Weifeng Sun

List of Publications by Year in Descending Order

148 papers	911 citations	15 h-index	21 g-index
166 ext. papers	1,261 ext. citations	3.4 avg, IF	4.54 L-index

#	Paper	IF	Citations
148	Comprehensive Investigation on Electrical Properties of Split-Gate Trench Power MOSFETs Under Mechanical Strains. *IEEE Transactions on Electron Devices*, **2022**, 1-5	2.9	1
147	Experimental Investigations on the Electrical Properties of 4H-SiC Power MOSFETs Under Biaxial and Uniaxial Mechanical Strains. *IEEE Transactions on Power Electronics*, **2022**, 37, 55-58	7.2	0
146	Unclamped-Inductive-Switching Behaviors of p-GaN HEMTs at Cryogenic Temperature. *IEEE Transactions on Power Electronics*, **2022**, 1-1	7.2	0
145	A Silicon-On-Insulator Lateral IGBT With Segmented Trenches for Improving Short-Circuit Withstanding Capability. *IEEE Transactions on Electron Devices*, **2022**, 1-4	2.9	1
144	Hot-Carrier-Induced Reliability for Lateral DMOS Transistors With Split-STI Structures. *IEEE Journal of the Electron Devices Society*, **2021**, 9, 1188-1193	2.3	
143	Novel Multiple-Layer Stack Capacitor and Its Application in the IRPFA Readout Circuit. *IEEE Access*, **2021**, 9, 161806-161813	3.5	1
142	Investigation on the Degradation Mechanism for GaN Cascode Device Under Repetitive Hard-Switching Stress. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	0
141	Electrical performances degradations and physics based mechanisms under negative bias temperature instability stress for p-GaN gate high electron mobility transistors. *Semiconductor Science and Technology*, **2021**, 36, 014007	1.8	3
140	Hot-Carrier-Induced Reliability Concerns for Lateral DMOS Transistors with Split-STI Structures **2021**,		1
139	System Performance Optimization for Dual-Loop Dual-Variable Controlled Active Clamp Flyback Converter Using Decoupling Compensation Technique **2021**,		1
138	. *IEEE Transactions on Electron Devices*, **2021**, 68, 3483-3489	2.9	0
137	Verification of Single-Pulse Avalanche Failure Mechanism for Double-Trench SiC Power MOSFETs. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 2190-2200	5.6	5
136	Investigations on Electrical Parameters Degradations of p-GaN HEMTs Under Repetitive UIS Stresses. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 2227-2234	5.6	4
135	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	8.9	2
134	. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 3307-3321	5.6	1
133	Design and implementation of a hybrid DPWM under 50 ps resolution based on general-purpose FPGA. *International Journal of Circuit Theory and Applications*, **2021**, 49, 114-127	2	1
132	Small Signal Modeling and Control Loop Design of Critical Conduction Mode Active Clamp Flyback Converter. *IEEE Transactions on Power Electronics*, **2021**, 36, 7250-7263	7.2	4

