

# Zheng Wang

## List of Publications by Year in descending order

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34  
papers

539  
citations

686830

13  
h-index

676716

22  
g-index

35  
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35  
docs citations

35  
times ranked

298  
citing authors

#	ARTICLE	IF	CITATIONS
1	High- $\hat{\nu}$ perovskite membranes as insulators for two-dimensional transistors. <i>Nature</i> , 2022, 605, 262-267.	13.7	109
2	7.6 V Threshold Voltage High-Performance Normally-Off Al <sub>2</sub> O <sub>3</sub> /GaN MOSFET Achieved by Interface Charge Engineering. <i>IEEE Electron Device Letters</i> , 2016, 37, 165-168.	2.2	88
3	Evaluating the Traditional Chinese Medicine (TCM) Officially Recommended in China for COVID-19 Using Ontology-Based Side-Effect Prediction Framework (OSPF) and Deep Learning. <i>Journal of Ethnopharmacology</i> , 2021, 272, 113957.	2.0	44
4	Numerical investigation on AlGa <sub>N</sub> /Ga <sub>N</sub> short channel HEMT with AlGa <sub>N</sub> /InGa <sub>N</sub> /AlGa <sub>N</sub> quantum well plate. <i>Superlattices and Microstructures</i> , 2018, 120, 753-758.	1.4	20
5	An Ontology-Based Artificial Intelligence Model for Medicine Side-Effect Prediction: Taking Traditional Chinese Medicine as an Example. <i>Computational and Mathematical Methods in Medicine</i> , 2019, 2019, 1-7.	0.7	20
6	A High-Performance Tunable LED-Compatible Current Regulator Using an Integrated Voltage Nanosensor. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 1917-1923.	1.6	20
7	Proposal of a novel enhancement type AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT using recess-free field coupled gate. <i>Superlattices and Microstructures</i> , 2018, 122, 343-348.	1.4	18
8	Simulation study on AlGa <sub>N</sub> /Ga <sub>N</sub> diode with $\hat{\nu}$ -shaped anode for ultra-low turn-on voltage. <i>Superlattices and Microstructures</i> , 2018, 117, 330-335.	1.4	17
9	Charge storage impact on input capacitance in p-Ga <sub>N</sub> gate AlGa <sub>N</sub> /Ga <sub>N</sub> power high-electron-mobility transistors. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 305106.	1.3	17
10	Simulation Study of an Ultralow Switching Loss p-Ga <sub>N</sub> Gate HEMT With Dynamic Charge Storage Mechanism. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 175-183.	1.6	17
11	Simulation study of high- $\hat{\nu}$ reverse blocking AlGa <sub>N</sub> /Ga <sub>N</sub> power rectifier with an integrated lateral composite buffer diode. <i>Micro and Nano Letters</i> , 2017, 12, 660-663.	0.6	15
12	A Machine Learning-Assisted Model for Ga <sub>N</sub> Ohmic Contacts Regarding the Fabrication Processes. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 2212-2219.	1.6	15
13	Design and Optimization on a Novel High-Performance Ultra-Thin Barrier AlGa <sub>N</sub> /Ga <sub>N</sub> Power HEMT With Local Charge Compensation Trench. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3054.	1.3	14
14	On the Baliga's Figure-Of-Merits (BFOM) Enhancement of a Novel Ga <sub>N</sub> Nano-Pillar Vertical Field Effect Transistor (FET) with 2DEG Channel and Patterned Substrate. <i>Nanoscale Research Letters</i> , 2019, 14, 128.	3.1	14
15	An analytical model on the gate control capability in p-Ga <sub>N</sub> Gate AlGa <sub>N</sub> /Ga <sub>N</sub> high-electron-mobility transistors considering buffer acceptor traps. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 095107.	1.3	13
16	Simulation design of uniform low turn-on voltage and high reverse blocking AlGa <sub>N</sub> /Ga <sub>N</sub> power field effect rectifier with trench heterojunction anode. <i>Superlattices and Microstructures</i> , 2017, 105, 132-138.	1.4	12
17	A novel technology for turn-on voltage reduction of high-performance lateral heterojunction diode with source-gate shorted anode. <i>Superlattices and Microstructures</i> , 2019, 125, 144-150.	1.4	12
18	Proposal of a novel recess-free enhancement-mode AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT with field-assembled structure: a simulation study. <i>Journal of Computational Electronics</i> , 2019, 18, 1251-1258.	1.3	11

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19	Approaching High-Accuracy Side Effect Prediction of Traditional Chinese Medicine Compound Prescription Using Network Embedding and Deep Learning. IEEE Access, 2020, 8, 82493-82499.	2.6	10
20	Threshold voltage modulation by interface charge engineering for high performance normally-off GaN MOSFETs with high faulty turn-on immunity. , 2016, , .		8
21	Approaching ultra-low turn-on voltage in GaN lateral diode. Semiconductor Science and Technology, 2021, 36, 014003.	1.0	7
22	Two-dimensional polarization doping of GaN heterojunction and its potential for realizing lateral p-n junction devices. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	5
23	A Novel High Performance Lateral AlGaIn/GaN Schottky Barrier Diode Using Highly Effective Field Plate with Polarization Enhanced Channel. , 2019, , .		4
24	A LED-Compatible Current Regulator with Integrated Electrically Adjustable Sensor. , 2019, , .		4
25	A low turn-on voltage AlGaIn/GaN lateral field-effect rectifier compatible with p-GaN gate HEMT technology. Semiconductor Science and Technology, 2021, 36, 034004.	1.0	4
26	Lateral AlGaIn/GaN diode with MIS-gated hybrid anode for high-sensitivity zero-bias microwave detection. Electronics Letters, 2015, 51, 1889-1891.	0.5	2
27	A Novel Enhancement-Type GaN HEMT with High Power Transmission Capability Using Extended Quantum Well Channel. , 2020, , .		2
28	A Novel High-Performance Bipolar GaN Diode Realized by Broadened Quantum Well and Three-Dimensional Carrier Sea. , 2020, , .		2
29	0.3 VT/1.1 kV AlGaIn/GaN lateral power diode with MIS-gated hybrid anode on silicon substrate. , 2016, , .		1
30	Physics of dynamic threshold voltage and steep subthreshold swing in Al <sub>2</sub> O <sub>3</sub> /InAlN/GaN MOSHEMTs. Semiconductor Science and Technology, 2016, 31, 035005.	1.0	1
31	Modelling on GaN Power HEMT with Consideration of Subthreshold Swing Using Artificial Intelligence Technology. , 2019, , .		1
32	High performance normally-off Al <sub>2</sub> O <sub>3</sub> /GaN MOSFETs with record high threshold voltage by interface charge engineering. , 2016, , .		0
33	A monolithic integration scheme for GaN-based power converter integrated circuit using fully-Schottky versatile HEMTs. IOP Conference Series: Materials Science and Engineering, 2020, 733, 012018.	0.3	0
34	A Novel GaN Bidirectional Current Rectifier Using Self-Quantum Channel Modulation. , 2021, , .		0