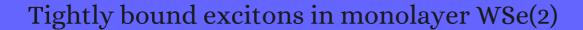
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#	Paper	IF	Citations
875	Exciton dynamics in WSe2 bilayers. 2014 , 105, 182105		40
874	Measurement of the optical dielectric function of monolayer transition-metal dichalcogenides: MoS2, MoSe2, WS2, and WSe2. <i>Physical Review B</i> , 2014 , 90,	3.3	739
873	Time-dependent density-matrix functional theory for trion excitations: Application to monolayer MoS2 and other transition-metal dichalcogenides. <i>Physical Review B</i> , 2014 , 90,	3.3	23
872	Valley splitting and polarization by the Zeeman effect in monolayer MoSe2. <i>Physical Review Letters</i> , 2014 , 113, 266804	7.4	299
871	Exciton valley dynamics probed by Kerr rotation in WSe2 monolayers. <i>Physical Review B</i> , 2014 , 90,	3.3	207
870	Trion-induced negative photoconductivity in monolayer MoS2. <i>Physical Review Letters</i> , 2014 , 113, 166	80 7 .4	180
869	Exciton binding energy and nonhydrogenic Rydberg series in monolayer WS(2). <i>Physical Review Letters</i> , 2014 , 113, 076802	7.4	1358
868	Spin and valley dynamics of excitons in transition metal dichalcogenide monolayers. 2015 , 252, 2349-2	362	85
867	Self-organized van der Waals epitaxy of layered chalcogenide structures. 2015 , 252, 2151-2158		54
866	Photocarrier dynamics in transition metal dichalcogenide alloy Mo0.5W0.5S2. 2015 , 23, 33370-7		4
865	Native defects in bulk and monolayer MoS2 from first principles. <i>Physical Review B</i> , 2015 , 91,	3.3	339
864	Tunable many-body interactions in semiconducting graphene: Giant excitonic effect and strong optical absorption. <i>Physical Review B</i> , 2015 , 92,	3.3	3
863	Bright and dark singlet excitons via linear and two-photon spectroscopy in monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2015 , 92,	3.3	54
862	Binding energies and spatial structures of small carrier complexes in monolayer transition-metal dichalcogenides via diffusion Monte Carlo. <i>Physical Review B</i> , 2015 , 92,	3.3	64
861	Binding energies of exciton complexes in transition metal dichalcogenide monolayers and effect of dielectric environment. <i>Physical Review B</i> , 2015 , 92,	3.3	163
860	Intraband effects in excitonic second-harmonic generation. <i>Physical Review B</i> , 2015 , 92,	3.3	40
859	Excitons in van der Waals heterostructures: The important role of dielectric screening. <i>Physical Review B</i> , 2015 , 92,	3.3	159

(2015-2015)

8	58	Exciton polaritons in two-dimensional dichalcogenide layers placed in a planar microcavity: Tunable interaction between two Bose-Einstein condensates. <i>Physical Review B</i> , 2015 , 92,	3.3	30
8	57	Double resonant Raman scattering and valley coherence generation in monolayer WSe_{2}. <i>Physical Review Letters</i> , 2015 , 115, 117401	7.4	52
8	56	Electrical Tuning of Exciton Binding Energies in Monolayer WS_{2}. <i>Physical Review Letters</i> , 2015 , 115, 126802	7.4	248
8	55	Signatures of Bloch-Band Geometry on Excitons: Nonhydrogenic Spectra in Transition-Metal Dichalcogenides. <i>Physical Review Letters</i> , 2015 , 115, 166802	7.4	91
8	54	Experimental Evidence for Dark Excitons in Monolayer WSe_{2}. <i>Physical Review Letters</i> , 2015 , 115, 257	4 9 3 ₄	286
8,	53	Intervalley biexcitons and many-body effects in monolayer MoS2. <i>Physical Review B</i> , 2015 , 92,	3.3	130
8	52	Theory of two-dimensional spatially indirect equilibrium exciton condensates. <i>Physical Review B</i> , 2015 , 92,	3.3	54
8	51	Excitonic effects in two-dimensional semiconductors: Path integral Monte Carlo approach. <i>Physical Review B</i> , 2015 , 92,	3.3	41
8	50	Berry Phase Modification to the Energy Spectrum of Excitons. <i>Physical Review Letters</i> , 2015 , 115, 16680)3 _{7.4}	71
82	49	Light-Induced Exciton Spin Hall Effect in van der Waals Heterostructures. <i>Physical Review Letters</i> , 2015 , 115, 166804	7.4	39
8.	48	Phase engineering of monolayer transition-metal dichalcogenide through coupled electron doping and lattice deformation. 2015 , 107, 191903		25
8,	47	Transient Absorption Measurements on Anisotropic Monolayer ReS2. 2015 , 11, 5565-71		71
8.	46	Giant two-photon absorption in monolayer MoS2. 2015 , 9, 427-434		122
82	45	High-Performance Transition Metal Dichalcogenide Photodetectors Enhanced by Self-Assembled Monolayer Doping. 2015 , 25, 4219-4227		189
82	44	Excitonic resonances in thin films of WSe2: from monolayer to bulk material. 2015 , 7, 10421-9		219
82	43	Magneto-optics in transition metal diselenide monolayers. 2015 , 2, 034002		100
82	42	Tightly Bound Trions in Transition Metal Dichalcogenide Heterostructures. 2015 , 9, 6459-64		86
8,	41	Gate-modulated conductance of few-layer WSe2 field-effect transistors in the subgap regime: Schottky barrier transistor and subgap impurity states. 2015 , 106, 152104		27

840	WSelLight-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. 2015 , 15, 8223-8		183
839	Exciton states in monolayer MoSe 2 : impact on interband transitions. 2015 , 2, 045005		55
838	Nonlinear optical selection rule based on valley-exciton locking in monolayer ws2. <i>Light: Science and Applications</i> , 2015 , 4, e366-e366	16.7	70
837	Optical Properties of Atomically Thin Layered Transition Metal Dichalchogenide. 2015 , 84, 121009		10
836	Divide and polarize. 2015 , 11, 94-95		16
835	Magnetic control of valley pseudospin in monolayer WSe2. 2015 , 11, 148-152		529
834	Valley Zeeman effect in elementary optical excitations of monolayer WSe2. 2015 , 11, 141-147		477
833	Valley excitons in two-dimensional semiconductors. 2015 , 2, 57-70		188
832	Probing excitonic states in suspended two-dimensional semiconductors by photocurrent spectroscopy. 2014 , 4, 6608		285
831	Optical generation and detection of pure valley current in monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2015 , 91,	3.3	29
8 ₃ 1		3.3	29 186
	dichalcogenides. <i>Physical Review B</i> , 2015 , 91,	3·3 7·4	
830	dichalcogenides. <i>Physical Review B</i> , 2015 , 91, Helicity-resolved Raman scattering of MoSIMoSeIWSII and WSeI atomic layers. 2015 , 15, 2526-32 Giant enhancement of the optical second-harmonic emission of WSe(2) monolayers by laser		186
830 829	dichalcogenides. <i>Physical Review B</i> , 2015 , 91, Helicity-resolved Raman scattering of MoSpMoSepWSpand WSepatomic layers. 2015 , 15, 2526-32 Giant enhancement of the optical second-harmonic emission of WSe(2) monolayers by laser excitation at exciton resonances. <i>Physical Review Letters</i> , 2015 , 114, 097403	7.4	186 365
830 829 828	dichalcogenides. <i>Physical Review B</i> , 2015 , 91, Helicity-resolved Raman scattering of MoSpMoSepWSpland WSepatomic layers. 2015 , 15, 2526-32 Giant enhancement of the optical second-harmonic emission of WSe(2) monolayers by laser excitation at exciton resonances. <i>Physical Review Letters</i> , 2015 , 114, 097403 Exciton band structure of monolayer MoS2. <i>Physical Review B</i> , 2015 , 91,	7.4	186 365 185
830 829 828	dichalcogenides. <i>Physical Review B</i> , 2015 , 91, Helicity-resolved Raman scattering of MoS[]MoSe[]WS[]and WSe[atomic layers. 2015 , 15, 2526-32 Giant enhancement of the optical second-harmonic emission of WSe(2) monolayers by laser excitation at exciton resonances. <i>Physical Review Letters</i> , 2015 , 114, 097403 Exciton band structure of monolayer MoS2. <i>Physical Review B</i> , 2015 , 91, Population inversion and giant bandgap renormalization in atomically thin WS2 layers. 2015 , 9, 466-470 Optical Investigation of Monolayer and Bulk Tungsten Diselenide (WSe]Jin High Magnetic Fields.	7.4	186 365 185 260
8 ₃ 0 8 ₂ 9 8 ₂ 8 8 ₂ 7	dichalcogenides. <i>Physical Review B</i> , 2015 , 91, Helicity-resolved Raman scattering of MoSIMoSeIWSI and WSeI atomic layers. 2015 , 15, 2526-32 Giant enhancement of the optical second-harmonic emission of WSe(2) monolayers by laser excitation at exciton resonances. <i>Physical Review Letters</i> , 2015 , 114, 097403 Exciton band structure of monolayer MoS2. <i>Physical Review B</i> , 2015 , 91, Population inversion and giant bandgap renormalization in atomically thin WS2 layers. 2015 , 9, 466-470 Optical Investigation of Monolayer and Bulk Tungsten Diselenide (WSeI in High Magnetic Fields. 2015 , 15, 4387-92 Direct Observation of Degenerate Two-Photon Absorption and Its Saturation in WS2 and MoS2	7.4	186 365 185 260 81

822	Excitons in monolayer transition metal dichalcogenides. 2015 , 27, 315301		12
821	Excitons in ultrathin organic-inorganic perovskite crystals. <i>Physical Review B</i> , 2015 , 92,	.3	206
820	Population pulsation resonances of excitons in monolayer MoSe2 with sub-1 BV linewidths. Physical Review Letters, 2015 , 114, 137402	'·4	20
819	An optical spectroscopic study on two-dimensional group-VI transition metal dichalcogenides. 2015 , 44, 2629-42		134
818	Computational 2D Materials Database: Electronic Structure of Transition-Metal Dichalcogenides and Oxides. 2015 , 119, 13169-13183		615
817	Coherent Control of Nanoscale Ballistic Currents in Transition Metal Dichalcogenide ReS2. 2015 , 9, 3935-	41	22
816	Exciton binding energy of monolayer WSII 2015 , 5, 9218		489
815	Electrical control of second-harmonic generation in a WSe2 monolayer transistor. 2015 , 10, 407-11		300
814	Voltage-controlled quantum light from an atomically thin semiconductor. 2015 , 10, 507-11		390
813	k 🛘 p theory for two-dimensional transition metal dichalcogenide semiconductors. 2015 , 2, 022001		456
812	Observation of biexcitons in monolayer WSe2. 2015 , 11, 477-481		399
811	Exciton dynamics and annihilation in WS2 2D semiconductors. 2015 , 7, 7402-8		278
810	Observation of Excitonic Rydberg States in Monolayer MoS2 and WS2 by Photoluminescence Excitation Spectroscopy. 2015 , 15, 2992-7		259
809	Excited Biexcitons in Transition Metal Dichalcogenides. 2015 , 15, 7002-5		80
808	Single-photon emission from localized excitons in an atomically thin semiconductor. 2015 , 2, 347		290
807	Optical spectroscopy of interlayer coupling in artificially stacked MoS 2 layers. 2015 , 2, 034016		13
806	Engineering excitonic dynamics and environmental stability of post-transition metal chalcogenides by pyridine functionalization technique. 2015 , 7, 17109-15		12
805	Probing Critical Point Energies of Transition Metal Dichalcogenides: Surprising Indirect Gap of Single Layer WSe2. 2015 , 15, 6494-500		137

804	Two-dimensional excitonpolaritonlght guiding by transition metal dichalcogenide monolayers. 2015 , 2, 740	25
803	Recent Advances in Two-Dimensional Materials beyond Graphene. 2015 , 9, 11509-39	1581
802	Exciton binding energies and luminescence of phosphorene under pressure. <i>Physical Review B</i> , 2015 , 91,	41
801	Polarization and time-resolved photoluminescence spectroscopy of excitons in MoSe2 monolayers. 2015 , 106, 112101	110
800	Monolayer excitonic laser. 2015, 9, 733-737	369
799	Probing charge transfer excitons in a MoSe2-WS2 van der Waals heterostructure. 2015 , 7, 17523-8	70
79 ⁸	Exciton-polaritons in van der Waals heterostructures embedded in tunable microcavities. 2015 , 6, 8579	275
797	A study of lateral Schottky contacts in WSe2 and MoS2 field effect transistors using scanning photocurrent microscopy. 2015 , 7, 15711-8	36
796	2D materials: Ultrafast exciton dynamics. 2015 , 14, 860-1	13
795	Active Light Control of the MoS2 Monolayer Exciton Binding Energy. 2015 , 9, 10158-64	153
		± <i>)</i>)
794	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. 2015 , 51, 1-6	18
794	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. 2015 , 51, 1-6 Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition	18
794 793	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. 2015 , 51, 1-6 Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition metal dichalcogenides. 2015 , 6, 8315	18 309
794 793 792	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. 2015 , 51, 1-6 Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition metal dichalcogenides. 2015 , 6, 8315 Exciton band structure in layered MoSe2: from a monolayer to the bulk limit. 2015 , 7, 20769-75 Measurement of high exciton binding energy in the monolayer transition-metal dichalcogenides	18 309 119
794 793 792 791	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. 2015, 51, 1-6 Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition metal dichalcogenides. 2015, 6, 8315 Exciton band structure in layered MoSe2: from a monolayer to the bulk limit. 2015, 7, 20769-75 Measurement of high exciton binding energy in the monolayer transition-metal dichalcogenides WS2 and WSe2. 2015, 203, 16-20	18 309 119 206
794 793 792 791 790	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. 2015, 51, 1-6 Intrinsic homogeneous linewidth and broadening mechanisms of excitons in monolayer transition metal dichalcogenides. 2015, 6, 8315 Exciton band structure in layered MoSe2: from a monolayer to the bulk limit. 2015, 7, 20769-75 Measurement of high exciton binding energy in the monolayer transition-metal dichalcogenides WS2 and WSe2. 2015, 203, 16-20 Optoelectronic Devices Based on Atomically Thin Transition Metal Dichalcogenides. 2016, 6, 78	18 309 119 206 74

