Brightening of dark excitons in monolayers of semicond
dichalcogenides

2D Materials

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Citation Report

#	Article	IF	Citations
1	Valley-Polarized Exciton Dynamics in Exfoliated Monolayer WSe₂. Journal of Physical Chemistry C, 2017, 121, 6409-6413.	1.5	25
2	Optical properties of atomically thin transition metal dichalcogenides: observations and puzzles. Nanophotonics, 2017, 6, 1289-1308.	2.9	165
3	Dark trions and biexcitons in WS2 and WSe2 made bright by e-e scattering. Scientific Reports, 2017, 7, 45998.	1.6	48
4	Exciton center-of-mass localization and dielectric environment effect in monolayer WS2. Journal of Applied Physics, 2017, 121, 235702.	1.1	20
5	Exciton valley dynamics in monolayer Mo1-xWxSe2 (xâ€‰=â€‰0, 0.5, 1). Applied Physics Letters, 2017, 111, .	1.5	19
6	Fine structure and lifetime of dark excitons in transition metal dichalcogenide monolayers. Physical Review B, 2017, 96, .	1.1	141
7	Excitonic Linewidth Approaching the Homogeneous Limit in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></m -Based van der Waals Heterostructures. Physical Review X, 2017, 7, .	2.8	389
8	Magnetic Proximity Effects in Transition-Metal Dichalcogenides: Converting Excitons. Physical Review Letters, 2017, 119, 127403.	2.9	111
9	In-Plane Propagation of Light in Transition Metal Dichalcogenide Monolayers: Optical Selection Rules. Physical Review Letters, 2017, 119, 047401.	2.9	257
10	Raman scattering excitation spectroscopy of monolayer WS2. Scientific Reports, 2017, 7, 5036.	1.6	63
11	The optical response of monolayer, few-layer and bulk tungsten disulfide. Nanoscale, 2017, 9, 13128-13141.	2.8	97
12	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. Nature Nanotechnology, 2017, 12, 856-860.	15.6	270
13	Brightening the dark excitons. Nature Nanotechnology, 2017, 12, 837-838.	15.6	10
14	Observation of forbidden phonons, Fano resonance and dark excitons by resonance Raman scattering in few-layer WS ₂. 2D Materials, 2017, 4, 031007.	2.0	41
15	Exciton Dynamics, Transport, and Annihilation in Atomically Thin Two-Dimensional Semiconductors. Journal of Physical Chemistry Letters, 2017, 8, 3371-3379.	2.1	169
16	Microsecond dark-exciton valley polarization memory in two-dimensional heterostructures. Nature Communications, 2018, 9, 753.	5.8	96
17	Strong valley Zeeman effect of dark excitons in monolayer transition metal dichalcogenides in a tilted magnetic field. Physical Review B, 2018, 97, .	1.1	22
18	Impact of environment on dynamics of exciton complexes in a WS ₂ monolayer. 2D Materials, 2018, 5, 031007.	2.0	39

#	Article	IF	Citations
19	<i>Colloquium</i> : Excitons in atomically thin transition metal dichalcogenides. Reviews of Modern Physics, 2018, 90, .	16.4	1,292
20	Strain Control of Excitonâ€"Phonon Coupling in Atomically Thin Semiconductors. Nano Letters, 2018, 18, 1751-1757.	4.5	177
21	Imaging spin dynamics in monolayer WS ₂ by time-resolved Kerr rotation microscopy. 2D Materials, 2018, 5, 011010.	2.0	47
22	Probing Excitons, Trions, and Dark Excitons in Monolayer WS₂ Using Resonance Raman Spectroscopy. Nano Letters, 2018, 18, 1428-1434.	4.5	25
23	Dark and bright exciton formation, thermalization, and photoluminescence in monolayer transition metal dichalcogenides. 2D Materials, 2018, 5, 035017.	2.0	129
24	Valley dynamics of intravalley and intervalley multiexcitonic states in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2018, 97, .	1.1	16
25	Magnetic field induced polarization enhancement in monolayers of tungsten dichalcogenides: effects of temperature. 2D Materials, 2018, 5, 015023.	2.0	8
