

CITATION REPORT

List of articles citing

Identification of individual and few layers of WS₂ using Raman Spectroscopy

DOI: 10.1038/srep01755
Scientific Reports, 2013, 3, .

Source: <https://exaly.com/paper-pdf/55908938/citation-report.pdf>

Version: 2024-04-25

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
1054	Layer-controlled, wafer-scale, and conformal synthesis of tungsten disulfide nanosheets using atomic layer deposition. 2013 , 7, 11333-40		272
1053	Nonblinking, intense two-dimensional light emitter: monolayer WS ₂ triangles. 2013 , 7, 10985-94		242
1052	Room temperature rubbing for few-layer two-dimensional thin flakes directly on flexible polymer substrates. <i>Scientific Reports</i> , 2013 , 3, 2697	4.9	20
1051	Lattice dynamics in mono- and few-layer sheets of WS ₂ and WSe ₂ . 2013 , 5, 9677-83		574
1050	Controlled growth of high-quality monolayer WS ₂ layers on sapphire and imaging its grain boundary. 2013 , 7, 8963-71		586
1049	Photosensor Device Based on Few-Layered WS ₂ Films. 2013 , 23, 5511-5517		480
1048	Controlled synthesis and transfer of large-area WS ₂ sheets: from single layer to few layers. 2013 , 7, 5235-42		453
1047	Negative infrared photocurrent response in layered WS ₂ /reduced graphene oxide hybrids. 2014 , 105, 243502		37
1046	High-performance photocurrent generation from two-dimensional WS ₂ field-effect transistors. 2014 , 104, 193113		72
1045	Ultrashort optical pulse characterization using WS ₂ monolayers. 2014 , 39, 383-5		30
1044	Electrochemistry of transition metal dichalcogenides: strong dependence on the metal-to-chalcogen composition and exfoliation method. 2014 , 8, 12185-98		239
1043	Second-order resonant Raman scattering in single-layer tungsten disulfide WS ₂ . 2014 , 89,		49
1042	Synthesis, characterization and electrostatic properties of WS ₂ nanostructures. 2014 , 4, 057105		9
1041	Resonance Raman scattering in bulk 2H-MX ₂ (M = Mo, W; X = S, Se) and monolayer MoS ₂ . 2014 , 115, 053527		70
1040	Synthesis and Optical Properties of Large-Area Single-Crystalline 2D Semiconductor WS ₂ Monolayer from Chemical Vapor Deposition. 2014 , 2, 131-136		411
1039	First-principles Raman spectra of MoS ₂ , WS ₂ and their heterostructures. 2014 , 6, 5394-401		261
1038	Production of aqueous dispersions of inorganic graphene analogues by exfoliation and stabilization with non-ionic surfactants. 2014 , 4, 14115-14127		90

1037	Ultrathin WS ₂ Nanoflakes as a High-Performance Electrocatalyst for the Hydrogen Evolution Reaction. 2014 , 126, 7994-7997	57
1036	Thermal expansion, anharmonicity and temperature-dependent Raman spectra of single- and few-layer MoSe ₂ and WSe ₂ . 2014 , 15, 1592-8	193
1035	Thermal conductivity of monolayer molybdenum disulfide obtained from temperature-dependent Raman spectroscopy. 2014 , 8, 986-93	526
1034	Ultrathin WS ₂ nanoflakes as a high-performance electrocatalyst for the hydrogen evolution reaction. 2014 , 53, 7860-3	561
1033	Vapor-phase growth and characterization of Mo(1-x)W(x)S ₂ (0 ≤ x ≤ 1) atomic layers on 2-inch sapphire substrates. 2014 , 6, 624-9	106
1032	Temperature dependent phonon shifts in single-layer WS(2). 2014 , 6, 1158-63	163
1031	Monolayer behaviour in bulk ReS ₂ due to electronic and vibrational decoupling. 2014 , 5, 3252	728
1030	Edge-states ferromagnetism of WS ₂ nanosheets. 2014 , 104, 202406	30
1029	Metal seed layer thickness-induced transition from vertical to horizontal growth of MoS ₂ and WS ₂ . 2014 , 14, 6842-9	208
1028	Optical properties and band gap of single- and few-layer MoTe ₂ crystals. 2014 , 14, 6231-6	540
1027	Composition-dependent Raman modes of Mo(1-x)W(x)S ₂ monolayer alloys. 2014 , 6, 2833-9	107
1026	Component-controllable WS(2(1-x))Se(2x) nanotubes for efficient hydrogen evolution reaction. 2014 , 8, 8468-76	285
1025	Strain engineering of WS ₂ , WSe ₂ , and WTe ₂ . 2014 , 4, 34561	216
1024	Layer-dependent optical conductivity in atomic thin WS ₂ by reflection contrast spectroscopy. 2014 , 6, 16020-6	28
1023	Probing local strain at MX(2)-metal boundaries with surface plasmon-enhanced Raman scattering. 2014 , 14, 5329-34	87
1022	Vertical and in-plane heterostructures from WS ₂ /MoS ₂ monolayers. 2014 , 13, 1135-42	1580
1021	Ultrafast charge transfer in atomically thin MoS ₂ /WS ₂ heterostructures. 2014 , 9, 682-6	1432
1020	Excited excitonic states in 1L, 2L, 3L, and bulk WSe ₂ observed by resonant Raman spectroscopy. 2014 , 8, 9629-35	154

1019	Strong enhancement of Raman scattering from a bulk-inactive vibrational mode in few-layer MoTe ₂ . 2014 , 8, 3895-903		223
1018	Wafer Scale Synthesis and High Resolution Structural Characterization of Atomically Thin MoS ₂ Layers. 2014 , 24, 7461-7466		87
1017	Controllable growth and transfer of monolayer MoS ₂ on Au foils and its potential application in hydrogen evolution reaction. 2014 , 8, 10196-204		351
1016	Two-dimensional molybdenum tungsten diselenide alloys: photoluminescence, Raman scattering, and electrical transport. 2014 , 8, 7130-7		166
1015	Growth of alloy MoS(2x)Se ₂ (1-x) nanosheets with fully tunable chemical compositions and optical properties. 2014 , 136, 3756-9		362
1014	Low-Temperature Synthesis of n-Type WS ₂ Thin Films via H ₂ S Plasma Sulfurization of WO ₃ . 2014 , 26, 3986-3992		67
1013	Setting up a nanolab inside a transmission electron microscope for two-dimensional materials research. 2015 , 30, 3153-3176		8
1012	Splitting of monolayer out-of-plane A _{1g} Raman mode in few-layer WS ₂ . 2015 , 91,		71
1011	Polarization analysis of excitons in monolayer and bilayer transition-metal dichalcogenides. 2015 , 92,		115
1010	The growth scale and kinetics of WS ₂ monolayers under varying H ₂ concentration. <i>Scientific Reports</i> , 2015 , 5, 13205	4.9	62
1009	Optical Limiting and Theoretical Modelling of Layered Transition Metal Dichalcogenide Nanosheets. <i>Scientific Reports</i> , 2015 , 5, 14646	4.9	174
1008	Au plasmonics in a WS ₂ -Au-CuInS ₂ photocatalyst for significantly enhanced hydrogen generation. 2015 , 107, 223902		23
1007	Low wavenumber Raman spectroscopy of highly crystalline MoSe ₂ grown by chemical vapor deposition. 2015 , 252, 2385-2389		21
1006	Lateral Built-In Potential of Monolayer MoS ₂ -WS ₂ In-Plane Heterostructures by a Shortcut Growth Strategy. 2015 , 27, 6431-7		155
1005	Raman and Brillouin scattering studies of bulk 2H-WSe ₂ . 2015 , 27, 395401		4
1004	Synthesis and enhanced electrochemical catalytic performance of monolayer WS ₂ (1-x) Se _{2x} with a tunable band gap. 2015 , 27, 4732-8		173
1003	High-Performance Monolayer WS ₂ Field-Effect Transistors on High-Dielectrics. 2015 , 27, 5230-4		177
1002	Vertically Aligned WS ₂ Nanosheets for Water Splitting. 2015 , 25, 6199-6204		98

1001	Drying-Mediated Self-Assembled Growth of Transition Metal Dichalcogenide Wires and their Heterostructures. 2015 , 27, 4142-9	27
1000	Coupling and Interlayer Exciton in Twist-Stacked WS ₂ Bilayers. 2015 , 3, 1600-1605	35
999	Optical control of charged exciton states in tungsten disulfide. 2015 , 106, 201907	65
998	Effects of substrate type and material-substrate bonding on high-temperature behavior of monolayer WS ₂ . 2015 , 8, 2686-2697	86
997	Ridge-like Ni supported WS ₂ films for lithium storage application. 2015 , 158, 9-12	6
996	Effect of disorder on Raman scattering of single-layer MoS ₂ . 2015 , 91,	380
995	Femtosecond Soliton Pulse Generation Using Evanescent Field Interaction Through Tungsten Disulfide (WS ₂) Film. 2015 , 33, 3550-3557	40
994	Vibrational and optical properties of MoS ₂ : From monolayer to bulk. 2015 , 70, 554-586	125
993	Origin of Hybrid 1T- and 2H-WS ₂ Ultrathin Layers by Pulsed Laser Deposition. 2015 , 119, 27496-27504	39
992	Direct epitaxial CVD synthesis of tungsten disulfide on epitaxial and CVD graphene. 2015 , 5, 98700-98708	34
991	Electron-Phonon Interaction and Double-Resonance Raman Studies in Monolayer WS ₂ . 2015 , 119, 5146-5151	54
990	WS ₂ mode-locked ultrafast fiber laser. <i>Scientific Reports</i> , 2015 , 5, 7965	4.9 360
989	Microwave and hydrothermal syntheses of WSe ₂ micro/nanorods and their application in supercapacitors. 2015 , 5, 21700-21709	59
988	Two solvent grinding sonication method for the synthesis of two-dimensional tungsten disulphide flakes. 2015 , 51, 3770-3	50
987	Photoluminescence and Raman mapping characterization of WS ₂ monolayers prepared using top-down and bottom-up methods. 2015 , 3, 2589-2592	33
986	Functionalization of liquid-exfoliated two-dimensional 2H-MoS ₂ . 2015 , 54, 2638-42	189
985	Controllable synthesis of high quality monolayer WS ₂ on a SiO ₂ /Si substrate by chemical vapor deposition. 2015 , 5, 15795-15799	52
984	Defect-induced photoluminescence in monolayer semiconducting transition metal dichalcogenides. 2015 , 9, 1520-7	295

983	Functionalization of Liquid-Exfoliated Two-Dimensional 2H-MoS ₂ . 2015 , 127, 2676-2680	32
982	Helicity-resolved Raman scattering of MoS ₂ /MoSe ₂ /WS ₂ and WSe ₂ atomic layers. 2015 , 15, 2526-32	186
981	Microfiber-based WS ₂ -film saturable absorber for ultra-fast photonics. 2015 , 5, 479	175
980	Layer-dependent modulation of tungsten disulfide photoluminescence by lateral electric fields. 2015 , 9, 2740-8	39
979	Unveiling surface redox charge storage of interacting two-dimensional heteronanoshets in hierarchical architectures. 2015 , 15, 2269-77	73
978	Phonon and Raman scattering of two-dimensional transition metal dichalcogenides from monolayer, multilayer to bulk material. 2015 , 44, 2757-85	755
977	A Method Toward Fabricating Semiconducting 3R-NbS ₂ Ultrathin Films. 2015 , 119, 19763-19771	38
976	Engineering Optical and Electronic Properties of WS ₂ by Varying the Number of Layers. 2015 , 9, 6854-60	73
975	Direct Observation of Degenerate Two-Photon Absorption and Its Saturation in WS ₂ and MoS ₂ Monolayer and Few-Layer Films. 2015 , 9, 7142-50	254
974	Controlled engineering of WS ₂ nanosheets/CdS nanoparticle heterojunction with enhanced photoelectrochemical activity. 2015 , 141, 260-269	47
973	High-mobility and air-stable single-layer WS ₂ field-effect transistors sandwiched between chemical vapor deposition-grown hexagonal BN films. <i>Scientific Reports</i> , 2015 , 5, 10699	4-9 187
972	A combined experimental and theoretical study of the structural, electronic and vibrational properties of bulk and few-layer Td-WTe ₂ . 2015 , 27, 285401	44
971	Synthesis of atomically thin transition metal disulfides for charge transport layers in optoelectronic devices. 2015 , 9, 4146-55	76
970	High-mobility three-atom-thick semiconducting films with wafer-scale homogeneity. 2015 , 520, 656-60	1224
969	Beyond Graphene: Progress in Novel Two-Dimensional Materials and van der Waals Solids. 2015 , 45, 1-27	430
968	Electro-active shape memory composites enhanced by flexible carbon nanotube/graphene aerogels. 2015 , 3, 11641-11649	71
967	Basal-Plane Functionalization of Chemically Exfoliated Molybdenum Disulfide by Diazonium Salts. 2015 , 9, 6018-30	232
966	New Strategy for the Growth of Complex Heterostructures Based on Different 2D Materials. 2015 , 27, 4105-4113	28

965	. 2015 , 27, 1581-1584	80
964	Double resonance Raman modes in monolayer and few-layer MoTe ₂ . 2015 , 91,	76
963	Synthesis, characterization of WS ₂ nanostructures by vapor phase deposition. 2015 , 117, 064302	6
962	Magnetoluminescence and valley polarized state of a two-dimensional electron gas in WS ₂ monolayers. 2015 , 10, 603-7	69
961	Synthesis and Transfer of Large-Area Monolayer WS ₂ Crystals: Moving Toward the Recyclable Use of Sapphire Substrates. 2015 , 9, 6178-87	163
960	Strain-induced direct \rightarrow indirect bandgap transition and phonon modulation in monolayer WS ₂ . 2015 , 8, 2562-2572	245
959	Layer-controllable WS ₂ -reduced graphene oxide hybrid nanosheets with high electrocatalytic activity for hydrogen evolution. 2015 , 7, 10391-7	124
958	Anisotropic Electron-Phonon Coupling in Colloidal Layered TiS ₂ Nanodiscs Observed via Coherent Acoustic Phonons. 2015 , 119, 7436-7442	11
957	Transition metal dichalcogenide growth via close proximity precursor supply. <i>Scientific Reports</i> , 2014 , 4, 7374	4-9 60
956	Investigation of 2D transition metal dichalcogenide films for electronic devices. 2015 ,	3
955	Tunable nonlinear refractive index of two-dimensional MoS ₂ , WS ₂ , and MoSe ₂ nanosheet dispersions [Invited]. 2015 , 3, A51	117
954	Unified Description of the Optical Phonon Modes in N-Layer MoTe ₂ . 2015 , 15, 6481-9	99
953	Hydrothermal synthesis of WS ₂ /RGO sheet and their application in UV photodetector. 2015 , 653, 298-303	33
952	Tellurium-Assisted Low-Temperature Synthesis of MoS ₂ and WS ₂ Monolayers. 2015 , 9, 11658-66	107
951	Recent Advances in Two-Dimensional Materials beyond Graphene. 2015 , 9, 11509-39	1581
950	Growth and synthesis of mono and few-layers transition metal dichalcogenides by vapour techniques: a review. 2015 , 5, 75500-75518	82
949	Pressure-Modulated Conductivity, Carrier Density, and Mobility of Multilayered Tungsten Disulfide. 2015 , 9, 9117-23	83
948	Highly Stable and Tunable Chemical Doping of Multilayer WS ₂ Field Effect Transistor: Reduction in Contact Resistance. 2015 , 7, 23589-96	84

947	Controlled Synthesis of High-Quality Monolayered Hn_2Se_3 via Physical Vapor Deposition. 2015 , 15, 6400-5		169
946	Electronic Properties of MoS_2 - WS_2 Heterostructures Synthesized with Two-Step Lateral Epitaxial Strategy. 2015 , 9, 9868-76		225
945	Two-dimensional transition metal dichalcogenides: Clusters, ribbons, sheets and more. 2015 , 10, 559-592		84
944	Direct exfoliation and dispersion of two-dimensional materials in pure water via temperature control. 2015 , 6, 8294		226
943	Low voltage transmission electron microscopy of graphene. 2015 , 11, 515-42		37
942	Transition metal dichalcogenides and beyond: synthesis, properties, and applications of single- and few-layer nanosheets. 2015 , 48, 56-64		864
941	Comparative study of Raman spectroscopy in graphene and MoS_2 -type transition metal dichalcogenides. 2015 , 48, 41-7		117
940	Thermal conductivity determination of suspended mono- and bilayer WS_2 by Raman spectroscopy. 2015 , 8, 1210-1221		205
939	New first order Raman-active modes in few layered transition metal dichalcogenides. <i>Scientific Reports</i> , 2014 , 4, 4215	4-9	289
938	Deep-ultraviolet-light-driven reversible doping of WS_2 field-effect transistors. 2015 , 7, 747-57		49
937	Layer-modulated synthesis of uniform tungsten disulfide nanosheet using gas-phase precursors. 2015 , 7, 1308-13		76
936	Large variations in both dark- and photoconductivity in nanosheet networks as nanomaterial is varied from MoS_2 to WTe_2 . 2015 , 7, 198-208		68
935	Lithium intercalation compound dramatically influences the electrochemical properties of exfoliated MoS_2 . 2015 , 11, 605-12		212
934	Photoresponsive and gas sensing field-effect transistors based on multilayer WS_2 nanoflakes. <i>Scientific Reports</i> , 2014 , 4, 5209	4-9	313
933	Extraordinary Second Harmonic Generation in tungsten disulfide monolayers. <i>Scientific Reports</i> , 2014 , 4, 5530	4-9	214
932	Electron transport of WS_2 transistors in a hexagonal boron nitride dielectric environment. <i>Scientific Reports</i> , 2015 , 4,	4-9	76
931	A Filmy Black-Phosphorus Polyimide Saturable Absorber for Q-Switched Operation in an Erbium-Doped Fiber Laser. 2016 , 9,		16
930	Direct observation of strong light-exciton coupling in thin WS_2 flakes. 2016 , 24, 7151-7		30

