-coupled light-emitting diodes (LEDs) as safe and convenient light sources for the characterization of optoelectronic devices. <i>Open Research Europe</i> , 0, 1, 98.	2.0	2
834	Nonclassical Exciton Diffusion in Monolayer WSe_2 . <i>Physical Review Letters</i> , 2021, 127, 076801.	2.9	40
835	Transfer Printing of Freestanding Nanoassemblies: A Route to Membrane Resonators with Adjustable Prestress. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 40932-40941.	4.0	3
836	Room Temperature Micro-Photoluminescence Studies of Colloidal WS ₂ Nanosheets. <i>Journal of Physical Chemistry C</i> , 2021, 125, 18841-18848.	1.5	7
837	Photocurrent Generation Mechanisms in Molybdenum-Contacted Semiconducting Black Phosphorus and Contributions from the Photobolometric Effect. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2021, 218, 2100196.	0.8	0
838	Photoluminescence Kinetics of Dark and Bright Excitons in Atomically Thin MoS ₂ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100263.	1.2	4
839	Polarized photoluminescence spectroscopy in WS ₂ , WSe ₂ atomic layers and heterostructures by cylindrical vector beams*. <i>Chinese Physics B</i> , 2021, 30, 087802.	0.7	1
840	Hydrogen etch resistance of aluminium oxide passivated graphitic layers. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 505304.	1.3	1
841	Surface morphology-modulated electrical conductivity behavior in 2D anisotropic exfoliated nanoribbons. <i>2D Materials</i> , 2021, 8, 045025.	2.0	4
842	Optical versus electron diffraction imaging of Twist-angle in 2D transition metal dichalcogenide bilayers. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	6
843	High-Performance and Ultralow-Noise Two-Dimensional Heterostructure Field-Effect Transistors with One-Dimensional Electrical Contacts. <i>ACS Applied Electronic Materials</i> , 2021, 3, 4126-4134.	2.0	2
844	The squeezable nanojunction as a tunable light-matter interface for studying photoluminescence of 2D materials. <i>2D Materials</i> , 2021, 8, 045034.	2.0	2
845	Monolayer Boron Nitride: Hyperspectral Imaging in the Deep Ultraviolet. <i>Nano Letters</i> , 2021, 21, 10133-10138.	4.5	22
846	Fabrication and characterization of large-area suspended MoSe ₂ crystals down to the monolayer. <i>JPhys Materials</i> , 2021, 4, 046001.	1.8	8
847	Narrow-band high-lying excitons with negative-mass electrons in monolayer WSe ₂ . <i>Nature Communications</i> , 2021, 12, 5500.	5.8	29
848	Modulation of trion and exciton formation in monolayer WS ₂ by dielectric and substrate engineering. <i>2D Materials</i> , 2021, 8, 045032.	2.0	3

#	ARTICLE	IF	CITATIONS
849	Black Phosphorus Photodetector Enhanced by a Planar Photonic Crystal Cavity. ACS Photonics, 2021, 8, 3104-3110.	3.2	19
850	Spin/valley pumping of resident electrons in WSe ₂ and WS ₂ monolayers. Nature Communications, 2021, 12, 5455.	5.8	30
851	Gate energy efficiency and negative capacitance in ferroelectric 2D/2D TFET from cryogenic to high temperatures. Npj 2D Materials and Applications, 2021, 5, .	3.9	16
852	Observation of high carrier density, ohmic contact, and metallic conductivity down to 5 K in aluminum-contacted multilayer MoS ₂ flakes. Japanese Journal of Applied Physics, 2021, 60, 111001.	0.8	2
853	Structure, Properties and Applications of Two-Dimensional Hexagonal Boron Nitride. Advanced Materials, 2021, 33, e2101589.	11.1	239
854	Tunable self-assembled Casimir microcavities and polaritons. Nature, 2021, 597, 214-219.	13.7	48
855	Dielectric Engineering for Manipulating Exciton Transport in Semiconductor Monolayers. Nano Letters, 2021, 21, 8409-8417.	4.5	12
856	A Josephson Junction with h-BN tunnel barrier: observation of low critical current noise. Journal of Physics Condensed Matter, 2021, 33, .	0.7	1
857	Etching-Free Transfer and Nanoimaging of CVD-Grown MoS ₂ Monolayers. Journal of Physical Chemistry C, 2021, 125, 21011-21017.	1.5	2
858	Deterministic coupling of quantum emitter to surface plasmon polaritons, Purcell enhanced generation of indistinguishable single photons and quantum information processing. Optics Communications, 2021, 496, 127139.	1.0	5
859	Single-molecule photocatalytic dynamics at individual defects in two-dimensional layered materials. Science Advances, 2021, 7, eabj4452.	4.7	22
860	Imaging vibrations of electromechanical few layer graphene resonators with a moving vacuum enclosure. Precision Engineering, 2021, 72, 769-776.	1.8	2
861	Delamination of multilayer graphene stacks from its substrate through wrinkle formation under high pressures. Carbon, 2021, 185, 242-251.	5.4	2
862	A versatile sample fabrication method for ultrafast electron diffraction. Ultramicroscopy, 2021, 230, 113389.	0.8	10
863	Two-dimensional quantum dots for highly efficient heterojunction solar cells. Journal of Colloid and Interface Science, 2021, 603, 48-57.	5.0	31
864	Electronic and optical properties of two-dimensional GaN/ZnO heterojunction tuned by different stacking configurations. Journal of Colloid and Interface Science, 2022, 607, 913-921.	5.0	31
865	Individual Si Nanospheres Wrapped in a Suspended Monolayer WS ₂ for Electromechanically Controlled Mie-Type Nanopixels. Advanced Optical Materials, 2021, 9, 2001954.	3.6	7
866	Ultrafast Electron Diffraction. Springer Theses, 2021, , 69-103.	0.0	1

#	ARTICLE	IF	CITATIONS
867	Synthesis of graphene and other two-dimensional materials. , 2021, , 1-79.		4
868	Magnetotransport in hybrid InSe/monolayer graphene on SiC. Nanotechnology, 2021, 32, 155704.	1.3	3
869	Wetting of nanopores probed with pressure. Physical Chemistry Chemical Physics, 2021, 23, 4975-4987.	1.3	8
870	Contact-Barrier Free, High Mobility, Dual-Gated Junctionless Transistor Using Tellurium Nanowire. Advanced Functional Materials, 2021, 31, 2006278.	7.8	14
871	Twist Angle-Dependent Interlayer Exciton Lifetimes in van der Waals Heterostructures. Physical Review Letters, 2021, 126, 047401.	2.9	88
872	Chlorine doping of MoSe ₂ flakes by ion implantation. Nanoscale, 2021, 13, 5834-5846.	2.8	21
873	Thickness-modulated lateral MoS ₂ diodes with sub-terahertz cutoff frequency. Nanoscale, 2021, 13, 8940-8947.	2.8	8
874	Room-Temperature Exciton-Based Optoelectronic Switch. Small, 2021, 17, e2005918.	5.2	11
875	Charge-polarized interfacial superlattices in marginally twisted hexagonal boron nitride. Nature Communications, 2021, 12, 347.	5.8	132
877	Effects of dielectric stoichiometry on the photoluminescence properties of encapsulated WSe ₂ monolayers. Nano Research, 2018, 11, 1399-1414.	5.8	12
878	Chemical Surface Reactivity and Morphological Changes of Bismuth Triiodide (BiI ₃) under Different Environmental Conditions. Langmuir, 2020, 36, 6458-6464.	1.6	7
879	Highly Responsive Flexible Photodetectors Based on MOVPE Grown Uniform Few-Layer MoS ₂ . ACS Photonics, 2020, 7, 1388-1395.	3.2	60
880	Electromechanical control of nitrogen-vacancy defect emission using graphene NEMS. , 0, .		1
881	Suppression of superconductivity and enhanced critical field anisotropy in thin flakes of FeSe. Npj Quantum Materials, 2020, 5, .	1.8	26
882	Anomalous thickness-dependent electrical conductivity in van der Waals layered transition metal halide, Nb ₃ Cl ₈ . Journal of Physics Condensed Matter, 2020, 32, 304004.	0.7	15
883	Temperature-dependent phonon dynamics and anharmonicity of suspended and supported few-layer gallium sulfide. Nanotechnology, 2020, 31, 495702.	1.3	10
884	Chemical-free transfer of patterned reduced graphene oxide thin films for large area flexible electronics and nanoelectromechanical systems. Nanotechnology, 2020, 31, 495301.	1.3	8
885	A system for the deterministic transfer of 2D materials under inert environmental conditions. 2D Materials, 2020, 7, 025034.	2.0	21

