

From Bulk to Monolayer MoS₂: Evolution of

Advanced Functional Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	High quality 2D crystals made by anodic bonding: a general technique for layered materials. <i>Nanotechnology</i> , 2012, 23, 505709.	1.3	41
2	Exceptional Tunability of Band Energy in a Compressively Strained Trilayer MoS ₂ Sheet. <i>ACS Nano</i> , 2013, 7, 7126-7131.	7.3	550
3	Van der Waals epitaxial growth of MoS ₂ on SiO ₂ /Si by chemical vapor deposition. <i>RSC Advances</i> , 2013, 3, 17287.	1.7	41
4	Controlled, Defect-Guided, Metal-Nanoparticle Incorporation onto MoS ₂ via Chemical and Microwave Routes: Electrical, Thermal, and Structural Properties. <i>Nano Letters</i> , 2013, 13, 4434-4441.	4.5	281
5	Improved dispersant-free liquid exfoliation down to the graphene-like state of solvent-free mechanochemically delaminated bulk MoS ₂ . <i>Journal of Materials Chemistry C</i> , 2013, 1, 6411.	2.7	50
6	Bandgap Engineering of Strained Monolayer and Bilayer MoS ₂ . <i>Nano Letters</i> , 2013, 13, 3626-3630.	4.5	1,950
7	MoS ₂ Nanocrystals Confined in a DNA Matrix Exhibiting Energy Transfer. <i>Langmuir</i> , 2013, 29, 11471-11478.	1.6	31
8	Electrochemical Control of Photoluminescence in Two-Dimensional MoS ₂ Nanoflakes. <i>ACS Nano</i> , 2013, 7, 10083-10093.	7.3	282
9	Anomalous frequency trends in MoS ₂ thin films attributed to surface effects. <i>Physical Review B</i> , 2013, 88, .	1.1	104
10	Graphene Analogues of Inorganic Layered Materials. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13162-13185.	7.2	441
11	Effect of sulphur vacancy on geometric and electronic structure of MoS ₂ induced by molecular hydrogen treatment at room temperature. <i>RSC Advances</i> , 2013, 3, 18424.	1.7	47
12	Metal Contacts on Physical Vapor Deposited Monolayer MoS ₂ . <i>ACS Nano</i> , 2013, 7, 11350-11357.	7.3	275
13	Room temperature rubbing for few-layer two-dimensional thin flakes directly on flexible polymer substrates. <i>Scientific Reports</i> , 2013, 3, 2697.	1.6	26
14	Lattice dynamics in mono- and few-layer sheets of WS ₂ and WSe ₂ . <i>Nanoscale</i> , 2013, 5, 9677.	2.8	724
15	Synthesis of rGO-supported layered MoS ₂ for high-performance rechargeable Mg batteries. <i>Nanoscale</i> , 2013, 5, 9562.	2.8	123
16	High-Performance Sensors Based on Molybdenum Disulfide Thin Films. <i>Advanced Materials</i> , 2013, 25, 6699-6702.	11.1	435
17	Raman-scattering measurements and first-principles calculations of strain-induced phonon shifts in monolayer MoS ₂ . <i>Physical Review B</i> , 2013, 87, .	1.1	495
18	CTAB-assisted synthesis of single-layer MoS ₂ –graphene composites as anode materials of Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2202-2210.	5.2	410

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19	Strongly luminescent monolayered MoS ₂ prepared by effective ultrasound exfoliation. <i>Nanoscale</i> , 2013, 5, 3387.	2.8	231
20	Photoluminescence emission and Raman response of monolayer MoS ₂ , MoSe ₂ , and WSe ₂ . <i>Optics Express</i> , 2013, 21, 4908.	1.7	1,241
21	Controlled Synthesis of Highly Crystalline MoS ₂ Flakes by Chemical Vapor Deposition. <i>Journal of the American Chemical Society</i> , 2013, 135, 5304-5307.	6.6	655
22	Raman spectroscopy of shear and layer breathing modes in multilayer MoS ₂ . <i>Physical Review B</i> , 2013, 87, .	1.1	404
23	High-Concentration Aqueous Dispersions of MoS ₂ . <i>Advanced Functional Materials</i> , 2013, 23, 3577-3583.	7.8	271
24	Facile synthesis of MoS ₂ nanosheet-silver nanoparticles composite for surface enhanced Raman scattering and electrochemical activity. <i>Journal of Alloys and Compounds</i> , 2013, 559, 87-91.	2.8	107
25	Role of Metal Contacts in Designing High-Performance Monolayer n-Type WSe ₂ Field Effect Transistors. <i>Nano Letters</i> , 2013, 13, 1983-1990.	4.5	833
26	Progress, Challenges, and Opportunities in Two-Dimensional Materials Beyond Graphene. <i>ACS Nano</i> , 2013, 7, 2898-2926.	7.3	4,062
27	Layer-by-Layer Thinning of MoS ₂ by Plasma. <i>ACS Nano</i> , 2013, 7, 4202-4209.	7.3	387
