Alex Q Huang

List of Publications by Year in descending order

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25031 20,855 581 57 citations h-index papers

122 g-index 585 585 585 11002 docs citations times ranked citing authors all docs

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#	Article	IF	CITATIONS
1	The Future Renewable Electric Energy Delivery and Management (FREEDM) System: The Energy Internet. Proceedings of the IEEE, 2011, 99, 133-148.	21.3	1,232
2	Review of Silicon Carbide Power Devices and Their Applications. IEEE Transactions on Industrial Electronics, 2017, 64, 8193-8205.	7.9	916
3	Review of Solid-State Transformer Technologies and Their Application in Power Distribution Systems. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2013, 1, 186-198.	5.4	869
4	The 2018 GaN power electronics roadmap. Journal Physics D: Applied Physics, 2018, 51, 163001.	2.8	843
5	Rule-Based Control of Battery Energy Storage for Dispatching Intermittent Renewable Sources. IEEE Transactions on Sustainable Energy, 2010, 1, 117-124.	8.8	573
6	Voltage and Power Balance Control for a Cascaded H-Bridge Converter-Based Solid-State Transformer. IEEE Transactions on Power Electronics, 2013, 28, 1523-1532.	7.9	505
7	Control Strategies for Battery Energy Storage for Wind Farm Dispatching. IEEE Transactions on Energy Conversion, 2009, 24, 725-732.	5.2	434
8	Investigation of candidate VRM topologies for future microprocessors. IEEE Transactions on Power Electronics, 2000, 15, 1172-1182.	7.9	384
9	Research on voltage and power balance control for cascaded modular solid-state transformer. IEEE Transactions on Power Electronics, 2011, 26, 1154-1166.	7.9	319
10	Characterization, Modeling, and Application of 10-kV SiC MOSFET. IEEE Transactions on Electron Devices, 2008, 55, 1798-1806.	3.0	313
11	Optimal Control of Battery Energy Storage for Wind Farm Dispatching. IEEE Transactions on Energy Conversion, 2010, 25, 787-794.	5.2	281
12	Fault-Tolerant Design and Control Strategy for Cascaded H-Bridge Multilevel Converter-Based STATCOM. IEEE Transactions on Industrial Electronics, 2010, 57, 2700-2708.	7.9	277
13	On Integration of Solid-State Transformer With Zonal DC Microgrid. IEEE Transactions on Smart Grid, 2012, 3, 975-985.	9.0	267
14	Design and Demonstration of a 3.6-kV–120-V/10-kVA Solid-State Transformer for Smart Grid Application. IEEE Transactions on Power Electronics, 2014, 29, 3982-3996.	7.9	263
15	A High Step-Up Three-Port DC–DC Converter for Stand-Alone PV/Battery Power Systems. IEEE Transactions on Power Electronics, 2013, 28, 5049-5062.	7.9	249
16	Analysis and Comparison of Medium Voltage High Power DC/DC Converters for Offshore Wind Energy Systems. IEEE Transactions on Power Electronics, 2013, 28, 2014-2023.	7.9	243
17	STATCOM Impact Study on the Integration of a Large Wind Farm into a Weak Loop Power System. IEEE Transactions on Energy Conversion, 2008, 23, 226-233.	5.2	231
18	A High-Efficiency PV Module-Integrated DC/DC Converter for PV Energy Harvest in FREEDM Systems. IEEE Transactions on Power Electronics, 2011, 26, 897-909.	7.9	222

