

# Yanqing Wu

## List of Publications by Year in descending order

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60  
papers

4,012  
citations

304368

22  
h-index

182168

51  
g-index

60  
all docs

60  
docs citations

60  
times ranked

5797  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonvolatile Logic and Ternary Content-Addressable Memory Based on Complementary Black Phosphorus and Rhenium Disulfide Transistors. <i>Advanced Materials</i> , 2022, 34, e2106321.	11.1	15
2	Investigation of Coercive Field Shift During Cycling in HfZrO <sub>2</sub> Ferroelectric Capacitors. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 2384-2390.	1.6	6
3	Flexible synaptic floating gate devices with dual electrical modulation based on ambipolar black phosphorus. <i>IScience</i> , 2022, 25, 103947.	1.9	3
4	Defects Induced Charge Trapping/Detrapping and Hysteresis Phenomenon in MoS <sub>2</sub> Field-Effect Transistors: Mechanism Revealed by Anharmonic Marcus Charge Transfer Theory. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 2185-2193.	4.0	15
5	A novel visible light sensing and recording system enabled by integration of photodetector and electrochromic devices. <i>Nanoscale</i> , 2021, 13, 9177-9184.	2.8	8
6	Improved Low-Frequency Noise in Recessed-Gate E-Mode AlGaIn/GaN MOS-HEMTs Under Electrical and Thermal Stress. <i>IEEE Journal of the Electron Devices Society</i> , 2021, 9, 511-516.	1.2	0
7	Improved low-frequency noise in CVD bilayer MoS <sub>2</sub> field-effect transistors. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	11
8	Performance Optimization of Atomic Layer Deposited ZnO Thin-Film Transistors by Vacuum Annealing. <i>IEEE Electron Device Letters</i> , 2021, 42, 716-719.	2.2	12
9	Double-Gate MoS <sub>2</sub> Field-Effect Transistors with Full-Range Tunable Threshold Voltage for Multifunctional Logic Circuits. <i>Advanced Materials</i> , 2021, 33, e2101036.	11.1	42
10	High-performance n-type transistors based on CVD-grown large-domain trilayer WSe <sub>2</sub> . <i>APL Materials</i> , 2021, 9, .	2.2	7
11	Investigation of Time Dependent Dielectric Breakdown (TDDB) of Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> -Based Ferroelectrics Under Both Forward and Reverse Stress Conditions. <i>IEEE Journal of the Electron Devices Society</i> , 2021, 9, 735-740.	1.2	7
12	Tunable 1/f Noise in CVD Bernal-Stacked Bilayer Graphene Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 17686-17690.	4.0	5
13	Reconfigurable Logic-in-Memory and Multilingual Artificial Synapses Based on 2D Heterostructures. <i>Advanced Functional Materials</i> , 2020, 30, 1909645.	7.8	92
14	A transverse tunnelling field-effect transistor made from a van der Waals heterostructure. <i>Nature Electronics</i> , 2020, 3, 106-112.	13.1	69
15	Light-stimulated artificial synapse based on Schottky barrier modulated CVD Mos <sub>2</sub> transistors. , 2020, , .		0
16	High-Frequency Performance of MoS <sub>2</sub> Transistors at Cryogenic Temperatures. , 2020, , .		0
17	Nanometre-thin indium tin oxide for advanced high-performance electronics. <i>Nature Materials</i> , 2019, 18, 1091-1097.	13.3	207
18	Improved Current Collapse in Recessed AlGaIn/GaN MOS-HEMTs by Interface and Structure Engineering. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 4591-4596.	1.6	17