28	Two-Dimensional Molybdenum Trioxide and Dichalcogenides. <i>Advanced Functional Materials</i> , 2013, 23, 3952-3970.	7.8	443
29	Two-dimensional semiconductors: recent progress and future perspectives. <i>Journal of Materials Chemistry C</i> , 2013, 1, 2952.	2.7	317
30	Temperature-Dependent Raman Studies and Thermal Conductivity of Few-Layer MoS ₂ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 9042-9047.	1.5	602
31	Identifying the mechanisms of p-to-n conversion in unipolar graphene field-effect transistors. <i>Nanotechnology</i> , 2013, 24, 195202.	1.3	8
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33	Raman Spectroscopy Study of Lattice Vibration and Crystallographic Orientation of Monolayer MoS ₂ under Uniaxial Strain. <i>Small</i> , 2013, 9, 2857-2861.	5.2	363
34	Graphene-Like MoS ₂ /Graphene Composites: Cationic Surfactant-Assisted Hydrothermal Synthesis and Electrochemical Reversible Storage of Lithium. <i>Small</i> , 2013, 9, 3693-3703.	5.2	322
35	Selective Decoration of Au Nanoparticles on Monolayer MoS ₂ Single Crystals. <i>Scientific Reports</i> , 2013, 3, 1839.	1.6	380
36	Novel hetero-layered materials with tunable direct band gaps by sandwiching different metal disulfides and diselenides. <i>Scientific Reports</i> , 2013, 3, 1549.	1.6	437

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37	Controlled Scalable Synthesis of Uniform, High-Quality Monolayer and Few-layer MoS ₂ Films. Scientific Reports, 2013, 3, 1866.	1.6	753
38	Identification of individual and few layers of WS ₂ using Raman Spectroscopy. Scientific Reports, 2013, 3, .	1.6	1,185
39	Electricâ€Field Screening in Atomically Thin Layers of MoS ₂ : the Role of Interlayer Coupling. Advanced Materials, 2013, 25, 899-903.	11.1	143
40	Controlled Synthesis and Transfer of Large-Area WS ₂ Sheets: From Single Layer to Few Layers. ACS Nano, 2013, 7, 5235-5242.	7.3	534
41	Effects of lower symmetry and dimensionality on Raman spectra in two-dimensional WSe ₂ . Physical Review B, 2013, 88, .	1.1	204
42	NEM relays using 2-dimensional nanomaterials for low energy contacts. , 2013, , .		2
43	Exciton dynamics in atomically thin MoS ₂ : Interexcitonic interaction and broadening kinetics. Physical Review B, 2013, 88, .	1.1	173
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51	Resonant Raman scattering in MoS ₂ "From bulk to monolayer. Solid State Communications, 2014, 197, 53-56.	0.9	108
52	Microfiber-based few-layer MoS ₂ saturable absorber for 25 GHz passively harmonic mode-locked fiber laser. Optics Express, 2014, 22, 22841.	1.7	163
53	Excitons in a mirror: Formation of "optical bilayers" using MoS ₂ monolayers on gold substrates. Applied Physics Letters, 2014, 104, .	1.5	31
54	Composition dependent lattice dynamics in MoS _x Se(2-x) alloys. Journal of Applied Physics, 2014, 116, .	1.1	35
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57	Second-order resonant Raman scattering in single-layer tungsten disulfide <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" > <mml:msub> <mml:mi mathvariant="normal">WS</mml:mi> <mml:mn>2</mml:mn> </mml:msub> </mml:math>. Physical Review B, 2014, 89, .	1.1	65
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64	Investigation of the optical properties of MoS ₂ thin films using spectroscopic ellipsometry. Applied Physics Letters, 2014, 104, 103114.	1.5	255
65	Mechanical Properties and Electric Field Screening of Atomically Thin MoS ₂ Crystals. Lecture Notes in Nanoscale Science and Technology, 2014, , 129-153.	0.4	0
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68	An electrochemical route to MoS ₂ nanosheets for device applications. Materials Letters, 2014, 121, 31-35.	1.3	49
69	First-principles Raman spectra of MoS ₂ , WS ₂ and their heterostructures. Nanoscale, 2014, 6, 5394.	2.8	348
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75	Chemical Vapor Deposition Growth of Crystalline Monolayer MoSe ₂ . <i>ACS Nano</i> , 2014, 8, 5125-5131.	7.3	694
