Francesco Iannuzzo

List of Publications by Year
in descending order

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224 papers	3,481 citations	201385 27 h-index	243296 44 g-index
230 all docs	230 docs citations	230 times ranked	1962 citing authors

#	Article	IF	Citations
1	Impact of Solder Degradation on V _{CE} of IGBT Module: Experiments and Modeling. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 4536-4545.	3.7	24
2	Intrusiveness of Power Device Condition Monitoring Methods: Introducing Figures of Merit for Condition Monitoring. IEEE Industrial Electronics Magazine, 2022, 16, 60-69.	2.3	10
3	Online Junction Temperature and Current Simultaneous Extraction for SiC MOSFETs With Electroluminescence Effect. IEEE Transactions on Power Electronics, 2022, 37, 21-25.	5.4	14
4	Voltage Balancing of Series IGBTs in Short-Circuit Conditions. IEEE Transactions on Power Electronics, 2022, 37, 5675-5686.	5.4	3
5	Self-Sustained Turn-OFF Oscillation of Cascode GaN HEMTs: Occurrence Mechanism, Instability Analysis, and Oscillation Suppression. IEEE Transactions on Power Electronics, 2022, 37, 5491-5500.	5.4	11
6	Separation and Validation of Bond-Wire and Solder Layer Failure Modes in IGBT Modules. IEEE Transactions on Industry Applications, 2022, 58, 2324-2331.	3.3	6
7	A Fully Coupled Model of Multi-Chip Press-Pack IGBT for Thermo-Mechanical Stress Distribution Prediction. IEEE Transactions on Industry Applications, 2022, 58, 3852-3862.	3.3	11
8	Improved Temperature Monitoring and Protection Method of Three-Level NPC Application Based on Half-Bridge IGBT Modules. IEEE Access, 2022, 10, 35605-35619.	2.6	4
9	Intelligent DC- and AC Power-Cycling Platform for Power Electronic Components. , 2022, , .		3
10	Lifetime Analysis of Metallized Polypropylene Capacitors in Modular Multilevel Converter Based on Finite Element Method. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4248-4259.	3.7	20
11	Elastic Half-Space Theory-Based Distributed-Press-Pack Packaging Technology for Power Module With Balanced Thermal Stress. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 3892-3903.	3.7	2
12	Lifetime Evaluation of Three-Level Inverters for 1500-V Photovoltaic Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 4285-4298.	3.7	26
13	Two Decades of Condition Monitoring Methods for Power Devices. Electronics (Switzerland), 2021, 10, 683.	1.8	20
14	Enhanced Reliability of 1500-V Photovoltaic Inverters with Junction Temperature Limit Control. , 2021, , .		5
15	Performance Comparison of PV Inverter Systems Considering System Voltage Ratings and Installation Sites. , 2021, , .		1
16	Switching Stability Analysis of Paralleled RC-IGBTs With Snapback Effect. IEEE Transactions on Electron Devices, 2021, 68, 3429-3434.	1.6	6
17	Thermal Modeling of Large Electrolytic Capacitors Using FEM and Considering the Internal Geometry. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6315-6328.	3.7	9
18	PV mission profile simplification method for power devices subjected to arid climates. Microelectronics Reliability, 2021, 126, 114328.	0.9	4