929	Graphene and monolayer transition-metal dichalcogenides: properties and devices. 2016 , 31, 845-877	10
928	High-Sensitivity Floating-Gate Phototransistors Based on WS ₂ and MoS ₂ . 2016 , 26, 6084-6090	103
927	Layer-Controlled Chemical Vapor Deposition Growth of MoS ₂ Vertical Heterostructures via van der Waals Epitaxy. 2016 , 10, 7039-46	97
926	Physically founded phonon dispersions of few-layer materials and the case of borophene. 2016 , 4, 204-211	158
925	Highly Sensitive Detection of Polarized Light Using Anisotropic 2D ReS ₂ . 2016 , 26, 1169-1177	286
924	Distinct photoluminescence and Raman spectroscopy signatures for identifying highly crystalline WS ₂ monolayers produced by different growth methods. 2016 , 31, 931-944	68
923	Passively Q -switched dual-wavelength Yb:LSO laser based on tungsten disulphide saturable absorber. 2016 , 25, 034207	7
922	Atomically Thin MoS ₂ : A Versatile Nongraphene 2D Material. 2016 , 26, 2046-2069	166
921	High pressure Raman study of layered Mo _{0.5} W _{0.5} S ₂ ternary compound. 2016 , 3, 025003	13
920	Growth and optical properties of Nb-doped WS ₂ monolayers. 2016 , 9, 071201	44
919	Negative Electro-conductance in Suspended 2D WS Nanoscale Devices. 2016 , 8, 32963-32970	9
918	Room temperature spin valve effect in NiFe/WS ₂ /Co junctions. <i>Scientific Reports</i> , 2016 , 6, 21038	4-9 52
917	Negative to positive crossover of the magnetoresistance in layered WS ₂ . 2016 , 108, 153114	17
916	Two dimensional WS ₂ lateral heterojunctions by strain modulation. 2016 , 108, 263104	22
915	Atomic-layer soft plasma etching of MoS ₂ . <i>Scientific Reports</i> , 2016 , 6, 19945	4-9 74
914	Ultrathin MoS ₂ and WS ₂ layers on silver nano-tips as electron emitters. 2016 , 109, 133102	8
913	Twinned growth behaviour of two-dimensional materials. 2016 , 7, 13911	101
912	Metallic monoclinic phase in VO ₂ induced by electrochemical gating: In situ Raman study. 2016 , 115, 17001	6

911	High room temperature optical polarization due to spin-valley coupling in monolayer WS ₂ . 2016 , 6, 055804	15
910	Strong Coulomb scattering effects on low frequency noise in monolayer WS ₂ field-effect transistors. 2016 , 109, 153102	12
909	A Self-Limiting Electro-Ablation Technique for the Top-Down Synthesis of Large-Area Monolayer Flakes of 2D Materials. <i>Scientific Reports</i> , 2016 , 6, 28195	4-9 19
908	High-performance flexible hydrogen sensor made of WS ₂ nanosheet-Pd nanoparticle composite film. 2016 , 27, 195501	63
907	Facile Synthesis of Water-Soluble WS ₂ Quantum Dots for Turn-On Fluorescent Measurement of Lipoic Acid. 2016 , 120, 12170-12177	91
906	High flex cycle testing of CVD monolayer WS ₂ TFTs on thin flexible polyimide. 2016 , 3, 021008	25
905	Electric-Field-Assisted Directed Assembly of Transition Metal Dichalcogenide Monolayer Sheets. 2016 , 10, 5006-14	7
904	Deciphering the quenching mechanism of 2D MnO ₂ nanosheets towards Au nanocluster fluorescence to design effective glutathione biosensors. 2016 , 8, 3935-3940	45
903	Atomically thin two-dimensional materials as hole extraction layers in organolead halide perovskite photovoltaic cells. 2016 , 319, 1-8	78
902	Comparison of Two-Dimensional Transition Metal Dichalcogenides for Electrochemical Supercapacitors. 2016 , 201, 30-37	167
901	Efficient exfoliation of bulk MoS ₂ to nanosheets by mixed-solvent refluxing method. 2016 , 41, 10737-10743	17
900	Raman and photoluminescence spectra of two-dimensional nanocrystallites of monolayer WS ₂ and WSe ₂ . 2016 , 3, 025016	91
899	Size-Dependent Properties of Two-Dimensional MoS ₂ and WS ₂ . 2016 , 120, 10078-10085	115
898	Two-dimensional metallic NbS ₂ : growth, optical identification and transport properties. 2016 , 3, 025027	66
897	Revealing the nature of excitons in liquid exfoliated monolayer tungsten disulphide. 2016 , 27, 425701	10
896	Significant Exciton Brightening in Monolayer Tungsten Disulfides via Fluorination: n-Type Gas Sensing Semiconductors. 2016 , 26, 7551-7559	25
895	Facile and Green Production of Impurity-Free Aqueous Solutions of WS ₂ Nanosheets by Direct Exfoliation in Water. 2016 , 12, 6703-6713	34
894	Layer-dependent properties of SnS ₂ and SnSe ₂ two-dimensional materials. 2016 , 94,	183

893	Improvement of Gas-Sensing Performance of Large-Area Tungsten Disulfide Nanosheets by Surface Functionalization. 2016 , 10, 9287-9296		243
892	Fluorescence Concentric Triangles: A Case of Chemical Heterogeneity in WS ₂ Atomic Monolayer. 2016 , 16, 5559-67		70
891	Investigations of vapour-phase deposited transition metal dichalcogenide films for future electronic applications. 2016 , 125, 39-51		30
890	Large range modification of exciton species in monolayer WS ₂ . 2016 , 55, 6251-5		32
889	Tungsten disulfide (WS ₂) based all-fiber-optic humidity sensor. 2016 , 24, 8956-66		105
888	WS ₂ nanotube formation by sulphurization: Effect of precursor tungsten film thickness and stress. 2016 , 181, 352-358		12
887	Bottom-Up Synthesis of MeS _x Nanodots for Optoelectronic Device Applications. 2016 , 4, 1796-1804		23
886	Few-layer thick WS ₂ nanosheets produced by intercalation/exfoliation route. 2016 , 51, 10160-10165		16
885	Raman Scattering of 2D TMDCs. 2016 , 227-294		4
884	Unexpected Epitaxial Growth of a Few WS ₂ Layers on {11 00} Facets of ZnO Nanowires. 2016 , 120, 21451-21459		7
883	Green synthesis route for WS ₂ nanosheets using water intercalation. 2016 , 3, 095014		7
882	Increased monolayer domain size and patterned growth of tungsten disulfide through controlling surface energy of substrates. 2016 , 49, 325304		18
881	Dispersion of nonlinear refractive index in layered WS ₂ and WSe ₂ semiconductor films induced by two-photon absorption. 2016 , 41, 3936-9		56
880	Temperature- and power-dependent phonon properties of suspended continuous WS ₂ monolayer films. 2016 , 86, 270-276		11
879	Exfoliation and Raman Spectroscopic Fingerprint of Few-Layer NiPS ₃ Van der Waals Crystals. <i>Scientific Reports</i> , 2016 , 6, 20904	4-9	159
878	Excitonic Valley Effects in Monolayer WS under High Magnetic Fields. 2016 , 16, 7899-7904		80
877	Anomalous temperature-dependent spin-valley polarization in monolayer WS ₂ . <i>Scientific Reports</i> , 2016 , 6, 18885	4-9	42
876	Raman scattering and anomalous Stokes-anti-Stokes ratio in MoTe ₂ atomic layers. <i>Scientific Reports</i> , 2016 , 6, 28024	4-9	35

875	Layer-modulated, wafer scale and continuous ultra-thin WS ₂ films grown by RF sputtering via post-deposition annealing. 2016 , 4, 7846-7852		19
874	Probing the uniaxial strains in MoS ₂ using polarized Raman spectroscopy: A first-principles study. 2016 , 93,		28
873	Resonance effects in the Raman scattering of monolayer and few-layer MoSe ₂ . 2016 , 93,		77
872	Ultrathin 2D Photodetectors Utilizing Chemical Vapor Deposition Grown WS ₂ With Graphene Electrodes. 2016 , 10, 7866-73		201
871	Raman spectroscopy of transition metal dichalcogenides. 2016 , 28, 353002		114
870	Photoinduced Schottky Barrier Lowering in 2D Monolayer WS ₂ Photodetectors. 2016 , 4, 1573-1581		47
869	Rapid synthesis of transition metal dichalcogenide few-layer thin crystals by the microwave-induced-plasma assisted method. 2016 , 450, 140-147		28
868	Two-dimensional lateral heterojunction through bandgap engineering of MoS ₂ via oxygen plasma. 2016 , 28, 364002		40
867	Temperature-dependent phonon shifts in atomically thin MoTe ₂ nanosheets. 2016 , 5, 98-102		20
866	Tri-wavelength passively Q-switched Yb ³⁺ :GdAl ₃ (BO ₃) ₄ solid-state laser based on WS ₂ saturable absorber. 2016 , 62, 621-625		17
865	Control of Radiative Exciton Recombination by Charge Transfer Induced Surface Dipoles in MoS ₂ and WS ₂ Monolayers. <i>Scientific Reports</i> , 2016 , 6, 24105	4-9	27
864	Photonics and optoelectronics of two-dimensional materials beyond graphene. 2016 , 27, 462001		203
863	Liquid exfoliated pristine WS nanosheets for ultrasensitive and highly stable chemiresistive humidity sensors. 2016 , 27, 475503		79
862	The role of collective motion in the ultrafast charge transfer in van der Waals heterostructures. 2016 , 7, 11504		79
861	Centimeter Scale Patterned Growth of Vertically Stacked Few Layer Only 2D MoS ₂ /WS ₂ van der Waals Heterostructure. <i>Scientific Reports</i> , 2016 , 6, 25456	4-9	99
860	WS ₂ BD graphene nano-architecture networks for high performance anode materials of lithium ion batteries. 2016 , 6, 107768-107775		24
859	Towards functional assembly of 3D and 2D nanomaterials. 2016 ,		
858	The Effect of Preparation Conditions on Raman and Photoluminescence of Monolayer WS. <i>Scientific Reports</i> , 2016 , 6, 35154	4-9	82

857	High-responsivity UV-Vis Photodetector Based on Transferable WS ₂ Film Deposited by Magnetron Sputtering. <i>Scientific Reports</i> , 2016 , 6, 20343	4.9	156
856	Scalable synthesis of WS ₂ on graphene and h-BN: an all-2D platform for light-matter transduction. 2016 , 3, 031013		28
855	Mapping of Low-Frequency Raman Modes in CVD-Grown Transition Metal Dichalcogenides: Layer Number, Stacking Orientation and Resonant Effects. <i>Scientific Reports</i> , 2016 , 6, 19476	4.9	88
854	Influence of curvature strain and Van der Waals force on the inter-layer vibration mode of WS ₂ nanotubes: A confocal micro-Raman spectroscopic study. <i>Scientific Reports</i> , 2016 , 6, 33091	4.9	13
853	Synthesis of Large-Area WS ₂ monolayers with Exceptional Photoluminescence. <i>Scientific Reports</i> , 2016 , 6, 19159	4.9	122
852	A novel WS ₂ nanowire-nanoflake hybrid material synthesized from WO ₃ nanowires in sulfur vapor. <i>Scientific Reports</i> , 2016 , 6, 25610	4.9	16
851	Quantitative Analysis of Temperature Dependence of Raman shift of monolayer WS ₂ . <i>Scientific Reports</i> , 2016 , 6, 32236	4.9	52
850	One-step Synthesis of Few-layer WS ₂ by Pulsed Laser Deposition. <i>Scientific Reports</i> , 2015 , 5, 18116	4.9	74
849	Spatially Resolved Electronic Properties of Single-Layer WS on Transition Metal Oxides. 2016 , 10, 10058-10067		25
848	Observation of Strong Interlayer Coupling in MoS ₂ /WS ₂ Heterostructures. 2016 , 28, 1950-6		172
847	Heterostructured WS ₂ /CH ₃ NH ₃ PbI ₃ Photoconductors with Suppressed Dark Current and Enhanced Photodetectivity. 2016 , 28, 3683-9		319
846	Complementary Unipolar WS ₂ Field-Effect Transistors Using Fermi-Level Depinning Layers. 2016 , 2, 1500278		22
845	Magnetron sputtered WS ₂ ; optical and structural analysis. 2016 , 707, 012028		14
844	Revealing Defect-State Photoluminescence in Monolayer WS ₂ by Cryogenic Laser Processing. 2016 , 10, 5847-55		72
843	Novel silicon compatible p-WS ₂ 2D/3D heterojunction devices exhibiting broadband photoresponse and superior detectivity. 2016 , 8, 13429-36		73
842	N-doped WS ₂ nanosheets: a high-performance electrocatalyst for the hydrogen evolution reaction. 2016 , 4, 11234-11238		121
841	Enhanced Photoresponse of SnSe-Nanocrystals-Decorated WS ₂ Monolayer Phototransistor. 2016 , 8, 4781-8		68
840	Biexciton Formation in Bilayer Tungsten Disulfide. 2016 , 10, 2176-83		46

839	Biexciton Emission from Edges and Grain Boundaries of Triangular WS ₂ Monolayers. 2016 , 10, 2399-405	175
838	Tungsten disulphide nanorattle: A new type of high performance electrocatalyst for hydrogen evolution reaction. 2016 , 307, 593-598	25
837	Uniform, large-area self-limiting layer synthesis of tungsten diselenide. 2016 , 3, 014004	32
836	Facile synthesis of large-area and highly crystalline WS ₂ film on dielectric surfaces for SERS. 2016 , 666, 412-418	28
835	Atypical Exciton-Phonon Interactions in WS ₂ and WSe ₂ Monolayers Revealed by Resonance Raman Spectroscopy. 2016 , 16, 2363-8	91
834	Scalable Production of a Few-Layer MoS ₂ /WS ₂ Vertical Heterojunction Array and Its Application for Photodetectors. 2016 , 10, 573-80	283
833	Wafer-scale transferable molybdenum disulfide thin-film catalysts for photoelectrochemical hydrogen production. 2016 , 9, 2240-2248	150
832	Facile self-assembly of AgNPs/WS ₂ nanocomposites with enhanced electrochemical properties. 2016 , 173, 203-206	12
831	Recombination Kinetics and Effects of Superacid Treatment in Sulfur- and Selenium-Based Transition Metal Dichalcogenides. 2016 , 16, 2786-91	187
830	Spin effects in MoS ₂ and WS ₂ single layers. 2016 , 10, 111-119	8
829	Effects of Uniaxial and Biaxial Strain on Few-Layered Terrace Structures of MoS ₂ Grown by Vapor Transport. 2016 , 10, 3186-97	70
828	Surface energy and wettability of van der Waals structures. 2016 , 8, 5764-70	112
827	Review on the Raman spectroscopy of different types of layered materials. 2016 , 8, 6435-50	235
826	Recent advances in high-pressure science and technology. 2016 , 1, 59-75	70
825	Transition Metal Disulfide Nanosheets Synthesized by Facile Sonication Method for the Hydrogen Evolution Reaction. 2016 , 120, 3929-3935	76
824	Electron-hole asymmetry in the electron-phonon coupling in top-gated phosphorene transistor. 2016 , 3, 015008	20
823	Large-quantity and continuous preparation of two-dimensional nanosheets. 2016 , 8, 5407-11	39
822	Robust room temperature valley polarization in monolayer and bilayer WS ₂ . 2016 , 8, 6035-42	50

821	Excitation intensity dependence of photoluminescence from monolayers of MoS ₂ and WS ₂ /MoS ₂ heterostructures. 2016 , 3, 015005	41
820	Stable electrical performance observed in large-scale monolayer WSe ₂ (1-x)S ₂ x with tunable band gap. 2016 , 27, 13LT01	26
819	Transfer-Free Growth of Atomically Thin Transition Metal Disulfides Using a Solution Precursor by a Laser Irradiation Process and Their Application in Low-Power Photodetectors. 2016 , 16, 2463-70	9
818	Tailoring the electrical and photo-electrical properties of a WS ₂ field effect transistor by selective n-type chemical doping. 2016 , 6, 24675-24682	34
817	Performance of field-effect transistors based on Nb(x)W(1-x)S ₂ monolayers. 2016 , 8, 6507-13	19
816	Passively Q-switched nd:YAG laser via a WS ₂ saturable absorber. 2016 , 367, 234-238	22
815	Large area chemical vapor deposition of monolayer transition metal dichalcogenides and their temperature dependent Raman spectroscopy studies. 2016 , 8, 3008-18	149
814	Synthesis of graphene and related two-dimensional materials for bioelectronics devices. 2017 , 89, 28-42	46
813	Enhanced magnetoresistance in graphene spin valve. 2017 , 429, 330-333	18
812	Microsteganography on WS Monolayers Tailored by Direct Laser Painting. 2017 , 11, 713-720	31
811	Two-dimensional WS nanoribbon deposition by conversion of pre-patterned amorphous silicon. 2017 , 28, 04LT01	17
810	A study of the effect of sonication time on the catalytic performance of layered WS from various sources. 2017 , 19, 2768-2777	4
809	1.36 W Passively Q-Switched YVO ₄ /Nd:YVO ₄ Laser With a WS ₂ Saturable Absorber. 2017 , 29, 470-473	22
808	Highly responsive and broadband photodetectors based on WS ₂ /graphene van der Waals epitaxial heterostructures. 2017 , 5, 1494-1500	79
807	Heterostructured WS -MoS Ultrathin Nanosheets Integrated on CdS Nanorods to Promote Charge Separation and Migration and Improve Solar-Driven Photocatalytic Hydrogen Evolution. 2017 , 10, 1563-1570	117
806	Advent of 2D Rhenium Disulfide (ReS ₂): Fundamentals to Applications. 2017 , 27, 1606129	224
805	Transfer of monolayer TMD WS and Raman study of substrate effects. <i>Scientific Reports</i> , 2017 , 7, 43037	4.9 41
804	Universal surface modification of transition metal dichalcogenide decorated with metal nanoparticles for surface enhanced Raman scattering. 2017 , 90, 73-80	3

803	Synthesis and properties of the molybdenum and tungsten disulfide thin films. 2017 , 789, 012073	
802	Solution synthesis of few-layer 2H MX ₂ (M = Mo, W; X = S, Se). 2017 , 5, 2859-2864	25
801	An effective liquid-phase exfoliation approach to fabricate tungsten disulfide into ultrathin two-dimensional semiconducting nanosheets. 2017 , 52, 7256-7268	28
800	Intervalley scattering by acoustic phonons in two-dimensional MoS revealed by double-resonance Raman spectroscopy. 2017 , 8, 14670	141
799	Direct Observation of 2D Electrostatics and Ohmic Contacts in Template-Grown Graphene/WS Heterostructures. 2017 , 11, 2785-2793	56
798	Heterogeneous Defect Domains in Single-Crystalline Hexagonal WS. 2017 , 29, 1605043	94
797	Room-Temperature Single-Photon Emission from Oxidized Tungsten Disulfide Multilayers. 2017 , 5, 1600939	24
796	Pressure-Induced Photoluminescence Adjustment and Lattice Disorder in Monolayer WSe ₂ . 2017 , 3, 238-244	6
795	Tuning Electronic Properties of Monolayer Hexagonal Boron Phosphide with Group IIIIV Dopants. 2017 , 121, 4583-4592	38
794	Quantifying Plasmon-Enhanced Light Absorption in Monolayer WS Films. 2017 , 9, 15044-15051	33
793	Observation of biexcitonic emission at extremely low power density in tungsten disulfide atomic layers grown on hexagonal boron nitride. <i>Scientific Reports</i> , 2017 , 7, 322	4-9 25
792	Fast and Highly Sensitive Ionic-Polymer-Gated WS -Graphene Photodetectors. 2017 , 29, 1700222	80
791	Visible-light-induced hydrogen evolution reaction with WS _x Se _{2-x} . 2017 , 40, 329-333	6
790	Dielectric functions and critical points of crystalline WS ultrathin films with tunable thickness. 2017 , 19, 12022-12031	14
789	Tungsten Disulfide Nanodispersions for Inkjet Printing and Semiconducting Devices. 2017 , 2, 3691-3696	4
788	Giant Gating Tunability of Optical Refractive Index in Transition Metal Dichalcogenide Monolayers. 2017 , 17, 3613-3618	59
787	Effect of WS ₂ Addition on Tribological Behavior of Aluminum at Room and Elevated Temperatures. 2017 , 65, 1	16
786	Realizing Stable p-Type Transporting in Two-Dimensional WS Films. 2017 , 9, 18215-18221	30