131	Lightning Surge Robustness Analysis and Optimization for an LED Driver Based on a Flyback Converter. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 10449-10458	8.9	1
130	Investigation on the Degradation Mechanism for SiC Power MOSFETs Under Repetitive Switching Stress. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 2180-2189	5.6	5
129	A Two-Stage BuckBoost Integrated LLC Converter With Extended ZVS Range and Reduced Conduction Loss for High-Frequency and High-Efficiency Applications. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2021**, 9, 727-743	5.6	10
128	Simulation Study of A 1200V 4H-SiC Lateral MOSFET With Reduced Saturation Current. *IEEE Electron Device Letters*, **2021**, 1-1	4.4	3
127	Experimental investigation on total-ionizing-dose radiation effects on the electrical properties of SOI-LIGBT. *Solid-State Electronics*, **2021**, 175, 107952	1.7	1
126	Comparison Investigations on Unclamped-Inductive-Switching Behaviors of Power GaN Switching Devices. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	7
125	Numerical Study of Novel GaN HEMTs With Integrated SBDs for Ultrahigh Reverse Conduction Capability. *IEEE Transactions on Electron Devices*, **2021**, 68, 931-933	2.9	0
124	A Novel Digital Control Method of Primary-Side Regulated Flyback With Active Clamping Technique. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2021**, 68, 950-962	3.9	4
123	Simulation Study of Novel Trench Gate U-Shaped Channel SOI Lateral IGBTs With Suppressed Gate Voltage Overshoot and Reduced di/dt. *IEEE Transactions on Electron Devices*, **2021**, 68, 3930-3935	2.9	
122	. *IEEE Transactions on Power Electronics*, **2021**, 36, 10827-10841	7.2	4
121	Quasisaturation Effect and Optimization for 4H-SiC Trench MOSFET With P+ Shielding Region. *IEEE Transactions on Electron Devices*, **2021**, 68, 4550-4556	2.9	0
120	High-Voltage a-IGZO TFTs With the Stair Gate-Dielectric Structure. *IEEE Transactions on Electron Devices*, **2021**, 68, 4462-4466	2.9	2
119	Silicon-on-Insulator Lateral DMOS With Potential Modulation Plates and Multiple Deep-Oxide Trenches. *IEEE Transactions on Electron Devices*, **2021**, 68, 5073-5077	2.9	3
118	Device and Circuit Design for Improving the Freewheeling Characteristics of High Voltage Monolithic Integrated Circuit. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 11420-11427	8.9	
117	An Ultraviolet Photon Counting Imaging System Based on a SiC SPAD Array. *IEEE Photonics Technology Letters*, **2021**, 33, 1213-1216	2.2	
116	Understanding Electrical Parameter Degradations of P-GaN HEMT Under Repetitive Short-Circuit Stresses. *IEEE Transactions on Power Electronics*, **2021**, 36, 12173-12176	7.2	1
115	An Improved Adaptive Synchronous Rectification Method With the Enhanced Capacity to Eliminate Reverse Current. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	2
114	Performance Boosts in n-Type Lateral Double-Diffused MOSFET With Process-Induced Strain Using Contact Etch Stop Layer Stressor. *IEEE Transactions on Electron Devices*, **2021**, 68, 421-424	2.9	3

113	. *IEEE Transactions on Electron Devices*, **2020**, 67, 3492-3495	2.9	5
112	Sampled-Data Modeling for PCM and ZVS Controlled Critical Conduction Mode (CrCM) Active Clamp Flyback (ACF) Converter at Variable Switching Frequency. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2020**, 67, 3588-3600	3.9	6
111	Hot-Carrier-Induced Degradation and Optimization for 700-V High-Voltage Lateral DMOS by the AC Stress. *IEEE Transactions on Electron Devices*, **2020**, 67, 1090-1097	2.9	2
110	High-temperature electrical performances and physics-based analysis of p-GaN HEMT device. *IET Power Electronics*, **2020**, 13, 420-425	2.2	7
109	Single Pulse Unclamped-Inductive-Switching Induced Failure and Analysis for 650 V p-GaN HEMT. *IEEE Transactions on Power Electronics*, **2020**, 35, 11328-11331	7.2	8
108	Super Field Plate Technique That Can Provide Charge Balance Effect for Lateral Power Devices Without Occupying Drift Region. *IEEE Transactions on Electron Devices*, **2020**, 67, 2218-2222	2.9	4
107	New Digital Control Method for Improving Dynamic Response of Synchronous Rectified PSR Flyback Converter With CCM and DCM Modes. *IEEE Transactions on Power Electronics*, **2020**, 35, 12347-12358	7.2	3
106	Modeling Avalanche Induced Degradation for 4H-SiC Power MOSFETs. *IEEE Transactions on Power Electronics*, **2020**, 35, 11299-11303	7.2	4
105	Breakdown Voltage Walk-in Phenomenon and Optimization for the Trench-Gate p-Type VDMOS Under Single Avalanche Stress. *IEEE Transactions on Electron Devices*, **2020**, 67, 2445-2450	2.9	3
104	Reliability Concerns on LDMOS With Different Split-STI Layout Patterns. *IEEE Transactions on Electron Devices*, **2020**, 67, 185-192	2.9	2
103	Small-signal modelling for time-length compensation algorithm in current controlled converters. *International Journal of Circuit Theory and Applications*, **2020**, 48, 148-155	2	1
102	Single-Pulse Avalanche Failure Investigations of Si-SJ-mosfet and SiC-mosfet by Step-Control Infrared Thermography Method. *IEEE Transactions on Power Electronics*, **2020**, 35, 5180-5189	7.2	4
101	A New Modulation Strategy for Four-switch Buck-boost Converter with Reduced Freewheeling Current **2020**,		2
100	Analysis of OFF-state dynamic avalanche instability in silicon-on-insulator lateral IGBTs at low temperature. *Microelectronics Reliability*, **2020**, 107, 113600	1.2	
99	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	1.2	1
98	Complete Avalanche Process and Failure Mechanism of Trench-Gate FS-IGBT Under Unclamped Inductive Switching by Using Infrared Visualization Method. *IEEE Transactions on Electron Devices*, **2020**, 67, 3908-3911	2.9	2
97	Understanding Short-Circuit Failure Mechanism of Double-Trench SiC Power MOSFETs. *IEEE Transactions on Electron Devices*, **2020**, 67, 5593-5599	2.9	7
96	Experimental Investigation on the Electrical Properties of SOI-LIGBT Under Total-Ionizing-Dose Radiation **2020**,		1

