

Zhihao Yu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7048704/publications.pdf>

Version: 2024-02-01

31
papers

3,355
citations

516215

16
h-index

610482

24
g-index

31
all docs

31
docs citations

31
times ranked

4843
citing authors

#	ARTICLE	IF	CITATIONS
1	Uniform nucleation and epitaxy of bilayer molybdenum disulfide on sapphire. <i>Nature</i> , 2022, 605, 69-75.	13.7	174
2	MoS ₂ /WSe ₂ vdW Heterostructures Decorated with PbS Quantum Dots for the Development of High-Performance Photovoltaic and Broadband Photodiodes. <i>ACS Nano</i> , 2022, 16, 9329-9338.	7.3	22
3	Enhancement of the ferroelectricity by interface engineering observed by in situ transmission electron microscope. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	2
4	Low-defect-density WS ₂ by hydroxide vapor phase deposition. <i>Nature Communications</i> , 2022, 13, .	5.8	37
5	Sub-thermionic, ultra-high-gain organic transistors and circuits. <i>Nature Communications</i> , 2021, 12, 1928.	5.8	83
6	Reliability of Ultrathin High κ Dielectrics on 2D Semiconductors. , 2021, , .		0
7	Epitaxial growth of wafer-scale molybdenum disulfide semiconductor single crystals on sapphire. <i>Nature Nanotechnology</i> , 2021, 16, 1201-1207.	15.6	339
8	Three-dimensional monolithic micro-LED display driven by atomically thin transistor matrix. <i>Nature Nanotechnology</i> , 2021, 16, 1231-1236.	15.6	120
9	High-Performance CVD MoS ₂ Transistors with Self-Aligned Top-Gate and Bi Contact. , 2021, , .		13
10	Monolithic 3D μ -LED displays through BEOL integration of large-area MoS ₂ TFT matrix. , 2021, , .		2
11	High-Accuracy Deep Neural Networks Using a Contralateral-Gated Analog Synapse Composed of Ultrathin MoS ₂ , nFET and Nonvolatile Charge-Trap Memory. <i>IEEE Electron Device Letters</i> , 2020, 41, 1649-1652.	2.2	3
12	Low-Power Complementary Inverter with Negative Capacitance 2D Semiconductor Transistors. <i>Advanced Functional Materials</i> , 2020, 30, 2003859.	7.8	58
13	Reliability of Ultrathin High- κ Dielectrics on Chemical-vapor Deposited 2D Semiconductors. , 2020, , .		5
14	Reducing the power consumption of two-dimensional logic transistors. <i>Journal of Semiconductors</i> , 2019, 40, 091002.	2.0	12
15	Nanocrystal-Embedded-Insulator (NEI) Ferroelectric Field-Effect Transistor Featuring Low Operating Voltages and Improved Synaptic Behavior. <i>IEEE Electron Device Letters</i> , 2019, 40, 1933-1936.	2.2	20
16	Thickness-Dependent Asymmetric Potential Landscape and Polarization Relaxation in Ferroelectric Hf _x Zr _{1-x} O ₂ Thin Films through Interfacial Bound Charges. <i>Advanced Electronic Materials</i> , 2019, 5, 1900554.	2.6	13
17	Uniform and ultrathin high- κ gate dielectrics for two-dimensional electronic devices. <i>Nature Electronics</i> , 2019, 2, 563-571.	13.1	204
18	A MoS ₂ /PTCDA Hybrid Heterojunction Synapse with Efficient Photoelectric Dual Modulation and Versatility. <i>Advanced Materials</i> , 2019, 31, e1806227.	11.1	336

#	ARTICLE	IF	CITATIONS
19	Toward High-mobility and Low-power 2D MoS ₂ Field-effect Transistors. , 2018, , .		9
20	Steep Slope p-type 2D WSe ₂ Field-Effect Transistors with Van Der Waals Contact and Negative Capacitance. , 2018, , .		16
21	Electrical contacts to two-dimensional transition-metal dichalcogenides. Journal of Semiconductors, 2018, 39, 124001.	2.0	7
22	Analyzing the Carrier Mobility in Transition-Metal Dichalcogenide MoS ₂ Field-Effect Transistors. Advanced Functional Materials, 2017, 27, 1604093.	7.8	265
23	High-Electron-Mobility and Air-Stable 2D Layered PtSe ₂ FETs. Advanced Materials, 2017, 29, 1604230.	11.1	502
24	Negative capacitance 2D MoS ₂ transistors with sub-60mV/dec subthreshold swing over 6 orders, 250 μ A/ μ m current density, and nearly-hysteresis-free. , 2017, , .		30
25	The Unique Current-Direction Dependent On-Off Switching in BiSbTeSe ₂ Topological Insulator Based Spin Valve Transistors. IEEE Electron Device Letters, 2016, , 1-1.	2.2	7
26	Transistors: Realization of Room-Temperature Phonon-Limited Carrier Transport in Monolayer MoS ₂ by Dielectric and Carrier Screening (Adv. Mater. 3/2016). Advanced Materials, 2016, 28, 546-546.	11.1	5
27	Transition-metal dichalcogenides: Group-10 expands the spectrum. Science China: Physics, Mechanics and Astronomy, 2016, 59, 1.	2.0	3
28	Realization of Room-Temperature Phonon-Limited Carrier Transport in Monolayer MoS ₂ by Dielectric and Carrier Screening. Advanced Materials, 2016, 28, 547-552.	11.1	218
29	High-Performance Monolayer WS ₂ Field-Effect Transistors on High- ϵ Dielectrics. Advanced Materials, 2015, 27, 5230-5234.	11.1	218
30	Mo-O bond doping and related-defect assisted enhancement of photoluminescence in monolayer MoS ₂ . AIP Advances, 2014, 4, 123004.	0.6	69
31	Towards intrinsic charge transport in monolayer molybdenum disulfide by defect and interface engineering. Nature Communications, 2014, 5, 5290.	5.8	563