785	Hydrogen Evolution at Liquid Liquid Interfaces Catalyzed by 2D Materials. 2017 , 3, 428-435	25
784	Thickness dependent friction on few-layer MoS, WS, and WSe. 2017 , 28, 245703	24
783	Photoluminescence Segmentation within Individual Hexagonal Monolayer Tungsten Disulfide Domains Grown by Chemical Vapor Deposition. 2017 , 9, 15005-15014	48
782	Tunable Wetting Property in Growth Mode-Controlled WS Thin Films. 2017 , 12, 262	7
781	Inorganic fullerene-type WS ₂ nanoparticles: processing, characterization and its photocatalytic performance on malachite green. 2017 , 123, 1	21
780	On-stack two-dimensional conversion of MoS ₂ into MoO ₃ . 2017 , 4, 014003	32
779	Testbeds for Transition Metal Dichalcogenide Photonics: Efficacy of Light Emission Enhancement in Monomer vs Dimer Nanoscale Antennae. 2017 , 4, 1713-1721	20
778	Heterogeneous modulation of exciton emission in triangular WS ₂ monolayers by chemical treatment. 2017 , 5, 6820-6827	21
777	Fatigue Resistant Bioinspired Composite from Synergistic Two-Dimensional Nanocomponents. 2017 , 11, 7074-7083	38
776	Patterned films from exfoliated two-dimensional transition metal dichalcogenides assembled at a liquid liquid interface. 2017 , 5, 6937-6944	10
775	MoS ₂ /WS ₂ Heterojunction for Photoelectrochemical Water Oxidation. 2017 , 7, 4990-4998	144
774	Two-Dimensional 1T-Phase Transition Metal Dichalcogenides as Nanocarriers To Enhance and Stabilize Enzyme Activity for Electrochemical Pesticide Detection. 2017 , 11, 5774-5784	86
773	Local strain-induced band gap fluctuations and exciton localization in aged WS ₂ monolayers. 2017 , 7, 065005	19
772	Investigating resonance energy transfer from protein molecules to van der Waals nanosheets. 2017 , 7, 26250-26255	8
771	Electronic and optical properties of strained graphene and other strained 2D materials: a review. 2017 , 80, 096501	252
770	From two-dimensional materials to their heterostructures: An electrochemist's perspective. 2017 , 8, 68-103	153
769	Two-dimensional transition metal dichalcogenide-based counter electrodes for dye-sensitized solar cells. 2017 , 7, 28234-28290	124
768	Tungsten disulfide thin film/p-type Si heterojunction photocathode for efficient photochemical hydrogen production. 2017 , 7, 272-279	22

767	Sulfidation of 2D transition metals (Mo, W, Re, Nb, Ta): thermodynamics, processing, and characterization. 2017 , 52, 10127-10139	13
766	WS ₂ /Silicon Heterojunction Solar Cells: A CVD Process for the Fabrication of WS ₂ Films on p-Si Substrates for Photovoltaic and Spectral Responses. 2017 , 11, 33-38	12
765	Layer-by-layer thinning of MoSe ₂ by soft and reactive plasma etching. 2017 , 411, 182-188	29
764	Light-matter interaction in transition metal dichalcogenides and their heterostructures. 2017 , 50, 173001	66
763	Functional two/three-dimensional assembly of monolayer WS ₂ and nickel oxide. 2017 , 7, 014001	1
762	Dendritic growth of monolayer ternary WSe flakes for enhanced hydrogen evolution reaction. 2017 , 9, 5641-5647	27
761	Enhanced Photoluminescence of Solution-Exfoliated Transition Metal Dichalcogenides by Laser Etching. 2017 , 2, 738-745	11
760	Plasma-Enhanced Atomic Layer Deposition of Two-Dimensional WS ₂ from WF ₆ , H ₂ Plasma, and H ₂ S. 2017 , 29, 2927-2938	57
759	Simple Chemical Treatment to n-Dope Transition-Metal Dichalcogenides and Enhance the Optical and Electrical Characteristics. 2017 , 9, 11950-11958	25
758	Controlled synthesis and mechanism of large-area WS ₂ flakes by low-pressure chemical vapor deposition. 2017 , 52, 7215-7223	20
757	Anomalous enhancement of valley polarization in multilayer WS at room temperature. 2017 , 9, 5148-5154	17
756	Transition Metal Dichalcogenide Atomic Layers for Lithium Polysulfides Electrocatalysis. 2017 , 139, 171-178	259
755	Temperature dependent Raman and photoluminescence of vertical WS ₂ /MoS ₂ monolayer heterostructures. 2017 , 62, 16-21	25
754	Large-area tungsten disulfide for ultrafast photonics. 2017 , 9, 1871-1877	104
753	Crystalline WS via Room Temperature, Solution-Phase Synthesis. 2017 , 56, 106-109	2
752	Highly sensitive and fast monolayer WS phototransistors realized by SnS nanosheet decoration. 2017 , 9, 1916-1924	33
751	Strain-induced phonon shifts in tungsten disulfide nanoplatelets and nanotubes. 2017 , 4, 015007	57
750	Substantial improvements of long-term stability in encapsulation-free WS ₂ using highly interacting graphene substrate. 2017 , 4, 011007	17

749	High Mobility WS ₂ Transistors Realized by Multilayer Graphene Electrodes and Application to High Responsivity Flexible Photodetectors. 2017 , 27, 1703448		84
748	Effects of Direct Solvent-Quantum Dot Interaction on the Optical Properties of Colloidal Monolayer WS Quantum Dots. 2017 , 17, 7471-7477		35
747	Preparation, characterization and catalytic performance of single-atom catalysts. 2017 , 38, 1528-1539		44
746	High-Mobility and High-Optical Quality Atomically Thin WS. <i>Scientific Reports</i> , 2017 , 7, 14911	4-9	54
745	Exciton broadening in WS ₂ /graphene heterostructures. 2017 , 96,		38
744	Increasing the range of non-noble-metal single-atom catalysts. 2017 , 38, 1489-1497		15
743	Conductometric gas sensing behavior of WS ₂ aerogel. 2017 , 5, 1-8		25
742	Synergistic effect of polymer encapsulated silver nanoparticle doped WS sheets for plasmon enhanced 2D/3D heterojunction photodetectors. 2017 , 9, 15591-15597		23
741	Synthesis of MoS ₂ (1-x)Se _{2x} and WS ₂ (1-x)Se _{2x} alloys for enhanced hydrogen evolution reaction performance. 2017 , 4, 2068-2074		23
740	Enhanced intervalley scattering of aluminum oxide-deposited graphene. 2017 , 124, 188-192		7
739	Phase Segregation Behavior of Two-Dimensional Transition Metal Dichalcogenide Binary Alloys Induced by Dissimilar Substitution. 2017 , 29, 7431-7439		22
738	Strain-Mediated Interlayer Coupling Effects on the Excitonic Behaviors in an Epitaxially Grown MoS/WS van der Waals Heterobilayer. 2017 , 17, 5634-5640		100
737	Liquid-processed transition metal dichalcogenide films for field-effect transistors. 2017 , 28, 18106-18112		1
736	Impact of fast transient charging and ambient on mobility of WS ₂ field-effect transistor. 2017 , 35, 050601		4
735	A comprehensive comparison study on the vibrational and optical properties of CVD-grown and mechanically exfoliated few-layered WS ₂ . 2017 , 5, 11239-11245		24
734	Role of Defects in Tuning the Electronic Properties of Monolayer WS ₂ Grown by Chemical Vapor Deposition. 2017 , 11, 1700302		1
733	Stable MoS ₂ Field-Effect Transistors Using TiO ₂ Interfacial Layer at Metal/MoS ₂ Contact. 2017 , 214, 1700534		10
732	Negative Differential Conductance & Hot-Carrier Avalanching in Monolayer WS ₂ FETs. <i>Scientific Reports</i> , 2017 , 7, 11256	4-9	11

731	Highly efficient hydrogen evolution reaction by strain and phase engineering in composites of Pt and MoS nano-scrolls. 2017 , 19, 18356-18365		28
730	NaCl-assisted one-step growth of MoS-WS in-plane heterostructures. 2017 , 28, 325602		65
729	Origin of the counterintuitive dynamic charge in the transition metal dichalcogenides. 2017 , 95,		24
728	Controlling Structural Anisotropy of Anisotropic 2D Layers in Pseudo-1D/2D Material Heterojunctions. 2017 , 29, 1701201		19
727	Ultraviolet-light-driven enhanced hysteresis effect in graphene-tungsten disulfide heterostructures. 2017 , 123, 168-173		13
726	Monolayer Tungsten Disulfide (WS) via Chlorine-Driven Chemical Vapor Transport. 2017 , 13, 1701232		19
725	Low-Temperature Solution Synthesis of Transition Metal Dichalcogenide Alloys with Tunable Optical Properties. 2017 , 139, 11096-11105		54
724	Raman scattering excitation spectroscopy of monolayer WS. <i>Scientific Reports</i> , 2017 , 7, 5036	4-9	39
723	Metal-free Ternary BCN Nanosheets with Synergetic Effect of Band Gap Engineering and Magnetic Properties. <i>Scientific Reports</i> , 2017 , 7, 6617	4-9	26
722	Tungsten dichalcogenides (WS ₂ , WSe ₂ , and WTe ₂): materials chemistry and applications. 2017 , 5, 18299-18325	197	
721	Selective and confined growth of transition metal dichalcogenides on transferred graphene. 2017 , 7, 37310-37314		1
720	2D Nanosheet Paint from Solvent-Exfoliated Bi ₂ Te ₃ Ink. 2017 , 29, 7390-7400		10
719	Raman Spectroscopy of Suspended MoS ₂ . 2017 , 254, 1700218		13
718	Ordered and Atomically Perfect Fragmentation of Layered Transition Metal Dichalcogenides via Mechanical Instabilities. 2017 , 11, 9191-9199		39
717	Low-temperature and scalable CVD route to WS ₂ monolayers on SiO ₂ /Si substrates. 2017 , 35, 061502		8
716	Intricate Resonant Raman Response in Anisotropic ReS. 2017 , 17, 5897-5907		49
715	Ab Initio Approach to Second-order Resonant Raman Scattering Including Exciton-Phonon Interaction. <i>Scientific Reports</i> , 2017 , 7, 7344	4-9	17
714	Interfacial properties of borophene contacts with two-dimensional semiconductors. 2017 , 19, 23982-23989		29

713	The effects of exfoliation, organic solvents and anodic activation on the catalytic hydrogen evolution reaction of tungsten disulfide. 2017 , 9, 13515-13526		25
712	Mechanically deposited tungsten disulfide saturable absorber for low-threshold Q-switched erbium-doped fiber laser. 2017 , 123, 1		9
711	Synthesis of uniform single layer WS for tunable photoluminescence. <i>Scientific Reports</i> , 2017 , 7, 16121	4.9	33
710	Phonon-assisted oscillatory exciton dynamics in monolayer MoSe ₂ . 2017 , 1,		37
709	Ultrahigh-Gain and Fast Photodetectors Built on Atomically Thin Bilayer Tungsten Disulfide Grown by Chemical Vapor Deposition. 2017 , 9, 42001-42010		17
708	Optical Controlled Terahertz Modulator Based on Tungsten Disulfide Nanosheet. <i>Scientific Reports</i> , 2017 , 7, 14828	4.9	19
707	Exfoliated WS-Nafion Composite based Electromechanical Actuators. <i>Scientific Reports</i> , 2017 , 7, 14599	4.9	15
706	Apparent breakdown of Raman selection rule at valley exciton resonances in monolayer MoS ₂ . 2017 , 95,		26
705	Excitation-dependent photoluminescence from WS ₂ nanostructures synthesized via top-down approach. 2017 , 52, 11326-11336		36
704	Improved photoresponse and stable photoswitching of tungsten disulfide single-layer phototransistor decorated with black phosphorus nanosheets. 2017 , 52, 11506-11512		12
703	Excitation energy dependence of Raman spectra of few-layer WS ₂ . 2017 , 3, 64-70		29
702	Electronic structure in 1T-ZrS ₂ monolayer by strain. 2017 , 93, 87-91		6
701	Enhanced Photocatalytic Activity of WS Film by Laser Drilling to Produce Porous WS/WO Heterostructure. <i>Scientific Reports</i> , 2017 , 7, 3125	4.9	25
700	KPFM and CAFM based studies of MoS ₂ (2D)/WS ₂ heterojunction patterns fabricated using stencil mask lithography technique. 2017 , 723, 50-57		9
699	Two-dimensional Penta-BP Sheets: High-stability, Strain-tunable Electronic Structure and Excellent Mechanical Properties. <i>Scientific Reports</i> , 2017 , 7, 2404	4.9	36
698	Guidelines for Exfoliation, Characterization and Processing of Layered Materials Produced by Liquid Exfoliation. 2017 , 29, 243-255		282
697	WS ₂ nanoflakes based selective ammonia sensors at room temperature. 2017 , 240, 273-277		172
696	Noble-Metal-Free Hybrid Membranes for Highly Efficient Hydrogen Evolution. 2017 , 29, 1603617		62

- 695 Electronic and magnetic properties of Mn-doped WSe₂ monolayer under strain. **2017**, 88, 11-17 8
- 694 Dual-wavelength mode-locked fiber laser based on tungsten disulfide saturable absorber. **2017**, 27, 125802 2
- 693 High temperature study on the thermal properties of few-layer Mo_{0.5}W_{0.5}S₂ and effects of capping layers. **2017**, 7, 4394-4397 4
- 692 Large single-domain growth of monolayer WS₂ by rapid-cooling chemical vapor deposition. **2017**, 10, 075201 8
- 691 Growth of single crystal WS₂ thin films via atmospheric pressure CVD. **2017**, 18, 1686-1690 18
- 690 WS₂ transistors on 300 mm wafers with BEOL compatibility. **2017**, 18, 1686-1690 18
- 689 Q-switching of waveguide lasers based on graphene/WS₂ van der Waals heterostructure. **2017**, 5, 406 45
- 688 Transition-metal dichalcogenides heterostructure saturable absorbers for ultrafast photonics. **2017**, 42, 4279-4282 51
- 687 High peak power sub-nanosecond pulsed Nd:Lu_{0.15}Y_{0.85}VO₄ laser with WS₂ saturable absorber and EO modulator. **2017**, 7, 1180 12
- 686 Tungsten disulfide wrapped on micro fiber for enhanced humidity sensing. **2017**, 7, 1686 29
- 685 Sub-nanosecond KTP-OPO pumped by a hybrid Q-switched laser with WS₂ saturable absorber and AOM. **2017**, 7, 3998 8
- 684 Facile Sonication Synthesis of WS₂ Quantum Dots for Photoelectrochemical Performance. **2017**, 7, 18 17
- 683 Investigation on the effect of output mirror transmission in WS₂-based red-light passively Q-switched Pr:ZBLAN all-fiber lasers. **2017**, 56, 7749-7755 2
- 682 Modification of degenerative photoluminescence in aged monolayer WS₂ by PC61BM surface processing. **2017**, 56, 890-896 2
- 681 Alpha particle irradiation of bulk and exfoliated MoS₂ and WS₂ membranes. **2018**, 435, 180-189 3
- 680 Low Frequency Raman Scattering of Two-Dimensional Materials Beyond Graphene. **2018**, 195-206 2
- 679 Contact Resistance Reduction of WS₂ FETs Using High-Pressure Hydrogen Annealing. **2018**, 6, 164-168 17
- 678 Pyrolytic carbon supported alloying metal dichalcogenides as free-standing electrodes for efficient hydrogen evolution. **2018**, 132, 512-519 15

677	Electronic band structure of Two-Dimensional WS ₂ /Graphene van der Waals Heterostructures. 2018 , 97,	46
676	Layer-dependent second-order Raman intensity of MoS ₂ and WSe ₂ : Influence of intervalley scattering. 2018 , 97,	15
675	Tunable Fano Resonance and Plasmon-Exciton Coupling in Single Au Nanotriangles on Monolayer WS at Room Temperature. 2018 , 30, e1705779	56
674	Oxygen incorporated WS nanoclusters with superior electrocatalytic properties for hydrogen evolution reaction. 2018 , 10, 9516-9524	57
673	Fast-Response Single-Nanowire Photodetector Based on ZnO/WS Core/Shell Heterostructures. 2018 , 10, 13869-13876	45
672	Interlayer Coupling Induced Infrared Response in WS ₂ /MoS ₂ Heterostructures Enhanced by Surface Plasmon Resonance. 2018 , 28, 1800339	75
671	Laser-induced fabrication of nanoporous monolayer WS ₂ membranes. 2018 , 5, 035011	15
670	Layer-controlled and atomically thin WS ₂ films prepared by sulfurization of atomic-layer-deposited WO ₃ films. 2018 , 745, 834-839	20
669	Cation-Controlled Electrocatalytical Activity of Transition-Metal Disulfides. 2018 , 8, 2774-2781	41
668	C ₂ N/WS ₂ van der Waals type-II heterostructure as a promising water splitting photocatalyst. 2018 , 359, 143-150	145
667	Determining the Optimized Interlayer Separation Distance in Vertical Stacked 2D WS ₂ :hBN:MoS ₂ Heterostructures for Exciton Energy Transfer. 2018 , 14, e1703727	40
666	Spin relaxation and proximity effect in WS ₂ /graphene/fluorographene non-local spin valves. 2018 , 131, 18-25	9
665	Superior electrocatalysis for hydrogen evolution with crumpled graphene/tungsten disulfide/tungsten trioxide ternary nanohybrids. 2018 , 47, 66-73	52
664	Influence of DC-biasing on the performance of graphene spin valve. 2018 , 272, 33-36	2
663	Extending the Continuous Operating Lifetime of Perovskite Solar Cells with a Molybdenum Disulfide Hole Extraction Interlayer. 2018 , 8, 1702287	90
662	WS ₂ nanoplates embedded in graphitic carbon nanotubes with excellent electrochemical performance for lithium and sodium storage. 2018 , 61, 671-678	24
661	Patterned tungsten disulfide/graphene heterostructures for efficient multifunctional optoelectronic devices. 2018 , 10, 4332-4338	19
660	Highly efficient computer algorithm for identifying layer thickness of atomically thin 2D materials. 2018 , 51, 11LT03	4

