

# Siyuan Yu

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

189  
papers

1,005  
citations

15  
h-index

20  
g-index

246  
ext. papers

1,382  
ext. citations

3.1  
avg, IF

4.62  
L-index

#	Paper	IF	Citations
189	Comprehensive Investigation on Electrical Properties of Split-Gate Trench Power MOSFETs Under Mechanical Strains. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-5	2.9	1
188	Experimental Investigations on the Electrical Properties of 4H-SiC Power MOSFETs Under Biaxial and Uniaxial Mechanical Strains. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 37, 55-58	7.2	0
187	A 400-V Half Bridge Gate Driver for Normally-off GaN HEMTs with Effective dv/dt Control and High dv/dt Immunity. <i>IEEE Transactions on Industrial Electronics</i> , <b>2022</b> , 1-1	8.9	0
186	Unclamped-Inductive-Switching Behaviors of p-GaN HEMTs at Cryogenic Temperature. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 1-1	7.2	0
185	A Silicon-On-Insulator Lateral IGBT With Segmented Trenches for Improving Short-Circuit Withstanding Capability. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-4	2.9	1
184	Hot-Carrier-Induced Reliability for Lateral DMOS Transistors With Split-STI Structures. <i>IEEE Journal of the Electron Devices Society</i> , <b>2021</b> , 9, 1188-1193	2.3	
183	Novel Multiple-Layer Stack Capacitor and Its Application in the IRPFA Readout Circuit. <i>IEEE Access</i> , <b>2021</b> , 9, 161806-161813	3.5	1
182	Investigation on the Degradation Mechanism for GaN Cascode Device Under Repetitive Hard-Switching Stress. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 1-1	7.2	0
181	Hot-Carrier-Induced Reliability Concerns for Lateral DMOS Transistors with Split-STI Structures <b>2021</b> ,		1
180	System Performance Optimization for Dual-Loop Dual-Variable Controlled Active Clamp Flyback Converter Using Decoupling Compensation Technique <b>2021</b> ,		1
179	Verification of Single-Pulse Avalanche Failure Mechanism for Double-Trench SiC Power MOSFETs. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 2190-2200	5.6	5
178	Investigations on Electrical Parameters Degradations of p-GaN HEMTs Under Repetitive UIS Stresses. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 2227-2234	5.6	4
177	Study and Implementation of 600-V High-Voltage Gate Driver IC With the Common-Mode Dual-Interlock Technique for GaN Devices. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 1506-1514	8.9	2
176	Small Signal Modeling and Control Loop Design of Critical Conduction Mode Active Clamp Flyback Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 7250-7263	7.2	4
175	Lightning Surge Robustness Analysis and Optimization for an LED Driver Based on a Flyback Converter. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 10449-10458	8.9	1
174	Investigation on the Degradation Mechanism for SiC Power MOSFETs Under Repetitive Switching Stress. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 2180-2189	5.6	5
173	A Two-Stage BuckBoost Integrated LLC Converter With Extended ZVS Range and Reduced Conduction Loss for High-Frequency and High-Efficiency Applications. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 727-743	5.6	10