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19	An Application of Feature Engineering and Machine Learning Algorithms on Condition Monitoring of SiC Converters. , 2021, , .		0
20	Discontinuous Modulation for Improved Thermal Balance of Three-Level 1500-V Photovoltaic Inverters under Low-Voltage Ride-Through. , 2021, , .		4
21	Effect of Current Distortion and Unbalanced Loads on Semiconductors Reliability. IEEE Access, 2021, 9, 162660-162670.	2.6	1
22	Role of Threshold Voltage Shift in Highly Accelerated Power Cycling Tests for SiC MOSFET Modules. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1657-1667.	3.7	43
23	Study of Current Density Influence on Bond Wire Degradation Rate in SiC MOSFET Modules. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1622-1632.	3.7	28
24	Compact Sandwiched Press-Pack SiC Power Module With Low Stray Inductance and Balanced Thermal Stress. IEEE Transactions on Power Electronics, 2020, 35, 2237-2241.	5.4	24
25	A New Lumped-Charge Modeling Method for Power Semiconductor Devices. IEEE Transactions on Power Electronics, 2020, 35, 3989-3996.	5.4	15
26	Discontinuous PWM for Online Condition Monitoring of SiC Power Modules. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 323-330.	3.7	11
27	Impact of Repetitive Short-Circuit Tests on the Normal Operation of SiC MOSFETs Considering Case Temperature Influence. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 195-205.	3.7	31
28	Isolated DC/AC Converter with ZVT based on Pulsating DC Link. , 2020, , .		4
29	Comparison of Press-Pack and Wire-Bonding Technologies for SiC MOSFETs under Short-Circuit Conditions. , 2020, , .		1
30	Analysis of the RC-IGBT snap-back phenomenon on the switching performance of parallel devices. , 2020, , .		3
31	Implications of Short-Circuit Degradation on the Aging Process in Accelerated Cycling Tests of SiC MOSFETs. , 2020, , .		1
32	FEM-aided damage model calibration method for experimental results. Microelectronics Reliability, 2020, 114, 113915.	0.9	0
33	A non-invasive SiC MOSFET Junction temperature estimation method based on the transient light Emission from the intrinsic body diode. Microelectronics Reliability, 2020, 114, 113845.	0.9	6
34	Design for Reliability of SiC-MOSFET-Based 1500-V PV Inverters with Variable Gate Resistance. , 2020, , .		2
35	Study of moisture transport in silicone gel for IGBT modules. Microelectronics Reliability, 2020, 114, 113773.	0.9	2
36	Effect of short-circuit degradation on the remaining useful lifetime of SiC MOSFETs and its failure analysis. Microelectronics Reliability, 2020, 114, 113784.	0.9	7

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37	Parameters sensitivity analysis of silicon carbide buck converters to extract features for condition monitoring. Microelectronics Reliability, 2020, 114, 113910.	0.9	4
38	Ensuring a Reliable Operation of Two-Level IGBT-Based Power Converters: A Review of Monitoring and Fault-Tolerant Approaches. IEEE Access, 2020, 8, 89988-90022.	2.6	43
39	Lifetime Evaluation of Power Modules for Three-Level 1500-V Photovoltaic Inverters. , 2020, , .		6
40	Thermal Mapping of Power Semiconductors in H-Bridge Circuit. Applied Sciences (Switzerland), 2020, 10, 4340.	1.3	7
41	Cost-Effective Prognostics of IGBT Bond Wires With Consideration of Temperature Swing. IEEE Transactions on Power Electronics, 2020, 35, 6773-6784.	5.4	15
42	Fault Investigation in Cascaded H-Bridge Multilevel Inverter through Fast Fourier Transform and Artificial Neural Network Approach. Energies, 2020, 13, 1299.	1.6	14
43	Mechanistic Power Module Degradation Modelling Concept with Feedback. , 2020, , .		0
44	A Mitigation Strategy for the Short-Circuit Degradation in SiC MOSFETs. , 2020, , .		2
45	Accurate Temperature-Dependent IGBT Model for Predicting Commutation Voltage Overshoot in MW-level Power Converters. , 2020, , .		0
46	Separation of Bond-Wire and Solder Layer Failure Modes in IGBT Power Modules. , 2020, , .		3
47	The Temperature Dependence of the Flatband Voltage in High-Power IGBTs. IEEE Transactions on Industrial Electronics, 2019, 66, 5581-5584.	5.2	25
48	Wear-Out Condition Monitoring of IGBT and mosfet Power Modules in Inverter Operation. IEEE Transactions on Industry Applications, 2019, 55, 6184-6192.	3.3	42
49	Guest Editorial: Special Section on Modeling, Design, and Application of Next-Generation Power Components. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1422-1424.	3.7	0
50	Effects of the HV-BIGT Design Elements on the High-Frequency Oscillation Instability during Short Circuit Transients. , 2019, , .		0
51	Modeling of IGBT With High Bipolar Gain for Mitigating Gate Voltage Oscillations During Short Circuit. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1584-1592.	3.7	4
52	Reliability Analysis of a 3-leg 4-wire Inverter under Unbalanced Loads and Harmonic Injection. , 2019, , .		4
53	Evaluating IGBT temperature evolution during short circuit operations using a TSEP-based method. Microelectronics Reliability, 2019, 100-101, 113423.	0.9	1
54	Impact of device aging in the compact electro-thermal modeling of SiC power MOSFETs. Microelectronics Reliability, 2019, 100-101, 113336.	0.9	15

