

# Francesco Iannuzzo

## List of Publications by Citations

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191  
papers

2,134  
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22  
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35  
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230  
ext. papers

2,787  
ext. citations

2.7  
avg, IF

5.45  
L-index

#	Paper	IF	Citations
191	Reliability Oriented Design Tool For the New Generation of Grid Connected PV-Inverters. <i>IEEE Transactions on Power Electronics</i> , <b>2015</b> , 30, 2635-2644	7.2	106
190	Catastrophic failure and fault-tolerant design of IGBT power electronic converters - an overview <b>2013</b> ,		92
189	A 3-D-Lumped Thermal Network Model for Long-Term Load Profiles Analysis in High-Power IGBT Modules. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2016</b> , 4, 1050-1063	5.6	89
188	IGBT Junction Temperature Measurement via Peak Gate Current. <i>IEEE Transactions on Power Electronics</i> , <b>2016</b> , 31, 3784-3793	7.2	73
187	High-Voltage, High-Performance Switch Using Series-Connected IGBTs. <i>IEEE Transactions on Power Electronics</i> , <b>2010</b> , 25, 2450-2459	7.2	65
186	. <i>IEEE Transactions on Industry Applications</i> , <b>2017</b> , 53, 2880-2887	4.3	56
185	A Temperature-Dependent Thermal Model of IGBT Modules Suitable for Circuit-Level Simulations. <i>IEEE Transactions on Industry Applications</i> , <b>2016</b> , 52, 3306-3314	4.3	50
184	IR Camera Validation of IGBT Junction Temperature Measurement via Peak Gate Current. <i>IEEE Transactions on Power Electronics</i> , <b>2017</b> , 32, 3099-3111	7.2	46
183	A survey of SiC power MOSFETs short-circuit robustness and failure mode analysis. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 272-276	1.2	41
182	Physical CAD model for high-voltage IGBTs based on lumped-charge approach. <i>IEEE Transactions on Power Electronics</i> , <b>2004</b> , 19, 885-893	7.2	38
181	Junction temperature estimation method for a 600 V, 30A IGBT module during converter operation. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 2022-2026	1.2	35
180	Analysis of Heavy Ion Irradiation Induced Thermal Damage in SiC Schottky Diodes. <i>IEEE Transactions on Nuclear Science</i> , <b>2015</b> , 62, 202-209	1.7	31
179	Investigation and Classification of Short-Circuit Failure Modes Based on Three-Dimensional Safe Operating Area for High-Power IGBT Modules. <i>IEEE Transactions on Power Electronics</i> , <b>2018</b> , 33, 1075-1086	7.2	30
178	Power cycling test and failure analysis of molded Intelligent Power IGBT Module under different temperature swing durations. <i>Microelectronics Reliability</i> , <b>2016</b> , 64, 403-408	1.2	30
177	Enabling Junction Temperature Estimation via Collector-Side Thermo-Sensitive Electrical Parameters Through Emitter Stray Inductance in High-Power IGBT Modules. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 4724-4738	8.9	30
176	Mission-Profile-Based Lifetime Prediction for a SiC mosfet Power Module Using a Multi-Step Condition-Mapping Simulation Strategy. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 9698-9708	7.2	28
175	Analytical and Experimental Investigation on A Dynamic Thermo-Sensitive Electrical Parameter With Maximum $\frac{dI_{C}}{dt}$ During Turn-off for High Power Trench Gate/Field-Stop IGBT Modules. <i>IEEE Transactions on Power Electronics</i> , <b>2017</b> , 32, 6394-6404	7.2	26

