Tao Zhang

List of Publications by Year
in descending order

20 papers	363 citations	759233 12 h-index	794594 19 g-index
20 all docs	20 docs citations	20 times ranked	328 citing authors

#	Article	IF	Citations
1	Investigation on the interface trap characteristics in a p-channel GaN MOSFET through temperature-dependent subthreshold slope analysis. Journal Physics D: Applied Physics, 2022, 55, 095112.	2.8	9
2	GaN High-Electron-Mobility-Transistor on Free- Standing GaN Substrate With Low Contact Resistance and State-of-the-Art f_T Ã— L_G Value. IEEE Transactions on Electron Devices, 2022, 69, 968-972.	3.0	7
3	High-Performance E-Mode p-Channel GaN FinFET on Silicon Substrate With High I _{ON}/I _{OFF} and High Threshold Voltage. IEEE Electron Device Letters, 2022, 43, 705-708.	3.9	16
4	Current transport mechanism of AlGaN-channel Schottky barrier diode with extremely low leakage current and high blocking voltage of 2.55 kV. Applied Physics Letters, 2022, 120, 092102.	3.3	1
5	Mechanism of low Ohmic contact resistance to p-type GaN by suppressed edge dislocations. Applied Physics Letters, 2022, 120, .	3.3	8
6	Mechanism of current-collapse free for lateral GaN Schottky barrier diodes utilizing polarization-induced hole injection. Applied Physics Letters, 2022, 120, 232101.	3.3	1
7	Current Transport Mechanism of High-Performance Novel GaN MIS Diode. IEEE Electron Device Letters, 2021, 42, 304-307.	3.9	12
8	Investigation of an AlGaN-channel Schottky barrier diode on a silicon substrate with a molybdenum anode. Semiconductor Science and Technology, 2021, 36, 044003.	2.0	4
9	Current-Collapse Suppression of High-Performance Lateral AlGaN/GaN Schottky Barrier Diodes by a Thick GaN Cap Layer. IEEE Electron Device Letters, 2021, 42, 477-480.	3.9	18
10	Comprehensive Annealing Effects on AlGaN/GaN Schottky Barrier Diodes With Different Work-Function Metals. IEEE Transactions on Electron Devices, 2021, 68, 2661-2666.	3.0	15
11	A 0.43 V/90 nA/mm Lateral AlGaN/GaN Schottky Barrier Diode With Plasma-Free Groove Anode Technique. IEEE Electron Device Letters, 2021, 42, 1747-1750.	3.9	4
12	Lateral GaN Schottky Barrier Diode for Wireless High-Power Transfer Application With High RF/DC Conversion Efficiency: From Circuit Construction and Device Technologies to System Demonstration. IEEE Transactions on Industrial Electronics, 2020, 67, 6597-6606.	7.9	32
13	A 5.8-GHz High-Power and High-Efficiency Rectifier Circuit With Lateral GaN Schottky Diode for Wireless Power Transfer. IEEE Transactions on Power Electronics, 2020, 35, 2247-2252.	7.9	60
14	Leakage current mechanisms of groove-type tungsten-anode GaN SBDs with ultra low turn-ON voltage and low reverse current. Solid-State Electronics, 2020, 169, 107807.	1.4	15
15	A > 3 kV/2.94 m $Omegacdot$ cm² and Low Leakage Current With Low Turn-On Voltage Lateral GaN Schottky Barrier Diode on Silicon Substrate With Anode Engineering Technique. IEEE Electron Device Letters, 2019, 40, 1583-1586.	3.9	50
16	High-performance lateral GaN Schottky barrier diode on silicon substrate with low turn-on voltage of 0.31 V, high breakdown voltage of 2.65 kV and high-power figure-of-merit of 2.65 GW cm^{â”2}. Applied Physics Express, 2019, 12, 046502.	2.4	27
17	AlGaN-Channel Gate Injection Transistor on Silicon Substrate With Adjustable 4â€“7-V Threshold Voltage and 1.3-kV Breakdown Voltage. IEEE Electron Device Letters, 2018, 39, 1026-1029.	3.9	21
18	InGaN-channel high-electron-mobility transistor with enhanced linearity and high-temperature performance. Applied Physics Express, 2018, 11, 094101.	2.4	13

#	Article	IF	Citations
19	A 1.9 kV/2.61 mâ„¦Â·cm2 Lateral GaN Schottky Barrier Diode on Silicon Substrate with Tungsten Anode and Low Turn-On Voltage of 0.35 V. IEEE Electron Device Letters, 2018, , 1-1.	3.9	23
20	Trap state analysis in AlGaN/GaN/AlGaN double heterostructure high electron mobility transistors at high temperatures. Applied Physics Letters, 2017, 110, 252102.	3.3	27