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55	Comparative study of wire bond degradation under power and mechanical accelerated tests. Journal of Materials Science: Materials in Electronics, 2019, 30, 17040-17045.	1.1	8
56	Implications of short-circuit events on power cycling of 1.2-kV/20-A SiC MOSFET power modules. Microelectronics Reliability, 2019, 100-101, 113373.	0.9	4
57	Reliability analysis of sintered Cu joints for SiC power devices under thermal shock condition. Microelectronics Reliability, 2019, 100-101, 113456.	0.9	10
58	SiC MOSFET vs SiC/Si Cascode short circuit robustness benchmark. Microelectronics Reliability, 2019, 100-101, 113429.	0.9	7
59	Wear-out evolution analysis of multiple-bond-wires power modules based on thermo-electro-mechanical FEM simulation. Microelectronics Reliability, 2019, 100-101, 113472.	0.9	4
60	Impact of the Case Temperature on the Reliability of SiC MOSFETs Under Repetitive Short Circuit Tests. , 2019, , .		8
61	A 3D Thermal Network Model for Monitoring Imbalanced Thermal Distribution of Press-Pack IGBT Modules in MMC-HVDC Applications. Energies, 2019, 12, 1319.	1.6	20
62	Implications of Ageing Through Power Cycling on the Short-Circuit Robustness of 1.2-kV SiC mosfets. IEEE Transactions on Power Electronics, 2019, 34, 11182-11190.	5.4	22
63	Proof-of-Concept for a Kelvin-Emitter On-Chip Temperature Sensor for Power Semiconductors. , 2019, , .		2
64	Thermal Performance Evaluation of 1500-VDC Photovoltaic Inverters Under Constant Power Generation Operation. , 2019, , .		7
65	Reliability analysis of sintered Cu joints under power cycle condition. , 2019, , .		0
66	Loss and Thermal Modeling of Metal Oxide Varistors (MOV) Under Standard Current Surge Mission Profile. , 2019, , .		0
67	Finite Element Modeling of IGBT Modules to Explore the Correlation between Electric Parameters and Damage in Bond Wires. , 2019, , .		9
68	Enhancement of Thermo-mechanical Behavior of IGBT Modules through Engineered Threshold Voltages. , 2019, , .		2
69	Mission-Profile-Based Lifetime Prediction for a SiC mosfet Power Module Using a Multi-Step Condition-Mapping Simulation Strategy. IEEE Transactions on Power Electronics, 2019, 34, 9698-9708.	5.4	54
70	A Lumped-Charge Approach Based Physical SPICE-Model for High Power Soft-Punch Through IGBT. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 62-70.	3.7	22
71	A Busbar Integrated SiC-based Converter with Embedded Heat-pipes. , 2019, , .		1
72	Improving the Short-Circuit Reliability in IGBTs: How to Mitigate Oscillations. IEEE Transactions on Power Electronics, 2018, 33, 5603-5612.	5.4	17