174	. <i>IEEE Transactions on Industry Applications</i> , <b>2018</b> , 54, 1592-1601	4.3	25
173	Effect of short-circuit stress on the degradation of the SiO <sub>2</sub> dielectric in SiC power MOSFETs. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 577-583	1.2	25
172	Online junction temperature measurement via internal gate resistance during turn-on <b>2014</b> ,		24
171	. <i>IEEE Transactions on Industry Applications</i> , <b>2019</b> , 55, 6184-6192	4.3	23
170	Role of Threshold Voltage Shift in Highly Accelerated Power Cycling Tests for SiC MOSFET Modules. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2020</b> , 8, 1657-1667	5.6	23
169	Series connection of high power IGBT modules for traction applications <b>2005</b> ,		22
168	Experimental and Numerical investigation about SEB/SEGR of Power MOSFET. <i>Microelectronics Reliability</i> , <b>2005</b> , 45, 1711-1716	1.2	21
167	. <i>IEEE Transactions on Industry Applications</i> , <b>2017</b> , 53, 4788-4795	4.3	20
166	Aging precursors and degradation effects of SiC-MOSFET modules under highly accelerated power cycling conditions <b>2017</b> ,		20
165	Instabilities in Silicon Power Devices: A Review of Failure Mechanisms in Modern Power Devices. <i>IEEE Industrial Electronics Magazine</i> , <b>2014</b> , 8, 28-39	6.2	20
164	Simultaneous On-State Voltage and Bond-Wire Resistance Monitoring of Silicon Carbide MOSFETs. <i>Energies</i> , <b>2017</b> , 10, 384	3.1	20
163	. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2016</b> , 4, 956-969	5.6	19
162	Thermal damage in SiC Schottky diodes induced by SE heavy ions. <i>Microelectronics Reliability</i> , <b>2014</b> , 54, 2200-2206	1.2	18
161	Active gate driving method for reliability improvement of IGBTs via junction temperature swing reduction <b>2016</b> ,		18
160	Thermal instability during short circuit of normally-off AlGa <sub>N</sub> /Ga <sub>N</sub> HFETs. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 1481-1485	1.2	17
159	MAGFET based current sensing for power integrated circuit. <i>Microelectronics Reliability</i> , <b>2003</b> , 43, 577-583		17
158	Experimental and numerical investigation on MOSFET's failure during reverse recovery of its internal diode. <i>IEEE Transactions on Electron Devices</i> , <b>1999</b> , 46, 1268-1273	2.9	17
157	Mission-profile-based stress analysis of bond-wires in SiC power modules. <i>Microelectronics Reliability</i> , <b>2016</b> , 64, 419-424	1.2	17

156	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> , <b>2019</b> , 7, 62-70	5.6	17
155	Ensuring a Reliable Operation of Two-Level IGBT-Based Power Converters: A Review of Monitoring and Fault-Tolerant Approaches. <i>IEEE Access</i> , <b>2020</b> , 8, 89988-90022	3.5	16
154	Experimental study of Single Event Effects induced by heavy ion irradiation in enhancement mode GaN power HEMT. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1496-1500	1.2	15
153	Modern IGBT gate driving methods for enhancing reliability of high-power converters [An overview. <i>Microelectronics Reliability</i> , <b>2016</b> , 58, 141-150	1.2	15
152	The Temperature Dependence of the Flatband Voltage in High-Power IGBTs. <i>IEEE Transactions on Industrial Electronics</i> , <b>2019</b> , 66, 5581-5584	8.9	15
151	Robustness of MW-Level IGBT modules against gate oscillations under short circuit events. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1950-1955	1.2	14
150	Die degradation effect on aging rate in accelerated cycling tests of SiC power MOSFET modules. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 415-419	1.2	14
149	Comprehensive investigation on current imbalance among parallel chips inside MW-scale IGBT power modules <b>2015</b> ,		14
148	Impact of Repetitive Short-Circuit Tests on the Normal Operation of SiC MOSFETs Considering Case Temperature Influence. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2020</b> , 8, 195-205	5.6	14
147	On-line solder layer degradation measurement for SiC-MOSFET modules under accelerated power cycling condition. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 563-567	1.2	14
146	Developments on DC/DC converters for the LHC experiment upgrades. <i>Journal of Instrumentation</i> , <b>2014</b> , 9, C02017-C02017	1	13
145	Heavy-Ion Induced Single Event Gate Damage in Medium Voltage Power MOSFETs. <i>IEEE Transactions on Nuclear Science</i> , <b>2009</b> , 56, 3573-3581	1.7	13
144	Experimental study and numerical investigation on the formation of single event gate damages induced on medium voltage power MOSFET. <i>Microelectronics Reliability</i> , <b>2010</b> , 50, 1842-1847	1.2	13
143	Impact of Solder Degradation on VCE of IGBT Module: Experiments and Modeling. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2019</b> , 1-1	5.6	12
142	Role of parasitic capacitances in power MOSFET turn-on switching speed limits: A SiC case study <b>2017</b> ,		12
141	Online junction temperature measurement using peak gate current <b>2015</b> ,		12
140	The impact of gate-driver parameters variation and device degradation in the PV-inverter lifetime <b>2014</b> ,		12
139	Operation of SiC normally-off JFET at the edges of its safe operating area. <i>Microelectronics Reliability</i> , <b>2011</b> , 51, 1767-1772	1.2	12