172	Simulation Study of A 1200V 4H-SiC Lateral MOSFET With Reduced Saturation Current. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 1-1	4.4	3
171	Comparison Investigations on Unclamped-Inductive-Switching Behaviors of Power GaN Switching Devices. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 1-1	8.9	7
170	Numerical Study of Novel GaN HEMTs With Integrated SBDs for Ultrahigh Reverse Conduction Capability. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 931-933	2.9	0
169	Erratum to Modeling Avalanche Induced Degradation for 4H-SiC Power MOSFETs <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 2447-2447	7.2	
168	A Novel Digital Control Method of Primary-Side Regulated Flyback With Active Clamping Technique. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2021</b> , 68, 950-962	3.9	4
167	Simulation Study of Novel Trench Gate U-Shaped Channel SOI Lateral IGBTs With Suppressed Gate Voltage Overshoot and Reduced di/dt. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 3930-3935	2.9	
166	Quasisaturation Effect and Optimization for 4H-SiC Trench MOSFET With P+ Shielding Region. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 4550-4556	2.9	0
165	High-Voltage a-IGZO TFTs With the Stair Gate-Dielectric Structure. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 4462-4466	2.9	2
164	Silicon-on-Insulator Lateral DMOS With Potential Modulation Plates and Multiple Deep-Oxide Trenches. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 5073-5077	2.9	3
163	Device and Circuit Design for Improving the Freewheeling Characteristics of High Voltage Monolithic Integrated Circuit. <i>IEEE Transactions on Industrial Electronics</i> , <b>2021</b> , 68, 11420-11427	8.9	
162	An Ultraviolet Photon Counting Imaging System Based on a SiC SPAD Array. <i>IEEE Photonics Technology Letters</i> , <b>2021</b> , 33, 1213-1216	2.2	
161	Understanding Electrical Parameter Degradations of P-GaN HEMT Under Repetitive Short-Circuit Stresses. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 12173-12176	7.2	1
160	An Improved Adaptive Synchronous Rectification Method With the Enhanced Capacity to Eliminate Reverse Current. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 1-1	7.2	2
159	Performance Boosts in n-Type Lateral Double-Diffused MOSFET With Process-Induced Strain Using Contact Etch Stop Layer Stressor. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 421-424	2.9	3
158	Sampled-Data Modeling for PCM and ZVS Controlled Critical Conduction Mode (CrCM) Active Clamp Flyback (ACF) Converter at Variable Switching Frequency. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , <b>2020</b> , 67, 3588-3600	3.9	6
157	Hot-Carrier-Induced Degradation and Optimization for 700-V High-Voltage Lateral DMOS by the AC Stress. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 1090-1097	2.9	2
156	High-temperature electrical performances and physics-based analysis of p-GaN HEMT device. <i>IET Power Electronics</i> , <b>2020</b> , 13, 420-425	2.2	7
155	Single Pulse Unclamped-Inductive-Switching Induced Failure and Analysis for 650 V p-GaN HEMT. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 11328-11331	7.2	8

154	Super Field Plate Technique That Can Provide Charge Balance Effect for Lateral Power Devices Without Occupying Drift Region. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 2218-2222	2.9	4
153	New Digital Control Method for Improving Dynamic Response of Synchronous Rectified PSR Flyback Converter With CCM and DCM Modes. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 12347-12358	7.2	3
152	Modeling Avalanche Induced Degradation for 4H-SiC Power MOSFETs. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 11299-11303	7.2	4
151	Breakdown Voltage Walk-in Phenomenon and Optimization for the Trench-Gate p-Type VDMOS Under Single Avalanche Stress. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 2445-2450	2.9	3
150	Reliability Concerns on LDMOS With Different Split-STI Layout Patterns. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 185-192	2.9	2
149	Small-signal modelling for time-length compensation algorithm in current controlled converters. <i>International Journal of Circuit Theory and Applications</i> , <b>2020</b> , 48, 148-155	2	1
148	Single-Pulse Avalanche Failure Investigations of Si-SJ-mosfet and SiC-mosfet by Step-Control Infrared Thermography Method. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 5180-5189	7.2	4
147	A New Modulation Strategy for Four-switch Buck-boost Converter with Reduced Freewheeling Current <b>2020</b> ,		2
146	A self-adaptive pulse generator to realize extremely low power consumption and high reliability of high voltage gate driver IC. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2020</b> , 105, 13-20	1.2	1
145	Complete Avalanche Process and Failure Mechanism of Trench-Gate FS-IGBT Under Unclamped Inductive Switching by Using Infrared Visualization Method. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 3908-3911	2.9	2
144	Understanding Short-Circuit Failure Mechanism of Double-Trench SiC Power MOSFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 5593-5599	2.9	7
143	Experimental Investigation on the Electrical Properties of SOI-LIGBT Under Total-Ionizing-Dose Radiation <b>2020</b> ,		1
142	Resonance Reduction by Optimal Switch Angle Selection in Switched Reluctance Motor. <i>IEEE Transactions on Industrial Electronics</i> , <b>2020</b> , 67, 1867-1877	8.9	10
141	A Digital Control Scheme for PSR Flyback Converter in CCM and DCM. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2020</b> , 8, 2837-2849	5.6	8
140	A 600 V high voltage gate driver IC with excellent allowable negative VS bias capability for E-mode GaN power devices. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2020</b> , 104, 27-36	1.2	
139	Mechanism and Novel Structure for di/dt Controllability in U-Shaped Channel Silicon-on-Insulator Lateral IGBTs. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1658-1661	4.4	6
138	ZVS Buck-Boost LLC cascade converter with all soft switched switches. <i>International Journal of Electronics</i> , <b>2019</b> , 106, 895-911	1.2	3
137	64 164 GM-APD array-based readout integrated circuit for 3D imaging applications. <i>Science China Information Sciences</i> , <b>2019</b> , 62, 1	3.4	0

