

# Alex Q Huang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5028445/publications.pdf>

Version: 2024-02-01

581  
papers

20,855  
citations

25034

57  
h-index

17105

122  
g-index

585  
all docs

585  
docs citations

585  
times ranked

11002  
citing authors

#	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

#	ARTICLE	IF	CITATIONS
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

#	ARTICLE	IF	CITATIONS
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 MOSFETs. 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

#	ARTICLE	IF	CITATIONS
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 Breaker-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 <sup>3</sup> 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

#	ARTICLE	IF	CITATIONS
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, , .		46
90	Monolithically Integrated Boost Converter Based on 0.5- $\mu\text{m}$ CMOS Process. IEEE Transactions on Power Electronics, 2005, 20, 628-638.	7.9	45

#	ARTICLE	IF	CITATIONS
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 DCâ€“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

#	ARTICLE	IF	CITATIONS
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



#	ARTICLE	IF	CITATIONS
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

#	ARTICLE	IF	CITATIONS
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 Diodesâ€”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 thyristor. , 0, , .		21

#	ARTICLE	IF	CITATIONS
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 Vehiclesâ€™ 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 real-time sub-transmission voltage 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

#	ARTICLE	IF	CITATIONS
181	15kV/40A 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
185	Evaluation and Analysis of Temperature-Dependent Dynamic $R_{DS(on)}$ of GaN Power Devices Considering High-Frequency Operation. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 111-123.	5.4	18
186	Three-Terminal Si/SiC Hybrid Switch. IEEE Transactions on Power Electronics, 2020, 35, 8867-8871.	7.9	18
187	PI-Based Synchronous Reference Frame Frequency-Locked Loop. IEEE Transactions on Industrial Electronics, 2021, 68, 4547-4553.	7.9	18
188	A Bidirectional Isolated Dual-Phase-Shift Variable-Frequency Series Resonant Dual-Active-Bridge GaN AC-DC Converter. IEEE Transactions on Industrial Electronics, 2023, 70, 3315-3325.	7.9	18
189	Series and parallel operation of the emitter turn-off (ETO) thyristor. IEEE Transactions on Industry Applications, 2002, 38, 706-712.	4.9	17
190	Improved wind farm's power availability by battery energy storage systems: modeling and control. , 2008, , .		17
191	Validation of battery energy storage control for wind farm dispatching. , 2010, , .		17
192	Reliability comparison for 3L-NPC and 3L-ANPC converters for drives application. , 2011, , .		17
193	A fully autonomous power management strategy for DC microgrid bus voltages. , 2013, , .		17
194	Comparative evaluation of 6kV Si and SiC power devices for medium voltage power electronics applications. , 2015, , .		17
195	Evaluation of design variables in Thompson coil based operating mechanisms for ultra-fast opening in hybrid AC and DC circuit breakers. , 2015, , .		17
196	A high efficiency flyback micro-inverter with a new adaptive snubber for photovoltaic applications. , 2015, , .		17
197	Real-time adaptive timing control of synchronous rectifiers in high frequency GaN LLC converter. , 2018, , .		17
198	Characterization of Partial Discharges in High-Frequency Transformer Under PWM Pulses. IEEE Transactions on Power Electronics, 2022, 37, 11199-11208.	7.9	17

#	ARTICLE	IF	CITATIONS
199	Analysis of the forward biased safe operating area of the super junction MOSFET. , 0, , .		16
200	An analysis and experimental approach to MOS controlled diodes behavior. IEEE Transactions on Power Electronics, 2000, 15, 916-922.	7.9	16
201	Analysis of the snubberless operation of the emitter turn-off thyristor (ETO). IEEE Transactions on Power Electronics, 2003, 18, 30-37.	7.9	16
202	A high efficiency high power step-up resonant switched-capacitor converter for offshore wind energy systems. , 2012, , .		16
203	Development of distributed grid intelligence platform for solid state transformer. , 2012, , .		16
204	Design and demonstration of a 3.6kV&#x2013;120V/10KVA solid state transformer for smart grid application. , 2014, , .		16
205	A protection scheme against DC faults VSC based DC systems with bus capacitors. , 2014, , .		16
206	A study of dynamic high voltage output charge measurement for 15 kV SiC MOSFET. , 2016, , .		16
207	Drive circuits for ultra-fast and reliable actuation of Thomson coil actuators used in hybrid AC and DC circuit breakers. , 2016, , .		16
208	Design and optimization of the high frequency transformer for a 800V/1.2MHz SiC LLC resonant converter. , 2017, , .		16
209	Improved analysis, design and control for interleaved dual-phase ZVS GaN-based totem-pole PFC rectifier with coupled inductor. , 2018, , .		16
210	Design of 1500V/200kW 99.6% Efficiency Dual Active Bridge Converters Based on 1700V SiC Power MOSFET Module. , 2020, , .		16
211	Analysis of the turn-off failure mechanism of silicon power diode. Solid-State Electronics, 2003, 47, 727-739.	1.4	15
212	A modular digital controller architecture for multi-node high power converter applications. , 2005, , .		15
213	Active Power Management of Electric Power System Using Emerging Power Electronics Technology. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	15
214	Comparison of 10-kV SiC power devices in solid-state transformer. , 2010, , .		15
215	A dynamic measurement method for parasitic capacitances of high voltage SiC MOSFETs. , 2015, , .		15
216	Configurations, Power Topologies and Applications of Hybrid Distribution Transformers. Energies, 2021, 14, 1215.	3.1	15