#	ARTICLE	IF	CITATIONS
904	Strain tuning of the emission axis of quantum emitters in an atomically thin semiconductor. <i>Optica</i> , 2020, 7, 580.	4.8	13
905	Novel p-n junctions based on ambipolar two-dimensional crystals. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2017, 66, 217302.	0.2	4
906	Research progress of high-quality monolayer MoS ₂ films. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2018, 67, 128103.	0.2	7
907	Experimental Technicalities. Springer Theses, 2021, , 71-84.	0.0	0
908	Electrically driven strain-induced deterministic single-photon emitters in a van der Waals heterostructure. <i>Science Advances</i> , 2021, 7, eabj3176.	4.7	28
909	Heat dissipation in few-layer MoS ₂ and MoS ₂ /hBN heterostructure. <i>2D Materials</i> , 2022, 9, 015005.	2.0	6
910	Steering on Degrees of Freedom of 2D Van der Waals Heterostructures. <i>Small Science</i> , 2022, 2, 2100033.	5.8	13
911	Functional Hybridization of Molecules with 2D Semiconducting Materials. <i>Zairyo/Journal of the Society of Materials Science, Japan</i> , 2021, 70, 721-726.	0.1	0
912	Thickness dependence of magnetotransport properties of tungsten ditelluride. <i>Physical Review B</i> , 2021, 104, .	1.1	4
913	Microcavity phonon polaritons from the weak to the ultrastrong phonon-photon coupling regime. <i>Nature Communications</i> , 2021, 12, 6206.	5.8	27
914	Forbidden and Second-Order Phonons in Raman Spectra of Single and Few-Layer MoS ₂ Close to C Exciton Resonance. <i>Journal of Physical Chemistry C</i> , 2021, 125, 23904-23910.	1.5	13
915	Thin-film electronics based on all-2D van der Waals heterostructures. <i>Journal of Information Display</i> , 2021, 22, 231-245.	2.1	3
916	Bright single photon emitters with enhanced quantum efficiency in a two-dimensional semiconductor coupled with dielectric nano-antennas. <i>Nature Communications</i> , 2021, 12, 6063.	5.8	36
917	Supercurrent and Phase Slips in a Ballistic Carbon Nanotube Bundle Embedded into a van der Waals Heterostructure. <i>Nano Letters</i> , 2021, 21, 8627-8633.	4.5	3
918	Strongly Anisotropic Strain-Tunability of Excitons in Exfoliated ZrSe ₃ . <i>Advanced Materials</i> , 2022, 34, e2103571.	11.1	16
919	Layer-Dependent Pressure Effect on the Electronic Structure of 2D Black Phosphorus. <i>Physical Review Letters</i> , 2021, 127, 186401.	2.9	17
920	Enhanced bulk photovoltaic effect in two-dimensional ferroelectric CuInP ₂ S ₆ . <i>Nature Communications</i> , 2021, 12, 5896.	5.8	109
921	Polarization-controlled amplified spontaneous emission in 2D semiconductors with birefringent microcavity. <i>Applied Physics Letters</i> , 2021, 119, 143101.	1.5	2

#	ARTICLE	IF	CITATIONS
922	Tuning exciton recombination rates in doped transition metal dichalcogenides. <i>Optical Materials: X</i> , 2021, 12, 100097.	0.3	5
923	Graphene-based electrostatic control of InAs quantum dots. , 2016, , .		0
924	Hysteresis of Transfer Characteristics in Field-Effect Transistors with a Molybdenum Disulfide Channel. <i>Proceedings of the Nature Research Society</i> , 0, 1, .	0.0	1
925	Progress Toward 2D Tunneling Devices. <i>Springer Theses</i> , 2017, , 117-122.	0.0	0
926	Relative Reflection Difference as a Method for Measuring the Thickness of the Exfoliated MoSe ₂ Layers. <i>Acta Physica Polonica A</i> , 2017, 132, 316-318.	0.2	0
928	Minutes-fast Heterostructure Prototyping via 2D Material Printing: Electrical 2D-LED and Tunnel Junctions. , 2018, , .		0
929	Active photonic integrated circuits combining Si ₃ N ₄ microresonators with 2D materials for applications in the visible wavelength range. , 2018, , .		0
930	Coupling single defects in 2D semiconductor to a silver nanowire. , 2018, , .		0
931	Optical spectroscopy of interlayer excitons in TMDC heterostructures: exciton dynamics, interactions, and giant valley-selective magnetic splitting. , 2018, , .		0
932	Cavity integrated layered material devices. , 2018, , .		0
933	Polariton electroluminescence in monolayer WS ₂ . , 2019, , .		0
934	Parametric design study of monolayer graphene based TeO ₂ waveguide saturable absorber. , 2019, , .		0
935	Resonant photocurrent from a single quantum emitter in tungsten diselenide. <i>2D Materials</i> , 2020, 7, 045021.	2.0	4
936	Quasi-1D exciton channels in strain-engineered 2D materials. <i>Science Advances</i> , 2021, 7, eabj3066.	4.7	37
938	Anisotropic Thermal Conductivity of Crystalline Layered SnSe ₂ . <i>Nano Letters</i> , 2021, 21, 9172-9179.	4.5	19
939	Single Nanoflake Photoelectrochemistry Reveals Intranoflake Doping Heterogeneity That Explains Ensemble-Level Photoelectrochemical Behavior. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 22737-22746.	4.0	8
940	MoS ₂ FET fabrication using adhesion lithography and their application to chemical sensors. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 016504.	0.8	4
941	Probing the local dielectric function of WS ₂ on an Au substrate by near field optical microscopy operating in the visible spectral range. <i>Applied Surface Science</i> , 2022, 574, 151672.	3.1	6