76	Pre-lithiation of onion-like carbon/MoS ₂ nano-urchin anodes for high-performance rechargeable lithium ion batteries. <i>Nanoscale</i> , 2014, 6, 8884-8890.	2.8	93
77	Synthesis of MoS ₂ -carbon composites with different morphologies and their application in hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9638-9650.	3.8	53
78	Functionalized MoS ₂ Nanosheet-Based Field-Effect Biosensor for Label-Free Sensitive Detection of Cancer Marker Proteins in Solution. <i>Small</i> , 2014, 10, 1101-1105.	5.2	254
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80	In situ growth of double-layer MoO ₃ /MoS ₂ film from MoS ₂ for hole-transport layers in organic solar cell. <i>Journal of Materials Chemistry A</i> , 2014, 2, 2742.	5.2	184
81	Electrical and optical characterization of atomically thin WS ₂ . <i>Dalton Transactions</i> , 2014, 43, 10388.	1.6	52
82	A binder-free CNT network-MoS ₂ composite as a high performance anode material in lithium ion batteries. <i>Chemical Communications</i> , 2014, 50, 3338-3340.	2.2	111
83	Emerging Device Applications for Semiconducting Two-Dimensional Transition Metal Dichalcogenides. <i>ACS Nano</i> , 2014, 8, 1102-1120.	7.3	2,307
84	Lattice vibrational modes and phonon thermal conductivity of monolayer MoS ₂ . <i>Physical Review B</i> , 2014, 89, .	1.1	387
85	Dependence of coupling of quasi 2-D MoS ₂ with substrates on substrate types, probed by temperature dependent Raman scattering. <i>Nanoscale</i> , 2014, 6, 4920-4927.	2.8	104
86	Mode-locking of Er-doped fiber laser using a multilayer MoS ₂ thin film as a saturable absorber in both anomalous and normal dispersion regimes. <i>Optics Express</i> , 2014, 22, 23732.	1.7	142
87	Growth of Large-Scale and Thickness-Modulated MoS ₂ Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 21215-21222.	4.0	140
88	Photocurrent Response of MoS ₂ Field-Effect Transistor by Deep Ultraviolet Light in Atmospheric and N ₂ Gas Environments. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 21645-21651.	4.0	44
89	Multiphonon resonant Raman scattering in MoS ₂ . <i>Applied Physics Letters</i> , 2014, 104, 092106.	1.5	118
90	Metal Seed Layer Thickness-Induced Transition From Vertical to Horizontal Growth of MoS ₂ and WS ₂ . <i>Nano Letters</i> , 2014, 14, 6842-6849.	4.5	251
91	Broadband optical properties of large-area monolayer CVD molybdenum disulfide. <i>Physical Review B</i> , 2014, 90, .	1.1	106

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95	A graphene-like MoS ₂ /graphene nanocomposite as a highperformance anode for lithium ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 13109-13115.	5.2	238
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97	Photoluminescence Quenching in Single-Layer MoS ₂ via Oxygen Plasma Treatment. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21258-21263.	1.5	228
98	Plasma Modified MoS ₂ Nanoflakes for Surface Enhanced Raman Scattering. <i>Small</i> , 2014, 10, 1090-1095.	5.2	129
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102	Composition-dependent Raman modes of Mo _{1-x} W _x S ₂ monolayer alloys. <i>Nanoscale</i> , 2014, 6, 2833-2839.	2.8	142
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105	High-performance hydrogen evolution electrocatalysis by layer-controlled MoS ₂ nanosheets. <i>RSC Advances</i> , 2014, 4, 34733-34738.	1.7	58
106	Plasma assisted synthesis of WS ₂ for gas sensing applications. <i>Chemical Physics Letters</i> , 2014, 615, 6-10.	1.2	150
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108	Gemini surfactant assisted hydrothermal synthesis of nanotile-like MoS ₂ /graphene hybrid with enhanced lithium storage performance. <i>Nano Energy</i> , 2014, 10, 144-152.	8.2	113
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148	Molybdenum disulfide nanoflower-chitosan-Au nanoparticles composites based electrochemical sensing platform for bisphenol A determination. <i>Journal of Hazardous Materials</i> , 2014, 276, 207-215.	6.5	170
149	Determining the thickness of atomically thin MoS2 and WS2 in the TEM. <i>Ultramicroscopy</i> , 2014, 147, 8-20.	0.8	46