786	Graphene and monolayer transition-metal dichalcogenides: properties and devices. 2016, 31, 845-877	10
785	Nonlinear optical characteristics of monolayer MoSe2. 2016 , 528, 551-559	43
784	Influence of the oxide thickness of a SiO2/Si(001) substrate on the optical second harmonic intensity of few-layer MoSe2. 2016 , 55, 085801	4
783	1s-intraexcitonic dynamics in monolayer MoS2 probed by ultrafast mid-infrared spectroscopy. 2016 , 7, 10768	59
782	Magnetoreflection spectroscopy of monolayer transition-metal dichalcogenide semiconductors in pulsed magnetic fields. 2016 , 34, 04J102	6
781	2D materials advances: from large scale synthesis and controlled heterostructures to improved characterization techniques, defects and applications. 2016 , 3, 042001	297
780	Excitonic Stark effect in MoS2 monolayers. <i>Physical Review B</i> , 2016 , 94,	32
779	Electronic properties of monolayer tungsten disulfide grown by chemical vapor deposition. 2016 , 109, 193502	22
778	Band structure characterization of WS2 grown by chemical vapor deposition. 2016 , 108, 252103	31
777	Photonics and optoelectronics of 2D semiconductor transition metal dichalcogenides. 2016 , 10, 216-226	1997
776	Quantum confined colloidal nanorod heterostructures for solar-to-fuel conversion. 2016 , 45, 3781-810	198
775	A systematic study of the synthesis of monolayer tungsten diselenide films on gold foil. 2016 , 16, 1216-1222	12
774	Valley-Coherent Hot Carriers and Thermal Relaxation in Monolayer Transition Metal Dichalcogenides. 2016 , 7, 2032-8	8
773	Exciton formation in monolayer transition metal dichalcogenides. 2016 , 8, 11681-8	111
772	Bandgap Transition of 2H Transition Metal Dichalcogenides: Predictive Tuning via Inherent Interface Coupling and Strain. 2016 , 120, 8927-8935	21
771	Tuning electronic transport in epitaxial graphene-based van der Waals heterostructures. 2016 , 8, 8947-54	19
770	Gap States at Low-Angle Grain Boundaries in Monolayer Tungsten Diselenide. 2016 , 16, 3682-8	46
769	Tailoring photoluminescence of monolayer transition metal dichalcogenides. 2016 , 16, 1159-1174	23

768	Pressure-induced K-l͡trossing in monolayer WSe2. 2016 , 8, 10843-8		25
767	Hybrid Bilayer WSe2 -CH3 NH3 PbI3 Organolead Halide Perovskite as a High-Performance Photodetector. 2016 , 55, 11945-9		71
766	Onset of exciton-exciton annihilation in single-layer black phosphorus. <i>Physical Review B</i> , 2016 , 94,	3.3	32
765	Excitons in boron nitride single layer. <i>Physical Review B</i> , 2016 , 94,	3.3	50
764	Chemical doping modulation of nonlinear photoluminescence properties in monolayer MoS2. 2016 , 9, 055202		13
763	Probing the Influence of Dielectric Environment on Excitons in Monolayer WSe: Insight from High Magnetic Fields. 2016 , 16, 7054-7060		148
762	Exciton and trion dynamics in atomically thin MoSe2 and WSe2: Effect of localization. <i>Physical Review B</i> , 2016 , 94,	3.3	88
761	Excitons. 2016 , 321-363		3
760	Dynamical Excitonic Effects in Doped Two-Dimensional Semiconductors. 2016 , 16, 5568-73		56
759	Optical absorption by Dirac excitons in single-layer transition-metal dichalcogenides. <i>Physical Review B</i> , 2016 , 94,	3.3	33
758	Review of photo response in semiconductor transition metal dichalcogenides based photosensitive devices. 2016 , 6, 2313		32
757	Electronic Band Structure of 2D TMDCs. 2016 , 165-226		1
756	Direct versus indirect band gap emission and exciton-exciton annihilation in atomically thin molybdenum ditelluride (MoTe2). <i>Physical Review B</i> , 2016 , 94,	3.3	45
755	Exciton Dynamics in Monolayer Transition Metal Dichalcogenides. 2016 , 33, C39-C49		101
754	Reconfigurable exciton-plasmon interconversion for nanophotonic circuits. 2016 , 7, 13663		34
753	Anomalous temperature-dependent spin-valley polarization in monolayer WS2. 2016 , 6, 18885		42
752	Hybrid Bilayer WSe2IIH3NH3PbI3 Organolead Halide Perovskite as a High-Performance Photodetector. 2016 , 128, 12124-12128		41
751	Optical properties of GaS-Ca(OH)2 bilayer heterostructure. <i>Physical Review B</i> , 2016 , 93,	3.3	17

(2016-2016)

75°	Probing the uniaxial strains in MoS2 using polarized Raman spectroscopy: A first-principles study. <i>Physical Review B</i> , 2016 , 93,	3.3	28	
749	Binding energies and structures of two-dimensional excitonic complexes in transition metal dichalcogenides. <i>Physical Review B</i> , 2016 , 93,	3.3	62	
748	Identifying multiexcitons in MoS2 monolayers at room temperature. <i>Physical Review B</i> , 2016 , 93,	3.3	61	
747	Resonance effects in the Raman scattering of monolayer and few-layer MoSe2. <i>Physical Review B</i> , 2016 , 93,	3.3	77	
746	Fundamental limits of exciton-exciton annihilation for light emission in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2016 , 93,	3.3	97	
745	Exciton radiative lifetime in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2016 , 93,	3.3	256	
744	Exciton Band Structure in Two-Dimensional Materials. <i>Physical Review Letters</i> , 2016 , 116, 066803	7.4	80	
743	Optical Coherence in Atomic-Monolayer Transition-Metal Dichalcogenides Limited by Electron-Phonon Interactions. <i>Physical Review Letters</i> , 2016 , 116, 127402	7.4	85	
742	The symmetry-resolved electronic structure of 2H-WSe2(0 0 0 1). 2016 , 28, 345503		5	
741	Trion formation dynamics in monolayer transition metal dichalcogenides. <i>Physical Review B</i> , 2016 , 93,	3.3	127	
740	Deviations of the exciton level spectrum in Cu2O from the hydrogen series. <i>Physical Review B</i> , 2016 , 93,	3.3	55	
739	Splitting between bright and dark excitons in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2016 , 93,	3.3	156	
738	Stark shift and electric-field-induced dissociation of excitons in monolayer MoS2 and hBN/MoS2 heterostructures. <i>Physical Review B</i> , 2016 , 94,	3.3	36	
737	Spin fl ip processes and radiative decay of dark intravalley excitons in transition metal dichalcogenide monolayers. 2016 , 3, 035009		55	
736	Electron-Phonon Scattering in Atomically Thin 2D Perovskites. 2016 , 10, 9992-9998		158	
735	Valleytronics in 2D materials. 2016 , 1,		1045	
734	Exciton-phonon relaxation bottleneck and radiative decay of thermal exciton reservoir in two-dimensional materials. <i>Physical Review B</i> , 2016 , 94,	3.3	17	
733	Probing the origin of excitonic states in monolayer WSe2. 2016 , 6, 22414		93	

732	Optical properties of single-layer and bilayer arsenene phases. <i>Physical Review B</i> , 2016 , 94, 3.3	53
731	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. 2016 , 7, 13279	248
730	Cascaded emission of single photons from the biexciton in monolayered WSe. 2016 , 7, 13409	61
729	Photonics and optoelectronics of two-dimensional materials beyond graphene. 2016 , 27, 462001	203
728	Control of Exciton Valley Coherence in Transition Metal Dichalcogenide Monolayers. <i>Physical Review Letters</i> , 2016 , 117, 187401	89
727	Solving Schrodinger equation for excitons in multilayered media. 2016 ,	
726	Optical polarization and intervalley scattering in single layers of MoS2 and MoSe2. 2016 , 6, 25041	80
725	Engineering Bandgaps of Monolayer MoS2 and WS2 on Fluoropolymer Substrates by Electrostatically Tuned Many-Body Effects. 2016 , 28, 6457-64	89
724	Electrically pumped single-defect light emitters in WSe 2. 2016 , 3, 025038	56
723	Spatial non-uniformity in exfoliated WS2 single layers. 2016 , 8, 16197-203	18
722	Computing optical properties of ultra-thin crystals. 2016 , 6, 351-368	13
721	Electroluminescence Dynamics across Grain Boundary Regions of Monolayer Tungsten Disulfide. 2016 , 10, 1093-100	26
720	Atypical Exciton-Phonon Interactions in WS2 and WSe2 Monolayers Revealed by Resonance Raman Spectroscopy. 2016 , 16, 2363-8	91
719	Electronic Structure, Surface Doping, and Optical Response in Epitaxial WSe2 Thin Films. 2016 , 16, 2485-91	111
718	Coherent quantum dynamics of excitons in monolayer transition metal dichalcogenides. 2016,	1
717	Spin effects in MoS2 and WS2 single layers. 2016 , 10, 111-119	8
716	Heterointerface Screening Effects between Organic Monolayers and Monolayer Transition Metal Dichalcogenides. 2016 , 10, 2476-84	66
715	Exciton diamagnetic shifts and valley Zeeman effects in monolayer WS2 and MoS2 to 65 Tesla. 2016 , 7, 10643	184

(2017-2016)

714	An ultrafast terahertz probe of the transient evolution of the charged and neutral phase of photo-excited electron-hole gas in a monolayer semiconductor. 2016 , 3, 014001	16
713	Triangular lattice exciton model. 2016 , 18, 8579-86	7
712	Modulating Optoelectronic Properties of Two-Dimensional Transition Metal Dichalcogenide Semiconductors by Photoinduced Charge Transfer. 2016 , 10, 1671-80	113
711	Excitonic luminescence upconversion in a two-dimensional semiconductor. 2016 , 12, 323-327	135
710	Photo-Induced Bandgap Renormalization Governs the Ultrafast Response of Single-Layer MoS2. 2016 , 10, 1182-8	209
709	Using dark states for exciton storage in transition-metal dichalcogenides. 2016 , 28, 034005	4
708	Tip-Enhanced Raman Scattering of MoS2. 2017 , 23, 138-143	19
707	Probing the Spin-Polarized Electronic Band Structure in Monolayer Transition Metal Dichalcogenides by Optical Spectroscopy. 2017 , 17, 740-746	80
706	Infrared fingerprints of few-layer black phosphorus. 2017 , 8, 14071	179
705	Dark excitons and the elusive valley polarization in transition metal dichalcogenides. 2017 , 4, 025016	53
704	Magneto photoluminescence measurements of tungsten disulphide monolayers. 2017 , 29, 08LT02	6
703	Unusual Exciton-Phonon Interactions at van der Waals Engineered Interfaces. 2017 , 17, 1194-1199	63
702	Many-body effects in nonlinear optical responses of 2D layered semiconductors. 2017 , 4, 025024	28
701	Anomalous Above-Gap Photoexcitations and Optical Signatures of Localized Charge Puddles in Monolayer Molybdenum Disulfide. 2017 , 11, 2115-2123	25
700	Sub-bandgap Voltage Electroluminescence and Magneto-oscillations in a WSe Light-Emitting van der Waals Heterostructure. 2017 , 17, 1425-1430	30
699	Nanobubble induced formation of quantum emitters in monolayer semiconductors. 2017 , 4, 021019	52
698	An effective liquid-phase exfoliation approach to fabricate tungsten disulfide into ultrathin two-dimensional semiconducting nanosheets. 2017 , 52, 7256-7268	28
697	Valley-Polarized Exciton Dynamics in Exfoliated Monolayer WSe2. 2017 , 121, 6409-6413	21

696 Control of interlayer valley excitons in atomically-thin MoSe2-WSe2heterostructures. 2017,

	Many-body Effect, Carrier Mobility, and Device Performance of Hexagonal Arsenene and	
695	Antimonene. 2017 , 29, 2191-2201	194
694	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. 2017,	
693	Direct Observation of Ultrafast Exciton Formation in a Monolayer of WSe. 2017 , 17, 1455-1460	126
692	Determination of band offsets, hybridization, and exciton binding in 2D semiconductor heterostructures. 2017 , 3, e1601832	208
691	All-optical band engineering of gapped Dirac materials. <i>Physical Review B</i> , 2017 , 95, 3.3	57
690	Influence of the substrate material on the optical properties of tungsten diselenide monolayers. 2017 , 4, 025045	60
689	Optical properties of atomically thin transition metal dichalcogenides: observations and puzzles. 2017 , 6, 1289-1308	123
688	Broken Symmetry Induced Strong Nonlinear Optical Effects in Spiral WS Nanosheets. 2017 , 11, 4892-4898	79
687	Thermal dissociation of inter-layer excitons in MoS/MoSe hetero-bilayers. 2017 , 9, 6674-6679	50
686	Approaching the intrinsic photoluminescence linewidth in transition metal dichalcogenide monolayers. 2017 , 4, 031011	188
685	Strongly bound excitons in anatase TiO single crystals and nanoparticles. 2017 , 8, 13	110
684	Chalcogenide Nanosheets: Optical Signatures of Many-Body Effects and Electronic Band Structure. 2017 , 133-162	1
683	Enhanced valley splitting in monolayer WSe due to magnetic exchange field. 2017 , 12, 757-762	220
682	Coulomb engineering of the bandgap and excitons in two-dimensional materials. 2017 , 8, 15251	334
681	Nonlinear photoluminescence in monolayer WS: parabolic emission and excitation fluence-dependent recombination dynamics. 2017 , 9, 7235-7241	30
680	Exciton center-of-mass localization and dielectric environment effect in monolayer WS2. 2017 , 121, 235702	17
679	Recent Progress on Localized Field Enhanced Two-dimensional Material Photodetectors from Ultraviolet-Visible to Infrared. 2017 , 13, 1700894	181

(2017-2017)

678	Influence of exciton-phonons coupling on the exciton binding energy in monolayer transition metal dichalcogenides. 2017 , 110, 231603		8
677	Manipulating Coherent Plasmon-Exciton Interaction in a Single Silver Nanorod on Monolayer WSe. 2017 , 17, 3809-3814		178
676	Large-scale quantum-emitter arrays in atomically thin semiconductors. 2017, 8, 15093		275
675	Defect Healing and Charge Transfer-Mediated Valley Polarization in MoS/MoSe/MoS Trilayer van der Waals Heterostructures. 2017 , 17, 4130-4136		44
674	Electrical Tuning of Exciton-Plasmon Polariton Coupling in Monolayer MoS Integrated with Plasmonic Nanoantenna Lattice. 2017 , 17, 4541-4547		96
673	Multivalley engineering in semiconductor microcavities. 2017 , 7, 45243		10
672	Enabling valley selective exciton scattering in monolayer WSe through upconversion. 2017 , 8, 14927		97
671	Temporal and spatial valley dynamics in two-dimensional semiconductors probed via Kerr rotation. <i>Physical Review B</i> , 2017 , 95,	3.3	18
670	Optical selection rules for excitonic Rydberg series in the massive Dirac cones of hexagonal two-dimensional materials. <i>Physical Review B</i> , 2017 , 95,	3.3	15
669	Proposal for dark exciton based chemical sensors. 2017 , 8, 14776		47
668	Raman-like resonant secondary emission causes valley coherence in CVD-grown monolayer MoS2. <i>Physical Review B</i> , 2017 , 95,	3.3	7
667	Optical fingerprint of dark 2p-states in transition metal dichalcogenides. 2017 , 4, 015029		17
666	Interlayer Excitons and Band Alignment in MoS/hBN/WSe van der Waals Heterostructures. 2017 , 17, 938-945		131
665	Layer-Number Dependent Optical Properties of 2D Materials and Their Application for Thickness Determination. 2017 , 27, 1604468		130
664	Ultrafast Laser Spectroscopy of Two-Dimensional Materials Beyond Graphene. 2017 , 27, 1604509		97
663	Ultrafast Interlayer Electron Transfer in Incommensurate Transition Metal Dichalcogenide Homobilayers. 2017 , 17, 6661-6666		35
662	Exciton broadening in WS2/graphene heterostructures. <i>Physical Review B</i> , 2017 , 96,	3.3	38
661	Phonon Sidebands in Monolayer Transition Metal Dichalcogenides. <i>Physical Review Letters</i> , 2017 , 119, 187402	7.4	100

