

Huai Wang

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.

261
papers

5,848
citations

36
h-index

69
g-index

327
ext. papers

8,204
ext. citations

4.9
avg, IF

6.71
L-index

#	Paper	IF	Citations
261	Reliability Improvement of Voltage Regulator Modules by a Virtual Series Voltage Source. <i>IEEE Transactions on Industrial Electronics</i> , 2022 , 1-1	8.9	
260	EMI Filter Robustness in Three-Level Active Neutral-Point-Clamped Inverter. <i>IEEE Transactions on Power Electronics</i> , 2022 , 37, 4641-4657	7.2	1
259	A Mixed Conduction Mode Controlled Bridgeless Boost PFC Converter and Its Mission Profile Based Reliability Analysis. <i>IEEE Transactions on Power Electronics</i> , 2022 , 1-1	7.2	2
258	High Power Factor Bridgeless Integrated Buck-Type PFC Converter with Wide Output Voltage Range. <i>IEEE Transactions on Power Electronics</i> , 2022 , 1-1	7.2	1
257	A Parasitic Effect Compensation Method for IGBT On-state Voltage Measurement in Traction Inverter Application. <i>IEEE Transactions on Power Electronics</i> , 2021 , 1-1	7.2	
256	A Robust Testing Method for DC and AC Capacitors with Minimum Required Power Supply. <i>IEEE Transactions on Power Electronics</i> , 2021 , 1-1	7.2	1
255	Robust Stability Assessment of Single-phase Inverter with Multi-parameter Distributions. <i>IEEE Transactions on Power Electronics</i> , 2021 , 1-1	7.2	1
254	An On-line Calibration Method for TSEP-based Junction Temperature Estimation. <i>IEEE Transactions on Industrial Electronics</i> , 2021 , 1-1	8.9	0
253	Differential Mode Noise Estimation and Filter Design for Interleaved Boost Power Factor Correction Converters. <i>Applied Sciences (Switzerland)</i> , 2021 , 11, 2716	2.6	1
252	Enabling Data-Driven Condition Monitoring of Power Electronic Systems With Artificial Intelligence: Concepts, Tools, and Developments. <i>IEEE Power Electronics Magazine</i> , 2021 , 8, 18-27	1.5	7
251	Bridgeless PFC Topology Simplification and Design for Performance Benchmarking. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 5398-5414	7.2	10
250	Robustness Assessment of the EMI Filter in a Three-Level Inverter 2021 ,		1
249	A Composite Failure Precursor for Condition Monitoring and Remaining Useful Life Prediction of Discrete Power Devices. <i>IEEE Transactions on Industrial Informatics</i> , 2021 , 17, 688-698	11.9	19
248	An Improved di/dt-RCD Detection for Short-Circuit Protection of SiC mosfet. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 12-17	7.2	7
247	Lifetime Prediction of DC-Link Capacitors in Multiple Drives System Based on Simplified Analytical Modeling. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 844-860	7.2	9
246	A Converter-Level on-State Voltage Measurement Method for Power Semiconductor Devices. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 1220-1224	7.2	10
245	A Digital Twin Based Estimation Method for Health Indicators of DCDC Converters. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 2105-2118	7.2	27