#	ARTICLE	IF	CITATIONS
217	500kVA Hybrid Solid State Transformer (HSST): Architecture, Functionality and Control. , 2020, , .		15
218	Analysis of CMOS-compatible lateral insulated base transistors. IEEE Transactions on Electron Devices, 1991, 38, 1624-1632.	3.0	14
219	A new trench base-shielded bipolar transistor. IEEE Transactions on Electron Devices, 2000, 47, 1662-1666.	3.0	14
220	Modelling and control of a cascade-multilevel converter-based STATCOM for electric arc furnace flicker mitigation. , 2005, , .		14
221	STATCOM Impact Study on the Integration of a Large Wind Farm into a Weak Loop Power System. , 2006, , .		14
222	Monolithic/Modularized Voltage Regulator Channel. IEEE Transactions on Power Electronics, 2007, 22, 1162-1176.	7.9	14
223	Control Strategy Improving Fault Ride-Through Capability of Cascade Multilevel Inverter Based STATCOM. , 2008, , .		14
224	Ruggedness analysis of 600V 4H-SiC JBS diodes under repetitive avalanche conditions. , 2012, , .		14
225	FREEDM system: An electronic smart distribution grid for the Future. , 2012, , .		14
226	Orthogonal Positive-Bevel Termination for Chip-Size SiC Reverse Blocking Devices. IEEE Electron Device Letters, 2012, 33, 1592-1594.	3.9	14
227	Threshold voltage stability comparison in AlGaIn/GaN FLASH MOS-HFETs utilizing charge trap or floating gate charge storage. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 864-867.	0.8	14
228	Data center energy efficiency and power quality: An alternative approach with solid state transformer. , 2015, , .		14
229	10kV SiC MPS diodes for high temperature applications. , 2016, , .		14
230	Wide Bandgap Devices and Power Conversion Systemsâ€”Part I. IEEE Transactions on Industrial Electronics, 2017, 64, 8190-8192.	7.9	14
231	A Family of Ultrahigh Efficiency Fractional dcâ€”dc Topologies for High Power Energy Storage Device. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 1420-1427.	5.4	14
232	Design of a 200 kW Medium-Frequency Transformer (MFT) With High Insulation Capability. , 2020, , .		14
233	Hardware Design of a 150kW/1500V All-SiC Grid-forming Photovoltaic Synchronous Generator (PVSG). , 2022, , .		14
234	The effect of the hole current on the channel inversion in trench insulated gate bipolar transistors (TIGBT). Solid-State Electronics, 1994, 37, 507-514.	1.4	13

#	ARTICLE	IF	CITATIONS
235	Analysis of the inductive turn-off of double gate MOS controlled thyristors. IEEE Transactions on Electron Devices, 1996, 43, 1029-1032.	3.0	13
236	Low voltage power devices for future VRM. , 0, , .		13
237	Development and Experimental Demonstration of a Self-Powered ETO (SPETO). IEEE Transactions on Industry Applications, 2006, 42, 1387-1394.	4.9	13
238	Control strategy for cascade multilevel inverter based STATCOM with optimal combination modulation. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	13
239	Distributed power flow controller design based-on ETO-light converter. IEEE Applied Power Electronics Conference and Exposition, 2008, , .	0.0	13
240	Controller hardware-in-the-loop validation for a 10 MVA ETO-based STATCOM for wind farm application. , 2009, , .		13
241	A Sample-Data Model for Double Edge Current Programmed Mode Control (DECPM) in High-Frequency and Wide-Range DC-DC Converters. IEEE Transactions on Power Electronics, 2010, 25, 1023-1033.	7.9	13
242	Application of active NPC converter on generator side for MW direct-driven wind turbine. , 2010, , .		13
243	A high efficiency transformerless step-up DC-DC converter with high voltage gain for LED backlighting applications. , 2011, , .		13
244	High bandwidth current sensing of SiC MOSFET with a Si current mirror. , 2016, , .		13
245	Improved medium voltage AC-DC rectifier based on 10kV SiC MOSFET for Solid State Transformer (SST) application. , 2016, , .		13
246	Optimal Control Scheme for Single-Stage Dual-Active-Bridge AC-DC Converter. , 2018, , .		13
247	High Isolation Auxiliary Power Supply for Medium-Voltage Power Electronics Building Block. , 2020, , .		13
248	A monolithic buck converter using differentially enhanced duty ripple control. , 2009, , .		12
249	Transient-Voltage-Clamp Circuit Design Based on Constant Load Line Impedance for Voltage Regulator Module. IEEE Transactions on Industrial Electronics, 2010, 57, 4085-4094.	7.9	12
250	Auxiliary power supply for Solid State Transformers. , 2012, , .		12
251	Loss analysis of GaN devices in an isolated bidirectional DC-DC converter. , 2015, , .		12
252	Understanding High Temperature Static and Dynamic Characteristics of 1.2 kV SiC Power MOSFETs. Materials Science Forum, 0, 897, 501-504.	0.3	12

#	ARTICLE	IF	CITATIONS
253	Multi-objective optimization of medium voltage SiC DC-DC converter based on modular input-series-output-parallel (ISOP) architecture. , 2017, , .		12
254	Performance optimization of A 1.2kV SiC high density half bridge power module in 3D package. , 2018, , .		12
255	A Single-Stage Isolated Resonant SiC DC/AC Inverter for Efficient High-Power Applications. , 2020, , .		12
256	SPETO: a superior power switch for high power, high frequency, low cost converters. , 0, , .		11
257	Emitter turn-off (ETO) thyristor: an emerging, lower cost power semiconductor switch with improved performance for converter-based transmission controllers. , 2005, , .		11
258	Testing of a controller for an ETO-based STATCOM through controller hardware-in-the-loop simulation. , 2009, , .		11
259	Impact of ALD Gate Dielectrics (SiO <sub>2</sub> , HfO <sub>2</sub> , and SiO <sub>2</sub> /HAH) on Device Electrical Characteristics and Reliability of AlGaIn/GaN MOSHFET Devices. ECS Transactions, 2011, 41, 445-450.	0.5	11
260	LCL filter utilized in battery charging applications to achieve compact size and low ripple charging. , 2012, , .		11
261	Circulating current control of double-star chopper-cell modular multilevel converter for HVDC system. , 2012, , .		11
262	Self-power emitter turn-off thyristor (SPETO) based circuit breaker for power distribution system. , 2012, , .		11
263	Normallyâ€off AlGaIn/GaN MOSHFET using ALD SiO <sub>2</sub> tunnel dielectric and ALD HfO <sub>2</sub> charge storage layer for power device application. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 868-870.	0.8	11
264	Hierarchical power management for DC microgrid in islanding mode and Solid State transformer enabled mode. , 2013, , .		11
265	Static and dynamic characterization of a >13kV SiC p-ETO device. , 2014, , .		11
266	Distributed and autonomous control of the FREEDM system: A power electronics based distribution system. , 2014, , .		11
267	Auxiliary power supply for solid state transformer with ultra high voltage capacitive driving. , 2015, , .		11
268	A novel energy balanced variable frequency control for input-series-output-parallel modular EV fast charging stations. , 2016, , .		11
269	1200V/200A FREEDM-pair: Loss and cost reduction analysis. , 2016, , .		11
270	Analysis and loss comparison of megahertz high voltage isolated DC/DC converters utilizing integrated SiC MOSFET module. , 2016, , .		11