659	High efficient degradation of dye molecules by PDMS embedded abundant single-layer tungsten disulfide and their antibacterial performance. 2018 , 46, 338-346	74
658	Preferential horizontal growth of tungsten sulfide on carbon and insight into active sulfur sites for the hydrogen evolution reaction. 2018 , 10, 3838-3848	22
657	Tunable Polarity Behavior and High-Performance Photosensitive Characteristics in Schottky-Barrier Field-Effect Transistors Based on Multilayer WS. 2018 , 10, 2745-2751	13
656	Growth and microstructural evolution of WS ₂ nanostructures with tunable field and light modulated electrical transport. 2018 , 436, 846-853	15
655	Resonant Raman and Exciton Coupling in High-Quality Single Crystals of Atomically Thin Molybdenum Diselenide Grown by Vapor-Phase Chalcogenization. 2018 , 12, 740-750	22
654	Liquid exfoliation of mechanochemically nanostructured tungsten disulfide to a graphene-like state. 2018 , 29, 085704	8
653	Modification of WS ₂ nanosheets with controllable layers via oxygen ion irradiation. 2018 , 439, 240-245	11
652	A new phase of the two-dimensional ReS ₂ sheet with tunable magnetism. 2018 , 6, 1248-1254	21
651	Light-Emitting Transition Metal Dichalcogenide Monolayers under Cellular Digestion. 2018 , 30, 1703321	12
650	Probing Excitons, Trions, and Dark Excitons in Monolayer WS Using Resonance Raman Spectroscopy. 2018 , 18, 1428-1434	22
649	One-pot growth of two-dimensional lateral heterostructures via sequential edge-epitaxy. 2018 , 553, 63-67	272
648	First-principles simulation of local response in transition metal dichalcogenides under electron irradiation. 2018 , 10, 2388-2397	22
647	High Yield Exfoliation of WS Crystals into 1-2 Layer Semiconducting Nanosheets and Efficient Photocatalytic Hydrogen Evolution from WS/CdS Nanorod Composites. 2018 , 10, 2810-2818	79
646	Size-tunable photoluminescence from WS ₂ nanostructures. 2018 , 5, 045047	4
645	Effects of ambient humidity and temperature on the NO ₂ sensing characteristics of WS ₂ /graphene aerogel. 2018 , 450, 372-379	58
644	Raman spectroscopy characterization of two-dimensional materials. 2018 , 27, 037802	18
643	The conversion mechanism of amorphous silicon to stoichiometric WS ₂ . 2018 , 6, 4122-4130	8
642	Strain mapping in single-layer two-dimensional crystals via Raman activity. 2018 , 97,	32

641	Nonadiabatic Molecular Dynamics Simulation of Charge Separation and Recombination at a WS ₂ /QD Heterojunction. 2018 , 122, 7041-7050	11
640	Enhanced Gas Sensing Properties of Liquid-Processed Semiconducting Tungsten Chalcogenide (WX _i , X = O and S) Based Hybrid Nanomaterials. 2018 , 18, 3494-3501	17
639	WS ₂ -Clad Microfiber Saturable Absorber for High-Energy Rectangular Pulse Fiber Laser. 2018 , 24, 1-7	9
638	High photoelectrochemical activity and stability of Au-WS ₂ /silicon heterojunction photocathode. 2018 , 174, 300-306	13
637	Light enhanced VOCs sensing of WS ₂ microflakes based chemiresistive sensors powered by triboelectric nengenerators. 2018 , 256, 992-1000	55
636	A facile and effective method to improve the dispersibility of WS ₂ nanosheets in PAO8 for the tribological performances. 2018 , 118, 60-70	24
635	Tunable excitonic emission of monolayer WS ₂ for the optical detection of DNA nucleobases. 2018 , 11, 1744-1754	14
634	Graphdiyne-WS ₂ 2D-Nanohybrid electrocatalysts for high-performance hydrogen evolution reaction. 2018 , 129, 228-235	93
633	Optical trapping and optical force positioning of two-dimensional materials. 2018 , 10, 1245-1255	30
632	Spin Valve Effect of 2D-Materials Based Magnetic Junctions. 2018 , 20, 1700692	9
631	Two-step synthesis and characterization of vertically stacked SnS-WS and SnS-MoS p-n heterojunctions. 2018 , 20, 889-897	16
630	WS-induced enhanced optical absorption and efficiency in graphene/silicon heterojunction photovoltaic cells. 2018 , 10, 20218-20225	11
629	Vertically Aligned Ultrathin 1T-WS Nanosheets Enhanced the Electrocatalytic Hydrogen Evolution. 2018 , 13, 167	31
628	P-Type Doping of WS ₂ Quantum Dots via Pulsed Laser Ablation. 2018 , 5, 4828-4837	9
627	Ppb-Level Ammonia Detection by Exfoliated WS ₂ Based Chemiresistive Sensors for Breath Analysis. 2018 ,	0
626	Exfoliated (hbox {WS}_{2}) nanosheets: optical, photocatalytic and nitrogen-adsorption/desorption characteristics. 2018 , 41, 1	4
625	Quasi-1D TiS Nanoribbons: Mechanical Exfoliation and Thickness-Dependent Raman Spectroscopy. 2018 , 12, 12713-12720	41
624	Room-Temperature Valley Polarization and Coherence in Transition Metal DichalcogenideGraphene van der Waals Heterostructures. 2018 , 5, 5047-5054	23

623	1T-Phase Tungsten Chalcogenides (WS ₂ , WSe ₂ , WTe ₂) Decorated with TiO ₂ Nanoplatelets with Enhanced Electron Transfer Activity for Biosensing Applications. 2018 , 1, 7006-7015	20
622	Control of Electrical and Thermal Transport Properties by Hybridization of Two-Dimensional Tungsten Disulfide and Reduced Graphene Oxide for Thermoelectric Applications. 2018 , 6, 15487-15493	4
621	Temperature dependent photoluminescence from WS ₂ nanostructures. 2018 , 29, 20064-20070	4
620	Direct Observation of Perovskite Photodetector Performance Enhancement by Atomically Thin Interface Engineering. 2018 , 10, 36493-36504	14
619	An Insight into the Phase Transformation of WS upon Fluorination. 2018 , 30, e1803366	15
618	Gold Decoration and Photoresistive Response to Nitrogen Dioxide of WS Nanotubes. 2018 , 24, 18952-18962	16
617	Intravalley Spin-Flip Relaxation Dynamics in Single-Layer WS. 2018 , 18, 6882-6891	50
616	Ultrasmall and Monolayered Tungsten Dichalcogenide Quantum Dots with Giant Spin-Valley Coupling and Purple Luminescence. 2018 , 3, 12188-12194	9
615	WS-Graphite Dual-Ion Batteries. 2018 , 18, 7155-7164	68
614	High-Efficiency Monolayer Molybdenum Ditelluride Light-Emitting Diode and Photodetector. 2018 , 10, 43291-43298	39
613	A photoelectron study of annealing induced changes to workfunction and majority carrier type in pulsed laser deposited few layer WS ₂ films. 2018 , 29, 20051-20056	3
612	Measuring the optical permittivity of two-dimensional materials without a priori knowledge of electronic transitions. 2018 , 8, 263-270	44
611	A Microfiber Knot Incorporating a Tungsten Disulfide Saturable Absorber Based Multi-Wavelength Mode-Locked Erbium-Doped Fiber Laser. 2018 , 36, 5633-5639	20
610	Growth of two-dimensional WS ₂ thin films by pulsed laser deposition technique. 2018 , 668, 69-73	20
609	Universality of electronic characteristics and photocatalyst applications in the two-dimensional Janus transition metal dichalcogenides. 2018 , 98,	128
608	Two-Dimensional Crystal Grain Size Tuning in WS ₂ Atomic Layer Deposition: An Insight in the Nucleation Mechanism. 2018 , 30, 7648-7663	32
607	Optical harmonic generation in monolayer group-VI transition metal dichalcogenides. 2018 , 98,	53
606	Growth of WS ₂ flakes on Ti ₃ C ₂ T _x Mxene Using Vapor Transportation Routine. 2018 , 8, 281	10

605	Large-area and low-temperature synthesis of few-layered WS ₂ films for photodetectors. 2018 , 5, 045030	10
604	Synthesis and characterization of graphene nanocomposites for non-linear optical applications. 2018 , 89, 239-245	1
603	Controllable one-step growth of bilayer MoS ₂ -WS ₂ /WS heterostructures by chemical vapor deposition. 2018 , 29, 455707	13
602	Sensitive, reproducible, and stable 3D plasmonic hybrids with bilayer WS ₂ as nanospacer for SERS analysis. 2018 , 26, 21626-21641	37
601	Long-lived photoluminescence polarization of localized excitons in liquid exfoliated monolayer enriched WS ₂ . 2018 , 29, 335703	1
600	Impeding Exciton Exciton Annihilation in Monolayer WS ₂ by Laser Irradiation. 2018 , 5, 2904-2911	41
599	Low-temperature study of neutral and charged excitons in the large-area monolayer WS ₂ . 2018 , 57, 060309	4
598	Two-dimensional WS ₂ -based nanosheets modified by Pt quantum dots for enhanced room-temperature NH ₃ sensing properties. 2018 , 455, 45-52	47
597	Dynamic tungsten diselenide nanomaterials: supramolecular assembly-induced structural transition over exfoliated two-dimensional nanosheets. 2018 , 9, 5452-5460	16
596	Structural anomalies in exfoliated WS ₂ : High pressure investigations on monolayer and nanocrystalline tungsten disulfide. 2018 , 123, 204306	8
595	Enhanced exciton emission behavior and tunable band gap of ternary W(SSe) monolayer: temperature dependent optical evidence and first-principles calculations. 2018 , 10, 11553-11563	9
594	Variation of photoluminescence spectral line shape of monolayer WS ₂ . 2018 , 18, 941-945	9
593	High-Performance Photovoltaic Effect with Electrically Balanced Charge Carriers in Black Phosphorus and WS ₂ Heterojunction. 2018 , 5, 1800671	15
592	Increasing Light Extraction Using UV Curable SILs. 2018 , 61-84	
591	2D transition metal dichalcogenides with glucan multivalency for antibody-free pathogen recognition. 2018 , 9, 2549	24
590	Strain Engineering and Raman Spectroscopy of Monolayer Transition Metal Dichalcogenides. 2018 , 30, 5148-5155	43
589	Deep-ultraviolet Raman scattering spectroscopy of monolayer WS ₂ . <i>Scientific Reports</i> , 2018 , 8, 11398	4-9 9
588	Laser-Assisted Chemical Modification of Monolayer Transition Metal Dichalcogenides. 2018 , 28, 1802949	26

587	Sensitivity-enhanced surface plasmon resonance sensor utilizing a tungsten disulfide (WS ₂) nanosheets overlayer. 2018 , 6, 485	57
586	Facile large-area autofocusing Raman mapping system for 2D material characterization. 2018 , 26, 9071-9080	6
585	Intrinsic excitonic emission and valley Zeeman splitting in epitaxial MS ₂ (M = Mo and W) monolayers on hexagonal boron nitride. 2018 , 11, 6227-6236	7
584	Exploring electric field assisted van der Waals weakening of stratified crystals. 2018 , 12, 359-365	2
583	Temperature-dependent Raman linewidths in transition-metal dichalcogenides. 2018 , 98,	5
582	High-yield production of 2D crystals by wet-jet milling. 2018 , 5, 890-904	92
581	Electrostatic Association of Ammonium-Functionalized Layered-Transition-Metal Dichalcogenides with an Anionic Porphyrin. 2018 , 10, 23476-23480	25
580	Nondestructive Thickness Mapping of Wafer-Scale Hexagonal Boron Nitride Down to a Monolayer. 2018 , 10, 25804-25810	11
579	Effect of tungsten disulfide (WS ₂) nanotubes on structural, morphological and mechanical properties of poly(L-lactide) (PLLA) films. 2018 ,	1
578	A Facile Synthesis of WS ₂ /g-C ₃ N ₄ Composites with Improved Photocatalytic Activity. 2018 , 39, 965-971	10
577	Technique and model for modifying the saturable absorption (SA) properties of 2D nanofilms by considering interband exciton recombination. 2018 , 6, 7501-7511	27
576	Two-Dimensional Nanosheets by Rapid and Efficient Microwave Exfoliation of Layered Materials. 2018 , 30, 5932-5940	45
575	Enhancement of Exciton-Phonon Scattering from Monolayer to Bilayer WS. 2018 , 18, 6135-6143	27
574	Electronic and vibrational properties of PbI ₂ : From bulk to monolayer. 2018 , 98,	33
573	Extrinsic p-type doping of few layered WS ₂ films with niobium by pulsed laser deposition. 2018 , 113, 062106	12
572	Unveiling Defect-Related Raman Mode of Monolayer WS via Tip-Enhanced Resonance Raman Scattering. 2018 , 12, 9982-9990	44
571	New Pathway for Hot Electron Relaxation in Two-Dimensional Heterostructures. 2018 , 18, 6057-6063	37
570	CoS ₂ -incorporated WS ₂ nanosheets for efficient hydrogen production. 2018 , 287, 1-9	15

569	Chalcogen Precursor Effect on Cold-Wall Gas-Source Chemical Vapor Deposition Growth of WS ₂ . 2018 , 18, 4357-4364	28
568	Improved Hydrogen Evolution Reaction Performance using MoS ₂ /WS ₂ Heterostructures by Physicochemical Process. 2018 , 6, 8400-8409	82
567	Interfacial charge transfer in WS ₂ monolayer/CsPbBr ₃ microplate heterostructure. 2018 , 13, 1	6
566	Structural and optical properties of WS ₂ prepared using sulfurization of different thick sputtered tungsten films. 2018 , 461, 133-138	9
565	Investigation of multilayer WS ₂ flakes as charge trapping stack layers in non-volatile memories. 2018 , 112, 231903	10
564	Two-Dimensional High-Quality Monolayered Triangular WS Flakes for Field-Effect Transistors. 2018 , 10, 22435-22444	46
563	Facile synthesis of reduced graphene oxide/tungsten disulfide/tungsten oxide nanohybrids for high performance supercapacitor with excellent rate capability. 2019 , 463, 150-158	18
562	Selective modification of two-dimensional MoS ₂ nanosheets by polymer grafting. 2019 , 30, 311-313	6
561	Tunable thermal transport in a WS monolayer with isotopic doping and fractal structure. 2019 , 11, 19763-19771	14
560	Enhanced Electron-Phonon Interaction in Multivalley Materials. 2019 , 9,	25
559	Irradiation of Transition Metal Dichalcogenides Using a Focused Ion Beam: Controlled Single-Atom Defect Creation. 2019 , 29, 1904668	32
558	Q-switched ytterbium fiber laser based on rhenium diselenide as a saturable absorber. 2019 , 52, 465101	4
557	First demonstration of 40-nm channel length top-gate WS ₂ pFET using channel area-selective CVD growth directly on SiO _x /Si substrate. 2019 ,	15
556	Facile Bottom-up Preparation of WS-Based Water-Soluble Quantum Dots as Luminescent Probes for Hydrogen Peroxide and Glucose. 2019 , 14, 271	12
555	Spin-Layer and Spin-Valley Locking in CVD-Grown AA'- and AB-Stacked Tungsten-Disulfide Bilayers. 2019 , 123, 21813-21821	13
554	Evidence for a narrow band gap phase in 1T' WS ₂ nanosheet. 2019 , 115, 032102	16
553	Widely tunable Bi ₂ Se ₃ /transition metal dichalcogenide 2D heterostructures for write-read-erase-reuse applications. 2019 , 6, 041003	8
552	Lateral Bilayer MoS ₂ /WS ₂ Heterostructure Photodetectors with High Responsivity and Detectivity. 2019 , 7, 1900815	39

551	WS and MoS thin film gas sensors with high response to NH in air at low temperature. 2019 , 30, 405501	52
550	Lithographically defined synthesis of transition metal dichalcogenides. 2019 , 6, 045055	1
549	Gate dependent phonon shift in tungsten disulfide (WS ₂) field effect transistor. 2019 , 6, 115909	4
548	Vapor Phase Selective Growth of Two-Dimensional Perovskite/WS Heterostructures for Optoelectronic Applications. 2019 , 11, 40503-40511	22
547	Carbon-nanoparticle-assisted growth of high quality bilayer WS ₂ by atmospheric pressure chemical vapor deposition. 2019 , 12, 2802-2807	9
546	The wettability and tribological behaviour of thin F-doped WS ₂ films deposited by magnetron sputtering. 2019 , 378, 125033	7
545	Electrophoretic Deposition of WS Flakes on Nanoholes Arrays-Role of Used Suspension Medium. 2019 , 12,	3
544	Ultrafast carrier dynamics in colloidal WS nanosheets obtained through a hot injection synthesis. 2019 , 151, 164701	12
543	Demonstration of 40-nm Channel Length Top-Gate p-MOSFET of WS ₂ Channel Directly Grown on SiO ₂ /Si Substrates Using Area-Selective CVD Technology. 2019 , 66, 5381-5386	3
542	Nonlocal dielectric function and nested dark excitons in MoS ₂ . 2019 , 3,	3
541	Convenient Synthesis of WS ₂ /MoS ₂ Heterostructures with Enhanced Photocatalytic Performance. 2019 , 123, 27363-27368	6
540	Rhenium Diselenide (ReSe) Near-Infrared Photodetector: Performance Enhancement by Selective p-Doping Technique. 2019 , 6, 1901255	15
539	Synthesis of Textured Tungsten Disulfide Nanosheets and their Catalysis for Benzylamine Coupling Reaction. 2019 , 11, 6288-6294	4
538	The deviations of evaporation modes in two different morphologies of 2D WS film.. 2019 , 9, 26799-26806	1
537	Temperature-dependent phonon dynamics of supported and suspended monolayer tungsten diselenide. 2019 , 9, 085316	14
536	Growth of pulsed laser deposited few-layer WS ₂ films. 2019 , 37, 051505	7
535	WS ₂ /CsPbBr ₃ van der Waals heterostructure planar photodetectors with ultrahigh on/off ratio and piezo-phototronic effect-induced strain-gated characteristics. 2019 , 65, 104001	31
534	High-Concentration Niobium-Substituted WS Basal Domains with Reconfigured Electronic Band Structure for Hydrogen Evolution Reaction. 2019 , 11, 34862-34868	11