244	Design for Accelerated Testing of DC-Link Capacitors in Photovoltaic Inverters Based on Mission Profiles. <i>IEEE Transactions on Industry Applications</i> , 2021 , 57, 741-753	4.3	1
243	Reliability of Power Electronic Systems for EV/HEV Applications. <i>Proceedings of the IEEE</i> , 2021 , 109, 1060-1076	4.9	13
242	An Overview of Artificial Intelligence Applications for Power Electronics. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 4633-4658	7.2	94
241	Analytical Modeling and Design of Capacitor Bank Considering Thermal Coupling Effect. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 2629-2640	7.2	2
240	An Overview of Condition Monitoring Techniques for Capacitors in DC-Link Applications. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 3692-3716	7.2	39
239	Parasitics of Orthocyclic Windings in Inductors and Transformers. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 1994-2008	7.2	2
238	Investigation of Switching Oscillations for Silicon Carbide MOSFETs in Three-Level Active Neutral-Point-Clamped Inverters. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2021 , 9, 4839-4853	5.6	3
237	Differential mode noise prediction and analysis in single-phase boost PFC for the new frequency range of 9- 150 kHz. <i>IEEE Journal of Emerging and Selected Topics in Industrial Electronics</i> , 2021 , 1-1	2.6	2
236	Standalone operation of Distributed Generation Systems with Improved Harmonic Elimination Scheme. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2021 , 1-1	5.6	4
235	A Voltage-Based Multiple Fault Diagnosis Approach for Cascaded H-Bridge Multilevel Converters. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2021 , 1-1	5.6	3
234	Health State Estimation and Remaining Useful Life Prediction of Power Devices Subject to Noisy and Aperiodic Condition Monitoring. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021 , 70, 1-16	5.2	7
233	Power converters and control of LEDs 2021 , 645-688		0
232	Intelligent Transition Control between Grid-Connected and Standalone Modes of Three-Phase Grid-Integrated Distributed Generation Systems. <i>Energies</i> , 2021 , 14, 3979	3.1	2
231	A Self-Power Method for a Converter-Level on-State Voltage Measurement Concept. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 8743-8751	7.2	6
230	Adequacy Evaluation of an Islanded Microgrid. <i>Electronics (Switzerland)</i> , 2021 , 10, 2344	2.6	0
229	A Simplified On-State Voltage Measurement Circuit for Power Semiconductor Devices. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 10993-10997	7.2	8
228	Safe Operating Area of DC-Link Film Capacitors. <i>IEEE Transactions on Power Electronics</i> , 2021 , 36, 11014-11018	4.1	2
227	A granular modeling method for non-uniform panel degradation based on IV characterization and electroluminescence imaging. <i>Solar Energy</i> , 2021 , 227, 162-178	6.8	

226	Wear-out failure of an IGBT module in motor drives due to uneven thermal impedance of power semiconductor devices. <i>Microelectronics Reliability</i> , 2020 , 114, 113800	1.2	4
225	Reactive Power Impacts on LCL Filter Capacitor Lifetime in Grid-Connected Inverter. <i>IEEE Open Journal of Power Electronics</i> , 2020 , 1, 139-148	2.5	6
224	Practical Submodule Capacitor Sizing for Modular Multilevel Converter Considering Grid Faults. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 3550	2.6	1
223	Artificial Intelligence-Aided Thermal Model Considering Cross-Coupling Effects. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 9998-10002	7.2	12
222	The Faraday Shields Loss of Transformers. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 12194-12206	7.2	7
221	Degradation Analysis of Planar Magnetics 2020 ,		3
220	Model-Based Design and Optimization of Hybrid DC-Link Capacitor Banks. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 8910-8925	7.2	6
219	Capacitor Condition Monitoring Based on the DC-Side Start-Up of Modular Multilevel Converters. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 5589-5593	7.2	13
218	Mission Profile-Based System-Level Reliability Prediction Method for Modular Multilevel Converters. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 6916-6930	7.2	23
217	Single-Phase Bridgeless PFC Topology Derivation and Performance Benchmarking. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 9238-9250	7.2	16
216	Thermal Characterization of Silicon Carbide MOSFET Module Suitable for High-Temperature Computationally Efficient Thermal-Profile Prediction. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2020 , 1-1	5.6	5
215	Power Electronics Reliability: State of the Art and Outlook. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2020 , 1-1	5.6	13
214	An Approximation Model of AC Resistance for Inductor and Transformer Windings with Partial Layers. <i>IEEE Journal of Industry Applications</i> , 2020 , 9, 549-556	0.7	
213	Uneven Inter-turn Voltage Distribution among Windings of Medium-voltage Medium/High-frequency Transformers 2020 ,		2
212	Diagnostic module for series-connected photovoltaic panels. <i>Solar Energy</i> , 2020 , 196, 243-259	6.8	3
211	A Cost-Constrained Active Capacitor for a Single-Phase Inverter. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 6746-6760	7.2	4
210	Simplified Power Loss Model for Aluminum Electrolytic Capacitors in Single-Phase Inverters. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 4452-4456	7.2	0
209	A Reference Submodule Based Capacitor Condition Monitoring Method for Modular Multilevel Converters. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 6691-6696	7.2	8