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19	Accommodating High PV Penetration on Distribution Feeders. IEEE Transactions on Smart Grid, 2012, 3, 1039-1046.	9.0	213
20	New Unipolar Switching Power Device Figures of Merit. IEEE Electron Device Letters, 2004, 25, 298-301.	3.9	208
21	Medium-Voltage Solid-State Transformer: Technology for a Smarter and Resilient Grid. IEEE Industrial Electronics Magazine, 2016, 10, 29-42.	2.6	205
22	Smart grid technologies. IEEE Industrial Electronics Magazine, 2009, 3, 16-23.	2.6	195
23	Power Semiconductor Devices for Smart Grid and Renewable Energy Systems. Proceedings of the IEEE, 2017, 105, 2019-2047.	21.3	195
24	Review of non-isolated bi-directional DC-DC converters for plug-in hybrid electric vehicle charge station application at municipal parking decks. , 2010, , .		191
25	Real-Time Calculation of Switching Angles Minimizing THD for Multilevel Inverters With Step Modulation. IEEE Transactions on Industrial Electronics, 2009, 56, 285-293.	7.9	189
26	Power Management for DC Microgrid Enabled by Solid-State Transformer. IEEE Transactions on Smart Grid, 2014, 5, 954-965.	9.0	188
27	Analysis and Design of Active NPC (ANPC) Inverters for Fault-Tolerant Operation of High-Power Electrical Drives. IEEE Transactions on Power Electronics, 2012, 27, 519-533.	7.9	178
28	Review of solid state transformer in the distribution system: From components to field application. , 2012, , .		177
29	A New Nine-Level Active NPC (ANPC) Converter for Grid Connection of Large Wind Turbines for Distributed Generation. IEEE Transactions on Power Electronics, 2011, 26, 961-972.	7.9	164
30	A 98.3% Efficient GaN Isolated Bidirectional DC–DC Converter for DC Microgrid Energy Storage System Applications. IEEE Transactions on Industrial Electronics, 2017, 64, 9094-9103.	7.9	147
31	Review of high power isolated bi-directional DC-DC converters for PHEV/EV DC charging infrastructure. , $2011, , .$		145
32	Integration of DC Microgrids as Virtual Synchronous Machines Into the AC Grid. IEEE Transactions on Industrial Electronics, 2017, 64, 7455-7466.	7.9	138
33	Wind Energy System With Integrated Functions of Active Power Transfer, Reactive Power Compensation, and Voltage Conversion. IEEE Transactions on Industrial Electronics, 2013, 60, 4512-4524.	7.9	133
34	15 kV SiC MOSFET: An Enabling Technology for Medium Voltage Solid State Transformers. CPSS Transactions on Power Electronics and Applications, 2017, 2, 118-130.	4.4	131
35	3-D Space Modulation With Voltage Balancing Capability for a Cascaded Seven-Level Converter in a Solid-State Transformer. IEEE Transactions on Power Electronics, 2011, 26, 3778-3789.	7.9	130
36	Small-Signal Model-Based Control Strategy for Balancing Individual DC Capacitor Voltages in Cascade Multilevel Inverter-Based STATCOM. IEEE Transactions on Industrial Electronics, 2009, 56, 2259-2269.	7.9	128

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37	Review of GaN Totem-Pole Bridgeless PFC. CPSS Transactions on Power Electronics and Applications, 2017, 2, 187-196.	4.4	128
38	System Integration and Hierarchical Power Management Strategy for a Solid-State Transformer Interfaced Microgrid System. IEEE Transactions on Power Electronics, 2014, 29, 4414-4425.	7.9	127
39	A High-Efficiency Flyback Micro-inverter With a New Adaptive Snubber for Photovoltaic Applications. IEEE Transactions on Power Electronics, 2016, 31, 318-327.	7.9	125
40	Design and development of Generation-I silicon based Solid State Transformer. , 2010, , .		119
41	A game theoretic framework for a next-generation retail electricity market with high penetration of distributed residential electricity suppliers. Applied Energy, 2014, 119, 341-350.	10.1	118
42	Comparisons of SiC MOSFET and Si IGBT Based Motor Drive Systems. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2007, , .	0.0	117
43	A New Edge Termination Technique for High-Voltage Devices in 4H-SiC–Multiple-Floating-Zone Junction Termination Extension. IEEE Electron Device Letters, 2011, 32, 880-882.	3.9	114
44	7.2-kV Single-Stage Solid-State Transformer Based on the Current-Fed Series Resonant Converter and 15-kV SiC <sc>mosfet</sc> s. IEEE Transactions on Power Electronics, 2019, 34, 1099-1112.	7.9	113
45	A Medium-Voltage Hybrid DC Circuit Breaker, Part I: Solid-State Main Breaker Based on 15 kV SiC Emitter Turn-OFF Thyristor. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 278-288.	5.4	106
46	An average model of solid state transformer for dynamic system simulation. , 2009, , .		105
47	270 kVA Solid State Transformer Based on 10 kV SiC Power Devices. , 2007, , .		103
48	Model predictive control-based power dispatch for distribution system considering plug-in electric vehicle uncertainty. Electric Power Systems Research, 2014, 106, 29-35.	3.6	103
49	Modeling, analysis and control of cascaded-multilevel converter-based STATCOM., 0,,.		99
50	Current Sensorless Power Balance Strategy for DC/DC Converters in a Cascaded Multilevel Converter Based Solid State Transformer. IEEE Transactions on Power Electronics, 2014, 29, 17-22.	7.9	95
51	A SiC Power MOSFET Loss Model Suitable for High-Frequency Applications. IEEE Transactions on Industrial Electronics, 2017, 64, 8268-8276.	7.9	94
52	Coupling Effect Reduction of a Voltage-Balancing Controller in Single-Phase Cascaded Multilevel Converters. IEEE Transactions on Power Electronics, 2012, 27, 3530-3543.	7.9	93
53	Design and control of grid-connected converter in bi-directional battery charger for Plug-in hybrid electric vehicle application. , 2009, , .		88
54	AC circulating currents suppression in modular multilevel converter. , 2012, , .		88