533	Energy-Yielding Mini Heat Thermocells with WS ₂ Water-Splitting Dual System to Recycle Wasted Heat. 2019 , 2, 7092-7103	5
532	2D WS liquid crystals: tunable functionality enabling diverse applications. 2019 , 11, 16886-16895	3
531	Ultrathin WO Nanosheets Converted from Metallic WS Sheets by Spontaneous Formation and Deposition of PdO Nanoclusters for Visible Light-Driven C-C Coupling Reactions. 2019 , 11, 36960-36969	21
530	Bilayer Lateral Heterostructures of Transition-Metal Dichalcogenides and Their Optoelectronic Response. 2019 , 13, 12372-12384	50
529	A Bilayer 2D-WS/Organic-Based Heterojunction for High-Performance Photodetectors. 2019 , 9,	9
528	Linear and nonlinear optical response of sulfur-deficient nanocrystallite WS ₂ thin films. 2019 , 54, 14809-148246	
527	Mass-producible 2D-WS bulk modified screen printed electrodes towards the hydrogen evolution reaction.. 2019 , 9, 25003-25011	7
526	The role of weak Lewis acid sites for methanol thiolation. 2019 , 9, 509-516	11
525	CVD growth of monolayer WS ₂ through controlled seed formation and vapor density. 2019 , 93, 158-163	15
524	Controlled Vapor Growth and Nonlinear Optical Applications of Large-Area 3R Phase WS ₂ and WSe ₂ Atomic Layers. 2019 , 29, 1806874	59
523	Atypical Defect-Mediated Photoluminescence and Resonance Raman Spectroscopy of Monolayer WS ₂ . 2019 , 123, 3900-3907	24
522	Location-selective growth of two-dimensional metallic/semiconducting transition metal dichalcogenide heterostructures. 2019 , 11, 4183-4189	10
521	Effect of layer and stacking sequence in simultaneously grown 2H and 3R WS atomic layers. 2019 , 30, 345203	7
520	Carbon doping of WS monolayers: Bandgap reduction and p-type doping transport. 2019 , 5, eaav5003	70
519	Dark-Exciton-Mediated Fano Resonance from a Single Gold Nanostructure on Monolayer WS at Room Temperature. 2019 , 15, e1900982	16
518	A Facile and Effective Method for Patching Sulfur Vacancies of WS via Nitrogen Plasma Treatment. 2019 , 15, e1901791	26
517	Prediction of two-dimensional monochalcogenides: MoS and WS. 2019 , 383, 2914-2921	6
516	Transistor properties of relatively small-diameter tungsten disulfide nanotubes obtained by sulfurization of solution-synthesized tungsten oxide nanowires. 2019 , 12, 085001	3

515	Hot carrier transfer and phonon transport in suspended nm WS ₂ films. 2019 , 175, 222-237	23
514	Restoring the intrinsic optical properties of CVD-grown MoS monolayers and their heterostructures. 2019 , 11, 12798-12803	20
513	Temperature dependent Raman investigations of few-layered WS ₂ nanosheets. 2019 , 298, 113626	11
512	Growth of Complex 2D Material-Based Structures with Naturally Formed Contacts. 2019 , 4, 9557-9562	3
511	Strain tolerance of two-dimensional crystal growth on curved surfaces. 2019 , 5, eaav4028	29
510	ZnO-Controlled Growth of Monolayer WS through Chemical Vapor Deposition. 2019 , 12,	3
509	In-plane band bending in hexagonal monolayer WS ₂ by edge polarization. 2019 , 99,	2
508	Double resonance Raman scattering process in 2D materials. 2019 , 34, 1976-1992	14
507	Metallo-Hydrogel-Assisted Synthesis and Direct Writing of Transition Metal Dichalcogenides. 2019 , 29, 1807612	7
506	Direct In Situ Growth of Centimeter-Scale Multi-Heterojunction MoS/WS/WSe Thin-Film Catalyst for Photo-Electrochemical Hydrogen Evolution. 2019 , 6, 1900301	34
505	Highly Rich 1T Metallic Phase of Few-Layered WS ₂ Nanoflowers for Enhanced Storage of Lithium-Ion Batteries. 2019 , 7, 10363-10370	19
504	Enhanced photoresponse of tungsten disulfide-reduced graphene oxide hybrid for photoelectrochemical photodetectors. 2019 , 30, 11499-11507	3
503	Controlled synthesis and frictional properties of 2D MoTe ₂ via chemical vapor deposition. 2019 , 728, 156-159	4
502	Quantifying Quasi-Fermi Level Splitting and Mapping its Heterogeneity in Atomically Thin Transition Metal Dichalcogenides. 2019 , 31, e1900522	20
501	Hydrophilic tannic acid-modified WS ₂ nanosheets for enhanced polysulfide conversion in aqueous media. 2019 , 1, 015005	
500	A facile preparation of WS ₂ nanosheets as a highly effective HER catalyst. 2019 , 1, 101-109	12
499	Effects of Acetone Vapor on the Exciton Band Photoluminescence Emission from Single- and Few-Layer WS on Template-Stripped Gold. 2019 , 19,	3
498	Tungsten disulfide saturable absorber for passively Q-Switched YVO ₄ /Nd:YVO ₄ /YVO ₄ laser at 1342.2 nm. 2019 , 92, 95-99	4

497	Electronic transitions of tungsten monosulfide. 2019 , 359, 31-36	10
496	Broadband photodetection in wide temperature range: Layer-by-layer exfoliation monitoring of WS ₂ bulk using microscopy and spectroscopy. 2019 , 125, 154303	7
495	Vapor growth of CdS nanowires/WS nanosheet heterostructures with sensitive photodetections. 2019 , 30, 345603	8
494	Vacancy-Induced Synaptic Behavior in 2D WS Nanosheet-Based Memristor for Low-Power Neuromorphic Computing. 2019 , 15, e1901423	142
493	Transport evidence of asymmetric spin-orbit coupling in few-layer superconducting 1T-MoTe. 2019 , 10, 2044	39
492	High efficient degradation of levofloxacin by edge-selectively Fe@3D-WS ₂ : Self-renewing behavior and Degradation mechanism study. 2019 , 252, 187-197	20
491	Large g factor in bilayer WS ₂ flakes. 2019 , 114, 113104	8
490	Chemical vapor deposition of monolayer-thin WS crystals from the WF and HS precursors at low deposition temperature. 2019 , 150, 104703	7
489	Why Phonon Behaviors in Transition Metal Dichalcogenides Matter. 2019 , 4, 629-634	1
488	Graphene-WS heterostructures by a lithography free method: their electrical properties. 2019 , 30, 275704	2
487	Unusual properties and potential applications of strain BN-MS (M = Mo, W) heterostructures. <i>Scientific Reports</i> , 2019 , 9, 3518	4-9 9
486	Oxygen-incorporated and layer-by-layer stacked WS nanosheets for broadband, self-driven and fast-response photodetection. 2019 , 11, 6810-6816	14
485	Horizontal-to-Vertical Transition of 2D Layer Orientation in Low-Temperature Chemical Vapor Deposition-Grown PtSe and Its Influences on Electrical Properties and Device Applications. 2019 , 11, 13598-13607	44
484	Surface-diffusion-limited growth of atomically thin WS crystals from core-shell nuclei. 2019 , 11, 8706-8714	11
483	Controlled growth of transition metal dichalcogenide monolayers using Knudsen-type effusion cells for the precursors. 2019 , 2, 016001	25
482	Facile and Controllable Synthesis of Large-Area Monolayer WS ₂ Flakes Based on WO ₃ Precursor Drop-Casted Substrates by Chemical Vapor Deposition. 2019 , 9,	12
481	Temperature- and position-dependent Raman study on carrier concentration of large-area monolayer WS ₂ . 2019 , 481, 241-245	4
480	Optical properties of chemical vapor deposition-grown PtSe ₂ characterized by spectroscopic ellipsometry. 2019 , 6, 035011	38

479	Ultrathin transition-metal dichalcogenide nanosheet-based colorimetric sensor for sensitive and label-free detection of DNA. 2019 , 290, 565-572	23
478	Ultrafast Monolayer In/Gr-WS-Gr Hybrid Photodetectors with High Gain. 2019 , 13, 3269-3279	26
477	Crystalline tungsten sulfide thin films by atomic layer deposition and mild annealing. 2019 , 37, 020921	10
476	A Self-Limited Atomic Layer Deposition of WS ₂ Based on the Chemisorption and Reduction of Bis(t-butylimino)bis(dimethylamino) Complexes. 2019 , 31, 1881-1890	14
475	Interfacial Engineering Determines Band Alignment and Steers Charge Separation and Recombination at an Inorganic Perovskite Quantum Dot/WS Junction: A Time Domain Ab Initio Study. 2019 , 10, 1234-1241	19
474	Core/Shell WO ₃ /WS ₂ Nanostructured Thin Films via Plasma Assisted Sublimation and Sulfurization. 2019 , 2, 1691-1703	14
473	Insertion of an ultrathin AlO interfacial layer for Schottky barrier height reduction in WS field-effect transistors. 2019 , 11, 4811-4821	15
472	Enhancing the electrocatalytic activity of 2H-WS for hydrogen evolution via defect engineering. 2019 , 21, 6071-6079	35
471	An Experimental Setup for Combined In-Vacuo Raman Spectroscopy and Cavity-Interferometry Measurements on TMDC Nano-resonators. 2019 , 59, 349-359	3
470	Synthesis and Characterization of MoS ₂ /WS ₂ Heterostructures by Second Harmonic Generation. 2019 ,	
469	Thermal expansion coefficient and phonon dynamics in coexisting allotropes of monolayer WS probed by Raman scattering. 2019 , 31, 505403	6
468	Symmetry breaking of in-plane Raman scattering by elliptically polarized light in MoS ₂ . 2019 , 100,	2
467	Triple sum frequency pump-probe spectroscopy of transition metal dichalcogenides. 2019 , 100,	4
466	Seeded-growth of WS atomic layers: the effect on chemical and optical properties. 2019 , 11, 22493-22503	13
465	Tailoring light-matter interaction in WS ₂ /gold nanoparticles hybrid systems. 2019 , 100,	7
464	Band-Structure Spin-Filtering in Vertical Spin Valves Based on Chemical Vapor Deposited WS. 2019 , 13, 14468-14476	28
463	Gas-Source CVD Growth of Atomic Layered WS from WF and HS Precursors with High Grain Size Uniformity. <i>Scientific Reports</i> , 2019 , 9, 17678	4-9 21
462	Enhancing exciton diffusion in monolayer WS ₂ with hBN bottom layer. 2019 , 100,	9

461	Manipulation of exciton and trion quasiparticles in monolayer WS ₂ via charge transfer. 2019 , 115, 173103		6
460	Coupled Charge Transfer Dynamics and Photoluminescence Quenching in Monolayer MoS ₂ Decorated with WS ₂ Quantum Dots. <i>Scientific Reports</i> , 2019 , 9, 19414	4.9	18
459	Biofunctional few-layer metal dichalcogenides and related heterostructures produced by direct aqueous exfoliation using phospholipids.. 2019 , 9, 37061-37066		1
458	Ambient atmosphere laser-induced local ripening of MoS ₂ nanoparticles. 2019 , 7, 13261-13266		0
457	Enhanced ferromagnetism in WS ₂ via defect engineering. 2019 , 772, 740-744		20
456	Rectify Effect of Pedot:PSS/WS ₂ Heterostructure. 2019 , 216, 1800829		9
455	Structural Quantification for Graphene and Related Two-Dimensional Materials by Raman Spectroscopy. 2019 , 91, 468-481		14
454	Reduced graphene oxide hybridized with WS ₂ nanoflakes based heterojunctions for selective ammonia sensors at room temperature. 2019 , 282, 290-299		67
453	Seamless tungsten disulfide-tungsten heterojunction with abundant exposed active sites for efficient hydrogen evolution. 2019 , 244, 320-326		21
452	Constituent substitution in hot wall deposition of Bi ₂ S ₃ films by reaction with substrates. 2019 , 270, 219-225		6
451	Tunable and enhanced light emission in hybrid WS ₂ -optical-fiber-nanowire structures. 2019 , 8, 8		29
450	Probing exciton species in atomically thin WS ₂ /graphene heterostructures. 2019 , 2, 025001		3
449	Raman Imaging of Two Dimensional Materials. 2019 , 231-261		
448	Open-source automated chemical vapor deposition system for the production of two- dimensional nanomaterials. 2019 , 14, e0210817		1
447	Polarized THz Emission from In-Plane Dipoles in Monolayer Tungsten Disulfide by Linear and Circular Optical Rectification. 2019 , 7, 1801314		17
446	Thickness controlled nanostructure formation in RF sputtered WS ₂ thin film. 2019 , 6, 025002		1
445	Low-temperature one-pot synthesis of WS ₂ nanoflakes as electrocatalyst for hydrogen evolution reaction. 2019 , 30, 045603		7
444	Surface spin accumulation due to the inverse spin Hall effect in WS ₂ crystals. 2019 , 6, 011007		7

443	Facile access to shape-controlled growth of WS ₂ monolayer via environment-friendly method. 2019 , 6, 015007	10
442	Ultrafast time-resolved investigations of excitons and biexcitons at room temperature in layered WS ₂ . 2019 , 6, 015011	18
441	Raman scattering studies on very thin layers of gallium sulfide (GaS) as a function of sample thickness and temperature. 2019 , 31, 075303	8
440	New Class of Electrocatalysts Based on 2D Transition Metal Dichalcogenides in Ionic Liquid. 2019 , 31, e1804453	31
439	Spatially selective reversible charge carrier density tuning in WS ₂ monolayers via photochlorination. 2019 , 6, 015003	7
438	Carrier dynamics in monolayer WS ₂ /GaAs heterostructures. 2020 , 500, 144005	4
437	Photoacoustic generation using WS ₂ in ultrasonic detection of seismic physical models. 2020 , 200, 163401	1
436	Photoluminescence quenching of WS ₂ nanoflakes upon Ga ion irradiation. 2020 , 217, 116786	5
435	Electrical friction modulation on MoS ₂ using electron beam radiation without electrostatic interactions. 2020 , 31, 075703	0
434	Deterministic direct growth of WS ₂ on CVD graphene arrays. 2020 , 7, 014002	8
433	Tailoring of Bound Exciton Photoluminescence Emission in WS ₂ Monolayers. 2020 , 14, 1900355	3
432	Nanoparticles decorated carbon nanotubes as novel matrix: A comparative study of influences of immobilization on the catalytic properties of Lensculinaris galactosidase (Lcgal). 2020 , 144, 770-780	5
431	2H/1T' phase WS ₂ (1-x)Te _{2x} alloys grown by chemical vapor deposition with tunable band structures. 2020 , 504, 144371	6
430	A review on Raman finger prints of doping and strain effect in TMDCs. 2020 , 219, 111152	21
429	Wafer-Scale and Low-Temperature Growth of 1T-WS Film for Efficient and Stable Hydrogen Evolution Reaction. 2020 , 16, e1905000	32
428	Mechanochemical preparation of piezoelectric nanomaterials: BN, MoS ₂ and WS ₂ 2D materials and their glycine-cocrystals. 2020 , 5, 331-335	6
427	Near infrared-light responsive WS microengines with high-performance electro- and photo-catalytic activities. 2020 , 11, 132-140	10
426	Ultrafast growth of large single crystals of monolayer WS and WSe. 2020 , 7, 737-744	36

425	Understanding the excitation wavelength dependent spectral shift and large exciton binding energy of tungsten disulfide quantum dots and its interaction with single-walled carbon nanotubes. 2020 , 561, 519-532	14
424	Uniform, large-scale growth of WS ₂ nanodomains via CVD technique for stable non-volatile RRAM application. 2020 , 107, 104837	18
423	@WS ₂ Core/Shell Architectures: Combining Vapor Phase and Solution-Based Approaches. 2020 , 124, 2627-2633	4
422	Graphene-Transition Metal Dichalcogenide Heterojunctions for Scalable and Low-Power Complementary Integrated Circuits. 2020 , 14, 985-992	20
421	Construction of WS ₂ triangular nanoplates array for hydrogen evolution reaction over a wide pH range. 2020 , 45, 2909-2916	7
420	All-Optical Reversible Manipulation of Exciton and Trion Emissions in Monolayer WS ₂ . 2019 , 10,	8
419	Measuring Photoexcited Free Charge Carriers in Mono- to Few-Layer Transition-Metal Dichalcogenides with Steady-State Microwave Conductivity. 2020 , 11, 99-107	6
418	Rose-like MoS ₂ nanostructures with a large interlayer spacing of ~9.9 Å and exfoliated WS ₂ nanosheets supported on carbon nanotubes for hydrogen evolution reaction. 2020 , 158, 216-225	23
417	New insights in the lattice dynamics of monolayers, bilayers, and trilayers of WSe ₂ and unambiguous determination of few-layer-flakes thickness. 2020 , 7, 025004	7
416	Determination of band alignments at 2D tungsten disulfide/high-k dielectric oxides interfaces by x-ray photoelectron spectroscopy. 2020 , 505, 144521	4
415	Tungsten sulfide co-catalytic radical chain-reaction for efficient organics degradation and electricity generation. 2020 , 268, 118471	4
414	Controllable Water Vapor Assisted Chemical Vapor Transport Synthesis of WS ₂ /MoS ₂ Heterostructure. 2020 , 2, 42-48	15
413	Atomic layer deposition for nonconventional nanomaterials and their applications. 2020 , 35, 656-680	5
412	Lattice chain theories for dynamics of acoustic flexural phonons in nonpolar nanomaterials. 2020 , 102,	4
411	QD/2D Hybrid Nanoscrolls: A New Class of Materials for High-Performance Polarized Photodetection and Ultralow Threshold Laser Action. 2020 , 16, e2003944	3
410	Solvent-Exfoliated 2D WS ₂ /Polyethersulfone Antifouling Mixed Matrix Ultrafiltration Membrane for Water Treatment. 2020 , 2, 5039-5047	5
409	Graphene to Advanced MoS ₂ : A Review of Structure, Synthesis, and Optoelectronic Device Application. 2020 , 10, 902	16
408	Thickness-Dependent, Gate-Tunable Rectification and Highly Sensitive Photovoltaic Behavior of Heterostructured GeSe/WS ₂ p-n Diode. 2020 , 7, 2000893	10