150	Determining the Thickness of Atomically Thin MoS2 and WS2 in the TEM. <i>Microscopy and Microanalysis</i> , 2014, 20, 1796-1797.	0.2	1
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154	Splitting of monolayer out-of-plane mode in few-layer WS ₂ . <i>Physical Review B</i> , 2015, 91, .	1.1	78
155	Tuning Photoluminescence Performance of Monolayer MoS ₂ via H ₂ O ₂ Aqueous Solution. <i>Chinese Physics Letters</i> , 2015, 32, 117801.	1.3	8
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1205	Exfoliation of Transition Metal Dichalcogenides by a High-Power Femtosecond Laser. <i>Scientific Reports</i> , 2018, 8, 12957.	1.6	48
1206	Controllable one-step growth of bilayer MoS ₂ WS ₂ /WS ₂ heterostructures by chemical vapor deposition. <i>Nanotechnology</i> , 2018, 29, 455707.	1.3	26
1207	Developing High-Energy Dissipative Soliton 2 ¼m Tm ³⁺ -Doped Fiber Lasers. , 2018, , .		0
1208	Pyrolic nitrogen-doped carbon sandwiched monolayer MoS ₂ vertically anchored on graphene oxide for high-performance sodium-ion battery anodes. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 2801-2809.	1.2	5
1209	Homogeneous surface oxidation and triangle patterning of monolayer MoS ₂ by hydrogen peroxide. <i>Applied Surface Science</i> , 2018, 452, 451-456.	3.1	18
1210	Defect mediated magnetic transitions in Fe and Mn doped MoS ₂ . <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 15817-15823.	1.3	19

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1212	Tuning Transport and Photoelectric Performance of Monolayer MoS ₂ Device by E-Beam Irradiation. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800348.	1.9	21
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1215	Asymmetric Schottky Contacts in Bilayer MoS ₂ Field Effect Transistors. <i>Advanced Functional Materials</i> , 2018, 28, 1800657.	7.8	162
1216	Carbon-coated molybdenum carbide nanosheets derived from molybdenum disulfide for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 12610-12617.	3.8	27
1217	Controllable solution-fabrication of triphasic 2H@1T-MoS ₂ /graphene heterostructure with assistance of supercritical CO ₂ . <i>Surfaces and Interfaces</i> , 2018, 12, 41-49.	1.5	9
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1219	Dispersible MoS ₂ micro-sheets induced a proinflammatory response and apoptosis in the gills and liver of adult zebrafish. <i>RSC Advances</i> , 2018, 8, 17826-17836.	1.7	16
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1223	Anomalous electrical bistability in lateral grain rich polycrystalline molybdenum disulfide thin films. <i>Vacuum</i> , 2018, 155, 667-674.	1.6	4
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1235	Strongly enhanced exciton-phonon coupling in two-dimensional WS_2 . <i>Physical Review B</i> , 2018, 97, .	1.1	30
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1240	Magnetron Sputter-Coated Nanoparticle MoS ₂ Supported on Nanocarbon: A Highly Efficient Electrocatalyst toward the Hydrogen Evolution Reaction. <i>ACS Omega</i> , 2018, 3, 7235-7242.	1.6	22
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1284	High-yield production of 2D crystals by wet-jet milling. <i>Materials Horizons</i> , 2018, 5, 890-904.	6.4	139
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2513	Few-layered MoS ₂ with S-vacancies anchored on N-doped carbon flower for high performance sodium storage. <i>Journal of Alloys and Compounds</i> , 2022, 895, 162514.	2.8	14
2514	Molecular docking and DFT analyses of magnetic cobalt doped MoS ₂ and BN nanocomposites for catalytic and antimicrobial explorations. <i>Surfaces and Interfaces</i> , 2021, 27, 101571.	1.5	19
2516	Hierarchical core/shell titanium dioxide/molybdenum disulfide nanosheets coupled with carbon architecture for superior lithium/sodium ion storage. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 2641-2649.	5.0	7