136	Hot-Carrier-Induced Degradation and Optimization for Lateral DMOS With Split-STI-Structure in the Drift Region. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2869-2875	2.9	2
135	Experimental Investigation on the Electrical Properties of Lateral IGBT Under Mechanical Strain. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 937-940	4.4	4
134	Comprehensive Investigations on Degradations of Dynamic Characteristics for SiC Power MOSFETs Under Repetitive Avalanche Shocks. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 2748-2757	7.2	23
133	Integrated GaN MIS-HEMT with Multi-Channel Heterojunction SBD Structures <b>2019</b> ,		3
132	A single-switched high-switching-frequency quasi-resonant flyback converter with zero-current-switching and valley-switching <b>2019</b> ,		5
131	An efficiency optimization method for a high frequency quasi-ZVS controlled resonant flyback converter <b>2019</b> ,		1
130	An Evolutionary Method to Achieve the Maximum Efficiency Tracking with Multi-Objective Optimization Based on the Genetic Algorithm <b>2019</b> ,		1
129	Electrical Degradations of p-GaN HEMT under High Off-state Bias Stress with Negative Gate Voltage <b>2019</b> ,		3
128	Comprehensive Investigation on Electrical Properties of nLDMOS and pLDMOS Under Mechanical Strain. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 1012-1017	2.9	6
127	Investigations on the Degradations of Double-Trench SiC Power MOSFETs Under Repetitive Avalanche Stress. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 546-552	2.9	28
126	A Single-Switched High-Switching-Frequency Quasi-Resonant Flyback Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 8775-8786	7.2	9
125	A hybrid time-to-digital converter based on sliding scale technique suitable for random time-of-flight measurement. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2019</b> , 99, 277-285	1.2	1
124	A Phase-Shift Triple Full-Bridge Converter With Three Shared Leading Legs. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2018</b> , 6, 1912-1920	5.6	8
123	Mobility Fluctuation-Induced Low-Frequency Noise in Ultrascaled Ge Nanowire nMOSFETs With Near-Ballistic Transport. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 2573-2577	2.9	3
122	A Low-Cost Constant Current Control Method for DCM and CCM in Digitally Controlled Primary-Side Regulation Flyback Converter. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2018</b> , 6, 1483-1494	5.6	19
121	Fast Computation of Radial Vibration in Switched Reluctance Motors. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 4588-4598	8.9	26
120	Noise Immunity and its Temperature Characteristics Study of the Capacitive-Loaded Level Shift Circuit for High Voltage Gate Drive IC. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 3027-3034	8.9	8
119	Investigation on degradation mechanism and optimization for SiC power MOSFETs under long-term short-circuit stress <b>2018</b> ,		9

