

Nicolas Rouger

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3430543/publications.pdf>

Version: 2024-02-01

44
papers

845
citations

471061

17
h-index

552369

26
g-index

44
all docs

44
docs citations

44
times ranked

885
citing authors

#	ARTICLE	IF	CITATIONS
1	Analytic modeling of a hybrid power module based on diamond and SiC devices. Diamond and Related Materials, 2022, 124, 108936.	1.8	1
2	Comparison between ig integration and vgs derivation methods dedicated to fast short-circuit 2D diagnosis for wide bandgap power transistors. Mathematics and Computers in Simulation, 2021, 183, 171-186.	2.4	3
3	High temperature operation of a monolithic bidirectional diamond switch. Diamond and Related Materials, 2021, 111, 108185.	1.8	5
4	Recent progress in deep-depletion diamond metal-oxide-semiconductor field-effect transistors. Journal Physics D: Applied Physics, 2021, 54, 233002.	1.3	22
5	Robustness study of a fast protection method based on the gate-charge dedicated for SiC MOSFETs power device. Microelectronics Reliability, 2021, 126, 114246.	0.9	1
6	Diamond power devices: state of the art, modelling, figures of merit and future perspective. Journal Physics D: Applied Physics, 2020, 53, 093001.	1.3	124
7	Diamond semiconductor performances in power electronics applications. Diamond and Related Materials, 2020, 110, 108154.	1.8	26
8	Modular Multilevel SOI-CMOS Active Gate Driver Architecture for SiC MOSFETs. , 2020, , .		9
9	CMOS Active Gate Driver for Closed-Loop dv/dt Control of GaN Transistors. IEEE Transactions on Power Electronics, 2020, 35, 13322-13332.	5.4	22
10	ig, vgs ™ Monitoring for Fast and Robust SiC MOSFET Short-Circuit Protection with High integration Capability. , 2020, , .		1
11	175V, > 5.4 MV/cm, $50 \text{ m}\Omega \cdot \text{cm}^2$ at 250°C Diamond MOSFET and its reverse conduction. , 2019, , .		5
12	Sub-Nanosecond Delay CMOS Active Gate Driver for Closed-Loop dv/dt Control of GaN Transistors. , 2019, , .		3
13	Design of Diamond Power Devices: Application to Schottky Barrier Diodes. Energies, 2019, 12, 2387.	1.6	18
14	High quality Al ₂ O ₃ /(100) oxygen-terminated diamond interface for MOSFETs fabrication. Applied Physics Letters, 2018, 112, .	1.5	19
15	Impact of Nonhomoepitaxial Defects in Depleted Diamond MOS Capacitors. IEEE Transactions on Electron Devices, 2018, 65, 1830-1837.	1.6	6
16	Comprehensive electrical analysis of metal/Al ₂ O ₃ /O-terminated diamond capacitance. Journal of Applied Physics, 2018, 123, .	1.1	32
17	Diamond Schottky barrier diodes for power electronics applications. , 2018, , .		0
18	A CMOS gate driver with ultra-fast dV/dt embedded control dedicated to optimum EMI and turn-on losses management for GaN power transistors. , 2018, , .		14

#	ARTICLE	IF	CITATIONS
19	Solderless Leadframe Assisted Wafer-Level Packaging Technology for Power Electronics. , 2018, , .		2
20	Characterization of breakdown behavior of diamond Schottky barrier diodes using impact ionization coefficients. Japanese Journal of Applied Physics, 2017, 56, 04CR12.	0.8	10
21	Deep depletion concept for diamond MOSFET. Applied Physics Letters, 2017, 111, .	1.5	46
22	Deep-Depletion Mode Boron-Doped Monocrystalline Diamond Metal Oxide Semiconductor Field Effect Transistor. IEEE Electron Device Letters, 2017, 38, 1571-1574.	2.2	53
23	Integrated temperature sensor with diamond Schottky diodes using a thermosensitive parameter. Diamond and Related Materials, 2017, 78, 83-87.	1.8	22
24	200V, 4MV/cm lateral diamond MOSFET. , 2017, , .		7
25	Parallel and interleaved structures for diamond Schottky diodes. , 2017, , .		2
26	High speed optical gate driver for wide band gap power transistors. , 2016, , .		4
27	Optimal drift region for diamond power devices. Diamond and Related Materials, 2016, 69, 68-73.	1.8	29
28	A Gate Driver with Integrated Dead-Time Controller. IEEE Transactions on Power Electronics, 2016, , 1-1.	5.4	26
29	Electric field distribution and voltage breakdown modeling for any PN junction. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2016, 35, 137-156.	0.5	6
30	Modeling and characterization of 0.35 μ m CMOS coreless transformer for gate drivers. , 2014, , .		6
31	Model implementation towards the prediction of J(V) characteristics in diamond bipolar device simulations. Diamond and Related Materials, 2014, 43, 34-42.	1.8	26
32	Packaging $\tilde{\text{A}}$ \AA chelle du<i>wafer</i> pour les semi-conducteurs de puissance dans les convertisseurs multicellulaires. European Journal of Electrical Engineering, 2013, 16, 307-322.	1.1	0
33	Performance analysis of different power electronics structures for electric vehicles (EVs). European Journal of Electrical Engineering, 2013, 16, 447-463.	1.1	0
34	Experimental Investigation of an Integrated Optical Interface for Power MOSFET Drivers. IEEE Electron Device Letters, 2012, 33, 230-232.	2.2	8
35	A vertical power device conductive assembly at wafer level using direct bonding technology. , 2012, , .		7
36	Towards reduced threshold voltages for vertical power Mosfet transistors. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
37	Benefits of cascaded inverters for electrical vehicles' drive-trains. , 2011, , .		3
38	Cascaded Inverters for electric vehicles: Towards a better management of traction chain from the battery to the motor?. , 2011, , .		11
39	Series-coupled silicon racetrack resonators and the Vernier effect: theory and measurement. Optics Express, 2010, 18, 25151.	1.7	102
40	Temperature Effects on Silicon-on-Insulator (SOI) Racetrack Resonators: A Coupled Analytic and 2-D Finite Difference Approach. Journal of Lightwave Technology, 2010, 28, 1380-1391.	2.7	84
41	Loss Free Gate Driver Unipolar Power Supply for High Side Power Transistors. IEEE Transactions on Power Electronics, 2008, 23, 1565-1573.	5.4	38
42	High-Efficiency and Fully Integrated Self-Powering Technique for Intelligent Switch-Based Flyback Converters. IEEE Transactions on Industry Applications, 2008, 44, 826-835.	3.3	19
43	Toward Generic Fully Integrated Gate Driver Power Supplies. IEEE Transactions on Power Electronics, 2008, 23, 2106-2114.	5.4	20
44	Non-Volatile Photo-Switch Using a Diamond pn Junction. Advanced Electronic Materials, 0, , 2100542.	2.6	3