#	ARTICLE	IF	CITATIONS
271	A 10 kV DC transformer (DCX) based on current fed SRC and 15 kV SiC MOSFETs. , 2018, , .		11
272	Three-phase Medium Voltage DC Fast Charger based on Single-stage Soft-switching Topology. , 2018, , .		11
273	Monolithic integration of 5 V CMOS and high-voltage devices. IEEE Electron Device Letters, 1992, 13, 575-577.	3.9	10
274	Control Power Self-Generation and Sensors Integration in Emitter Turn-off (ETO) Thyristor. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	10
275	New Improvement Results on 7.5 kV 4H-SiC p-IGBTs with $R_{ds(on)}$ of 26 m $\Omega$ at 25°C. , 2007, , .		10
276	10 kV SiC MOSFET Based Boost Converter. , 2008, , .		10
277	Design and investigation of frequency capability of 15kV 4H-SiC IGBT. Power Semiconductor Devices & IC's, 2009 ISPSD 2009 21st International Symposium on, 2009, , .	0.0	10
278	Power management strategy for plug and play DC microgrid. , 2012, , .		10
279	Operation principles of bidirectional isolated AC/DC converter with natural clamping soft switching scheme. , 2014, , .		10
280	Design and optimization of high conversion ratio quasi square wave buck converters. , 2017, , .		10
281	Single-phase hybrid transformerless PV grid-tied inverter. IET Power Electronics, 2018, 11, 2440-2449.	2.1	10
282	7.2-kV/60-A Austin SuperMOS: An Enabling SiC Switch Technology for Medium Voltage Applications. , 2019, , .		10
283	Design of A Medium Voltage Solid-State Transformer based on Modular AC-AC Resonant Converter and an Input-Series-Output-Parallel Architecture. , 2019, , .		10
284	Static CMOS latch-up considerations in HVIC design. IEEE Journal of Solid-State Circuits, 1990, 25, 613-616.	5.4	9
285	Reverse-bias safe operation area of large area MCT and IGBT. Solid-State Electronics, 2003, 47, 1-14.	1.4	9
286	ETO light multilevel inverter for STATCOM. , 2008, , .		9
287	Emitter turn-off (ETO) thyristor, ETO light converter and their grid applications. , 2009, , .		9
288	High-frequency high-efficiency DC-DC converter for distributed energy storage modularization. , 2010, , .		9

#	ARTICLE	IF	CITATIONS
289	An adaptive external ramp control of the peak current controlled Buck converters for high control bandwidth and wide operation range. , 2010, , .		9
290	Droop controller design methods for isolated DC-DC converter in DC grid battery energy storage applications. , 2013, , .		9
291	A 3.6kV high performance solid state transformer based on 13kV SiC MOSFET. , 2014, , .		9
292	An autonomous power management strategy based on DC bus signaling for solid-state transformer interfaced PMSG wind energy conversion system. , 2016, , .		9
293	Gate Bias Dependence of $V_{TH}$ Degradation in Planar and Trench SiC MOSFETs Under Repetitive Short Circuit Tests. IEEE Transactions on Electron Devices, 2022, 69, 2521-2527.	3.0	9
294	Insulated Gate P-I-N Transistor-a new MOS controlled switching power device. IEEE Electron Device Letters, 1995, 16, 408-410.	3.9	8
295	Junction termination technique for super junction devices. , 0, , .		8
296	Investigation of power MOSFETs for high temperature operation. , 0, , .		8
297	400kHz, 300W SiC BJT Based High Power Density PFC Converter. , 0, , .		8
298	Performance Evaluation of SiC MOSFET/BJT/Schottky Diode in A 1MHz Single Phase PFC. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	8
299	Characteristics of 10 kV SiC MOSFET and PIN Diode and Their Application Prospect in High Voltage High Frequency DC/DC Converter. , 2007, , .		8
300	Characterization, modeling of 10-kV SiC JBS diodes and their application prospect in X-ray generators. , 2009, , .		8
301	Switching losses analysis in MHz integrated synchronous Buck converter to support optimal power stage width segmentation in CMOS technology. , 2010, , .		8
302	A multi-modes charge-pump based high efficiency wide input range DC-DC converter. , 2010, , .		8
303	Feed-forward control of solid state transformer. , 2012, , .		8
304	A new nonisolated three-port DC-DC converter with high step-up/down ratio. , 2012, , .		8
305	SiC symmetric blocking terminations using orthogonal positive bevel termination and Junction Termination Extension. , 2013, , .		8
306	A cost effective power sharing strategy for a cascaded multilevel converter based solid state transformer. , 2013, , .		8

#	ARTICLE	IF	CITATIONS
307	4H-SiC 15kV n-IGBT physics-based sub-circuit model implemented in Simulink/Matlab. , 2015, , .		8
308	The first demonstration of symmetric blocking SiC gate turn-off (GTO) thyristor. , 2015, , .		8
309	SiC reversely switched dynistor (RSD) for pulse power application. , 2015, , .		8
310	Distributed energy storage device based on a novel bidirectional Dc-Dc converter with 650V GaN transistors. , 2015, , .		8
311	Loss analysis of a high efficiency GaN and Si device mixed isolated bidirectional DC-DC converter. , 2016, , .		8
312	Impact of Termination Region on Switching Loss for SiC MOSFET. IEEE Transactions on Electron Devices, 2019, 66, 1026-1031.	3.0	8
313	Turn-on Gate Resistor Optimization For Paralleled SiC MOSFETs. , 2020, , .		8
314	Evaluation of Medium Voltage SiC Flying Capacitor Converter and Modular Multilevel Converter. , 2020, , .		8
315	500kVA Hybrid Solid State Transformer (HSST): Design and Implementation of the SST. , 2020, , .		8
316	Modeling Avalanche Induced Degradation for 4H-SiC Power MOSFETs. IEEE Transactions on Power Electronics, 2020, 35, 11299-11303.	7.9	8
317	Design and Implementation of A 5kW 99.2% Efficient High-Density GaN-based Totem Pole Interleaved Bridgeless Bidirectional PFC. , 2021, , .		8
318	Performance Analysis of an Input-Series-Output-Parallel LLC Resonant Converter with Parameters Mismatch. , 2021, , .		8
319	Dual-Loop High Speed Voltage Balancing Control for High Frequency Four-level GaN Totem-Pole PFC With Small Flying Capacitors. , 2020, , .		8
320	A unified view of the MOS-gated thyristors. Solid-State Electronics, 1998, 42, 1855-1865.	1.4	7
321	Development and comparison of high-power semiconductor switches. , 0, , .		7
322	Design of a 4 MHz, 5V to 1V monolithic voltage regulator chip. , 0, , .		7
323	Analysis of Operational Degradation of SiC BJT Characteristics. , 2007, , .		7
324	Silicon Carbide Emitter Turn-Off Thyristor. International Journal of Power Management Electronics, 2008, 2008, 1-5.	0.9	7