#	ARTICLE	IF	CITATIONS
19	High-speed black phosphorus field-effect transistors approaching ballistic limit. Science Advances, 2019, 5, eaau3194.	4.7	66
20	Negative transconductance and negative differential resistance in asymmetric narrow bandgap 2D $\epsilon$ 3D heterostructures. Nanoscale, 2019, 11, 4701-4706.	2.8	20
21	Wafer Scale Mapping and Statistical Analysis of Radio Frequency Characteristics in Highly Uniform CVD Graphene Transistors. Advanced Electronic Materials, 2019, 5, 1800711.	2.6	12
22	High-Performance Flexible ZnO Thin-Film Transistors by Atomic Layer Deposition. IEEE Electron Device Letters, 2019, 40, 419-422.	2.2	34
23	High performance optoelectronics based on CVD MoS <sub>2</sub> . , 2019, , .		0
24	Improved Interface Properties and Dielectric Breakdown in Recessed AlGaIn/GaN MOS-HEMTs Using HfSiO <sub>2</sub> as Gate Dielectric. IEEE Electron Device Letters, 2019, 40, 295-298.	2.2	20
25	Improvement of Conversion Loss of Resistive Mixers Using Bernal-Stacked Bilayer Graphene. IEEE Electron Device Letters, 2019, 40, 325-328.	2.2	7
26	Performance and Reliability Improvement under High Current Densities in Black Phosphorus Transistors by Interface Engineering. ACS Applied Materials & Interfaces, 2019, 11, 1587-1594.	4.0	13
27	High Performance Black Phosphorus Electronic and Photonic Devices with HfLaO Dielectric. IEEE Electron Device Letters, 2018, 39, 127-130.	2.2	31
28	Optimized Transport Properties in Lithium Doped Black Phosphorus Transistors. IEEE Electron Device Letters, 2018, 39, 769-772.	2.2	25
29	Anomalous Temperature Dependence in Metal-Black Phosphorus Contact. Nano Letters, 2018, 18, 26-31.	4.5	25
30	Interface properties study on SiC MOS with high-k hafnium silicate gate dielectric. AIP Advances, 2018, 8, 125314.	0.6	2
31	AlGaIn/GaN E-mode MOS-HEMT Using Atomic-Layer-Deposited HfLaO <sub>x</sub> as Gate Dielectric. , 2018, , .		1
32	Scalable high performance radio frequency electronics based on large domain bilayer MoS <sub>2</sub> . Nature Communications, 2018, 9, 4778.	5.8	98
33	High-performance transistors based on monolayer CVD MoS <sub>2</sub> grown on molten glass. Applied Physics Letters, 2018, 113, .	1.5	36
34	High-performance two-dimensional transistors and circuits. , 2018, , .		2
35	Optimized Transport of Black Phosphorus Top Gate Transistors Using Alucone Dielectrics. IEEE Electron Device Letters, 2018, 39, 1952-1955.	2.2	2
36	High-Performance CVD Bernal-Stacked Bilayer Graphene Transistors for Amplifying and Mixing Signals at High Frequencies. ACS Applied Materials & Interfaces, 2018, 10, 20219-20224.	4.0	11

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37	Black Phosphorus Radio Frequency Electronics at Cryogenic Temperatures. <i>Advanced Electronic Materials</i> , 2018, 4, 1800138.	2.6	15
38	Near-Field Characterization of Graphene Plasmons by Photo-Induced Force Microscopy. <i>Laser and Photonics Reviews</i> , 2018, 12, 1800040.	4.4	26
39	Channel Engineering of Normally-OFF AlGaIn/GaN MOS-HEMTs by Atomic Layer Etching and High- $\kappa$ Dielectric. <i>IEEE Electron Device Letters</i> , 2018, 39, 1377-1380.	2.2	39
40	Tunable Low-Frequency Noise in Dual-Gate MoS <sub>2</sub> Transistors. <i>IEEE Electron Device Letters</i> , 2018, 39, 131-134.	2.2	11
41	Multifunctional devices from asymmetry. <i>Nature Electronics</i> , 2018, 1, 331-332.	13.1	3
42	Toward high-performance two-dimensional black phosphorus electronic and optoelectronic devices. <i>Chinese Physics B</i> , 2017, 26, 037307.	0.7	11
43	High field transport of high performance black phosphorus transistors. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	27
44	Short-Channel Graphene Mixer With High Linearity. <i>IEEE Electron Device Letters</i> , 2017, 38, 1168-1171.	2.2	21
45	Multifunctional high-performance van der Waals heterostructures. <i>Nature Nanotechnology</i> , 2017, 12, 1148-1154.	15.6	278
46	Effect of Dielectric Interface on the Performance of MoS <sub>2</sub> Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 44602-44608.	4.0	43
47	Semianalytical model of the contact resistance in two-dimensional semiconductors. <i>Physical Review B</i> , 2017, 96, .	1.1	5
48	Development of two-dimensional materials for electronic applications. <i>Science China Information Sciences</i> , 2016, 59, 1.	2.7	9
49	Interface properties study on SiC MOS with high- $\kappa$ Al <sub>2</sub> O <sub>3</sub> gate dielectric. , 2016, , .		0
50	Broadband Black-Phosphorus Photodetectors with High Responsivity. <i>Advanced Materials</i> , 2016, 28, 3481-3485.	11.1	364
51	Mechanisms of current fluctuation in ambipolar black phosphorus field-effect transistors. <i>Nanoscale</i> , 2016, 8, 3572-3578. Nearly Perfect Spin Filter Based on a Wire of Half-Metallic	2.8	27
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#	ARTICLE	IF	CITATIONS
55	Observation of frozen electronic states at epitaxial $\text{LaO}_3/\text{GaAs}$ heterostructure. , 2014, , .		0
56	Low temperature study of GaAs MOSFETs with atomic layer epitaxial $\text{La}_2\text{O}_3$ . , 2014, , .		0
57	Graphene Electronics: Materials, Devices, and Circuits. Proceedings of the IEEE, 2013, 101, 1620-1637.	16.4	104
58	State-of-the-Art Graphene High-Frequency Electronics. Nano Letters, 2012, 12, 3062-3067.	4.5	371
59	Wafer-Scale Graphene Integrated Circuit. Science, 2011, 332, 1294-1297.	6.0	812
60	High-frequency, scaled graphene transistors on diamond-like carbon. Nature, 2011, 472, 74-78.	13.7	813