

Tightly bound trions in monolayer MoS₂

Nature Materials

12, 207-211

DOI: [10.1038/nmat3505](https://doi.org/10.1038/nmat3505)

Citation Report

#	ARTICLE	IF	CITATIONS
16	Elucidating the Photoresponse of Ultrathin MoS ₂ Field-Effect Transistors by Scanning Photocurrent Microscopy. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 2508-2513.	2.1	190
17	Spin-orbit-mediated spin relaxation in monolayer MoS ₂ . <i>Physical Review B</i> , 2013, 87, .	1.1	152
18	Joined edges in MoS ₂ : metallic and half-metallic wires. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 312201.	0.7	21
19	Exceptional Tunability of Band Energy in a Compressively Strained Trilayer MoS ₂ Sheet. <i>ACS Nano</i> , 2013, 7, 7126-7131.	7.3	550
20	Epitaxial Monolayer MoS ₂ on Mica with Novel Photoluminescence. <i>Nano Letters</i> , 2013, 13, 3870-3877.	4.5	512
21	Layer-by-layer thinning of MoS ₂ by thermal annealing. <i>Nanoscale</i> , 2013, 5, 8904-8908.	2.8	110
22	Thickness-dependent patterning of MoS ₂ sheets with well-oriented triangular pits by heating in air. <i>Nano Research</i> , 2013, 6, 703-711.	5.8	118
23	Effective lattice Hamiltonian for monolayer MoS ₂ : Tailoring electronic structure with perpendicular electric and magnetic fields. <i>Physical Review B</i> , 2013, 88, .	1.1	193
24	Bandgap Engineering of Strained Monolayer and Bilayer MoS ₂ . <i>Nano Letters</i> , 2013, 13, 3626-3630.	4.5	1,950
25	Optical generation of excitonic valley coherence in monolayer WSe ₂ . <i>Nature Nanotechnology</i> , 2013, 8, 634-638.	15.6	1,210
26	Magnetic control of the valley degree of freedom of massive Dirac fermions with application to transition metal dichalcogenides. <i>Physical Review B</i> , 2013, 88, .	1.1	121
27	Electronic structures and optical properties of realistic transition metal dichalcogenide heterostructures from first principles. <i>Physical Review B</i> , 2013, 88, .	1.1	400
28	Defects activated photoluminescence in two-dimensional semiconductors: interplay between bound, charged and free excitons. <i>Scientific Reports</i> , 2013, 3, 2657.	1.6	876
29	Origin of Indirect Optical Transitions in Few-Layer MoS ₂ , WS ₂ , and WSe ₂ . <i>Nano Letters</i> , 2013, 13, 5627-5634.	4.5	435
30	Tunable Photoluminescence of Monolayer MoS ₂ via Chemical Doping. <i>Nano Letters</i> , 2013, 13, 5944-5948.	4.5	1,227
31	Valley Carrier Dynamics in Monolayer Molybdenum Disulfide from Helicity-Resolved Ultrafast Pump-Probe Spectroscopy. <i>ACS Nano</i> , 2013, 7, 11087-11093.	7.3	213
32	Nonblinking, Intense Two-Dimensional Light Emitter: Monolayer WS ₂ Triangles. <i>ACS Nano</i> , 2013, 7, 10985-10994.	7.3	281
33	Band-like transport in high mobility unencapsulated single-layer MoS ₂ transistors. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	359

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34	Theory of neutral and charged excitons in monolayer transition metal dichalcogenides. <i>Physical Review B</i> , 2013, 88, .	1.1	737
35	Lattice dynamics in mono- and few-layer sheets of WS ₂ and WSe ₂ . <i>Nanoscale</i> , 2013, 5, 9677.	2.8	724
36	Controlled Growth of High-Quality Monolayer WS ₂ Layers on Sapphire and Imaging Its Grain Boundary. <i>ACS Nano</i> , 2013, 7, 8963-8971.	7.3	696
37	Suspended single-layer MoS ₂ devices. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	60
38	Evolution of Electronic Structure in Atomically Thin Sheets of WS ₂ and WSe ₂ . <i>ACS Nano</i> , 2013, 7, 791-797.	7.3	1,690
39	Observation of the A-exciton peak in folded monolayer MoS ₂ . <i>Physical Review B</i> , 2013, 88, .	1.1	37
40	Optical manipulation of the exciton charge state in single-layer tungsten disulfide. <i>Physical Review B</i> , 2013, 88, .	1.1	174
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43	Anomalous Raman spectra and thickness-dependent electronic properties of WSe ₂ . <i>Physical Review B</i> , 2013, 87, .	1.1	408
44	Grains and grain boundaries in highly crystalline monolayer molybdenum disulphide. <i>Nature Materials</i> , 2013, 12, 554-561.	13.3	1,896
45	Experimental Demonstration of Continuous Electronic Structure Tuning via Strain in Atomically Thin MoS ₂ . <i>Nano Letters</i> , 2013, 13, 2931-2936.	4.5	808
46	Controlled Scalable Synthesis of Uniform, High-Quality Monolayer and Few-layer MoS ₂ Films. <i>Scientific Reports</i> , 2013, 3, 1866.	1.6	753
47	High-Gain Phototransistors Based on a CVD MoS ₂ Monolayer. <i>Advanced Materials</i> , 2013, 25, 3456-3461.	11.1	891
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49	Measuring the lateral size of liquid-exfoliated nanosheets with dynamic light scattering. <i>Nanotechnology</i> , 2013, 24, 265703.	1.3	214
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51	Observation of intense second harmonic generation from MoS ₂ atomic crystals. <i>Physical Review B</i> , 2013, 87, .	1.1	566