660	Direct exciton emission from atomically thin transition metal dichalcogenide heterostructures near the lifetime limit. 2017 , 7, 12383		84
659	Exciton valley dynamics in monolayer Mo1-xWxSe2 (x = 0, 0.5, 1). 2017 , 111, 152106		14
658	Fine structure and lifetime of dark excitons in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2017 , 96,	3.3	98
657	Evidence of indirect gap in monolayer WSe. 2017 , 8, 929		7 ²
656	Ultrafast exciton dynamics in chemical heterogenous WSe2 monolayer. 2017 , 50, 485109		5
655	Trion-Species-Resolved Quantum Beats in MoSe. 2017 , 11, 11550-11558		23
654	Optically Discriminating Carrier-Induced Quasiparticle Band Gap and Exciton Energy Renormalization in Monolayer MoS_{2}. <i>Physical Review Letters</i> , 2017 , 119, 087401	7.4	58
653	Temperature dependence of band gap in MoSe grown by molecular beam epitaxy. 2017 , 12, 492		26
652	Probing of free and localized excitons and trions in atomically thin WSe, WS, MoSe and MoS in photoluminescence and reflectivity experiments. 2017 , 28, 395702		64
651	Atomically inspired k[p approach and valley Zeeman effect in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2017 , 95,	3.3	26
650	Ultrafast interlayer photocarrier transfer in graphene MoSe 2 van der Waals heterostructure. 2017 , 26, 097202		1
649	Exciton-exciton interaction in transition-metal dichalcogenide monolayers. <i>Physical Review B</i> , 2017 , 96,	3.3	43
648	Suppression of exciton-exciton annihilation in tungsten disulfide monolayers encapsulated by hexagonal boron nitrides. <i>Physical Review B</i> , 2017 , 95,	3.3	58
647	Excitons and trions in monolayer transition metal dichalcogenides: A comparative study between the multiband model and the quadratic single-band model. <i>Physical Review B</i> , 2017 , 96,	3.3	53
646	Ultrahigh Off-Resonant Field Effects in Semiconductors. 2017 , 11, 1700049		33
645	Efficient Carrier-to-Exciton Conversion in Field Emission Tunnel Diodes Based on MIS-Type van der Waals Heterostack. 2017 , 17, 5156-5162		53
644	Strong and anisotropic third-harmonic generation in monolayer and multilayer ReS2. <i>Physical Review B</i> , 2017 , 95,	3.3	47
643	Impact of strain on the optical fingerprint of monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2017 , 96,	3.3	41

642	with a silicon nanobeam cavity. 2017 , 12, 987-992	153
641	Black Phosphorus: Optical Characterization, Properties and Applications. 2017 , 13, 1700823	46
640	Strong cavity-pseudospin coupling in monolayer transition metal dichalcogenides. <i>Physical Review B</i> , 2017 , 96,	2
639	In-Plane Propagation of Light in Transition Metal Dichalcogenide Monolayers: Optical Selection Rules. <i>Physical Review Letters</i> , 2017 , 119, 047401	176
638	Robust high-temperature trion emission in monolayers of Mo(SySe1) 2 alloys. <i>Physical Review B</i> , 2017 , 95,	20
637	Multicomponent plasmons in monolayer MoS2 with circularly polarized optical pumping. <i>Physical Review B</i> , 2017 , 96,	0
636	The optical response of monolayer, few-layer and bulk tungsten disulfide. 2017 , 9, 13128-13141	66
635	Direct observation of giant binding energy modulation of exciton complexes in monolayer MoSe2. <i>Physical Review B</i> , 2017 , 96,	30
634	Charged excitons in monolayer WSe2: Experiment and theory. <i>Physical Review B</i> , 2017 , 96, 3.3	137
633	Optical Response From Functionalized Atomically Thin Nanomaterials. 2017 , 529, 1700097	2
632	Valley-Spin Physics in 2D Semiconducting Transition Metal Dichalcogenides. 279-294	
631	TMDs [Dptoelectronic Devices. 329-343	
630	Photoinduced Bandgap Renormalization and Exciton Binding Energy Reduction in WS. 2017 , 11, 12601-126	08 70
629	van der Waals Layered Materials: Opportunities and Challenges. 2017 , 11, 11803-11830	258
628	Valley Polarization of Trions and Magnetoresistance in Heterostructures of MoS and Yttrium Iron Garnet. 2017 , 11, 12257-12265	25
627	Phonon-assisted oscillatory exciton dynamics in monolayer MoSe2. 2017 , 1,	37
626	Effects of rhenium dopants on photocarrier dynamics and optical properties of monolayer, few-layer, and bulk MoS. 2017 , 9, 19360-19366	11
625	Synthesis of Large-Area Tungsten Disulfide Films on Pre-Reduced Tungsten Suboxide Substrates. 2017 , 9, 43021-43029	21

624	Coupled relaxation channels of excitons in monolayer MoSe. 2017, 9, 18546-18551	19
623	Enhancing High Harmonic Output in Solids through Quantum Confinement. <i>Physical Review Letters</i> , 7.4	25
622	Excitation-dependent photoluminescence from WS2 nanostructures synthesized via top-down approach. 2017 , 52, 11326-11336	36
621	Electronic bandstructure and van der Waals coupling of ReSe revealed by high-resolution angle-resolved photoemission spectroscopy. 2017 , 7, 5145	22
620	Control of Coherently Coupled Exciton Polaritons in Monolayer Tungsten Disulphide. <i>Physical Review Letters</i> , 2017 , 119, 027403	67
619	Excited State Biexcitons in Atomically Thin MoSe. 2017 , 11, 7468-7475	44
618	Characterization of wafer-scale MoS 2 and WSe 2 2D films by spectroscopic ellipsometry. 2017 , 17, 1329-13	34 19
617	Comparative study of the exciton binding energies of thin and ultrathin organic-inorganic perovskites due to dielectric mismatch effects. 2017 , 122, 015701	7
616	Long valley relaxation time of free carriers in monolayer WSe2. <i>Physical Review B</i> , 2017 , 95,	29
615	Topological Exciton Bands in Moir[Heterojunctions. <i>Physical Review Letters</i> , 2017 , 118, 147401 7.4	155
614	Intrinsic exciton-state mixing and nonlinear optical properties in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2017 , 95,	42
613	Giant Paramagnetism-Induced Valley Polarization of Electrons in Charge-Tunable Monolayer MoSe_{2}. <i>Physical Review Letters</i> , 2017 , 118, 237404	50
612	Valley- and spin-polarized Landau levels in monolayer WSe. 2017 , 12, 144-149	121
611	High-harmonic generation from an atomically thin semiconductor. 2017 , 13, 262-265	320
610	Screening effect of graphite and bilayer graphene on excitons in MoSe 2 monolayer. 2017, 4, 015021	12
609	Photocatalytic robust solar energy reduction of dinitrogen to ammonia on ultrathin MoS2. 2017 , 200, 323-329	179
608	Polaritons in layered two-dimensional materials. 2017 , 16, 182-194	665
607	Light-Matter Interactions in Two-Dimensional Transition Metal Dichalcogenides: Dominant Excitonic Transitions in Mono- and Few-Layer MoX\$_2\$ and Band Nesting. 2017 , 23, 219-230	34

(2018-2017)

606	Self-energy effect and Coulomb potential modulation of the exciton in monolayer MoS2 on polar substrate. 2017 , 50, 475306	3
605	Exciton spectrum in two-dimensional transition metal dichalcogenides: The role of Diracness. 2017 , 864, 012033	2
604	Probing effect of electric field on photocarrier transfer in graphene-WS2 van der Waals heterostructures. 2017 , 25, 1949-1957	19
603	Recent Advances in Electronic and Optoelectronic Devices Based on Two-Dimensional Transition Metal Dichalcogenides. 2017 , 6, 43	46
602	Contribution of many-body effects into thermoelectricity and heat transport in graphene. 2018 , 341-418	
601	Strong valley Zeeman effect of dark excitons in monolayer transition metal dichalcogenides in a tilted magnetic field. <i>Physical Review B</i> , 2018 , 97,	14
600	Two-dimensional transition metal dichalcogenides: interface and defect engineering. 2018, 47, 3100-3128	381
599	Nanoengineering of strong field processes in solids. 2018 , 51, 084001	3
598	Saturation of Two-Photon Absorption in Layered Transition Metal Dichalcogenides: Experiment and Theory. 2018 , 5, 1558-1565	48
597	Unifying Optical Selection Rules for Excitons in Two Dimensions: Band Topology and Winding Numbers. <i>Physical Review Letters</i> , 2018 , 120, 087402	34
596	Evolution of the broadband optical transition in large-area MoSe2. <i>Physical Review B</i> , 2018 , 97, 3.3	10
595	Hole Transport in Exfoliated Monolayer MoS. 2018 , 12, 2669-2676	29
594	Band nesting, massive Dirac fermions, and valley Landland Zeeman effects in transition metal dichalcogenides: A tight-binding model. <i>Physical Review B</i> , 2018 , 97,	18
593	Fabrication of thin films of two-dimensional triangular antiferromagnet Ag2CrO2 and their transport properties. 2018 , 8, 025010	3
592	Highly Enhanced Many-Body Interactions in Anisotropic 2D Semiconductors. 2018 , 51, 1164-1173	25
591	Probing excitons in transition metal dichalcogenides by Drude-like exciton intraband absorption. 2018 , 10, 9538-9546	16
590	Optical absorption by indirect excitons in a transition metal dichalcogenide/hexagonal boron nitride heterostructure. 2018 , 30, 225001	7
589	Highly Efficient Photocatalytic Hydrogen Evolution by ReS via a Two-Electron Catalytic Reaction. 2018 , 30, e1707123	67

Strong room-temperature emission from defect states in CVD-grown WSe2 nanosheets. 2018, 11, 3922-3930 15 588 Valley-Selective Exciton Bistability in a Suspended Monolayer Semiconductor. 2018, 18, 3213-3220 587 9 Controlling the electronic properties of van der Waals heterostructures by applying electrostatic 586 11 design. **2018**, 5, 035019 High-Performance WSe Phototransistors with 2D/2D Ohmic Contacts. 2018, 18, 2766-2771 585 79 Colloquium: Excitons in atomically thin transition metal dichalcogenides. 2018, 90, 766 584 Excitonic Emission of Monolayer Semiconductors Near-Field Coupled to High-Q Microresonators. 583 32 **2018**, 18, 3138-3146 582 The organic-2D transition metal dichalcogenide heterointerface. 2018, 47, 3241-3264 113 Superior Valley Polarization and Coherence of 2s Excitons in Monolayer WSe_{2}. Physical Review 581 7.4 26 Letters, 2018, 120, 046402 Magnetooptics of Exciton Rydberg States in a Monolayer Semiconductor. Physical Review Letters, 580 126 7.4 2018, 120, 057405 Influence of the effective layer thickness on the ground-state and excitonic properties of 579 3.3 35 transition-metal dichalcogenide systems. Physical Review B, 2018, 97, Nonlinear dynamics of trions under strong optical excitation in monolayer MoSe. 2018, 8, 2389 578 7 Giant excitation induced bandgap renormalization in TMDC monolayers. 2018, 112, 061104 32 577 Quantum confinement effect and exciton binding energy of layered perovskite nanoplatelets. 2018 576 38 , 8, 025108 Charge Versus Energy Transfer in Atomically Thin Graphene-Transition Metal Dichalcogenide van 575 40 der Waals Heterostructures. 2018, 8, Dielectric Engineering of Electronic Correlations in a van der Waals Heterostructure. 2018, 18, 1402-1409 574 32 Theory of optical absorption by interlayer excitons in transition metal dichalcogenide 122 573 3.3 heterobilayers. Physical Review B, 2018, 97, Optical and Excitonic Properties of Atomically Thin Transition-Metal Dichalcogenides. 2018, 9, 379-396 46 572 Direct determination of monolayer MoS2and WSe2exciton binding energies on insulating and 100 metallic substrates. **2018**, 5, 025003

57°	Controllable Phase Stabilities in Transition Metal Dichalcogenides through Curvature Engineering: First-Principles Calculations and Continuum Prediction. 2018 , 1, 1800003	3
569	Dielectric function, critical points, and Rydberg exciton series of WSe monolayer. 2018 , 30, 235701	3
568	Dark and bright exciton formation, thermalization, and photoluminescence in monolayer transition metal dichalcogenides. 2018 , 5, 035017	89
567	Brightened spin-triplet interlayer excitons and optical selection rules in van der Waals heterobilayers. 2018 , 5, 035021	61
566	Exciton diffusion in WSe2 monolayers embedded in a van der Waals heterostructure. 2018 , 112, 152106	76
565	Temperature dependence of the excitonic spectra of monolayer transition metal dichalcogenides. 2018 , 13, 1	5
564	Dissociation of two-dimensional excitons in monolayer WSe. 2018 , 9, 1633	76
563	Model Prediction of Self-Rotating Excitons in Two-Dimensional Transition-Metal Dichalcogenides. Physical Review Letters, 2018 , 120, 187401 7-4	24
562	Revealing Bound Exciton Physics in Strongly Interacting Band Insulators. 2018 , 109-168	
561	Computational design and property predictions for two-dimensional nanostructures. 2018 , 21, 391-418	55
560	Electrostatics of electron-hole interactions in van der Waals heterostructures. <i>Physical Review B</i> , 2018 , 97,	20
559	Excitonic Properties of Chemically Synthesized 2D Organic-Inorganic Hybrid Perovskite Nanosheets. 2018 , 30, e1704055	74
558	Determination of layer-dependent exciton binding energies in few-layer black phosphorus. 2018 , 4, eaap9977	8o
557	The study of dispersive B Emode in monolayer MoS2 in temperature dependent resonant Raman scattering experiments. 2018 , 275, 25-28	9
556	Whisper Gallery Modes in Monolayer Tungsten Disulfide-Hexagonal Boron Nitride Optical Cavity. 2018 , 5, 353-358	21
555	Gold Dispersion and Activation on the Basal Plane of Single-Layer MoS2. 2018 , 122, 267-273	11
554	Group 6 transition metal dichalcogenide nanomaterials: synthesis, applications and future perspectives. 2018 , 3, 90-204	203
553	Radiative control of dark excitons at room temperature by nano-optical antenna-tip Purcell effect. 2018 , 13, 59-64	113