26	Optical Properties of 2D Semiconductor WS₂. Advanced Optical Materials, 2018, 6, 1700767.	3.6	265
27	Radiative control of dark excitons at room temperature by nano-optical antenna-tip Purcell effect. Nature Nanotechnology, 2018, 13, 59-64.	15.6	186
28	Multifunctional BBF monolayer with high mechanical flexibility and strong SHG response. New Journal of Chemistry, 2018, 42, 17291-17295.	1.4	2
29	Dark exciton brightening and its engaged valley dynamics in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WSe</mml:mi><mml:mn>2</mml:mn></mml:msub></mr Physical Review B, 2018, 98, .	1.1	20
30	Introduction: 2d-Based Quantum Technologies. Springer Theses, 2018, , 1-30.	0.0	0
31	Deterministic Arrays of Single-Photon Sources. Springer Theses, 2018, , 47-70.	0.0	0
32	Spin-orbit-stable type-II nodal line band crossing in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -doped monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Mo</mml:mi><mml:msub><mml:mi>X</mml:mi><mml:mn>2</mml:m		

#	Article	IF	Citations
37	Exciton physics and device application of two-dimensional transition metal dichalcogenide semiconductors. Npj 2D Materials and Applications, 2018, 2, .	3.9	526
38	Brightening and controlling dark excitons in monolayer TMDCs. Science China Materials, 2018, 61, 1245-1247.	3.5	1
39	Optically dark excitonic states mediated exciton and biexciton valley dynamics in monolayer WSe₂. Journal of Physics Condensed Matter, 2018, 30, 265502.	0.7	9
40	Singlet and triplet trions in WS₂ monolayer encapsulated in hexagonal boron nitride. Nanotechnology, 2018, 29, 325705.	1.3	63
41	Two-dimensional PdSe ₂ -Pd ₂ Se ₃ junctions can serve as nanowires. 2D Materials, 2018, 5, 035025.	2.0	18
42	Valley-contrasting optics of interlayer excitons in Mo- and W-based bulk transition metal dichalcogenides. Nanoscale, 2018, 10, 15571-15577.	2.8	31
43	Large second harmonic generation in alloyed TMDs and boron nitride nanostructures. Scientific Reports, 2018, 8, 10118.	1.6	45
44	Mapping of the dark exciton landscape in transition metal dichalcogenides. Physical Review B, 2018, 98, .	1.1	53
45	Tunability in the optical response of defective monolayer WSe₂ by computational analysis. Nanoscale, 2018, 10, 13751-13760.	2.8	16
46	The role of momentum-dark excitons in the elementary optical response of bilayer WSe2. Nature Communications, 2018, 9, 2586.	5.8	70
47	Two-dimensional semiconductors in the regime of strong light-matter coupling. Nature Communications, 2018, 9, 2695.	5.8	256
48	Excitonic structure of the optical conductivity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></m monolayers. Physical Review B, 2018, 97, .	1.1	43
49	Environmental engineering of transition metal dichalcogenide optoelectronics. Frontiers of Physics, 2018, 13, 1.	2.4	13
50	Proximitized materials. Materials Today, 2019, 22, 85-107.	8.3	206
51	Valley dynamics of different trion species in monolayer WSe2. Applied Physics Letters, 2019, 115, .	1.5	12
52	Physics of excitons and their transport in two dimensional transition metal dichalcogenide semiconductors. RSC Advances, 2019, 9, 25439-25461.	1.7	24
53	Simulation of Transition Metal Dichalcogenides. , 2019, , 135-172.		3
54	Gate Tunable Dark Trions in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub></ Physical Review Letters, 2019, 123, 027401.	2.9	95

#	Article	IF	Citations
55	Experimental observation of a negative grey trion in an electron-rich WSe₂ monolayer. Journal of Physics Condensed Matter, 2019, 31, 415701.	0.7	12
56	Probing and Manipulating Valley Coherence of Dark Excitons in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review Letters, 2019, 123, 096803.	2.9	49