407	Temperature- and power-dependent phonon properties of suspended few layers of tungsten diselenide. 2020 , 111, 103169	6
406	WS ₂ Monolayers Coupled to Hyperbolic Metamaterial Nanoantennas: Broad Implications for Light-Matter-Interaction Applications. 2020 , 3, 10226-10233	6
405	Stable and high-performance piezoelectric sensor via CVD grown WS. 2020 , 31, 445203	12
404	Improvement of photoelectric properties of MoS ₂ /WS ₂ heterostructure photodetector with interlayer of Au nanoparticles. 2020 , 108, 110191	9
403	Second harmonic generation in two-dimensional transition metal dichalcogenides with growth and post-synthesis defects. 2020 , 7, 045020	6
402	Light-matter coupling and non-equilibrium dynamics of exchange-split trions in monolayer WS. 2020 , 153, 034706	0
401	Monolayer Vanadium-Doped Tungsten Disulfide: A Room-Temperature Dilute Magnetic Semiconductor. 2020 , 7, 2001174	33
400	Nanotribological Investigation of Sliding Properties of Transition Metal Dichalcogenide Thin Film Coatings. 2020 ,	4
399	Reactivity of contact metals on monolayer WS ₂ . 2020 , 128, 055306	7
398	Surface-Enhanced Raman Scattering: Introduction and Applications. 2020 ,	4
397	Effect of Chemical Vapor Deposition WS on Viability and Differentiation of SH-SY5Y Cells. 2020 , 14, 592502	3
396	Sensor based on diamond nanoparticles and WS ₂ for ponceau 4R and tartrazine determination: Influence of green solvents employed for WS ₂ exfoliation. 2020 , 23, 100185	6
395	High-efficiency synthesis of large-area monolayer WS ₂ crystals on SiO ₂ /Si substrate via NaCl-assisted atmospheric pressure chemical vapor deposition. 2020 , 533, 147479	8
394	Rapid and Low-Temperature Molecular Precursor Approach toward Ternary Layered Metal Chalcogenides and Oxides: Mo W S and Mo W O Alloys (0 001). 2020 , 32, 7895-7907	7
393	Graphene/WS ₂ Nanodisk Van der Waals Heterostructures on Plasmonic Ag Nanoparticle-Embedded Silica Metafilms for High-Performance Photodetectors. 2020 , 3, 7858-7868	12
392	Sustainable Nanosheet Antioxidants for Sepsis Therapy Scavenging Intracellular Reactive Oxygen and Nitrogen Species. 2020 , 14, 10324-10336	35
391	Temperature Dependent Synthesis of Inorganic WS ₂ Nano Rods. 2020 , 830, 85-92	
390	Towards Scalable Fabrications and Applications of 2D Layered Material-based Vertical and Lateral Heterostructures. 2020 , 36, 525-550	3

389	Investigating the phonon line shapes of TMDs: An analytical approach. 2020 , 51, 2036-2045		2
388	WS ₂ 2D Semiconductor Down to Monolayers by Pulsed-Laser Deposition for Large-Scale Integration in Electronics and Spintronics Circuits. 2020 , 3, 7908-7916		8
387	Enhanced Charge Transfer in Atom-Thick 2H ₁ WS ₂ Nanosheets/Electron Transport Layers of Perovskite Solar Cells. 2020 , 4, 2000260		12
386	Distinct magneto-Raman signatures of spin-flip phase transitions in CrI ₃ . 2020 , 11, 3879		31
385	Understanding metal organic chemical vapour deposition of monolayer WS ₂ : the enhancing role of Au substrate for simple organosulfur precursors. 2020 , 12, 22234-22244		8
384	Layer-dependent optoelectronic properties of black phosphorus. 2020 , 31, 2050177		1
383	Synthesis and characterization of WS ₂ /graphene/SiC van der Waals heterostructures via WO thin film sulfurization. <i>Scientific Reports</i> , 2020 , 10, 17334	4-9	4
382	Exciton-to-trion conversion as a control mechanism for valley polarization in room-temperature monolayer WS ₂ . <i>Scientific Reports</i> , 2020 , 10, 17389	4-9	10
381	Atomically Asymmetric Inversion Scales up to Mesoscopic Single-Crystal Monolayer Flakes. 2020 , 14, 13834-13840		5
380	Stoichiometry-Modulated Resonant Raman Spectroscopy of WS ₂ (1-x)Se _{2x} -Alloyed Monolayer Nanosheets. 2020 , 124, 20547-20554		
379	Room temperature and high response ethanol sensor based on two dimensional hybrid nanostructures of WS ₂ /GONRs. <i>Scientific Reports</i> , 2020 , 10, 14799	4-9	4
378	Photoinduced Enhanced Raman Spectroscopy with Hybrid ₂ Nanosheets. 2020 , 124, 20350-20358		9
377	Influence of Reducing Agent on Properties of Thin WS ₂ Nanosheets Prepared by Sulfurization of Atomic Layer-Deposited WO ₃ . 2020 , 124, 28169-28177		4
376	Sustainable Liquid-Phase Exfoliation of Layered Materials with Nontoxic Polarclean Solvent. 2020 , 8, 18830-18840		16
375	Study of Structural and Optoelectronic Properties of Thin Films Made of a Few Layered WS ₂ Flakes. 2020 , 13,		3
374	Scanning Probe Spectroscopy of WS ₂ /Graphene Van Der Waals Heterostructures. 2020 , 10,		1
373	Graphene-WS ₂ van der Waals Hybrid Heterostructure for Photodetector and Memory Device Applications. 2020 , 14,		4
372	Scalable T-Gate Aligned Gr _{1-x} WS ₂ Cr Radio-Frequency Field-Effect Transistors. 2020 , 2, 3898-3905		6

371	Operational Limits and Failure Mechanisms in All-2D van der Waals Vertical Heterostructure Devices with Long-Lived Persistent Electroluminescence. 2020 , 14, 15533-15543	5
370	Study of the Properties of Two-Dimensional MoS ₂ and WS ₂ Films Synthesized by Chemical-Vapor Deposition. 2020 , 54, 454-464	2
369	Synthesis, microstructure and mechanical properties of WS ₂ self-lubricant thin films deposited by magnetron sputtering. 2020 , 150, 106363	10
368	Band Nesting Bypass in WS Monolayers Förster Resonance Energy Transfer. 2020 , 14, 5946-5955	4
367	Quantitative understanding of the ultra-sensitive and selective detection of dopamine using a graphene oxide/WS ₂ quantum dot hybrid. 2020 , 8, 7935-7946	6
366	Insights on the enhanced Raman scattering of monolayer TMDCs (Mo, W)(S, Se) ₂ with Ag nanoparticles via rapid thermal annealing. 2020 , 520, 146367	
365	2D Tungsten Chalcogenides: Synthesis, Properties and Applications. 2020 , 7, 2000002	17
364	Resonance Raman spectroscopy in semiconducting transition-metal dichalcogenides: basic properties and perspectives. 2020 , 7, 042001	10
363	Quasi-BIC Resonant Enhancement of Second-Harmonic Generation in WS Monolayers. 2020 , 20, 5309-5314	63
362	Defect-mediated strong exciton-phonon coupling between flower-like WS ₂ film with vicinity layers. 2020 , 226, 117483	4
361	Selective Synthesis of BiTe/WS Heterostructures with Strong Interlayer Coupling. 2020 ,	0
360	Synthesis, Microstructural, and Mechano-Tribological Properties of Self-Lubricating W-S-C(H) Thin Films Deposited by Different RF Magnetron Sputtering Procedures. 2020 , 10, 272	8
359	Local modulation of excitons and trions in monolayer WS ₂ by carbon nanotubes. 2020 , 13, 1982-1987	3
358	Thioether complexes of WS ₂ , WOCl ₂ and WS ₂ and evaluation of thiochloride complexes as CVD precursors for WS thin films. 2020 , 49, 2496-2504	6
357	Growth Control of WS: From 2D Layer by Layer to 3D Vertical Standing Nanowalls. 2020 , 12, 15785-15792	8
356	Study on the Growth Parameters and the Electrical and Optical Behaviors of 2D Tungsten Disulfide. 2020 , 12, 16576-16583	5
355	Beyond graphene. 2020 , 485-560	
354	Low Energy Implantation into Transition-Metal Dichalcogenide Monolayers to Form Janus Structures. 2020 , 14, 3896-3906	56

353	Perceptible exciton-to-trion conversion and signature of defect mediated vibronic modes and spin relaxation in nanoscale WS exposed to E-rays. 2020 , 31, 285706		6
352	Facile one-step synthesis of g-C ₃ N ₄ -supported WS ₂ with enhanced lithium storage properties. 2020 , 341, 136010		11
351	Curved 2D WS nanostructures: nanocasting and silent phonon mode. 2020 , 12, 9038-9047		3
350	Probing momentum-indirect excitons by near-resonance photoluminescence excitation spectroscopy in WS ₂ monolayer. 2020 , 7, 031002		9
349	Universal Substitutional Doping of Transition Metal Dichalcogenides by Liquid-Phase Precursor-Assisted Synthesis. 2020 , 14, 4326-4335		44
348	Effect of Surfactant Choice and Concentration on the Dimensions and Yield of Liquid-Phase-Exfoliated Nanosheets. 2020 , 32, 2852-2862		15
347	Atypical electrical behavior of few layered WS ₂ nanosheets based platform subject to heavy metal ion treatment. 2020 , 268, 127597		8
346	Enhanced Photoresponse of WS ₂ Photodetectors through Interfacial Defect Engineering Using a TiO ₂ Interlayer. 2020 , 2, 838-845		6
345	Rapid and broad-range thickness estimation method of hexagonal boron nitride using Raman spectroscopy and optical microscope. 2020 , 116, 081104		6
344	van der Waals Heterostructures based on Liquid Phase Exfoliated MoS ₂ and WS ₂ nanosheets. 2020 , 21, 1840-1845		3
343	The effect of substrate location on the composition, microstructure and mechano-tribological properties of W-S-C coatings deposited by magnetron sputtering. 2020 , 386, 125481		8
342	Solution-Based Synthesis of Few-Layer WS Large Area Continuous Films for Electronic Applications. <i>Scientific Reports</i> , 2020 , 10, 1696	4.9	12
341	Heteroatom doping of two-dimensional materials: From graphene to chalcogenides. 2020 , 30, 100829		45
340	Large-area, thermally-sulfurized WS ₂ thin films: control of growth direction and use as a substrate for GaN epitaxy. 2020 , 35, 035011		0
339	Optical dielectric function of two-dimensional WS ₂ on epitaxial graphene. 2020 , 7, 025024		6
338	An active and passive dual-loss Q-switched intracavity OPO based on few-layer WS ₂ saturable absorber. 2020 , 100, 109700		2
337	Effects of substrates on the optical properties of monolayer WS ₂ . 2020 , 540, 125645		2
336	Influence of laser structural patterning on the tribological performance of C-alloyed W-S coatings. 2020 , 394, 125822		4

335	Functional hetero-interfaces in atomically thin materials. 2020 , 37, 74-92	10
334	Area-Selective Atomic Layer Deposition of Two-Dimensional WS Nanolayers. 2020 , 2, 511-518	24
333	Photogating WS Photodetectors Using Embedded WSe Charge Puddles. 2020 , 14, 4559-4566	40
332	Prolonged Lifetime in Nanocrystal Light-Emitting Diodes Incorporating MoS ₂ -Based Conjugated Polyelectrolyte Interfacial Layer as an Alternative to PEDOT:PSS. 2020 , 2, 1186-1192	3
331	Surfactant-assisted electrodeposition of Au@Co/WS ₂ self-lubricating coating from WS ₂ suspended cyanide electrolyte. 2020 , 829, 154585	4
330	Impetuous exfoliation of tungsten disulfide into a few-layer nanoscale form due to super active collagenase biomolecules. 2020 , 250, 123008	2
329	Positive and Negative Effects of Dopants toward Electrocatalytic Activity of MoS and WS: Experiments and Theory. 2020 , 12, 20383-20392	22
328	Group VI transition metal dichalcogenides as antifouling transducers for electrochemical oxidation of catechol-containing structures. 2020 , 115, 106718	15
327	Line-Scan Hyperspectral Imaging Microscopy with Linear Unmixing for Automated Two-Dimensional Crystals Identification. 2020 , 7, 1216-1225	6
326	Wafer scale growth of MoS ₂ and WS ₂ by pulsed laser deposition. 2021 , 35, 494-496	3
325	2D WS ₂ : From Vapor Phase Synthesis to Device Applications. 2021 , 7, 2000688	16
324	Seedless growth of two-dimensional disc-shaped WS ₂ layers by chemical vapor deposition. 2021 , 257, 123837	2
323	Luminescence enhancement and Raman characterization of defects in WS ₂ monolayers treated with low-power N ₂ plasma. 2021 , 535, 147685	3
322	Helicity-resolved resonant Raman spectroscopy of layered WS ₂ . 2021 , 52, 525-531	9
321	Hybrid Organic/Inorganic Photocathodes Based on WS ₂ Flakes as Hole Transporting Layer Material. 2021 , 2, 2000098	6
320	Solution-based Bottom-up Synthesis of group VI transition metal dichalcogenides and their applications. 2021 , 2, 146-164	14
319	Optical Measurement Techniques. 2021 , 133-185	
318	The effect of 2D tungsten disulfide nanoparticles on Lewis lung carcinoma cells .. 2021 , 11, 16142-16150	0

317	Interaction of gases with monolayer WS: an spectroscopy study. 2021 , 13, 11470-11477	4
316	Nonlinear Optical Response of a WS Monolayer at Room Temperature upon Multicolor Laser Excitation. 2021 , 8, 550-556	7
315	Morphology-induced spectral modification of self-assembled WS pyramids.. 2021 , 3, 6427-6437	1
314	Atomic adsorption on monolayer CuSe: a first-principles study. 2021 , 23, 9814-9821	0
313	Facilitating electrocatalytic hydrogen evolution via multifunctional tungsten@tungsten disulfide core-shell nanospheres. 2021 , 9, 9272-9280	5
312	Highly symmetric and delayed excitonic emission response and space charge-limited current transport in μ irradiated WSe ₂ and WS ₂ nanoflakes. 2021 , 36, 870-883	1
311	Structural, optical, magnetic and electrochemical properties of hydrothermally synthesized WS ₂ nanoflakes. 2021 , 36, 884-895	1
310	Low-Temperature Synthesis of Wafer-Scale MoS-WS Vertical Heterostructures by Single-Step Penetrative Plasma Sulfurization. 2021 , 15, 707-718	10
309	Optical properties of two-dimensional materials. 2021 , 165-206	
308	3D Deep Learning Enables Accurate Layer Mapping of 2D Materials. 2021 , 15, 3139-3151	7
307	Effect of tungsten disulfide nanotubes on crystallization of polylactide under uniaxial deformation and annealing. 2021 , 2,	2
306	Micrometer-scale WS ₂ atomic layers grown by alkali metal free gas-source chemical vapor deposition with H ₂ S and WF ₆ precursors. 2021 , 60, SBBH09	1
305	Thermal stability of monolayer WS ₂ in BEOL conditions. 2021 , 4, 024002	2
304	Direct growth of tungsten disulfide on gallium nitride and the photovoltaic characteristics of the heterojunctions. 2021 , 36, 025016	2
303	Mechanical Properties of Atomically Thin Tungsten Dichalcogenides: WS, WSe, and WTe. 2021 , 15, 2600-2610	18
302	Engineering MoSe/WS Hybrids to Replace the Scarce Platinum Electrode for Hydrogen Evolution Reactions and Dye-Sensitized Solar Cells. 2021 , 13, 5061-5072	33
301	A comparative study of electrical and opto-electrical properties of a few-layer p-WSe/n-WS heterojunction diode on SiO and h-BN substrates.. 2021 , 11, 17901-17909	1
300	Phonon scattering mechanism in van der Waals heterostructures comprising of MoS ₂ and WS ₂ nanosheets. 2021 , 45, 4612-4618	1

299	Optical and electrical characterization of WS ₂ multilayer on flexible PET substrate. 2021 , 8, 026405	2
298	Additive-Enhanced Exfoliation for High-Yield 2D Materials Production. 2021 , 11,	0
297	Localized state effect and exciton dynamics for monolayer WS. 2021 , 29, 5856-5866	4
296	Stacking Orientation-Dependent Photoluminescence Pathways in Artificially Stacked Bilayer WS ₂ Nanosheets Grown by Chemical Vapor Deposition: Implications for Spintronics and Valleytronics. 2021 , 4, 3717-3724	9
295	Laser printed two-dimensional transition metal dichalcogenides. <i>Scientific Reports</i> , 2021 , 11, 5211	4-9 5
294	Reduced Fracture Strength of 2D Materials Induced by Interlayer Friction. 2021 , 17, e2005996	3
293	Improved Contact Resistance by a Single Atomic Layer Tunneling Effect in WS ₂ /MoTe ₂ Heterostructures. 2021 , 8, e2100102	5
292	1D chain structure in 1T'-phase 2D transition metal dichalcogenides and their anisotropic electronic structures. 2021 , 8, 011313	2
291	Tuning the valley polarization in WS ₂ monolayers via control of active defect sites induced by photochemical doping. 2021 , 118, 123103	2
290	Band-Gap Landscape Engineering in Large-Scale 2D Semiconductor van der Waals Heterostructures. 2021 , 15, 7279-7289	8
289	Recent Advances in Synthesis and Study of 2D Twisted Transition Metal Dichalcogenide Bilayers. 2021 , 2, 2000153	9
288	Advances in transition metal dichalcogenide-based two-dimensional nanomaterials. 2021 , 19, 100399	21
287	Ultrafast Charge Separation in Bilayer WS ₂ /Graphene Heterostructure Revealed by Time- and Angle-Resolved Photoemission Spectroscopy. 2021 , 9,	1
286	Enhanced interlayer coupling and efficient photodetection response of in-situ grown MoS ₂ /WS ₂ van der Waals heterostructures. 2021 , 129, 155304	5
285	Enhanced Photodetection Performance in Graphene-Assisted Tunneling Photodetector. 2021 , 68, 1702-1709	6
284	Layered WS ₂ thin films prepared by sulfurization of sputtered W films. 2021 , 544, 148719	5
283	Multimodal Nanoscopic Study of Atomic Diffusion and Related Localized Optoelectronic Response of WS ₂ /MoS ₂ Lateral Heterojunctions. 2021 , 13, 20361-20370	5
282	Davydov Splitting, Resonance Effect and Phonon Dynamics in Chemical Vapor Deposition Grown Layered MoS ₂ . 2021 , 32,	3

281	A Review on the Current Progress and Challenges of 2D Layered Transition Metal Dichalcogenides as Li/Na-ion Battery Anodes. 2021 , 8, 2358-2396	5
280	High-Performance Photodetector based on a 3D Dirac Semimetal Cd ₃ As ₂ /Tungsten Disulfide (WS ₂) van der Waals Heterojunction. 2021 , 2, 2000194	4
279	Transition metal dichalcogenides to optimize the performance of peptide-imprinted conductive polymers as electrochemical sensors. 2021 , 188, 203	2
278	Phonon and Thermal Properties of Thin Films Made from WS ₂ Mono- and Few-Layer Flakes. 2021 , 125, 14446-14452	2
277	Edge-enriched WS nanosheets on carbon nanofibers boosts NO detection at room temperature. 2021 , 411, 125120	61
276	Fe and P Doped 1T-Phase Enriched WS ₂ 3D-Dendritic Nanostructures for Efficient Overall Water Splitting. 2021 , 286, 119897	35
275	Transition metal dichalcogenide (TMDs) electrodes for supercapacitors: a comprehensive review. 2021 , 33,	12
274	Quantitative Analysis of Immunosuppressive Drugs Using Tungsten Disulfide Nanosheet-Assisted Laser Desorption Ionization Mass Spectrometry. 2021 , 15, 10141-10152	4
273	Wear and Rolling Contact Fatigue Analysis of AISI 52100 Bearing Steel in Presence of Additivated Lubricants. 2021 , 11, 907	0
272	Room temperature emission from single defects in WO ₃ enhanced by plasmonic nanocrystals. 2021 , 118, 231105	1
271	Understanding the Role of 2D Nature on the Junction Properties in WS ₂ Layers; Effect of AFM Tip Induced Loading Force on Spatially Varying Contact. 2021 , 24, 101131	1
270	Enhanced ammonia sensing properties of rGO/WS ₂ heterojunction based chemiresistive sensor by marginal sulfonate decoration. 2021 , 337, 129776	10
269	Davydov Splitting, Double-Resonance Raman Scattering, and Disorder-Induced Second-Order Processes in Chemical Vapor Deposited MoS Thin Films. 2021 , 12, 6197-6202	4
268	Importance of quadratic dispersion in acoustic flexural phonons for thermal transport of two-dimensional materials. 2021 , 103,	8
267	Solution Processing of Topochemically Converted Layered WO for Multifunctional Applications. 2021 , 27, 11326-11334	2
266	Toxicological assessment of commercial monolayer tungsten disulfide nanomaterials aqueous suspensions using human A549 cells and the model fungus <i>Saccharomyces cerevisiae</i> . 2021 , 272, 129603	4
265	Surface plasmon enhanced photoluminescence of monolayer WS ₂ on ion beam modified functional substrate. 2021 , 118, 263103	4
264	The Photodetectors Based on Lateral Monolayer MoS/WS Heterojunctions. 2021 , 16, 123	8