552	Tailored Emission Spectrum of 2D Semiconductors Using Plasmonic Nanocavities. 2018 , 5, 552-558		48
551	Two-dimensional black phosphorus: its fabrication, functionalization and applications. 2018 , 10, 21575-2	21603	54
550	Spatial control of carrier capture in two-dimensional materials: Beyond energy selection rules. <i>Physical Review B</i> , 2018 , 98,	3.3	9
549	Ultrafast formation and dynamics of interlayer exciton in a large-area CVD-grown WS/WSe heterostructure. 2018 , 30, 495701		9
548	Electrically and Optically Tunable Responses in Graphene/Transition-Metal-Dichalcogenide Heterostructures. 2018 , 10, 44102-44108		14
547	A SCANNING TUNNELING MICROSCOPY STUDY OF MONOLAYER AND BILAYER TRANSITION-METAL DICHALCOGENIDES GROWN BY MOLECULAR-BEAM EPITAXY. 2018 , 25, 1841002		1
546	Screening of long-range Coulomb interaction in graphene nanoribbons: Armchair versus zigzag edges. <i>Physical Review B</i> , 2018 , 98,	3.3	5
545	Exciton transport in strained monolayer WSe2. 2018 , 113, 252101		32
544	Dependence of band structure and exciton properties of encapsulated WSe2 monolayers on the hBN-layer thickness. <i>Physical Review B</i> , 2018 , 98,	3.3	29
543	Ultrafast charge transfer in dual graphene-WS 2 van der Waals quadrilayer heterostructures. 2018 , 35, 127801		2
542	Ultrafast Exciton Dissociation at the 2D-WS2 Monolayer/Perovskite Interface. 2018 , 122, 28910-28917		14
541	Excitonic complexes in anisotropic atomically thin two-dimensional materials: Black phosphorus and TiS3. <i>Physical Review B</i> , 2018 , 98,	3.3	9
540	Temperature dependent photoluminescence from WS2 nanostructures. 2018, 29, 20064-20070		4
539	Layer-Coupled States Facilitate Ultrafast Charge Transfer in a Transition Metal Dichalcogenide Trilayer Heterostructure. 2018 , 9, 5970-5978		8
538	Strain tuning of excitons in monolayer WSe2. <i>Physical Review B</i> , 2018 , 98,	3.3	70
537	Band Structure Engineering in 2D Materials for Optoelectronic Applications. 2018 , 3, 1800072		48
536	Coulomb interaction in monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2018 , 98,	3.3	51
535	Optoelectronics with single layer group-VIB transition metal dichalcogenides. 2018 , 7, 1589-1600		11

534	Efficient Energy Transfer in InSe-MoSe van der Waals Heterostructures. 2018 , 3, 11930-11936		14
533	Theory of ExcitonExciton Interactions in Monolayer Transition Metal Dichalcogenides. 2018 , 255, 18001	85	34
532	Ultrafast dynamics in van der Waals heterostructures. 2018 , 13, 994-1003		216
531	Two-photon absorption in two-dimensional materials: The case of hexagonal boron nitride. <i>Physical Review B</i> , 2018 , 98,	3.3	16
530	Strong coupling between excitons in transition metal dichalcogenides and optical bound states in the continuum. <i>Physical Review B</i> , 2018 , 98,	3.3	43
529	Light-matter interaction between photonic bound states in the continuum and bright excitons in transition metal dichalcogenides. 2018 , 1092, 012064		1
528	Efficient generation of neutral and charged biexcitons in encapsulated WSe monolayers. 2018 , 9, 3718		80
527	Light-Emitting Plexciton: Exploiting Plasmon-Exciton Interaction in the Intermediate Coupling Regime. 2018 , 12, 10393-10402		90
526	Biexcitons in monolayer transition metal dichalcogenides tuned by magnetic fields. 2018, 9, 3720		19
525	Interface excitons at lateral heterojunctions in monolayer semiconductors. <i>Physical Review B</i> , 2018 , 98,	3.3	16
524	Self-consistent dielectric constant determination for monolayer WSe. 2018 , 26, 23061-23068		1
523	Exciton States in Monolayer MoSe2 and MoTe2 Probed by Upconversion Spectroscopy. 2018 , 8,		37
522	Enhanced interlayer neutral excitons and trions in trilayer van der Waals heterostructures. 2018, 2,		26
521	Optical harmonic generation in monolayer group-VI transition metal dichalcogenides. <i>Physical Review B</i> , 2018 , 98,	3.3	53
520	Exciton physics and device application of two-dimensional transition metal dichalcogenide semiconductors. 2018 , 2,		267
519	Electrical control of excitons in van der Waals heterostructures with type-II band alignment. <i>Physical Review B</i> , 2018 , 98,	3.3	10
518	Communication: Multidimensional triple sum-frequency spectroscopy of MoS and comparisons with absorption and second harmonic generation spectroscopies. 2018 , 149, 091101		4
517	Enhanced Emission from WSe2 Monolayers Coupled to Circular Bragg Gratings. 2018 , 5, 3950-3955		17

516	Interlayer excitons in transition metal dichalcogenide heterostructures. <i>Physical Review B</i> , 2018 , 98,	3.3	30
515	Band-bending induced by charged defects and edges of atomically thin transition metal dichalcogenide films. 2018 , 5, 035034		15
5 ¹ 4	pH-Dependent Photoluminescence Properties of Monolayer Transition-Metal Dichalcogenides Immersed in an Aqueous Solution. 2018 , 122, 13175-13181		9
513	Dispersion and decay rate of exciton-polaritons and radiative modes in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2018 , 97,	3.3	2
512	Direct growth of doping controlled monolayer WSe by selenium-phosphorus substitution. 2018 , 10, 113	397-11	400
511	Enhanced exciton emission behavior and tunable band gap of ternary W(SSe) monolayer: temperature dependent optical evidence and first-principles calculations. 2018 , 10, 11553-11563		9
510	Evidence for line width and carrier screening effects on excitonic valley relaxation in 2D semiconductors. 2018 , 9, 2598		33
509	Exciton-polarons in doped semiconductors in a strong magnetic field. <i>Physical Review B</i> , 2018 , 97,	3.3	22
508	Excitation-induced transition to indirect band gaps in atomically thin transition-metal dichalcogenide semiconductors. <i>Physical Review B</i> , 2018 , 98,	3.3	19
507	Exciton-phonon coupling and band-gap renormalization in monolayer WSe2. <i>Physical Review B</i> , 2018 , 98,	3.3	15
506	Nanophotonics with 2D transition metal dichalcogenides [Invited]. 2018 , 26, 15972-15994		91
505	Zeeman Splitting and Inverted Polarization of Biexciton Emission in Monolayer WS_{2}. <i>Physical Review Letters</i> , 2018 , 121, 057402	7.4	48
504	Constraints on downconversion in atomically thick films. 2018 , 35, 672		7
503	Strong Light-Matter Coupling between Plasmons in Individual Gold Bi-pyramids and Excitons in Mono- and Multilayer WSe. 2018 , 18, 5938-5945		90
502	A gate-free monolayer WSe pn diode. 2018 , 9, 3143		66
501	Light₪alley interactions in 2D semiconductors. 2018 , 12, 451-460		187
500	Room-temperature electrical control of exciton flux in a van der Waals heterostructure. 2018 , 560, 340-	344	217
499	Influence of Polar Pressure Transmission Medium on the Pressure Coefficient of Excitonic Interband Transitions in Monolayer WSe 2. 2018 , 35, 066201		

498	Competition between Free Carriers and Excitons Mediated by Defects Observed in Layered WSe2 Crystal with Time-Resolved Terahertz Spectroscopy. 2018 , 6, 1800290	25
497	Tailoring MoS Valley-Polarized Photoluminescence with Super Chiral Near-Field. 2018 , 30, e1801908	66
496	Electrothermal Local Annealing via Graphite Joule Heating on Two-Dimensional Layered Transistors. 2018 , 10, 25638-25643	2
495	Observation of exciton-phonon coupling in MoSe2 monolayers. <i>Physical Review B</i> , 2018 , 98, 3.3	65
494	Interlayer screening effects in WS 2 /WSe 2 van der Waals hetero-bilayer. 2018 , 5, 041003	12
493	Tunability in the optical response of defective monolayer WSe by computational analysis. 2018 , 10, 13751-	137602
492	The role of momentum-dark excitons in the elementary optical response of bilayer WSe. 2018 , 9, 2586	41
491	Two-dimensional semiconductors in the regime of strong light-matter coupling. 2018 , 9, 2695	157
490	Spectrally narrow exciton luminescence from monolayer MoS2 and MoSe2 exfoliated onto epitaxially grown hexagonal BN. 2018 , 113, 032106	17
489	Engineering graphene and TMDs based van der Waals heterostructures for photovoltaic and photoelectrochemical solar energy conversion. 2018 , 47, 4981-5037	226
488	Excitons, trions, and biexcitons in transition-metal dichalcogenides: Magnetic-field dependence. <i>Physical Review B</i> , 2018 , 97,	28
487	Nature of Excitons in Bidimensional WSelby Hybrid Density Functional Theory Calculations. 2018 , 8,	5
486	Light Emission Properties of 2D Transition Metal Dichalcogenides: Fundamentals and Applications. 2018 , 6, 1800420	53
485	Mirrors made of a single atomic layer. 2018 , 556, 177-178	4
484	Ultrafast charge transfer in graphene-WS2 Van der Waals heterostructures. 2018, 174, 62-67	5
483	Enhanced thermoelectric performance of two dimensional MS2 (M´=´Mo, W) through phase engineering. 2018 , 4, 329-337	11
482	Optoelectronic properties of bottom gate-defined in-plane monolayer WSe2 pB junction. 2018 , 27, 087303	O
481	Ultrafast transient absorption measurements of photocarrier dynamics in monolayer and bulk ReSe. 2018 , 26, 21501-21509	10

480	Anomalous energy shift of laterally confined two-dimensional excitons. 2018 , 124, 034301	4
479	Evaporation-Rate and Substrate-Temperature Dependence of Direct Exciton Transitions in Bil3 Thin Films Formed by Hot-Wall Technique on Al2O3 Substrates. 2018 , 255, 1800092	1
478	Ab initio and semiempirical modeling of excitons and trions in monolayer TiS3. <i>Physical Review B</i> , 2018 , 98,	7
477	Electric field effects on electronic structure of tantalum dichalcogenides van der Waals TaS2/TaSe2 and TaSe2/TaTe2 heterostructures. 2018 , 455, 963-969	7
476	Monolayer Transition Metal Dichalcogenides as Light Sources. 2018 , 30, e1707627	46
475	Quantum-electrodynamical approach to the exciton spectrum in transition-metal dichalcogenides. 2018 , 5, 041006	7
474	Photocarrier Transfer across Monolayer MoS-MoSe Lateral Heterojunctions. 2018 , 12, 7086-7092	14
473	Excitonic processes in atomically-thin MoSe 2 /MoS 2 vertical heterostructures. 2018 , 5, 031016	5
472	THz-induced thermoelectric and thermal transport in atomic monolayers. 2018, 473-509	
471	Anisotropic exciton transport in transition-metal dichalcogenides. <i>Physical Review B</i> , 2018 , 97, 3.3	7
470	Many-Body Complexes in 2D Semiconductors. 2019 , 31, e1706945	199
469	Unraveling biexciton and excitonic excited states from defect bound states in monolayer MoS2. 2019 , 463, 52-57	34
468	Multiple-peak resonance of optical second harmonic generation arising from band nesting in monolayer transition metal dichalcogenides TX2 on SiO2/Si(001) substrates (T=Mo,W;X=S,Se). 3.3 Physical Review B, 2019 , 100,	9
468 467	monolayer transition metal dichalcogenides TX2 on SiO2/Si(001) substrates (T=Mo,W;X=S,Se). 3.3	9
	monolayer transition metal dichalcogenides TX2 on SiO2/Si(001) substrates (T=Mo,W;X=S,Se). 3.3 <i>Physical Review B</i> , 2019 , 100,	
467	monolayer transition metal dichalcogenides TX2 on SiO2/Si(001) substrates (T=Mo,W;X=S,Se). 3.3 Physical Review B, 2019, 100, Tunable Open-Access Microcavities for Solid-State Quantum Photonics and Polaritonics. 2019, 2, 1900060 Exciton Polarization and Renormalization Effect for Optical Modulation in Monolayer	16
467 466	monolayer transition metal dichalcogenides TX2 on SiO2/Si(001) substrates (T=Mo,W;X=S,Se). Physical Review B, 2019, 100, Tunable Open-Access Microcavities for Solid-State Quantum Photonics and Polaritonics. 2019, 2, 1900060 Exciton Polarization and Renormalization Effect for Optical Modulation in Monolayer Semiconductors. 2019, 13, 9218-9226	16

462	Retracted Article: Physics of excitons and their transport in two dimensional transition metal dichalcogenide semiconductors 2019 , 9, 25439-25461	16	
461	Two-dimensional excitons in monolayer transition metal dichalcogenides from radial equation and variational calculations. 2019 , 31, 105702	7	
460	Visualizing electrostatic gating effects in two-dimensional heterostructures. 2019 , 572, 220-223	71	
459	Sub-Picosecond Carrier Dynamics Induced by Efficient Charge Transfer in MoTe/WTe van der Waals Heterostructures. 2019 , 13, 9587-9594	15	
458	Giant gate-tunable bandgap renormalization and excitonic effects in a 2D semiconductor. 2019 , 5, eaaw2347	37	
457	Layer Rotation-Angle-Dependent Excitonic Absorption in van der Waals Heterostructures Revealed by Electron Energy Loss Spectroscopy. 2019 , 13, 9541-9550	17	
456	Nonlinear optics of two-dimensional transition metal dichalcogenides. 2019 , 1, 317-337	67	
455	Localized Intervalley Defect Excitons as Single-Photon Emitters in WSe_{2}. <i>Physical Review Letters</i> , 2019 , 123, 146401	44	
454	Excited-State Trions in Monolayer WS_{2}. <i>Physical Review Letters</i> , 2019 , 123, 167401 7.4	32	
453	Phonon-mediated intervalley relaxation of positive trions in monolayer WSe2. <i>Physical Review B</i> , 2019 , 100,	3	
452	2D Perovskites with Giant Excitonic Optical Nonlinearities for High-Performance Sub-Bandgap Photodetection. 2019 , 31, e1904155	39	
451	Quantum Multibody Interactions in Halide-Assisted Vapor-Synthesized Monolayer WSe2 and Its Integration in a High Responsivity Photodetector with Low-Interface Trap Density. 2019 , 31, 9861-9874	21	
450	Theory of exciton dynamics in time-resolved ARPES: Intra- and intervalley scattering in two-dimensional semiconductors. <i>Physical Review B</i> , 2019 , 100,	25	
449	Polymer Coatings Tune Electromagnetically Induced Transparency in Two-Dimensional Semiconductors. 2019 , 6, 3115-3119	6	
448	Rigid Band Shifts in Two-Dimensional Semiconductors through External Dielectric Screening. Physical Review Letters, 2019 , 123, 206403 7-4	39	
447	Exciton routing in the heterostructure of a transition metal dichalcogenide monolayer on a paraelectric substrate. <i>Physical Review B</i> , 2019 , 100,	7	
446	Three-Dimensional Resonant Exciton in Monolayer Tungsten Diselenide Actuated by Spin-Orbit Coupling. 2019 , 13, 14529-14539	5	
445	Experimental Evidence of Anisotropic and Stable Charged Excitons (Trions) in Atomically Thin 2D ReS2. 2019 , 29, 1905961	12	