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52	Tight-binding model and direct-gap/indirect-gap transition in single-layer and multilayer MoS ₂ . Physical Review B, 2013, 88, .	1.1	351
53	Two-dimensional ferromagnet/semiconductor transition metal dichalcogenide contacts: p-type Schottky barrier and spin-injection control. Physical Review B, 2013, 88, .	1.1	58
54	Optical investigation of the natural electron doping in thin MoS ₂ films deposited on dielectric substrates. Scientific Reports, 2013, 3, 3489.	1.6	144
55	Gate-tunable carbon nanotube/MoS ₂ heterojunction p-n diode. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18076-18080.	3.3	373
56	Optical manipulation and electrical control of valley pseudo-spins in atomically thin semiconductors. Proceedings of SPIE, 2013, , .	0.8	0
57	Tuning the optical emission of MoS ₂ nanosheets using proximal photoswitchable azobenzene molecules. Applied Physics Letters, 2014, 105, .	1.5	32
58	Wet chemical thinning of molybdenum disulfide down to its monolayer. APL Materials, 2014, 2, .	2.2	31
59	Reconfigurable p-n junction diodes and the photovoltaic effect in exfoliated MoS ₂ films. Applied Physics Letters, 2014, 104, .	1.5	51
60	Exciton-dominant electroluminescence from a diode of monolayer MoS ₂ . Applied Physics Letters, 2014, 104, .	1.5	86
61	Excitons in a mirror: Formation of optical bilayers using MoS ₂ monolayers on gold substrates. Applied Physics Letters, 2014, 104, .	1.5	31
62	Air stable n-doping of WSe ₂ by silicon nitride thin films with tunable fixed charge density. APL Materials, 2014, 2, .	2.2	76
63	Effect of Coulomb interactions on optical properties of monolayer transition-metal dichalcogenides. Physical Review B, 2014, 90, .	1.1	32
64	Photoluminescence properties and exciton dynamics in monolayer WSe ₂ . Applied Physics Letters, 2014, 105, .	1.5	149
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68	Two-dimensional material nanophotonics. Nature Photonics, 2014, 8, 899-907.	15.6	2,362
69	Ultrafast Transient Terahertz Conductivity of Monolayer MoS ₂ and WSe ₂ Grown by Chemical Vapor Deposition. ACS Nano, 2014, 8, 11147-11153.	7.3	191

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70	Measurement of the optical dielectric function of monolayer transition-metal dichalcogenides: $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{MoS}_2 \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Mo} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \text{mathvariant="normal"} \rangle \text{S} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant="normal"} \rangle \text{S} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant="normal"} \rangle \text{S} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$, $\langle \text{mml:math} \text{mathvariant="normal"} \rangle \text{e} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$, $\langle \text{mml:math} \text{mathvariant="normal"} \rangle \text{e} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$, and other transition-metal dichalcogenides. <i>Physical Review B</i> , 2014, 90, .	1.1	1,017
71	Exciton complexes in low dimensional transition metal dichalcogenides. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	26
72	Valley Splitting and Polarization by the Zeeman Effect in Monolayer $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{MoSe} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review Letters</i> , 2014, 113, 266804.	2.9	395
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74	Anomalously robust valley polarization and valley coherence in bilayer WS ₂ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11606-11611.	3.3	245
75	Intrinsic optical conductivity of modified Dirac fermion systems. <i>Physical Review B</i> , 2014, 89, .	1.1	37
76	Broadband Few-Layer MoS ₂ Saturable Absorbers. <i>Advanced Materials</i> , 2014, 26, 3538-3544.	11.1	645
77	Growth of Large-Area 2D MoS ₂ (1-x)Se _{2x} Semiconductor Alloys. <i>Advanced Materials</i> , 2014, 26, 2648-2653.	11.1	347
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79	Tailoring the Physical Properties of Molybdenum Disulfide Monolayers by Control of Interfacial Chemistry. <i>Nano Letters</i> , 2014, 14, 1354-1361.	4.5	129
80	Mechanism of excitonic dephasing in layered InSe crystals. <i>Physical Review B</i> , 2014, 89, .	1.1	23
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85	Solar-energy conversion and light emission in an atomic monolayer p-n diode. <i>Nature Nanotechnology</i> , 2014, 9, 257-261.	15.6	1,175
86	van der Waals trilayers and superlattices: modification of electronic structures of MoS ₂ by intercalation. <i>Nanoscale</i> , 2014, 6, 4566-4571.	2.8	111