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73	Increasing emitter efficiency in 3.3-kV enhanced trench IGBTs for higher short-circuit capability. , 2018, , .		5
74	Investigation and Classification of Short-Circuit Failure Modes Based on Three-Dimensional Safe Operating Area for High-Power IGBT Modules. IEEE Transactions on Power Electronics, 2018, 33, 1075-1086.	5.4	60
75	Enabling Junction Temperature Estimation via Collector-Side Thermo-Sensitive Electrical Parameters Through Emitter Stray Inductance in High-Power IGBT Modules. IEEE Transactions on Industrial Electronics, 2018, 65, 4724-4738.	5.2	46
76	Investigating SiC MOSFET body diode's light emission as temperature-sensitive electrical parameter. Microelectronics Reliability, 2018, 88-90, 627-630.	0.9	14
77	Performance Analysis of a Single-phase GaN-based 3L-ANPC Inverter for Photovoltaic Applications. , 2018, , .		7
78	Fast Electro-thermal Simulation Strategy for SiC MOSFETs Based on Power Loss Mapping. , 2018, , .		9
79	Investigation on the degradation indicators of short-circuit tests in 1.2â€¯kV SiC MOSFET power modules. Microelectronics Reliability, 2018, 88-90, 661-665.	0.9	11
80	Effect of short-circuit stress on the degradation of the SiO2 dielectric in SiC power MOSFETs. Microelectronics Reliability, 2018, 88-90, 577-583.	0.9	35
81	Development of Simulink Based Modeling Platform for 3.3kV/400A SiC MOSFET Power Module. , 2018, , .		0
82	Online Condition Monitoring of Bond Wire Degradation in Inverter Operation. , 2018, , .		5
83	Non-uniform Temperature Distribution Implications on Thermal Analysis Accuracy of Si IGBTs and SiC MOSFETs. , 2018, , .		3
84	Simple and effective open switch fault diagnosis of single-phase PWM rectifier. Microelectronics Reliability, 2018, 88-90, 423-427.	0.9	6
85	Thermal modeling of wire-bonded power modules considering non-uniform temperature and electric current interactions. Microelectronics Reliability, 2018, 88-90, 1135-1140.	0.9	15
86	Power cycling test of transfer molded IGBT modules by advanced power cycler under different junction temperature swings. Microelectronics Reliability, 2018, 88-90, 788-794.	0.9	8
87	On-line solder layer degradation measurement for SiC-MOSFET modules under accelerated power cycling condition. Microelectronics Reliability, 2018, 88-90, 563-567.	0.9	17
88	Failure mechanism analysis of fuses subjected to manufacturing and operational thermal stresses. Microelectronics Reliability, 2018, 88-90, 304-308.	0.9	2
89	Smart SiC MOSFET accelerated lifetime testing. Microelectronics Reliability, 2018, 88-90, 43-47.	0.9	8
90	Investigation of acoustic emission as a non-invasive method for detection of power semiconductor aging. Microelectronics Reliability, 2018, 88-90, 545-549.	0.9	18

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91	Failure Analysis of a Degraded 1.2 kV SiC MOSFET after Short Circuit at High Temperature. , 2018, , .		7
92	A temperature dependent lumped-charge model for trench FS-IGBT. , 2018, , .		5
93	Lock-in Thermography Failure Detection on Multilayer Ceramic Capacitors After Flex Cracking and Temperatureâ€"Humidityâ€"Bias Stress. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 2254-2261.	3.7	6
94	Computer-aided engineering simulations. , 2018, , 199-223.		4
95	Design of Low-Inductance Switching Power Cell for GaN HEMT Based Inverter. IEEE Transactions on Industry Applications, 2018, 54, 1592-1601.	3.3	49
96	IR Camera Validation of IGBT Junction Temperature Measurement via Peak Gate Current. IEEE Transactions on Power Electronics, 2017, 32, 3099-3111.	5.4	75
97	Modeling of Short-Circuit-Related Thermal Stress in Aged IGBT Modules. IEEE Transactions on Industry Applications, 2017, 53, 4788-4795.	3.3	28
98	Fuse modeling for reliability study of power electronic circuits. , 2017, , .		5
99	A fast electro-thermal co-simulation modeling approach for SiC power MOSFETs. , 2017, , .		18
100	Uneven temperature effect evaluation in high-power IGBT inverter legs and relative test platform design. Microelectronics Reliability, 2017, 76-77, 123-130.	0.9	5
101	Advanced power cycler with intelligent monitoring strategy of IGBT module under test. Microelectronics Reliability, 2017, 76-77, 522-526.	0.9	14
102	Die degradation effect on aging rate in accelerated cycling tests of SiC power MOSFET modules. Microelectronics Reliability, 2017, 76-77, 415-419.	0.9	23
103	Wire bond degradation under thermo- and pure mechanical loading. Microelectronics Reliability, 2017, 76-77, 373-377.	0.9	14
104	Capacitive effects in IGBTs limiting their reliability under short circuit. Microelectronics Reliability, 2017, 76-77, 485-489.	0.9	4
105	Short-circuit ruggedness assessment of a 1.2 kV/180 A SiC MOSFET power module. , 2017, , .		19
106	A survey of SiC power MOSFETs short-circuit robustness and failure mode analysis. Microelectronics Reliability, 2017, 76-77, 272-276.	0.9	68
107	Reliability-oriented environmental thermal stress analysis of fuses in power electronics. Microelectronics Reliability, 2017, 76-77, 25-30.	0.9	9
108	Analytical and Experimental Investigation on A Dynamic Thermo-Sensitive Electrical Parameter With Maximum dI_{C}/dt During Turn-off for High Power Trench Gate/Field-Stop IGBT Modules. IEEE Transactions on Power Electronics, 2017, 32, 6394-6404.	5.4	41

