

Travis Anderson

List of Publications by Year in descending order

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papers

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567144

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46
all docs

46
docs citations

46
times ranked

1389
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimizing performance and yield of vertical GaN diodes using wafer scale optical techniques. Scientific Reports, 2022, 12, 658.	1.6	8
2	High-Temperature Static and Dynamic Characteristics of 4.2-kV GaN Super-Heterojunction p-n Diodes. IEEE Transactions on Electron Devices, 2022, 69, 1912-1917.	1.6	4
3	Impact of Anode Thickness on Breakdown Mechanisms in Vertical GaN PiN Diodes with Planar Edge Termination. Crystals, 2022, 12, 623.	1.0	4
4	Effect of GaN Substrate Properties on Vertical GaN PiN Diode Electrical Performance. Journal of Electronic Materials, 2021, 50, 3013-3021.	1.0	8
5	Process Optimization for Selective Area Doping of GaN by Ion Implantation. Journal of Electronic Materials, 2021, 50, 4642-4649.	1.0	4
6	12.5 kV GaN Super-Heterojunction Schottky Barrier Diodes. IEEE Transactions on Electron Devices, 2021, 68, 5736-5741.	1.6	8
7	Full thermal characterization of AlGaIn/GaN high electron mobility transistors on silicon, silicon carbide, and diamond substrates using a reverse modeling approach. Semiconductor Science and Technology, 2021, 36, 014008.	1.0	4
8	Role of Capping Material and GaN Polarity on Mg Ion Implantation Activation. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900789.	0.8	5
9	A Study on the Impact of Mid-Gap Defects on Vertical GaN Diodes. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 546-551.	1.4	5
10	High-Resolution Thermoreflectance Imaging Investigation of Self-Heating in AlGaIn/GaN HEMTs on Si, SiC, and Diamond Substrates. IEEE Transactions on Electron Devices, 2020, 67, 5415-5420.	1.6	24
11	Reduced Contact Resistance in GaN Using Selective Area Si Ion Implantation. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 478-482.	1.4	3
12	GaN-On-Diamond HEMT Technology With $T_{AVG} = 176^{\circ}\text{C}$ at $P_{DC,max} = 56\text{ W/mm}$ Measured by Transient Thermoreflectance Imaging. IEEE Electron Device Letters, 2019, 40, 881-884.	2.2	52
13	Investigation of Single-Event Transients in AlGaIn/GaN MIS-Gate HEMTs Using a Focused X-Ray Beam. IEEE Transactions on Nuclear Science, 2019, 66, 368-375.	1.2	9
14	Defect Characterization of Multicycle Rapid Thermal Annealing Processed p-GaN for Vertical Power Devices. ECS Journal of Solid State Science and Technology, 2019, 8, P70-P76.	0.9	9
15	Lateral GaN JFET Devices on Large Area Engineered Substrates. ECS Journal of Solid State Science and Technology, 2019, 8, Q226-Q229.	0.9	4
16	Vertical power devices enabled by bulk GaN substrates. , 2019, , .		1
17	Correlation of the Spatial Variation of Single-Event Transient Sensitivity With Thermoreflectance Thermography in $\text{Al}_x\text{Ga}_{1-x}\text{N}$ /GaN HEMTs. IEEE Transactions on Nuclear Science, 2018, 65, 369-375.	1.2	6
18	High resistivity halide vapor phase homoepitaxial $\hat{1}^2$ -Ga ₂ O ₃ films co-doped by silicon and nitrogen. Applied Physics Letters, 2018, 113, .	1.5	30

