

# Jing Zhu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8687516/publications.pdf>

Version: 2024-02-01

90  
papers

631  
citations

686830

13  
h-index

794141

19  
g-index

90  
all docs

90  
docs citations

90  
times ranked

364  
citing authors

#	ARTICLE	IF	CITATIONS
1	Study and Implementation of 600-V High-Voltage Gate Driver IC With the Common-Mode Dual-Interlock Technique for GaN Devices. IEEE Transactions on Industrial Electronics, 2021, 68, 1506-1514.	5.2	7
2	Simulation Study of A 1200V 4H-SiC Lateral MOSFET With Reduced Saturation Current. IEEE Electron Device Letters, 2021, 42, 1037-1040.	2.2	12
3	A 500V SOI-LIGBT With Multiple Deep-Oxide Trenches For Fast Turn-OFF. , 2021, , .		0
4	Low On-Resistance SOI-LDMOS With Mobility-Enhancing Auxiliary Cell. , 2021, , .		2
5	Simulation Study of Novel Trench Gate U-Shaped Channel SOI Lateral IGBTs With Suppressed Gate Voltage Overshoot and Reduced $\frac{di}{dt}$ . IEEE Transactions on Electron Devices, 2021, 68, 3930-3935.	1.6	2
6	Silicon-on-Insulator Lateral DMOS With Potential Modulation Plates and Multiple Deep-Oxide Trenches. IEEE Transactions on Electron Devices, 2021, 68, 5073-5077.	1.6	5
7	Device and Circuit Design for Improving the Freewheeling Characteristics of High Voltage Monolithic Integrated Circuit. IEEE Transactions on Industrial Electronics, 2021, 68, 11420-11427.	5.2	0
8	Resonance-based bandwidth Fourier decomposition method for gearbox fault diagnosis. Measurement Science and Technology, 2021, 32, 035003.	1.4	4
9	A 600V high voltage gate driver IC with excellent allowable negative VS bias capability for E-mode GaN power devices. Analog Integrated Circuits and Signal Processing, 2020, 104, 27-36.	0.9	0
10	Analysis of OFF-state dynamic avalanche instability in silicon-on-insulator lateral IGBTs at low temperature. Microelectronics Reliability, 2020, 107, 113600.	0.9	1
11	A self-adaptive pulse generator to realize extremely low power consumption and high reliability of high voltage gate driver IC. Analog Integrated Circuits and Signal Processing, 2020, 105, 13-20.	0.9	1
12	Integrated 100 V bootstrap diode with enhanced reverse recovery characteristics for eGaN field effect transistor gate drivers. Electronics Letters, 2020, 56, 308-309.	0.5	0
13	Enhanced Lightweight Multiscale Convolutional Neural Network for Rolling Bearing Fault Diagnosis. IEEE Access, 2020, 8, 217723-217734.	2.6	22
14	Resonance-based sparse improved fast independent component analysis and its application to the feature extraction of planetary gearboxes. Journal of Mechanical Science and Technology, 2020, 34, 4465-4474.	0.7	1
15	Resonance-based sparse adaptive variational mode decomposition and its application to the feature extraction of planetary gearboxes. PLoS ONE, 2020, 15, e0231540.	1.1	5
16	Adaptive Bandwidth Fourier Decomposition Method for Multi-Component Signal Processing. IEEE Access, 2019, 7, 109776-109791.	2.6	9
17	A single-switched high-switching-frequency quasi-resonant flyback converter with zero-current-switching and valley-switching. , 2019, , .		8
18	An efficiency optimization method for a high frequency quasi-ZVS controlled resonant flyback converter. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
19	Impact of Depelction in Substrate on Turn-off Characteristic of Superjunction SOI-LIGBT. , 2019, , .		2
20	Experimental Study on the Electrical Properties of Lateral IGBT Under the Mechanical Strain. , 2019, , .		1
21	Gate Control Circuit for the LIGBT to Improve the Freewheeling Characteristics in Monolithic IC. , 2019, , .		0
22	Influence of Gate Connection Modes on Trade-offs in Trench Gate U-shaped Channel SOI-LIGBT. , 2019, , .		0
23	Modeling and Simulation the Effect of Electron Irradiation on the Reverse Recovery of Double-Epitaxy SJ-VDMOS. , 2019, , .		0
24	Mechanism and Novel Structure for di/dt Controllability in U-Shaped Channel Silicon-on-Insulator Lateral IGBTs. IEEE Electron Device Letters, 2019, 40, 1658-1661.	2.2	9
25	Experimental Investigation on the Electrical Properties of Lateral IGBT Under Mechanical Strain. IEEE Electron Device Letters, 2019, 40, 937-940.	2.2	6