#	ARTICLE	IF	CITATIONS
942	Enhanced emission and second harmonic generation from WS ₂ by using dielectric circular Bragg resonators. , 2020, , .		1
943	Thermal Conductivity Measurements via the Bolometric Effect. SpringerBriefs in Applied Sciences and Technology, 2020, , 29-50.	0.2	1
944	Spectral asymmetry of phonon sideband luminescence in monolayer and bilayer WSe ₂ . Physical Review Research, 2021, 3, .	1.3	3
945	Two-color Kerr microscopy of two-dimensional materials with sub-picosecond time resolution. Review of Scientific Instruments, 2021, 92, 113904.	0.6	2
946	Metal-insulator transition in few-layered GaTe transistors. Journal of Semiconductors, 2020, 41, 072902.	2.0	2
947	Real-time spatially resolved determination of twist angle in transition metal dichalcogenide heterobilayers. 2D Materials, 2021, 8, 015015.	2.0	7
948	Recent advances in the properties and synthesis of bilayer graphene and transition metal dichalcogenides. JPhys Materials, 2020, 3, 042003.	1.8	11
949	Direct growth of graphene-MoS ₂ heterostructure: Tailored interface for advanced devices. Applied Surface Science, 2022, 581, 151858.	3.1	16
950	Black phosphorus phase retarder based on anisotropic refractive index dispersion. 2D Materials, 2022, 9, 015020.	2.0	9
951	Anisotropic Optical and Vibrational Properties of GeS. Nanomaterials, 2021, 11, 3109.	1.9	7
952	Mechanical deformation of atomically thin layers during stamp transfer. Journal of Physics: Conference Series, 2021, 2015, 012058.	0.3	0
953	Robust Quantum Oscillation of Dirac Fermions in a Single-Defect Resonant Transistor. ACS Nano, 2021, 15, 20013-20019.	7.3	6
954	Layer and material-type dependent photoresponse in WSe ₂ /WS ₂ vertical heterostructures. 2D Materials, 2022, 9, 015022.	2.0	7
955	Non-equilibrium diffusion of dark excitons in atomically thin semiconductors. Nanoscale, 2021, 13, 19966-19972.	2.8	6
956	Tuning the Optical Properties of a MoSe ₂ Monolayer Using Nanoscale Plasmonic Antennas. Nano Letters, 2022, 22, 561-569.	4.5	11
957	Apparent Colors of 2D Materials. Advanced Photonics Research, 2022, 3, 2100221.	1.7	8
958	Optimization of Mechanically Assembled Van Der Waals Heterostructure Based On Solution Immersion and Hot Plate Heating. Journal of Physics: Conference Series, 2022, 2152, 012007.	0.3	1
959	Excited state charge transfer promoted Raman enhancement of copper phthalocyanine by twisted bilayer graphenes. Carbon, 2022, 188, 305-314.	5.4	1

#	ARTICLE	IF	CITATIONS
961	Molybdenum Disulfide Membrane-based Ultrasensitive Temperature Sensor. , 2021, , .		1
962	Photoluminescence and charge transfer in the prototypical 2D/3D semiconductor heterostructure MoS ₂ /GaAs. Applied Physics Letters, 2021, 119, .	1.5	10
963	Heteroepitaxial growth and interface band alignment in a large-mismatch CsPbI ₃ /GaN heterojunction. Journal of Materials Chemistry C, 2022, 10, 1984-1990.	2.7	10
964	Robotic four-dimensional pixel assembly of van der Waals solids. Nature Nanotechnology, 2022, 17, 361-366.	15.6	54
965	Charge density wave activated excitons in TiSe ₂ /MoSe ₂ heterostructures. APL Materials, 2022, 10, .	2.2	6
966	Fabrication Technologies for the On-Chip Integration of 2D Materials. Small Methods, 2022, 6, e2101435.	4.6	39
967	Trions in MoS_2 are quantum superpositions of intra- and intervalley spin states. Physical Review B, 2022, 105, .		
968	Interlayer exciton complexes in bilayer MoS_2 . Physical Review B, 2022, 105, .		
969	A van der Waals Integrated Damage-Free Memristor Based on Layered 2D Hexagonal Boron Nitride. Small, 2022, 18, e2106253.	5.2	32
970	Reconfigurable InSe Electronics with van der Waals Integration. Advanced Electronic Materials, 2022, 8, .	2.6	17
971	Spin-orbit coupling proximity effect in MoS ₂ /Fe ₃ GeTe ₂ heterostructures. Applied Physics Letters, 2022, 120, .	1.5	11
972	Boosting Second-Harmonic Generation in Monolayer Rhenium Disulfide by Reversible Laser Patterning. ACS Photonics, 2022, 9, 518-526.	3.2	8
973	Facile fabrication of 2D material multilayers and vdW heterostructures with multimodal microscopy and AFM characterization. Materials Today, 2022, 52, 31-42.	8.3	6
974	Recent Advances on Tuning the Interlayer Coupling and Properties in van der Waals Heterostructures. Small, 2022, 18, e2105877.	5.2	23
975	Active and Passive Tuning of Ultranarrow Resonances in Polaritonic Nanoantennas. Advanced Materials, 2022, 34, e2104954.	11.1	13
976	Nonvolatile electrical switching of optical and valleytronic properties of interlayer excitons. Light: Science and Applications, 2022, 11, 23.	7.7	9
977	Efficient modulation of MoS ₂ /WSe ₂ interlayer excitons via uniaxial strain. Applied Physics Letters, 2022, 120, .	1.5	14
978	Flexible 2D Materials beyond Graphene: Synthesis, Properties, and Applications. Small, 2022, 18, e2105383.	5.2	55

#	ARTICLE	IF	CITATIONS
979	The fabrication and physical properties of two-dimensional van der Waals heterostructures. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 048502.	0.2	2
980	Injection-free multiwavelength electroluminescence devices based on monolayer semiconductors driven by an alternating field. Science Advances, 2022, 8, eabl5134.	4.7	13
981	Angle-resolved one and Two-Photon absorption spectrum in twisted bilayer graphene quantum dots. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 271, 120894.	2.0	6
982	Self-Sealing Complex Oxide Resonators. Nano Letters, 2022, 22, 1475-1482.	4.5	10
983	Room-Temperature Ferroelectricity in $1T$ - ReS_2 Multilayers. Physical Review Letters, 2022, 128, 067601.	2.9	52
984	Interlayer exciton valley polarization dynamics in large magnetic fields. Physical Review B, 2022, 105, .	1.1	11
985	Stretching ReS_2 along different crystal directions: Anisotropic tuning of the vibrational and optical responses. Applied Physics Letters, 2022, 120, .	1.5	6
986	Design and analysis of III-V two-dimensional van der Waals heterostructures for ultra-thin solar cells. Applied Surface Science, 2022, 586, 152799.	3.1	16
987	High-mobility p-channel wide-bandgap transistors based on hydrogen-terminated diamond/hexagonal boron nitride heterostructures. Nature Electronics, 2022, 5, 37-44.	13.1	70
988	Quantum emitters and detectors based on 2D van der Waals materials. Nanoscale, 2022, 14, 5289-5313.	2.8	12
989	Construction and physical properties of low-dimensional structures for nanoscale electronic devices. Physical Chemistry Chemical Physics, 2022, 24, 9082-9117.	1.3	3
991	Ultrafast charge transfer and carrier dynamics in a $\text{WS}_2/\text{MoSe}_2$ few-layer van der Waals heterostructure. Journal of Materials Chemistry C, 2022, 10, 5328-5335.	2.7	3
992	Low-threshold single-mode laser in perovskite microdiscs direct-synthesized into planar microcavity. Applied Physics Letters, 2022, 120, 071110.	1.5	7
993	Quantitatively Deciphering Electronic Properties of Defects at Atomically Thin Transition-Metal Dichalcogenides. ACS Nano, 2022, 16, 4786-4794.	7.3	7
994	Enhanced Radiative Exciton Recombination in Monolayer WS_2 on the hBN Substrate Competing with Nonradiative Exciton Annihilation. ACS Photonics, 2022, 9, 873-879.	3.2	15
995	Spatiotemporally controlled room-temperature exciton transport under dynamic strain. Nature Photonics, 2022, 16, 242-247.	15.6	24
996	Geometric progress in the thickness of exfoliated van der Waals crystals on the example of MoS_2 . AIP Advances, 2022, 12, .	0.6	5
997	Challenges and opportunities in 2D heterostructures for electronic and optoelectronic devices. IScience, 2022, 25, 103942.	1.9	38