444	Effect of Dielectric Environment on Excitonic Dynamics in Monolayer WS2. 2019 , 6, 1901307		17
443	Probing and Manipulating Valley Coherence of Dark Excitons in Monolayer WSe_{2}. <i>Physical Review Letters</i> , 2019 , 123, 096803	7.4	26
442	Direct Observation of Gate-Tunable Dark Trions in Monolayer WSe. 2019 , 19, 6886-6893		33
441	Theory of second-order excitonic nonlinearities in transition metal dichalcogenides. <i>Physical Review B</i> , 2019 , 100,	3.3	8
440	Multiphonon Raman scattering mediated by the exciton states in monolayer transition metal chalcogenides. <i>Physical Review B</i> , 2019 , 100,	3.3	5
439	Machine-Learning Analysis to Predict the Exciton Valley Polarization Landscape of 2D Semiconductors. 2019 , 13, 12687-12693		10
438	Charged excitons in two-dimensional transition metal dichalcogenides: Semiclassical calculation of Berry curvature effects. <i>Physical Review B</i> , 2019 , 100,	3.3	8
437	Exciton states and absorption spectra in freestanding monolayer transition metal dichalcogenides: A variationally optimized diagonalization method. <i>Physical Review B</i> , 2019 , 100,	3.3	4
436	Interlayer excitons in bilayer MoS2 with strong oscillator strength up to room temperature. <i>Physical Review B</i> , 2019 , 99,	3.3	48
435	Probing many-body interactions in monolayer transition-metal dichalcogenides. <i>Physical Review B</i> , 2019 , 99,	3.3	34
434	Plasmon induced brightening of dark exciton in monolayer WSe2 for quantum optoelectronics. 2019 , 114, 201101		5
433	Site-selectively generated photon emitters in monolayer MoS via local helium ion irradiation. 2019 , 10, 2755		80
432	On-chip integrated photonic circuits based on two-dimensional materials and hexagonal boron nitride as the optical confinement layer. 2019 , 125, 230901		6
431	Intrinsic lifetime of higher excitonic states in tungsten diselenide monolayers. 2019 , 11, 12381-12387		40
430	Ultrafast dynamics of bright and dark positive trions for valley polarization in monolayer WSe2. <i>Physical Review B</i> , 2019 , 99,	3.3	4
429	Emerging photoluminescence from the dark-exciton phonon replica in monolayer WSe. 2019 , 10, 2469		57
428	Dark exciton based strain sensing in tungsten-based transition metal dichalcogenides. <i>Physical Review B</i> , 2019 , 99,	3.3	13
427	Cooperative evolution of intraband and interband excitations for high-harmonic generation in strained MoS2. <i>Physical Review B</i> , 2019 , 99,	3.3	17

426	Magneto-spectroscopy of exciton Rydberg states in a CVD grown WSe2 monolayer. 2019 , 114, 232104	11
425	Encapsulation of a Monolayer WSe Phototransistor with Hydrothermally Grown ZnO Nanorods. 2019 , 11, 20257-20264	8
424	Recent Advances in Quantum Effects of 2D Materials. 2019 , 2, 1800111	19
423	Tightly bound excitons in two-dimensional semiconductors with a flat valence band. <i>Physical Review B</i> , 2019 , 99,	6
422	Charge-Transfer-Induced Photoluminescence Properties of WSe Monolayer-Bilayer Homojunction. 2019 , 11, 20566-20573	11
421	Magnetophotoluminescence of exciton Rydberg states in monolayer WSe2. <i>Physical Review B</i> , 2019 , 99,	24
420	Modification of Optical Properties in Monolayer WS2 on Dielectric Substrates by Coulomb Engineering. 2019 , 123, 14097-14102	12
419	Ferroelectric-Driven Exciton and Trion Modulation in Monolayer Molybdenum and Tungsten Diselenides. 2019 , 13, 5335-5343	40
418	Two-dimensional pnictogens: A review of recent progresses and future research directions. 2019 , 6, 021308	97
417	High spectral resolution second harmonic generation microspectroscopy at thin layer interfaces with broadband continuum pulses. 2019 , 6, 910-917	
416	Valley polarization of exciton-polaritons in monolayer WSe in a tunable microcavity. 2019, 11, 9574-9579	10
415	Continuous Control and Enhancement of Excitonic Valley Polarization in Monolayer WSe2 by Electrostatic Doping. 2019 , 29, 1900260	22
414	Exciton states and oscillator strength in few-layer Eellurene. 2019 , 114, 092101	7
413	Probing the exciton k-space dynamics in monolayer tungsten diselenides. 2019 , 6, 025035	3
412	Interlayer exciton dynamics in van der Waals heterostructures. 2019 , 2,	55
411	Spectrum of exciton states in monolayer transition metal dichalcogenides: Angular momentum and Landau levels. <i>Physical Review B</i> , 2019 , 99,	8
410	Distinctive Signatures of the Spin- and Momentum-Forbidden Dark Exciton States in the Photoluminescence of Strained WSe Monolayers under Thermalization. 2019 , 19, 2299-2312	14
409	Luminescent Emission of Excited Rydberg Excitons from Monolayer WSe. 2019 , 19, 2464-2471	24

408	Strong Single- and Two-Photon Luminescence Enhancement by Nonradiative Energy Transfer across Layered Heterostructure. 2019 , 13, 4795-4803		13
407	Layer degree of freedom for excitons in transition metal dichalcogenides. <i>Physical Review B</i> , 2019 , 99,	3.3	13
406	Electroluminescence from multi-particle exciton complexes in transition metal dichalcogenide semiconductors. 2019 , 10, 1709		48
405	Giant exciton-phonon coupling and zero-point renormalization in hexagonal monolayer boron nitride. <i>Physical Review B</i> , 2019 , 99,	3.3	8
404	Enhancing functionalities of atomically thin semiconductors with plasmonic nanostructures. 2019 , 8, 577-598		17
403	Dielectric impact on exciton binding energy and quasiparticle bandgap in monolayer WS 2 and WSe 2. 2019 , 6, 025028		25
402	Ultrafast Carrier Dynamics in Few-Layer Colloidal Molybdenum Disulfide Probed by Broadband Transient Absorption Spectroscopy. 2019 , 123, 10571-10577		21
401	Nonlinear optics in the electron-hole continuum in 2D semiconductors: two-photon transition, second harmonic generation and valley current injection. 2019 , 64, 1036-1043		3
400	Tuning of impurity-bound interlayer complexes in a van der Waals heterobilayer. 2019 , 6, 035032		11
399	Dynamical screening in monolayer transition-metal dichalcogenides and its manifestations in the exciton spectrum. 2019 , 31, 203001		27
398	Fundamental exciton linewidth broadening in monolayer transition metal dichalcogenides. <i>Physical Review B</i> , 2019 , 99,	3.3	14
397	Two-dimensional nonlinear optical materials predicted by network visualization. 2019 , 4, 586-596		3
396	Tuning the FrElich exciton-phonon scattering in monolayer MoS. 2019 , 10, 807		43
395	Rate Equation-based Modeling of Steady-state and Transient Performance Characteristics and High Frequency Modulation Response of Single Layer Transition metal Dichalcogenide Excitonic Lasers. 2019 ,		
394	Triple sum frequency pump-probe spectroscopy of transition metal dichalcogenides. <i>Physical Review B</i> , 2019 , 100,	3.3	4
393	Many-body effects in doped WS2 monolayer quantum disks at room temperature. 2019 , 3,		12
392	Carrier multiplication in van der Waals layered transition metal dichalcogenides. 2019 , 10, 5488		18
391	Excitonic magneto-optics in monolayer transition metal dichalcogenides: From nanoribbons to two-dimensional response. <i>Physical Review B</i> , 2019 , 100,	3.3	3

(2020-2019)

390	Dielectric Environment-Robust Ultrafast Charge Transfer Between Two Atomic Layers. 2019 , 10, 150-155	28
389	Temporally Resolving Synchronous Degenerate and Nondegenerate Two-Photon Absorption in 2D Semiconducting Monolayers. 2019 , 13, 1800225	13
388	Novel Insights and Perspectives into Weakly Coupled ReS2 toward Emerging Applications. 2019 , 5, 505-525	33
387	Suppressing Ambipolar Characteristics of WSe2 Field Effect Transistors Using Graphene Oxide. 2019 , 5, 1800608	6
386	Nonlinear optical susceptibility of atomically thin WX2 crystals. 2019 , 88, 30-38	7
385	Quantum interference in second-harmonic generation from monolayer WSe2. 2019 , 15, 242-246	38
384	Screening Effect of Ultrathin Gold Films on Excitons in Monolayer WS2. 2019 , 14, 1063-1069	4
383	Non equilibrium anisotropic excitons in atomically thin ReS 2. 2019 , 6, 015012	18
382	Nonlinear Nanophotonics With 2D Transition Metal Dichalcogenides. 2019 , 305-318	1
381	Orbital, spin and valley contributions to Zeeman splitting of excitonic resonances in MoSe 2 , WSe 2 and WS 2 Monolayers. 2019 , 6, 015001	46
380	The Optical Properties and Plasmonics of Anisotropic 2D Materials. 2020 , 8, 1900996	39
379	Recent Progress on Exciton Polaritons in Layered Transition-Metal Dichalcogenides. 2020 , 8, 1901003	20
378	Controlling exciton transport in monolayer MoSe2 by dielectric screening. 2020 , 5, 139-143	15
377	Structural, electronic and vibrational properties of ultra-thin octahedrally coordinated structure of EuO2. 2020 , 493, 165668	1
376	2D Materials for Terahertz Modulation. 2020 , 8, 1900550	32
375	Photoexcited charge carrier behaviors in solar energy conversion systems from theoretical simulations. 2020 , 10, e1441	3
374	Theory of coherent pumpBrobe spectroscopy in monolayer transition metal dichalcogenides. 2020 , 7, 015021	18
373	Inorganic 2D Luminescent Materials: Structure, Luminescence Modulation, and Applications. 2020 , 8, 1900978	29

372	Nonlinear excitonic spin Hall effect in monolayer transition metal dichalcogenides. 2020 , 7, 015003	3
371	Exciton-polaritons in multilayer WSe 2 in a planar microcavity. 2020 , 7, 015006	10
370	High optical quality of MoS 2 monolayers grown by chemical vapor deposition. 2020 , 7, 015011	40
369	Negative effective excitonic diffusion in monolayer transition metal dichalcogenides. 2020 , 12, 356-363	16
368	Optical Properties and Photocarrier Dynamics of Bi2O2Se Monolayer and Nanoplates. 2020 , 8, 1901567	10
367	Excited-State Properties of Janus Transition-Metal Dichalcogenides. 2020 , 124, 1667-1673	8
366	Electrical and Chemical Tuning of Exciton Lifetime in Monolayer MoS2 for Field-Effect Transistors. ACS Applied Nano Materials, 2020 , 3, 641-647	7
365	Chiral Coupling of Valley Excitons and Light through Photonic Spin Drbit Interactions. 2020 , 8, 1901233	24
364	Strong correlations and orbital texture in single-layer 1T-TaSe2. 2020 , 16, 218-224	56
363	Temperature dependence of photoluminescence lifetime of atomically-thin WSe layer. 2020 , 31, 135002	O
362	Chemical doping of transition metal dichalcogenides (TMDCs) based field effect transistors: A review. 2020 , 137, 106350	21
361	Optical characterization of two-dimensional semiconductors. 2020 , 135-166	1
360	Electrically controllable router of interlayer excitons. 2020 , 6,	20
359	Tunable Phases of Moir Excitons in van der Waals Heterostructures. 2020 , 20, 8534-8540	18
358	Observation of inter-layer charge transmission resonance at optically excited graphene MDC interfaces. <i>APL Materials</i> , 2020 , 8, 091114	5
357	Skew Scattering and Side Jump Drive Exciton Valley Hall Effect in Two-Dimensional Crystals. 7.4 7.4	5
356	Efficient Frequency Mixing of Guided Surface Waves by Atomically Thin Nonlinear Crystals. 2020 , 20, 7956-7963	6
355	Highly Efficient Multiple Exciton Generation and Harvesting in Few-Layer Black Phosphorus and Heterostructure. 2020 , 20, 8212-8219	6

(2020-2020)

354	Suppressing photoexcited electronflole recombination in MoSe2/WSe2 lateral heterostructures via interface-coupled state engineering: a time-domain ab initio study. 2020 , 8, 20621-20628	8
353	Up- and Down-Conversion between Intra- and Intervalley Excitons in Waveguide Coupled Monolayer WSe. 2020 , 14, 10503-10509	6
352	Microcavity exciton polaritons. 2020 , 105, 29-87	0
351	Dynamic polaronic screening for anomalous exciton spin relaxation in two-dimensional lead halide perovskites. 2020 , 6,	15
350	Highly Tunable Layered Exciton in Bilayer WS2: Linear Quantum Confined Stark Effect versus Electrostatic Doping. 2020 , 7, 3386-3393	0
349	Valley excitons: From monolayer semiconductors to moir uperlattices. 2020 , 105, 269-303	
348	Engineering Dielectric Screening for Potential-well Arrays of Excitons in 2D Materials. 2020 , 12, 55134-55140	4
347	Correlated insulating states at fractional fillings of moir[superlattices. 2020, 587, 214-218	82
346	Robust Interlayer Coupling in Two-Dimensional Perovskite/Monolayer Transition Metal Dichalcogenide Heterostructures. 2020 , 14, 10258-10264	28
345	Photocarrier Dynamics in TlGaS2 Nanoflakes and van der Waals Heterostructures with Hexagonal Boron Nitride and WS2 Nanoflakes: Implications for Optoelectronic Applications. <i>ACS Applied Nano</i> 5.6 <i>Materials</i> , 2020 , 3, 8702-8707	1
344	The optical properties of few-layer InSe. 2020 , 128, 060901	10
343	Layer-Dependent Electron Transfer and Recombination Processes in MoS/WSe Multilayer Heterostructures. 2020 , 11, 9649-9655	10
342	Valley-selective energy transfer between quantum dots in atomically thin semiconductors. 2020 , 10, 16971	2
341	Electric-field-driven exciton vortices in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2020 , 102,	4
340	Ultrafast Photocurrent Response and High Detectivity in Two-Dimensional MoSe-based Heterojunctions. 2020 , 12, 46476-46482	11
339	Theory of the Coherent Response of Magneto-Excitons and Magneto-Biexcitons in Monolayer Transition Metal Dichalcogenides. <i>Physical Review B</i> , 2020 , 102,	6
338	Self-consistent screening enhances the stability of the nonequilibrium excitonic insulator phase. <i>Physical Review B</i> , 2020 , 102,	4
337	Ground and excited state exciton polarons in monolayer MoSe. 2020 , 153, 071101	10