95	Integrated 100 V bootstrap diode with enhanced reverse recovery characteristics for eGaN-field effect transistor gate drivers. *Electronics Letters*, **2020**, 56, 308-309	1.1	
94	Resonance Reduction by Optimal Switch Angle Selection in Switched Reluctance Motor. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 1867-1877	8.9	10
93	A Digital Control Scheme for PSR Flyback Converter in CCM and DCM. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2020**, 8, 2837-2849	5.6	8
92	Analog Compensator Design for Half Bridge LLC Resonant Converter **2019**,		1
91	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	4.4	6
90	Hot-Carrier-Induced Degradation and Optimization for Lateral DMOS With Split-STI-Structure in the Drift Region. *IEEE Transactions on Electron Devices*, **2019**, 66, 2869-2875	2.9	2
89	Reliability concern of quasi-vertical GaN Schottky barrier diode under high temperature reverse bias stress. *Superlattices and Microstructures*, **2019**, 130, 233-240	2.8	1
88	Experimental Investigation on the Electrical Properties of Lateral IGBT Under Mechanical Strain. *IEEE Electron Device Letters*, **2019**, 40, 937-940	4.4	4
87	A Wide Dynamic Range and Low Bit Error Pixel TDC Suitable for Array Application. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2019**, 66, 1805-1809	3.5	2
86	Comprehensive Investigations on Degradations of Dynamic Characteristics for SiC Power MOSFETs Under Repetitive Avalanche Shocks. *IEEE Transactions on Power Electronics*, **2019**, 34, 2748-2757	7.2	23
85	Integrated GaN MIS-HEMT with Multi-Channel Heterojunction SBD Structures **2019**,		3
84	Analysis and optimization of the switching noise for Super-junction MOSFET in full bridge converter system. *Solid-State Electronics*, **2019**, 161, 107638	1.7	
83	Anomalous output characteristics shrinkage in STI-LDMOS transistor after repetitive I-V scanning measurements. *Superlattices and Microstructures*, **2019**, 128, 204-211	2.8	
82	Turn-Off Transient of Superjunction SOI Lateral IGBTs: Mechanism and Optimization Strategy. *IEEE Transactions on Electron Devices*, **2019**, 66, 1409-1415	2.9	9
81	Comprehensive Investigation on Electrical Properties of nLDMOS and pLDMOS Under Mechanical Strain. *IEEE Transactions on Electron Devices*, **2019**, 66, 1012-1017	2.9	6
80	A 600V PiN diode with partial recessed anode and double-side Schottky engineering for fast reverse recovery. *Superlattices and Microstructures*, **2019**, 128, 56-66	2.8	
79	. *IEEE Transactions on Electron Devices*, **2019**, 66, 1430-1434	2.9	7
78	Investigations on the Degradations of Double-Trench SiC Power MOSFETs Under Repetitive Avalanche Stress. *IEEE Transactions on Electron Devices*, **2019**, 66, 546-552	2.9	28