138	Power converters for future LHC experiments. <i>Journal of Instrumentation</i> , <b>2012</b> , 7, C03012-C03012	1	12
137	IGBT RBSOA non-destructive testing methods: Analysis and discussion. <i>Microelectronics Reliability</i> , <b>2010</b> , 50, 1731-1737	1.2	12
136	Non-destructive high temperature characterisation of high-voltage IGBTs. <i>Microelectronics Reliability</i> , <b>2002</b> , 42, 1635-1640	1.2	12
135	Study of Current Density Influence on Bond Wire Degradation Rate in SiC MOSFET Modules. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2020</b> , 8, 1622-1632	5.6	12
134	Improving the Short-Circuit Reliability in IGBTs: How to Mitigate Oscillations. <i>IEEE Transactions on Power Electronics</i> , <b>2018</b> , 33, 5603-5612	7.2	11
133	Reliability oriented design of power supplies for high energy physics applications. <i>Microelectronics Reliability</i> , <b>2012</b> , 52, 2465-2470	1.2	11
132	Power supply distribution system for calorimeters at the LHC beyond the nominal luminosity. <i>Journal of Instrumentation</i> , <b>2011</b> , 6, P06005-P06005	1	11
131	EMI Characterisation of high power IGBT modules for Traction Application		11
130	Loss distribution analysis of three-level active neutral-point-clamped (3L-ANPC) converter with different PWM strategies <b>2016</b> ,		11
129	Compact Sandwiched Press-Pack SiC Power Module With Low Stray Inductance and Balanced Thermal Stress. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 2237-2241	7.2	11
128	Investigation of acoustic emission as a non-invasive method for detection of power semiconductor aging. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 545-549	1.2	11
127	A fast electro-thermal co-simulation modeling approach for SiC power MOSFETs <b>2017</b> ,		10
126	A 3D Thermal Network Model for Monitoring Imbalanced Thermal Distribution of Press-Pack IGBT Modules in MMC-HVDC Applications. <i>Energies</i> , <b>2019</b> , 12, 1319	3.1	10
125	Separation test method for investigation of current density effects on bond wires of SiC power MOSFET modules <b>2017</b> ,		10
124	Thermal stress mitigation by Active Thermal Control: Architectures, models and specific hardware <b>2017</b> ,		10
123	A New Lumped-Charge Modeling Method for Power Semiconductor Devices. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 3989-3996	7.2	10
122	Investigating SiC MOSFET body diode's light emission as temperature-sensitive electrical parameter. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 627-630	1.2	10
121	Study on Oscillations During Short Circuit of MW-Scale IGBT Power Modules by Means of a 6-kA/1.1-kV Nondestructive Testing System. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2015</b> , 3, 756-765	5.6	9

