Shin-Ichi Nishizawa

List of Publications by Year
in descending order

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		1478505	1281871
27	150	6	11
papers	citations	h-index	g-index

27	27	27	122
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Scaling Design Effects on Surface Buffer IGBT Characteristics. IEEE Journal of the Electron Devices Society, 2022, 10, 23-28.	2.1	0
2	Investigation of turn-on performance in 1.2 kV MOS-bipolar devices. Japanese Journal of Applied Physics, 2022, 61, SC0801.	1.5	2
3	Zoomed Response Surface Method for Automatic Design in Parameters Optimization of Low-Voltage Power MOSFET. IEEE Journal of the Electron Devices Society, 2022, 10, 512-515.	2.1	1
4	Fabrication Aspects and Switching Performance of a Self-Sensing 800 V SiC Circuit Breaker Device. , 2022, , .		1
5	Switching Noise-Loss Trade-Off Improvement of SJ-IGBTs. , 2022, , .		1
6	Turn-OFF dV/dt Controllability in 1.2-kV MOS-Bipolar Devices. IEEE Transactions on Power Electronics, 2021, 36, 3304-3311.	7.9	10
7	A design direction of low-voltage field-plate power MOSFETs for figure-of-merit (FOM) limit. Japanese Journal of Applied Physics, 2021, 60, SBBD16.	1.5	3
8	Power Loss Reduction of Low-Voltage Power MOSFET by Combination of Assist Gate Structure and Gate Control Technology. , 2021, , .		0
9	Simulation Study on Dual Gate Control of Surface Buffer Insulated Gate Bipolar Transistor for High Switching Controllability. IEEE Electron Device Letters, 2021, 42, 907-910.	3.9	5
10	Slit Field Plate Power MOSFET for Improvement of Figure-Of-Merits. IEEE Journal of the Electron Devices Society, 2021, 9, 552-556.	2.1	1
11	High dV/dt Controllability of 1.2kV Si-TCIGBT for High Flexibility Design with Ultra-low Loss Operation. , 2020, , .		2
12	Assist Gate MOSFETs for Improvement of On-Resistance and Turn-Off Loss Trade-Off. IEEE Electron Device Letters, 2020, , 1-1.	3.9	3
13	On-Resistance Limit Estimation of 100 V-class Field-Plate Trench Power MOSFETs Optimized Oxide Thickness. IEEE Electron Device Letters, 2020, 41, 1063-1065.	3.9	10
14	Evaluation of Dynamic Avalanche Performance in 1.2-kV MOS-Bipolar Devices. IEEE Transactions on Electron Devices, 2020, 67, 3691-3697.	3.0	6
15	High Switching Controllability Trench Gate Design in Si-IGBTs. , 2020, , .		2
16	Dislocation Propagation in Si 300 mm Wafer during High Thermal Budget Process and Its Optimization. , 2020, , .		3
17	N-Buffer Design for Silicon-Based Power Diode Targeting High Dynamic Robustness and High Operating Temperature Over 448 K. IEEE Transactions on Electron Devices, 2020, 67, 2437-2444.	3.0	5
18	Surface Buffer IGBT for High Total Performance. IEEE Transactions on Electron Devices, 2020, 67, 3263-3269.	3.0	8

#	Article	IF	Citations
19	Impact of structural parameter scaling on on-state voltage in 1200 V scaled IGBTs. Japanese Journal of Applied Physics, 2020, 59, SGGD18.	1.5	3
20	Alternated Trench-Gate IGBT for Low Loss and Suppressing Negative Gate Capacitance. IEEE Transactions on Electron Devices, 2020, 67, 3285-3290.	3.0	23
21	Bipolar Transistor Test Structures for Extracting Minority Carrier Lifetime in IGBTs. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 159-165.	1.7	0
22	Improvement Design for Turn-On Switching Characteristics in Surface Buffer Insulated Gate Bipolar Transistor. IEEE Electron Device Letters, 2020, 41, 1814-1816.	3.9	4
23	Origin of carrier lifetime degradation in floating-zone silicon during a high-temperature process for insulated gate bipolar transistor. Japanese Journal of Applied Physics, 2020, 59, 115503.	1.5	0
24	Impact of three-dimensional current flow on accurate TCAD simulation for trench-gate IGBTs. , 2019, , .		7
25	Dynamic Avalanche Free Design in 1.2kV Si-IGBTs for Ultra High Current Density Operation. , 2019, , .		7
26	Freewheeling Diode Technology With Low Loss and High Dynamic Ruggedness in High-Speed IGBT Applications. IEEE Transactions on Electron Devices, 2019, 66, 4842-4849.	3.0	7
27	GaNâ€based complementary metalâ€“oxideâ€“semiconductor inverter with normally off Pch and Nch MOSFETs fabricated using polarisationâ€induced holes and electron channels. IET Power Electronics, 2018, 11, 689-694.	2.1	36