Xi Wan

List of Publications by Year
in descending order

33 papers	1,679 citations	361296 20 h-index	414303 32 g-index
33 all docs	33 docs citations	33 times ranked	3256 citing authors

#	Article	IF	Citations
1	Electronic Properties of MoS₂â€“WS₂ Heterostructures Synthesized with Two-Step Lateral Epitaxial Strategy. ACS Nano, 2015, 9, 9868-9876.	7.3	283
2	Lateral Builtâ€In Potential of Monolayer MoS₂â€“WS₂ Inâ€Plane Heterostructures by a Shortcut Growth Strategy. Advanced Materials, 2015, 27, 6431-6437.	11.1	191
3	High Responsivity, Broadband, and Fast Graphene/Silicon Photodetector in Photoconductor Mode. Advanced Optical Materials, 2015, 3, 1207-1214.	3.6	141
4	Transition metal dichalcogenides bilayer single crystals by reverse-flow chemical vapor epitaxy. Nature Communications, 2019, 10, 598.	5.8	124
5	High-Quality Large-Area Graphene from Dehydrogenated Polycyclic Aromatic Hydrocarbons. Chemistry of Materials, 2012, 24, 3906-3915.	3.2	119
6	A Simple Method for Synthesis of Highâ€Quality Millimeterâ€Scale 1Tâ€² Transitionâ€Metal Telluride and Nearâ€Field Nanooptical Properties. Advanced Materials, 2017, 29, 1700704.	11.1	101
7	High-responsivity graphene-on-silicon slot waveguide photodetectors. Nanoscale, 2016, 8, 13206-13211.	2.8	98
8	Epitaxial Stitching and Stacking Growth of Atomically Thin Transitionâ€Metal Dichalcogenides (TMDCs) Heterojunctions. Advanced Functional Materials, 2017, 27, 1603884.	7.8	73
9	Enhanced optical Kerr nonlinearity of MoS_2 on silicon waveguides. Photonics Research, 2015, 3, 206.	3.4	58
10	Shape-Uniform, High-Quality Monolayered MoS₂ Crystals for Gate-Tunable Photoluminescence. ACS Applied Materials & Interfaces, 2017, 9, 42121-42130.	4.0	51
11	Growth of Large-Scale, Large-Size, Few-Layered Î±-MoO₃ on SiO₂ and Its Photoresponse Mechanism. ACS Applied Materials & Interfaces, 2017, 9, 5543-5549.	4.0	50
12	Synthesis and Characterization of Metallic Janus MoSH Monolayer. ACS Nano, 2021, 15, 20319-20331.	7.3	47
13	Controlled Electrochemical Deposition of Largeâ€Area MoS₂ on Graphene for Highâ€Responsivity Photodetectors. Advanced Functional Materials, 2017, 27, 1603998.	7.8	45
14	In Situ Ultrafast and Patterned Growth of Transition Metal Dichalcogenides from Inkjetâ€Printed Aqueous Precursors. Advanced Materials, 2021, 33, e2100260.	11.1	36
15	Interface Engineering for CVD Graphene: Current Status and Progress. Small, 2014, 10, 4443-4454.	5.2	29
16	Controllable modulation of the electronic properties of graphene and silicene by interface engineering and pressure. Journal of Materials Chemistry C, 2013, 1, 4869.	2.7	28
17	Quantitative determination of scattering mechanism in large-area graphene on conventional and SAM-functionalized substrates at room temperature. Nanoscale, 2013, 5, 5784.	2.8	27
18	Enhanced Performance and Fermi-Level Estimation of Coronene-Derived Graphene Transistors on Self-Assembled Monolayer Modified Substrates in Large Areas. Journal of Physical Chemistry C, 2013, 117, 4800-4807.	1.5	27

#	Article	IF	Citations
19	Controllable one-step growth of bilayer MoS₂â€“WS₂/WS₂ heterostructures by chemical vapor deposition. Nanotechnology, 2018, 29, 455707.	1.3	26
20	Quantitative Analysis of Scattering Mechanisms in Highly Crystalline CVD MoS₂through a Self-Limited Growth Strategy by Interface Engineering. Small, 2016, 12, 438-445.	5.2	25
21	Facet-Dependent Property of Sequentially Deposited Perovskite Thin Films: Chemical Origin and Self-Annihilation. ACS Applied Materials & Interfaces, 2016, 8, 32366-32375.	4.0	19
22	Large-size Mo1-xWxS2 and W1-xMoxS2 (xâ€¯=â€¯0â€“0.5) monolayers by confined-space chemical vapor deposition. Applied Surface Science, 2018, 457, 591-597.	3.1	17
23	Limit of Voc in polymeric bulk heterojunction solar cells predicted by a double-junction model. Solar Energy Materials and Solar Cells, 2013, 108, 17-21.	3.0	13
24	A self-driven approach for local ion intercalation in vdW crystals. Nanoscale, 2020, 12, 1448-1454.	2.8	11
25	A spontaneously formed plasmonic-MoTe2 hybrid platform for ultrasensitive Raman enhancement. Cell Reports Physical Science, 2021, 2, 100526.	2.8	10
26	Influence of Annealing on Raman Spectrum of Graphene in Different Gaseous Environments. Spectroscopy Letters, 2014, 47, 465-470.	0.5	7
27	Towards Scalable Fabrications and Applications of 2D Layered Material-based Vertical and Lateral Heterostructures. Chemical Research in Chinese Universities, 2020, 36, 525-550.	1.3	6
28	Direct ink write printing of resistive-type humidity sensors. Flexible and Printed Electronics, 2021, 6, 045007.	1.5	5
29	Optimization Strategies for High Photoluminescence Quantum Yield of Monolayer Chemical Vapor Deposition Transition Metal Dichalcogenides. ACS Applied Materials & Interfaces, 2021, 13, 44814-44823.	4.0	4
30	Exploration of Nafion for the Electric-Double-Layer Gating of Metal-Oxide Thin Film Transistors. ECS Journal of Solid State Science and Technology, 2021, 10, 025003.	0.9	3
31	Inkjet-printed TMDCâ€“graphene heterostructures for flexible and broadband photodetectors. Journal of Applied Physics, 2022, 131, .	1.1	3
32	Probing Electronic Properties of CVD Monolayer Hexagonal Boron Nitride by an Atomic Force Microscope. Frontiers in Materials, 2021, 8, .	1.2	2
33	Preparation and Characterization of Two-Dimensional Layered Transition Metal Dichalcogenide Thin Films. , 2019, , .		0