

Photoluminescence from Chemically Exfoliated MoS₂

Nano Letters

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Citation Report

#	ARTICLE	IF	CITATIONS
16	Magnetic properties of MoS ₂ : Existence of ferromagnetism. Applied Physics Letters, 2012, 101, .	1.5	249
17	Die Trittbrettfahrer des Graphens. Nachrichten Aus Der Chemie, 2012, 60, 422-425.	0.0	1
18	Raman spectroscopy of the interlayer shear mode in few-layer MoS ₂ flakes. Applied Physics Letters, 2012, 101, .	1.5	175
19	Two-Dimensional Transition Metal Dichalcogenide Alloys: Stability and Electronic Properties. Journal of Physical Chemistry Letters, 2012, 3, 3652-3656.	2.1	290
20	Electronics and optoelectronics of two-dimensional transition metal dichalcogenides. Nature Nanotechnology, 2012, 7, 699-712.	15.6	13,346
21	Large excitonic effects in monolayers of molybdenum and tungsten dichalcogenides. Physical Review B, 2012, 86, .	1.1	1,250
22	Effects of confinement and environment on the electronic structure and exciton binding energy of MoS ₂ from first principles. Physical Review B, 2012, 86, .	1.1	539
23	High quality 2D crystals made by anodic bonding: a general technique for layered materials. Nanotechnology, 2012, 23, 505709.	1.3	41
24	MoS ₂ Nanosheets for Top-Gate Nonvolatile Memory Transistor Channel. Small, 2012, 8, 3111-3115.	5.2	219
25	Robust optical emission polarization in MoS ₂ monolayers through selective valley excitation. Physical Review B, 2012, 86, .	1.1	385
26	Titanium sulphene: two-dimensional confinement of electrons and phonons giving rise to improved thermoelectric performance. Physical Chemistry Chemical Physics, 2012, 14, 15641.	1.3	23
27	Semiconductor-metal transition in semiconducting bilayer sheets of transition-metal dichalcogenides. Physical Review B, 2012, 86, .	1.1	259
28	Wafer-scale MoS ₂ thin layers prepared by MoO ₃ sulfurization. Nanoscale, 2012, 4, 6637.	2.8	621
29	Amorphous Molybdenum Sulfide Catalysts for Electrochemical Hydrogen Production: Insights into the Origin of their Catalytic Activity. ACS Catalysis, 2012, 2, 1916-1923.	5.5	1,007
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31	Low-temperature photocarrier dynamics in single-layer MoS ₂ flakes. Proceedings of SPIE, 2012, , .	0.8	2
32	Preparation of MoS ₂ -Polyvinylpyrrolidone Nanocomposites for Flexible Nonvolatile Rewritable Memory Devices with Reduced Graphene Oxide Electrodes. Small, 2012, 8, 3517-3522.	5.2	393
33	Optical and photocatalytic properties of two-dimensional MoS ₂ . European Physical Journal B, 2012, 85, 1.	0.6	121

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34	Well-Defined Colloidal 2-D Layered Transition-Metal Chalcogenide Nanocrystals via Generalized Synthetic Protocols. <i>Journal of the American Chemical Society</i> , 2012, 134, 18233-18236.	6.6	224
35	Two-Dimensional Transition Metal Dichalcogenides under Electron Irradiation: Defect Production and Doping. <i>Physical Review Letters</i> , 2012, 109, 035503.	2.9	960
36	Molybdenum disulphide/titanium dioxide nanocomposite-poly 3-hexylthiophene bulk heterojunction solar cell. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	137
37	Production and processing of graphene and 2d crystals. <i>Materials Today</i> , 2012, 15, 564-589.	8.3	866
38	Thermally Driven Crossover from Indirect toward Direct Bandgap in 2D Semiconductors: MoSe ₂ versus MoS ₂ . <i>Nano Letters</i> , 2012, 12, 5576-5580.	4.5	1,206
39	Quantitative Raman Spectrum and Reliable Thickness Identification for Atomic Layers on Insulating Substrates. <i>ACS Nano</i> , 2012, 6, 7381-7388.	7.3	322
40	MoS ₂ / TiO ₂ nanoparticle composite bulk heterojunction solar cell. , 2012, , .		1
41	Highly Flexible MoS ₂ Thin-Film Transistors with Ion Gel Dielectrics. <i>Nano Letters</i> , 2012, 12, 4013-4017.	4.5	746
43	Fabrication of Flexible MoS ₂ Thin-Film Transistor Arrays for Practical Gas Sensing Applications. <i>Small</i> , 2012, 8, 2994-2999.	5.2	817
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45	Ultrafast and spatially resolved studies of charge carriers in atomically thin molybdenum disulfide. <i>Physical Review B</i> , 2012, 86, .	1.1	215