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55	A Medium-Voltage Medium-Frequency Isolated DC–DC Converter Based on 15-kV SiC MOSFETs. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 100-109.	5.4	87
56	Evaluation of Cascade-Multilevel-Converter-Based STATCOM for Arc Furnace Flicker Mitigation. IEEE Transactions on Industry Applications, 2007, 43, 378-385.	4.9	84
57	Two-Phase Interleaved Critical Mode PFC Boost Converter With Closed Loop Interleaving Strategy. IEEE Transactions on Power Electronics, 2009, 24, 3003-3013.	7.9	84
58	Photovoltaic Synchronous Generator: Architecture and Control Strategy for a Grid-Forming PV Energy System. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 936-948.	5.4	81
59	A Medium-Voltage Hybrid DC Circuit Breakerâ€"Part II: Ultrafast Mechanical Switch. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2017, 5, 289-296.	5.4	80
60	Real-Time Algorithm for Minimizing THD in Multilevel Inverters With Unequal or Varying Voltage Steps Under Staircase Modulation. IEEE Transactions on Industrial Electronics, 2009, 56, 2249-2258.	7.9	79
61	High-voltage high-frequency transformer design for a 7.2kV to $120V/240V\ 20kVA$ solid state transformer. , $2010, , .$		76
62	Design and hardware implementation of Gen-1 silicon based solid state transformer., 2011,,.		73
63	A new wide input range high efficiency photovoltaic inverter. , 2010, , .		70
64	Current-mode variable-frequency control architecture for high-current low-voltage DC–DC converters [Letters]. IEEE Transactions on Power Electronics, 2006, 21, 1133-1137.	7.9	67
65	Comparison of Static and Switching Characteristics of 1200 V 4H-SiC BJT and 1200 V Si-IGBT. IEEE Transactions on Industry Applications, 2008, 44, 887-893.	4.9	66
66	FREEDM system - a vision for the future grid. , 2010, , .		65
67	Short-circuit capability of 1200V SiC MOSFET and JFET for fault protection. , 2013, , .		63
68	Predictive ZVS Control With Improved ZVS Time Margin and Limited Variable Frequency Range for a 99% Efficient, 130-W/in ³ MHz GaN Totem-Pole PFC Rectifier. IEEE Transactions on Power Electronics, 2019, 34, 7079-7091.	7.9	63
69	High-Efficiency and High-Density Single-Phase Dual-Mode Cascaded Buck–Boost Multilevel Transformerless PV Inverter With GaN AC Switches. IEEE Transactions on Power Electronics, 2019, 34, 7474-7488.	7.9	62
70	Repetitive Unclamped-Inductive-Switching-Induced Electrical Parameters Degradations and Simulation Optimizations for 4H-SiC MOSFETs. IEEE Transactions on Electron Devices, 2016, 63, 4331-4338.	3.0	61
71	Performance evaluation of solid state transformer based microgrid in FREEDM systems. , 2011, , .		60
72	Performance comparison of 1200V 100A SiC MOSFET and 1200V 100A silicon IGBT., 2013,,.		60

