

Daniel Piedra

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11171266/publications.pdf>

Version: 2024-02-01

21
papers

2,123
citations

623734

14
h-index

940533

16
g-index

21
all docs

21
docs citations

21
times ranked

2011
citing authors

#	ARTICLE	IF	CITATIONS
1	The 2018 GaN power electronics roadmap. Journal Physics D: Applied Physics, 2018, 51, 163001.	2.8	843
2	Origin and Control of OFF-State Leakage Current in GaN-on-Si Vertical Diodes. IEEE Transactions on Electron Devices, 2015, 62, 2155-2161.	3.0	185
3	GaN-on-Si Vertical Schottky and p-n Diodes. IEEE Electron Device Letters, 2014, 35, 618-620.	3.9	154
4	Electrothermal Simulation and Thermal Performance Study of GaN Vertical and Lateral Power Transistors. IEEE Transactions on Electron Devices, 2013, 60, 2224-2230.	3.0	142
5	Vertical GaN Junction Barrier Schottky Rectifiers by Selective Ion Implantation. IEEE Electron Device Letters, 2017, 38, 1097-1100.	3.9	136
6	3000-V 4.3- $\Omega \cdot \text{cm}^2$ InAlN/GaN MOSHEMTs With AlGaIn Back Barrier. IEEE Electron Device Letters, 2012, 33, 982-984.	3.9	114
7	Materials and processing issues in vertical GaN power electronics. Materials Science in Semiconductor Processing, 2018, 78, 75-84.	4.0	112
8	Trench formation and corner rounding in vertical GaN power devices. Applied Physics Letters, 2017, 110, .	3.3	77
9	High-Performance 500 V Quasi- and Fully-Vertical GaN-on-Si pn Diodes. IEEE Electron Device Letters, 2017, 38, 248-251.	3.9	70
10	Large Area 1.2 kV GaN Vertical Power FinFETs with a Record Switching Figure-of-Merit. IEEE Electron Device Letters, 2018, , 1-1.	3.9	69
11	A Technology Overview of the PowerChip Development Program. IEEE Transactions on Power Electronics, 2013, 28, 4182-4201.	7.9	67
12	AlN metal- ϵ semiconductor field-effect transistors using Si-ion implantation. Japanese Journal of Applied Physics, 2018, 57, 04FR11.	1.5	42
13	Reduction of on-resistance and current crowding in quasi-vertical GaN power diodes. Applied Physics Letters, 2017, 111, .	3.3	39
14	Comparative Breakdown Study of Mesa- and Ion-Implantation-Isolated AlGaIn/GaN High-Electron-Mobility Transistors on Si Substrate. Applied Physics Express, 2012, 5, 074202.	2.4	27
15	Current collapse suppression in AlGaIn/GaN HEMTs by means of slant field plates fabricated by multi-layer SiCN. Solid-State Electronics, 2014, 101, 63-69.	1.4	13
16	A new process approach for slant field plates in GaN-based high-electron-mobility transistors. Japanese Journal of Applied Physics, 2016, 55, 01AD02.	1.5	11
17	GaN power electronics. , 2010, , .		10
18	Advanced power electronic devices based on Gallium Nitride (GaN). , 2015, , .		6

#	ARTICLE	IF	CITATIONS
19	Integration of a phase change material for junction-level cooling in GaN devices. , 2012, , .		3
20	Novel junction level cooling in pulsed GaN devices. , 2012, , .		2
21	Scaling of InAlN/GaN power transistors. , 2012, , .		1