Yunyou Lu

List of Publications by Year in descending order

30 papers	1,048 citations	623574 14 h-index	940416 16 g-index
31 all docs	31 docs citations	31 times ranked	984 citing authors

#	Article	IF	Citations
1	Investigation of SiN_x 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	Trapping mechanisms in insulatedâ€gate GaN power devices: Understanding and characterization techniques. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600607.	0.8	10
3	Role of shallow surface traps and polarization charges in nitride-based passivation for AlGaN/GaN heterojunction FET. , 2016, , .		0
4	Impact of Vth shift on Ron in E/D-mode GaN-on-Si power transistors: Role of dynamic stress and gate overdrive. , 2016, , .		7
5	On-chip addressable Schottky-on-heterojunction light-emitting diode arrays on AlGaN/GaN-on-Si platform. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 365-368.	0.8	4
6	Compatibility of AlN/SiN_xPassivation With LPCVD-SiN_xGate Dielectric in GaN-Based MIS-HEMT. IEEE Electron Device Letters, 2016, 37, 265-268.	2.2	29
7	Dynamic Gate Stress-Induced $V_{ext {TH}}$ Shift and Its Impact on Dynamic $R_{mathrm {ON}}$ in GaN MIS-HEMTs. IEEE Electron Device Letters, 2016, 37, 157-160.	2.2	36
8	Surface nitridation for improved dielectric/IIIâ€nitride interfaces in GaN MISâ€HEMTs (Phys. Status Solidi A) Tj ETQq0 0 0 rgBT /Overlock	0.8	0
9	Nitridation interfacial-layer technology for enhanced stability in GaN-based power devices. , 2015, , .		0
10	AC-Capacitance Techniques for Interface Trap Analysis in GaN-Based Buried-Channel MIS-HEMTs. IEEE Transactions on Electron Devices, 2015, 62, 1870-1878.	1.6	79
11	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
12	Enhancement-mode GaN double-channel MOS-HEMT with low on-resistance and robust gate recess. , 2015, , .		38
13	III-Nitride transistors with photonic-ohmic drain for enhanced dynamic performances. , 2015, , .		18
14	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
15	Normally-off GaN MIS-HEMT with improved thermal stability in DC and dynamic performance. , 2015, , .		4
16	Characterization of SiN_x/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
17	Low On-Resistance Normally-Off GaN Double-Channel Metalâ€“Oxideâ€“Semiconductor High-Electron-Mobility Transistor. IEEE Electron Device Letters, 2015, 36, 1287-1290.	2.2	88
18	650-V GaN-based MIS-HEMTs using LPCVD-SiNx as passivation and gate dielectric. , 2015, , .		8

#	Article	IF	Citations
19	Mechanisms of thermally induced threshold voltage instability in GaN-based heterojunction transistors. Applied Physics Letters, 2014, 105, .	1.5	19
20	Schottky-on-heterojunction optoelectronic functional devices realized on AlGaN/GaN-on-Si platform. , 2014, , .		6
21	High-temperature low-damage gate recess technique and ozone-assisted ALD-grown Al<inf>2</inf>O<inf>3</inf> gate dielectric for high-performance normally-off GaN MIS-HEMTs. , 2014, , .		28
22	Thermally induced threshold voltage instability of III-Nitride MIS-HEMTs and MOSC-HEMTs: Underlying mechanisms and optimization schemes. , 2014, , .		28
23	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
24	High-voltage enhancement/Depletion-mode AlGaN/GaN HEMTs on modified SOI substrates. , 2013, , .		1
25	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
26	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
27	1.4-kV AlGaN/GaN HEMTs on a GaN-on-SOI Platform. IEEE Electron Device Letters, 2013, 34, 357-359.	2.2	53
28	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
29	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
30	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