118	A simple average current control with time-length equality for primary-side regulation flyback converter with constant output current control. <i>International Journal of Circuit Theory and Applications</i> , <b>2018</b> , 46, 2477-2494	2	4
117	Comprehensive investigation on mechanical strain induced performance boosts in LDMOS <b>2018</b> ,		3
116	Duty-cycle-accelerated hot-carrier degradation and lifetime evaluation for 700V lateral DMOS <b>2018</b> ,		1
115	New digital control method for improving dynamic response of synchronous rectified flyback converter with CCM and DCM mode <b>2018</b> ,		1
114	An Integrated Bias Voltage Control Method for SPAD Arrays. <i>IEEE Photonics Technology Letters</i> , <b>2018</b> , 30, 1723-1726	2.2	2
113	Switch-OFF Avalanche-Breakdown-Induced Electrical Degradations of RF-LDMOS Transistor for SMPAs Applications. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 4719-4723	2.9	2
112	A Review on Hot-Carrier-Induced Degradation of Lateral DMOS Transistor. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2018</b> , 18, 298-312	1.6	16
111	Influence of switch angles on second-order current harmonic and resonance in switched reluctance motors. <i>IET Electric Power Applications</i> , <b>2018</b> , 12, 1247-1255	1.8	9
110	Comprehensive Analysis of Electrical Parameters Degradations for SiC Power MOSFETs Under Repetitive Short-Circuit Stress. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 5440-5447	2.9	19
109	Comparative Study on Vibration Mode with Different Current Amplitudes and Modeling of Radial Vibration in Switched Reluctance Motor <b>2018</b> ,		1
108	One cycle start-up time, high linearity relaxation oscillator with capacitor pre-charge technique. <i>Electronics Letters</i> , <b>2018</b> , 54, 1206-1208	1.1	0
107	A Novel Lateral DMOS Transistor With H-Shape Shallow-Trench-Isolation Structure. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 5218-5221	2.9	8
106	Influence of Latch-Up Immunity Structure on ESD Robustness of SOI-LIGBT Used As Output Device. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2018</b> , 18, 284-290	1.6	2
105	Novel Digital Control Method for Improving Dynamic Responses of Multimode Primary-Side Regulation Flyback Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2017</b> , 32, 1457-1468	7.2	16
104	Radiated EMI study on super-junction VDMOS in flyback power converters. <i>International Journal of Circuit Theory and Applications</i> , <b>2017</b> , 45, 1313-1325	2	
103	Novel Snapback-Free Reverse-Conducting SOI-LIGBT With Dual Embedded Diodes. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 1187-1192	2.9	13
102	1200 V FS-IGBT with electric field modulation layer to improve trade-off between avalanche ruggedness and on-state voltage drop. <i>Electronics Letters</i> , <b>2017</b> , 53, 100-102	1.1	1
101	Impact of stray inductances of the power loop on false trigger-on in the zero-voltage-switching full-bridge converter. <i>International Journal of Circuit Theory and Applications</i> , <b>2017</b> , 45, 392-406	2	

100	Failure Analysis and Improvement for High Power Single-Phase Module. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2017</b> , 17, 170-175	1.6	
99	Fast switch fault diagnosis for PWM DCDC low power converters. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , <b>2017</b> , 12, 778-785	1	0
98	A time-length compensation algorithm for sub-harmonic oscillation elimination in digital controlled primary-side regulation flyback converter <b>2017</b> ,		1
97	Isolated gate driver for SiC MOSFETs with constant negative off voltage <b>2017</b> ,		4
96	A U-Shaped Channel SOI-LIGBT With Dual Trenches. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 2587-2591	2.9	9
95	Low-Loss SOI-LIGBT With Dual Deep-Oxide Trenches. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3282-3286	2.9	10
94	A LLC resonant converter with dual resonant frequency for high light load efficiency. <i>International Journal of Electronics</i> , <b>2017</b> , 1-15	1.2	2
93	A high frequency isolated resonant gate driver for SiC power MOSFET with asymmetrical ON/OFF voltage <b>2017</b> ,		9
92	A high linearity current-controlled CMOS relaxation oscillator with frequency self-calibration technique. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2017</b> , 92, 29-37	1.2	2
91	An Improved Convergent Model for Single-Photon Avalanche Diodes. <i>IEEE Photonics Technology Letters</i> , <b>2017</b> , 29, 798-801	2.2	4
90	Hot-Carrier-Induced Degradations Investigations for 600 V SOI-LIGBT by an Improved Charge Pumping Solution. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 634-637	2.9	5
89	Lateral DMOS With Partial-Resist-Implanted Drift Region for Alleviating Hot-Carrier Effect. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2017</b> , 17, 780-784	1.6	6
88	Interfacial damage extraction method for SiC power MOSFETs based on C-V characteristics <b>2017</b> ,		10
87	Investigation on Self-Adjust Conductivity Modulation SOI-LIGBT Structure (SCM-LIGBT) for Monolithic High-Voltage IC. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3762-3767	2.9	8
86	A novel digital multi-mode control strategy with PSM for primary-side flyback converter. <i>International Journal of Electronics</i> , <b>2017</b> , 104, 840-854	1.2	4
85	Analysis of a Time-Length Compensation Algorithm for Elimination of Subharmonic Oscillation and Application in a Digitally Controlled Primary-Side Regulation Flyback Converter. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2017</b> , 5, 1710-1719	5.6	4
84	Hot-Carrier-Induced Degradations and Optimizations for Lateral DMOS Transistor With Multiple Floating Poly-Gate Field Plates. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3275-3281	2.9	12
83	Temperature compensated and gated CMOS ring oscillator for time-to-digital converter application. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2017</b> , 90, 513-521	1.2	2