336	Integrated single photon emitters. 2020 , 2, 031701		14
335	Excitonic Lasers in Atomically Thin 2D Semiconductors. 2020 , 2, 1328-1342		4
334	Phonon-assisted exciton/trion conversion efficiency in transition metal dichalcogenides. <i>Physical Review B</i> , 2020 , 102,	3.3	1
333	Temporal Evolution of Low-Temperature Phonon Sidebands in Transition Metal Dichalcogenides. 2020 , 7, 2756-2764		9
332	Collective excitations in 2D materials. 2020 , 2, 524-537		10
331	Trion-to-exciton upconversion dynamics in monolayer WSe2. 2020 , 117, 083107		3
330	Giant Valley-Polarized Rydberg Excitons in Monolayer WSe Revealed by Magneto-photocurrent Spectroscopy. 2020 , 20, 7635-7641		3
329	A Self-Powered Photovoltaic Photodetector Based on a Lateral WSe-WSe Homojunction. 2020 , 12, 4493	34-449)4 2 5
328	Evidence of Rotational FrElich Coupling in Polaronic Trions. <i>Physical Review Letters</i> , 2020 , 125, 086803	7.4	8
327	2D Nanomaterial-Based Surface Plasmon Resonance Sensors for Biosensing Applications. 2020 , 11,		24
326	A colloquium on the variational method applied to excitons in 2D materials. 2020, 93, 1		8
325	Carrier relaxation to quantum emitters in few-layer WSe2. <i>Physical Review B</i> , 2020 , 102,	3.3	O
324	Dark-state impact on the exciton recombination of WS2 monolayers as revealed by multi-timescale pump-probe spectroscopy. <i>Physical Review B</i> , 2020 , 102,	3.3	2
323	Mechanisms and Applications of Steady-State Photoluminescence Spectroscopy in Two-Dimensional Transition-Metal Dichalcogenides. 2020 , 14, 14579-14604		20
322	Spectromicroscopic measurements of electronic structure variations in atomically thin WSe2. 2020 , 10, 095027		
321	Annihilation mechanism of excitons in a MoS2 monolayer through direct FEster-type energy transfer and multistep diffusion. <i>Physical Review B</i> , 2020 , 101,	3.3	6
320	Collective modes in excitonic insulators: Effects of electron-phonon coupling and signatures in the optical response. <i>Physical Review B</i> , 2020 , 101,	3.3	13
319	Quasiparticle energies and excitonic effects of chromium trichloride: From two dimensions to bulk. <i>Physical Review B</i> , 2020 , 101,	3.3	O

(2020-2020)

318	Synthesis of Two-Dimensional Perovskite by Inverse Temperature Crystallization and Studies of Exciton States by Two-Photon Excitation Spectroscopy. 2020 , 30, 2002661		9
317	Remote Lightening and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS. 2020 , 14, 6897-6905		8
316	Hybridized intervalley moir@excitons and flat bands in twisted WSe bilayers. 2020 , 12, 11088-11094		21
315	Multipath Optical Recombination of Intervalley Dark Excitons and Trions in Monolayer WSe_{2}. <i>Physical Review Letters</i> , 2020 , 124, 196802	7.4	21
314	Normal-Incidence-Excited Strong Coupling between Excitons and Symmetry-Protected Quasi-Bound States in the Continuum in Silicon Nitride-WS Heterostructures at Room Temperature. 2020 , 11, 4631-4638		15
313	Dislocations as Single Photon Sources in Two-Dimensional Semiconductors. 2020 , 20, 4136-4143		11
312	Spatiotemporally Resolved Optical Measurements on Photocarrier Dynamics in Copper Monosulfide. 2020 , 124, 14459-14464		1
311	Excited-state trions in two-dimensional materials. <i>Physical Review B</i> , 2020 , 101,	3.3	4
310	Microscopic model of the doping dependence of linewidths in monolayer transition metal dichalcogenides. 2020 , 152, 194705		8
309	Reconstructing Local Profile of Exciton-Emission Wavelengths across a WS Bubble beyond the Diffraction Limit. 2020 , 14, 6931-6937		5
308	Microscopic Modeling of Pump P robe Spectroscopy and Population Inversion in Transition Metal Dichalcogenides. 2020 , 257, 2000223		O
307	Controlling Exciton and Valley Dynamics in Two-Dimensional Heterostructures with Atomically Precise Interlayer Proximity. 2020 , 14, 4618-4625		23
306	Two-Dimensional to Three-Dimensional Growth of Transition Metal Diselenides by Chemical Vapor Deposition: Interplay between Fractal, Dendritic, and Compact Morphologies. 2020 , 12, 15885-15892		12
305	Nonconventional screening of Coulomb interaction in hexagonal boron nitride nanoribbons. <i>Physical Review B</i> , 2020 , 101,	3.3	3
304	Ultrafast band-gap renormalization and build-up of optical gain in monolayer MoTe2. <i>Physical Review B</i> , 2020 , 101,	3.3	8
303	Probing momentum-indirect excitons by near-resonance photoluminescence excitation spectroscopy in WS2 monolayer. 2020 , 7, 031002		9
302	Strained bilayer WSe2 with reduced exciton-phonon coupling. <i>Physical Review B</i> , 2020 , 101,	3.3	12
301	Band nesting and exciton spectrum in monolayer MoS2. <i>Physical Review B</i> , 2020 , 101,	3.3	5

300	Terahertz Excitonics in Carbon Nanotubes: Exciton Autoionization and Multiplication. 2020 , 20, 3098-31	05	13
299	Light-matter interaction in van der Waals hetero-structures. 2020 , 32, 333002		6
298	Electrical Control of Interband Resonant Nonlinear Optics in Monolayer MoS. 2020 , 14, 8442-8448		18
297	High oscillator strength interlayer excitons in two-dimensional heterostructures for mid-infrared photodetection. 2020 , 15, 675-682		56
296	Photoinduced charge transfer in transition metal dichalcogenide heterojunctions Leowards next generation energy technologies. 2020 , 13, 2684-2740		29
295	Universal Precise Growth of 2D Transition-Metal Dichalcogenides in Vertical Direction. 2020 , 12, 35337-3	35344	9
294	Transient absorption of transition metal dichalcogenide monolayers studied by a photodope-pump-probe technique. <i>Physical Review B</i> , 2020 , 102,	3.3	6
293	Optical properties of semiconducting transition metal dichalcogenide materials. 2020 , 57-75		1
292	Pumpprobe micro-spectroscopy and 2D materials. 2020 , 53, 473001		6
291	Brightening odd-parity excitons in transition-metal dichalcogenides: Rashba spin-orbit interaction, skyrmions, and cavity polaritons. <i>Physical Review B</i> , 2020 , 101,	3.3	1
29 0	Landau-Quantized Excitonic Absorption and Luminescence in a Monolayer Valley Semiconductor. <i>Physical Review Letters</i> , 2020 , 124, 097401	7.4	10
289	Revealing Strong Plasmon-Exciton Coupling between Nanogap Resonators and Two-Dimensional Semiconductors at Ambient Conditions. <i>Physical Review Letters</i> , 2020 , 124, 063902	7.4	39
288	Temperature-dependent Raman spectroscopy studies of 18-layer WSe2. 2020 , 13, 591-595		18
287	Layer-dependent signatures for exciton dynamics in monolayer and multilayer WSe2 revealed by fluorescence lifetime imaging measurement. 2020 , 13, 661-666		4
286	Thermal boundary conductance between high thermal conductivity boron arsenide and silicon. 2020 , 127, 055105		2
285	Broadband solar energy absorber based on monolayer molybdenum disulfide using tungsten elliptical arrays. 2020 , 16, 100390		102
284	Ultrafast nonequilibrium evolution of excitonic modes in semiconductors. <i>Physical Review B</i> , 2020 , 101,	3.3	18
283	Trends in Quantum Nanophotonics. 2020 , 3, 1900126		14

(2021-2020)

282	Direct Observation of the Linear Dichroism Transition in Two-Dimensional Palladium Diselenide. 2020 , 20, 1172-1182	42
281	Transient Absorption Microscopy of Layered Crystal AsSbS. 2020 , 124, 1047-1052	6
280	Valley phonons and exciton complexes in a monolayer semiconductor. 2020 , 11, 618	55
279	Strain dependence of second harmonic generation in transition metal dichalcogenide monolayers and the fine structure of the C exciton. <i>Physical Review B</i> , 2020 , 101,	10
278	Observation of Quantized Exciton Energies in Monolayer WSe2 under a Strong Magnetic Field. 2020 , 10,	5
277	Ultrafast charge transfer and vibronic coupling in a laser-excited hybrid inorganic/organic interface. 2020 , 5, 1749883	6
276	Dipolar interactions between localized interlayer excitons in van der Waals heterostructures. 2020 , 19, 624-629	49
275	Interplay of excitonic complexes in p-doped WSe2 monolayers. <i>Physical Review B</i> , 2020 , 101, 3.3	4
274	The optical conductivity of few-layer black phosphorus by infrared spectroscopy. 2020 , 11, 1847	17
273	Functionalization of single-layer TaS2 and formation of ultrathin Janus structures. 2020 , 35, 1397-1406	1
272	Two-dimensional materials for light emitting applications: Achievement, challenge and future perspectives. 2021 , 14, 1912-1936	11
271	Tunable Spectral Properties of Photodetectors Based on Quaternary Transition Metal Dichalcogenide Alloys MoxW(1-x)Se2yS2(1-y). 2021 , 21, 325-330	2
270	Strong exciton-photon interaction and lasing of two-dimensional transition metal dichalcogenide semiconductors. 2021 , 14, 1937-1954	9
269	Magnetic Field Induced Inter-Valley Trion Dynamics in Monolayer 2D Semiconductor. 2021 , 31, 2006064	2
268	Monolayer Excitonic Semiconductors Integrated with Au Quasi-Periodic Nanoterrace Morphology on Fused Silica Substrates for Light-Emitting Devices. <i>ACS Applied Nano Materials</i> , 2021 , 4, 84-93	1
267	Gravitational Search Algorithm for Calculating Exciton Binding Energy in Monolayer Transition Metal Dichalcogenides. 2021 , 50, 163-169	1
266	Guide to optical spectroscopy of layered semiconductors. 2021 , 3, 39-54	13
265	Theory and Ab Initio Calculation of Optically Excited States-Recent Advances in 2D Materials. 2021 , 33, e1904306	7

264 Optical Measurement Techniques. **2021**, 133-185

263	Valley Orientation of Electrons and Excitons in Atomically Thin Transition Metal Dichalcogenide Monolayers (Brief Review). 2021 , 113, 7-17	6
262	Investigations of Electron-Electron and Interlayer Electron-Phonon Coupling in van der Waals hBN/WSe/hBN Heterostructures by Photoluminescence Excitation Experiments. 2021 , 14,	1
261	Ray irradiation-induced unprecedent optical, frictional and electrostatic performances on CVD-prepared monolayer WSe 2021 , 11, 22088-22094	О
260	Engineering exciton many-body interaction in atomically thin MoS2. 2021 ,	
259	Entering a Two-Dimensional Materials World. 2021 , 17-59	
258	Reversible photoluminescence modulation of monolayer MoS on a ferroelectric substrate by light irradiation and thermal annealing. 2021 , 23, 17265-17270	
257	Hot carrier photovoltaics in van der Waals heterostructures. 2021 , 3, 178-192	32
256	Phonon-assisted exciton dissociation in transition metal dichalcogenides. 2021 , 13, 1884-1892	2
255	Stacking-tailoring quasiparticle energies and interlayer excitons in bilayer Janus MoSSe. 2021 , 23, 013003	1
254	A progressive journey into 2D-chalcogenide/carbide/nitride-based broadband photodetectors: recent developments and future perspectives.	3
253	Efficient phonon cascades in WSe monolayers. 2021 , 12, 538	12
252	Probing valley population imbalance in transition metal dichalcogenides via temperature-dependent second harmonic generation imaging. 2021 , 5,	5
251	A Facile Liquid Phase Exfoliation of Tungsten Diselenide using Dimethyl Sulfoxide as Polar Aprotic Solvent to Produce High-quality Nanosheets. 2021 , 7, 328-333	4
250	Tunable electronic properties of SnS2/WSe2 hetero-structure: A frist principle study. 2021 , 150, 106806	2
249	Control of the exciton valley dynamics in atomically thin semiconductors by tailoring the environment. <i>Physical Review B</i> , 2021 , 103,	3
248	Highly Enhanced Light-Matter Interaction in MXene Quantum Dots-Monolayer WS Heterostructure. 2021 , 17, e2006309	11
247	Ultrafast optical switching to a metallic state via photoinduced Mott transition in few-layer MoS2 under hydrostatic pressure. <i>Physical Review B</i> , 2021 , 103,	1

(2021-2021)

246	Modeling excitonic Mott transitions in two-dimensional semiconductors. <i>Physical Review B</i> , 2021 , 103,	3.3	О
245	Magneto-optics of layered two-dimensional semiconductors and heterostructures: Progress and prospects. 2021 , 129, 120902		4
244	Atomic-layer-confined multiple quantum wells enabled by monolithic bandgap engineering of transition metal dichalcogenides. 2021 , 7,		2
243	GW band structure of monolayer MoS2 using the SternheimerGW method and effect of dielectric environment. <i>Physical Review B</i> , 2021 , 103,	3.3	1
242	Many-Body Effect on Optical Properties of Monolayer Molybdenum Diselenide. 2021 , 12, 2555-2561		6
241	Filling Exciton Trap-States in Two-Dimensional Tungsten Disulfide (WS) and Diselenide (WSe) Monolayers. 2021 , 11,		1
240	Hexagonal WSe2 Nanoplates for Large-Scale Continuous Optoelectronic Films. <i>ACS Applied Nano Materials</i> , 2021 , 4, 5014-5021	5.6	5
239	Influences of thickness and gamma-ray irradiation on the frictional and electronic properties of WSe2 nanosheets. 2021 , 11, 045229		1
238	Enhanced nonlinear interaction of polaritons via excitonic Rydberg states in monolayer WSe. 2021 , 12, 2269		13
237	Spinorial formulation of the GW-BSE equations and spin properties of excitons in two-dimensional transition metal dichalcogenides. <i>Physical Review B</i> , 2021 , 103,	3.3	2
236	Layer-Dependent Electronic and Optical Properties of 2D Black Phosphorus: Fundamentals and Engineering. 2021 , 15, 2000399		8
235	Excitonic Emission in Atomically Thin Electroluminescent Devices. 2021 , 15, 2000587		2
234	Energy Scaling of Compositional Disorder in Ternary Transition-Metal Dichalcogenide Monolayers. 2021 , 7, 2100196		5
233	Enhanced Scattering between Electrons and Exciton-Polaritons in a Microcavity. <i>Physical Review Letters</i> , 2021 , 126, 197401	7.4	1
232	Superradiant Emission from Coherent Excitons in van Der Waals Heterostructures. 2021 , 31, 2102196		1
231	lonic gate spectroscopy of 2D semiconductors. 2021 , 3, 508-519		3
230	Simulations of Trions and Biexcitons in Layered Hybrid Organic-Inorganic Lead Halide Perovskites. <i>Physical Review Letters</i> , 2021 , 126, 216402	7.4	3
229	Tightly-bound trion and bandgap engineering via-ray irradiation in the monolayer transition metal dichalcogenide WSe. 2021 , 32,		О