120	Electro-thermal modeling of high power IGBT module short-circuits with experimental validation <b>2015,</b>		9
119	Short-circuit ruggedness assessment of a 1.2 kV/180 A SiC MOSFET power module <b>2017,</b>		9
118	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 <b>2014,</b>		9
117	Instable mechanisms during unclamped operation of high power IGBT modules. <i>Microelectronics Reliability</i> , <b>2009</b> , 49, 1363-1369	1.2	9
116	IGBT modules robustness during turn-off commutation. <i>Microelectronics Reliability</i> , <b>2008</b> , 48, 1435-1439	1.2	9
115	PSpice modeling platform for SiC power MOSFET modules with extensive experimental validation <b>2016,</b>		9
114	Thermal modeling of wire-bonded power modules considering non-uniform temperature and electric current interactions. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 1135-1140	1.2	9
113	Implications of Ageing Through Power Cycling on the Short-Circuit Robustness of 1.2-kV SiC mosfets. <i>IEEE Transactions on Power Electronics</i> , <b>2019</b> , 34, 11182-11190	7.2	8
112	Advanced power cyler with intelligent monitoring strategy of IGBT module under test. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 522-526	1.2	8
111	Experimental evaluation of IGBT junction temperature measurement via peak gate current <b>2015,</b>		8
110	A temperature-dependent thermal model of IGBT modules suitable for circuit-level simulations <b>2014,</b>		8
109	Analysis and optimisation through innovative driving strategy of high power IGBT performances/EMI reduction trade-off for converter systems in railway applications. <i>Microelectronics Reliability</i> , <b>2004</b> , 44, 1443-1448	1.2	8
108	Discontinuous PWM for Online Condition Monitoring of SiC Power Modules. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2020</b> , 8, 323-330	5.6	8
107	Lifetime Evaluation of Three-Level Inverters for 1500-V Photovoltaic Systems. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 4285-4298	5.6	8
106	Wire bond degradation under thermo- and pure mechanical loading. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 373-377	1.2	7
105	High voltage, high performance switch using series connected IGBTs. <i>Power Electronics Specialist Conference (PESC), IEEE</i> , <b>2008</b> ,		7
104	Experimental evidence of latent gate oxide damages in medium voltage power MOSFET as a result of heavy ions exposure. <i>Microelectronics Reliability</i> , <b>2008</b> , 48, 1306-1309	1.2	7
103	Lumped charge PSPICE model for high-voltage IGBTs		7

102	A lumped-charge model for gate turn-off thyristors suitable for circuit simulation. <i>Microelectronics Journal</i> , <b>1999</b> , 30, 543-550	1.8	7
101	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> , <b>2020</b> , 1-1	5.6	6
100	Cost-Effective Prognostics of IGBT Bond Wires With Consideration of Temperature Swing. <i>IEEE Transactions on Power Electronics</i> , <b>2020</b> , 35, 6773-6784	7.2	6
99	Impact of device aging in the compact electro-thermal modeling of SiC power MOSFETs. <i>Microelectronics Reliability</i> , <b>2019</b> , 100-101, 113336	1.2	6
98	Round busbar concept for 30 nH, 1.7 kV, 10 kA IGBT non-destructive short-circuit tester <b>2014</b> ,		6
97	Reliability-oriented environmental thermal stress analysis of fuses in power electronics. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 25-30	1.2	6
96	Experimental study of power MOSFET gate damage in radiation environment. <i>Microelectronics Reliability</i> , <b>2006</b> , 46, 1854-1857	1.2	6
95	Experimental and 3D Simulation Study on the Role of the Parasitic BJT Activation in SEB/SEGR of Power MOSFET. <i>European Conference on Radiation and Its Effects on Components and Systems, Proceedings of the</i> , <b>2005</b> ,		6
94	EMI analysis in high power converters for traction application <b>2005</b> ,		6
93	Two Decades of Condition Monitoring Methods for Power Devices. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 683	2.6	6
92	Investigation on the degradation indicators of short-circuit tests in 1.2 kV SiC MOSFET power modules. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 661-665	1.2	6
91	SiC MOSFET vs SiC/Si Cascode short circuit robustness benchmark. <i>Microelectronics Reliability</i> , <b>2019</b> , 100-101, 113429	1.2	5
90	Impact of the Case Temperature on the Reliability of SiC MOSFETs Under Repetitive Short Circuit Tests <b>2019</b> ,		5
89	Active thermal control by controlled shoot-through of power devices <b>2017</b> ,		5
88	Comparative assessment of 3.3kV/400A SiC MOSFET and Si IGBT power modules <b>2017</b> ,		5
87	Compact electro-thermal modeling of a SiC MOSFET power module under short-circuit conditions <b>2017</b> ,		5
86	Unclamped repetitive stress on 1200 V normally-off SiC JFETs. <i>Microelectronics Reliability</i> , <b>2012</b> , 52, 2420-2425	5	5
85	Race-Control Algorithm for the Full-Bridge PRCP Converter Using Cost-Effective FPGAs. <i>IEEE Transactions on Industrial Electronics</i> , <b>2008</b> , 55, 1519-1526	8.9	5



