

Steffen Bernet

List of Publications by Year in descending order

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44
papers

2,943
citations

933264

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46
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docs citations

46
times ranked

2311
citing authors

#	ARTICLE	IF	CITATIONS
1	Multilevel Voltage-Source-Converter Topologies for Industrial Medium-Voltage Drives. IEEE Transactions on Industrial Electronics, 2007, 54, 2930-2945.	5.2	1,938
2	Design of LCL Filters of Active-Front-End Two-Level Voltage-Source Converters. IEEE Transactions on Industrial Electronics, 2009, 56, 1674-1689.	5.2	364
3	Feedforward Loss Control of Three-Level Active NPC Converters. IEEE Transactions on Industry Applications, 2007, 43, 1588-1596.	3.3	107
4	How to Select the System Voltage of MV Drives – A Comparison of Semiconductor Expenses. IEEE Transactions on Industrial Electronics, 2008, 55, 3381-3390.	5.2	61
5	Parallel Connection of Integrated Gate Commutated Thyristors (IGCTs) and Diodes. IEEE Transactions on Power Electronics, 2009, 24, 2159-2170.	5.4	50
6	Advanced Gate Drive Unit With Closed-Loop $\frac{di_{C}}{dt}$ Control. IEEE Transactions on Power Electronics, 2013, 28, 2587-2595.	5.4	50
7	Comparison of IGCT and IGBT for the use in the modular multilevel converter for HVDC applications. , 2012, , .		38
8	Design and Evaluation Criteria for High Power Drives. , 2008, , .		35
9	A new delay time compensation principle for parallel connected IGBTs. , 2011, , .		32
10	Characterization of a new 4.5 kV press pack SPT+ IGBT for medium voltage converters. , 2009, , .		31
11	Discrete-Time Active Damping of $\frac{di_{C}}{dt}$ Resonance by Proportional Capacitor Current Feedback. IEEE Transactions on Industry Applications, 2014, 50, 3911-3920.	3.3	25
12	Comparison of 1700-V SiC-MOSFET and Si-IGBT Modules Under Identical Test Setup Conditions. IEEE Transactions on Industry Applications, 2019, 55, 7765-7775.	3.3	25
13	Characterization of a 6.5 kV / 500A IGBT module in a series resonant converter. , 2011, , .		19
14	Simulation and experimental investigation of parallel connected IGBTs. , 2010, , .		15
15	Sinusoidal Current Operation of Delay-Time Compensation for Parallel-Connected IGBTs. IEEE Transactions on Industry Applications, 2014, 50, 3485-3493.	3.3	15
16	Online temperature estimation of a high-power 4.5 kV IGBT module based on the gate-emitter threshold voltage. , 2015, , .		11
17	Comprehensive design of DC busbars for medium voltage applications. , 2013, , .		10
18	Decoupled capacitor voltage control of modular multilevel converters. , 2014, , .		10

#	ARTICLE	IF	CITATIONS
19	Evaluation of 6.5-kV SiC p-i-n Diodes in a Medium-Voltage, High-Power 3L-NPC Converter. IEEE Transactions on Power Electronics, 2014, 29, 5148-5156.	5.4	10
20	Input Filter for a Power Electronics Transformer in a Railway Traction Application. IEEE Transactions on Industrial Electronics, 2018, 65, 9449-9458.	5.2	10
21	Comparison of Medium Voltage IGBT-based 3L-ANPC-VSCs. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	9
22	Direct dead-time control - a novel dc-link neutral-point balancing method for the three-level neutral-point-clamped voltage source inverter. , 2012, , .		9
23	Characterization of 4.5 kV/2.4 kA press pack IGBT including comparison with IGCT. , 2013, , .		9
24	Experimental verification of direct dead-time Control and DC-link neutral-point balancing of a three level neutral-point-clamped (3L-NPC) VSC. , 2013, , .		7
25	Discrete-time optimal active damping of LCL resonance in grid connected converters by proportional capacitor current feedback. , 2013, , .		7
26	SiC-MOSFET or Si-IGBT: Comparison of Design and Key Characteristics of a 690 V Grid-Tied Industrial Two-Level Voltage Source Converter. Energies, 2021, 14, 3054.	1.6	7
27	Optimization of a series resonant DCIDC converter for traction applications. , 2012, , .		6
28	Characterization of a new 4.5 kV press pack SPT+ IGBT in Voltage Source Converters with clamp circuit. , 2010, , .		4
29	Characterization of a new 6.5 kV 1000A SiC diode for medium voltage converters. , 2012, , .		4
30	Comparative evaluation of losses in 3L and 5L ANPC converters using HV-IGBT modules. , 2015, , .		4
31	A novel topology to characterize high voltage IGBTs in a soft switching converter. , 2011, , .		3
32	Sinusoidal current operation of delay time compensation for parallel connected IGBTs. , 2012, , .		3
33	Level-Shifted PWM for a multilevel traction converter using a state composer. , 2012, , .		2
34	High frequency transformer with synchronous rectifier for resistance spot welding. , 2013, , .		2
35	Parallel connection of Integrated Gate Commutated Thyristors and diodes. Power Electronics Specialist Conference (PESC), IEEE, 2008, , .	0.0	1
36	Investigation of oscillations in a 6.5-kV, 1-kA SiC diode module. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
37	Delay time compensation for parallel connected IGBTs: Implementation and extension for n IGBTs. , 2014, , .		1
38	Online collector-emitter saturation voltage measurement for the in-situ temperature estimation of a high-power 4.5 kV IGBT module. , 2017, , .		1
39	New flatness-based control of a high-voltage generator for medical X-ray applications. Journal of Engineering, 2018, 2018, 1799-1805.	0.6	1
40	Limits of enhanced desaturation detection method with adaptive blanking for GaN HEMTs. , 2020, , .		1
41	Loss reduction in a medium frequency series resonance converter by forced evacuation. , 2013, , .		0
42	Analysis and space-vector-modulation of a 4L-3B6-VSC. , 2013, , .		0
43	Reduction of low-order-even-harmonics in grid connected inverters for renewable energy systems using delta-sigma based A/D conversion. , 2014, , .		0
44	Switching Behavior and Comparison of 600V SMD Wide Bandgap Power Devices. , 2020, , .		0