2517	Morphology and Phase Engineering of MoS ₂ Cocatalyst for High-Efficiency Hydrogen Evolution: One-Step Clean Synthesis and Comparative Studies. <i>Journal of Physical Chemistry C</i> , 0, , .	1.5	10
2518	Few-Layered MoS ₂ Nanoparticles Covering Anatase TiO ₂ Nanosheets: Comparison between Ex Situ and In Situ Synthesis Approaches. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 143.	1.3	5
2519	A biodegradable polymer-assisted efficient and universal exfoliation route to a stable few layer dispersion of transition metal dichalcogenides. <i>Materials Chemistry and Physics</i> , 2022, 276, 125347.	2.0	6
2520	An Optothermal Field Effect Transistor Based on PMN-26PT Single Crystal. <i>Springer Theses</i> , 2020, , 29-48.	0.0	0
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2524	Caveats in obtaining high-quality 2D materials and property characterization. <i>Journal of Materials Research</i> , 2020, 35, 855-863.	1.2	4
2525	Experimental Techniques, Instruments, and Cryostat. <i>Springer Theses</i> , 2020, , 79-121.	0.0	0
2526	Spectral Manifestations of Nonlinear Resonant Wave Interactions in the Vibrational Spectra of Transition Metal Dichalcogenides. <i>Springer Proceedings in Physics</i> , 2020, , 337-361.	0.1	0
2527	Facile fabrication of conductive MoS ₂ thin films by sonication in hot water and evaluation of their electrocatalytic performance in the hydrogen evolution reaction. <i>Nanoscale Advances</i> , 2021, 4, 125-137.	2.2	10
2528	Controlled vanadium doping of mos ₂ thin films through co-sputtering and thermal sulfurization. <i>Cumhuriyet Science Journal</i> , 2020, 41, 305-310.	0.1	5
2529	A Facile Liquid-Phase, Solvent-Dependent Exfoliation of Large Scale MoS ₂ Nanosheets and Study of Their Photoconductive Behaviour for UV-Photodetector Application. <i>ChemistrySelect</i> , 2021, 6, 11285-11292.	0.7	10
2530	Atomic scale friction properties of confined water layers. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021, 39, .	0.9	3

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2532	Enhancement of nonlinear functionality of step-index silica fibers combining thermal poling and 2D materials deposition. <i>Optics Express</i> , 2020, 28, 34461.	1.7	1
2533	Real-time spatially resolved determination of twist angle in transition metal dichalcogenide heterobilayers. <i>2D Materials</i> , 2021, 8, 015015.	2.0	7
2534	Lateral monolayer MoS ₂ homojunction devices prepared by nitrogen plasma doping. <i>Nanotechnology</i> , 2021, 32, 015701.	1.3	2
2535	Flexible, heat-resistant photodetector based on MoS ₂ nanosheets thin film on transparent muscovite mica substrate. <i>Nanotechnology</i> , 2021, 32, 025206.	1.3	9
2536	Single crystal flake parameters of MoS ₂ and MoSe ₂ exfoliated using anodic bonding technique and its potential in rapid prototyping. <i>Journal of Physics Communications</i> , 2020, 4, 105015.	0.5	2
2537	Temperature-switching logic in MoS ₂ single transistors*. <i>Chinese Physics B</i> , 2020, 29, 097201.	0.7	3
2539	An experimental and theoretical study on nanomachining forces along zigzag and armchair lattice orientations of monolayer MoS ₂ . <i>Materials Research Express</i> , 2020, 7, 095002.	0.8	1
2540	Induced anisotropic superconductivity in ionic liquid cation intercalated 1T-SnSe ₂ . <i>2D Materials</i> , 2021, 8, 015024.	2.0	6
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2542	Flexible electronics based on 2D transition metal dichalcogenides. <i>Journal of Materials Chemistry A</i> , 2021, 10, 89-121.	5.2	66
2543	Different optical characteristics between monolayer and bilayer WS ₂ due to interlayer interaction. <i>Optik</i> , 2022, 251, 168374.	1.4	3
2544	Large-Area Monolayer MoS ₂ Nanosheets on GaN Substrates for Light-Emitting Diodes and Valley-Spin Electronic Devices. <i>ACS Applied Nano Materials</i> , 2021, 4, 12127-12136.	2.4	17
2545	Fast and controllable synthesis of AB-stacked bilayer MoS ₂ for photoelectric detection. <i>2D Materials</i> , 2022, 9, 015016.	2.0	11
2546	MoS ₂ /CF synergistic reinforcement on tribological properties of NBR/PU/EP interpenetrating polymer networks. <i>Tribology International</i> , 2022, 167, 107384.	3.0	11