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73	10-kV SiC MOSFET-Based Boost Converter. IEEE Transactions on Industry Applications, 2009, 45, 2056-2063.	4.9	59
74	Voltage and power balance control for a cascaded multilevel solid state transformer. , 2010, , .		59
75	Understanding switching losses in SiC MOSFET: Toward lossless switching. , 2015, , .		58
76	A Fast Mechanical Switch for Medium-Voltage Hybrid DC and AC Circuit Breakers. IEEE Transactions on Industry Applications, 2016, 52, 2911-2918.	4.9	57
77	Solid-State-Transformer-Interfaced Permanent Magnet Wind Turbine Distributed Generation System With Power Management Functions. IEEE Transactions on Industry Applications, 2017, 53, 3849-3861.	4.9	56
78	An Isolated Bidirectional Single-Stage DC–AC Converter Using Wide-Band-Gap Devices With a Novel Carrier-Based Unipolar Modulation Technique Under Synchronous Rectification. IEEE Transactions on Power Electronics, 2017, 32, 1832-1843.	7.9	55
79	A Family of Multimodes Charge Pump based DC–DC Converter With High Efficiency over Wide Input and Output Range. IEEE Transactions on Power Electronics, 2012, 27, 4788-4798.	7.9	52
80	15-kV/40-A FREEDM Supercascode: A Cost-Effective SiC High-Voltage and High-Frequency Power Switch. IEEE Transactions on Industry Applications, 2017, 53, 5715-5727.	4.9	52
81	SiC Trench MOSFET With Integrated Self-Assembled Three-Level Protection Schottky Barrier Diode. IEEE Transactions on Electron Devices, 2018, 65, 347-351.	3.0	51
82	Design and Characterization of High-Voltage 4H-SiC p-IGBTs. IEEE Transactions on Electron Devices, 2008, 55, 1912-1919.	3.0	50
83	Multi-function bi-directional battery charger for plug-in hybrid electric vehicle application. , 2009, , .		50
84	FREEDM System: Role of power electronics and power semiconductors in developing an energy internet. Power Semiconductor Devices & IC's, 2009 ISPSD 2009 21st International Symposium on, 2009, , .	0.0	50
85	Design and Optimization of a 200-kW Medium-Frequency Transformer for Medium-Voltage SiC PV Inverters. IEEE Transactions on Power Electronics, 2021, 36, 10548-10560.	7.9	49
86	Experimental and numerical study of the emitter turn-off thyristor (ETO). IEEE Transactions on Power Electronics, 2000, 15, 561-574.	7.9	48
87	Comparing SiC switching power devices: MOSFET, NPN transistor and GTO thyristor. Solid-State Electronics, 2000, 44, 325-340.	1.4	47
88	Wide bandgap (WBG) power devices and their impacts on power delivery systems. , 2016, , .		47
89	Optimal design methodology of bidirectional LLC resonant DC/DC converter for solid state transformer application. , $2014, \ldots$		46
90	Monolithically Integrated Boost Converter Based on 0.5- <tex>\$mu\$</tex> m CMOS Process. IEEE Transactions on Power Electronics, 2005, 20, 628-638.	7.9	45