228	Interlayer Excitonic Spectra of Vertically Stacked MoSe2/WSe2 Heterobilayers. 2021 , 258, 2000614		0
227	Intracavity second harmonic generation from a WSe2 monolayer in a passively mode-locked picosecond fiber laser. 2021 , 11, 1603		O
226	Remote growth of oxide heteroepitaxy through MoS2. APL Materials, 2021, 9, 051115	5.7	1
225	Light-matter interactions in high quality manganese-doped two-dimensional molybdenum diselenide. 2021 , 64, 2507-2518		O
224	Directional Emission from Tungsten Disulfide Monolayer Coupled to Plasmonic Nanowire-on-Mirror Cavity. 2021 , 2, 2100002		O
223	Theory of polariton-electron interactions in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 103,	3.3	1
222	Evidence for Moir [®] Trions in Twisted MoSe Homobilayers. 2021 , 21, 4461-4468		5
221	Giant Linear and Nonlinear Excitonic Responses in an Atomically Thin Indirect Semiconductor Nitrogen Phosphide. 2021 , 125, 12738-12757		3
220	Opening band gaps of low-dimensional materials at the meta-GGA level of density functional approximations. <i>Physical Review Materials</i> , 2021 , 5,	3.2	8
219	The influence of Coulomb interaction screening on the excitons in disordered two-dimensional insulators. 2021 , 11, 11956		3
218	Valley-Dependent Interlayer Excitons in Magnetic WSe/CrI. 2021 , 21, 5173-5178		5
217	Probing the Chiral Domains and Excitonic States in Individual WS Tubes by Second-Harmonic Generation. 2021 , 21, 4937-4943		4
216	Broadband Plasmon-Enhanced Four-Wave Mixing in Monolayer MoS. 2021 , 21, 6321-6327		7
215	Semiclassical approach for excitonic spectrum of Coulomb coupling between two Dirac particles. 2021 , 477, 20210098		
214	Spin/Valley Coupled Dynamics of Electrons and Holes at the MoS-MoSe Interface. 2021 , 21, 7123-7130		2
213	Role of dark exciton states in the relaxation dynamics of bright 1s excitons in monolayer WSe2. 2021 , 119, 093101		O
212	Defect-Enhanced Exciton E xciton Annihilation in Monolayer Transition Metal Dichalcogenides at High Exciton Densities. 2021 , 8, 2770-2780		4
211	Imaging Seebeck drift of excitons and trions in MoSe2 monolayers. 2021 , 8, 045014		1

2 10	Excitonic two-photon absorption in monolayer transition metal dichalcogenides: Impact of screening and trigonal warping. <i>Physical Review B</i> , 2021 , 104,	
209	Magnetic-field tuning of the intraexcitonic absorption and gain in transition metal dichalcogenides. <i>Physical Review B</i> , 2021 , 104, 3.3	
208	Inorganic-organic interfaces in hybrid solar cells.	4
207	Radiative lifetime and dynamics of trions in few-layered ReS2. 2021 , 119, 113103	2
206	Photocarrier Dynamics in MoTe Nanofilms with 2 and Distorted 1 Lattice Structures. 2021 , 13, 44703-44710	1
205	Electron⊞ole Plasma-Induced Dephasing in Transition Metal Dichalcogenides. 2021 , 15, 2100391	
204	Recent developments in two-dimensional layered tungsten dichalcogenides based materials for gas sensing applications. 2021 , 28, 102717	1
203	Narrow-band high-lying excitons with negative-mass electrons in monolayer WSe. 2021 , 12, 5500	5
202	WS2/WSe2 Nanodot Composite Photodetectors for Fast and Sensitive Light Detection.	1
201	Localized polariton states in a photonic crystal intercalated by a transition metal dichalcogenide monolayer. 2021 , 38, C225	O
200	Charged Bosons Made of Fermions in Bilayer Structures with Strong Metallic Screening. 2021 , 21, 7669-7675	5
199	Extracting Electrons from Delocalized Excitons by Flattening the Energetic Pathway for Charge Separation. 2021 , 12, 9047-9054	O
198	Vibrational and optical identification of GeO and GeO single layers: a first-principles study. 2021 , 23, 21307-21315	1
197	Optical properties of two-dimensional black phosphorus. 2021 , 70, 027802-027802	3
196	Binding energy and decaytime of exciton in dielectric medium. 2021 , 94, 1	10
195	Defect-related dynamics of photoexcited carriers in 2D transition metal dichalcogenides. 2021 , 23, 8222-823	5 5
194	Strong plasmon-exciton coupling in transition metal dichalcogenides and plasmonic nanostructures. 2021 , 13, 4408-4419	7
193	Creation of moir[bands in a monolayer semiconductor by spatially periodic dielectric screening. 2021 , 20, 645-649	15

192	In-Plane Isotropic/Anisotropic 2D van der Waals Heterostructures for Future Devices. 2019 , 15, e1804733		30
191	Measurement of the Optical Dielectric Function of Monolayer Transition Metal Dichalcogenides: MoS2, MoSe2, WS2, and WSe2. 2016 , 33-43		10
190	Valley Splitting and Polarization by Zeeman Effect in Monolayer MoSe2. 2016 , 55-64		5
189	Effects of dielectric stoichiometry on the photoluminescence properties of encapsulated WSe2 monolayers. 2018 , 11, 1399-1414		10
188	Driven dipolariton transistors in Y-shaped channels. 2020 , 384, 126855		2
187	Coupled 2D SemiconductorMolecular Excitons with Enhanced Raman Scattering. 2020 , 124, 27637-27644		2
186	Time-Resolved Measurements of Photocarrier Dynamics in TiS3 Nanoribbons. 2016, 8, 18334-8		24
185	Microscopic Coulomb interaction in transition-metal dichalcogenides. 2020,		2
184	van der Waals coefficients of the multi-layered MoS2 with alkali metals. 2020 , 95, 095506		1
183	Optical dispersion of valley-hybridised coherent excitons with momentum-dependent valley polarisation in monolayer semiconductor. 2021 , 8, 015009		7
182	Surface susceptibility and conductivity of MoS2 and WSe2 monolayers: A first-principles and ellipsometry characterization. <i>Physical Review B</i> , 2020 , 101,	3	16
181	Engineering of optical and electronic band gaps in transition metal dichalcogenide monolayers through external dielectric screening. <i>Physical Review Materials</i> , 2017 , 1,	2	55
180	Optical spectroscopy of excited exciton states in MoS2 monolayers in van der Waals heterostructures. <i>Physical Review Materials</i> , 2018 , 2,	2	60
179	Molecule signatures in photoluminescence spectra of transition metal dichalcogenides. <i>Physical Review Materials</i> , 2018 , 2,	2	4
178	Stable biexcitons in two-dimensional metal-halide perovskites with strong dynamic lattice disorder. Physical Review Materials, 2018, 2,	2	66
177	Effect of a pick-and-drop process on optical properties of a CVD-grown monolayer tungsten disulfide. <i>Physical Review Materials</i> , 2018 , 2,	2	3
176	Signatures of defect-localized charged excitons in the photoluminescence of monolayer molybdenum disulfide. <i>Physical Review Materials</i> , 2018 , 2,	2	4
175	Exciton Mott transition revisited. <i>Physical Review Materials</i> , 2019 , 3,	2	6

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174	Disorder-induced broadening of excitonic resonances in transition metal dichalcogenides. <i>Physical Review Materials</i> , 2019 , 3,	1
173	Valley-selective chiral phonon replicas of dark excitons and trions in monolayer WSe2. 2019 , 1,	29
172	Many-body effects for excitonic high-order wave mixing in monolayer transition metal dichalcogenides. 2020 , 2,	3
171	Polariton interactions in microcavities with atomically thin semiconductor layers. 2020 , 2,	6
170	Emerging material systems for integrated optical Kerr frequency combs. 2020 , 12, 135	37
169	Tunable strong exciton-plasmon-exciton coupling in WS-J-aggregates-plasmonic nanocavity. 2019 , 27, 16613-16623	9
168	Shedding light on exciton's nature in monolayer quantum material by optical dispersion measurements. 2019 , 27, 37131-37149	8
167	Observation of double indirect interlayer exciton in WSe/WS heterostructure. 2020 , 28, 13260-13268	14
166	Radially polarized light beams from spin-forbidden dark excitons and trions in monolayer WSe2. 2020 , 10, 1273	3
165	Second harmonic generation spectroscopy on two-dimensional materials [Invited]. 2019 , 9, 1136	27
164	Electrically tunable valley polarization and valley coherence in monolayer WSe 2 embedded in a van der Waals heterostructure. 2019 , 9, 1479	11
163	Layer-modulated two-photon absorption in MoS2: probing the shift of the excitonic dark state and band-edge. 2019 , 7, 762	11
162	Fine structures of valley-polarized excitonic states in monolayer transitional metal dichalcogenides. 2020 , 9, 1811-1829	7
161	Polariton panorama. 2020 , 10, 549-577	47
160	Valley depolarization in downconversion and upconversion emission of monolayer WS2 at room temperature. 2020 , 9, 4809-4818	2
159	Prediction of hyperbolic exciton-polaritons in monolayer black phosphorus. 2021 , 12, 5628	6
158	Interlayer Exciton in Transition Metal Dichalcogenide Semiconductors for 2D Optoelectronics. 2021 , e2107138	4
157	Polaritons in an Electron GasiQuasiparticles and Landau Effective Interactions. 2021 , 9, 81	1

156	Impurity-Induced Robust Trionic Effect in Layered Violet Phosphorus. 2101538	3
155	Robust Interlayer Exciton in WS/MoSe van der Waals Heterostructure under High Pressure. 2021 , 21, 8035-8042	6
154	Introduction and Background. 2016 , 1-8	
153	Tunneling Transport Between Transition Metal Dichalcogenides. 2017 , 49-64	
152	Valley Polarization Dynamics of Inter- and Intra-valley Trions in Monolayer WSe2. 2017,	
151	Photoluminescence Studies of Excitonic Complexes in Atomically Thin Mo(SySe1-y)2 Alloys. 2017 , 132, 307-312	O
150	Tuning Electronic Transport in WSe2-Graphene. 2018 , 103-112	
149	Two-photon absorption in layered transition metal dichalcogenides. 2018,	
148	Effect of self-care guidelines on knowledge and quality of life among faculty of nursing students with vaginal infection . 2019 , 10,	
147	Excitons in Low-Dimensional Semiconductor Structures. 2019 , 405-452	
146	Exciton dynamics in atomically thin semiconductors: optical lineshape, intervalley coupling, and luminescence dynamics. 2019 ,	
145	Optical response of atomically thin materials: a focus on ellipsometric measurements. 2019,	
144	Optical-field induced SU(2) pair potential in caesium lead halide perovskites. 2021 , 35, 2150030	
143	Ultrafast and High-Yield Polaronic Exciton Dissociation in Two-Dimensional Perovskites. 2021 , 143, 19128-19	9136
142	Probing Electronic States in Monolayer Semiconductors through Static and Transient Third-Harmonic Spectroscopies. 2021 , e2107104	0
141	Phonon scattering and exciton localization: molding exciton flux in two dimensional disorder energy landscape. 2021 , 1,	15
140	Strong exciton-photon coupling in large area MoSe2 and WSe2 heterostructures fabricated from two-dimensional materials grown by chemical vapor deposition. 2021 , 8, 011002	4
139	Trap-free exciton dynamics in monolayer WS oleic acid passivation. 2021,	1

138 Two-dimensional WSe2 flakes under high power optical excitation. **2021**, 7, 109-113

137	Phase Diagram of ElectronHole Liquid in Monolayer Heterostructures Based on Transition Metal Dichalcogenides. 2021 , 133, 494-507	1
136	Probing biexciton in monolayer WS2 through controlled many-body interaction.	1
135	Valley-contrasting interband transitions and excitons in symmetrically biased dice model. <i>Physical Review B</i> , 2021 , 104,	1
134	Fine structure mediated magnetic response of trion valley polarization in monolayer WSe2. <i>Physical Review B</i> , 2021 , 104,	O
133	Brightening of dark excitons in 2D perovskites. 2021 , 7, eabk0904	8
132	Exciton luminescence and many-body effect of monolayer WS2 at room-temperature.	O
131	Atomlike interaction and optically tunable giant band-gap renormalization in large-area atomically thin MoS2. <i>Physical Review B</i> , 2021 , 104,	2
130	Mid-infrared photonics and optoelectronics in 2D materials. 2021 ,	3
129	Excitons and emergent quantum phenomena in stacked 2D semiconductors. 2021 , 599, 383-392	24
128	Approaching the intrinsic exciton physics limit in two-dimensional semiconductor diodes. 2021 , 599, 404-410	7
127	Doping-induced non-Markovian interference causes excitonic linewidth broadening in monolayer WSe2. <i>Physical Review B</i> , 2022 , 105,	1
126	Many-body Interactions in Halide-assisted CVD Grown WSe2 for High Performance Photodetectors. 2020 ,	1
125	Bright excitonic multiplexing mediated by dark exciton transition in two-dimensional TMDCs at room temperature 2022 ,	1
124	Universality of optical absorptance quantization in two-dimensional group-IV, III-V, II-VI, and IV-VI semiconductors. <i>Physical Review B</i> , 2022 , 105,	O
123	Probing dark exciton navigation through a local strain landscape in a WSe monolayer 2022 , 13, 232	8
122	An Asymmetry Field-Effect Phototransistor for Solving Large Exciton Binding Energy of 2D TMDCs. 2021 , e2107468	2
121	Giant Photoresponse Enhancement in Mixed-Dimensional Van der Waals Heterostructure through Dielectric Engineering. 2102054	2

120	Plexcitonic strong coupling: unique features, applications, and challenges. 2022 , 55, 203002		4
119	Morphological Control of 2D Hybrid Organic-Inorganic Semiconductor AgSePh 2022,		4
118	GaS:WS Heterojunctions for Ultrathin Two-Dimensional Photodetectors with Large Linear Dynamic Range across Broad Wavelengths. 2021 ,		7
117	Giant Rydberg excitons in Cu2O probed by photoluminescence excitation spectroscopy. <i>Physical Review B</i> , 2021 , 104,	3.3	O
116	Evidence for highly p-type doping and type II band alignment in large scale monolayer WSe/Se-terminated GaAs heterojunction grown by molecular beam epitaxy 2022 ,		О
115	Durable polymer solar cells produced by the encapsulation of a WSe2 hole-transport layer and Etarotene as an active layer additive.		
114	A Waveguide-Integrated Two-Dimensional Light-Emitting Diode Based on p-Type WSe/n-Type CdS Nanoribbon Heterojunction 2022 ,		1
113	Chiral phonons and pseudoangular momentum in nonsymmorphic systems. 2022 , 4,		2
112	Excitons in semiconductor moir uperlattices 2022,		9
111	Enhanced Light-Matter Interaction in Two-Dimensional Transition Metal Dichalcogenides 2021 ,		4
110	Local Plasmon Phase Delay Effect in Plasmon Exciton Coupling. 2102380		
109	Unveiling the electrical and photo-physical properties of intrinsic n-type 2D WSe2 for high performance field-effect transistors. 2022 , 131, 094301		
108	Photoexcitation Dynamics and Long-lived Excitons in Strain-engineered Transition Metal Dichalcogenides 2022 , e2110568		1
107	Two-Dimensional Self-Assembly of Boric Acid-Functionalized Graphene Quantum Dots: Tunable and Superior Optical Properties for Efficient Eco-Friendly Luminescent Solar Concentrators 2022 ,		1
106	Molding 2D Exciton Flux toward Room Temperature Excitonic Devices. 2200032		0
105	Engineering Radiative Energy Transfer and Directional Excitonic Emission in van der Waals Heterostructures. 2100737		1
104	Directing monolayer tungsten disulfide photoluminescence using a bent-plasmonic nanowire on a mirror cavity.		1
103	Spatiotemporally Coupled Electron-Hole Dynamics in Two Dimensional Heterostructures 2022,		1