208	A System Engineering Approach Using FMEA and Bayesian Network for Risk Analysis A Case Study. <i>Sustainability</i> , 2020 , 12, 77	3.6	18
207	Review on reliability of supercapacitors in energy storage applications. <i>Applied Energy</i> , 2020 , 278, 115436-7	6.7	59
206	Reduced-Order Thermal Modeling for Photovoltaic Inverters Considering Mission Profile Dynamics. <i>IEEE Open Journal of Power Electronics</i> , 2020 , 1, 407-419	2.5	2
205	A Mission-Profile-Based Tool for the Reliability Evaluation of Power Semiconductor Devices in Hybrid Electric Vehicles 2020 ,		1
204	An Overview of Capacitive DC-Links-Topology Derivation and Scalability Analysis. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 1805-1829	7.2	32
203	. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 882-900	7.2	16
202	A Thermal Modeling Method Considering Ambient Temperature Dynamics. <i>IEEE Transactions on Power Electronics</i> , 2020 , 35, 6-9	7.2	11
201	Impact of Modulation Strategies on the Reliability and Harmonics of Impedance-Source Inverters. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2020 , 8, 3968-3981	5.6	16
200	Benchmark of DC-link LC Filters based on Passive Inductor and Two-terminal Active Inductor 2019 ,		1
199	On the Stability of Power Electronics-Dominated Systems: Challenges and Potential Solutions. <i>IEEE Transactions on Industry Applications</i> , 2019 , 55, 7657-7670	4.3	40
198	. <i>IEEE Transactions on Industry Applications</i> , 2019 , 55, 5055-5067	4.3	21
197	Reliability Assessment of Hybrid Capacitor Bank Using Electrolytic- and Film-Capacitors in Three-Level Neutral-Point-Clamped Inverters 2019 ,		4
196	Mission Profile-based Accelerated Testing of DC-link Capacitors in Photovoltaic Inverters 2019 ,		3
195	First Observations in Degradation Testing of Planar Magnetics 2019 ,		4
194	Condition Monitoring for Submodule Capacitors in Modular Multilevel Converters. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 10403-10407	7.2	18
193	Cost-Volume-Reliability Pareto Optimization of a Photovoltaic Microinverter 2019 ,		5
192	Sensitivity Analysis of Inductive Power Transfer Systems With Voltage-Fed Compensation Topologies. <i>IEEE Transactions on Vehicular Technology</i> , 2019 , 68, 4502-4513	6.8	22
191	Guest Editorial Joint Special Section on Power Conversion & Control in Photovoltaic Power Plants. <i>IEEE Transactions on Energy Conversion</i> , 2019 , 34, 159-160	5.4	1

190	An Improved Stray Capacitance Model for Inductors. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 11153-11170	7.2	28
189	. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 11580-11593	7.2	13
188	A Two-Terminal Active Inductor With Minimum Apparent Power for the Auxiliary Circuit. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 1013-1016	7.2	7
187	Wear-Out Failure Analysis of an Impedance-Source PV Microinverter Based on System-Level Electrothermal Modeling. <i>IEEE Transactions on Industrial Electronics</i> , 2019 , 66, 3914-3927	8.9	37
186	. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 4064-4078	7.2	64
185	Asymmetrical Reactive Power Capability of Modular Multilevel Cascade Converter Based STATCOMs for Offshore Wind Farm. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 5147-5164	7.2	24
184	A DC-Link Capacitor Voltage Ripple Reduction Method for a Modular Multilevel Cascade Converter With Single Delta Bridge Cells. <i>IEEE Transactions on Industry Applications</i> , 2019 , 55, 6115-6126	4.3	8
183	A Simplification Method for Power Device Thermal Modeling With Quantitative Error Analysis. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2019 , 7, 1649-1658	5.6	7
182	Simplified Multi-time Scale Thermal Model Considering Thermal Coupling in IGBT Modules 2019 ,		6
181	A Review on Electrothermal Modeling of Supercapacitors for Energy Storage Applications. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2019 , 7, 1677-1690	5.6	15
180	Condition Monitoring Method for Submodule Capacitor in Modular Multilevel Converter 2019 ,		1
179	Performance Evaluation of a Two-terminal Active Inductor in the DC-link Filter of a Three-phase Diode Bridge Rectifier 2019 ,		1
178	Computational-Efficient Thermal Estimation for IGBT Modules Under Periodic Power Loss Profiles in Modular Multilevel Converters. <i>IEEE Transactions on Industry Applications</i> , 2019 , 55, 4984-4992	4.3	9
177	Degradation modeling for reliability estimation of DC film capacitors subject to humidity acceleration. <i>Microelectronics Reliability</i> , 2019 , 100-101, 113401	1.2	7
176	Benchmarking of capacitor power loss calculation methods for wear-out failure prediction in PV inverters. <i>Microelectronics Reliability</i> , 2019 , 100-101, 113491	1.2	2
175	Analytical Modeling of 9-150 kHz EMI in Single-Phase PFC Converter 2019 ,		2
174	Electro-Thermal Modeling and Design of High-Current Pulse Power Supply for Electrically Assisted Manufacturing. <i>IEEE Access</i> , 2019 , 7, 160377-160384	3.5	1
173	Impact of the Circulating Current Control on Transient Submodule Voltage Stresses for Grid-Tied Modular Multilevel Converters During Grid Faults 2019 ,		1