#	ARTICLE	IF	CITATIONS
998	Interior and Edge Magnetization in Thin Exfoliated CrGeTe ₃ Films. Nano Letters, 2022, 22, 3165-3172.	4.5	12
999	Scalable and Versatile Transfer of Sensitive Two-dimensional Materials. Nano Letters, 2022, 22, 2342-2349.	4.5	4
1000	Spatial Control of Graphene Functionalization by Patterning a 2D Substrate: Implications for Graphene Based van-der-Waals Heterostructures. ACS Applied Nano Materials, 0, , .	2.4	2
1001	Optoelectronic Properties of MoS ₂ in Proximity to Carrier Selective Metal Oxides. Advanced Optical Materials, 2022, 10, .	3.6	7
1002	Highly accurate, reliable, and non-contaminating two-dimensional material transfer system. Applied Physics Reviews, 2022, 9, .	5.5	13
1003	Constructing van der Waals heterostructures by dry-transfer assembly for novel optoelectronic device. Nanotechnology, 2022, 33, 465601.	1.3	7
1004	Ferroelectric-gated ReS ₂ field-effect transistors for nonvolatile memory. Nano Research, 2022, 15, 5443-5449.	5.8	5
1005	Probing Nanoscale Schottky Barrier Characteristics at WSe ₂ /Graphene Heterostructures via Electrostatic Doping. Advanced Electronic Materials, 0, , 2200196.	2.6	3
1006	Magnon-exciton proximity coupling at a van der Waals heterointerface. Physical Review B, 2022, 105, .	1.1	5
1007	Picosecond energy transfer in a transition metal dichalcogenide-graphene heterostructure revealed by transient Raman spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119726119.	3.3	16
1008	Quantitative Strain and Topography Mapping of 2D Materials Using Nanobeam Electron Diffraction. Microscopy and Microanalysis, 2022, 28, 701-715.	0.2	1
1009	Mechanical, Elastic, and Adhesive Properties of Two-dimensional Materials: From Straining Techniques to State-of-the-Art Local Probe Measurements. Advanced Materials Interfaces, 2022, 9, .	1.9	24
1010	Efficient valley polarization of charged excitons and resident carriers in Molybdenum disulfide monolayers by optical pumping. Communications Physics, 2022, 5, .	2.0	7
1011	Spin dependent charge transfer in MoSe ₂ /hBN/Ni hybrid structures. Applied Physics Letters, 2021, 119, 263103.	1.5	0
1012	How high is a MoSe ₂ monolayer?. Nanotechnology, 2022, 33, 125706.	1.3	10
1013	Manipulating Edge Current in Hexagonal Boron Nitride via Doping and Friction. ACS Nano, 2021, 15, 20203-20213.	7.3	5
1014	Optimized Liquid-Phase Exfoliation of Magnetic van der Waals Heterostructures: Towards the Single Layer and Deterministic Fabrication of Devices. Molecules, 2021, 26, 7371.	1.7	4
1015	Efficient Suppression of Charge Recombination in Self-Powered Photodetectors with Band-Aligned Transferred van der Waals Metal Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 61799-61808.	4.0	13

#	ARTICLE	IF	CITATIONS
1016	Influence of Initial Temperature and Convective Heat Loss on the Self-Propagating Reaction in Al/Ni Multilayer Foils. <i>Materials</i> , 2021, 14, 7815.	1.3	8
1017	Deterministic transfer of thin carbon nanotube film. <i>Bulletin of the Korean Chemical Society</i> , 2022, 43, 196-200.	1.0	1
1018	A Vertical PN Diode Constructed of MoS ₂ /CsPbBr ₃ Heterostructure for High-Performance Optoelectronics. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	4
1019	Plasmon-Exciton Coupling Effect on Plasmon Damping. <i>Advanced Photonics Research</i> , 0, , 2100281.	1.7	2
1020	Spatial Modulation of Vibrational and Luminescence Properties of Monolayer MoS ₂ , Using a GaAs Nanowire Array. <i>IEEE Journal of Quantum Electronics</i> , 2022, 58, 1-8.	1.0	3
1021	Imaging the effect of high photoexcited densities on valley polarization and coherence in MoS ₂ monolayers. <i>Npj 2D Materials and Applications</i> , 2022, 6, .	3.9	0
1022	High-Efficiency Second-Harmonic and Sum-Frequency Generation in a Silicon Nitride Microring Integrated with Few-Layer GaSe. <i>ACS Photonics</i> , 2022, 9, 1671-1678.	3.2	8
1023	Tailoring Photoluminescence by Strain-Engineering in Layered Perovskite Flakes. <i>Nano Letters</i> , 2022, 22, 4153-4160.	4.5	8
1024	The effect of dielectric environment on the brightening of neutral and charged dark excitons in WSe ₂ monolayer. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	5
1025	Fundamentals of Chemical Vapor Deposition of Atomic Layer Materials. <i>Vacuum and Surface Science</i> , 2022, 65, 169-176.	0.0	0
1026	Tuning nanowire lasers <i>via</i> hybridization with two-dimensional materials. <i>Nanoscale</i> , 2022, 14, 6822-6829.	2.8	2
1027	Interlayer excitons in MoSe ₂ /2D perovskite hybrid heterostructures – the interplay between charge and energy transfer. <i>Nanoscale</i> , 2022, 14, 8085-8095.	2.8	11
1028	The field-free Josephson diode in a van der Waals heterostructure. <i>Nature</i> , 2022, 604, 653-656.	13.7	131
1029	Van der Waals integration of high- $\hat{\rho}$ perovskite oxides and two-dimensional semiconductors. <i>Nature Electronics</i> , 2022, 5, 233-240.	13.1	68
1030	Electrostatic Coupling in MoS ₂ /CuInP ₂ S ₆ Ferroelectric vdW Heterostructures. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	17
1031	From the synthesis of hBN crystals to their use as nanosheets in van der Waals heterostructures. <i>2D Materials</i> , 2022, 9, 035008.	2.0	7
1032	Twisted black phosphorus-based van der Waals stacks for fiber-integrated polarimeters. <i>Science Advances</i> , 2022, 8, eabo0375.	4.7	30
1033	A non-destructive and efficient transfer method for preparing 2D materials samples for transmission electron microscopy study. <i>Nanotechnology</i> , 2022, 33, 345702.	1.3	1

#	ARTICLE	IF	CITATIONS
1034	Direct Patterning of Optoelectronic Nanostructures Using Encapsulated Layered Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2022, 14, 23775-23784.	4.0	8
1035	Multifunctional and Transformative Metaphotonics with Emerging Materials. Chemical Reviews, 2022, 122, 15414-15449.	23.0	23
1036	Phosphorene—“an emerging two-dimensional material: recent advances in synthesis, functionalization, and applications. 2D Materials, 2022, 9, 032001.	2.0	25
1037	Anomalous optical excitations from arrays of whirlpooled lattice distortions in moiré superlattices. Nature Materials, 2022, 21, 890-895.	13.3	15
1038	Optical study on the crystal symmetry of two-dimensional WTe ₂ . Wuli Xuebao/Acta Physica Sinica, 2022, .	0.2	0
1039	Optoelectronic Nonvolatile Memories Using Graphene/Hexagonal Boron Nitride/Rhenium Disulfide Heterostructure. ACS Applied Electronic Materials, 2022, 4, 2964-2969.	2.0	4
1040	Nonlinear mechanical response of rippled MoS ₂ nanosheets evaluated by in situ transmission electron microscopy. Applied Surface Science, 2022, 597, 153708.	3.1	1
1041	Synthesis, modification, and application of black phosphorus, few-layer black phosphorus (FLBP), and phosphorene: a detailed review. Materials Advances, 2022, 3, 5557-5574.	2.6	23
1042	Few-Layered MnAl ₂ S ₄ Dielectrics for High-Performance van der Waals Stacked Transistors. ACS Applied Materials & Interfaces, 2022, 14, 25920-25927.	4.0	8
1043	Uniaxial strain tuning of Raman spectra of a ReS_2 monolayer. Physical Review B, 2022, 105, .		
1044	CVD Bilayer Graphene Spin Valves with 26 $\hat{\text{A}}$ m Spin Diffusion Length at Room Temperature. Nano Letters, 2022, 22, 4949-4955.	4.5	7
1045	Electronic and optical properties and quantum tuning effects of As/HfS ₂ /van der Waals heterostructure. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 177304.	0.2	1
1046	Quantum oscillations in a hexagonal boron nitride-supported single crystalline InSb nanosheet. Chinese Physics B, 2022, 31, 098507.	0.7	3
1047	Integration of MoSe ₂ Monolayers with Epitaxial High- $\hat{\text{A}}$ Gd ₂ O ₃ Substrate: Implication for High-Quality Emission and Modulation of Excitonic Quasiparticles. ACS Applied Nano Materials, 2022, 5, 9567-9575.	2.4	4
1048	Optical Constants of Several Multilayer Transition Metal Dichalcogenides Measured by Spectroscopic Ellipsometry in the 300–1700 nm Range: High Index, Anisotropy, and Hyperbolicity. ACS Photonics, 2022, 9, 2398-2407.	3.2	47
1049	A Steady-State Approach for Studying Valley Relaxation Using an Optical Vortex Beam. Nano Letters, 2022, 22, 4712-4717.	4.5	4
1050	Nonlocal Exciton-Photon Interactions in Hybrid High- Q Beam Nanocavities with Encapsulated Monolayers. Physical Review Letters, 2022, 128, .	2.9	6
1051	Intrinsic circularly polarized exciton emission in a twisted van der Waals heterostructure. Physical Review B, 2022, 105, .	1.1	6