2547	Amino Acid-Functionalized MoS ₂ Quantum Dots for Selective Antibacterial Activity. <i>ACS Applied Nano Materials</i> , 2021, 4, 13947-13954.	2.4	17
2548	Intrinsic half-metallic properties of MnHm (M: Fe, V, Co, and Cr) in various space groups: A first-principles study. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 547, 168758.	1.0	6
2549	Tailoring the Fluorescent and Electronic Properties of 2H-MoS ₂ by Step-by-Step Functionalization. <i>Journal of Physical Chemistry C</i> , 2021, 125, 25739-25748.	1.5	5

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2551	MoS ₂ nano-flower incorporation for improving organic-organic solid state electrochromic device performance. <i>Solar Energy Materials and Solar Cells</i> , 2022, 236, 111502.	3.0	33
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2554	2D Indium Phosphorus Sulfide (In ₂ P ₃ S ₉): An Emerging van der Waals High-κ Dielectrics. <i>Small</i> , 2022, 18, e2104401.	5.2	9
2555	Low-Temperature Chemical Vapor Deposition Growth of MoS ₂ Nanodots and Their Raman and Photoluminescence Profiles. <i>Frontiers in Nanotechnology</i> , 2021, 3, .	2.4	3
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2557	Carbon nanotubes-reinforced preparation of flat MoS ₂ nanomaterials: Co-enhancement of acoustic exfoliation efficiency and dye removal capacity. <i>FlatChem</i> , 2021, 30, 100312.	2.8	7
2558	Toward high load-bearing, ambient robust and macroscale structural superlubricity through contact stress dispersion. <i>Chemical Engineering Journal</i> , 2022, 431, 133548.	6.6	10
2559	Recent development in emerging phosphorene based novel materials: Progress, challenges, prospects and their fascinating sensing applications. <i>Progress in Solid State Chemistry</i> , 2022, 65, 100336.	3.9	18
2560	Electrophoretic Codeposition of MoO _x /MoS ₂ Thin Film for Platinum-Free Counter Electrode in Quantum Dot Solar Cells. <i>International Journal of Photoenergy</i> , 2021, 2021, 1-12.	1.4	2
2561	Template-assisted hydrothermal synthesized hydrophilic spherical 1T-MoS ₂ with excellent zinc storage performance. <i>Journal of Alloys and Compounds</i> , 2022, 898, 162854.	2.8	20
2562	Encapsulate SrCoO ₃ perovskite crystal within molybdenum disulfide layer as core-shell structure to enhance electron transfer for peroxydisulfate activation. <i>Separation and Purification Technology</i> , 2022, 283, 120199.	3.9	18
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2564	Flower-like MoS ₂ hierarchical architectures assembled by 2D nanosheets sensitized with SnO ₂ quantum dots for high-performance NH ₃ sensing at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2022, 353, 131191.	4.0	24
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2567	Facile Synthesis of 1T-Phase MoS ₂ Nanosheets on N-Doped Carbon Nanotubes towards Highly Efficient Hydrogen Evolution. <i>Nanomaterials</i> , 2021, 11, 3273.	1.9	6
2568	Exfoliation Routes to the Production of Nanoflakes of Graphene Analogous 2D Materials and Their Applications. <i>Indian Institute of Metals Series</i> , 2022, , 377-443.	0.2	1

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2570	Highly Sensitive NO ₂ Detection by TVS-Grown Multilayer MoS ₂ Films. <i>ACS Omega</i> , 2022, 7, 1851-1860.	1.6	3
2571	Facile exfoliation of MoS ₂ powders into nanosheets with excellent fluorescence quenching performance of perovskite. <i>Optik</i> , 2022, 251, 168480.	1.4	2
2572	Silver nanoparticles decorated two dimensional MoS ₂ nanosheets for enhanced photocatalytic activity. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 635, 128102.	2.3	11
2573	Development of multiwalled carbon nanotubes (MWCNT's) functionalized with molybdenum disulfide (MoS ₂) by separate methodology. <i>Diamond and Related Materials</i> , 2022, 122, 108814.	1.8	11
2574	Role of catalyst defect sites towards product selectivity in the upgrading of vacuum residue. <i>Fuel</i> , 2022, 314, 123062.	3.4	11