77	A Single-Switched High-Switching-Frequency Quasi-Resonant Flyback Converter. *IEEE Transactions on Power Electronics*, **2019**, 34, 8775-8786	7.2	9
76	A Phase-Shift Triple Full-Bridge Converter With Three Shared Leading Legs. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2018**, 6, 1912-1920	5.6	8
75	Mobility Fluctuation-Induced Low-Frequency Noise in Ultrascaled Ge Nanowire nMOSFETs With Near-Ballistic Transport. *IEEE Transactions on Electron Devices*, **2018**, 65, 2573-2577	2.9	3
74	A Low-Cost Constant Current Control Method for DCM and CCM in Digitally Controlled Primary-Side Regulation Flyback Converter. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2018**, 6, 1483-1494	5.6	19
73	Fast Computation of Radial Vibration in Switched Reluctance Motors. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 4588-4598	8.9	26
72	A digital detecting method for synchronous rectification based on dual-verification for LLC resonant converter **2018**,		11
71	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	8.9	8
70	Investigation on degradation mechanism and optimization for SiC power MOSFETs under long-term short-circuit stress **2018**,		9
69	A simple average current control with time-length equality for primary-side regulation flyback converter with constant output current control. *International Journal of Circuit Theory and Applications*, **2018**, 46, 2477-2494	2	4
68	Comprehensive investigation on mechanical strain induced performance boosts in LDMOS **2018**,		3
67	Duty-cycle-accelerated hot-carrier degradation and lifetime evaluation for 700V lateral DMOS **2018** ,		1
66	Optimization of ${V}_{text{CE}}$ Plateau for Deep-Oxide Trench SOI Lateral IGBT During Inductive Load Turn-OFF. *IEEE Transactions on Electron Devices*, **2018**, 65, 3862-3868	2.9	6
65	An Integrated Bias Voltage Control Method for SPAD Arrays. *IEEE Photonics Technology Letters*, **2018**, 30, 1723-1726	2.2	2
64	Switch-OFF Avalanche-Breakdown-Induced Electrical Degradations of RF-LDMOS Transistor for SMPAs Applications. *IEEE Transactions on Electron Devices*, **2018**, 65, 4719-4723	2.9	2
63	A Review on Hot-Carrier-Induced Degradation of Lateral DMOS Transistor. *IEEE Transactions on Device and Materials Reliability*, **2018**, 18, 298-312	1.6	16
62	Extraction method of interfacial injected charges for SiC power MOSFETs. *Superlattices and Microstructures*, **2018**, 113, 706-712	2.8	4
61	Influence of switch angles on second-order current harmonic and resonance in switched reluctance motors. *IET Electric Power Applications*, **2018**, 12, 1247-1255	1.8	9
60	Comprehensive Analysis of Electrical Parameters Degradations for SiC Power MOSFETs Under Repetitive Short-Circuit Stress. *IEEE Transactions on Electron Devices*, **2018**, 65, 5440-5447	2.9	19

