

Francesco Iannuzzo

List of Publications by Year in descending order

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224
papers

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201385

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230
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230
docs citations

230
times ranked

1962
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Catastrophic failure and fault-tolerant design of IGBT power electronic converters - an overview. , 2013, , .		145
3	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
4	IGBT Junction Temperature Measurement via Peak Gate Current. IEEE Transactions on Power Electronics, 2016, 31, 3784-3793.	5.4	115
5	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
6	High-Voltage, High-Performance Switch Using Series-Connected IGBTs. IEEE Transactions on Power Electronics, 2010, 25, 2450-2459.	5.4	79
7	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
8	IR Camera Validation of IGBT Junction Temperature Measurement via Peak Gate Current. IEEE Transactions on Power Electronics, 2017, 32, 3099-3111.	5.4	75
9	A survey of SiC power MOSFETs short-circuit robustness and failure mode analysis. Microelectronics Reliability, 2017, 76-77, 272-276.	0.9	68
10	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
11	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
12	Junction temperature estimation method for a 600 V, 30A IGBT module during converter operation. Microelectronics Reliability, 2015, 55, 2022-2026.	0.9	50
13	Design of Low-Inductance Switching Power Cell for GaN HEMT Based Inverter. IEEE Transactions on Industry Applications, 2018, 54, 1592-1601.	3.3	49
14	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
15	Physical CAD Model for High-Voltage IGBTs Based on Lumped-Charge Approach. IEEE Transactions on Power Electronics, 2004, 19, 885-893.	5.4	47
16	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
17	Analysis of Heavy Ion Irradiation Induced Thermal Damage in SiC Schottky Diodes. IEEE Transactions on Nuclear Science, 2015, 62, 202-209.	1.2	43
18	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

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	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
22	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
23	Effect of short-circuit stress on the degradation of the SiO ₂ dielectric in SiC power MOSFETs. Microelectronics Reliability, 2018, 88-90, 577-583.	0.9	35
24	Online junction temperature measurement via internal gate resistance during turn-on. , 2014, , .		33
25	Aging precursors and degradation effects of SiC-MOSFET modules under highly accelerated power cycling conditions. , 2017, , .		33
26	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
27	Series connection of high power IGBT modules for traction applications. , 2005, , .		29
28	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
29	Online junction temperature measurement using peak gate current. , 2015, , .		28
30	Active gate driving method for reliability improvement of IGBTs via junction temperature swing reduction. , 2016, , .		28
31	Modeling of Short-Circuit-Related Thermal Stress in Aged IGBT Modules. IEEE Transactions on Industry Applications, 2017, 53, 4788-4795.	3.3	28
32	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
33	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
34	Mission-profile-based stress analysis of bond-wires in SiC power modules. Microelectronics Reliability, 2016, 64, 419-424.	0.9	27
35	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
36	Experimental and Numerical investigation about SEB/SEGR of Power MOSFET. Microelectronics Reliability, 2005, 45, 1711-1716.	0.9	25