172	System-Level Power Loss Evaluation of Modular Multilevel Converters 2019 ,		2
171	Application of Digital Twin Concept in Condition Monitoring for DC-DC Converter 2019 ,		9
170	Reliability Evaluation of DC-link Capacitors in Multi-drive Systems 2019 ,		1
169	. <i>IEEE Transactions on Industry Applications</i> , 2019 , 55, 1752-1764	4.3	21
168	On the Practical Design of a Two-Terminal Active Capacitor. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 10006-10020	7.2	14
167	A 1-MHz Series Resonant DCDC Converter With a Dual-Mode Rectifier for PV Microinverters. <i>IEEE Transactions on Power Electronics</i> , 2019 , 34, 6544-6564	7.2	26
166	Simplified Thermal Modeling for IGBT Modules With Periodic Power Loss Profiles in Modular Multilevel Converters. <i>IEEE Transactions on Industrial Electronics</i> , 2019 , 66, 2323-2332	8.9	51
165	Analysis and Mitigation of Dead-Time Harmonics in the Single-Phase Full-Bridge PWM Converter With Repetitive Controllers. <i>IEEE Transactions on Industry Applications</i> , 2018 , 54, 5343-5354	4.3	39
164	2018 ,		3
163	Lifetime benchmarking of two DC-link passive filtering configurations in adjustable speed drives 2018 ,		7
162	Reliability evaluation of an impedance-source PV microconverter 2018 ,		1
161	Protection Scheme for Modular Multilevel Converters Under Diode Open-Circuit Faults. <i>IEEE Transactions on Power Electronics</i> , 2018 , 33, 2866-2877	7.2	19
160	A Bidirectional Resonant DCDC Converter Suitable for Wide Voltage Gain Range. <i>IEEE Transactions on Power Electronics</i> , 2018 , 33, 2957-2975	7.2	41
159	A Dual Active Bridge Converter With an Extended High-Efficiency Range by DC Blocking Capacitor Voltage Control. <i>IEEE Transactions on Power Electronics</i> , 2018 , 33, 5949-5966	7.2	41
158	. <i>IEEE Transactions on Industry Applications</i> , 2018 , 54, 447-457	4.3	56
157	System-Level Lifetime Prediction for LED Lighting Applications Considering Thermal Coupling Between LED Sources and Drivers. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2018 , 6, 1860-1870	5.6	9
156	Modeling framework of voltage-source converters based on equivalence with synchronous generator. <i>Journal of Modern Power Systems and Clean Energy</i> , 2018 , 6, 1291-1305	4	14
155	A Novel Type-2 Fuzzy Logic for Improved Risk Analysis of Proton Exchange Membrane Fuel Cells in Marine Power Systems Application. <i>Energies</i> , 2018 , 11, 721	3.1	21

154	Design for Reliability of Power Electronic Systems 2018 , 1423-1440		18
153	From chip to inverter: Electro-thermal modeling and design for paralleled power devices in high power application. <i>Microelectronics Reliability</i> , 2018 , 87, 271-277	1.2	1
152	Winding design of series AC inductor for dual active bridge converters 2018 ,		4
151	. <i>IEEE Transactions on Power Electronics</i> , 2018 , 33, 8030-8039	7.2	82
150	Impact of Long-Term Mission Profile Sampling Rate on the Reliability Evaluation of Power Electronics in Photovoltaic Applications 2018 ,		6
149	A Temperature-dependent Thermal Model of Silicon Carbide MOSFET Module for Long-term Reliability Assessment 2018 ,		3
148	Simplified Estimation of the Junction Temperature Fluctuation at the Output Frequency for IGBT Modules in Modular Multilevel Converters 2018 ,		2
147	Balanced Conduction Loss Distribution among SMs in Modular Multilevel Converters 2018 ,		6
146	Efficiency Enhancement of Bridgeless Buck-Boost PFC Converter with Unity PF and DC Split to Reduce Voltage Stresses 2018 ,		5
145	Mission Profile Based Power Converter Reliability Analysis in a DC Power Electronic Based Power System 2018 ,		5
144	Submodule Level Power Loss Balancing Control for Modular Multilevel Converters 2018 ,		5
143	Reliability Evaluation and Optimization of Capacitor Bank 2018 ,		2
142	Impact of the Thermal-Interface-Material Thickness on IGBT Module Reliability in the Modular Multilevel Converter 2018 ,		1
141	Reactive Power Impacts on LCL Filter Capacitor Lifetime and Reliability in DFIG Grid-Connected Inverter 2018 ,		2
140	Thermal Coupling and Network Modeling for Planar Transformers 2018 ,		2
139	Single-stage Bridgeless Buck-boost PFC Converter with DC Split for Low Power LED applications 2018 ,		2
138	Uncertainties in the Lifetime Prediction of IGBTs for a Motor Drive Application 2018 ,		2
137	Influence of DC Link Capacitance on Power Efficiency of Single-Phase Inverter 2018 ,		1