59	Comparative Study on Vibration Mode with Different Current Amplitudes and Modeling of Radial Vibration in Switched Reluctance Motor **2018**,		1
58	A Novel Lateral DMOS Transistor With H-Shape Shallow-Trench-Isolation Structure. *IEEE Transactions on Electron Devices*, **2018**, 65, 5218-5221	2.9	8
57	Influence of Latch-Up Immunity Structure on ESD Robustness of SOI-LIGBT Used As Output Device. *IEEE Transactions on Device and Materials Reliability*, **2018**, 18, 284-290	1.6	2
56	Novel Digital Control Method for Improving Dynamic Responses of Multimode Primary-Side Regulation Flyback Converter. *IEEE Transactions on Power Electronics*, **2017**, 32, 1457-1468	7.2	16
55	Implementation of a High-Precision and Wide-Range Time-to-Digital Converter With Three-Level Conversion Scheme. *IEEE Transactions on Circuits and Systems II: Express Briefs*, **2017**, 64, 181-185	3.5	7
54	Novel Snapback-Free Reverse-Conducting SOI-LIGBT With Dual Embedded Diodes. *IEEE Transactions on Electron Devices*, **2017**, 64, 1187-1192	2.9	13
53	Failure Analysis and Improvement for High Power Single-Phase Module. *IEEE Transactions on Device and Materials Reliability*, **2017**, 17, 170-175	1.6	
52	A time-length compensation algorithm for sub-harmonic oscillation elimination in digital controlled primary-side regulation flyback converter **2017**,		1
51	A U-Shaped Channel SOI-LIGBT With Dual Trenches. *IEEE Transactions on Electron Devices*, **2017**, 64, 2587-2591	2.9	9
50	Low-Loss SOI-LIGBT With Dual Deep-Oxide Trenches. *IEEE Transactions on Electron Devices*, **2017**, 64, 3282-3286	2.9	10
49	Comparison of short-circuit characteristics of trench gate and planar gate U-shaped channel SOI-LIGBTs. *Solid-State Electronics*, **2017**, 135, 24-30	1.7	5
48	A LLC resonant converter with dual resonant frequency for high light load efficiency. *International Journal of Electronics*, **2017**, 1-15	1.2	2
47	A new high-voltage interconnection shielding method for SOI monolithic ICs. *Solid-State Electronics*, **2017**, 133, 25-30	1.7	7
46	Hot-Carrier-Induced Degradations Investigations for 600 V SOI-LIGBT by an Improved Charge Pumping Solution. *IEEE Transactions on Electron Devices*, **2017**, 64, 634-637	2.9	5
45	Lateral DMOS With Partial-Resist-Implanted Drift Region for Alleviating Hot-Carrier Effect. *IEEE Transactions on Device and Materials Reliability*, **2017**, 17, 780-784	1.6	6
44	U-shaped channel SOI-LIGBT with dual trenches to improve the trade-off between saturation voltage and turn-off loss **2017**,		3
43	Interfacial damage extraction method for SiC power MOSFETs based on C-V characteristics **2017**,		10
42	Turn-off failure in multi-finger SOI-LIGBT used for single chip inverter ICs. *Solid-State Electronics*, **2017**, 137, 29-37	1.7	6

41	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	2.9	8
40	A novel digital multi-mode control strategy with PSM for primary-side flyback converter. *International Journal of Electronics*, **2017**, 104, 840-854	1.2	4
39	Fast recovery SOI PiN diode with multiple trenches. *Superlattices and Microstructures*, **2017**, 111, 405-413	2.8	3
38	. *IEEE Transactions on Device and Materials Reliability*, **2017**, 17, 450-457	1.6	4
37	Endurance degradation and lifetime model of p-channel floating gate flash memory device with 2T structure. *Solid-State Electronics*, **2017**, 134, 58-64	1.7	
36	Analysis of a Time-Length Compensation Algorithm for Elimination of Subharmonic Oscillation and Application in a Digitally Controlled Primary-Side Regulation Flyback Converter. *IEEE Journal of Emerging and Selected Topics in Power Electronics*, **2017**, 5, 1710-1719	5.6	4
35	Hot-Carrier-Induced Degradations and Optimizations for Lateral DMOS Transistor With Multiple Floating Poly-Gate Field Plates. *IEEE Transactions on Electron Devices*, **2017**, 64, 3275-3281	2.9	12
34	Study on EMI Characteristics of the Superjunction DMOS in Flyback Converter System. *IEEE Transactions on Device and Materials Reliability*, **2017**, 17, 692-697	1.6	2
33	Low-Loss SOI-LIGBT With Triple Deep-Oxide Trenches. *IEEE Transactions on Electron Devices*, **2017**, 64, 3756-3761	2.9	10
32	High precision constant voltage digital control scheme for primary-side controlled flyback converter. *IET Power Electronics*, **2016**, 9, 2522-2533	2.2	15
31	Repetitive Unclamped-Inductive-Switching-Induced Electrical Parameters Degradations and Simulation Optimizations for 4H-SiC MOSFETs. *IEEE Transactions on Electron Devices*, **2016**, 63, 4331-4338	2.9	40
30	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	7.2	9
29	Electrical Parameters Degradations and Optimizations of SOI-LIGBT Under Repetitive Unclamped-Inductive-Switching Conditions. *IEEE Transactions on Electron Devices*, **2016**, 63, 1644-1649	2.9	8
28	An accurate design method of RCD circuit for flyback converter considering diode reverse recovery **2016**,		6
27	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	2.9	1
26	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	2.9	30
25	Electrical Characteristic Study of an SOI-LIGBT With Segmented Trenches in the Anode Region. *IEEE Transactions on Electron Devices*, **2016**, 63, 2003-2008	2.9	28
24	Digital regulation scheme for multimode primary-side controlled flyback converter. *IET Power Electronics*, **2016**, 9, 782-788	2.2	12

