Wenshuo Xu

List of Publications by Year
in descending order

31 papers	1,288 citations	361045 20 h-index	433756 31 g-index
31 all docs	31 docs citations	31 times ranked	2800 citing authors

#	Article	IF	Citations
1	Ultrathin 2D Photodetectors Utilizing Chemical Vapor Deposition Grown WS₂ With Graphene Electrodes. ACS Nano, 2016, 10, 7866-7873.	7.3	264
2	Lateral Grapheneâ€Contacted Vertically Stacked WS₂/MoS₂ Hybrid Photodetectors with Large Gain. Advanced Materials, 2017, 29, 1702917.	11.1	111
3	Revealing Defect-State Photoluminescence in Monolayer WS₂ by Cryogenic Laser Processing. ACS Nano, 2016, 10, 5847-5855.	7.3	91
4	Large Dendritic Monolayer MoS₂ Grown by Atmospheric Pressure Chemical Vapor Deposition for Electrocatalysis. ACS Applied Materials & Interfaces, 2018, 10, 4630-4639.	4.0	88
5	Atomically Flat Zigzag Edges in Monolayer MoS₂ by Thermal Annealing. Nano Letters, 2017, 17, 5502-5507.	4.5	70
6	Photoluminescence Segmentation within Individual Hexagonal Monolayer Tungsten Disulfide Domains Grown by Chemical Vapor Deposition. ACS Applied Materials & Interfaces, 2017, 9, 15005-15014.	4.0	59
7	Biexciton Formation in Bilayer Tungsten Disulfide. ACS Nano, 2016, 10, 2176-2183.	7.3	57
8	Determining the Optimized Interlayer Separation Distance in Vertical Stacked 2D WS₂:hBN:MoS₂ Heterostructures for Exciton Energy Transfer. Small, 2018, 14, e1703727.	5.2	54
9	Ultralong 1D Vacancy Channels for Rapid Atomic Migration during 2D Void Formation in Monolayer MoS₂. ACS Nano, 2018, 12, 7721-7730.	7.3	54
10	Utilizing Interlayer Excitons in Bilayer WS₂ for Increased Photovoltaic Response in Ultrathin Graphene Vertical Cross-Bar Photodetecting Tunneling Transistors. ACS Nano, 2018, 12, 4669-4677.	7.3	37
11	Photoluminescent Arrays of Nanopatterned Monolayer MoS₂. Advanced Functional Materials, 2017, 27, 1703688.	7.8	35
12	Epitaxial Growth of Monolayer MoS₂ on SrTiO₃ Single Crystal Substrates for Applications in Nanoelectronics. ACS Applied Nano Materials, 2018, 1, 6976-6988.	2.4	34
13	Atomic Structure and Dynamics of Defects in 2D MoS₂ Bilayers. ACS Omega, 2017, 2, 3315-3324.	1.6	32
14	Waterproof molecular monolayers stabilize 2D materials. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20844-20849.	3.3	32
15	Symmetry-Controlled Reversible Photovoltaic Current Flow in Ultrathin All 2D Vertically Stacked Graphene/MoS₂/WS₂/Graphene Devices. ACS Applied Materials & Interfaces, 2019, 11, 2234-2242.	4.0	32
16	High-Performance Two-Dimensional Schottky Diodes Utilizing Chemical Vapour Deposition-Grown Grapheneâ€"MoS₂ Heterojunctions. ACS Applied Materials & Interfaces, 2018, 10, 37258-37266.	4.0	30
17	Mixed multilayered vertical heterostructures utilizing strained monolayer WS₂. Nanoscale, 2016, 8, 2639-2647.	2.8	27
18	Controlling Photoluminescence Enhancement and Energy Transfer in WS₂:hBN:WS₂ Vertical Stacks by Precise Interlayer Distances. Small, 2020, 16, e1905985.	5.2	26

#	Article	IF	Citations
19	Single-Step Chemical Vapor Deposition Growth of Platinum Nanocrystal: Monolayer MoS₂ Dendrite Hybrid Materials for Efficient Electrocatalysis. Chemistry of Materials, 2020, 32, 8243-8256.	3.2	23
20	Epitaxial Templating of Two-Dimensional Metal Chloride Nanocrystals on Monolayer Molybdenum Disulfide. ACS Nano, 2017, 11, 6404-6415.	7.3	20
21	Inhomogeneous Strain Release during Bending of WS₂ on Flexible Substrates. ACS Applied Materials & Interfaces, 2018, 10, 39177-39186.	4.0	17
22	Thermal Degradation of Monolayer MoS2 on SrTiO3 Supports. Journal of Physical Chemistry C, 2019, 123, 3876-3885.	1.5	17
23	Precise Layerâ€Dependent Electronic Structure of MBEâ€Grown PtSe₂. Advanced Electronic Materials, 2021, 7, 2100559.	2.6	16
24	Blister-based-laser-induced-forward-transfer: a non-contact, dry laser-based transfer method for nanomaterials. Nanotechnology, 2018, 29, 385301.	1.3	14
25	The metallic nature of two-dimensional transition-metal dichalcogenides and MXenes. Surface Science Reports, 2021, 76, 100542.	3.8	13
26	Atomic Structure of Dislocations and Grain Boundaries in Two-Dimensional PtSe₂. ACS Nano, 2021, 15, 16748-16759.	7.3	12
27	Atomic-Level Dynamics of Point Vacancies and the Induced Stretched Defects in 2D Monolayer PtSe₂. Nano Letters, 2022, 22, 3289-3297.	4.5	9
28	Atomically sharp jagged edges of chemical vapor deposition-grown WS2 for electrocatalysis. Materials Today Nano, 2022, 18, 100183.	2.3	5
29	Ultrathin Lateral 2D Photodetectors Using Transition-Metal Dichalcogenides PtSe₂â€“WS₂â€“PtSe₂ by Direct Laser Patterning. ACS Applied Electronic Materials, 2022, 4, 1029-1038.	2.0	4
30	Nanoporous Silicon-Assisted Patterning of Monolayer MoS₂ with Thermally Controlled Porosity: A Scalable Method for Diverse Applications. ACS Applied Nano Materials, 2018, 1, 3548-3556.	2.4	3
31	Selective Chemical Vapor Deposition Growth of WS2/MoS2 Vertical and Lateral Heterostructures on Gold Foils. Nanomaterials, 2022, 12, 1696.	1.9	2