#	ARTICLE	IF	CITATIONS
325	Design and implementation of a 9-bit 8MHz DPWM with AMI06 process. , 2009, , .		7
326	A comparison of converter topologies for vehicle-to-grid applications: Three-leg converter versus H-bridge converter. , 2009, , .		7
327	RBSOA study of high voltage SiC bipolar devices. Power Semiconductor Devices & IC's, 2009 ISPSD 2009 21st International Symposium on, 2009, , .	0.0	7
328	Design and Characterization of Differentially Enhanced Duty Ripple Control (DE-DRC) for Step-Down Converter. IEEE Transactions on Power Electronics, 2009, 24, 2714-2725.	7.9	7
329	Quality of Life and Functional Capacity after Longâ€Term Right Ventricular Pacing in Pediatrics and Young Adults with Congenital Atrioventricular Block. PACE - Pacing and Clinical Electrophysiology, 2013, 36, 1539-1549.	1.2	7
330	Static and Dynamic Performance Evaluation of >13 kV SiC-ETO and its Application as a Solid-State Circuit Breaker. Materials Science Forum, 0, 778-780, 1025-1029.	0.3	7
331	Distributed power balance strategy for DC/DC converters in solid state transformer. , 2014, , .		7
332	Development of solid state arc-free socket for DC distribution system. , 2014, , .		7
333	A novel bi-directional DC-DC converter for distributed energy storage device. , 2015, , .		7
334	GaN HEMT based 250W CCM photovoltaic micro-inverter. , 2015, , .		7
335	A new modulation technique to reduce leakage current without compromising modulation index in PV systems. , 2015, , .		7
336	Assessment of medium voltage SiC MOSFET advantages in medium voltage drive application. , 2017, , .		7
337	A Design Investigation of A 1 MVA SiC MOSFET Medium Voltage Variable Frequency Drive With Various Filtering Options. , 2018, , .		7
338	Temperatureâ€dependent dynamic $R_{DS,ON}$ under different operating conditions in enhancementâ€mode GaN HEMTs. IET Power Electronics, 2020, 13, 456-462.	2.1	7
339	Shared Redundancy Strategy to Improve the Reliability and Fault-Tolerant Capability of Modular Multilevel Converter. IEEE Transactions on Industrial Electronics, 2023, 70, 3326-3336.	7.9	7
340	Simulation of reverse breakdown in planar P-N junctions. Solid-State Electronics, 1991, 34, 983-993.	1.4	6
341	Analytical GTO turn-off model under snubberless turn-off condition. Microelectronics Journal, 2003, 34, 297-304.	2.0	6
342	MVRC and Its Tolerance Analysis For Microprocessor Power Management. , 0, , .		6

#	ARTICLE	IF	CITATIONS
343	Emitter Size Effect in 4H-SiC BJT. , 2006, , .		6
344	A Novel Distributed Interleaving Scheme to achieve Scalable Phase Design For Microprocessor Power Management. , 0, , .		6
345	A Novel Carrier-based PWM Method for 3-Level NPC Inverter Utilizing Control Freedom Degree. , 2007, , .		6
346	A Layered Modular Controller Structure for Multilevel Converters. , 2007, , .		6
347	Monolithic dc offset self-calibration method for adaptive on-time control buck converter. , 2009, , .		6
348	Controller design issues and solutions for buck converters with phase shedding and AVP functions. , 2009, , .		6
349	An optimum PWM Strategy for 5-level active NPC (ANPC) converter based on real-time solution for THD minimization. , 2009, , .		6
350	Silicon Carbide Emitter Turn-off Thyristor, A Promising Technology For High Voltage and High Frequency Applications. , 2009, , .		6
351	Low-dropout (LDO) regulator output impedance analysis and transient performance enhancement circuit. , 2010, , .		6
352	Small-signal analysis and modeling of the Dual Active Half Bridge converter. , 2012, , .		6
353	An improved constant on/off time control scheme for photovoltaic DC/DC MIC. , 2013, , .		6
354	Proposing a electricity market framework for the Energy Internet. , 2013, , .		6
355	Improved high-temperature device transport properties and off-state characteristics of AlGaN/GaN power devices with atomic layer deposition (ALD) HfAlO high- $\kappa$ dielectric. Semiconductor Science and Technology, 2013, 28, 074016.	2.0	6
356	THD minimization of modular multilevel converter with unequal DC values. , 2014, , .		6
357	A fast mechanical switch for medium voltage hybrid DC and AC circuit breakers. , 2015, , .		6
358	Power-weighting-based multiple input and multiple output control strategy for single-phase PV cascaded H-bridge multilevel grid-connected inverter. , 2015, , .		6
359	Low cost plug-and-play PV system for DC microgrid. , 2015, , .		6
360	Physics understanding of high temperature behavior of Gallium Nitride power transistor. , 2016, , .		6

#	ARTICLE	IF	CITATIONS
361	Improved 6.5kV FREEMD-Pair based on SiC JFET and Si IGBT. , 2016, , .		6
362	Comparative study on the turn-off capability of multiple Si and SiC power devices. , 2017, , .		6
363	Single-phase dual-mode four-switch Buck-Boost Transformerless PV inverter with inherent leakage current elimination. , 2018, , .		6
364	Influence of Lateral Straggling of Implanted Aluminum Ions on High Voltage 4H-SiC Device Edge Termination Design. Materials Science Forum, 0, 924, 361-364.	0.3	6
365	A Study of Physical Limitation of Reactive Power Output Capability of Modern PV Inverters. , 2018, , .		6
366	Solid state transformers, the Energy Router and the Energy Internet. , 2019, , 21-44.		6
367	Efficiency Optimization of Dual Active Bridge Converter Based on dV/dt Snubber Capacitors. , 2021, , .		6
368	An 800V/300 kW, 44 kW/L Air-Cooled SiC Power Electronics Building Block (PEBB). , 2021, , .		6
369	500kVA Hybrid Solid State Transformer (HSST): Modelling and Control. , 2021, , .		6
370	Lateral insulated gate p-i-n transistor (LIGPT)-a new MOS gate lateral power device. IEEE Electron Device Letters, 1996, 17, 297-299.	3.9	5
371	Theoretical limitation of the RBSOA of MOS-controlled thyristors. Solid-State Electronics, 1998, 42, 785-794.	1.4	5
372	Impacts of transient voltage clamp on CPU power delivery. , 0, , .		5
373	Comparison of Static and Switching Characteristics of 1200V 4H-SiC BJT and 1200V Si-IGBT. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	5
374	Field Data-based Study on Electric Arc Furnace Flicker Mitigation. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	5
375	Physics-based Model for Emitter Turn-Off Thyristor (ETO). , 2007, , .		5
376	STATCOM Impact Study on the Integration of a Large Wind Farm into a Weak Loop Power System. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	5
377	Fault-Tolerant Transformerless Power Flow Controller Based-On ETO Light Converter. , 2008, , .		5
378	Dispatching of wind farms using battery energy storage. International Journal of Power Electronics, 2008, 1, 164.	0.2	5