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109	A Short-Circuit Safe Operation Area Identification Criterion for SiC MOSFET Power Modules. IEEE Transactions on Industry Applications, 2017, 53, 2880-2887.	3.3	78
110	Active thermal control by controlled shoot-through of power devices. , 2017, , .		8
111	Comparative assessment of 3.3kV/400A SiC MOSFET and Si IGBT power modules. , 2017, , .		13
112	Role of parasitic capacitances in power MOSFET turn-on switching speed limits: A SiC case study. , 2017, , .		20
113	Development of PSpice modeling platform for 10 kV/100 A SiC MOSFET power module. , 2017, , .		3
114	Compact electro-thermal modeling of a SiC MOSFET power module under short-circuit conditions. , 2017, , .		7
115	Thermal stress mitigation by Active Thermal Control: Architectures, models and specific hardware. , 2017, , .		13
116	Active thermal control for reliability improvement of MOS-gated power devices. , 2017, , .		6
117	Elimination of bus voltage impact on temperature sensitive electrical parameter during turn-on transition for junction temperature estimation of high-power IGBT modules. , 2017, , .		4
118	Impact of bending speed and setup on flex cracks in multilayer ceramic capacitors. , 2017, , .		1
119	TCAD analysis of short-circuit oscillations in IGBTs. , 2017, , .		5
120	Simultaneous On-State Voltage and Bond-Wire Resistance Monitoring of Silicon Carbide MOSFETs. Energies, 2017, 10, 384.	1.6	25
121	Separation test method for investigation of current density effects on bond wires of SiC power MOSFET modules. , 2017, , .		11
122	Aging precursors and degradation effects of SiC-MOSFET modules under highly accelerated power cycling conditions. , 2017, , .		33
123	Ultra-low inductance design for a GaN HEMT based 3L-ANPC inverter. , 2016, , .		10
124	Approaching repetitive short circuit tests on MW-scale power modules by means of an automatic testing setup. , 2016, , .		0
125	Loss distribution analysis of three-level active neutral-point-clamped (3L-ANPC) converter with different PWM strategies. , 2016, , .		19
126	PSpice modeling platform for SiC power MOSFET modules with extensive experimental validation. , 2016, , .		14