26	The prevalence, temporal trends, and geographical distribution of HIV-1 subtypes among men who have sex with men in China: A systematic review and meta-analysis. Epidemiology and Infection, 2019, 147, e83.	1.0	28
27	Turn-Off Transient of Superjunction SOI Lateral IGBTs: Mechanism and Optimization Strategy. IEEE Transactions on Electron Devices, 2019, 66, 1409-1415.	1.6	11
28	A Novel Reverse Conducting SOI-LIGBT with Double Integrated NMOS for Enhanced Reverse Recovery. , 2019, , .		1
29	Low-Loss SOI-LIGBT With Assistant-Depletion Trench and Partial P-type Buried Layer. , 2019, , .		1
30	100 V Integrated Bootstrap Diode with Dynamic Field Limiting Rings for Solving Reverse Recovery Failure in GaN Gate Driver ICs. , 2019, , .		0
31	Comprehensive Investigation on Electrical Properties of nLDMOS and pLDMOS Under Mechanical Strain. IEEE Transactions on Electron Devices, 2019, 66, 1012-1017.	1.6	8
32	A 600V PiN diode with partial recessed anode and double-side Schottky engineering for fast reverse recovery. Superlattices and Microstructures, 2019, 128, 56-66.	1.4	0
33	500-V Silicon-On-Insulator Lateral IGBT With W-Shaped n-Typed Buffer and Composite p-Typed Collectors. IEEE Transactions on Electron Devices, 2019, 66, 1430-1434.	1.6	11
34	Characteristics of the vaginal microbiome in cross-border female sex workers in China: a case-control study. PeerJ, 2019, 7, e8131.	0.9	4
35	Noise Immunity and its Temperature Characteristics Study of the Capacitive-Loaded Level Shift Circuit for High Voltage Gate Drive IC. IEEE Transactions on Industrial Electronics, 2018, 65, 3027-3034.	5.2	21
36	Influence of Emitter-side Deep-oxide Trenches on Dynamic Avalanche Capability of SOI Lateral IGBTs Used for Monolithic Power ICs. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
37	One cycle start-up time, high linearity relaxation oscillator with capacitor pre-charge technique. Electronics Letters, 2018, 54, 1206-1208.	0.5	1
38	A high-speed SOI-LIGBT with electric potential modulation trench and low-doped buried layer. , 2018, , .		4
39	A 600V high-side gate drive circuit with ultra-low propagation delay for enhancement mode GaN devices. , 2018, , .		5
40	Comprehensive investigation on mechanical strain induced performance boosts in LDMOS. , 2018, , .		6
41	Optimization of $V_{CE}$ Plateau for Deep-Oxide Trench SOI Lateral IGBT During Inductive Load Turn-OFF. IEEE Transactions on Electron Devices, 2018, 65, 3862-3868.	1.6	9
42	Novel Snapback-Free Reverse-Conducting SOI-LIGBT With Dual Embedded Diodes. IEEE Transactions on Electron Devices, 2017, 64, 1187-1192.	1.6	21
43	1200 V FSâ€¦IGBT with electric field modulation layer to improve trade-off between avalanche ruggedness and on-state voltage drop. Electronics Letters, 2017, 53, 100-102.	0.5	2
44	A U-Shaped Channel SOI-LIGBT With Dual Trenches. IEEE Transactions on Electron Devices, 2017, 64, 2587-2591.	1.6	16
45	Low-Loss SOI-LIGBT With Dual Deep-Oxide Trenches. IEEE Transactions on Electron Devices, 2017, 64, 3282-3286.	1.6	15
46	Comparison of short-circuit characteristics of trench gate and planar gate U-shaped channel SOI-LIGBTs. Solid-State Electronics, 2017, 135, 24-30.	0.8	6
47	A high linearity current-controlled CMOS relaxation oscillator with frequency self-calibration technique. Analog Integrated Circuits and Signal Processing, 2017, 92, 29-37.	0.9	2
48	A new high-voltage interconnection shielding method for SOI monolithic ICs. Solid-State Electronics, 2017, 133, 25-30.	0.8	7
49	Turn-off failure in multi-finger SOI-LIGBT used for single chip inverter ICs. Solid-State Electronics, 2017, 137, 29-37.	0.8	7
50	Investigation on Self-Adjust Conductivity Modulation SOI-LIGBT Structure (SCM-LIGBT) for Monolithic High-Voltage IC. IEEE Transactions on Electron Devices, 2017, 64, 3762-3767.	1.6	11
51	Fast recovery SOI PiN diode with multiple trenches. Superlattices and Microstructures, 2017, 111, 405-413.	1.4	4
52	A composite structure named self-adjusted conductivity modulation SOI-LIGBT with low on-state voltage. , 2017, , .		3
53	Study on EMI Characteristics of the Superjunction DMOS in Flyback Converter System. IEEE Transactions on Device and Materials Reliability, 2017, 17, 692-697.	1.5	3
54	Low-Loss SOI-LIGBT With Triple Deep-Oxide Trenches. IEEE Transactions on Electron Devices, 2017, 64, 3756-3761.	1.6	15