#	ARTICLE	IF	CITATIONS
1052	Nanomechanical probing and strain tuning of the Curie temperature in suspended Cr ₂ Ge ₂ Te ₆ -based heterostructures. Npj 2D Materials and Applications, 2022, 6, .	3.9	21
1053	Resolving the Heterogeneous Adsorption of Antibody Fragment on a 2D Layered Molybdenum Disulfide by Super-Resolution Imaging. Langmuir, 2022, 38, 7455-7461.	1.6	2
1054	Nano-optical Visualization of Interlayer Interactions in WSe ₂ /WS ₂ Heterostructures. Journal of Physical Chemistry Letters, 2022, 13, 5854-5859.	2.1	5
1055	Omnidirectional spin-to-charge conversion in graphene/NbSe ₂ van der Waals heterostructures. 2D Materials, 2022, 9, 045001.	2.0	15
1057	Ultrafast scanning electron microscopy with sub-micrometer optical pump resolution. Applied Physics Reviews, 2022, 9, .	5.5	3
1058	In Situ Construction of a LiF-Enriched Interfacial Modification Layer for Stable All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2022, 14, 29878-29885.	4.0	5
1059	Low-energy Se ion implantation in MoS ₂ monolayers. Npj 2D Materials and Applications, 2022, 6, .	3.9	11
1060	Parallel Measurements of Vibrational Modes in a Few-Layer Graphene Nanomechanical Resonator Using Software-Defined Radio Dongles. IEEE Access, 2022, 10, 69981-69991.	2.6	1
1061	Space-Confined Growth of Large-Mismatch CsPb(BrxCl _{1-x}) ₃ /GaN Heterostructures with Tunable Band Alignment and Optical Properties. Inorganic Chemistry Frontiers, 0, .	3.0	2
1062	Chiral molecular intercalation superlattices. Nature, 2022, 606, 902-908.	13.7	67
1063	Evaluation of polyvinyl chloride adhesion to 2D crystal flakes. Npj 2D Materials and Applications, 2022, 6, .	3.9	0
1064	Strong Linearly Polarized Emission from Monolayer WS ₂ Coupled with Plasmonic Nanocavity Array. Advanced Optical Materials, 0, , 2200535.	3.6	0
1065	Optical interference effect in the hybrid quantum dots/two-dimensional materials: photoluminescence enhancement and modulation. Optics Express, 2022, 30, 26557.	1.7	4
1066	Quantization of Mode Shifts in Nanocavities Integrated with Atomically Thin Sheets. Advanced Optical Materials, 2022, 10, .	3.6	2
1067	Selectively Strong Coupling of $\langle \text{mml:math xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \text{display}=\text{"inline"} \text{overflow}=\text{"scroll"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Mo} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{S} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ Excitons to a Metamaterial at Room Temperature. Physical Review Applied, 2022, 18, .	1.5	0
1068	Optical Detection of Long Electron Spin Transport Lengths in a Monolayer Semiconductor. Physical Review Letters, 2022, 129, .	2.9	2
1069	Probing interlayer shear thermal deformation in atomically-thin van der Waals layered materials. Nature Communications, 2022, 13, .	5.8	1
1070	Photoluminescence Enhancement by Band Alignment Engineering in MoS ₂ /FePS ₃ van der Waals Heterostructures. ACS Applied Materials & Interfaces, 2022, 14, 33482-33490.	4.0	8

#	ARTICLE	IF	CITATIONS
1071	Strain induced lifting of the charged exciton degeneracy in monolayer MoS ₂ on a GaAs nanomembrane. 2D Materials, 2022, 9, 045006.	2.0	4
1072	Fiber-coupled light-emitting diodes (LEDs) as safe and convenient light sources for the characterization of optoelectronic devices. Open Research Europe, 0, 1, 98.	2.0	0
1073	Quasi-1D ZrS ₃ as an Anisotropic Nano-Reflector for Manipulating Light-Matter Interactions. Advanced Optical Materials, 2022, 10, .	3.6	9
1074	Waveguide-coupled deterministic quantum light sources and post-growth engineering methods for integrated quantum photonics. , 2022, 1, 100018.		4
1075	Signature of lattice dynamics in twisted 2D homo/hetero-bilayers. 2D Materials, 2022, 9, 045018.	2.0	9
1076	Substrate influence on transition metal dichalcogenide monolayer exciton absorption linewidth broadening. Physical Review Materials, 2022, 6, .	0.9	8
1077	Van der Waals heterostructures. Nature Reviews Methods Primers, 2022, 2, .	11.8	80
1078	Demonstration of PdSe ₂ CMOS Using Same Metal Contact in PdSe ₂ n-MOSFETs through Thickness-Dependent Phase Transition. Advanced Electronic Materials, 2022, 8, .	2.6	1
1079	Supercurrent diode effect and magnetochiral anisotropy in few-layer NbSe ₂ . Nature Communications, 2022, 13, .	5.8	83
1080	Planar Optical Cavities Hybridized with Low-Dimensional Light-Emitting Materials. Advanced Materials, 2023, 35, .	11.1	10
1081	Valley-magnetophonon resonance for interlayer excitons. 2D Materials, 2022, 9, 045016.	2.0	2
1082	2D materials and van der Waals heterojunctions for neuromorphic computing. Neuromorphic Computing and Engineering, 2022, 2, 032004.	2.8	14
1083	Superconducting quantum interference effect in NbSe ₂ /NbSe ₂ van der Waals junctions. Journal of Physics Condensed Matter, 2022, 34, 405702.	0.7	0
1084	Layer-Thickness-Dependent Work Function of MoS ₂ on Metal and Metal Oxide Substrates. Journal of Physical Chemistry C, 2022, 126, 13929-13935.	1.5	11
1085	An Automated System for Strain Engineering and Straintronics of 2D Materials. Advanced Materials Technologies, 2023, 8, .	3.0	9
1086	Photothermal Responsivity of van der Waals Material-Based Nanomechanical Resonators. Nanomaterials, 2022, 12, 2675.	1.9	0
1087	Magnetic Skyrmions with Unconventional Helicity Polarization in a Van Der Waals Ferromagnet. Advanced Materials, 2022, 34, .	11.1	19
1088	Upconversion photoluminescence excitation reveals exciton-trion and exciton-biexciton coupling in hBN/WSe ₂ /hBN van der Waals heterostructures. Scientific Reports, 2022, 12, .	1.6	3