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89	Spin and pseudospins in layered transition metal dichalcogenides. <i>Nature Physics</i> , 2014, 10, 343-350.	6.5	2,204
90	Edge Nonlinear Optics on a MoS ₂ Atomic Monolayer. <i>Science</i> , 2014, 344, 488-490.	6.0	631
91	The effect of the substrate on the Raman and photoluminescence emission of single-layer MoS ₂ . <i>Nano Research</i> , 2014, 7, 561-571.	5.8	497
92	Few-Layer MoS ₂ : A Promising Layered Semiconductor. <i>ACS Nano</i> , 2014, 8, 4074-4099.	7.3	1,181
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95	Electrically tunable excitonic light-emitting diodes based on monolayer WSe ₂ p-n junctions. <i>Nature Nanotechnology</i> , 2014, 9, 268-272.	15.6	1,434
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98	Scalable Growth of High-Quality Polycrystalline MoS ₂ Monolayers on SiO ₂ with Tunable Grain Sizes. <i>ACS Nano</i> , 2014, 8, 6024-6030.	7.3	263
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100	Many-Body Effects in Valleytronics: Direct Measurement of Valley Lifetimes in Single-Layer MoS ₂ . <i>Nano Letters</i> , 2014, 14, 202-206.	4.5	431
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125	Extraordinary attributes of 2-dimensional MoS ₂ nanosheets. <i>Chemical Physics Letters</i> , 2014, 609, 172-183.	1.2	141
126	Possible Topological Superconducting Phases of MoS_2 . <i>Physical Review Letters</i> , 2014, 113, 097001.	2.9	133
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133	Observation of Rapid Exciton–Exciton Annihilation in Monolayer Molybdenum Disulfide. <i>Nano Letters</i> , 2014, 14, 5625-5629.	4.5	457
134	Enhanced photocurrent and photoluminescence spectra in MoS ₂ under ionic liquid gating. <i>Nano Research</i> , 2014, 7, 973-980.	5.8	41
135	Direct Chemical Vapor Deposition Growth of WS ₂ Atomic Layers on Hexagonal Boron Nitride. <i>ACS Nano</i> , 2014, 8, 8273-8277.	7.3	267
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143	Functional Polyelectrolyte Nanospaced MoS ₂ Multilayers for Enhanced Photoluminescence. Nano Letters, 2014, 14, 6456-6462.	4.5	65
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1012	Interfacial Charge Behavior Modulation in Perovskite Quantum Dot@Monolayer MoS ₂ /2D Mixed-Dimensional van der Waals Heterostructures. <i>Advanced Functional Materials</i> , 2018, 28, 1802015.	7.8	107
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1015	Two-dimensional light-emitting materials: preparation, properties and applications. <i>Chemical Society Reviews</i> , 2018, 47, 6128-6174.	18.7	167
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1017	Recent Progress and Future Prospects of 2D-Based Photodetectors. <i>Advanced Materials</i> , 2018, 30, e1801164.	11.1	408
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1025	Competition between Free Carriers and Excitons Mediated by Defects Observed in Layered WSe ₂ Crystal with Time-Resolved Terahertz Spectroscopy. <i>Advanced Optical Materials</i> , 2018, 6, 1800290.	3.6	39
1026	Properties, Preparation and Applications of Low Dimensional Transition Metal Dichalcogenides. <i>Nanomaterials</i> , 2018, 8, 463.	1.9	38
1027	Emerging photonic architectures in two-dimensional opto-electronics. <i>Chemical Society Reviews</i> , 2018, 47, 6824-6844.	18.7	71
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