57	Long valley lifetime of dark excitons in single-layer WSe2. Nature Communications, 2019, 10, 4047.	5.8	53
58	Magnetic brightening, large valley Zeeman splitting, and dynamics of long-lived A and B dark excitonic states in monolayer WS2. Physical Review B, 2019, 100, .	1.1	2
59	Revealing exciton masses and dielectric properties of monolayer semiconductors with high magnetic fields. Nature Communications, 2019, 10, 4172.	5.8	179
60	Exploration of the bright and dark exciton landscape and fine structure of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub> using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">G</mml:mi><mml:mn>0</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">W</mml:mi><mml:mn>0</mml:mn></mml:msub></mml:mrow></mml:math> -BSE.	1.1	15
61	Polariton hyperspectral imaging of two-dimensional semiconductor crystals. Scientific Reports, 2019, 9, 13756.	1.6	7
62	Charged excitons in two-dimensional transition metal dichalcogenides: Semiclassical calculation of Berry curvature effects. Physical Review B, 2019, 100, .	1.1	14
63	Interlayer excitons in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn with strong oscillator strength up to room temperature. Physical Review B, 2019, 99, .	1.1	88
64	Darkâ€Excitonâ€Mediated Fano Resonance from a Single Gold Nanostructure on Monolayer WS₂ at Room Temperature. Small, 2019, 15, e1900982.	5.2	25
65	Trion-Induced Distinct Transient Behavior and Stokes Shift in WS₂ Monolayers. Journal of Physical Chemistry Letters, 2019, 10, 3763-3772.	2.1	13
66	Ultrafast dynamics of bright and dark positive trions for valley polarization in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>WS</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2019, 99, .	1.1	8
67	Dark exciton based strain sensing in tungsten-based transition metal dichalcogenides. Physical Review B, 2019, 99, .	1.1	23
68	The lifetime of interlayer breathing modes of few-layer 2H-MoSe₂ membranes. Nanoscale, 2019, 11, 10446-10453.	2.8	34
69	Strong and tunable interlayer coupling of infrared-active phonons to excitons in van der Waals heterostructures. Physical Review B, 2019, 99, .	1.1	17
70	Valley polarization of excitonâ€"polaritons in monolayer WSe₂ in a tunable microcavity. Nanoscale, 2019, 11, 9574-9579.	2.8	17
71	Continuous Control and Enhancement of Excitonic Valley Polarization in Monolayer WSe₂ by Electrostatic Doping. Advanced Functional Materials, 2019, 29, 1900260.	7.8	42
72	Dark-exciton valley dynamics in transition metal dichalcogenide alloy monolayers. Scientific Reports, 2019, 9, 4575.	1.6	20

#	Article	IF	Citations
73	Detection of thermodynamic â€œvalley noiseâ€•in monolayer semiconductors: Access to intrinsic valley relaxation time scales. Science Advances, 2019, 5, eaau4899.	4.7	17
74	Interlayer exciton dynamics in van der Waals heterostructures. Communications Physics, 2019, 2, .	2.0	103
75	Distinctive Signatures of the Spin- and Momentum-Forbidden Dark Exciton States in the Photoluminescence of Strained WSe₂ Monolayers under Thermalization. Nano Letters, 2019, 19, 2299-2312.	4.5	34
76	Electroluminescence from multi-particle exciton complexes in transition metal dichalcogenide semiconductors. Nature Communications, 2019, 10, 1709.	5.8	100
77	Tuning carrier concentration in a superacid treated MoS2 monolayer. Scientific Reports, 2019, 9, 1989.	1.6	18
78	First-principles many-body theory for charged and neutral excitations: Trion fine structure splitting in transition metal dichalcogenides. Physical Review B, 2019, 100, .	1.1	21
79	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS2. , 2019, , .		3