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37	Thermal damage in SiC Schottky diodes induced by SE heavy ions. <i>Microelectronics Reliability</i> , 2014, 54, 2200-2206.	0.9	25
38	Comprehensive investigation on current imbalance among parallel chips inside MW-scale IGBT power modules. , 2015, , .		25
39	Modern IGBT gate driving methods for enhancing reliability of high-power converters “ An overview. <i>Microelectronics Reliability</i> , 2016, 58, 141-150.	0.9	25
40	Simultaneous On-State Voltage and Bond-Wire Resistance Monitoring of Silicon Carbide MOSFETs. <i>Energies</i> , 2017, 10, 384.	1.6	25
41	The Temperature Dependence of the Flatband Voltage in High-Power IGBTs. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 5581-5584.	5.2	25
42	Impact of Solder Degradation on V_{CE} of IGBT Module: Experiments and Modeling. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2022, 10, 4536-4545.	3.7	24
43	Compact Sandwiched Press-Pack SiC Power Module With Low Stray Inductance and Balanced Thermal Stress. <i>IEEE Transactions on Power Electronics</i> , 2020, 35, 2237-2241.	5.4	24
44	EMI Characterisation of high power IGBT modules for Traction Application. , 0, , .		23
45	Die degradation effect on aging rate in accelerated cycling tests of SiC power MOSFET modules. <i>Microelectronics Reliability</i> , 2017, 76-77, 415-419.	0.9	23
46	Experimental and numerical investigation on MOSFET's failure during reverse recovery of its internal diode. <i>IEEE Transactions on Electron Devices</i> , 1999, 46, 1268-1273.	1.6	22
47	Implications of Ageing Through Power Cycling on the Short-Circuit Robustness of 1.2-kV SiC mosfets. <i>IEEE Transactions on Power Electronics</i> , 2019, 34, 11182-11190.	5.4	22
48	A Lumped-Charge Approach Based Physical SPICE-Model for High Power Soft-Punch Through IGBT. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2019, 7, 62-70.	3.7	22
49	MAGFET based current sensing for power integrated circuit. <i>Microelectronics Reliability</i> , 2003, 43, 577-583.	0.9	21
50	The impact of gate-driver parameters variation and device degradation in the PV-inverter lifetime. , 2014, , .		21
51	Robustness of MW-Level IGBT modules against gate oscillations under short circuit events. <i>Microelectronics Reliability</i> , 2015, 55, 1950-1955.	0.9	20
52	Role of parasitic capacitances in power MOSFET turn-on switching speed limits: A SiC case study. , 2017, , .		20
53	A 3D Thermal Network Model for Monitoring Imbalanced Thermal Distribution of Press-Pack IGBT Modules in MMC-HVDC Applications. <i>Energies</i> , 2019, 12, 1319.	1.6	20
54	Lifetime Analysis of Metallized Polypropylene Capacitors in Modular Multilevel Converter Based on Finite Element Method. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2021, 9, 4248-4259.	3.7	20

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55	Two Decades of Condition Monitoring Methods for Power Devices. Electronics (Switzerland), 2021, 10, 683.	1.8	20
56	Thermal instability during short circuit of normally-off AlGaIn/GaN HFETs. Microelectronics Reliability, 2013, 53, 1481-1485.	0.9	19
57	Loss distribution analysis of three-level active neutral-point-clamped (3L-ANPC) converter with different PWM strategies. , 2016, , .		19
58	Short-circuit ruggedness assessment of a 1.2 kV/180 A SiC MOSFET power module. , 2017, , .		19
59	A fast electro-thermal co-simulation modeling approach for SiC power MOSFETs. , 2017, , .		18
60	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
61	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
62	Improving the Short-Circuit Reliability in IGBTs: How to Mitigate Oscillations. IEEE Transactions on Power Electronics, 2018, 33, 5603-5612.	5.4	17
63	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
64	Non-destructive high temperature characterisation of high-voltage IGBTs. Microelectronics Reliability, 2002, 42, 1635-1640.	0.9	16
65	Power converters for future LHC experiments. Journal of Instrumentation, 2012, 7, C03012-C03012.	0.5	16
66	Heavy-Ion Induced Single Event Gate Damage in Medium Voltage Power MOSFETs. IEEE Transactions on Nuclear Science, 2009, 56, 3573-3581.	1.2	15
67	A temperature-dependent thermal model of IGBT modules suitable for circuit-level simulations. , 2014, , .		15
68	Developments on DC/DC converters for the LHC experiment upgrades. Journal of Instrumentation, 2014, 9, C02017-C02017.	0.5	15
69	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
70	Impact of device aging in the compact electro-thermal modeling of SiC power MOSFETs. Microelectronics Reliability, 2019, 100-101, 113336.	0.9	15
71	A New Lumped-Charge Modeling Method for Power Semiconductor Devices. IEEE Transactions on Power Electronics, 2020, 35, 3989-3996.	5.4	15
72	Cost-Effective Prognostics of IGBT Bond Wires With Consideration of Temperature Swing. IEEE Transactions on Power Electronics, 2020, 35, 6773-6784.	5.4	15