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47	Laser-Thinning of MoS ₂ : On Demand Generation of a Single-Layer Semiconductor. <i>Nano Letters</i> , 2012, 12, 3187-3192.	4.5	567
48	MoS ₂ Nanosheet Phototransistors with Thickness-Modulated Optical Energy Gap. <i>Nano Letters</i> , 2012, 12, 3695-3700.	4.5	1,221
49	Synthesis of Large-Area MoS ₂ Atomic Layers with Chemical Vapor Deposition. <i>Advanced Materials</i> , 2012, 24, 2320-2325.	11.1	2,956
50	Preparation of High Concentration Dispersions of Exfoliated MoS ₂ with Increased Flake Size. <i>Chemistry of Materials</i> , 2012, 24, 2414-2421.	3.2	504
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55	Epitaxial Monolayer MoS ₂ on Mica with Novel Photoluminescence. Nano Letters, 2013, 13, 3870-3877.	4.5	512
56	Chemical Unzipping of WS ₂ Nanotubes. ACS Nano, 2013, 7, 7311-7317.	7.3	50
57	A Solution-Processed Hole Extraction Layer Made from Ultrathin MoS ₂ Nanosheets for Efficient Organic Solar Cells. Advanced Energy Materials, 2013, 3, 1262-1268.	10.2	231
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61	Improved dispersant-free liquid exfoliation down to the graphene-like state of solvent-free mechanochemically delaminated bulk MoS ₂ . Journal of Materials Chemistry C, 2013, 1, 6411.	2.7	50
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70	MoS ₂ nanosheet functionalized with Cu nanoparticles and its application for glucose detection. Materials Research Bulletin, 2013, 48, 4544-4547.	2.7	104
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73	Laminar MoS ₂ membranes for molecule separation. Chemical Communications, 2013, 49, 10718.	2.2	274
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75	Conducting MoS ₂ Nanosheets as Catalysts for Hydrogen Evolution Reaction. Nano Letters, 2013, 13, 6222-6227.	4.5	1,948
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86	Ferromagnetism in exfoliated tungsten disulfide nanosheets. Nanoscale Research Letters, 2013, 8, 430.	3.1	97
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91	The Intrinsic Ferromagnetism in a MnO ₂ Monolayer. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 3382-3386.	2.1	171
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94	Predicting Dislocations and Grain Boundaries in Two-Dimensional Metal-Disulfides from the First Principles. <i>Nano Letters</i> , 2013, 13, 253-258.	4.5	310
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100	Large and Tunable Photothermoelectric Effect in Single-Layer MoS ₂ . <i>Nano Letters</i> , 2013, 13, 358-363.	4.5	566
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103	Electrical control of optical properties of monolayer MoS ₂ . <i>Solid State Communications</i> , 2013, 155, 49-52.	0.9	182
104	High on/off ratio field effect transistors based on exfoliated crystalline SnS ₂ nano-membranes. <i>Nanotechnology</i> , 2013, 24, 025202.	1.3	120
105	Synthesis of graphene-conjugated polymer nanocomposites for electronic device applications. <i>Nanoscale</i> , 2013, 5, 1440.	2.8	80
106	Strongly luminescent monolayered MoS ₂ prepared by effective ultrasound exfoliation. <i>Nanoscale</i> , 2013, 5, 3387.	2.8	231
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109	Electrical tuning of valley magnetic moment through symmetry control in bilayer MoS ₂ . <i>Nature Physics</i> , 2013, 9, 149-153.	6.5	540
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117	Three-Dimensional Hierarchical Architectures Constructed by Graphene/MoS ₂ Nanoflake Arrays and Their Rapid Charging/Discharging Properties as Lithium-Ion Battery Anodes. <i>Chemistry - A European Journal</i> , 2013, 19, 5818-5823.	1.7	141
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119	Chemically Exfoliated MoS ₂ as Near-Infrared Photothermal Agents. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4160-4164.	7.2	575
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121	Ligand Conjugation of Chemically Exfoliated MoS ₂ . <i>Journal of the American Chemical Society</i> , 2013, 135, 4584-4587.	6.6	509