80	Reduced Binding Energy and Layer-Dependent Exciton Dynamics in Monolayer and Multilayer WS₂. ACS Nano, 2019, 13, 14416-14425.	7.3	17
81	Optical fingerprint of bright and dark localized excitonic states in atomically thin 2D materials. Physical Chemistry Chemical Physics, 2019, 21, 26077-26083.	1.3	7
82	Probing exciton species in atomically thin WS₂â€“graphene heterostructures. JPhys Materials, 2019, 2, 025001.	1.8	5
83	Orbital, spin and valley contributions to Zeeman splitting of excitonic resonances in MoSe ₂ , WSe ₂ and WS ₂ Monolayers. 2D Materials, 2019, 6, 015001.	2.0	85
84	Inorganic 2D Luminescent Materials: Structure, Luminescence Modulation, and Applications. Advanced Optical Materials, 2020, 8, 1900978.	3.6	37
85	Negative effective excitonic diffusion in monolayer transition metal dichalcogenides. Nanoscale, 2020, 12, 356-363.	2.8	37
86	Magnetic field mixing and splitting of bright and dark excitons in monolayer MoSe ₂. 2D Materials, 2020, 7, 015017.	2.0	45
87	Optical characterization of two-dimensional semiconductors. , 2020, , 135-166.		1
88	Additional excitonic features and momentum-dark states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>ReS</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2020, 102, .	1.1	20
89	Up- and Down-Conversion between Intra- and Intervalley Excitons in Waveguide Coupled Monolayer WSe₂. ACS Nano, 2020, 14, 10503-10509.	7.3	14
90	Trion fine structure and anomalous Hall effect in monolayer transition metal dichalcogenides. Physical Review B, 2020, 102, .	1.1	6

#	Article	IF	Citations
91	Valley polarization of singlet and triplet trions in a WS₂ monolayer in magnetic fields. Physical Chemistry Chemical Physics, 2020, 22, 19155-19161.	1.3	16
92	Measurement of the spin-forbidden dark excitons in MoS2 and MoSe2 monolayers. Nature Communications, 2020, 11, 4037.	5.8	86
93	Theory of the Coherent Response of Magneto-Excitons and Magneto-Biexcitons in Monolayer Transition Metal Dichalcogenides. Physical Review B, 2020, 102, .	1.1	8
94	Exciton g-factors in monolayer and bilayer WSe2 from experiment and theory. Nature Communications, 2020, 11, 4539.	5.8	52
95	Large Photoluminescence Enhancement by an Out-of-Plane Magnetic Field in Exfoliated WS₂ Flakes. Chinese Physics Letters, 2020, 37, 087801.	1.3	7
96	Neutral and charged dark excitons in monolayer WS₂. Nanoscale, 2020, 12, 18153-18159.	2.8	22
97	A colloquium on the variational method applied to excitons in 2D materials. European Physical Journal B, 2020, 93, 1.	0.6	10
98	Excitons, trions and Rydberg states in monolayer MoS2 revealed by low-temperature photocurrent spectroscopy. Communications Physics, 2020, 3, .	2.0	19
99	Dark-state impact on the exciton recombination of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow><mml:mi>WS</mml:mi></mml:mrow><mml:mn>2</m monolayers as revealed by multi-timescale pump-probe spectroscopy. Physical Review B, 2020, 102, .	1.1	7
100	Mechanisms and Applications of Steady-State Photoluminescence Spectroscopy in Two-Dimensional Transition-Metal Dichalcogenides. ACS Nano, 2020, 14, 14579-14604.	7.3	56
101	Robust room temperature emissions of trion in darkish WSe2 monolayers: effects of dark neutral and charged excitonic states. Journal of Physics Condensed Matter, 2020, 32, 365702.	0.7	7
102	Multipath Optical Recombination of Intervalley Dark Excitons and Trions in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review Letters, 2020, 124, 196802.	2.9	57
103	Valley Polarization in Superacid-Treated Monolayer MoS₂. ACS Applied Electronic Materials, 2020, 2, 1981-1988.	2.0	4