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127	Development of Simulink-based SiC MOSFET modeling platform for series connected devices. , 2016, , .		11
128	Investigation on the short circuit safe operation area of SiC MOSFET power modules. , 2016, , .		6
129	Prediction of short-circuit-related thermal stress in aged IGBT modules. , 2016, , .		3
130	Reliability assessment of SiC power MOSFETs from the end user's perspective. , 2016, , .		2
131	New layout concepts in MW-scale IGBT modules for higher robustness during normal and abnormal operations. , 2016, , .		8
132	Reliability-Driven Assessment of GaN HEMTs and Si IGBTs in 3L-ANPC PV Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 956-969.	3.7	29
133	A Temperature-Dependent Thermal Model of IGBT Modules Suitable for Circuit-Level Simulations. IEEE Transactions on Industry Applications, 2016, 52, 3306-3314.	3.3	85
134	Power cycling test and failure analysis of molded Intelligent Power IGBT Module under different temperature swing durations. Microelectronics Reliability, 2016, 64, 403-408.	0.9	48
135	Active gate driving method for reliability improvement of IGBTs via junction temperature swing reduction. , 2016, , .		28
136	Mission-profile-based stress analysis of bond-wires in SiC power modules. Microelectronics Reliability, 2016, 64, 419-424.	0.9	27
137	Comparison of thermal runaway limits under different test conditions based on a 4.5kV IGBT. Microelectronics Reliability, 2016, 64, 524-529.	0.9	3
138	Effects of uneven temperature of IGBT and diode on switching characteristics of bridge legs in MW-level power converters. , 2016, , .		3
139	Estimation method for turn-off collector voltage of IGBTs using emitter-auxiliary inductor. , 2016, , .		2
140	A 3-D-Lumped Thermal Network Model for Long-Term Load Profiles Analysis in High-Power IGBT Modules. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 1050-1063.	3.7	131
141	Modern IGBT gate driving methods for enhancing reliability of high-power converters â€" An overview. Microelectronics Reliability, 2016, 58, 141-150.	0.9	25
142	IGBT Junction Temperature Measurement via Peak Gate Current. IEEE Transactions on Power Electronics, 2016, 31, 3784-3793.	5.4	115
143	Short-circuit robustness assessment in power electronic modules for megawatt applications. Facta Universitatis - Series Electronics and Energetics, 2016, 29, 35-47.	0.6	2
144	A comprehensive investigation on the short circuit performance of MW-level IGBT power modules. , 2015, , .		3

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145	Online junction temperature measurement using peak gate current. , 2015, , .		28
146	Comprehensive investigation on current imbalance among parallel chips inside MW-scale IGBT power modules. , 2015, , .		25
147	Experimental evaluation of IGBT junction temperature measurement via peak gate current. , 2015, , .		8
148	Analysis of Heavy Ion Irradiation Induced Thermal Damage in SiC Schottky Diodes. IEEE Transactions on Nuclear Science, 2015, 62, 202-209.	1.2	43
149	Junction temperature estimation method for a 600 V, 30A IGBT module during converter operation. Microelectronics Reliability, 2015, 55, 2022-2026.	0.9	50
150	Robustness of MW-Level IGBT modules against gate oscillations under short circuit events. Microelectronics Reliability, 2015, 55, 1950-1955.	0.9	20
151	Study on Oscillations During Short Circuit of MW-Scale IGBT Power Modules by Means of a 6-kA/1.1-kV Nondestructive Testing System. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 756-765.	3.7	17
152	Experimental study of Single Event Effects induced by heavy ion irradiation in enhancement mode GaN power HEMT. Microelectronics Reliability, 2015, 55, 1496-1500.	0.9	27
153	Electro-thermal modeling of high power IGBT module short-circuits with experimental validation. , 2015, , .		11
154	Reliability Oriented Design Tool For the New Generation of Grid Connected PV-Inverters. IEEE Transactions on Power Electronics, 2015, 30, 2635-2644.	5.4	157
155	Fast and Accurate Icepak-PSpice Co-Simulation of IGBTs under Short-Circuit with an Advanced PSpice Model. , 2014, , .		3
156	Investigation on the short-circuit behavior of an aged IGBT module through a 6 kA/1.1 kV non-destructive testing equipment. , 2014, , .		7
157	An Icepak-PSpice co-simulation method to study the impact of bond wires fatigue on the current and temperature distribution of IGBT modules under short-circuit. , 2014, , .		13
158	The impact of gate-driver parameters variation and device degradation in the PV-inverter lifetime. , 2014, , .		21
159	A temperature-dependent thermal model of IGBT modules suitable for circuit-level simulations. , 2014, , .		15
160	Mechanoluminescence of nylon under high velocity impact. Journal of Physics: Conference Series, 2014, 500, 182005.	0.3	1
161	Round busbar concept for 30 nH, 1.7 kV, 10 kA IGBT non-destructive short-circuit tester. , 2014, , .		11
162	Instabilities in Silicon Power Devices: A Review of Failure Mechanisms in Modern Power Devices. IEEE Industrial Electronics Magazine, 2014, 8, 28-39.	2.3	37

