Zeheng Wang

List of Publications by Year
in descending order

34 papers	539 citations	686830 13 h-index	676716 22 g-index
35 all docs	35 docs citations	35 times ranked	298 citing authors

#	ARTICLE	IF	CITATIONS
1	High-Iº perovskite membranes as insulators for two-dimensional transistors. Nature, 2022, 605, 262-267.	13.7	109
2	Two-dimensional polarization doping of GaN heterojunction and its potential for realizing lateral pâ€"n junction devices. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	5
3	A low turn-on voltage AlGaN/GaN lateral field-effect rectifier compatible with p-GaN gate HEMT technology. Semiconductor Science and Technology, 2021, 36, 034004.	1.0	4
4	Evaluating the Traditional Chinese Medicine (TCM) Officially Recommended in China for COVID-19 Using Ontology-Based Side-Effect Prediction Framework (OSPF) and Deep Learning. Journal of Ethnopharmacology, 2021, 272, 113957.	2.0	44
5	A Machine Learning-Assisted Model for GaN Ohmic Contacts Regarding the Fabrication Processes. IEEE Transactions on Electron Devices, 2021, 68, 2212-2219.	1.6	15
6	A Novel GaN Bidirectional Current Rectifier Using Self-Quantum Channel Modulation. , 2021, , .		0
7	Simulation Study of an Ultralow Switching Loss p-GaN Gate HEMT With Dynamic Charge Storage Mechanism. IEEE Transactions on Electron Devices, 2021, 68, 175-183.	1.6	17
8	An analytical model on the gate control capability in p-GaN Gate AlGaN/GaN high-electron-mobility transistors considering buffer acceptor traps. Journal Physics D: Applied Physics, 2021, 54, 095107.	1.3	13
9	Approaching ultra-low turn-on voltage in GaN lateral diode. Semiconductor Science and Technology, 2021, 36, 014003.	1.0	7
10	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
11	Charge storage impact on input capacitance in p-GaN gate AlGaN/GaN power high-electron-mobility transistors. Journal Physics D: Applied Physics, 2020, 53, 305106.	1.3	17
12	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
13	A Novel Enhancement-Type GaN HEMT with High Power Transmission Capability Using Extended Quantum Well Channel. , 2020, , .		2
14	A Novel High-Performance Bipolar GaN Diode Realized by Broadened Quantum Well and Three-Dimensional Carrier Sea. , 2020, , .		2
15	Design and Optimization on a Novel High-Performance Ultra-Thin Barrier AlGaN/GaN Power HEMT With Local Charge Compensation Trench. Applied Sciences (Switzerland), 2019, 9, 3054.	1.3	14
16	Proposal of a novel recess-free enhancement-mode AlGaN/GaN HEMT with field-assembled structure: a simulation study. Journal of Computational Electronics, 2019, 18, 1251-1258.	1.3	11
17	An Ontology-Based Artificial Intelligence Model for Medicine Side-Effect Prediction: Taking Traditional Chinese Medicine as an Example. Computational and Mathematical Methods in Medicine, 2019, 2019, 1-7.	0.7	20
18	Modelling on GaN Power HEMT with Condideration of Subthreshold Swing Using Artificial Intelligence Technology. , 2019, , .		1

#	Article	IF	Citations
19	On the Baligaâ€™s Figure-Of-Merits (BFOM) Enhancement of a Novel GaN Nano-Pillar Vertical Field Effect Transistor (FET) with 2DEG Channel and Patterned Substrate. Nanoscale Research Letters, 2019, 14, 128.	3.1	14
20	A Novel High Performance Lateral AlGaN/GaN Schottky Barrier Diode Using Highly Effective Field Plate with Polarization Enhanced Channel. , 2019, , .		4
21	A High-Performance Tunable LED-Compatible Current Regulator Using an Integrated Voltage Nanosensor. IEEE Transactions on Electron Devices, 2019, 66, 1917-1923.	1.6	20
22	A LED-Compatible Current Regulator with Integrated Electrically Adjustable Sensor. , 2019, , .		4
23	A novel technology for turn-on voltage reduction of high-performance lateral heterojunction diode with source-gate shorted anode. Superlattices and Microstructures, 2019, 125, 144-150.	1.4	12
24	Simulation study on AlGaN/GaN diode with Î“-shaped anode for ultra-low turn-on voltage. Superlattices and Microstructures, 2018, 117, 330-335.	1.4	17
25	Numerical investigation on AlGaN/GaN short channel HEMT with AlGaN/InGaN/AlGaN quantum well plate. Superlattices and Microstructures, 2018, 120, 753-758.	1.4	20
26	Proposal of a novel enhancement type AlGaN/GaN HEMT using recess-free field coupled gate. Superlattices and Microstructures, 2018, 122, 343-348.	1.4	18
27	Simulation design of uniform low turn-on voltage and high reverse blocking AlGaN/GaN power field effect rectifier with trench heterojunction anode. Superlattices and Microstructures, 2017, 105, 132-138.	1.4	12
28	Simulation study of highâ€reverse blocking AlGaN/GaN power rectifier with an integrated lateral composite buffer diode. Micro and Nano Letters, 2017, 12, 660-663.	0.6	15
29	Threshold voltage modulation by interface charge engineering for high performance normally-off GaN MOSFETs with high faulty turn-on immunity. , 2016, , .		8
30	High performance normally-off Al2O3/GaN MOSFETs with record high threshold voltage by interface charge engineering. , 2016, , .		0
31	0.3 VT/1.1 kV AlGaN/GaN lateral power diode with MIS-gated hybrid anode on silicon substrate. , 2016, , .		1
32	Physics of dynamic threshold voltage and steep subthreshold swing in Al_2O_3â€“InAlNâ€“GaN MOSHEMTs. Semiconductor Science and Technology, 2016, 31, 035005.	1.0	1
33	7.6 V Threshold Voltage High-Performance Normally-Off Al_2O_3/GaN MOSFET Achieved by Interface Charge Engineering. IEEE Electron Device Letters, 2016, 37, 165-168.	2.2	88
34	Lateral AlGaN/GaN diode with MISâ€gated hybrid anode for highâ€sensitivity zeroâ€bias microwave detection. Electronics Letters, 2015, 51, 1889-1891.	0.5	2