#	ARTICLE	IF	CITATIONS
55	Investigations of inhomogeneous reverse recovery behavior of the body diode in superjunction MOSFET. , 2017, , .		10
56	Analysis of clamped inductive turn-off failure of multi-finger lateral IGBT in SOI single chip inverter ICs. , 2017, , .		1
57	U-shaped channel SOI-LIGBT with dual trenches to improve the trade-off between saturation voltage and turn-off loss. , 2017, , .		6
58	A 0.048ns/°C delay generator with variation self-calibration structure(VSCS) for HVICs. , 2016, , .		0
59	High-Voltage Electron Injection Enhanced TC-LIGBT on 1.5- $\mu\text{m}$ -Thin SOI Layer for Reducing the Forward Voltage Drop. IEEE Transactions on Electron Devices, 2016, 63, 4873-4879.	1.6	1
60	A novel split-gate structure for 85V application with low output capacitance. , 2016, , .		1
61	Further Study of the U-Shaped Channel SOI-LIGBT With Enhanced Current Density for High-Voltage Monolithic ICs. IEEE Transactions on Electron Devices, 2016, 63, 1161-1167.	1.6	37
62	Electrical Characteristic Study of an SOI-LIGBT With Segmented Trenches in the Anode Region. IEEE Transactions on Electron Devices, 2016, 63, 2003-2008.	1.6	37
63	A novel high-voltage interconnection structure with dual trenches for 500V SOI-LIGBT. , 2016, , .		7
64	Wide range temperature sensor with adaptive nonlinearity cancellation (ANC) technique for HVICs. Electronics Letters, 2016, 52, 458-460.	0.5	1
65	Bipolar gate drive integrated circuit for insulated gate bipolar transistor to achieve better tradeoff between the turn-off losses and collector voltage overshoot. IET Circuits, Devices and Systems, 2016, 10, 410-416.	0.9	7
66	A 120V/us high slew rate Operational Transconductance Amplifier with improved dynamic-output control technique (DOCT). , 2016, , .		0
67	An Integrated Bootstrap Diode Emulator for 600-V High Voltage Gate Drive IC With P-Sub/P-Epi Technology. IEEE Transactions on Power Electronics, 2016, 31, 518-523.	5.4	14
68	500 V SOI lateral pin diode with dual deep-oxide trenches for fast reverse recovery and suppressed oscillation. Electronics Letters, 2016, 52, 71-73.	0.5	0
69	A Novel Silicon-on-Insulator Lateral Insulated-Gate Bipolar Transistor With Dual Trenches for Three-Phase Single Chip Inverter ICs. IEEE Electron Device Letters, 2015, 36, 693-695.	2.2	28
70	500 V dual gate deep-oxide trench SOI-LIGBT with improved short-circuit immunity. Electronics Letters, 2015, 51, 78-80.	0.5	2
71	A high current density SOI-LIGBT with Segmented Trenches in the Anode region for suppressing negative differential resistance regime. , 2015, , .		23
72	High voltage thick SOI-LIGBT with high current density and latch-up immunity. , 2015, , .		24

