Zhikai Tang

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/357630/publications.pdf

Version: 2024-02-01

29	1,303	16	21
papers	citations	h-index	g-index

516561 713332

30	30	30	1094
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of SiN_{<i>x</i>} and AlN Passivation for AlGaN/GaN High-Electron-Mobility Transistors: Role of Interface Traps and Polarization Charges. IEEE Journal of the Electron Devices Society, 2020, 8, 358-364.	1.2	19
2	Role of shallow surface traps and polarization charges in nitride-based passivation for AlGaN/GaN heterojunction FET. , 2016, , .		0
3	Surface nitridation for improved dielectric/IIIâ€nitride interfaces in GaN MISâ€HEMTs (Phys. Status Solidi A) Tj ETQq1 1 0.784314 rgBT /	0.8	0
4	Correction to â€œThermally Stable Enhancement-Mode GaN Metal-Isolator-Semiconductor High-Electron-Mobility Transistor With Partially Recessed Fluorine-Implanted Barrierâ€[Apr 15 318-320]. IEEE Electron Device Letters, 2015, 36, 624-624.	2.2	2
5	Thermally Stable Enhancement-Mode GaN Metal-Isolator-Semiconductor High-Electron-Mobility Transistor With Partially Recessed Fluorine-Implanted Barrier. IEEE Electron Device Letters, 2015, 36, 318-320.	2.2	55
6	Surface nitridation for improved dielectric/IIIâ€nitride interfaces in GaN MISâ€HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1059-1065.	0.8	41
7	Interface/border trap characterization of Al2O3/AlN/GaN metal-oxide-semiconductor structures with an AlN interfacial layer. Applied Physics Letters, 2015, 106, .	1.5	74
8	Normally off Al₂O₃–AlGaN/GaN MIS-HEMT With Transparent Gate Electrode for Gate Degradation Investigation. IEEE Transactions on Electron Devices, 2015, 62, 821-827.	1.6	18
9	Characterization of SiN<i>_x</i>/AlN passivation stack with epitaxial AlN grown on AlGaN/GaN heterojunctions by plasma-enhanced atomic layer deposition. Applied Physics Express, 2015, 8, 064101.	1.1	16
10	Dynamic Performance of AlN-Passivated AlGaN/GaN MIS-High Electron Mobility Transistors Under Hard Switching Operation. IEEE Electron Device Letters, 2015, 36, 760-762.	2.2	16
11	Performance enhancement of normally-off Al₂O₃/AlN/GaN MOS-Channel-HEMTs with an ALD-grown AlN interfacial layer. , 2014, , .		7
12	Substrate-Coupled Cross-Talk Effects on an AlGaN/GaN-on-Si Smart Power IC Platform. IEEE Transactions on Electron Devices, 2014, 61, 3808-3813.	1.6	32
13	Thermally induced threshold voltage instability of III-Nitride MIS-HEMTs and MOSC-HEMTs: Underlying mechanisms and optimization schemes. , 2014, , .		28
14	Analytical Modeling of Capacitances for GaN HEMTs, Including Parasitic Components. IEEE Transactions on Electron Devices, 2014, 61, 755-761.	1.6	44
15	GaNâ€toâ€Si vertical conduction mechanisms in AlGaN/GaNâ€onâ€Si lateral heterojunction FET structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 949-952.	0.8	17
16	High-$f_{{m MAX}}$ High Johnson's Figure-of-Merit 0.2- $mu{m m}$ Gate AlGaN/GaN HEMTs on Silicon Substrate With ${m AlN}/{m SiN}_{{m x}}$ Passivation. IEEE Electron Device Letters, 2014, 35, 315-317.	2.2	50
17	Al₂O₃/AlN/GaN MOS-Channel-HEMTs With an AlN Interfacial Layer. IEEE Electron Device Letters, 2014, 35, 723-725.	2.2	104
18	Influence of AlN Passivation on Dynamic ON-Resistance and Electric Field Distribution in High-Voltage AlGaN/GaN-on-Si HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 2785-2792.	1.6	52

#	Article	IF	Citations
19	A High-Voltage Low-Standby-Power Startup Circuit Using Monolithically Integrated E/D-Mode AlGaN/GaN MIS-HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 762-768.	1.6	16
20	Monolithically integrated 600-V E/D-mode SiN<inf>x</inf>/AlGaN/GaN MIS-HEMTs and their applications in low-standby-power start-up circuit for switched-mode power supplies. , 2013, , .		1
21	Mapping of interface traps in high-performance Al<inf>2</inf>O<inf>3</inf>/AlGaN/GaN MIS-heterostructures using frequency- and temperature-dependent C-V techniques. , 2013, , .		32
22	600V 1.3mμ·cm² low-leakage low-current-collapse AlGaN/GaN HEMTs with AlN/SiN<inf>x</inf> passivation. , 2013, , .		3
23	Mechanism of PEALD-Grown AlN Passivation for AlGaN/GaN HEMTs: Compensation of Interface Traps by Polarization Charges. IEEE Electron Device Letters, 2013, 34, 193-195.	2.2	110
24	High-Voltage (600-V) Low-Leakage Low-Current-Collapse AlGaN/GaN HEMTs with AlN/SiN_x Passivation. IEEE Electron Device Letters, 2013, 34, 366-368.	2.2	96
25	600-V Normally Off ${m SiN}_{x}$/AlGaN/GaN MIS-HEMT With Large Gate Swing and Low Current Collapse. IEEE Electron Device Letters, 2013, 34, 1373-1375.	2.2	223
26	Characterization ofVT-instability in enhancement-mode Al2O3-AlGaN/GaN MIS-HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1397-1400.	0.8	66
27	High-Quality Interface in ${m Al}_{2}{m O}_{3}/{m GaN}/{m GaN}/{m AlGaN}/{m GaN}$ MIS Structures With In Situ Pre-Gate Plasma Nitridation. IEEE Electron Device Letters, 2013, 34, 1497-1499.	2.2	160
28	Recent development in flourine-ion-implanted GaN-based heterojunction power devices. , 2013, , .		5
29	Effects of interface oxidation on the transport behavior of the two-dimensional-electron-gas in AlGaN/GaN heterostructures by plasma-enhanced-atomic-layer-deposited AlN passivation. Journal of Applied Physics, 2013, 114, .	1.1	16