#	ARTICLE	IF	CITATIONS
379	A new voltage-balancing controller in cascaded multilevel converters. , 2011, , .		5
380	Dual-GCT design criteria and voltage scaling. , 2012, , .		5
381	Parallel operation of solid state transformer. , 2012, , .		5
382	Switched-capacitor filter based Type-III compensation for switched-mode Buck converters. , 2013, , .		5
383	An analytical investigation of the effect of varied buffer layer designs on the turn-off speed for 4H-SiC IGBTs. , 2013, , .		5
384	Control of modular multilevel converter based HVDC systems during asymmetrical grid faults. , 2014, , .		5
385	Multiple objectives tertiary control strategy for solid state transformer interfaced DC microgrid. , 2014, , .		5
386	Low voltage ride through control of modular multilevel converter based HVDC systems. , 2014, , .		5
387	Zero standby power high efficiency hot plugging outlet for 380VDC power delivery system. , 2016, , .		5
388	Independent DC link voltage control of cascaded multilevel PV inverter. , 2016, , .		5
389	High-frequency AC distributed power delivery system. , 2016, , .		5
390	Bit-energy: An innovative bitcoin-style distributed transactional model for a competitive electricity market. , 2017, , .		5
391	Data center power distribution system reliability analysis tool based on Monte Carlo next event simulation method. , 2017, , .		5
392	A novel adaptive control for three-phase inverter. , 2018, , .		5
393	Analysis of Trade-Off Between Noise and Wide Band-Gap (WBG) Device Switching Speed. , 2018, , .		5
394	Switching Loss Model of SiC MOSFET Promoting High Frequency Applications. , 2019, , .		5
395	Fabrication and Analysis of a Novel High Voltage Heterojunction p-NiO/n-Ga <sub>2</sub> O <sub>3</sub> Diode. , 2020, , .		5
396	Thermal Design Consideration of Medium Voltage High Frequency Transformers. , 2020, , .		5

#	ARTICLE	IF	CITATIONS
397	Real-time Implementation of a Dual-Active-Bridge Based Multi-Level Photovoltaic Converter. , 2021, , .		5
398	A Novel 3.6kV/400A SiC Intelligent Power Module (IPM). , 2021, , .		5
399	GaN-based $\hat{A}\pm 5\text{kV}/100\text{kHz}$ PWM Generator for Advanced Partial Discharge Characterization. , 2021, , .		5
400	MOS controlled current interruption. Solid-State Electronics, 1992, 35, 187-191.	1.4	4
401	Analysis of 4500 V double trench MOS controlled thyristor. , 0, , .		4
402	The impact of sub-threshold current on ultra high density trench MOSFET for synchronous rectifier application. , 0, , .		4
403	Frequency response analysis for switching converters in SPICE without averaging. , 0, , .		4
404	Design of a monolithic high frequency fast transient buck for portable application. , 0, , .		4
405	Development of a scalable power semiconductor switch (SPSS). , 0, , .		4
406	4H-SiC BJT Characterization at High Current High Voltage. , 0, , .		4
407	An ETO Thyristor and Modular H-bridge PWM Converter-based 4.5MVA STATCOM: 480V/500A Transformerless Grid-Connected Experimentation. Conference Record - IAS Annual Meeting (IEEE) Tj ETQq1 1 0.784804 rgBT4Overload		4
408	Modular ETO Voltage Source Converter Enables Low Cost FACTS Controller Applications. , 2006, , .		4
409	Design of a Transient Voltage Clamp (TVC) Based On Output Impedance Analysis. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	4
410	Analysis of the MOSFET Failure In a Junction-Isolated Power Integrated Circuit. , 2007, , .		4
411	Integration of 1200V SiC BJT With SiC Diode. , 2008, , .		4
412	A high efficiency regulated charge pump over wide input and load range. , 2010, , .		4
413	Modeling of the impact of diode junction capacitance on high voltage high frequency rectifiers based on 10kV SiC JBS diodes. , 2010, , .		4
414	An efficient 13.56 MHz active back-telemetry rectifier in standard CMOS technology. , 2010, , .		4



#	ARTICLE	IF	CITATIONS
415	Capacitor energy variation based designer-side switching losses analysis for integrated synchronous Buck converters in CMOS technology. , 2011, , .		4
416	A high efficiency DC MIC for PV energy harvest in FREEDM systems. , 2011, , .		4
417	A Comparative Study of Gate Structures for 9.4-kV 4H-SiC Normally On Vertical JFETs. IEEE Transactions on Electron Devices, 2012, 59, 2417-2423.	3.0	4
418	A high resolution digital phase-shift modulation scheme for ultra-high frequency dual active bridge converters. , 2012, , .		4
419	Power management strategy for DC microgrid interfaced to distribution system based on solid state transformer. , 2013, , .		4
420	Design and fabrication of high current AlGaIn/GaN HFET for Gen III solid state transformer. , 2014, , .		4
421	A novel single stage AC/DC converter for fast charging applications with unity power factor. , 2014, , .		4
422	Stationary energy storage system based on modular high voltage battery modules. , 2015, , .		4
423	An isolated bi-directional soft-switched DC-AC converter using wide-band-gap devices with novel carrier-based unipolar modulation technique under synchronous rectification. , 2015, , .		4
424	GaN transistor based Bi-directional DC-DC converter for stationary energy storage device for 400V DC microgrid. , 2015, , .		4
425	Design considerations of an isolated GaN bidirectional dc-dc converter. , 2016, , .		4
426	Active damping of ultra-fast mechanical switches for hybrid AC and DC circuit breakers. , 2016, , .		4
427	Proposing a frequency based real-time energy market and economic dispatch strategy. , 2016, , .		4
428	A frequency based real-time electricity rate for residential prosumers. , 2017, , .		4
429	Gate driver design and continuous operation of an improved 1200V/200A FREEDM-pair half-bridge power module. , 2018, , .		4
430	Electrical Characteristics of 10-kV 4H-SiC MPS Rectifiers with High Schottky Barrier Height. Journal of Electronic Materials, 2018, 47, 927-931.	2.2	4
431	IGBT Dynamic Loss Reduction through Device Level Soft Switching. Energies, 2018, 11, 1182.	3.1	4
432	A Novel Three Dimensional (3D) Winding Structure for Planar Transformers. , 2020, , .		4