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91	Design and Analysis of a 270kW Five-level DC/DC Converter for Solid State Transformer Using 10kV SiC Power Devices., 2007,,.		45
92	Solid state transformer in the future smart electrical system. , 2013, , .		45
93	Solid State Transformer (SST) as an energy router: Economic dispatch based energy routing strategy. , 2015, , .		45
94	Soft-Switched Modulation Techniques for an Isolated Bidirectional DC–AC. IEEE Transactions on Power Electronics, 2018, 33, 137-150.	7.9	44
95	Theoretical and Experimental Analyses of Safe Operating Area (SOA) of 1200-V 4H-SiC BJT. IEEE Transactions on Electron Devices, 2008, 55, 1887-1893.	3.0	41
96	Three-Level Active Neutral-Point-Clamped (ANPC) Converter with Fault Tolerant Ability., 2009,,.		41
97	Comparisons of 6.5kV 25A Si IGBT and 10-kV SiC MOSFET in Solid-State Transformer application., 2010,,.		41
98	Area-Efficient Bevel-Edge Termination Techniques for SiC High-Voltage Devices. IEEE Transactions on Electron Devices, 2016, 63, 1630-1636.	3.0	41
99	Achieving Zero Switching Loss in Silicon Carbide MOSFET. IEEE Transactions on Power Electronics, 2019, 34, 12193-12199.	7.9	41
100	A Generalized Control Strategy of Per-Phase DC Voltage Balancing for Cascaded Multilevel Converter-based STATCOM., 2007,,.		40
101	Development of medium voltage solid-state fault isolation devices for ultra-fast protection of distribution systems. , 2014, , .		40
102	7.2-kV/60-A Austin SuperMOS: An Intelligent Medium-Voltage SiC Power Switch. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 6-15.	5.4	40
103	Control Strategy for Fault-Tolerant Cascaded Multilevel Converter based STATCOM. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	39
104	99% Efficient 2.5-kW Four-Level Flying Capacitor Multilevel GaN Totem-Pole PFC. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 5795-5806.	5.4	39
105	Hybrid Cascaded H-bridges Multilevel Motor Drive Control for Electric Vehicles. , 0, , .		38
106	High voltage Si/SiC hybrid switch: An ideal next step for SiC. , 2015, , .		38
107	Experimental study of 650V AlGaN/GaN HEMT short-circuit safe operating area (SCSOA). , 2014, , .		37
108	Theoretical and Experimental Study of 22 kV SiC Emitter Turn-OFF (ETO) Thyristor. IEEE Transactions on Power Electronics, 2017, 32, 6381-6393.	7.9	37

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109	Design and Characterization of High-Voltage Silicon Carbide Emitter Turn-off Thyristor. IEEE Transactions on Power Electronics, 2009, 24, 1189-1197.	7.9	36
110	Modeling of the High-Frequency Rectifier With 10-kV SiC JBS Diodes in High-Voltage Series Resonant Type DC–DC Converters. IEEE Transactions on Power Electronics, 2014, 29, 4288-4300.	7.9	36
111	STATCOM with energy storage for smoothing intermittent wind farm power. , 2008, , .		35
112	A Novel Dominant Dynamic Elimination Control for Voltage-Controlled Inverter. IEEE Transactions on Industrial Electronics, 2018, 65, 6800-6812.	7.9	35
113	Analysis of n-channel MOS-controlled thyristors. IEEE Transactions on Electron Devices, 1991, 38, 1612-1618.	3.0	34
114	A comparison of medium voltage high power DC/DC converters with high step-up conversion ratio for offshore wind energy systems. , 2011, , .		34
115	Modulation Technique to Reverse Power Flow for the Isolated Series Resonant DC–DC Converter With Clamped Capacitor Voltage. IEEE Transactions on Industrial Electronics, 2012, 59, 4617-4628.	7.9	33
116	Design and operation of A 3.6kV high performance solid state transformer based on 13kV SiC MOSFET and JBS diode. , 2014, , .		33
117	6.5 kV Si/SiC hybrid power module: An ideal next step?. , 2015, , .		33
118	Complex-Coefficient Complex-Variable Filter for Grid Synchronization Based on Linear Quadratic Regulation. IEEE Transactions on Industrial Informatics, 2018, 14, 1824-1834.	11.3	32
119	Integrated SiC MOSFET module with ultra low parasitic inductance for noise free ultra high speed switching. , 2015, , .		31
120	Current commutation in a medium voltage hybrid DC circuit breaker using 15 kV vacuum switch and SiC devices. , 2015 , , .		31
121	Comparative study of temperature sensitive electrical parameters (TSEP) of Si, SiC and GaN power devices. , 2016 , , .		31
122	Strategic Overview of High-Voltage SiC Power Device Development Aiming at Global Energy Savings. Materials Science Forum, 2014, 778-780, 1089-1095.	0.3	30
123	Bevel Junction Termination Extension—A New Edge Termination Technique for 4H-SiC High-Voltage Devices. IEEE Electron Device Letters, 2015, 36, 594-596.	3.9	30
124	Intradevice Repeatability and Interdevice Agreement of Ocular Biometric Measurements: A Comparison of Two Swept-Source Anterior Segment OCT Devices. Translational Vision Science and Technology, 2020, 9, 14.	2.2	30
125	Performance evaluation of multiple Si and SiC solid state devices for circuit breaker application in 380VDC delivery system. , 2016 , , .		29
126	Hardware Design of a 13.8-kV/3-MVA PV Plus Storage Solid-State Transformer (PVS-SST). IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 3571-3586.	5.4	29