84	Measurement of the BJT activation current during the reverse recovery of power MOSFET's drain-source diode. <i>IEEE Transactions on Electron Devices</i> , <b>2001</b> , 48, 391-393	2.9	5
83	Non-destructive tester for single event burnout of power diodes. <i>Microelectronics Reliability</i> , <b>2001</b> , 41, 1725-1729	1.2	5
82	Online Condition Monitoring of Bond Wire Degradation in Inverter Operation <b>2018</b> ,		5
81	Smart SiC MOSFET accelerated lifetime testing. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 43-47	1.2	5
80	Failure Analysis of a Degraded 1.2 kV SiC MOSFET after Short Circuit at High Temperature <b>2018</b> ,		5
79	Reliability analysis of sintered Cu joints for SiC power devices under thermal shock condition. <i>Microelectronics Reliability</i> , <b>2019</b> , 100-101, 113456	1.2	4
78	Thermal Mapping of Power Semiconductors in H-Bridge Circuit. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 4340	2.6	4
77	Fault Investigation in Cascaded H-Bridge Multilevel Inverter through Fast Fourier Transform and Artificial Neural Network Approach. <i>Energies</i> , <b>2020</b> , 13, 1299	3.1	4
76	A temperature dependent lumped-charge model for trench FS-IGBT <b>2018</b> ,		4
75	Lock-in Thermography Failure Detection on Multilayer Ceramic Capacitors After Flex Cracking and TemperatureHumidityBias Stress. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2018</b> , 6, 2254-2261	5.6	4
74	Uneven temperature effect evaluation in high-power IGBT inverter legs and relative test platform design. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 123-130	1.2	4
73	Elimination of bus voltage impact on temperature sensitive electrical parameter during turn-on transition for junction temperature estimation of high-power IGBT modules <b>2017</b> ,		4
72	Investigation on the short-circuit behavior of an aged IGBT module through a 6 kA/1.1 kV non-destructive testing equipment <b>2014</b> ,		4
71	A 3-D simulation study about Single Event Gate damage in medium voltage power MOSFET <b>2008</b> ,		4
70	The robustness of series-connected high power IGBT modules. <i>Microelectronics Reliability</i> , <b>2007</b> , 47, 1746-1750		4
69	Development of Simulink-based SiC MOSFET modeling platform for series connected devices <b>2016</b> ,		4
68	New layout concepts in MW-scale IGBT modules for higher robustness during normal and abnormal operations <b>2016</b> ,		4
67	Simple and effective open switch fault diagnosis of single-phase PWM rectifier. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 423-427	1.2	4