#	ARTICLE	IF	CITATIONS
1089	Direct growth of hBN/Graphene heterostructure via surface deposition and segregation for independent thickness regulation. <i>Nanotechnology</i> , 0, , .	1.3	1
1090	Ultrafast pseudospin quantum beats in multilayer WSe ₂ and MoSe ₂ . <i>Nature Communications</i> , 2022, 13, .	5.8	7
1091	Tunable Emission from Localized Excitons Deterministically Positioned in Monolayer WSe_2 Junctions. <i>ACS Photonics</i> , 2022, 9, 3067-3074.	3.2	5
1092	Room-temperature electrical control of polarization and emission angle in a cavity-integrated 2D pulsed LED. <i>Nature Communications</i> , 2022, 13, .	5.8	8
1093	Spectroscopic imaging ellipsometry of two-dimensional TMDC heterostructures. <i>Applied Physics Letters</i> , 2022, 121, .	1.5	3
1094	Electroluminescence of monolayer WSe_2 in a scanning tunneling microscope: Effect of bias polarity on spectral and angular distribution of emitted light. <i>Physical Review B</i> , 2022, 106, .	1.1	3
1095	Straining of atomically thin WSe ₂ crystals: Suppressing slippage by thermal annealing. <i>Journal of Applied Physics</i> , 2022, 132, .	1.1	3
1096	Coherent Phononics of van der Waals Layers on Nanogratings. <i>Nano Letters</i> , 2022, 22, 6509-6515.	4.5	6
1097	Electrically Self-Aligned, Reconfigurable Test Structure Using WSe ₂ /SnSe ₂ Heterojunction for TFET and MOSFET. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 5377-5381.	1.6	2
1098	Recent progress in 2D van der Waals heterostructures: fabrication, properties, and applications. <i>Science China Information Sciences</i> , 2022, 65, .	2.7	16
1099	Oxidation and phase transition in covalently functionalized MoS_2 . <i>Physical Review B</i> , 2022, 106, .	1.1	1
1100	Thickness-dependent spin bistable transitions in single-crystalline molecular 2D material. <i>Npj 2D Materials and Applications</i> , 2022, 6, .	3.9	3
1101	Strong coupling of excitons in patterned few-layer WSe ₂ with guided mode and bound state in the continuum. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 23382-23390.	1.3	5
1102	Three-dimensional racetrack memory devices designed from freestanding magnetic heterostructures. <i>Nature Nanotechnology</i> , 2022, 17, 1065-1071.	15.6	20
1103	Exciton resonances for atomically-thin optics. <i>Journal of Applied Physics</i> , 2022, 132, .	1.1	6
1104	Emerging low-dimensional materials for nanoelectromechanical systems resonators. <i>Materials Research Letters</i> , 2023, 11, 21-52.	4.1	6
1106	Combining Freestanding Ferroelectric Perovskite Oxides with Two-Dimensional Semiconductors for High Performance Transistors. <i>Nano Letters</i> , 2022, 22, 7457-7466.	4.5	21
1107	Molecular Reaction Imaging of a Surface Recombination Process Explains Performance Variation Among Smooth MoS ₂ Photoelectrodes. <i>Journal of the Electrochemical Society</i> , 2022, 169, 096519.	1.3	0

#	ARTICLE	IF	CITATIONS
1108	Designed growth of large bilayer graphene with arbitrary twist angles. Nature Materials, 2022, 21, 1263-1268.	13.3	45
1109	Towards Improved Detectivity and Responsivity Using Graphene Nanoribbons with Width of 10–15 nm for Photodetection Applications. Journal of Electronic Materials, 2022, 51, 6815-6826.	1.0	1
1110	Ultrathin Piezoelectric Resonators Based on Graphene and Free-Standing Single-Crystal BaTiO ₃ . Advanced Materials, 2022, 34, .	11.1	15
1111	Hybrid Integration of Nanophotonic Elements on Silicon with Transfer Printing. The Review of Laser Engineering, 2020, 48, 545.	0.0	0
1112	The zoology of two-dimensional van der waals materials. , 2023, , 449-498.		1
1113	Exciton tuning in monolayer WSe ₂ via substrate induced electron doping. Nanoscale Advances, 2022, 4, 5102-5108.	2.2	7
1114	Two-dimensional van der Waals heterostructures (vdWHs) with band alignment transformation in multi-functional devices. RSC Advances, 2022, 12, 31456-31465.	1.7	2
1115	Evolution of Reverse-Biased Current of a Barristor Junction by Varying Temperature and Barrier Height of the Junction. Advanced Electronic Materials, 0, , 2200761.	2.6	0
1116	Gas permeation rates of ultrathin graphite sealed SiO ₂ cavities. Journal of Chemical Physics, 2022, 157, .	1.2	1
1117	Study on the mechanically exfoliated graphene saturable absorption dependence on the number of layers and its influence on passive mode-locking erbium-doped fiber laser dynamics. Optical Materials Express, 2022, 12, 4506.	1.6	3
1118	Sliding nanomechanical resonators. Nature Communications, 2022, 13, .	5.8	9
1119	Single-dopant band bending fluctuations in MoSe_2 measured with electrostatic force microscopy. Physical Review Materials, 2022, 6, .		
1120	The Structural, Electronic and Optical Properties of the AlAs/InP/CdS Heterotrilinear: A First-Principles Study. Journal of Electronic Materials, 2022, 51, 7297-7303.	1.0	1
1121	Saturable absorption performance of large area monolayer MoS ₂ coated planarized optical waveguide. Laser Physics Letters, 2022, 19, 116205.	0.6	0
1122	Graphene delamination from chemical vapor deposited turbostratic multilayer graphene for TEM analysis. Nanotechnology, 2023, 34, 055701.	1.3	1
1123	Robust Anti-Ambipolar Behavior and Gate-Tunable Rectifying Effect in van der Waals p^n Junctions. ACS Applied Electronic Materials, 2022, 4, 5487-5497.	2.0	3
1124	Excitonic resonances control the temporal dynamics of nonlinear optical wave mixing in monolayer semiconductors. Nature Photonics, 2022, 16, 777-783.	15.6	5
1125	Ultrasonic photoacoustic emitter of graphene-nanocomposites film on a flexible substrate. Photoacoustics, 2022, 28, 100413.	4.4	5

#	ARTICLE	IF	CITATIONS
1126	Switching of K-Q intervalley trions fine structure and their dynamics in n-doped monolayer WS ₂ . Opto-Electronic Advances, 2023, 6, 220034-220034.	6.4	2
1127	MOCVD of WSe ₂ crystals on highly crystalline single- and multi-layer CVD graphene. Carbon, 2023, 202, 150-160.	5.4	4
1128	Progress in the preparation, application, and recycling of black phosphorus. Chemosphere, 2023, 311, 137161.	4.2	3
1129	Selective Excitation of Higher Harmonic Coherent Acoustic Phonons in a Graphite Nanofilm. Journal of Physical Chemistry C, 2022, 126, 19822-19833.	1.5	3
1130	Exciton-polarons in the presence of strongly correlated electronic states in a MoSe ₂ /WSe ₂ moiré superlattice. Npj 2D Materials and Applications, 2022, 6, .	3.9	12
1131	2D InSe Self-Powered Schottky Photodetector with the Same Metal in Asymmetric Contacts. Advanced Materials Interfaces, 2022, 9, .	1.9	13
1132	Conversion of Classical Light Emission from a Nanoparticle-Strained WSe ₂ Monolayer into Quantum Light Emission via Electron Beam Irradiation. Advanced Materials, 2023, 35, .	11.1	6
1133	Remote near-field spectroscopy of vibrational strong coupling between organic molecules and phononic nanoresonators. Nature Communications, 2022, 13, .	5.8	10
1134	Quantum Photon Sources in WSe ₂ Monolayers Induced by Weakly Localized Strain Fields. Journal of Physical Chemistry C, 2022, 126, 20057-20064.	1.5	4
1135	Raman Fingerprint of Interlayer Coupling in 2D TMDCs. Nanomaterials, 2022, 12, 3949.	1.9	6
1136	High-lying valley-polarized trions in 2D semiconductors. Nature Communications, 2022, 13, .	5.8	7
1137	Black-phosphorus-based junctions and their optoelectronic device applications. Nano Research, 2023, 16, 1651-1669.	5.8	6
1138	Atomistic measurement and modeling of intrinsic fracture toughness of two-dimensional materials. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	8
1139	Van der Waals-Interface-Dominated All-2D Electronics. Advanced Materials, 2023, 35, .	11.1	13
1140	Recent progress in mid-infrared photodetection devices using 2D/nD (n=0, 1, 2, 3) heterostructures. Materials and Design, 2023, 225, 111446.	3.3	4
1141	Formation of a vertical SnSe/SnSe ₂ p-n heterojunction by NH ₃ plasma-induced phase transformation. Nanoscale Advances, 2023, 5, 443-449.	2.2	2
1142	Graphene transfer implementations to micro and nano electronic. Microelectronic Engineering, 2023, 269, 111915.	1.1	0
1143	Two-dimensional multiband superconductivity of the optimally and uniformly Li-intercalated FeSe nanoflakes. Current Applied Physics, 2023, 46, 27-33.	1.1	1