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127	A novel wide voltage range bi-directional series resonant converter with clamped capacitor voltage., 2009,,.		28
128	Solid state transformer interfaced wind energy system with integrated active power transfer, reactive power compensation and voltage conversion functions., 2012,,.		28
129	3.38 Mhz operation of 1.2kV SiC MOSFET with integrated ultra-fast gate drive. , 2015, , .		28
130	Active Damping of Ultrafast Mechanical Switches for Hybrid AC and DC Circuit Breakers. IEEE Transactions on Industry Applications, 2017, 53, 5354-5364.	4.9	28
131	Large-Signal Stability Criteria in DC Power Grids With Distributed-Controlled Converters and Constant Power Loads. IEEE Transactions on Smart Grid, 2020, 11, 5273-5287.	9.0	28
132	Development of a Scalable Power Semiconductor Switch (SPSS). IEEE Transactions on Power Electronics, 2007, 22, 364-373.	7.9	27
133	Reliability of 4H-SiC SBD/JBS diodes under repetitive surge current stress. , 2012, , .		27
134	An Optimal Combination Modulation Strategy for a Seven-level Cascade Multilevel Converter Based STATCOM. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	26
135	A High-Dynamic Range Current Source Gate Driver for Switching-Loss Reduction of High-Side Switch in Buck Converter. IEEE Transactions on Power Electronics, 2010, 25, 1439-1443.	7.9	26
136	22 kV SiC Emitter turn-off (ETO) thyristor and its dynamic performance including SOA. , 2015, , .		26
137	Medium voltage solid state transformers based on 15 kV SiC MOSFET and JBS diode. , 2016, , .		26
138	Adaptive zero-voltage-switching control and hybrid current control for high efficiency GaN-based MHz Totem-pole PFC rectifier. , 2017, , .		26
139	Feedforward Proportional Carrier-Based PWM for Cascaded H-Bridge PV Inverter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 2192-2205.	5.4	26
140	A novel high current solid state power controller. , 2005, , .		25
141	DC zonal micro-grid architecture and control. , 2010, , .		25
142	Static and dynamic performance characterization and comparison of 15 kV SiC MOSFET and 15 kV SiC n-IGBTs. , 2015, , .		25
143	High current medium voltage solid state circuit breaker using paralleled 15kV SiC ETO. , 2018, , .		25
144	Load Current Decoupling Based LQ Control for Three-Phase Inverter. IEEE Transactions on Power Electronics, 2018, 33, 5476-5491.	7.9	25

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145	A 3-D Winding Structure for Planar Transformers and Its Applications to <i>LLC</i> Resonant Converters. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 6232-6247.	5.4	25
146	The future of bipolar power transistors. IEEE Transactions on Electron Devices, 2001, 48, 2535-2543.	3.0	24
147	Renewable energy system research and education at the NSF FREEDM systems center., 2009,,.		24
148	Power synchronization control for capacitor minimization in Solid State Transformers (SST)., 2011,,.		24
149	High efficiency switched capacitor buck-boost converter for PV application. , 2012, , .		24
150	Solid-state transformer interfaced PMSG wind energy conversion system., 2015,,.		24
151	Fractional converter for high efficiency high power battery energy storage system. , 2017, , .		24
152	Analysis of double trench insulated gate bipolar transistor. Solid-State Electronics, 1995, 38, 829-838.	1.4	23
153	MOS Controlled Diodes—A new power diode. Solid-State Electronics, 1995, 38, 977-980.	1.4	23
154	A novel closed loop interleaving strategy of multiphase critical mode boost PFC converters. IEEE Applied Power Electronics Conference and Exposition, 2008, , .	0.0	23
155	6.5kV FREEDM-Pair: Ideal high power switch capitalizing on Si and SiC. , 2015, , .		23
156	A novel light load performance enhanced variable-switching-frequency and hybrid single-dual-phase-shift control for single-stage dual-active-bridge based AC/DC converter. , 2016, , .		23
157	A single-stage bidirectional dual-active-bridge AC-DC converter based on enhancement mode GaN power transistor. , 2018, , .		23
158	Understanding Short-Circuit Failure Mechanism of Double-Trench SiC Power MOSFETs. IEEE Transactions on Electron Devices, 2020, 67, 5593-5599.	3.0	23
159	A new resonant gate driver for switching loss reduction of high side switch in buck converter. , 2010, , .		22
160	Comparisons of different control strategies for 20kVA solid state transformer., 2011,,.		22
161	A Novel Order Reduced Synchronous Power Control for Grid-Forming Inverters. IEEE Transactions on Industrial Electronics, 2020, 67, 10989-10995.	7.9	22
162	A high-frequency 1.5 MVA H-bridge building block for cascaded multilevel converters using emitter turn-off thyrister. , 0, , .		21

