

# Largeâ€Area and Highâ€Quality 2D Transition Metal Te

Advanced Materials

29, 1603471

DOI: [10.1002/adma.201603471](https://doi.org/10.1002/adma.201603471)

Citation Report

#	ARTICLE	IF	CITATIONS
1	WTe <sub>2</sub> thin films grown by beam-interrupted molecular beam epitaxy. 2D Materials, 2017, 4, 025044.	2.0	48
2	Large-Area 2D Layered MoTe <sub>2</sub> by Physical Vapor Deposition and Solid-Phase Crystallization in a Tellurium-Free Atmosphere. Advanced Materials Interfaces, 2017, 4, 1700157.	1.9	61
3	2D transition metal dichalcogenides. Nature Reviews Materials, 2017, 2, .	23.3	3,689
4	Solution synthesis of few-layer WTe <sub>2</sub> and Mo <sub>x</sub> W <sub>1-x</sub> Te <sub>2</sub> nanostructures. Journal of Materials Chemistry C, 2017, 5, 11317-11323.	2.7	23
5	A Simple Method for Synthesis of High-Quality Millimeter-Scale 1T <sup>±</sup> Transition-Metal Telluride and Near-Field Nanooptical Properties. Advanced Materials, 2017, 29, 1700704.	11.1	101
6	Coplanar semiconductor-metal circuitry defined on few-layer MoTe <sub>2</sub> via polymorphic heteroepitaxy. Nature Nanotechnology, 2017, 12, 1064-1070.	15.6	210
7	Tuning the transport behavior of centimeter-scale WTe <sub>2</sub> ultrathin films fabricated by pulsed laser deposition. Applied Physics Letters, 2017, 111, .	1.5	34
8	Controllable Synthesis of Atomically Thin Type-II Weyl Semimetal WTe <sub>2</sub> Nanosheets: An Advanced Electrode Material for All-State Flexible Supercapacitors. Advanced Materials, 2017, 29, 1701909.	11.1	107
9	Synthesis and Physical Properties of Phase-Engineered Transition Metal Dichalcogenide Monolayer Heterostructures. ACS Nano, 2017, 11, 8619-8627.	7.3	42
10	van der Waals Layered Materials: Opportunities and Challenges. ACS Nano, 2017, 11, 11803-11830.	7.3	394
11	Toward a Mechanistic Understanding of Vertical Growth of van der Waals Stacked 2D Materials: A Multiscale Model and Experiments. ACS Nano, 2017, 11, 12780-12788.	7.3	89
12	Direct visualization of a two-dimensional topological insulator in the single-layer $T_xW_{1-x}Te_2$ . Physical Review B, 2017, 96, .	1.1	129
13	Telluriding monolayer MoS <sub>2</sub> and WS <sub>2</sub> via alkali metal sinter. Nature Communications, 2017, 8, 2163.	5.8	87
14	InSe monolayer: synthesis, structure and ultra-high second-harmonic generation. 2D Materials, 2018, 5, 025019.	2.0	92
15	Centimeter-Scale, Large-Area, Few-Layer 1T <sup>±</sup> -WTe <sub>2</sub> Films by Chemical Vapor Deposition and Its Long-Term Stability in Ambient Condition. Journal of Physical Chemistry C, 2018, 122, 7005-7012.	1.5	42
16	Novel structured transition metal dichalcogenide nanosheets. Chemical Society Reviews, 2018, 47, 3301-3338.	18.7	303
17	Inversion Symmetry Broken 2D 3R <sup>±</sup> -MoTe <sub>2</sub> . Advanced Functional Materials, 2018, 28, 1800785.	7.8	63
18	Large-scale synthesis of 2D metal dichalcogenides. Journal of Materials Chemistry C, 2018, 6, 4627-4640.	2.7	35

