

Luca Nela

List of Publications by Year in descending order

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703
citing authors

#	ARTICLE	IF	CITATIONS
1	Intrinsic Polarization Super Junctions: Design of Single and Multichannel GaN Structures. IEEE Transactions on Electron Devices, 2022, 69, 1798-1804.	1.6	8
2	A perspective on multi-channel technology for the next-generation of GaN power devices. Applied Physics Letters, 2022, 120, .	1.5	16
3	Enhancement-Mode Multi-Channel AlGaIn/GaN Transistors With LiNiO Junction Tri-Gate. IEEE Electron Device Letters, 2022, 43, 1523-1526.	2.2	3
4	Ultra-compact, High-Frequency Power Integrated Circuits Based on GaN-on-Si Schottky Barrier Diodes. IEEE Transactions on Power Electronics, 2021, 36, 1269-1273.	5.4	31
5	Conformal Passivation of Multi-Channel GaN Power Transistors for Reduced Current Collapse. IEEE Electron Device Letters, 2021, 42, 86-89.	2.2	18
6	P-GaN Tri-Gate MOS Structure for Normally-Off GaN Power Transistors. IEEE Electron Device Letters, 2021, 42, 82-85.	2.2	21
7	Multi-channel nanowire devices for efficient power conversion. Nature Electronics, 2021, 4, 284-290.	13.1	46
8	LiNiO Gate Dielectric with Tri-Gate Structure for High Performance E-mode GaN transistors. , 2021, , .		2
9	High-Performance Enhancement-Mode AlGaIn/GaN Multi-Channel Power Transistors. , 2021, , .		7
10	Performance of GaN Power Devices for Cryogenic Applications Down to 4.2 K. IEEE Transactions on Power Electronics, 2021, 36, 7412-7416.	5.4	46
11	Impact of Embedded Liquid Cooling on the Electrical Characteristics of GaN-on-Si Power Transistors. IEEE Electron Device Letters, 2021, 42, 1642-1645.	2.2	9
12	GaN-based power devices: Physics, reliability, and perspectives. Journal of Applied Physics, 2021, 130, .	1.1	191
13	Embedded Microchannel Cooling for Monolithically-integrated GaN Half-bridge ICs. , 2021, , .		1
14	Figures-of-Merit of Lateral GaN Power Devices: Modeling and Comparison of HEMTs and PSJs. IEEE Journal of the Electron Devices Society, 2021, 9, 1066-1075.	1.2	9
15	<i>p</i>-GaN field plate for low leakage current in lateral GaN Schottky barrier diodes. Applied Physics Letters, 2021, 119, .	1.5	5
16	Fast-Switching Tri-Anode Schottky Barrier Diodes for Monolithically Integrated GaN-on-Si Power Circuits. IEEE Electron Device Letters, 2020, 41, 99-102.	2.2	26
17	\cos Loss Tangent of Field-Effect Transistors: Generalizing High-Frequency Soft-Switching Losses. IEEE Transactions on Power Electronics, 2020, 35, 12585-12589.	5.4	7
18	High-Frequency GaN-on-Si power integrated circuits based on Tri-Anode SBDs. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
19	Embedded Microchannel Cooling for High Power-Density GaN-on-Si Power Integrated Circuits. , 2020, , .		7
20	Co-designing electronics with microfluidics for more sustainable cooling. Nature, 2020, 585, 211-216.	13.7	437
21	Bringing the Heat Sink Closer to the Heat: Evaluating Die-Embedded Microchannel Cooling of GaN-on-Si Power Devices. , 2020, , .		5
22	Output-Capacitance Hysteresis Losses of Field-Effect Transistors. , 2020, , .		6
23	High-performance normally-off tri-gate GaN power MOSFETs. , 2019, , .		2
24	High-Voltage Normally-off Recessed Tri-Gate GaN Power MOSFETs With Low on-Resistance. IEEE Electron Device Letters, 2019, 40, 1289-1292.	2.2	33
25	Impact of Fin Width on Tri-Gate GaN MOSHEMTs. IEEE Transactions on Electron Devices, 2019, 66, 4068-4074.	1.6	22
26	High-Performance Nanowire-Based E-Mode Power GaN MOSHEMTs With Large Work-Function Gate Metal. IEEE Electron Device Letters, 2019, 40, 439-442.	2.2	30