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163	A new cost-effective analog maximum power point tracker for PV systems. , 2010, , .		21
164	Optimal design of a vibration-based energy harvester using magnetostrictive material (MsM). Smart Materials and Structures, 2011, 20, 015021.	3.5	21
165	High-Frequency Resonance Mitigation for Plug-In Hybrid Electric Vehicles' Integration With a Wide Range of Grid Conditions. IEEE Transactions on Power Electronics, 2012, 27, 4459-4471.	7.9	21
166	ZVS range extension of 10A 15kV SiC MOSFET based 20kW Dual Active Half Bridge (DHB) DC-DC converter. , 2012, , .		21
167	Coordinative realâ€time subâ€transmission volt–var control for reactive power regulation between transmission and distribution systems. IET Generation, Transmission and Distribution, 2019, 13, 2006-2014.	2.5	21
168	An injection efficiency model to characterize the injection capability and turn-off speed for >10kV 4H-SiC IGBTs. Solid-State Electronics, 2014, 93, 27-39.	1.4	20
169	A medium voltage bidirectional DC-DC converter combining resonant and dual active bridge converters. , $2015, , .$		20
170	Development of 6kV SiC hybrid power switch based on 1200V SiC JFET and MOSFET., 2015,,.		20
171	Design and application of a 1200V ultra-fast integrated Silicon Carbide MOSFET module. , 2016, , .		20
172	Design and implementation of a 7.2kV single stage AC-AC solid state transformer based on current source series resonant converter and 15 kV SiC MOSFET. , 2017, , .		20
173	Hardware Design and Demonstration of a 100kW, 99% Efficiency Dual Active Half Bridge Converter Based on 1700V SiC Power MOSFET. , 2020, , .		20
174	Variable-Switching-Frequency Single-Stage Bidirectional GaN AC–DC Converter for the Grid-Tied Battery Energy Storage System. IEEE Transactions on Industrial Electronics, 2022, 69, 10776-10786.	7.9	20
175	System integration and demonstration of a 4.5 MVA STATCOM based on emitter turn-off (ETO) thyristor and cascade multilevel converter., 2005,,.		19
176	Model-based fault detection of hybrid fuel cell and photovoltaic direct current power sources. Journal of Power Sources, 2011, 196, 5197-5204.	7.8	19
177	Design and development of a 7.2 kV/200A hybrid circuit breaker based on 15 kV SiC emitter turn-off (ETO) thyristor. , 2015, , .		19
178	Hierarchical protection architecture for 380V DC data center application. , 2016, , .		19
179	The influence of an LIGBT on CMOS latch up in power integrated circuit. IEEE Transactions on Electron Devices, 1995, 42, 1873-1874.	3.0	18
180	Control Power Self-Generation and Sensor Integration in Emitter Turn-Off Thyristor. IEEE Transactions on Industry Applications, 2009, 45, 1715-1728.	4.9	18

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181	15 kV/40 A FREEDM super-cascode: A cost effective SiC high voltage and high frequency power switch. , $2016,$, .		18
182	An improved SiC MOSFET-gate driver integrated power module with ultra low stray inductances. , 2017, , .		18
183	3kW Four-Level Flying Capacitor Totem-Pole Bridgeless PFC Rectifier with 200V GaN Devices. , 2019, , .		18
184	Variable Frequency Average Current Mode Control for ZVS Symmetrical Dual-Buck H-Bridge All-GaN Inverter. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 4416-4427.	5.4	18
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