Xiankun Zhang

List of Publications by Year
in descending order

29 papers	1,472 citations	361413 20 h-index	477307 29 g-index
29 all docs	29 docs citations	29 times ranked	1919 citing authors

#	Article	IF	Citations
1	Poly(4-styrenesulfonate)-induced sulfur vacancy self-healing strategy for monolayer MoS2 homojunction photodiode. Nature Communications, 2017, 8, 15881.	12.8	191
2	Interfacial Charge Behavior Modulation in Perovskite Quantum Dotâ€Monolayer MoS₂ 0Dâ€2D Mixedâ€Dimensional van der Waals Heterostructures. Advanced Functional Materials, 2018, 28, 1802015.	14.9	107
3	Near-ideal van der Waals rectifiers based on all-two-dimensional Schottky junctions. Nature Communications, 2021, 12, 1522.	12.8	103
4	Integrated High-Performance Infrared Phototransistor Arrays Composed of Nonlayered PbSâ€“MoS₂ Heterostructures with Edge Contacts. Nano Letters, 2016, 16, 6437-6444.	9.1	98
5	Manganeseâ€Based Materials for Rechargeable Batteries beyond Lithiumâ€Ion. Advanced Energy Materials, 2021, 11, 2100867.	19.5	95
6	Strain-Engineered van der Waals Interfaces of Mixed-Dimensional Heterostructure Arrays. ACS Nano, 2019, 13, 9057-9066.	14.6	94
7	Defectâ€Engineered Atomically Thin MoS₂ Homogeneous Electronics for Logic Inverters. Advanced Materials, 2020, 32, e1906646.	21.0	94
8	Self-Healing Originated van der Waals Homojunctions with Strong Interlayer Coupling for High-Performance Photodiodes. ACS Nano, 2019, 13, 3280-3291.	14.6	69
9	Piezotronic effect on interfacial charge modulation in mixed-dimensional Van der Waals heterostructure for ultrasensitive flexible photodetectors. Nano Energy, 2019, 58, 85-93.	16.0	66
10	Hidden Vacancy Benefit in Monolayer 2D Semiconductors. Advanced Materials, 2021, 33, e2007051.	21.0	65
11	Layer Dependence and Light Tuning Surface Potential of 2D MoS₂ on Various Substrates. Small, 2017, 13, 1603103.	10.0	58
12	Atomicâ€Thin ZnO Sheet for Visibleâ€Blind Ultraviolet Photodetection. Small, 2020, 16, e2005520.	10.0	45
13	Direct Charge Trapping Multilevel Memory with Graphdiyne/MoS₂ Van der Waals Heterostructure. Advanced Science, 2021, 8, e2101417.	11.2	45
14	Strain modulation on graphene/ZnO nanowire mixed-dimensional van der Waals heterostructure for high-performance photosensor. Nano Research, 2017, 10, 3476-3485.	10.4	41
15	Gateâ€Controlled Polarityâ€Reversible Photodiodes with Ambipolar 2D Semiconductors. Advanced Functional Materials, 2021, 31, 2007559.	14.9	38
16	Allâ€vanâ€derâ€Waals Barrierâ€Free Contacts for Highâ€Mobility Transistors. Advanced Materials, 2022, 34, e2109521.	21.0	38
17	Single-Atom Vacancy Doping in Two-Dimensional Transition Metal Dichalcogenides. Accounts of Materials Research, 2021, 2, 655-668.	11.7	32
18	Reconstructing Vanadium Oxide with Anisotropic Pathways for a Durable and Fast Aqueous K-Ion Battery. ACS Nano, 2021, 15, 17717-17728.	14.6	30

#	Article	IF	Citations
19	Moleculeâ€Upgraded van der Waals Contacts for Schottkyâ€Barrierâ€Free Electronics. Advanced Materials, 2021, 33, e2104935.	21.0	26
20	Record-high saturation current in end-bond contacted monolayer MoS2 transistors. Nano Research, 2022, 15, 475-481.	10.4	24
21	A van der Waals Ferroelectric Tunnel Junction for Ultrahighâ€Temperature Operation Memory. Small Methods, 2022, 6, e2101583.	8.6	22
22	Low-cost highly sensitive strain sensors for wearable electronics. Journal of Materials Chemistry C, 2017, 5, 10571-10577.	5.5	21
23	Tuning Transport and Photoelectric Performance of Monolayer MoS₂ Device by Eâ€Beam Irradiation. Advanced Materials Interfaces, 2018, 5, 1800348.	3.7	21
24	Synergisticâ€engineered van der Waals photodiodes with high efficiency. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	17.3	16
25	Force and light tuning vertical tunneling current in the atomic layered MoS₂. Nanotechnology, 2018, 29, 275202.	2.6	10
26	Flexible electronics and optoelectronics of 2D van der Waals materials. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 671-690.	4.9	10
27	Microscopic pump-probe optical technique to characterize the defect of monolayer transition metal dichalcogenides. Photonics Research, 2019, 7, 711.	7.0	9
28	Van Der Waals Heterostructures: Interfacial Charge Behavior Modulation in Perovskite Quantum Dot-Monolayer MoS2 0D-2D Mixed-Dimensional van der Waals Heterostructures (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	18.5	3
29	2D Materials: Layer Dependence and Light Tuning Surface Potential of 2D MoS₂ on Various Substrates (Small 14/2017). Small, 2017, 13, .	10.0	1