136	Modeling and Optimization of Displacement Windings for Transformers in Dual Active Bridge Converters 2018 ,		4
135	On Power Electronized Power Systems: Challenges and Solutions 2018 ,		2
134	Thermal resistance modelling and design optimization of PCB vias. <i>Microelectronics Reliability</i> , 2018 , 88-90, 1118-1123	1.2	3
133	An analytical circuit based nonlinear thermal model for capacitor banks. <i>Microelectronics Reliability</i> , 2018 , 88-90, 524-527	1.2	7
132	Two-thermal-states model predictive control for IGBT in three-phase inverter. <i>Microelectronics Reliability</i> , 2018 , 88-90, 1098-1102	1.2	0
131	Thermal stress reduction of quasi-Z source inverter drive by model predictive control. <i>Microelectronics Reliability</i> , 2018 , 88-90, 1247-1250	1.2	3
130	Fundamental frequency region-based thermal control of power electronics modules in high power motor drive. <i>Microelectronics Reliability</i> , 2018 , 88-90, 1242-1246	1.2	0
129	System-level reliability enhancement of DC/DC stage in a single-phase PV inverter. <i>Microelectronics Reliability</i> , 2018 , 88-90, 1030-1035	1.2	10
128	A DC-link Capacitor Voltage Oscillation Reduction Method for a Modular Multilevel Cascade Converter with Single Delta Bridge Cells (MMCC-SDBC) 2018 ,		2
127	Transient Voltage Stress Modeling for Submodules of Modular Multilevel Converters under Grid Voltage Sags 2018 ,		1
126	The Impact of Topology and Mission Profile on the Reliability of Boost-type Converters in PV Applications 2018 ,		14
125	Design for reliability and robustness tool platform for power electronic systems [Study case on motor drive applications] 2018 ,		11
124	A Two-Terminal Active Capacitor. <i>IEEE Transactions on Power Electronics</i> , 2017 , 32, 5893-5896	7.2	42
123	Energy Saving and Efficient Energy Use By Power Electronic Systems. <i>Lecture Notes in Energy</i> , 2017 , 1-140.4		5
122	An AC resistance optimization method applicable for inductor and transformer windings with full layers and partial layers 2017 ,		5
121	Reliability assessment of single-phase grid-connected PV microinverters considering mission profile and uncertainties 2017 ,		1
120	A voltage doubler circuit to extend the soft-switching range of dual active bridge converters 2017 ,		1
119	A fixed-frequency bidirectional resonant DC-DC converter suitable for wide voltage range 2017 ,		2