#	ARTICLE	IF	CITATIONS
1144	Twistronics: Investigating Twist Angles in 2D Materials. , 2022, , 1-12.		0
1145	Nano Flex Screen Protectors for 2D Material Piezotronics. IEEE Nanotechnology Magazine, 2023, 22, 1-7.	1.1	0
1146	Interaction Length-Dependent Saturable Absorption of MoS ₂ -Coated Planarized Waveguide and its Effect on the Performance of Q-Switched Pulse Laser Generation. Journal of Lightwave Technology, 2023, 41, 2458-2464.	2.7	0
1147	Waveguide-Integrated MoTe ₂ p-i-n Homojunction Photodetector. ACS Nano, 2022, 16, 20946-20955.	7.3	17
1148	Mechanical Detection of Magnetic Phase Transition in Suspended CrOCl Heterostructures. Magnetochemistry, 2022, 8, 170.	1.0	1
1149	Giant bulk piezophotovoltaic effect in 3R-MoS ₂ . Nature Nanotechnology, 2023, 18, 36-41.	15.6	24
1150	Nanostructured Transition Metal Dichalcogenide Multilayers for Advanced Nanophotonics. Laser and Photonics Reviews, 2023, 17, .	4.4	21
1151	Interfacial stress transfer in monolayer and few-layer MoS ₂ nanosheets in model nanocomposites. Composites Science and Technology, 2023, 233, 109892.	3.8	4
1152	Epitaxial Atomic Substitution for MoS ₂ MoN Heterostructure Synthesis. ACS Applied Materials & Interfaces, 2022, 14, 57144-57152.	4.0	4
1153	Disentangling Light-Induced Charge Transfer, Heating, and Strain Effects in WS ₂ /Graphene Heterostructures. Advanced Materials Interfaces, 2023, 10, .	1.9	0
1154	Probing the interfacial coupling in ternary van der Waals heterostructures. Npj 2D Materials and Applications, 2022, 6, .	3.9	5
1155	Laser trimming for lithography-free fabrications of MoS ₂ devices. Nano Research, 0, , .	5.8	2
1156	Enhanced Field-Effect Control of Single-Layer WS ₂ Optical Features by hBN Full Encapsulation. Nanomaterials, 2022, 12, 4425.	1.9	1
1157	Tip-Induced and Electrical Control of the Photoluminescence Yield of Monolayer WS ₂ . Nano Letters, 2022, 22, 9244-9251.	4.5	3
1158	Large Exchange Bias Effect and Coverage-Dependent Interfacial Coupling in CrI ₃ /MnBi ₂ Te ₄ van der Waals Heterostructures. Nano Letters, 2023, 23, 765-771.	4.5	6
1159	Utilizing Ultraviolet Photons to Generate Single-Photon Emitters in Semiconductor Monolayers. ACS Nano, 2022, 16, 21240-21247.	7.3	4
1160	Strain control of hybridization between dark and localized excitons in a 2D semiconductor. Nature Communications, 2022, 13, .	5.8	16
1161	Electronic and optical properties of the buckled and puckered phases of phosphorene and arsenene. Scientific Reports, 2022, 12, .	1.6	4

#	ARTICLE	IF	CITATIONS
1162	All-dry flip-over stacking of van der Waals junctions of 2D materials using polyvinyl chloride. <i>Scientific Reports</i> , 2022, 12, .	1.6	4
1163	Two/Quasi-two-dimensional perovskite-based heterostructures: construction, properties and applications. <i>International Journal of Extreme Manufacturing</i> , 2023, 5, 012004.	6.3	8
1164	Comprehensive Polarity Regulation of WSe_2 Field-Effect Transistors Enabled by Combining Contact Engineering and Plasma Doping. <i>Physica Status Solidi - Rapid Research Letters</i> , 2023, 17, .	1.2	2
1165	Deterministic and replaceable transfer of silver flakes for microcavities. <i>Frontiers of Physics</i> , 2023, 18, .	2.4	1
1166	Purcell enhancement and polarization control of single-photon emitters in monolayer WSe_2 using dielectric nanoantennas. <i>Nanophotonics</i> , 2023, 12, 477-484.	2.9	5
1167	Trends in energy and charge transfer in 2D and integrated perovskite heterostructures. <i>Nanoscale</i> , 2023, 15, 3610-3629.	2.8	5
1169	Spin Polarization in Ferromagnetic Barrier Phosphorene Superlattice Under an Exterior Magnetic Field. <i>Journal of Superconductivity and Novel Magnetism</i> , 2023, 36, 529-536.	0.8	1
1170	Planar tunneling spectroscopy on van der Waals superconductors with AlO_x junction grown by atomic layer deposition. <i>Journal of Applied Physics</i> , 2023, 133, .	1.1	1
1171	Flexible temperature sensors based on two-dimensional materials for wearable devices. <i>Journal Physics D: Applied Physics</i> , 2023, 56, 063001.	1.3	6
1172	Ion-gel-based light-emitting devices using transition metal dichalcogenides and hexagonal boron nitride heterostructures. <i>Japanese Journal of Applied Physics</i> , 0, , .	0.8	0
1174	High-performance self-powered ultraviolet to near-infrared photodetector based on $WS_2/InSe$ van der Waals heterostructure. <i>Nano Research</i> , 2023, 16, 7851-7857.	5.8	12
1175	OPTICAL PROPERTIES OF LOW-DIMENSIONAL SYSTEMS: METHODS OF THEORETICAL STUDY OF 2D MATERIALS. <i>Vestnik NĀ,C RK</i> , 2022, , 35-40.	0.1	0
1176	Scalable synthesis of 2D materials. , 2023, , 1-54.		0
1177	Unconventional Charge-to-Spin Conversion in Graphene/ $MoTe_2$ van der Waals Heterostructures. <i>Physical Review Applied</i> , 2023, 19, .	1.5	10
1178	Subgigahertz Multilayer-Graphene Nanoelectromechanical System Integrated with a Nanometer-Scale Silicon Transistor Driven by Reflectometry. <i>Physical Review Applied</i> , 2023, 19, .	1.5	3
1179	1D and 2D Field Effect Transistors in Gas Sensing: A Comprehensive Review. <i>Small</i> , 2023, 19, .	5.2	21
1180	Resonant frequency decay in graphene nanomechanical resonators fabricated by focused ion beam lithography. , 2023, , .		0
1181	Pressure driven rotational isomerism in 2D hybrid perovskites. <i>Nature Communications</i> , 2023, 14, .	5.8	14