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123	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
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128	Layer-by-Layer Thinning of MoS ₂ by Plasma. <i>ACS Nano</i> , 2013, 7, 4202-4209.	7.3	387
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136	Controllable synthesis of silver cyanamide as a new semiconductor photocatalyst under visible-light irradiation. <i>Journal of Materials Chemistry A</i> , 2013, 1, 7942.	5.2	40
137	Bridging the Gap Between Bulk and Nanostructured Photoelectrodes: The Impact of Surface States on the Electrocatalytic and Photoelectrochemical Properties of MoS ₂ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 9713-9722.	1.5	86
138	Graphene-analogous low-dimensional materials. <i>Progress in Materials Science</i> , 2013, 58, 1244-1315.	16.0	684
139	Oriented Molecular Attachments Through Sol-Gel Chemistry for Synthesis of Ultrathin Hydrated Vanadium Pentoxide Nanosheets and Their Applications. <i>Small</i> , 2013, 9, 716-721.	5.2	67
140	Grains and grain boundaries in highly crystalline monolayer molybdenum disulphide. <i>Nature Materials</i> , 2013, 12, 554-561.	13.3	1,896
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142	Efficient work-function engineering of solution-processed MoS ₂ thin-films for novel hole and electron transport layers leading to high-performance polymer solar cells. <i>Journal of Materials Chemistry C</i> , 2013, 1, 3777.	2.7	173
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145	High-Gain Phototransistors Based on a CVD MoS ₂ Monolayer. <i>Advanced Materials</i> , 2013, 25, 3456-3461.	11.1	891
146	Sensing Behavior of Atomically Thin-Layered MoS ₂ Transistors. <i>ACS Nano</i> , 2013, 7, 4879-4891.	7.3	1,158
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174	Optical identification of MoS ₂ /graphene heterostructure on SiO ₂ /Si substrate. Optics Express, 2014, 22, 15969.	1.7	22
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1557	Review“Electrochemical Synthesis of 2D Layered Materials and Their Potential Application in Pesticide Detection. <i>Journal of the Electrochemical Society</i> , 2018, 165, B848-B861.	1.3	32
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1568	Sugar-Based Natural Deep Eutectic Mixtures as Green Intercalating Solvents for High-Yield Preparation of Stable MoS ₂ Nanosheets: Application to Electrocatalysis of Hydrogen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2018, 1, 5896-5906.	2.5	37
1569	Two-dimensional quantum dots: Fundamentals, photoluminescence mechanism and their energy and environmental applications. <i>Materials Today Energy</i> , 2018, 10, 222-240.	2.5	87
1570	Synthesis of 2D transition metal dichalcogenides by chemical vapor deposition with controlled layer number and morphology. <i>Nano Convergence</i> , 2018, 5, 26.	6.3	119
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1921	Strong Charge Transfer at 2H-1T Phase Boundary of MoS ₂ for Superb High-Performance Energy Storage. <i>Small</i> , 2019, 15, e1900131.	5.2	53
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1923	Structural, chemical, and electrical parameters of Au/MoS ₂ /n-GaAs metal/2D/3D hybrid heterojunction. <i>Journal of Colloid and Interface Science</i> , 2019, 550, 48-56.	5.0	18
1924	Hierarchical MoS ₂ Hollow Architectures with Abundant Mo Vacancies for Efficient Sodium Storage. <i>ACS Nano</i> , 2019, 13, 5533-5540.	7.3	187
1925	Triiodide reduction activity of hydrangea molybdenum sulfide/reduced graphene oxide composite for dye-sensitized solar cells. <i>Materials Research Bulletin</i> , 2019, 117, 78-83.	2.7	11
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1930	Confining Free Radicals in Close Vicinity to Contaminants Enables Ultrafast Fenton-Like Processes in the Interspacing of MoS ₂ Membranes. <i>Angewandte Chemie</i> , 2019, 131, 8218-8222.	1.6	23
