Ui-Min Choi

List of Publications by Year
in descending order

36	2,203	430874	610901
papers	citations	18 h-index	24 g-index

36	36	36	1686
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Velocity Profile-Based Evaluation and Improvement of Lifetime of Power Devices in Railway Propulsion Inverters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 1384-1394.	5.4	1
2	Comparative Evaluation of Efficiency and Reliability of Single-Phase Five-Level NPC Inverters for Photovoltaic Systems. IEEE Access, 2021, 9, 120638-120651.	4.2	12
3	Study on Effect of Installation Location on Lifetime of PV Inverter and DC-to-AC Ratio. IEEE Access, 2020, 8, 86003-86011.	4.2	11
4	Comparative Evaluation of Lifetime of Three-Level Inverters in Grid-Connected Photovoltaic Systems. Energies, 2020, 13, 1227.	3.1	8
5	Effect of Asymmetric Layout of IGBT Modules on Reliability of Motor Drive Inverters. IEEE Transactions on Power Electronics, 2019, 34, 1765-1772.	7.9	20
6	Impact of Cooling System Capacity on Lifetime of Power Module in Adjustable Speed Drives. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1768-1776.	5.4	13
7	Comparison of Heat-Pipe Cooling System Design Processes in Railway Propulsion Inverter Considering Power Module Reliability. Energies, 2019, 12, 4676.	3.1	5
8	Prediction and Validation of Wear-Out Reliability Metrics for Power Semiconductor Devices With Mission Profiles in Motor Drive Application. IEEE Transactions on Power Electronics, 2018, 33, 9843-9853.	7.9	57
9	Power Cycling Test Methods for Reliability Assessment of Power Device Modules in Respect to Temperature Stress. IEEE Transactions on Power Electronics, 2018, 33, 2531-2551.	7.9	155
10	Separation of Wear-Out Failure Modes of IGBT Modules in Grid-Connected Inverter Systems. IEEE Transactions on Power Electronics, 2018, 33, 6217-6223.	7.9	51
11	Validation of Lifetime Prediction of IGBT Modules Based on Linear Damage Accumulation by Means of Superimposed Power Cycling Tests. IEEE Transactions on Industrial Electronics, 2018, 65, 3520-3529.	7.9	61
12	Asymmetric Pulse Width Modulation for Improving the Reliability of Motor Drive Inverters. , 2018, , .		1
13	Effect of asymmetric layout of IGBT modules on reliability of power inverters in motor drive system. , 2018, , .		3
14	Study on Effect of Junction Temperature Swing Duration on Lifetime of Transfer Molded Power IGBT Modules. IEEE Transactions on Power Electronics, 2017, 32, 6434-6443.	7.9	73
15	Impacts of ripple current to the loading and lifetime of power semiconductor device. , 2017, , .		3
16	Lifetime prediction of IGBT modules based on linear damage accumulation. , 2017, , .		4
17	Reliability Improvement of Power Converters by Means of Condition Monitoring of IGBT Modules. IEEE Transactions on Power Electronics, 2017, 32, 7990-7997.	7.9	139
18	Asymmetric power device rating selection for even temperature distribution in NPC inverter. , 2017, , .		11

#	Article	IF	Citations
19	Reliability metrics extraction for power electronics converter stressed by thermal cycles. , 2017, , .		3
20	Effect of junction temperature swing durations on a lifetime of a transfer molded IGBT module. , 2016, , .		3
21	Advanced Accelerated Power Cycling Test for Reliability Investigation of Power Device Modules. IEEE Transactions on Power Electronics, 2016, , 1-1.	7.9	118
22	Advanced power cycling test for power module with on-line on-state V<inf>CE</inf> measurement. , 2015, , .		7
23	Open-circuit fault diagnosis for a grid-connected NPC inverter with unity Power Factor. , 2015, , .		2
24	Open-Circuit Fault Diagnosis and Fault-Tolerant Control for a Grid-Connected NPC Inverter. IEEE Transactions on Power Electronics, 2015, , 1-1.	7.9	141
25	Control Strategy of Two Capacitor Voltages for Separate MPPTs in Photovoltaic Systems Using Neutral-Point-Clamped Inverters. IEEE Transactions on Industry Applications, 2015, 51, 3295-3303.	4.9	76
26	Study and Handling Methods of Power IGBT Module Failures in Power Electronic Converter Systems. IEEE Transactions on Power Electronics, 2015, 30, 2517-2533.	7.9	537
27	Comparison of Tolerance Controls for Open-Switch Fault in a Grid-Connected T-Type Rectifier. IEEE Transactions on Power Electronics, 2015, 30, 5810-5820.	7.9	51
28	Method to Minimize the Low-Frequency Neutral-Point Voltage Oscillations With Time-Offset Injection for Neutral-Point-Clamped Inverters. IEEE Transactions on Industry Applications, 2015, 51, 1678-1691.	4.9	54
29	A novel active T-type three-level converter with open-circuit fault-tolerant control. , 2015, , .		5
30	Reliability Improvement of a T-Type Three-Level Inverter With Fault-Tolerant Control Strategy. IEEE Transactions on Power Electronics, 2015, 30, 2660-2673.	7.9	219
31	Independent control strategy of two DC-link voltages for separate MPPTs in transformerless photovoltaic systems using neutral-point-clamped inverters. , 2014, , .		3
32	New Modulation Strategy to Balance the Neutral-Point Voltage for Three-Level Neutral-Clamped Inverter Systems. IEEE Transactions on Energy Conversion, 2014, 29, 91-100.	5.2	127
33	Simple Neutral-Point Voltage Control for Three-Level Inverters Using a Discontinuous Pulse Width Modulation. IEEE Transactions on Energy Conversion, 2013, 28, 434-443.	5.2	136
34	Space vector modulation strategy for neutralâ€point voltage balancing in threeâ€level inverter systems. IET Power Electronics, 2013, 6, 1390-1398.	2.1	55
35	Method to minimize the low-frequency neutral-point voltage oscillations with time-offset injection for neutral-point-clamped inverters. , 2013, , .		2
36	Neutral-Point Voltage Balancing Method for Three-Level Inverter Systems with a Time-Offset Estimation Scheme. Journal of Power Electronics, 2013, 13, 243-249.	1.5	36