

Zhikai Tang

List of Publications by Year in descending order

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papers

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citing authors

#	ARTICLE	IF	CITATIONS
1	600-V Normally Off $\text{SiN}_x/\text{AlGaIn}/\text{GaIn}$ MIS-HEMT With Large Gate Swing and Low Current Collapse. IEEE Electron Device Letters, 2013, 34, 1373-1375.	2.2	223
2	High-Quality Interface in $\text{Al}_2\text{O}_3/\text{GaIn}/\text{GaIn}/\text{AlGaIn}/\text{GaIn}$ MIS Structures With In Situ Pre-Gate Plasma Nitridation. IEEE Electron Device Letters, 2013, 34, 1497-1499.	2.2	160
3	Mechanism of PEALD-Grown AlN Passivation for AlGaIn/GaIn HEMTs: Compensation of Interface Traps by Polarization Charges. IEEE Electron Device Letters, 2013, 34, 193-195.	2.2	110
4	$\text{Al}_2\text{O}_3/\text{AlGaIn}/\text{GaIn}$ MOS-Channel-HEMTs With an AlN Interfacial Layer. IEEE Electron Device Letters, 2014, 35, 723-725.	2.2	104
5	High-Voltage (600-V) Low-Leakage Low-Current-Collapse AlGaIn/GaIn HEMTs with AlN/SiN _x Passivation. IEEE Electron Device Letters, 2013, 34, 366-368.	2.2	96
6	Interface/border trap characterization of Al ₂ O ₃ /AlGaIn/GaIn metal-oxide-semiconductor structures with an AlN interfacial layer. Applied Physics Letters, 2015, 106, .	1.5	74
7	Characterization of VT-instability in enhancement-mode Al ₂ O ₃ -AlGaIn/GaIn MIS-HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1397-1400.	0.8	66
8	Thermally Stable Enhancement-Mode GaIn Metal-Insulator-Semiconductor High-Electron-Mobility Transistor With Partially Recessed Fluorine-Implanted Barrier. IEEE Electron Device Letters, 2015, 36, 318-320.	2.2	55
9	Influence of AlN Passivation on Dynamic ON-Resistance and Electric Field Distribution in High-Voltage AlGaIn/GaIn-on-Si HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 2785-2792.	1.6	52
10	High- f_{MAX} High Johnson's Figure-of-Merit 0.2- μm Gate AlGaIn/GaIn HEMTs on Silicon Substrate With AlN/SiN_x Passivation. IEEE Electron Device Letters, 2014, 35, 315-317.	2.2	50
11	Analytical Modeling of Capacitances for GaIn HEMTs, Including Parasitic Components. IEEE Transactions on Electron Devices, 2014, 61, 755-761.	1.6	44
12	Surface nitridation for improved dielectric/III-nitride interfaces in GaIn MIS-HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1059-1065.	0.8	41
13	Mapping of interface traps in high-performance $\text{Al}_2\text{O}_3/\text{AlGaIn}/\text{GaIn}$ MIS-heterostructures using frequency- and temperature-dependent C-V techniques. , 2013, , .		32
14	Substrate-Coupled Cross-Talk Effects on an AlGaIn/GaIn-on-Si Smart Power IC Platform. IEEE Transactions on Electron Devices, 2014, 61, 3808-3813.	1.6	32
15	Thermally induced threshold voltage instability of III-Nitride MIS-HEMTs and MOSC-HEMTs: Underlying mechanisms and optimization schemes. , 2014, , .		28
16	Investigation of SiN _x and AlN Passivation for AlGaIn/GaIn 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
17	Normally off $\text{Al}_2\text{O}_3/\text{AlGaIn}/\text{GaIn}$ MIS-HEMT With Transparent Gate Electrode for Gate Degradation Investigation. IEEE Transactions on Electron Devices, 2015, 62, 821-827.	1.6	18
18	GaN-to-Si vertical conduction mechanisms in AlGaIn/GaIn-Si lateral heterojunction FET structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 949-952.	0.8	17

#	ARTICLE	IF	CITATIONS
19	Effects of interface oxidation on the transport behavior of the two-dimensional-electron-gas in AlGa _N /Ga _N heterostructures by plasma-enhanced-atomic-layer-deposited AlN passivation. Journal of Applied Physics, 2013, 114, .	1.1	16
20	A High-Voltage Low-Standby-Power Startup Circuit Using Monolithically Integrated E/D-Mode AlGa _N /Ga _N MIS-HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 762-768.	1.6	16
21	Characterization of SiN _x /AlN passivation stack with epitaxial AlN grown on AlGa _N /Ga _N heterojunctions by plasma-enhanced atomic layer deposition. Applied Physics Express, 2015, 8, 064101.	1.1	16
22	Dynamic Performance of AlN-Passivated AlGa _N /Ga _N MIS-High Electron Mobility Transistors Under Hard Switching Operation. IEEE Electron Device Letters, 2015, 36, 760-762.	2.2	16
23	Performance enhancement of normally-off Al ₂ O ₃ /AlN/GaN MOS-Channel-HEMTs with an ALD-grown AlN interfacial layer. , 2014, , .		7
24	Recent development in fluorine-ion-implanted Ga _N -based heterojunction power devices. , 2013, , .		5
25	600V 1.3mΩ/cm ² low-leakage low-current-collapse AlGa _N /Ga _N HEMTs with AlN/SiN _x passivation. , 2013, , .		3
26	Correction to "Thermally Stable Enhancement-Mode Ga _N Metal-Isolator-Semiconductor High-Electron-Mobility Transistor With Partially Recessed Fluorine-Implanted Barrier" [Apr 15 318-320]. IEEE Electron Device Letters, 2015, 36, 624-624.	2.2	2
27	Monolithically integrated 600-V E/D-mode SiN _x /AlGa _N /Ga _N MIS-HEMTs and their applications in low-standby-power start-up circuit for switched-mode power supplies. , 2013, , .		1
28	Surface nitridation for improved dielectric/nitride interfaces in Ga _N MIS-HEMTs (Phys. Status Solidi A) Tj ETQq000 rgBT ₀ /Overlock		0.8
29	Role of shallow surface traps and polarization charges in nitride-based passivation for AlGa _N /Ga _N heterojunction FET. , 2016, , .		0