

Shin-Ichi Nishizawa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/379603/publications.pdf>

Version: 2024-02-01

27
papers

150
citations

1478505

6
h-index

1281871

11
g-index

27
all docs

27
docs citations

27
times ranked

122
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | GaN-based complementary metal-oxide semiconductor inverter with normally off Pch and Nch MOSFETs fabricated using polarisation-induced holes and electron channels. IET Power Electronics, 2018, 11, 689-694. | 2.1 | 36 |
| 2 | Alternated Trench-Gate IGBT for Low Loss and Suppressing Negative Gate Capacitance. IEEE Transactions on Electron Devices, 2020, 67, 3285-3290. | 3.0 | 23 |
| 3 | 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 |
| 4 | Turn-OFF dV/dt Controllability in 1.2-kV MOS-Bipolar Devices. IEEE Transactions on Power Electronics, 2021, 36, 3304-3311. | 7.9 | 10 |
| 5 | Surface Buffer IGBT for High Total Performance. IEEE Transactions on Electron Devices, 2020, 67, 3263-3269. | 3.0 | 8 |
| 6 | Impact of three-dimensional current flow on accurate TCAD simulation for trench-gate IGBTs. , 2019, , . | | 7 |
| 7 | Dynamic Avalanche Free Design in 1.2kV Si-IGBTs for Ultra High Current Density Operation. , 2019, , . | | 7 |
| 8 | 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 |
| 9 | Evaluation of Dynamic Avalanche Performance in 1.2-kV MOS-Bipolar Devices. IEEE Transactions on Electron Devices, 2020, 67, 3691-3697. | 3.0 | 6 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | Assist Gate MOSFETs for Improvement of On-Resistance and Turn-Off Loss Trade-Off. IEEE Electron Device Letters, 2020, , 1-1. | 3.9 | 3 |
| 14 | Dislocation Propagation in Si 300 mm Wafer during High Thermal Budget Process and Its Optimization. , 2020, , . | | 3 |
| 15 | 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 |
| 16 | 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 |
| 17 | High dV/dt Controllability of 1.2kV Si-TCIGBT for High Flexibility Design with Ultra-low Loss Operation. , 2020, , . | | 2 |
| 18 | High Switching Controllability Trench Gate Design in Si-IGBTs. , 2020, , . | | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Investigation of turn-on performance in 1.2 kV MOS-bipolar devices. Japanese Journal of Applied Physics, 2022, 61, SC0801. | 1.5 | 2 |
| 20 | 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 |
| 21 | 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 |
| 22 | Fabrication Aspects and Switching Performance of a Self-Sensing 800 V SiC Circuit Breaker Device. , 2022, , . | | 1 |
| 23 | Switching Noise-Loss Trade-Off Improvement of SJ-IGBTs. , 2022, , . | | 1 |
| 24 | Bipolar Transistor Test Structures for Extracting Minority Carrier Lifetime in IGBTs. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 159-165. | 1.7 | 0 |
| 25 | Power Loss Reduction of Low-Voltage Power MOSFET by Combination of Assist Gate Structure and Gate Control Technology. , 2021, , . | | 0 |
| 26 | 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 |
| 27 | Scaling Design Effects on Surface Buffer IGBT Characteristics. IEEE Journal of the Electron Devices Society, 2022, 10, 23-28. | 2.1 | 0 |