

# 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  | AlN metal-oxide semiconductor field-effect transistors using Si-ion implantation. Japanese Journal of Applied Physics, 2018, 57, 04FR11.                                    | 1.5 | 42        |
| 3  | Materials and processing issues in vertical GaN power electronics. Materials Science in Semiconductor Processing, 2018, 78, 75-84.  | 4.0 | 112       |
| 4  | 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        |
| 5  | Trench formation and corner rounding in vertical GaN power devices. Applied Physics Letters, 2017, 110, .   | 3.3 | 77        |
| 6  | High-Performance 500 V Quasi- and Fully-Vertical GaN-on-Si pn Diodes. IEEE Electron Device Letters, 2017, 38, 248-251.  | 3.9 | 70        |
| 7  | Reduction of on-resistance and current crowding in quasi-vertical GaN power diodes. Applied Physics Letters, 2017, 111, .   | 3.3 | 39        |
| 8  | Vertical GaN Junction Barrier Schottky Rectifiers by Selective Ion Implantation. IEEE Electron Device Letters, 2017, 38, 1097-1100.   | 3.9 | 136       |
| 9  | 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        |
| 10 | Advanced power electronic devices based on Gallium Nitride (GaN). , 2015, , .   |     | 6         |
| 11 | 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       |
| 12 | 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        |
| 13 | GaN-on-Si Vertical Schottky and p-n Diodes. IEEE Electron Device Letters, 2014, 35, 618-620.  | 3.9 | 154       |
| 14 | 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       |
| 15 | A Technology Overview of the PowerChip Development Program. IEEE Transactions on Power Electronics, 2013, 28, 4182-4201.  | 7.9 | 67        |
| 16 | Scaling of InAlN/GaN power transistors. , 2012, , .   |     | 1         |
| 17 | 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        |
| 18 | Novel junction level cooling in pulsed GaN devices. , 2012, , .   |     | 2         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | 3000-V 4.3- $\hbox{m}\Omega$ $\cdot$ $\hbox{cm}^2$ InAlN/GaN MOSHEMTs With AlGaN Back Barrier. IEEE Electron Device Letters, 2012, 33, 982-984. | 3.9 | 114       |
| 20 | Integration of a phase change material for junction-level cooling in GaN devices. , 2012, , .   |     | 3         |
| 21 | GaN power electronics. , 2010, , .  |     | 10        |