#	ARTICLE	IF	CITATIONS
433	Multilevel active NPC converter for filterless grid-connection for large wind turbines. , 2009, , .		4
434	The energy internet and electricity market in the United States. Chinese Science Bulletin, 2016, 61, 1210-1221.	0.7	4
435	Design methodologies and fabrication of 4H-SiC lateral Schottky barrier diode on thin RESURF layer. Applied Physics Letters, 2022, 120, 122103.	3.3	4
436	Versatile Control Functions of Hybrid Solid-State Transformers in Distribution Systems. , 2021, , .		4
437	Triple Phase-Shift Optimization of SiC-based Dual-Active Bridge DC/AC Converter. , 2022, , .		4
438	A new MOS gate thyristorâ€™The single-gate emitter controlled thyristor (SECT). Solid-State Electronics, 1997, 41, 1233-1239.	1.4	3
439	Introducing the emitter turn-off thyristor (ETO). Numerical and experimental demonstration of unity turn-off gain capability. , 0, , .		3
440	Analysis of high-voltage trench bipolar junction diode (TBJD). Solid-State Electronics, 1999, 43, 1777-1783.	1.4	3
441	Comprehensive investigations of high voltage non-punch-through double gate-injection enhanced gate transistor. Solid-State Electronics, 2000, 44, 1783-1787.	1.4	3
442	Characterization of IGCT under zero-current-transition condition. , 0, , .		3
443	Characterization and modeling of 4H-SiC power BJTs. , 2005, , .		3
444	Evaluation of cascade-multilevel converter based STATCOM for arc furnace flicker mitigation. , 0, , .		3
445	Design of an Ultra-Capacitor Energy Storage System (UESS) for Power Quality Improvement of Electric Arc Furnaces. , 2008, , .		3
446	7MVA ETO Light NPC converter for multi-MW direct-driven wind turbine application. , 2009, , .		3
447	Dead-band controller for balancing individual dc capacitor voltages in cascade multilevel inverter based STATCOM. , 2009, , .		3
448	The issue of plug-in hybrid electric vehicles' grid integration and its control solution. , 2010, , .		3
449	Digital controller development for grid-tied photovoltaic inverter with model based technique. , 2010, , .		3
450	Analysis of Process-Dependent Maximal Switching Frequency, Choke Effect, and Its Relaxed Solution in High-Resolution DPWM. IEEE Transactions on Power Electronics, 2010, 25, 152-157.	7.9	3

#	ARTICLE	IF	CITATIONS
451	Considerations on the optimal power stage segmentation algorithm for MHz integrated synchronous Buck DC-DC converters. , 2011, , .		3
452	Ultra fast protection of radial and looped electric power grid using a novel solid-state protection device. , 2012, , .		3
453	A novel high step-up ratio bi-directional DC-DC converter. , 2012, , .		3
454	A monolithic CMOS synchronous Buck converter with a fast and low-cost current sensing scheme. , 2012, , .		3
455	Selected harmonic resistance control based series active power filter. , 2014, , .		3
456	An isolated bi-directional soft-switched high-frequency-ac link DC-AC converter using SiC MOSFETs. , 2014, , .		3
457	A modular integrated Li-ion battery pack with a multi-core based transformer isolated bidirectional DC-DC converter. , 2014, , .		3
458	Turn-on capability of 22 kV SiC Emitter Turn-off (ETO) Thyristor. , 2015, , .		3
459	Full ZVS soft-start of a SiC medium voltage series resonant DC-DC converter using variable frequency variable duty cycle control. , 2017, , .		3
460	Wide Bandgap Devices and Power Conversion Systemsâ€™Part II. IEEE Transactions on Industrial Electronics, 2017, 64, 8959-8961.	7.9	3
461	Continuous switching operation of 15 kV FREEDM super-cascode. , 2017, , .		3
462	A GUI Based Automatic Tester with A Novel Heating Method for Power Semiconductor Device Dynamic Measurement. , 2018, , .		3
463	Electrical Performances and Physics Based Analysis of 10kV SiC Power MOSFETs at High Temperatures. Materials Science Forum, 0, 924, 719-722.	0.3	3
464	Medium Voltage Single-stage Single Active Bridge based Solid State Transformer. , 2018, , .		3
465	Novel Power Control of Voltage-Controlled Inverters for Grid Inertia Support. , 2019, , .		3
466	Digital Interleaving Control for Two-Phase TCM GaN Totem-Pole PFC to Reduce Current Distortion. , 2019, , .		3
467	A 480V to 45V GaN Bidirectional AC-DC Converter for Grid-Tied Battery Energy Storage System (BESS). , 2020, , .		3
468	Degradation Assessment of SiC MOSFETs under the Repetitive Short Circuit Ageing with Different Gate-Source Voltage Bias. , 2020, , .		3