263	Enhancing and quantifying spatial homogeneity in monolayer WS. <i>Scientific Reports</i> , 2021 , 11, 14831	4.9	2
262	Hyperspectral Fingerprints for Atomic Layer Mapping of Two-Dimensional Materials with Single-Layer Accuracy. 2021 , 125, 16583-16590		1
261	Generation of High Peak Power Mode-Locked Green Pulses Based on WS and EOM: Experiment and Theory. 2021 , 26,		
260	Ultrahigh degradation efficiency of AB type in-plane reverse polarization WS2 nano sheets in dark by piezo-catalyst effect. 2021 , 553, 149557		3
259	WS2 Monolayer for PiezoPhototronic Dye Degradation and Bacterial Disinfection. 2021 , 4, 7879-7887		5
258	Nanotribology of transition metal dichalcogenide flakes deposited by chemical vapour deposition: The influence of chemical composition and sliding speed on nanoscale friction of monolayers. 2021 , 556, 149762		1
257	Defect activated optical Raman modes in single layer MoSe. 2021 , 32,		0
256	2D Layered g-C3N4/WO3/WS2 S-Scheme Heterojunctions with Enhanced Photochemical Performance. 2021 , 125, 19382-19393		10
255	Transfer-free, scalable photodetectors based on MOCVD-grown 2D-heterostructures. 2021 , 8, 045015		3
254	Coupled valence carrier and core-exciton dynamics in WS2 probed by few-femtosecond extreme ultraviolet transient absorption spectroscopy. 2021 , 104,		4
253	Transition-Metal Dichalcogenide Artificial Antibodies with Multivalent Polymeric Recognition Phases for Rapid Detection and Inactivation of Pathogens. 2021 , 143, 14635-14645		2
252	Influence of direct deposition of dielectric materials on the optical response of monolayer WS2. 2021 , 119, 133106		2
251	Synthesis of two-dimensional/one-dimensional heterostructures with tunable width. 2021 , 42, 092001		4
250	Synthesis of vertically stacked, highly oriented WS2 thin films by Electron beam evaporation. 2021 , 734, 138851		1
249	Exciton Transitions in Monolayer WS2 Activated by Swift Heavy Ion Irradiation. 2021 , 125, 20389-20396		0
248	Growth Mechanisms and Morphology Engineering of Atomic Layer-Deposited WS. 2021 , 13, 43115-43122		2
247	Drastic reduction of thermal conductivity in hexagonal AX (A = Ga, In & Tl, X = S, Se & Te) monolayers due to alternative atomic configuration. 2021 , 88, 106248		3
246	A novel Hf2CO2/WS2 van der Waals heterostructure as a potential candidate for overall water splitting photocatalyst. 2021 , 133, 105947		6

245	Layer number dependent optical and electrical properties of CVD grown two-dimensional anisotropic WS ₂ . 2021 , 26, 101308	6
244	Structural phase transition from 1H to 1T? at low pressure in supported monolayer WS ₂ : Raman study. 2021 , 336, 114412	2
243	Thulium-holmium doped fiber laser mode-locking with hafnium disulfide (HfS ₂) coated on D-shaped fiber. 2021 , 246, 167785	
242	Growth Behavior, nucleation control and excellent optical properties of atomically thin WS ₂ thin films processed via Gas-phase chemical vapor deposition. 2021 , 568, 150908	1
241	WS ₂ nanosheets as a potential candidate towards sensing heavy metal ions: A new dimension of 2D materials. 2021 , 144, 111471	5
240	Atom substitution method to construct full-solar-spectrum absorption MoSeS/TiO ₂ nanotube arrays for highly efficient hydrogen evolution. 2022 , 889, 161694	2
239	Interface Kinetics Assisted Barrier Removal in Large Area 2D-WS Growth to Facilitate Mass Scale Device Production. 2021 , 11,	1
238	Highly electroconductive and uniform WS ₂ film growth by sulfurization of W film using diethyl sulfide. 2021 , 5, 3692-3698	3
237	Sensing and electrocatalytic activity of tungsten disulphide thin films fabricated via metalorganic chemical vapour deposition. 2021 , 9, 10254-10265	0
236	Growth of a Large, Single-Crystalline WS Monolayer for High-Performance Photodetectors by Chemical Vapor Deposition. 2021 , 12,	7
235	WS /MoS Heterostructures through Thermal Treatment of MoS Layers Electrostatically Functionalized with W S Molecular Clusters. 2020 , 26, 6670-6678	4
234	Growth-Etch Metal-Organic Chemical Vapor Deposition Approach of WS Atomic Layers. 2021 , 15, 526-538	20
233	Raman spectra and phonon structures of BaGa ₄ Se ₇ crystal. 2020 , 3,	6
232	Enhanced carrier transport by transition metal doping in WS field effect transistors. 2020 , 12, 17253-17264	8
231	Laser exposure induced alteration of WS ₂ monolayers in the presence of ambient moisture. 2018 , 5, 015013	26
230	Strain engineering in monolayer WS ₂ and WS ₂ nanocomposites. 2020 , 7, 045022	16
229	An ambipolar transistor based on a monolayer WS ₂ using lithium ions injection. 2020 , 7, 076302	4
228	Vibrational and dielectric properties of the bulk transition metal dichalcogenides. 2018 , 2,	17

227	Vibrational and dielectric properties of monolayer transition metal dichalcogenides. 2019 , 3,	7
226	Tungsten-disulphide-based heterojunction photodetector. 2019 , 58, 4014-4019	3
225	Passively Mode-locked Fiber Laser based on CVD WS ₂ . 2015 ,	1
224	Broadband all-light-control with WS coated microfibers. 2019 , 27, 12817-12831	6
223	Incoherent phonon population and exciton-exciton annihilation dynamics in monolayer WS revealed by time-resolved Resonance Raman scattering. 2019 , 27, 29949-29961	6
222	Low-frequency shift Raman spectroscopy using atomic filters. 2016 , 41, 5397-5400	4
221	Surface-enhanced Raman scattering of monolayer transition metal dichalcogenides on Ag nanorod arrays. 2019 , 44, 5493-5496	2
220	WS ₂ based 523 MHz mode-locked erbium-doped fiber laser for microwave photonic application. 2019 , 9, 4688	5
219	Raman spectroscopy regulation in van der Waals crystals. 2018 , 6, 991	21
218	Nonlinear optical response of a monolayer WS and the application of a hundred-MHz nanosecond laser. 2021 , 29, 36634-36643	0
217	Ultrafast Exciton Trapping and Exciton-Exciton Annihilation in Large-Area CVD-Grown Monolayer WS ₂ .	5
216	Sulfides. 2015 , 611-651	
215	Beyond graphene. 2015 , 2015, 11-20	
214	Two-photon absorption in layered transition metal dichalcogenides. 2018 ,	
213	The effect of elevated temperatures on excitonic emission and degradation processes of WS monolayers. 2020 , 22, 22609-22616	1
212	Correlative imaging of exciton distribution in monolayer of transition metal dichalcogenides. 2020 ,	
211	Effects of Tungsten Disulphide Coating on Tapered Microfiber for Relative Humidity Sensing Applications. 2021 , 21,	0
210	Efficient degradation of methylene blue: A comparative study using hydrothermally synthesised SnS ₂ , WS ₂ and VS ₂ nanostructures. 2021 , 146, 111623	2

209	Strain Induced Phase Transition of WS ₂ by Local Dewetting of Au/Mica Film upon Annealing. 2021 , 4, 1-8	3
208	A biodegradable polymer-assisted efficient and universal exfoliation route to a stable few layer dispersion of transition metal dichalcogenides. 2022 , 276, 125347	0
207	Multi-imaging analysis of exciton states in monolayer of transition metal dichalcogenides. 2020 ,	
206	Chalcogenides. 2020 , 631-833	
205	Tunable coupling of terahertz Dirac plasmons and phonons in transition metal dichalcogenide-based van der Waals heterostructures.	
204	Enhanced epitaxial growth of two-dimensional monolayer WS ₂ film with large single domains. 2021 , 25, 101234	0
203	Probing the structure and composition of van der Waals heterostructures using the nonlocality of Dirac plasmons in the terahertz regime. 2021 , 8, 015014	1
202	Two-dimensional WS ₂ crystals at predetermined locations by anisotropic growth during atomic layer deposition. 2020 , 128, 175302	1
201	Investigation of second phase concentration effects on tribological and electrical properties of Cu/WS ₂ composites. 2022 , 166, 107357	2
200	Different optical characteristics between monolayer and bilayer WS ₂ due to interlayer interaction. 2022 , 251, 168374	0
199	Dependence of the photoelectric performance of the CVD-grown 2D WS ₂ on the oxygen-doping concentration. 2021 , 895, 162705	
198	Schottky Diode with Asymmetric Metal Contacts on WS ₂ . 2100941	3
197	Liquid phase exfoliated WS ₂ nanosheet-based gas sensor for room temperature NO ₂ detection. 1	2
196	Highly Suppressed Dark Current and Fast Photoresponse from Au Nanoparticle-Embedded, Si/Au/WS ₂ Quantum-Dot-Based, Self-Biased Schottky Photodetectors. 2021 , 3, 4891-4904	2
195	Electrodeposited WS ₂ monolayers on patterned graphene.	0
194	High Seebeck coefficient in PVD-WS ₂ film with grain size enlargement.	0
193	Charge Transfer Properties of Heterostructures Formed by Bi O Se and Transition Metal Dichalcogenide Monolayers. 2021 , e2106078	2
192	Bandgap modulation in the two-dimensional core-shell-structured monolayers of WS ₂ . 2022 , 25, 103563	0

191	Strain regulated interlayer coupling in WSe/WS heterobilayer. 2021 , 33,	1
190	Optical Study of Liquid Dispersed Few-Layered WS ₂ Nanosheets. 2021 , 243-249	
189	Reusable piezocatalytic water disinfection activity of CVD-grown few-layer WS ₂ on sapphire substrate.	1
188	Exfoliation Routes to the Production of Nanoflakes of Graphene Analogous 2D Materials and Their Applications. 2022 , 377-443	1
187	Dual-wavelength mode-locked fiber laser based on graphene materials. 1	0
186	Magnetron sputtered tungsten di-sulfide: An efficient battery grade electrode for supercapattery devices. 2022 , 46, 103861	2
185	Photoresponse properties of thin films of vertically grown WS ₂ nanoflakes. 2022 , 277, 115587	0
184	Covalently Interconnected Polymer Dot/WS ₂ Nanosheet Heterostructure for Visible Light-Driven Hydrogen Production.	0
183	Bandgap Engineering in 2D Lateral Heterostructures of Transition Metal Dichalcogenides via Controlled Alloying.. 2022 , e2106600	4
182	Novel chalcogenides and their fabrication techniques. 2022 , 171-185	
181	Patterning Functionalized Surfaces of 2D Materials by Nanoshaving. 2022 , 5, 23	
180	Correlation between morphology and local mechanical and electrical properties of van der Waals heterostructures.. 2021 ,	0
179	WSe/WS Heterobilayer Nonvolatile Memory Device with Boosted Charge Retention.. 2022 ,	1
178	Chemical vapor deposited WS ₂ /MoS ₂ heterostructure photodetector with enhanced photoresponsivity. 2022 , 55, 175101	0
177	Operation characteristics of mid-infrared optical parametric oscillation pumped by layered WS ₂ modulated laser. 2022 , 71, 024204	
176	Efficient light-confinement in heterostructured transition metal dichalcogenide-based nanoscrolls for high-performance photonic devices. 2022 , 37, 660-669	
175	Polymorph Structures, Rich Physical Properties and Potential Applications of Two-Dimensional MoTe ₂ , WTe ₂ and Their Alloys □	0
174	Growth mode control of CVD-grown WS ₂ monolayer flakes via O ₂ pre-annealing for organic surfactant oxidation. 2022 , 585, 152564	1

173	Growth and Optoelectronic Properties of Large-Scale Bilayer WS ₂ Ribbons with Unusual Shapes via Chemical Vapor Deposition. 2022 , 126, 1099-1106	0
172	Top-gate field-effect transistor based on monolayer WS ₂ with an ion-gel gate dielectric.	0
171	Optimisation of processing conditions during CVD growth of 2D WS ₂ films from a chloride precursor. 2022 , 57, 1215-1229	
170	Improved Mass-Transfer Enhances Photo-Driven Dye Degradation and H Evolution over a Few-Layer WS/ZnO Heterostructure.. 2022 , 7, 2217-2223	0
169	Enhanced Performance of WS Field-Effect Transistor through Mono and Bilayer h-BN Tunneling Contacts.. 2022 , e2105753	2
168	Featuring exfoliated 2D stacks into fractal-like patterns in WS ₂ /carboxy methyl cellulose nanocomposites. 2022 , 29, 101727	0
167	High-Performance Dual-Gated Single-Layer WS ₂ MOSFETs with Bi Contacts. 2022 , 1-1	4
166	Strong laser polarization control of coherent phonon excitation in van der Waals material Fe ₃ GeTe ₂ . 2022 , 6,	0
165	Twist-Dependent Tuning of Excitonic Emissions in Bilayer WSe ₂ . 2022 , 7, 6412-6418	1
164	Pt ₁₄₇ Nanoclusters Soft-Landed on WS ₂ Nanosheets for Catalysis and Energy Harvesting. 2021 , 4, 13140-13148	
163	Few-Layer WS-WSe Lateral Heterostructures: Influence of the Gas Precursor Selenium/Tungsten Ratio on the Number of Layers.. 2021 ,	2
162	Controllable synthesis of few-layer ammoniated 1T'-phase WS as an anode material for lithium-ion batteries.. 2022 ,	0
161	Wafer-sized WS monolayer deposition by sputtering.. 2022 ,	1
160	Tailoring the Oxygen Vacancies and Electronic Structures of Hex-Wo ₃ (100) Crystal Plane with Heteroatoms Toward Highly Efficient Hydrogen Evolution.	
159	Identifying the Origin of Defect-Induced Raman Mode in WS ₂ Monolayers via Density Functional Perturbation Theory. 2022 , 126, 4182-4187	1
158	Large Dzyaloshinskii-Moriya interaction and atomic layer thickness dependence in a ferromagnet-WS ₂ heterostructure. 2022 , 105,	3
157	Probing the long-lived photo-generated charge carriers in transition metal dichalcogenides by time-resolved microwave photoconductivity. 2022 , 11, 1335-1344	1
156	Laser-Patterned Submicrometer BiSe-WS Pixels with Tunable Circular Polarization at Room Temperature.. 2022 ,	1

155	CRYSTALLINE AND NANOSTRUCTURED MATERIALS BASED ON TRANSITION METAL DICHALCOGENIDES: SYNTHESIS AND ELECTRONIC PROPERTIES. 2022 , 63, 176-226	1
154	Two-Dimensional CsAgBiBr/WS Heterostructure-Based Photodetector with Boosted Detectivity via Interfacial Engineering.. 2022 ,	5
153	Tungsten Disulfide Nanosheet-Based Field-Effect Transistor Biosensor for DNA Hybridization Detection.	1
152	Passively Q-switched 1.3 μm bismuth doped-fiber laser based on transition metal dichalcogenides saturable absorbers. 2022 , 69, 102851	1
151	Ultrathin Lateral 2D Photodetectors Using Transition-Metal Dichalcogenides PtSe ₂ /WS ₂ /PtSe ₂ by Direct Laser Patterning. 2022 , 4, 1029-1038	1
150	Directing monolayer tungsten disulfide photoluminescence using a bent-plasmonic nanowire on a mirror cavity.	1
149	Facile Synthesis of Template-Free SnS ₂ with Different Morphologies and Excellent Gas-Sensing Performance for NO ₂ Gas-Sensor Applications. 2100827	1
148	Noncovalent Liquid Phase Functionalization of 2H-WS with PDI: An Energy Conversion Platform with Long-Lived Charge Separation.. 2022 ,	1
147	Tungsten disulfide nanosheets for piezoelectric nanogenerator and human-machine interface applications. 2022 , 97, 107172	2
146	Vapor pressure-controllable molecular inorganic precursors for growth of monolayer WS ₂ : Influence of precursor-substrate interaction on growth thermodynamics. 2022 , 587, 152829	0
145	Resonant-Raman study of Fröhlich exciton-phonon interaction in WS ₂ nanostructures. 1	0
144	Nanoscale Raman Characterization of a 2D Semiconductor Lateral Heterostructure Interface.. 2021 ,	3
143	High-performance thermoelectric properties of strained two-dimensional tellurium. 2021 , 5,	0
142	Surface Functionalization of WS Nanosheets with Alkyl Chains for Enhancement of Dispersion Stability and Tribological Properties.. 2021 ,	1
141	Substrate-dependent synergistic many-body effects in atomically thin two-dimensional WS ₂ . 2021 , 5,	1
140	Preparation and photoelectric characterization of p-GeSe/p-WS ₂ heterojunction devices.	0
139	Observation of Strong Interlayer Couplings in WS/MoS Heterostructures via Low-Frequency Raman Spectroscopy.. 2022 , 12,	3
138	Centimeter-Scale Synthesis of Monolayer WS ₂ Using Single-Zone Atmospheric-Pressure Chemical Vapor Deposition: A Detailed Study of Parametric Dependence, Growth Mechanism, and Photodetector Properties.	2

- 137 Phonon and Exciton Properties between WS and MoS Layers via Inversion Heterostructure Engineering.. **2022**, 0
- 136 Visualization of Strain-Engineered Nanopattern in Center-Confined Mesoscopic WS₂ Monolayer Flakes. 0
- 135 Controlling Tunneling Characteristics via Bias Voltage in Bilayer Graphene/WS/Metal Heterojunctions.. **2022**, 12, 1
- 134 Phase transition and formation of inorganic fullerene type nanostructure in WS₂ nanosheet system under laser excitation. **2022**, 216, 114729 0
- 133 Image_1.pdf. **2020**,
- 132 Coupling nanobubbles in 2D lateral heterostructures.. **2022**, 0
- 131 Two-Dimensional Transition Metal Dichalcogenide as Electron Transport Layer of Perovskite Solar Cells.
- 130 Resonance Raman scattering on graded-composition W_xMo_{1-x}S₂ alloy with tunable excitons. **2022**, 120, 172104 0
- 129 WS₂ Nanotubes as a 1D Functional Filler for Melt Mixing with Poly(lactic acid):Implications for Composites Manufacture. 1
- 128 Visible light assisted trace gaseous NO₂ sensor with anti-humidity ability via LSPR enhancement effect. **2022**, 132032 0
- 127 Photoluminescence Induced by Substitutional Nitrogen in Single-Layer Tungsten Disulfide.. **2022**, 1
- 126 Fabrication of patternable Janus transition-metal dichalcogenides assisted by electron beam irradiation. **2022**, 120, 221901
- 125 Laser-induced fluorescence spectroscopy of the B 5 π 1 X 5 π 1 system of the chromium monosulfide molecule. 1-8
- 124 Tungsten disulfide coated side-polished fibre as polarisation state modulator in all-optical system.
- 123 Microwave-Assisted Solid-State Synthesis of Dichalcogenide Nanostructures for Electrocatalytic Hydrogen Evolution.
- 122 First-principles calculations of double resonance Raman spectra for monolayer MoTe₂. **2022**, 105, 0
- 121 A facile strategy for the growth of high-quality tungsten disulfide crystals mediated by oxygen-deficient oxide precursors. 1
- 120 Feather-like Few-layer WSe₂ Nanosheets Grown on W Substrate:Excellent Electrocatalyst for Hydrogen Evolution Reaction.