2575	Interfacial Charge Transfers and Ultrafast Nonlinear Optical Response Via Constructing Electronic Structure-Induced MoS ₂ /ZnO Heterostructure. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2576	Interfacial Charge Transfers and Ultrafast Nonlinear Optical Response Via Constructing Electronic Structure-Induced MoS ₂ /ZnO Heterostructure. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
2577	Influence of Crystal Disorder in MoS. <i>Australian Journal of Chemistry</i> , 2021, 74, 819-825.	0.5	2
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2581	Morphology Regulation of MoS ₂ Nanosheet-Based Domain Boundaries for the Hydrogen Evolution Reaction. <i>ACS Applied Nano Materials</i> , 2022, 5, 2273-2279.	2.4	14
2582	The influence of single layer MoS ₂ flake on the propagated surface plasmons of silver nanowire. <i>Nanotechnology</i> , 2022, 33, 155401.	1.3	2
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2584	MoS ₂ quantum dot-decorated MXene nanosheets as efficient hydrogen evolution electrocatalysts. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1171-1178.	3.0	69
2585	Confined growth of molybdenum disulfide in cellulose microspheres with highly porous structure for environmental applications. <i>Journal of Cleaner Production</i> , 2022, 332, 130048.	4.6	4
2586	Chemical vapor deposited WS ₂ /MoS ₂ heterostructure photodetector with enhanced photoresponsivity. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 175101.	1.3	3

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2588	Defects, band bending and ionization rings in MoS ₂ . <i>Journal of Physics Condensed Matter</i> , 2022, 34, 174002.	0.7	3
2589	Excitonic absorption and defect-related emission in three-dimensional MoS ₂ pyramids. <i>Nanoscale</i> , 2022, 14, 1179-1186.	2.8	3
2590	Fabrication of Fe-Doped Molybdenum Multisulfide MoS ₂ /Mo ₂ S ₃ Thin Film Via Aerosol-Assisted Chemical Vapor Deposition (AACVD) for Photoelectrochemical (PEC) Water Splitting. <i>Electrocatalysis</i> , 2022, 13, 182-194.	1.5	8
2591	Linear response calculation with nonlocal van der Waals density functionals. <i>Physical Review B</i> , 2022, 105, .	1.1	3
2592	Self-Assembled 1T-MoS ₂ /Functionalized Graphene Composite Electrodes for Supercapacitor Devices. <i>ACS Applied Energy Materials</i> , 2022, 5, 61-70.	2.5	31
2593	The Underlying Molecular Mechanism of Fence Engineering to Break the Activityâ€“Stability Tradeâ€“Off in Catalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 0, , .	1.6	3
2594	Interlayer exciton emission in a MoS ₂ /VOPc inorganic/organic van der Waals heterostructure. <i>Materials Horizons</i> , 2022, 9, 1253-1263.	6.4	6
2595	Hot carrier dynamics in MoS ₂ /WS ₂ heterostructure. <i>Nanotechnology</i> , 2022, 33, 195701.	1.3	1
2596	Facile fabrication of 2D material multilayers and vdW heterostructures with multimodal microscopy and AFM characterization. <i>Materials Today</i> , 2022, 52, 31-42.	8.3	6
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2602	Characterization of high quality, monolayer WS ₂ domains via chemical vapor deposition technique. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, 1.	1.1	3
2603	Two-dimensional molybdenum disulfide artificial synapse with high sensitivity. <i>Neuromorphic Computing and Engineering</i> , 2022, 2, 014004.	2.8	3
2604	The Underlying Molecular Mechanism of Fence Engineering to Break the Activityâ€“Stability Tradeâ€“Off in Catalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	28

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2606	Interface effects of Schottky devices built from MoS ₂ and high work function metals. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 165001.	0.7	6
2607	Uniform growth of MoS ₂ films using ultra-low MoO ₃ precursor in one-step heating chemical vapor deposition. <i>Thin Solid Films</i> , 2022, 744, 139092.	0.8	6
2608	Theoretical understanding of electronic and mechanical properties of 1T' transition metal dichalcogenide crystals. <i>Beilstein Journal of Nanotechnology</i> , 2022, 13, 160-171.	1.5	5