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19	Chemical Vapor Deposition Growth and Applications of Two-Dimensional Materials and Their Heterostructures. <i>Chemical Reviews</i> , 2018, 118, 6091-6133.	23.0	1,000
20	Large area growth of MoTe <sub>2</sub> films as high performance counter electrodes for dye-sensitized solar cells. <i>Scientific Reports</i> , 2018, 8, 29.	1.6	68
21	Anisotropic Ordering in 1T <sup>±</sup> Molybdenum and Tungsten Ditelluride Layers Alloyed with Sulfur and Selenium. <i>ACS Nano</i> , 2018, 12, 894-901.	7.3	52
22	One-Step Synthesis of Metal/Semiconductor Heterostructure NbS <sub>2</sub> /MoS <sub>2</sub> . <i>Chemistry of Materials</i> , 2018, 30, 4001-4007.	3.2	85
23	Semimetallic 1T <sup>±</sup> WTe <sub>2</sub> Nanorods as Anode Material for the Sodium Ion Battery. <i>Energy &amp; Fuels</i> , 2018, 32, 6371-6377.	2.5	39
24	Synthesis of Atomically Thin Transition Metal Ditelluride Films by Rapid Chemical Transformation in Solution Phase. <i>Chemistry of Materials</i> , 2018, 30, 2463-2473.	3.2	25
25	Chemical synthesis of two-dimensional atomic crystals, heterostructures and superlattices. <i>Chemical Society Reviews</i> , 2018, 47, 3129-3151.	18.7	132
26	Liquid Exfoliation of Few-layer 1T-TaS <sub>2</sub> x Se x Superconductors. <i>Journal of Superconductivity and Novel Magnetism</i> , 2018, 31, 1005-1011.	0.8	3
27	Enhanced Electrocatalytic Hydrogen Evolution from Large-Scale, Facile-Prepared, Highly Crystalline WTe <sub>2</sub> Nanoribbons with Weyl Semimetallic Phase. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 458-467.	4.0	64
28	Group 6 transition metal dichalcogenide nanomaterials: synthesis, applications and future perspectives. <i>Nanoscale Horizons</i> , 2018, 3, 90-204.	4.1	309
29	1T <sup>±</sup> Transition Metal Telluride Atomic Layers for Plasmon-Free SERS at Femtomolar Levels. <i>Journal of the American Chemical Society</i> , 2018, 140, 8696-8704.	6.6	192
30	Anomalous oxidation and its effect on electrical transport originating from surface chemical instability in large-area, few-layer 1T <sup>±</sup> -MoTe <sub>2</sub> films. <i>Nanoscale</i> , 2018, 10, 19906-19915.	2.8	36
31	Orientation-dependent optical characterization of atomically thin transition metal ditellurides. <i>Nanoscale</i> , 2018, 10, 21978-21984.	2.8	24
32	Development of a WS <sub>2</sub> /MoTe <sub>2</sub> heterostructure as a counter electrode for the improved performance in dye-sensitized solar cells. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 3178-3183.	3.0	27
33	Observation of Coulomb gap in the quantum spin Hall candidate single-layer 1T <sup>±</sup> -WTe <sub>2</sub> . <i>Nature Communications</i> , 2018, 9, 4071.	5.8	60
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35	Probing the charging and discharging behavior of K-CO <sub>2</sub> nanobatteries in an aberration corrected environmental transmission electron microscope. <i>Nano Energy</i> , 2018, 53, 544-549.	8.2	34
36	CVD Technology for 2-D Materials. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 4040-4052.	1.6	47