118	A reconfigurable series resonant DC-DC converter for wide-input and wide-output voltages 2017 ,		8
117	A Lifetime Prediction Method for LEDs Considering Real Mission Profiles. <i>IEEE Transactions on Power Electronics</i> , 2017 , 32, 8718-8727	7.2	17
116	Reliability-oriented design of a cost-effective active capacitor 2017 ,		3
115	An active capacitor with self-power and internal feedback control signals 2017 ,		2
114	A reliability-oriented component sizing procedure for cost benchmarking of capacitive DC-links 2017 ,		1
113	Reactive power compensation capability of a STATCOM based on two types of Modular Multilevel Cascade Converters for offshore wind application 2017 ,		4
112	Degradation effect on reliability evaluation of aluminum electrolytic capacitor in backup power converter 2017 ,		6
111	Artificial Neural Network based DC-link capacitance estimation in a diode-bridge front-end inverter system 2017 ,		7
110	Precharge strategies for isolated modular DC-DC converters under two different start-up conditions 2017 ,		1
109	Reliability oriented design of a grid-connected photovoltaic microinverter 2017 ,		3
108	A voltage control method for an active capacitive DC-link module with series-connected circuit 2017 ,		4
107	Reliability-Oriented Optimization of the LC Filter in a Buck DC-DC Converter. <i>IEEE Transactions on Power Electronics</i> , 2017 , 32, 6323-6337	7.2	21
106	A new soft-switched high step-up DC-DC converter with dual coupled inductors 2017 ,		1
105	The impact of mission profile models on the predicted lifetime of IGBT modules in the modular multilevel converter 2017 ,		10
104	An analytical essential switching loss estimation method for modular multilevel converters with nearest level modulation 2017 ,		2
103	A method for hotspot temperature estimation of aluminum electrolytic capacitors 2017 ,		2
102	Lifetime prediction of LED lighting systems considering thermal coupling between LED sources and drivers 2017 ,		2
101	The impact of grid unbalances on the reliability of DC-link capacitors in a motor drive 2017 ,		10

100	Impedance characteristics modeling of a two-terminal active capacitor 2017 ,		3
99	Analysis of indirect rotor field oriented control-based induction machine performance under inaccurate field-oriented condition 2017 ,		1
98	Capacitance estimation algorithm based on DC-link voltage harmonics using artificial neural network in three-phase motor drive systems 2017 ,		9
97	A switched-capacitor based high conversion ratio converter for renewable energy applications: Principle and generation 2017 ,		2
96	Design for reliability in renewable energy systems 2017 ,		5
95	Impact of lifetime model selections on the reliability prediction of IGBT modules in modular multilevel converters 2017 ,		29
94	Capacitance estimation for dc-link capacitors in a back-to-back converter based on Artificial Neural Network algorithm 2016 ,		5
93	Mission profile based sizing of IGBT chip area for PV inverter applications 2016 ,		8
92	Cost assessment of three power decoupling methods in a single-phase power converter with a reliability-oriented design procedure 2016 ,		6
91	Power control flexibilities for grid-connected multi-functional photovoltaic inverters. <i>IET Renewable Power Generation</i> , 2016 , 10, 504-513	2.9	104
90	Reliability evaluation of a single-phase H-bridge inverter with integrated active power decoupling 2016 ,		0
89	Reliability assessment of fuel cell system - A framework for quantitative approach 2016 ,		1
88	Analytical model for LLC resonant converter with variable duty-cycle control 2016 ,		5
87	System-level reliability assessment of power stage in fuel cell application 2016 ,		7
86	A generic topology derivation method for single-phase converters with active capacitive DC-links 2016 ,		3
85	Lifetime estimation of electrolytic capacitors in a fuel cell power converter at various confidence levels 2016 ,		11
84	New Approaches to Reliability Assessment: Using physics-of-failure for prediction and design in power electronics systems. <i>IEEE Power Electronics Magazine</i> , 2016 , 3, 28-41	1.5	88
83	Lifetime estimation of DC-link capacitors in a single-phase converter with an integrated active power decoupling module 2016 ,		0

82	A new ZVS-PWM current-fed full-bridge converter with full soft-switching load range 2016,		2
81	A lifetime prediction method for LEDs considering mission profiles 2016,		4
80	Benchmarking of constant power generation strategies for single-phase grid-connected Photovoltaic systems 2016,		9
79	A Temperature-Dependent Thermal Model of IGBT Modules Suitable for Circuit-Level Simulations. <i>IEEE Transactions on Industry Applications</i> , 2016 , 52, 3306-3314	4.3	50
78	Power cycling test and failure analysis of molded Intelligent Power IGBT Module under different temperature swing durations. <i>Microelectronics Reliability</i> , 2016 , 64, 403-408	1.2	30
77	A Review of the Condition Monitoring of Capacitors in Power Electronic Converters. <i>IEEE Transactions on Industry Applications</i> , 2016 , 52, 4976-4989	4.3	102
76	Real mission profile based lifetime estimation of fuel-cell power converter 2016,		6
75	Degradation testing and failure analysis of DC film capacitors under high humidity conditions. <i>Microelectronics Reliability</i> , 2015 , 55, 2007-2011	1.2	23
74	Prediction of bond wire fatigue of IGBTs in a PV inverter under long-term operation 2015,		3
73	Instantaneous thermal modeling of the DC-link capacitor in PhotoVoltaic systems 2015,		18
72	Harmonics mitigation of dead time effects in PWM converters using a repetitive controller 2015,		21
71	Wide-Scale Adoption of Photovoltaic Energy: Grid Code Modifications Are Explored in the Distribution Grid. <i>IEEE Industry Applications Magazine</i> , 2015 , 21, 21-31	0.6	156
70	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> , 2015 , 3, 756-765	5.6	9
69	Condition monitoring for DC-link capacitors based on artificial neural network algorithm 2015,		17
68	Electro-thermal modeling of high power IGBT module short-circuits with experimental validation 2015,		9
67	Reliability Oriented Design Tool For the New Generation of Grid Connected PV-Inverters. <i>IEEE Transactions on Power Electronics</i> , 2015 , 30, 2635-2644	7.2	106
66	Frequency Adaptive Selective Harmonic Control for Grid-Connected Inverters. <i>IEEE Transactions on Power Electronics</i> , 2015 , 30, 3912-3924	7.2	103
65	Waveform control method for mitigating harmonics of inverter systems with nonlinear load 2015,		2