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1939	Dependence of Photocurrent Enhancements in Hybrid Quantum Dot-MoS ₂ Devices on Quantum Dot Emission Wavelength. <i>ACS Photonics</i> , 2019, 6, 976-984.	3.2	9
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1941	Enhanced photoelectrochemical hydrogen production efficiency of MoS ₂ -Si heterojunction. <i>Optics Express</i> , 2019, 27, A352.	1.7	91
1942	Room-temperature infrared photodetectors with hybrid structure based on two-dimensional materials. <i>Chinese Physics B</i> , 2019, 28, 017302.	0.7	24
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1945	Ultrathin MoS ₂ nanosheets for high-performance photoelectrochemical applications <i>via</i> plasmonic coupling with Au nanocrystals. <i>Nanoscale</i> , 2019, 11, 7813-7824.	2.8	57
1946	Engineering MoS ₂ Basal Planes for Hydrogen Evolution via Synergistic Ruthenium Doping and Nanocarbon Hybridization. <i>Advanced Science</i> , 2019, 6, 1900090.	5.6	148
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1948	Thermal annealing effects on the electrophysical characteristics of sputtered MoS ₂ thin films by Hall effect measurements. <i>Semiconductor Science and Technology</i> , 2019, 34, 045017.	1.0	9
1949	Influence of MoS ₂ Nanosheet Size on Performance of Drilling Mud. <i>Polymers</i> , 2019, 11, 321.	2.0	15
1950	Glucose-Induced Synthesis of 1T-MoS ₂ /C Hybrid for High-Rate Lithium-Ion Batteries. <i>Small</i> , 2019, 15, e1805420.	5.2	138
1951	Graphene/silicon and 2D-MoS ₂ /silicon solar cells: a review. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	22
1952	Manipulation of Coherent Optical Propagation Based on Monolayer MoS ₂ Resonator. <i>Photonic Sensors</i> , 2019, 9, 317-326.	2.5	0

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1955	Chemically exfoliated 1T-phase transition metal dichalcogenide nanosheets for transparent antibacterial applications. <i>2D Materials</i> , 2019, 6, 025025.	2.0	45
1956	Thickness-Dependent Ultrafast Photonics of SnS_2 Nanolayers for Optimizing Fiber Lasers. <i>ACS Applied Nano Materials</i> , 2019, 2, 2697-2705.	2.4	48
1957	Quantum confinement in few layer SnS nanosheets. <i>Nanotechnology</i> , 2019, 30, 245705.	1.3	7
1958	Sensitive and anti-interference stripping voltammetry analysis of Pb(II) in water using flower-like MoS_2/rGO composite with ultra-thin nanosheets. <i>Analytica Chimica Acta</i> , 2019, 1063, 64-74.	2.6	55
1959	Recent progress in atomic layer deposition of molybdenum disulfide: a mini review. <i>Science China Materials</i> , 2019, 62, 913-924.	3.5	24
1960	Nanoscale Friction on Confined Water Layers Intercalated between MoS_2 Flakes and Silica. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8827-8835.	1.5	36
1961	Influence of the substrate types on the molybdenum disulfide grown by thermal vapour sulfurization. <i>Superlattices and Microstructures</i> , 2019, 129, 69-76.	1.4	0
1962	Electronic and optical properties of layered van der Waals heterostructure based on MS_2 ($M = \text{Mo}, \text{W}$) monolayers. <i>Materials Research Express</i> , 2019, 6, 065060.	0.8	13
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1965	Lattice Mismatch-Induced Ultraprecise 1T-Phase MoS_2 -Pd/Au for Plasmon-Enhanced Hydrogen Evolution. <i>Nano Letters</i> , 2019, 19, 2758-2764.	4.5	98
1966	Surface-diffusion-limited growth of atomically thin WS_2 crystals from core-shell nuclei. <i>Nanoscale</i> , 2019, 11, 8706-8714.	2.8	18
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1968	Multiphoton Excitation and Defect-Enhanced Fast Carrier Relaxation in Few-Layered MoS_2 Crystals. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11216-11223.	1.5	6
1969	N,N -Dimethylformamide assisted hydrothermal introduction of MoS_2 on ultrathin $\text{g-C}_3\text{N}_4$ layers with enhanced visible light photocatalytic hydrogen evolution activity. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1461-1467.	2.5	21
1970	Synthesis of Au-nanoparticle-loaded 1T@2H- MoS_2 nanosheets with high photocatalytic performance. <i>Journal of Materials Science</i> , 2019, 54, 9656-9665.	1.7	44