- 119 Evidence of laser induced amplification of random noise in WS₂ nanosheets based resistive system.
- 118 Band Alignment Engineering by Twist Angle and Composition Modulation for Heterobilayer. 2202229 0
- 117 A Brief Review of the Chemical Structure and Raman Spectrum of Mono- and Multilayer Molybdenum- and Tungsten-Based Transition Metal Dichalcogenides.
- 116 Generating and Capturing Secondary Hot Carriers in Monolayer Tungsten Dichalcogenides. 5703-5710
- 115 A critical assessment of the role of ionic surfactants in the exfoliation and stabilization of 2D nanosheets: the case of the transition metal dichalcogenides MoS₂, WS₂ and MoSe₂. **2022**, 0
- 114 Light-matter interaction in tungsten Sulfide-based Janus monolayers: A First-Principles study. **2022**, 599, 153967
- 113 Ultrafast photoresponse of vertically oriented TMD films probed in a vertical electrode configuration on Si chips. 0
- 112 Mirror-coupled microsphere can narrow the angular distribution of photoluminescence from WS₂ monolayers. **2022**, 120, 261109 0
- 111 CVD growth and optical characterization of homo and heterobilayer TMDs. **2022**, 132, 024301 2
- 110 Deep-Learning-Based Microscopic Imagery Classification, Segmentation, and Detection for the Identification of 2D Semiconductors. 2200140 2
- 109 Understanding the Linear and Nonlinear Optical Responses of Few-Layer Exfoliated MoS₂ and WS₂ Nanoflakes: Experimental and Simulation Studies. 1
- 108 Accurate determination of low-dimensional materials' complex refractive index by cavity resonant method. **2022**, 131, 112682 1
- 107 On the tribological performance of laser-treated self-lubricating thin films in contact with rubber. **2022**, 174, 107758
- 106 Growth of two-dimensional high-quality large edge length WS₂. **2020**,
- 105 K-point longitudinal acoustic phonons are responsible for ultrafast intervalley scattering in monolayer MoSe₂. **2022**, 13,
- 104 Raman Spectroscopy of Few-Layers TaS₂ and Mo-Doped TaS₂ with Enhanced Superconductivity. 2200457
- 103 Edge Modes of MoS₂ via Indirect Double Resonant Raman Spectroscopy. 0
- 102 Large-Scale 1T'-Phase Tungsten Disulfide Atomic Layers Grown by Gas-Source Chemical Vapor Deposition. 1

- 101 Direct Band Gap in Multilayer Transition Metal Dichalcogenide Nanoscrolls with Enhanced Photoluminescence. 1547-1555 ○
- 100 Surface Diffusion-Limited Growth of Large and High-Quality Monolayer Transition Metal Dichalcogenides in Confined Space of Microreactor. **2022**, 16, 11360-11373
- 99 Deciphering the therapeutic mechanism of topical WS₂ nanosheets for the effective therapy of burn injuries. **2022**, 29, 101591
- 98 Two-dimensional van der Waals: characterization and manipulation of superconductivity. **2022**, 0
- 97 Optothermal and electrical properties of ultrathin alloys of mixed dichalcogenides. **2022**, 57, 14339-14355
- 96 Quantitative Understanding of the Photoluminescence Modulation and Doping of Monolayer WS₂ by Heterostructuring with Non-van der Waals 2D Bi₂O₂Se Quantum Dots. **2022**, 126, 12623-12634 ○
- 95 Control of the Schottky barrier height in monolayer WS₂ FETs using molecular doping. **2022**, 12, 085222 1
- 94 Graphene oxide/Ag nanoparticle/WS₂ nanosheet heterostructures for surface-enhanced Raman spectroscopy. **2022**, 12, 3718
- 93 Tailoring the Vertical and Planar Growth of 2D WS₂ Thin Films Using Pulsed Laser Deposition for Enhanced Gas Sensing Properties. **2022**, 14, 36789-36800 ○
- 92 Altered mesopore distribution in exfoliated WS₂ nanosheets with radiation exposure. **2022**,
- 91 Atomic Layer Deposition of Large-Area Polycrystalline Transition Metal Dichalcogenides from 100 °C through Control of Plasma Chemistry. **2022**, 34, 7280-7292 ○
- 90 Solid lubricity of WS₂ and Bi₂S₃ coatings deposited by plasma spraying and air spraying. **2022**, 446, 128772 1
- 89 MoS₂/p-Si heterojunction with graphene interfacial layer for high performance 940 nm infrared photodetector. **2022**, 604, 154485 ○
- 88 An electrically and optically controllable memristor with synaptic plasticity based on scalable monolayer ReS₂/WS₂ heterostructure. ○
- 87 Non-centrosymmetric features in nanostructured MoS₂ and WS₂ exfoliated in liquid phase. **2022**, 133, 112890 ○
- 86 Salt-promoted growth of monolayer tungsten disulfide on hexagonal boron nitride using all chemical vapor deposition approach. **2022**, 605, 154812 ○
- 85 Enhanced optical emission at MoS₂-WS₂ heterostructure interface with n-N junction. **2022**, 606, 154923 1
- 84 Fluorine dopants in tungsten sulfide boost the efficiency of H₂O₂ electro-synthesis via the oxygen reduction reaction. **2022**, 58, 9782-9785 ○

- 83 High-frequency and rapid response tungsten sulfide nano onion-based electrochemical actuators. **2022**, 14, 13651-13660 ○
- 82 Identifying the effects of oxygen on the magnetism of WS₂ nanosheets. **2022**, 14, 12814-12822 ○
- 81 Low Energy Switching of Phase Change Materials Using a 2D Thermal Boundary Layer. **2022**, 14, 41225-41234 ○
- 80 Designing of Kirkendall effect assisted CoFe : WS₂ nanoboxes for dye-sensitized solar cell and supercapacitor applications. ○
- 79 Large-Area Growth of MoS₂ /WS₂ Heterostructures by a Sequential Atomic Layer Deposition and Spin-Coating Approach. 2200816 ○
- 78 Symmetric domain segmentation in WS₂ flakes: correlating spatially resolved photoluminescence, conductance with valley polarization. **2022**, 33, 495203 ○
- 77 Nanostructured 2D WS₂@PANI nanohybrids for electrochemical energy storage. 10, 1
- 76 Synthesis of centimeter-scale WS₂ membrane by chemical vapor deposition. **2022**, 33, 22560-22572 ○
- 75 Microscopic Image Deblurring by a Generative Adversarial Network for 2D Nanomaterials: Implications for Wafer-Scale Semiconductor Characterization. **2022**, 5, 12855-12864 2
- 74 Large Spin-To-Charge Conversion at the Two-Dimensional Interface of Transition-Metal Dichalcogenides and Permalloy. **2022**, 14, 41598-41604 1
- 73 Stacking-order-dependent interlayer coupling in Janus WSe₂/WS₂ heterostructures. **2022**, 121, 113102 ○
- 72 On the tribological performance of magnetron sputtered W-S-C coatings with conventional and graded composition. **2022**, 128929 1
- 71 Vapor-Liquid-Solid Growth of Morphology-Tailorable WS₂ toward P-Type Monolayer Field-Effect Transistors. ○
- 70 A colloidal route to semiconducting tungsten disulfide nanosheets with monolayer thickness. 1
- 69 Engineering the Polarization Sensitivity in All-2D Photodetectors Composed of Semimetal MoTe₂ and Semiconductor WS₂. 2201902 ○
- 68 Extremely Reduced Dielectric Constant and Band Gap Enhancement in Few-Layered Tungsten Disulfide Nanosheets. 10267-10274 ○
- 67 Hierarchical van der Waals Heterostructure Strategy to Form Stable Transition Metal Dichalcogenide Dispersions. ○
- 66 Nanoparticle-on-mirror pairs: building blocks for remote spectroscopies. **2022**, 2

65	Highly efficient photocatalytic overall water splitting in two-dimensional van der Waals MoS ₂ /HF ₂ CO ₂ heterostructure.	1
64	Room-temperature continuous-wave indirect-bandgap transition lasing in an ultra-thin WS ₂ disk. 2022 , 16, 792-797	2
63	Room-temperature highly sensitive and selective NH ₃ gas sensor using vertically aligned WS ₂ nanosheets.	0
62	Revealing the nanogeometry of WS ₂ nanoflowers by polarization-resolved Raman spectroscopy. 2022 , 132, 173103	0
61	Nucleation and growth studies of large-area deposited WS ₂ on flexible substrates. 2022 , 9, 116401	0
60	Synergistic charge transfer on n-WO ₃ /p-WS ₂ /Au ternary heterojunction material for solar energy-driven sustainable H ₂ production. 2023 , 932, 167629	0
59	Highly sensitive chemiresistive detection of NH ₃ by formation of WS ₂ nanosheets and SnO ₂ quantum dot heterostructures. 2023 , 375, 132899	1
58	Fluorescence Quenching of Raman Spectra by Carbon Materials. 2022 , 71, 603-608	0
57	Breaking Rotational Symmetry in Supertwisted WS ₂ Spirals via Moiré Magnification of Intrinsic Heterostrain.	0
56	One-Step Synthesis of a Bilayer MoS ₂ /WS ₂ Lateral Heterojunction for Photoelectric Detection.	0
55	Transition metal dichalcogenide micromotors with programmable photophoretic swarming motion.	2
54	Multifunctional strategy of two-dimensional WS ₂ modified absorbers for efficient planar perovskite solar cells.	0
53	Photoresponsivity of ultrathin 2D WS ₂ /graphene heterostructures. 2023 , 147, 115603	0
52	Extraordinary Phonon Displacement and Giant Resonance Raman Enhancement in WSe ₂ /WS ₂ Moiré Heterostructures.	0
51	Pristine Interlayer Coupling for Strain Engineering of WS ₂ /WSe ₂ Nanosheet-Based van der Waals Heterostructures. 2022 , 5, 17986-17994	0
50	Nanostructure-free Metal Dielectric Stacks for Raman Scattering Enhancement and Defect Identification in CVD-Grown Tungsten Disulfide (2H-WS ₂) Nanosheets. 2022 , 126, 20511-20523	0
49	Three-Dimensional Ternary rGO/VS ₂ /WS ₂ Composite Hydrogel for Supercapacitor Applications. 2022 , 10, 229	1
48	WS ₂ Nanosheet Loaded Silicon-Oxycarbide Electrode for Sodium and Potassium Batteries. 2022 , 12, 4185	0

47	Dielectric Function of 2D Tungsten Disulfide in Homo- and Heterobilayer Stacking. 2201586	0
46	Understanding the Photoluminescence Quenching of Liquid Exfoliated WS ₂ Monolayers.	0
45	Enhanced Field-Effect Control of Single-Layer WS ₂ Optical Features by hBN Full Encapsulation. 2022 , 12, 4425	0
44	Chemical vapor deposition of two-dimensional transition metal sulfides on carbon paper for electrocatalytic hydrogen evolution. 2022 , 37, 1183-1191	2
43	Room-Temperature Excitonic Nanolaser Array with Directly Grown Monolayer WS ₂ .	0
42	Sandwich-type architecture film based on WS ₂ and ultrafast self-expanded and reduced graphene oxide in a Li-ion battery. 10,	0
41	Tungsten disulfide interfacing nickel-porphyrin for photo-enhanced electrocatalytic water oxidation.	1
40	Tailoring the oxygen vacancies and electronic structures of the hex-WO ₃ (1 0 0) crystal plane with heteroatoms for enhanced hydrogen evolution performance. 2023 , 615, 156321	0
39	Orientation-Dependent Interaction between the Magnetic Plasmons in Gold Nanocups and the Excitons in WS ₂ Monolayer and Multilayer.	0
38	Momentum-Resolved Exciton Coupling and Valley Polarization Dynamics in Monolayer WS ₂ . 2023 , 130,	0
37	Photocurrent conversion capability of a 2D WS ₂ -polyvinyl alcohol matrix and its DFT-based charge carrier dynamics analysis.	0
36	Migration-Enhanced MetalOrganic Chemical Vapor Deposition of Wafer-Scale Fully Coalesced WS ₂ and WSe ₂ Monolayers.	0
35	Dual-Channel WS ₂ /WSe ₂ Heterostructure with Tunable Graphene Electrodes.	0
34	Interdigitated electrodes enhanced photosensitive monolayer WS ₂ field effect transistor on glass substrate. 2023 , 534, 129323	0
33	Surface Modification of Transition Metal Dichalcogenide Nanosheets for Intrinsically Self-Healing Hydrogels with Enhanced Mechanical Properties. 2207081	0
32	Laser-enabled localized synthesis of Mo _{1-x} W _x S ₂ alloys with tunable composition. 2023 , 17, 100351	0
31	Structural and Optical Properties of Tungsten Disulfide Nanoscale Films Grown by Sulfurization from W and WO ₃ . 2023 , 13, 1276	0
30	Tuning the surface electronic structure of WS ₂ with Zn- and Cu-phthalocyanine for improved hydrogen evolution reaction: Experimental and DFT investigation. 2023 , 39, 100499	0

- 29 Surface related NIR laser induced anti-Stokes emission from 2-D WS₂ and MoS₂. **2023**, 162, 109320 ○
- 28 Structural, spectroscopic and electrical properties of liquid phase exfoliated few layered two-dimensional tungsten disulfide (WS₂) using anionic surfactant. **2023**, 34, ○
- 27 Ultrashort channel chemical vapor deposited bilayer WS₂ field-effect transistors. **2023**, 10, 011405 ○
- 26 Mo₂CF₂/WS₂: Two-Dimensional Van Der Waals Heterostructure for Overall Water Splitting Photocatalyst from Five-Step Screening. **2023**, 14, 1363-1370 ○
- 25 Induced Magnetic Anisotropy in Co/WS₂ Bilayer. ○
- 24 Au/WS₂ Nanohybrids with Enhanced Optical Nonlinearity for Optical Limiting Applications. **2023**, 6, 2327-2335 ○
- 23 Tuning the Photoluminescence and Raman Response of Single-Layer WS₂ Crystals Using Biaxial Strain. **2023**, 127, 3506-3515 ○
- 22 Heteroatomic stitching of broken WS₂ monolayer with enhanced surface potential. **2023**, 15, 5274-5283 ○
- 21 Tuneable Piezoresistance of Graphene-Based 2D:2D Nanocomposite Networks. 2214855 ○
- 20 Suppression of substrate-induced charge doping in hBN-encapsulated monolayer WS₂. **2023**, 49, 115-119 ○
- 19 PVD growth of spiral pyramid-shaped WS₂ on SiO₂/Si driven by screw dislocations. 11, ○
- 18 WS₂ Nanotube-Embedded SiOC Fiber-mat Electrodes for Sodium-Ion Batteries. **2023**, 8, 10126-10138 ○
- 17 Tungsten Oxide Mediated Quasi-van der Waals Epitaxy of WS₂ on Sapphire. **2023**, 17, 5399-5411 ○
- 16 Effect of Solution pH on the Synthesis of Two-Dimensional Molybdenum/Tungsten Sulfide Nanostructures. **2023**, 6, 5963-5971 ○
- 15 Directing Exfoliation, Slipping, and Corrugation in WS₂ through Bubbling with 15 keV He²⁺ Ion Irradiation. ○
- 14 Substrate-Induced Changes on the Optical Properties of Single-Layer WS₂. **2023**, 16, 2591 ○
- 13 Study on the thermal decomposition reaction process and kinetics of SF₆ and tungsten. **2023**, 375, 03002 ○
- 12 Photosensitive Field-Effect Transistor with Enhanced Photoamplification Mediated by Charge Transfer in a Heterostructure of CsPbI₃ Nanocrystals and Two-Dimensional . **2023**, 19, ○

- 11 Understanding the impact of heavy ions and tailoring the optical properties of large-area monolayer WS₂ using focused ion beam. **2023**, 7,
- 10 Highly Sensitive Phototransistors Based on Partially Suspended Monolayer WS₂.
- 9 Silane functionalization of WS₂ nanotubes for interaction with poly(lactic acid).
- 8 Local dielectric function of hBN-encapsulated WS₂ flakes grown by chemical vapor deposition. **2023**, 35, 274001
- 7 Tungsten dichalcogenide WS₂xSe₂1-x films via single source precursor low-pressure CVD and their (thermo-)electric properties.
- 6 The Role of GaN in the Heterostructure WS₂/GaN for SERS Applications. **2023**, 16, 3054
- 5 Tuning of Interlayer Interaction in MoS₂/WS₂ van der Waals Heterostructures Using Hydrostatic Pressure.
- 4 Tailoring the interface magnetron sputtered silver/tungsten disulfide for battery-supercapacitor hybrids: Electrochemical assessment of redox activity. **2023**, 66, 107333
- 3 E-Ray-Induced Surface-Charge Redistribution and Change of the Surface Morphology in Monolayer WS₂.
- 2 Excellent Seebeck coefficient observed in exfoliated N-type Tungsten Disulphide (WS₂). **2023**, 162, 107554
- 1 WS₂/TiO₂ hetero-photocatalysts for efficient hydrogen evolution via plasmon-induced resonance energy transfer. **2023**,