64	A comprehensive investigation on the short circuit performance of MW-level IGBT power modules 2015,		2
63	Reliability Assessment of Transformerless PV Inverters considering Mission Profiles. <i>International Journal of Photoenergy</i> , 2015 , 2015, 1-10	2.1	4
62	Introducing state-trajectory control for the synchronous interleaved boost converter 2015,		3
61	A humidity-dependent lifetime derating factor for DC film capacitors 2015,		19
60	A review of the condition monitoring of capacitors in power electronic converters 2015,		3
59	Comprehensive investigation on current imbalance among parallel chips inside MW-scale IGBT power modules 2015,		14
58	Prediction of Bond Wire Fatigue of IGBTs in a PV Inverter Under a Long-Term Operation. <i>IEEE Transactions on Power Electronics</i> , 2015 , 1-1	7.2	78
57	The feasibility study on thermal loading control of wind power converters with a flexible switching frequency 2015,		8
56	Reliability of Power Electronic Converter Systems 2015,		39
55	Reduction of DC-link capacitor in case of cascade multilevel converters by means of reactive power control 2014,		9
54	Constant power generation of photovoltaic systems considering the distributed grid capacity 2014,		40
53	A Robust Passive Damping Method for LLCL-Filter-Based Grid-Tied Inverters to Minimize the Effect of Grid Harmonic Voltages. <i>IEEE Transactions on Power Electronics</i> , 2014 , 29, 3279-3289	7.2	107
52	. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , 2014 , 2, 97-114	5.6	433
51	A design tool to study the impact of mission-profile on the reliability of SiC-based PV-inverter devices. <i>Microelectronics Reliability</i> , 2014 , 54, 1655-1660	1.2	11
50	. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 4065-4076	4.3	154
49	Reduced junction temperature control during low-voltage ride-through for single-phase photovoltaic inverters. <i>IET Power Electronics</i> , 2014 , 7, 2050-2059	2.2	18
48	. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 3569-3578	4.3	602
47	A Hybrid Power Control Concept for PV Inverters With Reduced Thermal Loading. <i>IEEE Transactions on Power Electronics</i> , 2014 , 29, 6271-6275	7.2	113

46	Reactive power injection strategies for single-phase photovoltaic systems considering grid requirements 2014 ,		17
45	Real Field Mission Profile Oriented Design of a SiC-Based PV-Inverter Application. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 4082-4089	4-3	35
44	Sizing of the series dynamic breaking resistor in a doubly fed induction generator wind turbine 2014 ,		2
43	Fast and Accurate Icepak-PSpice Co-Simulation of IGBTs under Short-Circuit with an Advanced PSpice Model 2014 ,		2
42	Investigation into the control methods to reduce the DC-link capacitor ripple current in a back-to-back converter 2014 ,		15
41	Improved reliability of single-phase PV inverters by limiting the maximum feed-in power 2014 ,		12
40	Wide-band gap devices in PV systems - opportunities and challenges 2014 ,		15
39	Investigation on the short-circuit behavior of an aged IGBT module through a 6 kA/1.1 kV non-destructive testing equipment 2014 ,		4
38	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 ,		9
37	The impact of gate-driver parameters variation and device degradation in the PV-inverter lifetime 2014 ,		12
36	A temperature-dependent thermal model of IGBT modules suitable for circuit-level simulations 2014 ,		8
35	Mission profile translation to capacitor stresses in grid-connected photovoltaic systems 2014 ,		13
34	Design for Reliability of Power Electronics in Renewable Energy Systems. <i>Green Energy and Technology</i> , 2014 , 295-338	0.6	3
33	Improving the Effectiveness of Testing Pervasive Software via Context Diversity. <i>ACM Transactions on Autonomous and Adaptive Systems</i> , 2014 , 9, 1-28	1.2	14
32	Use of a Series Voltage Compensator for Reduction of the DC-Link Capacitance in a Capacitor-Supported System. <i>IEEE Transactions on Power Electronics</i> , 2014 , 29, 1163-1175	7.2	139
31	Low-Voltage Ride-Through of Single-Phase Transformerless Photovoltaic Inverters. <i>IEEE Transactions on Industry Applications</i> , 2014 , 50, 1942-1952	4.3	213
30	. <i>IEEE Industrial Electronics Magazine</i> , 2013 , 7, 17-26	6.2	433
29	Reliability-oriented design and analysis of input capacitors in single-phase transformer-less photovoltaic inverters 2013 ,		17

