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**Coupled spin and valley physics in monolayers of MoS<sub>2</sub> and other group-VI dichalcogenides**

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2053	Exciton valley dynamics probed by Kerr rotation in WSe <sub>2</sub> monolayers. <b>2014</b> , 90,		207
2052	Spin-Orbit Coupling, Quantum Dots, and Qubits in Monolayer Transition Metal Dichalcogenides. <b>2014</b> , 4,		183
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2049	Plasma modified MoS <sub>2</sub> nanoflakes for surface enhanced raman scattering. <b>2014</b> , 10, 1090-5		95
2048	Spin- and valley-dependent magnetotransport in periodically modulated silicene. <b>2014</b> , 90,		29
2047	Nonlinear photoluminescence in atomically thin layered WSe <sub>2</sub> arising from diffusion-assisted exciton-exciton annihilation. <b>2014</b> , 90,		168
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2044	Observation of topological structures in photonic quantum walks. <i>Physical Review Letters</i> , <b>2014</b> , 112, 120502	7-4	7
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2042	Third-harmonic generation in ultrathin films of MoS <sub>2</sub> . <b>2014</b> , 6, 314-8		137
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2032	Possible topological superconducting phases of MoS <sub>2</sub> . <i>Physical Review Letters</i> , <b>2014</b> , 113, 097001	7.4	104
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2028	Valley-dependent spin polarization in bulk MoS <sub>2</sub> with broken inversion symmetry. <b>2014</b> , 9, 611-7		306
2027	Spin and valley noise in two-dimensional Dirac materials. <i>Physical Review Letters</i> , <b>2014</b> , 113, 046602	7.4	15
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2022	Effect of doping and strain modulations on electron transport in monolayer MoS <sub>2</sub> . <b>2014</b> , 90,		49
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2015	Effects of V-shaped edge defect and H-saturation on spin-dependent electronic transport of zigzag MoS <sub>2</sub> nanoribbons. <b>2014</b> , 378, 2701-2707		11
2014	Direct chemical vapor deposition growth of WS <sub>2</sub> atomic layers on hexagonal boron nitride. <b>2014</b> , 8, 8273-7		234
2013	Dense network of one-dimensional midgap metallic modes in monolayer MoSe <sub>2</sub> and their spatial undulations. <i>Physical Review Letters</i> , <b>2014</b> , 113, 066105	7-4	135
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1810	Electric Field and Strain Effect on Graphene-MoS <sub>2</sub> Hybrid Structure: Ab Initio Calculations. <b>2015</b> , 6, 3269-3275	86
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1763	Exciton radiative lifetimes in two-dimensional transition metal dichalcogenides. <b>2015</b> , 15, 2794-800	409
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1738	Polarization and time-resolved photoluminescence spectroscopy of excitons in MoSe <sub>2</sub> monolayers. <b>2015</b> , 106, 112101	110
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1734	Two-dimensional transition metal dichalcogenides as atomically thin semiconductors: opportunities and challenges. <b>2015</b> , 44, 8859-76	719
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1726	Observation of Ultrafast Free Carrier Dynamics in Single Layer MoS <sub>2</sub> . <b>2015</b> , 15, 5883-7	106
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1720	Single-Spin Dirac Fermion and Chern Insulator Based on Simple Oxides. <b>2015</b> , 15, 6434-9	73
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1717	High-Mobility Holes in Dual-Gated WSe <sub>2</sub> Field-Effect Transistors. <b>2015</b> , 9, 10402-10	180
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1713	Emergence of electron coherence and two-color all-optical switching in MoS <sub>2</sub> based on spatial self-phase modulation. <b>2015</b> , 112, 11800-5	100
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1709	Measurement of Ultrafast Excitonic Dynamics of Few-Layer MoS <sub>2</sub> Using State-Selective Coherent Multidimensional Spectroscopy. <b>2015</b> , 9, 12146-57	29
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1174	Strong electron-hole symmetric Rashba spin-orbit coupling in graphene/monolayer transition metal dichalcogenide heterostructures. <b>2017</b> , 96,	71

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1172	Repairing atomic vacancies in single-layer MoSe <sub>2</sub> field-effect transistor and its defect dynamics. <b>2017</b> , 2,		27
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1162	In Situ Transmission Electron Microscopy Characterization and Manipulation of Two-Dimensional Layered Materials beyond Graphene. <b>2017</b> , 13, 1604259		51
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1156	Structural and electronic properties of MoS <sub>2</sub> , WS <sub>2</sub> , and WS <sub>2</sub> /MoS <sub>2</sub> heterostructures encapsulated with hexagonal boron nitride monolayers. <b>2017</b> , 122, 065303		29

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1153	Charged excitons in monolayer WSe <sub>2</sub> : Experiment and theory. <b>2017</b> , 96,	137
1152	Electronic Properties and Strain Engineering in Semiconducting Transition Metal Dichalcogenides. 259-278	
1151	Valley-Spin Physics in 2D Semiconducting Transition Metal Dichalcogenides. 279-294	
1150	Optical Properties of TMD Heterostructures. 310-328	1
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1136	Van der Waals epitaxial growth and optoelectronics of large-scale WSe/SnS vertical bilayer p-n junctions. <b>2017</b> , 8, 1906	258
1135	Valley Polarization of Trions and Magnetoresistance in Heterostructures of MoS and Yttrium Iron Garnet. <b>2017</b> , 11, 12257-12265	25
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1131	Interlayer Coupling and Gate-Tunable Excitons in Transition Metal Dichalcogenide Heterostructures. <b>2017</b> , 17, 7809-7813	65
1130	Potential Profile of Stabilized Field-Induced Lateral p-n Junction in Transition-Metal Dichalcogenides. <b>2017</b> , 11, 12583-12590	20
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1125	Wafer-Scale Growth and Transfer of Highly-Oriented Monolayer MoS Continuous Films. <b>2017</b> , 11, 12001-12007	264
1124	Optical fingerprint of non-covalently functionalized transition metal dichalcogenides. <b>2017</b> , 29, 384003	2
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1120	Low-Frequency Shear and Layer-Breathing Modes in Raman Scattering of Two-Dimensional Materials. <b>2017</b> , 11, 11777-11802	109