#	ARTICLE	IF	CITATIONS
1182	2D materials for flexible electronics. , 2023, , 169-206.		1
1183	Exact Relationship between Black Phosphorus Thickness and Behaviors of Field-Effect Transistors. Applied Sciences (Switzerland), 2023, 13, 1736.	1.3	4
1184	Platform-agnostic waveguide integration of high-speed photodetectors with evaporated tellurium thin films. Optica, 0, , .	4.8	1
1185	Fabrication of graphene nanomechanical resonators using focused ions beam lithography. , 2023, , .		0
1186	Electrostatic restacking of two-dimensional materials to generate novel hetero-superlattices and their energy applications. APL Materials, 2023, 11, .	2.2	2
1187	Perfect Absorption and Strong Coupling in Supported MoS ₂ Multilayers. ACS Nano, 2023, 17, 3401-3411.	7.3	6
1188	Tip-induced excitonic luminescence nanoscopy of an atomically resolved van der Waals heterostructure. Nature Materials, 2023, 22, 482-488.	13.3	8
1189	Straining techniques for strain engineering of 2D materials towards flexible straintronic applications. Nano Energy, 2023, 109, 108278.	8.2	12
1190	Gate-tunable self-driven photodetector based on asymmetric monolayer WSe ₂ channel. Applied Surface Science, 2023, 616, 156444.	3.1	4
1191	Low-Thermal-Budget BEOL-Compatible Beyond-Silicon Transistor Technologies for Future Monolithic-3D Compute and Memory Applications. , 2022, , .		1
1192	Reconfigurable transistors based on van der Waals heterostructures. MRS Advances, 2023, 8, 773-779.	0.5	1
1193	Atomically Unveiling an Atlas of Polytypes in Transition-Metal Trihalides. Journal of the American Chemical Society, 2023, 145, 3624-3635.	6.6	6
1194	Nonlocal Spin Valves Based on Graphene/Fe ₃ GeTe ₂ van der Waals Heterostructures. ACS Applied Materials & Interfaces, 2023, 15, 9649-9655.	4.0	4
1195	Fast Fabrication of WS ₂ /Bi ₂ Se ₃ Heterostructures for High-Performance Photodetection. ACS Applied Materials & Interfaces, 2023, 15, 10098-10108.	4.0	2
1196	Layer-engineered interlayer charge transfer in WSe ₂ /WS ₂ heterostructures. Journal Physics D: Applied Physics, 2023, 56, 135102.	1.3	2
1197	Anisotropic Optical and Mechanical Properties in Few-layer GaPS ₄ . Advanced Optical Materials, 2023, 11, .	3.6	5
1198	Electron transmission and mean free path in molybdenum disulfide at electron-volt energies. Physical Review B, 2023, 107, .	1.1	0
1199	Mobile Trions in Electrically Tunable 2D Hybrid Perovskites. Advanced Materials, 2023, 35, .	11.1	1

#	ARTICLE	IF	CITATIONS
1200	Controlling quantum phases of electrons and excitons in moiré superlattices. Journal of Applied Physics, 2023, 133, 080901.	1.1	1
1201	Mechanical Mode Imaging of a High-Q Hybrid hBN/Si ₃ N ₄ Resonator. Nano Letters, 2023, 23, 2016-2022.	4.5	2
1202	Low resistance electrical contacts to few-layered MoS ₂ by local pressurization. 2D Materials, 2023, 10, 021003.	2.0	0
1203	Robustness of Momentum-Indirect Interlayer Excitons in MoS ₂ /WSe ₂ Heterostructure against Charge Carrier Doping. ACS Photonics, 0, , .	3.2	1
1204	Persistent room-temperature valley polarization in graphite-filtered WS ₂ monolayer. 2D Materials, 2023, 10, 025023.	2.0	2
1205	Ultrafast hot electron-hole plasma photoluminescence in two-dimensional semiconductors. Nanoscale, 2023, 15, 7154-7163.	2.8	0
1206	Emergent second-harmonic generation in van der Waals heterostructure of bilayer MoS ₂ and monolayer graphene. Science Advances, 2023, 9, .	4.7	6
1207	Progress and Insight of Van der Waals Heterostructures Containing Interlayer Transition for Near Infrared Photodetectors. Advanced Functional Materials, 2023, 33, .	7.8	18
1208	Ultrashort pulse generation in erbium-doped fiber lasers in South America: a historical review. Journal of the Optical Society of America B: Optical Physics, 2023, 40, C148.	0.9	1
1210	Quasi-One-Dimensional ZrS ₃ Nanoflakes for Broadband and Polarized Photodetection with High Tuning Flexibility. ACS Applied Materials & Interfaces, 2023, 15, 16999-17008.	4.0	6
1211	Band-to-band tunneling switches based on two-dimensional van der Waals heterojunctions. Applied Physics Reviews, 2023, 10, .	5.5	8
1212	Highly Sensitive Phototransistors Based on Partially Suspended Monolayer WS ₂ . ACS Photonics, 0, , .	3.2	3
1213	Ultrafast Dynamics of Valley-Polarized Excitons in WSe ₂ Monolayer Studied by Few-Cycle Laser Pulses. Nanomaterials, 2023, 13, 1207.	1.9	1
1214	Improved strain engineering of 2D materials by adamantane plasma polymer encapsulation. Npj 2D Materials and Applications, 2023, 7, .	3.9	6
1215	In Situ Device-Level TEM Characterization Based on Ultra-Flexible Multilayer MoS ₂ Micro-Cantilever. Advanced Materials, 2023, 35, .	11.1	4
1216	Interface shape dependent interference patterns of NbSe_2 heterostructure Josephson junctions. Physical Review B. 2023. 107, .	1.1	0
1217	Complex Strain Scapes in Reconstructed Transition-Metal Dichalcogenide Moiré Superlattices. ACS Nano, 2023, 17, 7787-7796.	7.3	7
1218	Spatially Controlled Single Photon Emitters in hBN-Capped WS ₂ Domes. Advanced Optical Materials, 2023, 11, .	3.6	4

#	ARTICLE	IF	CITATIONS
1219	Electroluminescence from a phthalocyanine monolayer encapsulated in a van der Waals tunnel diode. Molecular Physics, 0, , .	0.8	0
1220	Photoemission study of twisted monolayers and bilayers of WSe_2 on graphite substrates. Physical Review Materials, 2023, 7, .		
1221	Chemomechanical modification of quantum emission in monolayer WSe_2 . Nature Communications, 2023, 14, .	5.8	3
1222	Two-Dimensional Materials for Terahertz Emission. , 0, , .		1
1223	Resonant Exciton Scattering Reveals Raman Forbidden Phonon Modes in Layered GeS. Journal of Physical Chemistry Letters, 2023, 14, 3986-3994.	2.1	1
1226	Gate-Tunable Spin Hall Effect in an All-Light-Element Heterostructure: Graphene with Copper Oxide. Nano Letters, 2023, 23, 4406-4414.	4.5	3
1227	Fermi Pressure and Coulomb Repulsion Driven Rapid Hot Plasma Expansion in a van der Waals Heterostructure. Nano Letters, 2023, 23, 4399-4405.	4.5	4
1257	Radiation Pressure Backaction on a Hexagonal Boron Nitride Nanomechanical Resonator. Nano Letters, 2023, 23, 6301-6307.	4.5	0
1290	Damage-Free Cleaning of 2D van der Waals Heterostructures with Nano-Spherical AFM Probes. , 2023, , .		0
1297	van der Waals 2D transition metal dichalcogenide/organic hybridized heterostructures: recent breakthroughs and emerging prospects of the device. Nanoscale Horizons, 2023, 9, 44-92.	4.1	1
1301	Vapour-phase deposition of two-dimensional layered chalcogenides. Nature Reviews Materials, 2023, 8, 799-821.	23.3	1
1332	Saturable absorption in the C-Band employing 2D ITe_2 - $MoTe_2$. , 2023, , .		0
1360	Graphene and its hybrid materials: Properties and applications. , 2023, , .		0