104	Evidence for the Dominance of Carrier-Induced Band Gap Renormalization over Biexciton Formation in Cryogenic Ultrafast Experiments on MoS₂ Monolayers. Journal of Physical Chemistry Letters, 2020, 11, 2658-2666.	2.1	17
105	The effect of metallic substrates on the optical properties of monolayer MoSe2. Scientific Reports, 2020, 10, 4981.	1.6	10
106	Probing momentum-indirect excitons by near-resonance photoluminescence excitation spectroscopy in WS2 monolayer. 2D Materials, 2020, 7, 031002.	2.0	17
107	Band nesting and exciton spectrum in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review B, 2020, 101, .	1.1	14
108	Magnetic-gateable valley exciton emission. Npj Computational Materials, 2020, 6, .	3.5	7

#	Article	IF	Citations
109	Dark trions govern the temperature-dependent optical absorption and emission of doped atomically thin semiconductors. Physical Review B, 2020, 101, .	1.1	39
110	Optical properties of semiconducting transition metal dichalcogenide materials. , 2020, , 57-75.		2
111	Brightening odd-parity excitons in transition-metal dichalcogenides: Rashba spin-orbit interaction, skyrmions, and cavity polaritons. Physical Review B, 2020, 101, .	1.1	4
112	Temperature dependence of optical properties of monolayer WS2 by spectroscopic ellipsometry. Applied Surface Science, 2020, 511, 145503.	3.1	21
113	Intrinsic edge excitons in two-dimensional <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn Physical Review B, 2020, 101, .	1.1	6
114	Strain-Correlated Localized Exciton Energy in Atomically Thin Semiconductors. ACS Photonics, 2020, 7, 1135-1140.	3.2	25
115	Interplay of excitonic complexes in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WSe</mml:mi><mml:mn>2</mml:mn></mml:msub></mn monolayers. Physical Review B, 2020, 101, .	1.1	12
116	Detection of electron-phonon coupling in two-dimensional materials by light scattering. Nano Research, 2021, 14, 1711-1733.	5.8	25
117	Breakdown of Raman selection rules by FrÃ¶hlich interaction in few-layer WS2. Nano Research, 2021, 14, 239-244.	5.8	15
118	Reversible engineering of spinâ€"orbit splitting in monolayer MoS₂<i>via</i> laser irradiation under controlled gas atmospheres. Nanoscale, 2021, 13, 8966-8975.	2.8	2
119	Anomalously polarised emission from a MoS2/WS2 heterostructure. Nanoscale Advances, 2021, 3, 5676-5682.	2.2	3
120	Intrinsic donor-bound excitons in ultraclean monolayer semiconductors. Nature Communications, 2021, 12, 871.	5.8	29
121	Magneto-optics of layered two-dimensional semiconductors and heterostructures: Progress and prospects. Journal of Applied Physics, 2021, 129, .	1.1	21
122	Exciton band structure of molybdenum disulfide: from monolayer to bulk. Electronic Structure, 2021, 3, 014005.	1.0	2
123	Excitonic Complexes in n-Doped WS₂ Monolayer. Nano Letters, 2021, 21, 2519-2525.	4.5	35
124	Spinorial formulation of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>G</mml:mi><mml:mi>W</mml:mi></mml:mrow></mm -BSE equations and spin properties of excitons in two-dimensional transition metal dichalcogenides. Physical Review B, 2021, 103, .	1.1	16
125	Luminescence Anomaly of Dipolar Valley Excitons in Homobilayer Semiconductor MoirÃ© Superlattices. Physical Review X, 2021, 11, .	2.8	10
126	Role of dark exciton states in the relaxation dynamics of bright 1s excitons in monolayer WSe2. Applied Physics Letters, 2021, 119, .	1.5	4

#	Article	IF	Citations
127	Highly Polarized Single Photons from Strain-Induced Quasi-1D Localized Excitons in WSe₂. Nano Letters, 2021, 21, 7175-7182.	4.5	33
128	Photoluminescence Kinetics of Dark and Bright Excitons in Atomically Thin MoS₂. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100263.	1.2	4