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163	Online junction temperature measurement via internal gate resistance during turn-on. , 2014, , .		33
164	Turn-off instabilities in large area IGBTs. Microelectronics Reliability, 2014, 54, 1927-1934.	0.9	0
165	Thermal damage in SiC Schottky diodes induced by SE heavy ions. Microelectronics Reliability, 2014, 54, 2200-2206.	0.9	25
166	Developments on DC/DC converters for the LHC experiment upgrades. Journal of Instrumentation, 2014, 9, C02017-C02017.	0.5	15
167	RADIATION AND MAGNETIC FIELD EFFECTS ON NEW SEMICONDUCTOR POWER DEVICES FOR HL-LHC EXPERIMENTS. , 2014, , .		1
168	Thermal instability during short circuit of normally-off AlGaN/GaN HFETs. Microelectronics Reliability, 2013, 53, 1481-1485.	0.9	19
169	Single-Event Effects in Power MOSFETs During Heavy Ion Irradiations Performed After Gamma-Ray Degradation. IEEE Transactions on Nuclear Science, 2013, 60, 3793-3801.	1.2	6
170	Catastrophic failure and fault-tolerant design of IGBT power electronic converters - an overview. , 2013, , .		145
171	Scattering parameter approach applied to the stability analysis of power IGBTs in short circuit. Microelectronics Reliability, 2013, 53, 1707-1712.	0.9	2
172	Power converters for future LHC experiments. Journal of Instrumentation, 2012, 7, C03012-C03012.	0.5	16
173	Reliability oriented design of power supplies for high energy physics applications. Microelectronics Reliability, 2012, 52, 2465-2470.	0.9	12
174	Unclamped repetitive stress on 1200V normally-off SiC JFETs. Microelectronics Reliability, 2012, 52, 2420-2425.	0.9	6
175	Behavior of power MOSFETs during heavy ions irradiation performed after Î³-rays exposure. Microelectronics Reliability, 2012, 52, 2363-2367.	0.9	2
176	A time-resolved IBICC experiment using the IEEM of the SIRAD facility. Nuclear Instruments & Methods in Physics Research B, 2012, 273, 234-236.	0.6	4
177	Power supply distribution system for calorimeters at the LHC beyond the nominal luminosity. Journal of Instrumentation, 2011, 6, P06005-P06005.	0.5	14
178	A new test methodology for an exhaustive study of single-event-effects on power MOSFETs. Microelectronics Reliability, 2011, 51, 1995-1998.	0.9	4
179	Operation of SiC normally-off JFET at the edges of its safe operating area. Microelectronics Reliability, 2011, 51, 1767-1772.	0.9	14
180	Effects of back-side He irradiation on MOS-GTO performances. , 2011, , .		1

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181	High-Voltage, High-Performance Switch Using Series-Connected IGBTs. IEEE Transactions on Power Electronics, 2010, 25, 2450-2459.	5.4	79
182	Experimental study and numerical investigation on the formation of single event gate damages induced on medium voltage power MOSFET. Microelectronics Reliability, 2010, 50, 1842-1847.	0.9	13
183	IGBT RBSOA non-destructive testing methods: Analysis and discussion. Microelectronics Reliability, 2010, 50, 1731-1737.	0.9	14
184	RADIATION EFFECTS ON POWER SEMICONDUCTOR DEVICES FOR DISTRIBUTED POWER SYSTEMS FOR ELECTROMAGNETIC CALORIMETERS. , 2010, , .		0
185	INDUCED DAMAGES IN POWER MOSFETS AFTER HEAVY IONS IRRADIATION. , 2010, , .		0
186	Instable mechanisms during unclamped operation of high power IGBT modules. Microelectronics Reliability, 2009, 49, 1363-1369.	0.9	9
187	Experimental study about gate oxide damages in patterned MOS capacitor irradiated with heavy ions. Microelectronics Reliability, 2009, 49, 1033-1037.	0.9	3
188	The role of the charge generated during heavy ion irradiation in the gate damage of medium voltage power MOSFET. , 2009, , .		3
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