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73	IGBT RBSOA non-destructive testing methods: Analysis and discussion. Microelectronics Reliability, 2010, 50, 1731-1737.	0.9	14
74	Power supply distribution system for calorimeters at the LHC beyond the nominal luminosity. Journal of Instrumentation, 2011, 6, P06005-P06005.	0.5	14
75	Operation of SiC normally-off JFET at the edges of its safe operating area. Microelectronics Reliability, 2011, 51, 1767-1772.	0.9	14
76	PSpice modeling platform for SiC power MOSFET modules with extensive experimental validation. , 2016, , .		14
77	Advanced power cycler with intelligent monitoring strategy of IGBT module under test. Microelectronics Reliability, 2017, 76-77, 522-526.	0.9	14
78	Wire bond degradation under thermo- and pure mechanical loading. Microelectronics Reliability, 2017, 76-77, 373-377.	0.9	14
79	Investigating SiC MOSFET body diode's light emission as temperature-sensitive electrical parameter. Microelectronics Reliability, 2018, 88-90, 627-630.	0.9	14
80	Fault Investigation in Cascaded H-Bridge Multilevel Inverter through Fast Fourier Transform and Artificial Neural Network Approach. Energies, 2020, 13, 1299.	1.6	14
81	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
82	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
83	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
84	Comparative assessment of 3.3kV/400A SiC MOSFET and Si IGBT power modules. , 2017, , .		13
85	Thermal stress mitigation by Active Thermal Control: Architectures, models and specific hardware. , 2017, , .		13
86	Reliability oriented design of power supplies for high energy physics applications. Microelectronics Reliability, 2012, 52, 2465-2470.	0.9	12
87	Analysis and optimisation through innovative driving strategy of high power IGBT performances/EMI reduction trade-off for converter systems in railway applications. Microelectronics Reliability, 2004, 44, 1443-1448.	0.9	11
88	IGBT modules robustness during turn-off commutation. Microelectronics Reliability, 2008, 48, 1435-1439.	0.9	11
89	High voltage, high performance switch using series connected IGBTs. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	11
90	Round busbar concept for 30 nH, 1.7 kV, 10 kA IGBT non-destructive short-circuit tester. , 2014, , .		11

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91	Electro-thermal modeling of high power IGBT module short-circuits with experimental validation. , 2015, , .		11
92	Development of Simulink-based SiC MOSFET modeling platform for series connected devices. , 2016, , .		11
93	Separation test method for investigation of current density effects on bond wires of SiC power MOSFET modules. , 2017, , .		11
94	Investigation on the degradation indicators of short-circuit tests in 1.2kV SiC MOSFET power modules. Microelectronics Reliability, 2018, 88-90, 661-665.	0.9	11
95	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
96	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
97	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
98	Ultra-low inductance design for a GaN HEMT based 3L-ANPC inverter. , 2016, , .		10
99	Reliability analysis of sintered Cu joints for SiC power devices under thermal shock condition. Microelectronics Reliability, 2019, 100-101, 113456.	0.9	10
100	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
101	A lumped-charge model for gate turn-off thyristors suitable for circuit simulation. Microelectronics Journal, 1999, 30, 543-550.	1.1	9
102	Lumped charge PSPICE model for high-voltage IGBTs. , 0, , .		9
103	Instable mechanisms during unclamped operation of high power IGBT modules. Microelectronics Reliability, 2009, 49, 1363-1369.	0.9	9
104	Reliability-oriented environmental thermal stress analysis of fuses in power electronics. Microelectronics Reliability, 2017, 76-77, 25-30.	0.9	9
105	Fast Electro-thermal Simulation Strategy for SiC MOSFETs Based on Power Loss Mapping. , 2018, , .		9
106	Finite Element Modeling of IGBT Modules to Explore the Correlation between Electric Parameters and Damage in Bond Wires. , 2019, , .		9
107	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
108	Experimental and 3D Simulation Study on the Role of the Parasitic BJT Activation in SEB/SEGR of Power MOSFET. European Conference on Radiation and Its Effects on Components and Systems, Proceedings of the, 2005, , .	0.0	8