#	ARTICLE	IF	CITATIONS
469	The emitter-controlled thyristor (ECT)-a new MOS gate controlled thyristor. , 0, , .		2
470	Analytical GTO turn-off model under snubberless turn-off condition. , 0, , .		2
471	A 600-V 10-A trench bipolar junction diode with superior static and dynamic characteristics. IEEE Transactions on Electron Devices, 2001, 48, 2143-2147.	3.0	2
472	Abnormal failure mechanism of the asymmetrical emitter turn-off thyristor in high-frequency converters. , 0, , .		2
473	Static and dynamic characterization of silicon carbide bipolar junction transistor. , 0, , .		2
474	A Novel Current Mode Variable Frequency Control for DC-DC Converters with Adaptive Voltage Positioning. , 0, , .		2
475	Improving the Emitter Turn-Off Thyristor for Parallel Operation. , 2007, , .		2
476	Thermal Analysis of A Novel Hybrid Multilevel Megawatt AC Drive with ETO Devices. , 2007, , .		2
477	Operation of series and shunt converters with 48-pulse series connected three-level NPC converter for UPFC. , 2008, , .		2
478	Performance comparison of a new current regulator for 3-level NPC inverter for sinusoidal and non-sinusoidal current tracking applications. , 2008, , .		2
479	10MHz current mode 4 switch buck boost converter (4SBBC) for polar modulation. IEEE Applied Power Electronics Conference and Exposition, 2008, , .	0.0	2
480	Digital controller design for PV inverter with model based technique. , 2010, , .		2
481	New inductor current feedback control with active harmonics injection for inverter stage of solid state transformer. , 2010, , .		2
482	Analysis of static voltage balance of series connected self-power emitter turn-off thyristors. , 2010, , .		2
483	An accurate prediction of two-dimensional carrier density profile in IGBT and its significances on steady-state and transient analysis. , 2012, , .		2
484	A Low-Loss Gate Drive for Emitter Turn-Off Thyristor (ETO). IEEE Transactions on Power Electronics, 2012, 27, 4827-4831.	7.9	2
485	Comprehensive lost minimization strategy for parallel plug-in hybrid electric vehicles. , 2013, , .		2
486	Decentralized architecture and control of photovoltaic generation system based on cascaded AC module integrated converter. , 2014, , .		2

#	ARTICLE	IF	CITATIONS
487	A novel distributed PV system with ultra-high-frequency-AC bus for residential applications. , 2014, , .		2
488	Rectifier stage operation and controller design for a medium voltage solid state transformer with LCL filter. , 2014, , .		2
489	Control and analysis of the high efficiency split phase PWM inverter. , 2014, , .		2
490	Design consideration of an MMC-HVDC system based on 4500V/4000A emitter turn-off (ETO) thyristor. , 2015, , .		2
491	A novel low cost PV micro-inverters based on analog control and interleaving method. , 2015, , .		2
492	Integrated DC/DC parallel PnP PV architecture method for powering residential buildings. , 2015, , .		2
493	Converting HVAC to HVDC grids: A novel switched conductor HVDC scheme. , 2016, , .		2
494	Shielded Gate SiC Trench Power MOSFET with Ultra-Low Switching Loss. Materials Science Forum, 0, 924, 765-769.	0.3	2
495	A design investigation of A 1 MVA SiC medium voltage three phase rectifier based on isolated dual active bridge. , 2018, , .		2
496	Design and Simulation of 600V 4H-SiC Superjunction JBS Diode. , 2019, , .		2
497	Turn-on Performance Comparison of SiC SingleDriver Module (SDM) and Multi-Driver Module (MDM). , 2020, , .		2
498	Hybrid Low-Frequency Switch for Bridgeless PFC. IEEE Transactions on Power Electronics, 2020, 35, 9982-9986.	7.9	2
499	Generalized Average Modeling of a Single-Stage Resonant-Based Inverter. , 2020, , .		2
500	Huang-Pair: A New High Voltage Diode Concept and Its Demonstration. IEEE Transactions on Power Electronics, 2021, 36, 8653-8657.	7.9	2
501	Packaging and Characterization of a Novel 7.2kV/85A SiC Austin SuperMOS Half-Bridge Intelligent Power Module (IPM). , 2022, , .		2
502	Design and Characterization of 4.5kV/ $15\mathrm{m}\Omega$ SiC SuperMOS Half-bridge Module. , 2022, , .		2
503	Dynamic Modeling and Model Predictive Control of Hybrid Solid-State Transformers. , 2022, , .		2
504	Forward blocking capability of double gate IGBTs at high temperatures. Solid-State Electronics, 1995, 38, 981-982.	1.4	1

#	ARTICLE	IF	CITATIONS
505	An 0.35- $\mu$ m, 6-m/spl Omega/, 43 $\mu$ m/spl Omega/-csub 2 lateral power MOSFET for low-voltage, megahertz switching power applications. IEEE Electron Device Letters, 1999, 20, 351-353.	3.9	1
506	Development status of a 1000 HP superconducting motor. , 0, , .		1
507	Static and dynamic characteristics of 600-V, 10-A trench bipolar junction diodes. , 0, , .		1
508	The uniform turn-on of the emitter turn-off thyristor. , 0, , .		1
509	Investigation of high temperature operation of the emitter turn-off thyristor. , 2005, , .		1
510	Improving RBSOA of 10 kV class bipolar devices. , 2005, , .		1
511	Development of current-scalable emitter turn-off (ETO) thyristor module. , 2005, , .		1
512	Mitigation of EAF Induced Problems. , 2006, , .		1
513	Monolithic Integration of Trench Power JFET with Schottky Diode. , 2006, , .		1
514	Trench Power JFET with Integrated Junction Barrier Schottky Diode. , 2006, , .		1
515	Feasibility Study of AlGaN/GaN HEMT for Multi-megahertz DC/DC Converter Applications. , 2006, , .		1
516	Intelligent Modularized Emitter Turn-Off Thyristor (ETO)-Based High Power Converter. , 2008, , .		1
517	A low noise, high efficiency two stage envelope modulator structure for EDGE polar modulation. , 2009, , .		1
518	ETO light multilevel converters for large electric vehicle and hybrid electric vehicle drives. , 2009, , .		1
519	Modeling and control design of distributed power flow controller based-on per-phase control. , 2009, , .		1
520	Electronics. , 0, , 949-1110.		1
521	Modeling and control of multi-modes charge pump with improved efficiency over wide input and load range. , 2010, , .		1
522	A simplified space vector based current controller for any general N-level converter. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
523	Improvement of gate drive for self-power emitter turn-off thyristor (SPETO). , 2010, , .		1
524	Performance enhancement of AlGaIn/GaN metal-oxide-semiconductor heterojunction field-effect transistor (MOSHET) with atomic layer deposition (ALD) of high-k HfAlO gate dielectric layer. , 2011, , .		1
525	A Novel 4H-SiC Fault Isolation Device with Improved Trade-Off between On-State Voltage Drop and Short Circuit SOA. Materials Science Forum, 2012, 717-720, 1045-1048.	0.3	1
526	Standalone operation of a single phase medium voltage solid state transformer in distribution grid. , 2014, , .		1
527	High voltage AlGaIn/GaN HFET employing low taper angle field-plate for stable forward blocking capability. , 2014, , .		1
528	Autonomous Control, Operation, and Protection of the FREEDM System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 969-974.	0.4	1
529	An isolated bi-directional high-frequency-AC link DC-AC converter using hybrid SiC switches with carrier-based unipolar modulation technique. , 2015, , .		1
530	A new AlGaIn/GaN power HFET employing partial deep trench drain structure for high voltage application. , 2015, , .		1
531	Time-varying full-order state-space modeling of variable-switching-frequency control for single-phase single-stage dual-active-bridge based AC/DC converter. , 2016, , .		1
532	The direct connection of electronic components to power distribution primaries. , 2017, , .		1
533	Design and fabrication of low pinch-off voltage 700V lateral 4H-SiC MESFET with thin RESURF layer. , 2021, , .		1
534	Monolithic Integration of Trench Power JFET with Schottky Diode. , 2006, , .		1
535	A Novel 600V Lateral RESURF 4H-SiC MESFET with Sloped Field Plate for High Power and High Frequency Applications. , 2020, , .		1
536	Loss Model and Output Impedance Analysis of a 48V-to-1V High Current Point-of-Load Converter. , 2020, , .		1
537	Thyristor turn off using MOS controlled current interruption. Solid-State Electronics, 1993, 36, 361-371.	1.4	0
538	The bipolar junction diode (BJD)-a new power diode concept. , 0, , .		0
539	High channel density dual operation mode MOS-controlled thyristor with superior current saturation capability. IEEE Electron Device Letters, 2000, 21, 463-465.	3.9	0
540	A novel power diode model for circuit simulation. , 0, , .		0