82	Novel Hybrid Analytical/Numerical Conducted EMI Model of a Flyback Converter. <i>IEEE Transactions on Electromagnetic Compatibility</i> , <b>2017</b> , 59, 488-497	2	4
81	A composite structure named self-adjusted conductivity modulation SOI-LIGBT with low on-state voltage <b>2017</b> ,		1
80	Study on EMI Characteristics of the Superjunction DMOS in Flyback Converter System. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2017</b> , 17, 692-697	1.6	2
79	Low-Loss SOI-LIGBT With Triple Deep-Oxide Trenches. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3756-3761	2.9	10
78	Dynamic characteristics analysis of 1.2kV SiC VDMOS under high temperature up to 375°C <b>2017</b> ,		4
77	Investigations of inhomogeneous reverse recovery behavior of the body diode in superjunction MOSFET <b>2017</b> ,		3
76	ESD failure mechanism and optimization for the LDMOS with low on-resistance and large geometric array used as output device <b>2016</b> ,		2
75	Accurate model of switched reluctance motor based on indirect measurement method and least square support vector machine. <i>IET Electric Power Applications</i> , <b>2016</b> , 10, 916-922	1.8	21
74	Method for radial vibration modelling in switched reluctance motor. <i>IET Electric Power Applications</i> , <b>2016</b> , 10, 834-842	1.8	14
73	Oscillation effect of auxiliary winding in primary side regulated flyback converter. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , <b>2016</b> , 11, 640-647	1	1
72	Wide range temperature sensor with adaptive nonlinearity cancellation (ANC) technique for HVICs. <i>Electronics Letters</i> , <b>2016</b> , 52, 458-460	1.1	1
71	Bipolar gate drive integrated circuit for insulated gate bipolar transistor to achieve better tradeoff between the turn-off losses and collector voltage overshoot. <i>IET Circuits, Devices and Systems</i> , <b>2016</b> , 10, 410-416	1.1	5
70	High precision constant voltage digital control scheme for primary-side controlled flyback converter. <i>IET Power Electronics</i> , <b>2016</b> , 9, 2522-2533	2.2	15
69	Repetitive Unclamped-Inductive-Switching-Induced Electrical Parameters Degradations and Simulation Optimizations for 4H-SiC MOSFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 4331-4338	2.9	40
68	A novel lumped-parameter model of crosstalk between vias in high-speed PCBs. <i>Microwave and Optical Technology Letters</i> , <b>2016</b> , 58, 2088-2090	1.2	
67	An Integrated Bootstrap Diode Emulator for 600-V High Voltage Gate Drive IC With P-Sub/P-Epi Technology. <i>IEEE Transactions on Power Electronics</i> , <b>2016</b> , 31, 518-523	7.2	9
66	Design and Fabrication of a Monolithic Optoelectronic Integrated Si CMOS LED Based on Hot-Carrier Effect. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2016</b> , 22, 70-77	3.8	17
65	500 V SOI lateral pin diode with dual deep-oxide trenches for fast reverse recovery and suppressed oscillation. <i>Electronics Letters</i> , <b>2016</b> , 52, 71-73	1.1	