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109	EMI analysis in high power converters for traction application. , 2005, , .		8
110	Experimental study of power MOSFETs gate damage in radiation environment. Microelectronics Reliability, 2006, 46, 1854-1857.	0.9	8
111	Experimental evidence of latent gate oxide damages in medium voltage power MOSFET as a result of heavy ions exposure. Microelectronics Reliability, 2008, 48, 1306-1309.	0.9	8
112	Experimental evaluation of IGBT junction temperature measurement via peak gate current. , 2015, , .		8
113	New layout concepts in MW-scale IGBT modules for higher robustness during normal and abnormal operations. , 2016, , .		8
114	Active thermal control by controlled shoot-through of power devices. , 2017, , .		8
115	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
116	Smart SiC MOSFET accelerated lifetime testing. Microelectronics Reliability, 2018, 88-90, 43-47.	0.9	8
117	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
118	Impact of the Case Temperature on the Reliability of SiC MOSFETs Under Repetitive Short Circuit Tests. , 2019, , .		8
119	Investigation on the short-circuit behavior of an aged IGBT module through a 6 kA/1.1 kV non-destructive testing equipment. , 2014, , .		7
120	Compact electro-thermal modeling of a SiC MOSFET power module under short-circuit conditions. , 2017, , .		7
121	Performance Analysis of a Single-phase GaN-based 3L-ANPC Inverter for Photovoltaic Applications. , 2018, , .		7
122	Failure Analysis of a Degraded 1.2 kV SiC MOSFET after Short Circuit at High Temperature. , 2018, , .		7
123	SiC MOSFET vs SiC/Si Cascode short circuit robustness benchmark. Microelectronics Reliability, 2019, 100-101, 113429.	0.9	7
124	Thermal Performance Evaluation of 1500-VDC Photovoltaic Inverters Under Constant Power Generation Operation. , 2019, , .		7
125	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
126	Thermal Mapping of Power Semiconductors in H-Bridge Circuit. Applied Sciences (Switzerland), 2020, 10, 4340.	1.3	7

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127	Race-Control Algorithm for the Full-Bridge PRCP Converter Using Cost-Effective FPGAs. IEEE Transactions on Industrial Electronics, 2008, 55, 1519-1526.	5.2	6
128	Unclamped repetitive stress on 1200V normally-off SiC JFETs. Microelectronics Reliability, 2012, 52, 2420-2425.	0.9	6
129	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
130	Investigation on the short circuit safe operation area of SiC MOSFET power modules. , 2016, , .		6
131	Active thermal control for reliability improvement of MOS-gated power devices. , 2017, , .		6
132	Simple and effective open switch fault diagnosis of single-phase PWM rectifier. Microelectronics Reliability, 2018, 88-90, 423-427.	0.9	6
133	Lock-in Thermography Failure Detection on Multilayer Ceramic Capacitors After Flex Cracking and Temperature-Humidity-Bias Stress. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 2254-2261.	3.7	6
134	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
135	Lifetime Evaluation of Power Modules for Three-Level 1500-V Photovoltaic Inverters. , 2020, , .		6
136	Switching Stability Analysis of Paralleled RC-IGBTs With Snapback Effect. IEEE Transactions on Electron Devices, 2021, 68, 3429-3434.	1.6	6
137	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
138	Non-destructive tester for single event burnout of power diodes. Microelectronics Reliability, 2001, 41, 1725-1729.	0.9	5
139	Measurement of the BJT activation current during the reverse recovery of power MOSFET's drain-source diode. IEEE Transactions on Electron Devices, 2001, 48, 391-393.	1.6	5
140	Experimental study of charge generation mechanisms in power MOSFETs due to energetic particle impact. Microelectronics Reliability, 2003, 43, 549-555.	0.9	5
141	A 3-D simulation study about Single Event Gate damage in medium voltage power MOSFET. , 2008, , .		5
142	Fuse modeling for reliability study of power electronic circuits. , 2017, , .		5
143	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
144	TCAD analysis of short-circuit oscillations in IGBTs. , 2017, , .		5