66	Online Junction Temperature and Current Simultaneous Extraction for SiC MOSFETs With Electroluminescence Effect. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 37, 21-25	7.2	4
65	Comparative study of wire bond degradation under power and mechanical accelerated tests. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2019</b> , 30, 17040-17045	2.1	3
64	Implications of short-circuit events on power cycling of 1.2-kV/20-A SiC MOSFET power modules. <i>Microelectronics Reliability</i> , <b>2019</b> , 100-101, 113373	1.2	3
63	Wear-out evolution analysis of multiple-bond-wires power modules based on thermo-electro-mechanical FEM simulation. <i>Microelectronics Reliability</i> , <b>2019</b> , 100-101, 113472	1.2	3
62	A time-resolved IBICC experiment using the IEEM of the SIRAD facility. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>2012</b> , 273, 234-236	1.2	3
61	Single-Event Effects in Power MOSFETs During Heavy Ion Irradiations Performed After Gamma-Ray Degradation. <i>IEEE Transactions on Nuclear Science</i> , <b>2013</b> , 60, 3793-3801	1.7	3
60	Active thermal control for reliability improvement of MOS-gated power devices <b>2017</b> ,		3
59	A new test methodology for an exhaustive study of single-event-effects on power MOSFETs. <i>Microelectronics Reliability</i> , <b>2011</b> , 51, 1995-1998	1.2	3
58	The role of the charge generated during heavy ion irradiation in the gate damage of medium voltage power MOSFET <b>2009</b> ,		3
57	Investigation of MOSFET failure in soft-switching conditions. <i>Microelectronics Reliability</i> , <b>2006</b> , 46, 1790-1794		3
56	The Reliability of New Generation Power MOSFETs in Radiation Environment. <i>Microelectronics Reliability</i> , <b>2002</b> , 42, 1629-1634	1.2	3
55	Experimental study of charge generation mechanisms in power MOSFETs due to energetic particle impact. <i>Microelectronics Reliability</i> , <b>2003</b> , 43, 549-555	1.2	3
54	Non-destructive Testing Technique for MOSFETs Characterisation during Soft-Switching ZVS Operations. <i>Microelectronics Reliability</i> , <b>2005</b> , 45, 1738-1741	1.2	3
53	Discontinuous Modulation for Improved Thermal Balance of Three-Level 1500-V Photovoltaic Inverters under Low-Voltage Ride-Through <b>2021</b> ,		3
52	A non-invasive SiC MOSFET Junction temperature estimation method based on the transient light Emission from the intrinsic body diode. <i>Microelectronics Reliability</i> , <b>2020</b> , 114, 113845	1.2	3
51	Ultra-low inductance design for a GaN HEMT based 3L-ANPC inverter <b>2016</b> ,		3
50	Prediction of short-circuit-related thermal stress in aged IGBT modules <b>2016</b> ,		3
49	Thermal Performance Evaluation of 1500-VDC Photovoltaic Inverters Under Constant Power Generation Operation <b>2019</b> ,		3

48	Finite Element Modeling of IGBT Modules to Explore the Correlation between Electric Parameters and Damage in Bond Wires <b>2019</b> ,		3
47	Intrusiveness of Power Device Condition Monitoring Methods: Introducing Figures of Merit for Condition Monitoring. <i>IEEE Industrial Electronics Magazine</i> , <b>2021</b> , 2-11	6.2	3
46	Fast Electro-thermal Simulation Strategy for SiC MOSFETs Based on Power Loss Mapping <b>2018</b> ,		3
45	Effect of short-circuit degradation on the remaining useful lifetime of SiC MOSFETs and its failure analysis. <i>Microelectronics Reliability</i> , <b>2020</b> , 114, 113784	1.2	2
44	Effects of uneven temperature of IGBT and diode on switching characteristics of bridge legs in MW-level power converters <b>2016</b> ,		2
43	Estimation method for turn-off collector voltage of IGBTs using emitter-auxiliary inductor <b>2016</b> ,		2
42	Computer-aided engineering simulations <b>2018</b> , 199-223		2
41	Reliability Analysis of a 3-leg 4-wire Inverter under Unbalanced Loads and Harmonic Injection <b>2019</b> ,		2
40	Scattering parameter approach applied to the stability analysis of power IGBTs in short circuit. <i>Microelectronics Reliability</i> , <b>2013</b> , 53, 1707-1712	1.2	2
39	Capacitive effects in IGBTs limiting their reliability under short circuit. <i>Microelectronics Reliability</i> , <b>2017</b> , 76-77, 485-489	1.2	2
38	TCAD analysis of short-circuit oscillations in IGBTs <b>2017</b> ,		2
37	A comprehensive investigation on the short circuit performance of MW-level IGBT power modules <b>2015</b> ,		2
36	Fast and Accurate Icpak-PSpice Co-Simulation of IGBTs under Short-Circuit with an Advanced PSpice Model <b>2014</b> ,		2
35	Experimental study about gate oxide damages in patterned MOS capacitor irradiated with heavy ions. <i>Microelectronics Reliability</i> , <b>2009</b> , 49, 1033-1037	1.2	2
34	Experimental characterisation of high efficiency resonant gate driver circuit <b>2007</b> ,		2
33	High performance, FPGA-based test apparatus for unclamped inductive switching of IGBTs. <i>Microelectronics Reliability</i> , <b>2008</b> , 48, 1449-1452	1.2	2
32	The high frequency behaviour of high voltage and current IGBT modules. <i>Microelectronics Reliability</i> , <b>2006</b> , 46, 1848-1853	1.2	2
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29	Power cycling test of transfer molded IGBT modules by advanced power cyler under different junction temperature swings. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 788-794	1.2	2
28	Failure mechanism analysis of fuses subjected to manufacturing and operational thermal stresses. <i>Microelectronics Reliability</i> , <b>2018</b> , 88-90, 304-308	1.2	2
27	Modeling of IGBT With High Bipolar Gain for Mitigating Gate Voltage Oscillations During Short Circuit. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2019</b> , 7, 1584-1592	5.6	1
26	Evaluating IGBT temperature evolution during short circuit operations using a TSEP-based method. <i>Microelectronics Reliability</i> , <b>2019</b> , 100-101, 113423	1.2	1
25	Mechanoluminescence of nylon under high velocity impact. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 500, 182005	0.3	1
24	Development of PSpice modeling platform for 10 kV/100 A SiC MOSFET power module <b>2017</b> ,		1
23	Impact of bending speed and setup on flex cracks in multilayer ceramic capacitors <b>2017</b> ,		1
22	Effects of back-side He irradiation on MOS-GTO performances <b>2011</b> ,		1
21	Experimental analysis of energy consumption by MobileDDR memory for mobile applications <b>2008</b> ,		1
20	Characterisation of high-voltage IGBT modules at high temperature and high currents		1
19	Effects of heavy ion impact on power diodes		1
18	Effect of Current Distortion and Unbalanced Loads on Semiconductors Reliability. <i>IEEE Access</i> , <b>2021</b> , 9, 162660-162670	3.5	1
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16	Enhancement of Thermo-mechanical Behavior of IGBT Modules through Engineered Threshold Voltages <b>2019</b> ,		1
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13	Thermal Modeling of Large Electrolytic Capacitors Using FEM and Considering the Internal Geometry. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 6315-6328	5.6	1