64	Electrical Parameters Degradations and Optimizations of SOI-LIGBT Under Repetitive Unclamped-Inductive-Switching Conditions. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 1644-1649	2.9	8
63	An accurate design method of RCD circuit for flyback converter considering diode reverse recovery <b>2016</b> ,		6
62	Magnetic flux density bias analysis and suppression strategy for voltage-fed single-stage full-bridge converter. <i>International Journal of Circuit Theory and Applications</i> , <b>2016</b> , 44, 1903-1925	2	1
61	Hybrid modulation scheme for dual active bridge converter that employs the triangular modulation and the single phase shift modulation. <i>International Journal of Circuit Theory and Applications</i> , <b>2016</b> , 44, 1982-2002	2	3
60	High-Voltage Electron Injection Enhanced TC-LIGBT on 1.5- $\mu\text{m}$ -Thin SOI Layer for Reducing the Forward Voltage Drop. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 4873-4879	2.9	1
59	A current detecting circuit for linear-mode InGaAs APD arrays <b>2016</b> ,		1
58	A Novel High Latch-Up Immunity Electrostatic Discharge Protection Device for Power Rail in High-Voltage ICs. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2016</b> , 16, 266-268	1.6	2
57	Gate-drive circuit with efficient energy recovery based on DC/DC converter. <i>Electronics Letters</i> , <b>2016</b> , 52, 952-954	1.1	2
56	Further Study of the U-Shaped Channel SOI-LIGBT With Enhanced Current Density for High-Voltage Monolithic ICs. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 1161-1167	2.9	30
55	Electrical Characteristic Study of an SOI-LIGBT With Segmented Trenches in the Anode Region. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2003-2008	2.9	28
54	Digital regulation scheme for multimode primary-side controlled flyback converter. <i>IET Power Electronics</i> , <b>2016</b> , 9, 782-788	2.2	12
53	Investigation on Hot-Carrier-Induced degradation of STI-nLDMOS with two-step-oxide process for high side application <b>2016</b> ,		4
52	A novel high-voltage interconnection structure with dual trenches for 500V SOI-LIGBT <b>2016</b> ,		4
51	Repetitive-Avalanche-Induced Electrical Parameters Shift for 4H-SiC Junction Barrier Schottky Diode. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 601-605	2.9	20
50	500 V dual gate deep-oxide trench SOI-LIGBT with improved short-circuit immunity. <i>Electronics Letters</i> , <b>2015</b> , 51, 78-80	1.1	1
49	Modeling and analysis of primary side regulated flyback converter with pulse frequency modulation <b>2015</b> ,		3
48	Analysis of simulation of multiterminal electro-optic modulator based on p-n junction in reverse bias. <i>Optical Engineering</i> , <b>2015</b> , 54, 057104	1.1	12
47	A capacitive-loaded level shift circuit for improving the noise immunity of high voltage gate drive IC <b>2015</b> ,		6

46	A High-Frequency Model for a PCM Buck Converter. <i>IEEE Transactions on Power Electronics</i> , <b>2015</b> , 30, 2304-2312	7.2	7
45	A Ripple Control Dual-Mode Single-Inductor Dual-Output Buck Converter With Fast Transient Response. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , <b>2015</b> , 23, 107-117	2.6	15
44	A new digital predictive control strategy for boost PFC converter. <i>IEICE Electronics Express</i> , <b>2015</b> , 12, 20150726-20150726	0.5	3
43	Zero-steady-state-error compensation method in application of peak current mode buck converter with fast transient response. <i>IET Power Electronics</i> , <b>2015</b> , 8, 647-655	2.2	4
42	An electrolytic capacitor-less LED driver with interleaving flyback topology. <i>International Journal of Circuit Theory and Applications</i> , <b>2015</b> , 43, 2025-2038	2	5
41	Analysis of common-mode electromagnetic interference noise in a flyback converter using a self-supply power control integrated circuit. <i>IET Power Electronics</i> , <b>2015</b> , 8, 1749-1757	2.2	3
40	Hot-Carrier-Induced On-Resistance Degradation of n-Type Lateral DMOS Transistor With Shallow Trench Isolation for High-Side Application. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2015</b> , 15, 458-460	1.6	10
39	Analysis and accurate modeling of a flyback converter on conducted EMI <b>2015</b> ,		1
38	A Novel Silicon-on-Insulator Lateral Insulated-Gate Bipolar Transistor With Dual Trenches for Three-Phase Single Chip Inverter ICs. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 693-695	4.4	20
37	Hot-Carrier-Induced Forward and Reverse Saturation Current Degradations for the n-Type Symmetric EDMOS Transistor. <i>IEEE Electron Device Letters</i> , <b>2014</b> , 35, 690-692	4.4	7
36	Linear Drain Current Degradation of FG-pLED MOS Transistor Under Pulse Gate Stress With Different Rising and Falling Edges. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2014</b> , 14, 229-233 <sup>1.6</sup>		
35	A Robust W-Shape-Buffer LIGBT Device With Large Current Capability. <i>IEEE Transactions on Power Electronics</i> , <b>2014</b> , 29, 4466-4469	7.2	8
34	A lateral DMOS with partial buried-oxide layer to achieve better RESURF effect. <i>IEICE Electronics Express</i> , <b>2014</b> , 11, 20140055-20140055	0.5	
33	A digital control algorithm for single-phase boost PFC converter with fast dynamic response. <i>IEICE Electronics Express</i> , <b>2014</b> , 11, 20140493-20140493	0.5	
32	Modelling of Ldi/dt effect with frequency spectrum analysis and parameter design in float ground driver system. <i>IET Circuits, Devices and Systems</i> , <b>2014</b> , 8, 442-449	1.1	
31	Robust 600 V high-voltage gate drive IC with low-temperature coefficient propagation delay time. <i>IET Circuits, Devices and Systems</i> , <b>2014</b> , 8, 576-582	1.1	1
30	Low-jitter, high-linearity current-controlled complementary metal oxide semiconductor relaxation oscillator with optimised floating capacitors. <i>IET Circuits, Devices and Systems</i> , <b>2014</b> , 8, 509-515	1.1	4
29	1 ppm/°C bandgap with multipoint curvature-compensation technique for HVIC. <i>Electronics Letters</i> , <b>2014</b> , 50, 1908-1910	1.1	3