129	Rydberg series of dark excitons and the conduction band spin-orbit splitting in monolayer WSe2. Communications Physics, 2021, 4, .	2.0	18
130	Probing negatively charged and neutral excitons in MoS₂/hBN and hBN/MoS₂/hBN van der Waals heterostructures. Nanotechnology, 2021, 32, 145717.	1.3	17
131	Flipping exciton angular momentum with chiral phonons in MoSe₂/WSe₂ heterobilayers. 2D Materials, 2020, 7, 041002.	2.0	24
132	Brightening of spin- and momentum-dark excitons in transition metal dichalcogenides. 2D Materials, 2021, 8, 015013.	2.0	20
133	Dark excitations in monolayer transition metal dichalcogenides. Physical Review B, 2017, 96, .	1.1	60
134	Dark excitons in transition metal dichalcogenides. Physical Review Materials, 2018, 2, .	0.9	149
135	Many-body effect of mesoscopic localized states in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn monolayer. Physical Review Materials, 2019, 3, .	0.9	8
136	Valley-selective chiral phonon replicas of dark excitons and trions in monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>WS</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Research, 2019, 1, .	1.3	69
137	Incoherent phonon population and exciton-exciton annihilation dynamics in monolayer WS2 revealed by time-resolved Resonance Raman scattering. Optics Express, 2019, 27, 29949.	1.7	7
138	Observation of 2D semiconductor P-type dark-exciton lifetime using two-photon ultrafast spectroscopy. Optics Express, 2019, 27, 33427.	1.7	4
139	Radially polarized light beams from spin-forbidden dark excitons and trions in monolayer WSe₂. Optical Materials Express, 2020, 10, 1273.	1.6	10
140	All-optical dynamic tuning of local excitonic emission of monolayer MoS2 by integration with Ge2Sb2Te5. Nanophotonics, 2020, 9, 2351-2359.	2.9	4
141	Fine structures of valley-polarized excitonic states in monolayer transitional metal dichalcogenides. Nanophotonics, 2020, 9, 1811-1829.	2.9	27
142	On the impact of the stress situation on the optical properties of WSe_2 monolayers under high pressure. Papers in Physics, 0, 11, 110005.	0.2	5
143	Observation of Roomâ€Temperature Dark Exciton Emission in Nanopatchâ€Decorated Monolayer WSe₂ on Metal Substrate. Advanced Optical Materials, 2021, 9, 2101801.	3.6	11
144	Shear-strain-mediated photoluminescence manipulation in two-dimensional transition metal dichalcogenides. 2D Materials, 2022, 9, 015011.	2.0	5

#	Article	IF	Citations
145	First-principles study on effects of local Coulomb repulsion and Hund's coupling in ferromagnetic semiconductor CrGeTe3. Journal of Applied Physics, 2020, 128, 123901.	1.1	4
146	Engineering photonic environments for two-dimensional materials. Nanophotonics, 2021, 10, 1031-1058.	2.9	14
147	Fine structure mediated magnetic response of trion valley polarization in monolayer WSe2. Physical Review B, 2021, 104, .	1.1	1
148	Dispersive coupling between MoSe₂ and an integrated zero-dimensional nanocavity. Optical Materials Express, 2022, 12, 59.	1.6	5
149	Optical dipole orientation of interlayer excitons in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoSe</mml:mi><mml:mn>2</mml:mn></mml:msub><mm heterostacks. Physical Review B, 2022, 105, .	1.1	22
150	Bright excitonic multiplexing mediated by dark exciton transition in two-dimensional TMDCs at room temperature. Materials Horizons, 2022, 9, 1089-1098.	6.4	8
151	Trions in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mm are quantum superpositions of intra- and intervalley spin states. Physical Review B, 2022, 105, .	1.1	11
152	Site-controlled interlayer coupling in WSe2/2D perovskite heterostructure. Science China Materials, 2022, 65, 1337-1344.	3.5	8