1119	Magnetic brightening and control of dark excitons in monolayer WSe. <b>2017</b> , 12, 883-888	213
1118	Anomalous, spin, and valley Hall effects in graphene deposited on ferromagnetic substrates. <b>2017</b> , 4, 034003	24
1117	Binding energies of trions and biexcitons in two-dimensional semiconductors from diffusion quantum Monte Carlo calculations. <b>2017</b> , 95,	64
1116	Resonantly excited exciton dynamics in two-dimensional MoSe <sub>2</sub> monolayers. <b>2017</b> , 96,	11
1115	Low-Temperature Ohmic Contact to Monolayer MoS by van der Waals Bonded Co/h-BN Electrodes. <b>2017</b> , 17, 4781-4786	164
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1105	Size-tunable Lateral Confinement in Monolayer Semiconductors. <b>2017</b> , 7, 3324	39
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1096	Layer dependence of the electronic band alignment of few-layer MoS <sub>2</sub> on SiO <sub>2</sub> measured using photoemission electron microscopy. <b>2017</b> , 95,	26
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1094	Spin-degenerate regimes for single quantum dots in transition metal dichalcogenide monolayers. <b>2017</b> , 95,	18
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1091	Observation of Room-Temperature Magnetoresistance in Monolayer MoS by Ferromagnetic Gating. <b>2017</b> , 11, 6950-6958	48
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1089	Long valley relaxation time of free carriers in monolayer WSe <sub>2</sub> . <b>2017</b> , 95,	29
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1084	Magnetic and electric control of spin- and valley-polarized transport across tunnel junctions on monolayer WSe <sub>2</sub> . <b>2017</b> , 95,	15

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1082	Uniform large-area growth of nanotemplated high-quality monolayer MoS <sub>2</sub> . <b>2017</b> , 110, 263103		6
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1076	Intrinsic exciton-state mixing and nonlinear optical properties in transition metal dichalcogenide monolayers. <b>2017</b> , 95,		42
1075	Ultrafast sublattice pseudospin relaxation in graphene probed by polarization-resolved photoluminescence. <b>2017</b> , 95,		8
1074	Electronic and optical properties of vacancy defects in single-layer transition metal dichalcogenides. <b>2017</b> , 95,		37
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1072	Density-Dependent Quantum Hall States and Zeeman Splitting in Monolayer and Bilayer WSe <sub>2</sub> . <i>Physical Review Letters</i> , <b>2017</b> , 118, 247701	7-4	53
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1051	Photon wavelength dependent valley photocurrent in multilayer MoS <sub>2</sub> . <b>2017</b> , 96,	10
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1044	Valley Polarized Single Photon Source Based on Transition Metal Dichalcogenides Quantum Dots. <b>2017</b> ,	
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1034	First-principles investigation of quantum transport in GeP <sub>3</sub> nanoribbon-based tunneling junctions. <b>2018</b> , 13, 1	4
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1003	Interlayer excitons in MoSe <sub>2</sub> /WSe <sub>2</sub> heterostructures from first principles. <b>2018</b> , 97,	46
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989	Accessing valley degree of freedom in bulk Tin(II) sulfide at room temperature. <b>2018</b> , 9, 1455		46
988	Visualizing grain boundaries in monolayer MoSe <sub>2</sub> using mild H <sub>2</sub> O vapor etching. <b>2018</b> , 11, 4082-4089		14
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986	Optical Selection Rule of Excitons in Gapped Chiral Fermion Systems. <i>Physical Review Letters</i> , <b>2018</b> , 120, 077401	7.4	27
985	Cation-Controlled Electrocatalytical Activity of Transition-Metal Disulfides. <b>2018</b> , 8, 2774-2781		41
984	On Low-Resistance Contacts to 2-D MoTe <sub>2</sub> by Crystalline Phase Junctions. <b>2018</b> , 65, 1583-1588		5
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982	Revealing the nature of low-temperature photoluminescence peaks by laser treatment in van der Waals epitaxially grown WS monolayers. <b>2018</b> , 10, 4807-4815		20
981	Optically adjustable valley Hall current in single-layer transition metal dichalcogenides. <b>2018</b> , 123, 054301		1
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972	Superior Valley Polarization and Coherence of 2s Excitons in Monolayer WSe <sub>2</sub> . <i>Physical Review Letters</i> , <b>2018</b> , 120, 046402	7.4	26
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965	Orbital Edelstein Effect as a Condensed-Matter Analog of Solenoids. <b>2018</b> , 18, 916-920		29
964	Modification of Vapor Phase Concentrations in MoS Growth Using a NiO Foam Barrier. <b>2018</b> , 12, 1339-1349		62
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962	Environmentally sensitive theory of electronic and optical transitions in atomically thin semiconductors. <b>2018</b> , 97,		62
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8 <sub>07</sub>	Valley-polarized magnetic state in hole-doped monolayers of transition-metal dichalcogenides. <b>2018</b> , 98,		10
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8 <sub>02</sub>	Electronic and Optical Properties of Two-Dimensional PbO from First Principles. <b>2018</b> , 30, 7124-7129		11
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