1971	Strain effects on phase transitions in transition metal dichalcogenides. <i>Current Applied Physics</i> , 2019, 19, 690-696.	1.1	7

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1973	Synergetic effect of BiOCl/Bi ₂ O ₃ and MoS ₂ : in situ DRIFTS investigation on photocatalytic NO oxidation pathway. <i>Rare Metals</i> , 2019, 38, 437-445.	3.6	26
1974	Fabrication and Properties of Molybdenum Disulfide Films for Electro-Optical Applications. <i>International Journal of Nanoscience</i> , 2019, 18, 1940037.	0.4	1
1975	Effects of Stone-Wales Defect on the Electronic and Optical Properties of Armchair MoS ₂ Nanoribbon: First-Principles Calculations. <i>Journal of Electronic Materials</i> , 2019, 48, 3763-3776.	1.0	7
1976	Ultrafast Carrier Dynamics in Few-Layer Colloidal Molybdenum Disulfide Probed by Broadband Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10571-10577.	1.5	35
1977	Facile Synthesis of Carbon Dots@2D MoS ₂ Heterostructure with Enhanced Photocatalytic Properties. <i>Inorganic Chemistry</i> , 2019, 58, 5746-5752.	1.9	31
1978	Electronic properties of several two dimensional halides from ab initio calculations. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 823-832.	1.5	24
1979	Ab initio investigation of the optical properties of layered Mo _x Se _(2-x) (0 ≤ x ≤ 2): By GGA and mBJ approaches. <i>International Journal of Modern Physics B</i> , 2019, 33, 1950062.	1.0	1
1980	Edge-terminated few-layer MoS ₂ nanoflakes supported on TNAs@C with enhanced electrocatalysis activity for iodine reduction reaction. <i>Materials Today Nano</i> , 2019, 6, 100033.	2.3	12
1981	Direct and indirect optical transitions in bulk and atomically thin MoS ₂ studied by photoreflectance and photoacoustic spectroscopy. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	17
1982	Functionalized MoS ₂ supported core-shell Ag@Au nanoclusters for managing electronic processes in photocatalysis. <i>Materials Research Bulletin</i> , 2019, 114, 112-120.	2.7	14
1983	2D Organic Hybrid Heterostructures for Optoelectronic Applications. <i>Advanced Materials</i> , 2019, 31, e1803831.	11.1	86
1984	Enhancing hydrogen evolution on the basal plane of transition metal dichalcogenide van der Waals heterostructures. <i>Npj Computational Materials</i> , 2019, 5, .	3.5	39
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1986	Liquid phase exfoliation of MoO ₃ nanosheets for lithium ion battery applications. <i>Nanoscale Advances</i> , 2019, 1, 1560-1570.	2.2	35
1987	Exfoliation of transition-metal dichalcogenides using ATP in aqueous solution. <i>Chemical Communications</i> , 2019, 55, 2972-2975.	2.2	15
1988	Sulfur-doped graphene/transition metal dichalcogenide heterostructured hybrids with electrocatalytic activity toward the hydrogen evolution reaction. <i>Nanoscale Advances</i> , 2019, 1, 1489-1496.	2.2	36
1989	PVP incorporated MoS ₂ as a Mg ion host with enhanced capacity and durability. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4426-4430.	5.2	35

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1992	Size-Dependent Quantization Effect in Optical Properties of MoS ₂ Nanostructures. ChemistrySelect, 2019, 4, 2116-2121.	0.7	11
1993	A synoptic review of MoS ₂ : Synthesis to applications. Superlattices and Microstructures, 2019, 128, 274-297.	1.4	225
1994	Phase engineering of two-dimensional transition metal dichalcogenides. Science China Materials, 2019, 62, 759-775.	3.5	106
1995	1T-2H Cr _x -MoS ₂ Ultrathin Nanosheets for Durable and Enhanced Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 7227-7232.	3.2	25
1996	Translocation, biotransformation-related degradation, and toxicity assessment of polyvinylpyrrolidone-modified 2H-phase nano-MoS ₂ . Nanoscale, 2019, 11, 4767-4780.	2.8	47
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2030	Two-dimensional materials as catalysts for solar fuels: hydrogen evolution reaction and CO ₂ reduction. <i>Journal of Materials Chemistry A</i> , 2019, 7, 430-454.	5.2	125
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