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37	Few-layer 1T <sup>±</sup> MoTe <sub>2</sub> as gapless semimetal with thickness dependent carrier transport. 2D Materials, 2018, 5, 031010.	2.0	14
38	van der Waals Metallic Transition Metal Dichalcogenides. Chemical Reviews, 2018, 118, 6297-6336.	23.0	252
39	Defect in 2D materials beyond graphene. , 2018, , 161-187.		4
40	2D Group IVB Transition Metal Dichalcogenides. Advanced Functional Materials, 2018, 28, 1803305.	7.8	91
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47	Sub-Picosecond Carrier Dynamics Induced by Efficient Charge Transfer in MoTe <sub>2</sub> /WTe <sub>2</sub> van der Waals Heterostructures. ACS Nano, 2019, 13, 9587-9594.	7.3	22
48	Conductive and Catalytic VTe <sub>2</sub> @MgO Heterostructure as Effective Polysulfide Promotor for Lithium-Sulfur Batteries. ACS Nano, 2019, 13, 13235-13243.	7.3	107
49	Electronic structure of molecular beam epitaxy grown 1T <sup>±</sup> -MoTe <sub>2</sub> film and strain effect*. Chinese Physics B, 2019, 28, 107307.	0.7	7
50	Linear Dichroism and Nondestructive Crystalline Identification of Anisotropic Semimetal Few-Layer MoTe <sub>2</sub> . Small, 2019, 15, e1903159.	5.2	24
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58	Controlled synthesis and frictional properties of 2D MoTe <sub>2</sub> via chemical vapor deposition. <i>Chemical Physics Letters</i> , 2019, 728, 156-159.	1.2	7
59	Transport evidence of asymmetric spin-orbit coupling in few-layer superconducting 1Td-MoTe <sub>2</sub> . <i>Nature Communications</i> , 2019, 10, 2044.	5.8	79
60	Growth of Monolayer WS <sub>2</sub> Single Crystals with Atmospheric Pressure CVD: Role of Temperature. <i>MRS Advances</i> , 2019, 4, 255-262.	0.5	5
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65	Band structure and giant Stark effect in two-dimensional transition-metal dichalcogenides. <i>Electronic Structure</i> , 2019, 1, 015005.	1.0	5
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68	Phonon-mediated superconductivity in electron-doped monolayer InSe: A first-principles investigation. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 125, 23-30.	1.9	5
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70	2H/1T phase WS <sub>2</sub> (1-x)Te <sub>x</sub> alloys grown by chemical vapor deposition with tunable band structures. <i>Applied Surface Science</i> , 2020, 504, 144371.	3.1	18
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79	Stoichiometry-Controlled Mo <sub>x</sub> W <sub>1-x</sub> Te <sub>2</sub> Nanowhiskers: A Novel Electrocatalyst for Pt-Free Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 34815-34824.	4.0	15
80	Design and synthesis of two-dimensional materials and their heterostructures. , 2020, , 13-54.		1
81	Surface engineered 2D materials for photocatalysis. Chemical Communications, 2020, 56, 11000-11013.	2.2	61
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93	Quantum spin Hall state in monolayer $1T'$ -TMDCs. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 333001.	0.7	16
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98	Large-Area Freestanding Weyl Semimetal WTe <sub>2</sub> Membranes. <i>Chinese Physics Letters</i> , 2021, 38, 017101.	1.3	7
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108	Two-Dimensional Metal Telluride Atomic Crystals: Preparation, Physical Properties, and Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2010901.	7.8	22
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110	Evidence of the Ferroelectric Polarization in Charge Transport through WTe <sub>2</sub> Weyl Semimetal Surface. JETP Letters, 2021, 113, 389-395.	0.4	7
111	Metastable 1Tâ€²-phase group VIB transition metal dichalcogenide crystals. Nature Materials, 2021, 20, 1113-1120.	13.3	119
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129	Machine Learning Driven Synthesis of Few-Layered $WTe_2$ with Geometrical Control. <i>Journal of the American Chemical Society</i> , 2021, 143, 18103-18113.	6.6	30
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139	Two Birds with One Stone: A NaCl-Assisted Strategy toward $MoTe_2$ Nanosheets Nanoconfined in 3D Porous Carbon Network for Sodium-Ion Battery Anode. <i>Energy Storage Materials</i> , 2022, 47, 591-601.	9.5	23
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