102	Strong Light-Matter Interactions between Gap Plasmons and Two-Dimensional Excitons under Ambient Conditions in a Deterministic Way 2022 ,		3
101	Optical Response of CVD-Grown ML-WS2 Flakes on an Ultra-Dense Au NP Plasmonic Array. 2022 , 10, 120		O
100	Electronic structure of 2D van der Waals crystals and heterostructures investigated by spatially-and angle-resolved photoemission. 2021 , 22, 107-131		
99	Dominating Interlayer Resonant Energy Transfer in Type-II 2D Heterostructure 2022,		4
98	Microscopic modeling of exciton-polariton diffusion coefficients in atomically thin semiconductors. <i>Physical Review Materials</i> , 2022 , 6,	3.2	1
97	Probing Nanoscale Schottky Barrier Characteristics at WSe 2 /Graphene Heterostructures via Electrostatic Doping. 2200196		1
96	Molecular beam epitaxy of two-dimensional semiconductor Bil3 films exhibiting sharp exciton absorption. 2021 , 119, 243101		1
95	Two Dimensional Perovskites/Transition Metal Dichalcogenides Heterostructures: Puzzles and Challenges.		1
94	Greatly Enhanced Plasmon-Exciton Coupling in Si/WS/Au Nanocavities 2021,		4
93	Optical Harmonic Generation in 2D Materials. 2022 , 32, 2105259		7
93 92	Optical Harmonic Generation in 2D Materials. 2022 , 32, 2105259 Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 104,	3.3	7 0
	Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> ,	3.3	
92	Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 104, An efficient route to prepare suspended monolayer for feasible optical and electronic	3.3	0
92 91	Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 104, An efficient route to prepare suspended monolayer for feasible optical and electronic characterizations of two-dimensional materials. 2022 , 4, Enhancement of photoluminescence of monolayer transition metal dichalcogenide by	3.3	0
92 91 90	Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 104, An efficient route to prepare suspended monolayer for feasible optical and electronic characterizations of two-dimensional materials. 2022 , 4, Enhancement of photoluminescence of monolayer transition metal dichalcogenide by subwavelength TiO₂ grating. 2022 , 71, 087801	3.3	6
92 91 90 89	Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 104, An efficient route to prepare suspended monolayer for feasible optical and electronic characterizations of two-dimensional materials. 2022 , 4, Enhancement of photoluminescence of monolayer transition metal dichalcogenide by subwavelength TiO₂ grating. 2022 , 71, 087801 The Magnetic Genome of Two-Dimensional van der Waals Materials 2022 , Symmetry Engineering Induced In-Plane Polarization in MoS 2 through Van der Waals Interlayer	3:3	6
92 91 90 89 88	Microscopic calculation of polariton scattering in semiconductor microcavities. <i>Physical Review B</i> , 2021 , 104, An efficient route to prepare suspended monolayer for feasible optical and electronic characterizations of two-dimensional materials. 2022 , 4, Enhancement of photoluminescence of monolayer transition metal dichalcogenide by subwavelength TiO₂ grating. 2022 , 71, 087801 The Magnetic Genome of Two-Dimensional van der Waals Materials 2022 , Symmetry Engineering Induced In-Plane Polarization in MoS 2 through Van der Waals Interlayer Coupling. 2202658 On the importance of electron-electron and electron-phonon scatterings and energy	3.3	o 6 10 6

84 Theory of Excitons in Atomically Thin Semiconductors: Tight-Binding Approach.. 2022, 12,

83	Photoluminescence Induced by Substitutional Nitrogen in Single-Layer Tungsten Disulfide 2022 ,		1
82	Directional Exciton-Energy Transport in a Lateral Heteromonolayer of WSe-MoSe 2022,		4
81	Crescent-Shaped Shadow of Second Harmonic Generation in Dielectric Microsphere/TMD Monolayer Heterostructure.		1
80	Direct observation of contact resistivity for monolayer TMD based junctions via PL spectroscopy.		
79	Exciton binding energy and screening length in two-dimensional semiconductors. <i>Physical Review B</i> , 2022 , 105,	3.3	O
78	Reliable and broad-range layer identification of Au-assisted exfoliated large area MoS2 and WS2 using reflection spectroscopic fingerprints.		1
77	Giant bulk photovoltaic effect driven by the wall-to-wall charge shift in WS2 nanotubes. 2022 , 13,		1
76	Energy transfer in a type-I van der Waals heterostructure of WSe2/PtSe2. 2022, 9, 035019		О
75	The rise of 2D materials/ferroelectrics for next generation photonics and optoelectronics devices. <i>APL Materials</i> , 2022 , 10, 060903	5.7	3
74	Giant excitonic upconverted emission from two-dimensional semiconductor in doubly resonant plasmonic nanocavity. <i>Light: Science and Applications</i> , 2022 , 11,	16.7	1
73	Chiral phonons entangled with multiple Hall effects and unified convention for pseudoangular momentum in two-dimensional materials. <i>Physical Review B</i> , 2022 , 105,	3.3	1
72	Optical nonlinearities in the excited carrier density of atomically thin transition metal dichalcogenides. <i>Physical Review B</i> , 2022 , 106,	3.3	
71	Ultrafast phonon-driven charge transfer in van der Waals heterostructures. Natural Sciences,		1
70	Strong light-matter interactions in hybrid nanostructures with transition metal dichalcogenides. <i>Journal of Optics (United Kingdom)</i> ,	1.7	О
69	Positively Charged Biexcitons in Monolayer WSe2 in Type-I GaSe/WSe2 van der Waals Heterostructures: Implications for the Biexciton Laser. <i>ACS Applied Nano Materials</i> ,	5.6	
68	Substrate influence on transition metal dichalcogenide monolayer exciton absorption linewidth broadening. <i>Physical Review Materials</i> , 2022 , 6,	3.2	0
67	Valley engineering electron-hole liquids in transition metal dichalcogenide monolayers. <i>Physical Review B</i> , 2022 , 106,	3.3	O

66	Dielectric catastrophe at the Wigner-Mott transition in a moir uperlattice. 2022, 13,	1
65	Large Exciton-Driven Linear and Nonlinear Optical Processes in Monolayers of Nitrogen Arsenide and Nitrogen Antimonide.	O
64	Temperature- and Power-Dependent Characteristics of Heterointerlayer Excitons Emitting in the Visible Region of a WS2/PbI2 Nanostructure: Implications in Excitonic Devices. 2022 , 5, 11167-11175	1
63	Magneto-optical measurements of the negatively charged 2s exciton in WSe2. 2022 , 106,	
62	Electronic gap characterization at mesoscopic scale via scanning probe microscopy under ambient conditions. 2022 , 13,	О
61	Polarized Photoluminescence Enhancement of Monolayer MoS 2 Coupled with Plasmonic Salisbury-Type Absorber. 2200008	
60	Calculation of Excited-State Properties. 2022 , 123-143	
59	Interlayer interactions in transition metal dichalcogenides heterostructures. 2022 , 9, 100077	
58	Chapter 1. Introduction. 2022 , 1-32	0
57	Local strain and tunneling current modulate excitonic luminescence in MoS2 monolayers. 2022 , 12, 249	22-24929
56	Analysis of localized excitons in strained monolayer WSe2 by first principles calculations. 2022 , 14, 113	70.44207
55		/8-1138Ø
))	Valley dynamics of different excitonic states in monolayer WSe2 grown by molecular beam epitaxy. 2022 , 43, 082001	78-1138 <i>φ</i> Ο
54		
	2022, 43, 082001 Ultrasonication assisted exfoliation of MoSe2 nanosheets for optical and optical power limiting	0
54	2022, 43, 082001 Ultrasonication assisted exfoliation of MoSe2 nanosheets for optical and optical power limiting applications. 2022, 132, 103101	0
54 53	2022, 43, 082001 Ultrasonication assisted exfoliation of MoSe2 nanosheets for optical and optical power limiting applications. 2022, 132, 103101 Exciton resonances for atomically-thin optics. 2022, 132, 091102	0 0
54 53 52	Ultrasonication assisted exfoliation of MoSe2 nanosheets for optical and optical power limiting applications. 2022, 132, 103101 Exciton resonances for atomically-thin optics. 2022, 132, 091102 Tuning exciton complexes in twisted bilayer WSe2 at intermediate misorientation. 2022, 106, Screening of the Coulomb interaction in C3N: Reduced dimensionality and electronic structure	o o o

48	Robust room-temperature ferromagnetism induced by defect engineering in monolayer MoS2. 2022 , 155220	O
47	Probing Spin Dynamics of 2D Excitons with Twisted Light.	1
46	Nano-optical imaging of excitonBlasmon polaritons in WSe2/Au heterostructures. 2022 , 14, 15663-15668	0
45	Tailoring the superposition of finite-momentum valley exciton states in transition-metal dichalcogenide monolayers by using polarized twisted light. 2022 , 106,	O
44	Photo-dynamics in 2D materials: Processes, tunability and device applications. 2022 , 993, 1-70	0
43	Optical Nonlinearity in 2D Semiconductors. 2022 ,	О
42	Surface Acoustic Waves Induced Phenomena in Two-dimensional Materials.	Ο
41	Hybrid electroluminescent devices composed of (In,Ga)N micro-LEDs and monolayers of transition metal dichalcogenides.	O
40	Quantum Photon Sources in WSe2 Monolayers Induced by Weakly Localized Strain Fields.	1
39	Plexcitonic interactions in spherical and bi-pyramidical Au nanoparticles with monolayer WSe2. 2022 , 121, 201108	O
38	Signatures of dark excitons in exciton-polariton optics of transition metal dichalcogenides.	Ο
37	Band valley modification under strain in monolayer WSe2. 2022 , 12, 115023	O
36	Vacancy-Mediated Anomalous Emission Characteristics of Size-Confined Semiconducting CoTe2.	Ο
35	Mixed dimensional Transition Metal Dichalcogenides (TMDs) vdW Heterostructure based Photodetectors: A review. 2023 , 269, 111926	Ο
34	Pristine Interlayer Coupling for Strain Engineering of WS2/WSe2 Nanosheet-Based van der Waals Heterostructures. 2022 , 5, 17986-17994	Ο
33	Light Emission in 2D Silver Phenylchalcogenolates.	2
32	Hot exciton effect in photoluminescence of monolayer transition metal dichalcogenide.	О
31	Role of the Berry curvature on BCS-type superconductivity in two-dimensional materials. 2022 , 106,	Ο

30	Electrical tuning of moir@xcitons in MoSe2 bilayers. 2023 , 10, 014013	О
29	Semiconductor Bloch equation analysis of optical Stark and Bloch-Siegert shifts in monolayer WSe2 and MoS2. 2022 , 106,	1
28	Two-dimensional optoelectronic devices for silicon photonic integration. 2022,	О
27	Tip-Enhanced Dark Exciton Nanoimaging and Local Strain Control in Monolayer WSe2.	1
26	All-inorganic non-perovskite copper halides for light emission. 2022 , 3, 101171	1
25	Cluster Formation Effect of Water on Pristine and Defective MoS2 Monolayers. 2023 , 13, 229	1
24	A review of the synthesis, properties, and applications of 2D transition metal dichalcogenides and their heterostructures. 2023 , 127332	0
23	Excited state biexcitons in monolayer WSe2 driven by vertically grown graphene nanosheets with high-density electron trapping edges. 2023 , 18,	O
22	Pressure-tuning the interlayer excitons in the GaS/HfS2 heterobilayer: A many-body perturbation simulation. 2023 , 614, 156272	О
21	Orientation-Dependent Interaction between the Magnetic Plasmons in Gold Nanocups and the Excitons in WS2 Monolayer and Multilayer.	O
20	All-optically generating and monitoring interlayer expansion of layered GaSe via in situ second harmonic generation. 2023 , 122, 043102	О
19	Strong coupling of multiple plasmon modes and excitons with excitation light controlled active tuning. 2023 ,	2
18	Optical spectroscopy study of two-dimensional materials. 2023 , 305-335	0
17	Prolonging exciton lifetime of WSe2 monolayer through image dipole interaction leading to huge enhancement of photocurrent. 2023 , 12, 695-703	O
16	Strong anisotropic optical response in two-dimensional Mo-VIA and Mo-VIIA monolayer binary materials. 2023 , 53, 101114	О
15	Crossover from strong to weak exciton confinement in thickness-controlled epitaxial PbI2 thin films. 2023 , 122, 073101	O
14	Hybrid Heterostructures to Generate Long-Lived and Mobile Photocarriers in Graphene. 2023 , 17, 3939-3947	0
13	Layer-dependent dielectric modulation in WS2/GaN heterostructures. 2023, 107,	O

12	Tunable band-structures of MSe2/C3N (M = Mo and W) van der Waals Heterojunctions. 2023, 10, 035004	O
11	Polarity-Driven Atomic Displacements at the 2D Mg 2 TiO 4 -MgO (001) Oxide Interface for Hosting Potential Interlayer Excitons. 2023 , 10,	O
10	Ultrafast hot electronflole plasma photoluminescence in two-dimensional semiconductors. 2023 , 15, 7154-7163	O
9	Coulomb enhancement of high harmonic generation in monolayer transition metal dichalcogenides. 2023 , 48, 2094	O
8	Pair-Density-Wave and Chiral Superconductivity in Twisted Bilayer Transition Metal Dichalcogenides. 2023 , 130,	O
7	Evidence of defect formation in monolayer MoS2 at ultralow accelerating voltage electron irradiation. 2023 , 10, 035002	O
6	Local dielectric function of hBN-encapsulated WS2 flakes grown by chemical vapor deposition. 2023 , 35, 274001	O
5	Thermal effect on magnetoexciton energy spectra in monolayer transition metal dichalcogenides. 2023 , 107,	O
4	Intrinsic Control of Interlayer Exciton Generation in Van der Waals Materials via Janus Layers.	O
3	Stacking effect on the electronic structures of hexagonal GaTe.	O
2	Nanometer-Scale Structure Property of WS2 Flakes by Nonlinear Optical Microscopy: Implications for Optical Frequency Converted Signals.	0
1	Dark-exciton energy splitting in monolayer WSe2 : Insights from time-dependent density functional theory. 2023 , 107,	O