153	Bright and Dark Exciton Coherent Coupling and Hybridization Enabled by External Magnetic Fields. Nano Letters, 2022, 22, 1680-1687.	4.5	3
154	Plasmonic Nanocavity Induced Coupling and Boost of Dark Excitons in Monolayer WSe₂ at Room Temperature. Nano Letters, 2022, 22, 1915-1921.	4.5	25
155	Enhanced lightâ€"matter interaction in two-dimensional transition metal dichalcogenides. Reports on Progress in Physics, 2022, 85, 046401.	8.1	74
156	Engineering Purcell factor anisotropy for dark and bright excitons in two dimensional semiconductors. Journal Physics D: Applied Physics, 2022, 55, 225103.	1.3	3
157	Valley degree of freedom in two-dimensional van der Waals materials. Journal Physics D: Applied Physics, 2022, 55, 303003.	1.3	10
158	Dark exciton anti-funneling in atomically thin semiconductors. Nature Communications, 2021, 12, 7221.	5.8	35
159	Spectroscopic ellipsometry for low-dimensional materials and heterostructures. Nanophotonics, 2022, 11, 2811-2825.	2.9	14
160	The effect of dielectric environment on the brightening of neutral and charged dark excitons in WSe2 monolayer. Applied Physics Letters, 2022, 120, .	1.5	5
161	Theory of Excitons in Atomically Thin Semiconductors: Tight-Binding Approach. Nanomaterials, 2022, 12, 1582.	1.9	7
162	Quantification of Exciton Fine Structure Splitting in a Two-Dimensional Perovskite Compound. Journal of Physical Chemistry Letters, 2022, 13, 4463-4469.	2.1	20

#	Article	IF	Citations
163	Brightening of a dark monolayer semiconductor via strong light-matter coupling in a cavity. Nature Communications, 2022, 13, .	5.8	8
164	Twoâ€dimensional Transition metal Dichalcogenides as an Emerging Platform for Singlet Fission Solar Cells. Chemistry - an Asian Journal, 2022, 17, .	1.7	5
165	Exchange-split multiple Rydberg series of excitons in anisotropic quasi two-dimensional ReS₂. 2D Materials, 2022, 9, 045005.	2.0	2
166	Enhanced excitonic features in an anisotropic ReS₂/WSe₂ heterostructure. Nanoscale, 2022, 14, 10851-10861.	2.8	9
167	Trapping the carrier in the spin-locked MoS₂ atomic valley by absorption of chiral L-cysteine. AIP Advances, 2022, 12, 075308.	0.6	1
168	Magneto-optical measurements of the negatively charged <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>s</mml:mi></mml:mrow></mm exciton in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>WSe</mml:mi><mml:mn>2</mml:mn><mml:n /></mml:mmultiscripts></mml:math>. Physical Review B, 2022, 106, .	1.1	1
169	Charge Separation in Monolayer WSe₂ by Strain Engineering: Implications for Strain-Induced Diode Action. ACS Applied Nano Materials, 2022, 5, 15095-15101.	2.4	3
170	Tailoring the superposition of finite-momentum valley exciton states in transition-metal dichalcogenide monolayers by using polarized twisted light. Physical Review B, 2022, 106, .	1.1	4
171	Excitons and light-emission in semiconducting MoSi2X4 two-dimensional materials. Npj 2D Materials and Applications, 2022, 6, .	3.9	37
172	Mixed dimensional Transition Metal Dichalcogenides (TMDs) vdW Heterostructure based Photodetectors: A review. Microelectronic Engineering, 2023, 269, 111926.	1.1	10
173	Excitons and trions in WSSe monolayers. 2D Materials, 2023, 10, 015018.	2.0	5
174	Negative Valley Polarization of the Intralayer Exciton via One-Step Growth of H-Type Heterobilayer WS₂/MoS₂. ACS Nano, 2023, 17, 2629-2638.	7.3	2
175	Quantum interference between dark-excitons and zone-edged acoustic phonons in few-layer WS2. Nature Communications, 2023, 14, .	5.8	9
176	Spin-defect characteristics of single sulfur vacancies in monolayer MoS2. Npj 2D Materials and Applications, 2023, 7, .	3.9	8
183	Two-dimensional hybrid plasmonic materials. , 2024, , 163-194.		1