

# Qimeng Jiang

## List of Publications by Year in descending order

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33  
papers

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citing authors

#	ARTICLE	IF	CITATIONS
1	Identification of Semi-ON-State Current Collapse in AlGaIn/GaN HEMTs by Drain Current Deep Level Transient Spectroscopy. IEEE Electron Device Letters, 2022, 43, 200-203.	3.9	11
2	An Enhancement-Mode GaN p-FET With Improved Breakdown Voltage. IEEE Electron Device Letters, 2022, 43, 1191-1194.	3.9	14
3	Impact of $V_{DS}$ Instability on Time-Resolved Characteristics of MIS-HEMT-Based GaN Power IC. IEEE Electron Device Letters, 2021, 42, 1440-1443.	3.9	4
4	Identification of bulk and interface state-induced threshold voltage instability in metal/SiNx(insulator)/AlGaIn/GaN high-electron-mobility transistors using deep-level transient spectroscopy. Applied Physics Letters, 2021, 119, .	3.3	7
5	Proposal of a GaN/SiC Hybrid Field-Effect Transistor for Power Switching Applications. IEEE Transactions on Electron Devices, 2016, 63, 2469-2473.	3.0	53
6	Proposal of a novel GaN/SiC hybrid FET (HyFET) with enhanced performance for high-voltage switching applications. , 2016, , .		4
7	Surface nitridation for improved dielectric/III-nitride interfaces in GaN MIS-HEMTs (Phys. Status Solidi A) Tj EQ <sub>1.1</sub> 0.784314 rgB <sub>1.8</sub> 0	1.8	41
8	Correction to "Thermally Stable Enhancement-Mode GaN 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.	3.9	2
9	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.	3.9	55
10	Surface nitridation for improved dielectric/III-nitride interfaces in GaN MIS-HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1059-1065.	1.8	41
11	Normally off Al <sub>0.2</sub> In <sub>0.8</sub> GaN MIS-HEMT With Transparent Gate Electrode for Gate Degradation Investigation. IEEE Transactions on Electron Devices, 2015, 62, 821-827.	3.0	18
12	A GaN Pulse Width Modulation Integrated Circuit for GaN Power Converters. IEEE Transactions on Electron Devices, 2015, 62, 1143-1149.	3.0	53
13	Dynamic Performance of AlN-Passivated AlGaIn/GaN MIS-High Electron Mobility Transistors Under Hard Switching Operation. IEEE Electron Device Letters, 2015, 36, 760-762.	3.9	16
14	Substrate-Coupled Cross-Talk Effects on an AlGaIn/GaN-on-Si Smart Power IC Platform. IEEE Transactions on Electron Devices, 2014, 61, 3808-3813.	3.0	32
15	Schottky-on-heterojunction optoelectronic functional devices realized on AlGaIn/GaN-on-Si platform. , 2014, , .		6
16	Technology for III-nitride heterogeneous mixed-signal electronics. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 769-774.	1.8	7
17	Investigation of buffer traps in AlGaIn/GaN-on-Si devices by thermally stimulated current spectroscopy and back-gating measurement. Applied Physics Letters, 2014, 104, .	3.3	50
18	GaN-to-Si vertical conduction mechanisms in AlGaIn/GaN-on-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	Degradation of transient OFF-state leakage current in AlGaIn/GaN HEMTs induced by ON-state gate overdrive. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 928-931.	0.8	16
20	High- $f_{MAX}$ High Johnson's Figure-of-Merit 0.2- $\mu m$ Gate AlGaIn/GaN HEMTs on Silicon Substrate With $AlN/SiN_x$ Passivation. IEEE Electron Device Letters, 2014, 35, 315-317.	3.9	50
21	Al <sub>0.2</sub> O <sub>3</sub> /AlN/GaN MOS-Channel-HEMTs With an AlN Interfacial Layer. IEEE Electron Device Letters, 2014, 35, 723-725.	3.9	104
22	A High-Voltage Low-Standby-Power Startup Circuit Using Monolithically Integrated E/D-Mode AlGaIn/GaN MIS-HEMTs. IEEE Transactions on Electron Devices, 2014, 61, 762-768.	3.0	16
23	Vertical power diodes in bulk GaN. , 2014, , .		23
24	High-voltage enhancement/Depletion-mode AlGaIn/GaN HEMTs on modified SOI substrates. , 2013, , .		1
25	Monolithically integrated 600-V E/D-mode SiN <sub>x</sub> /AlGaIn/GaN MIS-HEMTs and their applications in low-standby-power start-up circuit for switched-mode power supplies. , 2013, , .		1
26	600V 1.3m $\Omega$ cm <sup>2</sup> low-leakage low-current-collapse AlGaIn/GaN HEMTs with AlN/SiN <sub>x</sub> passivation. , 2013, , .		3
27	1.4-kV AlGaIn/GaN HEMTs on a GaN-on-SOI Platform. IEEE Electron Device Letters, 2013, 34, 357-359.	3.9	53
28	High-Voltage (600-V) Low-Leakage Low-Current-Collapse AlGaIn/GaN HEMTs with AlN/SiN <sub>x</sub> Passivation. IEEE Electron Device Letters, 2013, 34, 366-368.	3.9	96
29	600-V Normally Off $SiN_x$ /AlGaIn/GaN MIS-HEMT With Large Gate Swing and Low Current Collapse. IEEE Electron Device Letters, 2013, 34, 1373-1375.	3.9	223
30	Characterization of VT-instability in enhancement-mode Al <sub>2</sub> O <sub>3</sub> -AlGaIn/GaN MIS-HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1397-1400.	0.8	66
31	Vertical Leakage/Breakdown Mechanisms in AlGaIn/GaN-on-Si Devices. IEEE Electron Device Letters, 2012, 33, 1132-1134.	3.9	170
32	Vertical leakage/breakdown mechanisms in AlGaIn/GaN-on-Si structures. , 2012, , .		13
33	Effective Passivation of AlGaIn/GaN HEMTs by ALD-Grown AlN Thin Film. IEEE Electron Device Letters, 2012, 33, 516-518.	3.9	213