28	A reliability-oriented design method for power electronic converters 2013 ,		18
27	Comprehensive evaluation on efficiency and thermal loading of associated Si and SiC based PV inverter applications 2013 ,		13
26	A novel electro-thermal model for wide bandgap semiconductor based devices 2013 ,		14
25	Mission profile based multi-disciplinary analysis of power modules in single-phase transformerless photovoltaic inverters 2013 ,		37
24	Catastrophic failure and fault-tolerant design of IGBT power electronic converters - an overview 2013 ,		92
23	Real field mission profile oriented design of a SiC-based PV-inverter application 2013 ,		6
22	Low voltage ride-through of single-phase transformerless photovoltaic inverters 2013 ,		5
21	Overview of catastrophic failures of freewheeling diodes in power electronic circuits. <i>Microelectronics Reliability</i> , 2013 , 53, 1788-1792	1.2	22
20	A hybrid damping method for LLCL-filter based grid-tied inverter with a digital filter and an RC parallel passive damper 2013 ,		5
19	2013 ,		13
18	Suggested grid code modifications to ensure wide-scale adoption of photovoltaic energy in distributed power generation systems 2013 ,		43
17	Design for reliability in power electronics in renewable energy systems [status and future] 2013 ,		15
16	Stability analysis and dynamic response of a DC-link module with a series voltage compensator 2013 ,		5
15	A novel concept to reduce the DC-link capacitor in PFC front-end power conversion systems 2012 ,		14
14	Design for reliability of power electronic systems 2012 ,		127
13	A New Concept of High-Voltage DC/DC Conversion Using Asymmetric Voltage Distribution on the Switch Pairs and Hybrid ZVS/ZCS Scheme. <i>IEEE Transactions on Power Electronics</i> , 2012 , 27, 2242-2259	7.2	16
12	Long Lifetime DC-link Voltage Stabilization Module for Smart Grid Application 2012 ,		1
11	Hold-up time analysis of a dc-link module with a series voltage compensator 2012 ,		4

10	A Class of High-Input Low-Output Voltage Single-Step Converters with Low Voltage Stress on the Primary-Side Switches and High Output Current Capacity. <i>IEEE Transactions on Power Electronics</i> , 2011 , 26, 1659-1672	7.2	17
9	Study of a new technique to reduce the dc-link capacitor in a power electronic system by using a series voltage compensator 2011 ,		9
8	A Uniform Nonlinear Control Method for DC-DC Converters with Fast Transient Response. <i>HKIE Transactions</i> , 2010 , 17, 31-39	2.9	
7	Correlating Context-Awareness and Mutation Analysis for Pervasive Computing Systems 2010 ,		4
6	A class of single-step high-voltage DC-DC converters with low voltage stress and high output current capacity 2009 ,		2
5	A ZCS Current-Fed Full-Bridge PWM Converter With Self-Adaptable Soft-Switching Snubber Energy. <i>IEEE Transactions on Power Electronics</i> , 2009 , 24, 1977-1991	7.2	56
4	Modeling and Analysis of a Current-Fed ZCS Full-Bridge DC/DC Converter with Adaptive Soft-Switching Energy 2009 ,		4
3	Weaving Context Sensitivity into Test Suite Construction 2009 ,		11
2	A unified derivation of second-order switching surface for boundary control of DC-DC converters 2009 ,		6
1	. <i>IEEE Transactions on Power Electronics</i> , 2008 , 23, 2630-2647	7.2	26