23	Investigation on Hot-Carrier-Induced degradation of STI-nLDMOS with two-step-oxide process for high side application **2016**,		4
22	Repetitive-Avalanche-Induced Electrical Parameters Shift for 4H-SiC Junction Barrier Schottky Diode. *IEEE Transactions on Electron Devices*, **2015**, 62, 601-605	2.9	20
21	A high current density SOI-LIGBT with Segmented Trenches in the Anode region for suppressing negative differential resistance regime **2015**,		15
20	High voltage thick SOI-LIGBT with high current density and latch-up immunity **2015**,		17
19	A capacitive-loaded level shift circuit for improving the noise immunity of high voltage gate drive IC **2015**,		6
18	A High-Frequency Model for a PCM Buck Converter. *IEEE Transactions on Power Electronics*, **2015**, 30, 2304-2312	7.2	7
17	Zero-steady-state-error compensation method in application of peak current mode buck converter with fast transient response. *IET Power Electronics*, **2015**, 8, 647-655	2.2	4
16	Hot-Carrier-Induced On-Resistance Degradation of n-Type Lateral DMOS Transistor With Shallow Trench Isolation for High-Side Application. *IEEE Transactions on Device and Materials Reliability*, **2015**, 15, 458-460	1.6	10
15	. *IEEE Transactions on Electron Devices*, **2015**, 62, 3767-3773	2.9	4
14	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	4.4	20
13	A Robust W-Shape-Buffer LIGBT Device With Large Current Capability. *IEEE Transactions on Power Electronics*, **2014**, 29, 4466-4469	7.2	8
12	. *IEEE Transactions on Device and Materials Reliability*, **2014**, 14, 523-528	1.6	8
11	TC-LIGBTs on the Thin SoI Layer for the High Voltage Monolithic ICs With High Current Density and Latch-Up Immunity. *IEEE Transactions on Electron Devices*, **2014**, 61, 3814-3820	2.9	9
10	Anomalous output characteristic shift for the n-type lateral diffused metal-oxide-semiconductor transistor with floating P-top layer. *Applied Physics Letters*, **2014**, 104, 153512	3.4	6
9	Off-State Stress Degradation Analysis and Optimization for the High-Voltage SOI-pLEDMOS With Thick Gate Oxide. *IEEE Transactions on Electron Devices*, **2013**, 60, 3632-3638	2.9	9
8	Reliability concern and design for the lateral insulator gate bipolar transistor based on SOI substrate. *Solid-State Electronics*, **2013**, 85, 28-35	1.7	3
7	A noise immunity improved level shift structure for a 600 V HVIC. *Journal of Semiconductors*, **2013**, 34, 065008	2.3	4
6	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	2.9	9

5	Hot-carrier degradation mechanism for p-type symmetric LDMOS transistor with thick gate oxide. *Electronics Letters*, **2012**, 48, 1545-1546	1.1	2
4	. *IEEE Transactions on Electron Devices*, **2011**, 58, 1158-1163	2.9	8
3	A Novel Charge-Imbalance Termination for Trench Superjunction VDMOS. *IEEE Electron Device Letters*, **2010**, 31, 1434-1436	4.4	17
2	Comparisons of hot-carrier degradation behavior in SOI-LIGBT and SOI-LDMOS with different stress conditions. *Solid-State Electronics*, **2010**, 54, 1598-1601	1.7	9
1	Numerical study of a novel GaN vertical FinFET with a p-base structure for high switching performance. *Journal of Computational Electronics*,1	1.8	0