#	ARTICLE	IF	CITATIONS
73	A capacitive-loaded level shift circuit for improving the noise immunity of high voltage gate drive IC. , 2015, , .		16
74	Robust 600 V high-voltage gate drive IC with low-temperature coefficient propagation delay time. IET Circuits, Devices and Systems, 2014, 8, 576-582.	0.9	1
75	Low-jitter, high-linearity current-controlled complementary metal oxide semiconductor relaxation oscillator with optimised floating capacitors. IET Circuits, Devices and Systems, 2014, 8, 509-515.	0.9	4
76	1 ppm/°C bandgap with multipoint curvature-compensation technique for HVIC. Electronics Letters, 2014, 50, 1908-1910.	0.5	3
77	TC-LIGBTs on the Thin Sol Layer for the High Voltage Monolithic ICs With High Current Density and Latch-Up Immunity. IEEE Transactions on Electron Devices, 2014, 61, 3814-3820.	1.6	11
78	Investigation on Electrical Degradation of High Voltage nLDMOS After High Temperature Reverse Bias Stress. IEEE Transactions on Device and Materials Reliability, 2014, 14, 651-656.	1.5	5
79	A novel sub-1V bandgap reference with offset compensated techniques. Analog Integrated Circuits and Signal Processing, 2014, 78, 391-397.	0.9	1
80	A novel BEM-LIGBT with high current density on thin SOI layer for 600V HVIC. Solid-State Electronics, 2014, 100, 33-38.	0.8	0
81	A fast transient response synchronous Buck converter with modified ripple-based control (MRBC) technique. , 2013, , .		1
82	700V thin SOI-LIGBT with high current capability. , 2013, , .		6
83	A novel Operational Transconductance Amplifier with high $G_{m<inf>m</inf>}$ using improved differential current redistribution technique (DCRT). , 2013, , .		1
84	Negative voltage surge resistant circuit design in HVIC. Electronics Letters, 2013, 49, 1476-1477.	0.5	6
85	On state output characteristics and transconductance analysis of high voltage (600V) SJ-VDMOS. , 2012, , .		2
86	A novel double-well isolation structure for high voltage ICs. , 2012, , .		5
87	Electrical Characteristic Investigation on a Novel Double-Well Isolation Structure in 600-V-Class High-Voltage Integrated Circuits. IEEE Transactions on Electron Devices, 2012, 59, 3477-3481.	1.6	13
88	A novel compact isolated structure for 600V Gate Drive IC. , 2011, , .		1
89	The influence of the input capacitor on the ESD behavior. , 2011, , .		0
90	Effects of Ca-Based Catalysts on Biomass Gasification with Steam in a Circulating Spout-Fluid Bed Reactor. Energy & Fuels, 2010, 24, 3256-3261.	2.5	35