#	ARTICLE	IF	CITATIONS
541	Modeling and analysis of 55 mm 4.5-kV MTO. , 0, , .		0
542	Comparative study of 1800 V and 2400 V MCT and IGBT. , 0, , .		0
543	Performance of a 4.5 kV, 100A current-scalable emitter turn-off (ETO) thyristor module. , 0, , .		0
544	Simulated Performance of SiC Based OP-AMP at High Temperature. , 0, , .		0
545	STATCOM ETO Failure Analysis. , 2006, , .		0
546	Electro-Thermal Design of a Heat Pipe Based High Power Voltage Source Converter Using Emitter Turn-Off Thyristor. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	0
547	100% Efficient Converter, Is This Possible?. , 0, , .		0
548	Design And Implementation of A Novel Average Current Mode PFC Controller IC. IEEE Applied Power Electronics Conference and Exposition, 2007, , .	0.0	0
549	Recent advances and applications of power electronics and motor drives - Power semiconductor devices. , 2008, , .		0
550	Future Power Delivery Systems. , 2008, , .		0
551	Design of a transient voltage clamp (TVC) for 4 Switch Buck Boost (4SBB) Converter. , 2009, , .		0
552	1MHz multi mode regulated charge pump with improved light load efficiency without sacrificing output ripple. , 2009, , .		0
553	Design of a transition mode controller for flyback converters. , 2009, , .		0
554	Improved breakdown-voltage complementary MOSFET in a 0.18µm standard CMOS process for switch mode power supply (SMPS) applications. Power Semiconductor Devices & IC's, 2009 ISPSD 2009 21st International Symposium on, 2009, , .	0.0	0
555	A low power high noise immunity boost DC-DC converter using the differential difference amplifiers. , 2009, , .		0
556	Adaptive FMO strategy for video transcoding. , 2009, , .		0
557	An optimal design of magnetostrictive material (MsM) based energy harvester. Proceedings of SPIE, 2010, , .	0.8	0
558	Education for renewable electric energy delivery and management systems. , 2010, , .		0



#	ARTICLE	IF	CITATIONS
559	Analysis of impact of self-power function on emitter turn-off thyristor. , 2011, , .		0
560	[Welcome message]. , 2012, , .		0
561	A high fidelity wide bandwidth (HFWB) buck converter with switching ripple cancellation for wireless communication application. , 2012, , .		0
562	Multi-objective optimization and design of a 500kHz isolated bidirectional DC-DC converter. , 2013, , .		0
563	Five-level bidirectional converter for renewable power generation system. , 2014, , .		0
564	A high performance controller for a single phase cascaded multilevel photovoltaic system. , 2014, , .		0
565	An integrated high efficiency ultra-low power single chip DC/AC inverter for driving liquid crystal electro-optic lenses. , 2015, , .		0
566	Excess carrier mapping technique “ A new parameter extraction method for 4H-SiC ambipolar power devices. , 2015, , .		0
567	Practical consideration and implementation of a medium voltage SiC AC-DC rectifier. , 2016, , .		0
568	Analysis on Ultra-Fast Switching of SiC MOSFETs for Megahertz Applications Enabled by 3D Package and Embedded Components. , 2018, , .		0
569	Improved Modulation Strategy for Semi-Full-Bridge Submodule in Modular Multilevel Converter. , 2018, , .		0
570	High Voltage Vertical Gallium Nitride Pseudo-Junction-Barrier-Schottky Diode with Ion Implantation. , 2018, , .		0
571	Design of Printed Circuit Boards for Power Electronics Utilizing Gallium Nitride Ball Grid Array Integrated Half Bridges. , 2019, , .		0
572	Erratum to “Modeling Avalanche Induced Degradation for 4H-SiC Power MOSFETs” IEEE Transactions on Power Electronics, 2021, 36, 2447-2447.	7.9	0
573	Comprehensive Comparison of Fabricated 1.6-kV Punch-Through Design Ni/n-SiC Schottky Barrier Diode with Ar+ Implant Edge Termination and Heterojunction p-NiO/n-SiC Diode. , 2021, , .		0
574	STATCOM ETO Failure Analysis. , 2006, , .		0
575	Comparative Evaluation and Analysis of Gate Driver Impacts on a SiC MOSFET-Gate Driver Integrated Power Module. International Symposium on Microelectronics, 2017, 2017, 000247-000251.	0.0	0
576	Guest Editorial: WBG Semiconductor Power Electronics for Industrial and Automotive Applications. IET Power Electronics, 2020, 13, 391-393.	2.1	0

#	ARTICLE	IF	CITATIONS
577	Ultra-Light Load Performance Enhancement of A 1 MVA SiC Medium Voltage Three Phase Rectifier. , 2021, , .		0
578	Control of solid-state transformer-enabled DC microgrids. , 2018, , 119-151.		0
579	Dynamic State Estimation Based Monitoring of High Frequency Transformer. , 2020, , .		0
580	Complex-Variable Design of Voltage Control for Grid-Forming Inverter. , 2020, , .		0
581	FREEDM Systems Center Partnership Overview and Challenges. , 0, , .		0