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11	Improved Temperature Monitoring and Protection Method of Three-Level NPC Application Based on Half-Bridge IGBT Modules. <i>IEEE Access</i> , <b>2022</b> , 10, 35605-35619	3.5	1
10	Study of moisture transport in silicone gel for IGBT modules. <i>Microelectronics Reliability</i> , <b>2020</b> , 114, 11377-11383	7.3	0
9	Parameters sensitivity analysis of silicon carbide buck converters to extract features for condition monitoring. <i>Microelectronics Reliability</i> , <b>2020</b> , 114, 113910	1.2	0
8	Behavior of power MOSFETs during heavy ions irradiation performed after Trays exposure. <i>Microelectronics Reliability</i> , <b>2012</b> , 52, 2363-2367	1.2	0
7	Voltage Balancing of Series IGBTs in Short-Circuit Conditions. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 1-1	7.2	0
6	Separation and Validation of Bond-Wire and Solder Layer Failure Modes in IGBT Modules. <i>IEEE Transactions on Industry Applications</i> , <b>2022</b> , 1-1	4.3	0
5	PV mission profile simplification method for power devices subjected to arid climates. <i>Microelectronics Reliability</i> , <b>2021</b> , 126, 114328	1.2	0
4	Comparison of thermal runaway limits under different test conditions based on a 4.5kV IGBT. <i>Microelectronics Reliability</i> , <b>2016</b> , 64, 524-529	1.2	0
3	Elastic Half-Space Theory-Based Distributed-Press-Pack Packaging Technology for Power Module With Balanced Thermal Stress. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2020</b> , 1-1	5.6	
2	Turn-off instabilities in large area IGBTs. <i>Microelectronics Reliability</i> , <b>2014</b> , 54, 1927-1934	1.2	
1	FEM-aided damage model calibration method for experimental results. <i>Microelectronics Reliability</i> , <b>2020</b> , 114, 113915	1.2	