28	Peripheral Adaption Power Cell Network for High Efficiency and High Linearity Power Amplifier. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2014</b> , 24, 799-801	2.6	3
27	TC-LIGBTs on the Thin Sol Layer for the High Voltage Monolithic ICs With High Current Density and Latch-Up Immunity. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 3814-3820	2.9	9
26	Transient response optimisation for peak current mode buck converter in the application of dynamic voltage scaling. <i>IET Power Electronics</i> , <b>2014</b> , 7, 705-712	2.2	8
25	Investigation on Electrical Degradation of High Voltage nLDMOS After High Temperature Reverse Bias Stress. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2014</b> , 14, 651-656	1.6	4
24	Anomalous output characteristic shift for the n-type lateral diffused metal-oxide-semiconductor transistor with floating P-top layer. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 153512	3.4	6
23	Digital Controller for Single-Phase DCM Boost PFC Converter with High Power Factor over Wide Input Voltage and Load Range. <i>IEICE Transactions on Electronics</i> , <b>2014</b> , E97.C, 377-385	0.4	2
22	Model of hot-carrier degradation for lateral IGBT device on SOI substrate. <i>Electronics Letters</i> , <b>2013</b> , 49, 497-499	1.1	2
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18	Analytical model for energy recovery circuit of plasma display panel data driver integrated circuit. <i>IET Circuits, Devices and Systems</i> , <b>2013</b> , 7, 74-80	1.1	1
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16	700V thin SOI-LIGBT with high current capability <b>2013</b> ,		2
15	A novel Operational Transconductance Amplifier with high Gm using improved differential current redistribution technique (DCRT) <b>2013</b> ,		1
14	Power loss analysis of active clamp forward converter in continuous conduction mode and discontinuous conduction mode operating modes. <i>IET Power Electronics</i> , <b>2013</b> , 6, 1142-1150	2.2	9
13	Negative voltage surge resistant circuit design in HVIC. <i>Electronics Letters</i> , <b>2013</b> , 49, 1476-1477	1.1	3
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11	Analytic Ldi/dt Effect Model Based on Float Ground in Plasma Display Panel Driver System. <i>IEICE Transactions on Electronics</i> , <b>2013</b> , E96.C, 1428-1435	0.4	

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9	The Investigation of Electrothermal Characteristics of High-Voltage Lateral IGBT for ESD Protection. <i>IEEE Transactions on Device and Materials Reliability</i> , <b>2012</b> , 12, 146-151	1.6	15
8	Linear drain current degradations of FG-pLED MOS transistor under different AC stress conditions <b>2012</b> ,		2
7	A novel double-well isolation structure for high voltage ICs <b>2012</b> ,		5
6	Electrical Characteristic Investigation on a Novel Double-Well Isolation Structure in 600-V-Class High-Voltage Integrated Circuits. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 3477-3481	2.9	9
5	A novel surface potential-based mobility degradation model of thin-oxide-MOSFET for circuit simulation <b>2011</b> ,		2
4	A novel compact isolated structure for 600V Gate Drive IC <b>2011</b> ,		1
3	The hot-carrier degradation mechanism of p-DDDMOS transistor with different p-drift dosage <b>2011</b> ,		1
2	A 65nm 10MHz single-inductor dual-output switching buck converter with time-multiplexing control <b>2011</b> ,		1
1	Numerical study of a novel GaN vertical FinFET with a p-base structure for high switching performance. <i>Journal of Computational Electronics</i> , <b>2011</b>	1.8	0