2609	Organo-functionalized MoS ₂ as a nanofiller to enhance and control the swelling behavior of polybutadiene rubber nanocomposites. <i>Composites Communications</i> , 2022, 30, 101053.	3.3	3
2610	Plasmonic MXene Nanoparticle-Enabled High-Performance Two-Dimensional MoS ₂ Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 8243-8250.	4.0	18
2611	Bifunctional Application of Viologen-MoS ₂ -CNT/Polythiophene Device as Electrochromic Diode and Half-Wave Rectifier. <i>ACS Materials Au</i> , 2022, 2, 293-300.	2.6	14
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2613	Electrochemically deposited molybdenum disulfide surfaces enable polymer adsorption studies using quartz crystal microbalance with dissipation monitoring (QCM-D). <i>Journal of Colloid and Interface Science</i> , 2022, 614, 522-531.	5.0	2
2614	Self-powered near-infrared MoS ₂ /n-Si photodetectors with Al ₂ O ₃ interface passivation. <i>Journal of Alloys and Compounds</i> , 2022, 902, 163878.	2.8	8
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2616	Activating MoS ₂ via electronic structure modulation and phase engineering for hydrogen evolution reaction. <i>Catalysis Communications</i> , 2022, 164, 106427.	1.6	3
2617	Morphological Evolution of Monolayer MoS ₂ Single-Crystalline Flakes. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3549-3559.	1.5	8
2618	One-Interlayer-Twisted Multilayer MoS ₂ Moiré Superlattices. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	16
2619	Elucidation of PVD MoS ₂ film formation process and its structure focusing on sub-monolayer region. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SC1023.	0.8	5
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2625	Surface plasmon enhancement in different spatial distributions of nanowires and two-dimensional materials. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 8296-8302.	1.3	2
2626	Fast and efficient electrochemical thinning of ultra-large supported and free-standing MoS ₂ layers on gold surfaces. <i>Nanoscale</i> , 2022, 14, 6811-6821.	2.8	2
2627	Electrochemical studies of biofunctionalized MoS ₂ matrix for highly stable immobilization of antibodies and detection of lung cancer protein biomarker. <i>New Journal of Chemistry</i> , 2022, 46, 7477-7489.	1.4	4
2628	Ni-promoted MoS ₂ in hollow zeolite nanoreactors: enhanced catalytic activity and stability for deep hydrodesulfurization. <i>Journal of Materials Chemistry A</i> , 2022, 10, 7263-7270.	5.2	8
2629	Twist-angle-controlled neutral exciton annihilation in WS ₂ homostructures. <i>Nanoscale</i> , 2022, 14, 5537-5544.	2.8	4
2630	Water-induced dual ultrahigh mobilities over 400 cm ² V ⁻¹ s ⁻¹ in 2D MoS ₂ transistors for ultralow-voltage operation and photoelectric synapse perception. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5249-5256.	2.7	6
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2632	Interfacial Charge Transfers and Carrier Regulation Characteristics of Narrow/Wide Band Gap Tmds@Ga ₂ O ₃ N-N Heterojunction Film. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
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2643	Geometric progress in the thickness of exfoliated van der Waals crystals on the example of MoS ₂ . <i>AIP Advances</i> , 2022, 12, .	0.6	5
2644	Utilizing trapped charge at bilayer 2D MoS ₂ /SiO ₂ interface for memory applications. <i>Nanotechnology</i> , 2022, 33, 275201.	1.3	3
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2646	A Novel Methodology of Using Nonsolvent in Achieving Ultraclean Transferred Monolayer MoS ₂ . <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	4
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2651	Molybdenum Disulfide/Double-Wall Carbon Nanotube Mixed-Dimensional Heterostructures. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	6
2652	Optoelectronic Properties of MoS ₂ in Proximity to Carrier Selective Metal Oxides. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	7
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