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145	Increasing emitter efficiency in 3.3-kV enhanced trench IGBTs for higher short-circuit capability. , 2018, , .		5
146	Online Condition Monitoring of Bond Wire Degradation in Inverter Operation. , 2018, , .		5
147	A temperature dependent lumped-charge model for trench FS-IGBT. , 2018, , .		5
148	Enhanced Reliability of 1500-V Photovoltaic Inverters with Junction Temperature Limit Control. , 2021, , .		5
149	The robustness of series-connected high power IGBT modules. Microelectronics Reliability, 2007, 47, 1746-1750.	0.9	4
150	A new test methodology for an exhaustive study of single-event-effects on power MOSFETs. Microelectronics Reliability, 2011, 51, 1995-1998.	0.9	4
151	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
152	Capacitive effects in IGBTs limiting their reliability under short circuit. Microelectronics Reliability, 2017, 76-77, 485-489.	0.9	4
153	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
154	Computer-aided engineering simulations. , 2018, , 199-223.		4
155	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
156	Reliability Analysis of a 3-leg 4-wire Inverter under Unbalanced Loads and Harmonic Injection. , 2019, , .		4
157	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
158	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
159	Isolated DC/AC Converter with ZVT based on Pulsating DC Link. , 2020, , .		4
160	Parameters sensitivity analysis of silicon carbide buck converters to extract features for condition monitoring. Microelectronics Reliability, 2020, 114, 113910.	0.9	4
161	PV mission profile simplification method for power devices subjected to arid climates. Microelectronics Reliability, 2021, 126, 114328.	0.9	4
162	Discontinuous Modulation for Improved Thermal Balance of Three-Level 1500-V Photovoltaic Inverters under Low-Voltage Ride-Through. , 2021, , .		4

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163	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
164	The Reliability of New Generation Power MOSFETs in Radiation Environment. Microelectronics Reliability, 2002, 42, 1629-1634.	0.9	3
165	Non-destructive Testing Technique for MOSFETs Characterisation during Soft-Switching ZVS Operations. Microelectronics Reliability, 2005, 45, 1738-1741.	0.9	3
166	Investigation of MOSFET failure in soft-switching conditions. Microelectronics Reliability, 2006, 46, 1790-1794.	0.9	3
167	Experimental study about gate oxide damages in patterned MOS capacitor irradiated with heavy ions. Microelectronics Reliability, 2009, 49, 1033-1037.	0.9	3
168	The role of the charge generated during heavy ion irradiation in the gate damage of medium voltage power MOSFET. , 2009, , .		3
169	Fast and Accurate Icepak-PSpice Co-Simulation of IGBTs under Short-Circuit with an Advanced PSpice Model. , 2014, , .		3
170	A comprehensive investigation on the short circuit performance of MW-level IGBT power modules. , 2015, , .		3
171	Prediction of short-circuit-related thermal stress in aged IGBT modules. , 2016, , .		3
172	Comparison of thermal runaway limits under different test conditions based on a 4.5kV IGBT. Microelectronics Reliability, 2016, 64, 524-529.	0.9	3
173	Effects of uneven temperature of IGBT and diode on switching characteristics of bridge legs in MW-level power converters. , 2016, , .		3
174	Development of PSpice modeling platform for 10 kV/100 A SiC MOSFET power module. , 2017, , .		3
175	Non-uniform Temperature Distribution Implications on Thermal Analysis Accuracy of Si IGBTs and SiC MOSFETs. , 2018, , .		3
176	Analysis of the RC-IGBT snap-back phenomenon on the switching performance of parallel devices. , 2020, , .		3
177	Voltage Balancing of Series IGBTs in Short-Circuit Conditions. IEEE Transactions on Power Electronics, 2022, 37, 5675-5686.	5.4	3
178	Separation of Bond-Wire and Solder Layer Failure Modes in IGBT Power Modules. , 2020, , .		3
179	Intelligent DC- and AC Power-Cycling Platform for Power Electronic Components. , 2022, , .		3
180	Characterisation of high-voltage IGBT modules at high temperature and high currents. , 0, , .		2

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181	Experimental optimisation of high power IGBT modules performances working at the edges of their safe operating area. , 0, , .		2
182	The high frequency behaviour of high voltage and current IGBT modules. Microelectronics Reliability, 2006, 46, 1848-1853.	0.9	2
183	Experimental characterisation of high efficiency resonant gate driver circuit. , 2007, , .		2
184	High performance, FPGA-based test apparatus for unclamped inductive switching of IGBTs. Microelectronics Reliability, 2008, 48, 1449-1452.	0.9	2
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