#	ARTICLE	IF	CITATIONS
19	GaN Power Devices – Current Status and Future Directions. Electrochemical Society Interface, 2018, 27, 43-47.	0.3	12
20	Lateral GaN JFET Devices on 200 mm Engineered Substrates for Power Switching Applications. , 2018, , .		4
21	Electrothermal Evaluation of AlGaIn/GaN Membrane High Electron Mobility Transistors by Transient Thermoreflectance. IEEE Journal of the Electron Devices Society, 2018, 6, 922-930.	1.2	14
22	A Tri-Layer PECVD SiN Passivation Process for Improved AlGaIn/GaN HEMT Performance. ECS Journal of Solid State Science and Technology, 2017, 6, P58-P61.	0.9	10
23	Application of a Focused, Pulsed X-Ray Beam to the Investigation of Single-Event Transients in Al _{0.3} Ga _{0.7} N/GaN HEMTs. IEEE Transactions on Nuclear Science, 2017, 64, 97-105.	1.2	9
24	Vertical GaN Junction Barrier Schottky Diodes. ECS Journal of Solid State Science and Technology, 2017, 6, Q10-Q12.	0.9	33
25	Quantifying substrate removal induced electrothermal degradation in AlGaIn/GaN HEMTs. , 2017, , .		3
26	Electrothermal evaluation of thick GaN epitaxial layers and AlGaIn/GaN high-electron-mobility transistors on large-area engineered substrates. Applied Physics Express, 2017, 10, 126501.	1.1	20
27	High Voltage GaN Lateral Photoconductive Semiconductor Switches. ECS Journal of Solid State Science and Technology, 2017, 6, S3099-S3102.	0.9	12
28	Vertical GaN Junction Barrier Schottky Rectifiers by Selective Ion Implantation. IEEE Electron Device Letters, 2017, 38, 1097-1100.	2.2	136
29	Nanocrystalline Diamond Integration with III-Nitride HEMTs. ECS Journal of Solid State Science and Technology, 2017, 6, Q3036-Q3039.	0.9	40
30	Hyperspectral Electroluminescence Characterization of OFF-State Device Characteristics in Proton Irradiated High Voltage AlGaIn/GaN HEMTs. ECS Journal of Solid State Science and Technology, 2016, 5, Q289-Q293.	0.9	11
31	Epitaxial Lift-Off and Transfer of III-N Materials and Devices from SiC Substrates. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 384-389.	1.4	41
32	Vertical GaN junction barrier schottky diodes by Mg implantation and activation annealing. , 2016, , .		0
33	Improvements in the Annealing of Mg Ion Implanted GaN and Related Devices. IEEE Transactions on Semiconductor Manufacturing, 2016, 29, 343-348.	1.4	30
34	Improved Vertical GaN Schottky Diodes with Ion Implanted Junction Termination Extension. ECS Journal of Solid State Science and Technology, 2016, 5, Q176-Q178.	0.9	35
35	Selective p-type Doping of GaN:Si by Mg Ion Implantation and Multicycle Rapid Thermal Annealing. ECS Journal of Solid State Science and Technology, 2016, 5, P124-P127.	0.9	43
36	Control of the in-plane thermal conductivity of ultra-thin nanocrystalline diamond films through the grain and grain boundary properties. Acta Materialia, 2016, 103, 141-152.	3.8	97

#	ARTICLE	IF	CITATIONS
37	Comparison of AlN Encapsulants for Bulk GaN Multicycle Rapid Thermal Annealing. ECS Journal of Solid State Science and Technology, 2015, 4, P403-P407.	0.9	12
38	Characterization of a selective AlN wet etchant. Applied Physics Express, 2015, 8, 036501.	1.1	15
39	Symmetric Multicycle Rapid Thermal Annealing: Enhanced Activation of Implanted Dopants in GaN. ECS Journal of Solid State Science and Technology, 2015, 4, P382-P386.	0.9	45
40	Degradation mechanisms of AlGaIn/GaN HEMTs on sapphire, Si, and SiC substrates under proton irradiation. , 2014, , .		9
41	Degradation of dynamic ON-resistance of AlGaIn/GaN HEMTs under proton irradiation. , 2013, , .		14
42	Modeling Radiation-Induced Degradation in Top-Gated Epitaxial Graphene Field-Effect-Transistors (FETs). Electronics (Switzerland), 2013, 2, 234-245.	1.8	9
43	Bilayer graphene by bonding CVD graphene to epitaxial graphene. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2012, 30, 03D110.	0.6	10
44	Reduced Self-Heating in AlGaIn/GaN HEMTs Using Nanocrystalline Diamond Heat-Spreading Films. IEEE Electron Device Letters, 2012, 33, 23-25.	2.2	100
45	Quantifying pulsed laser induced damage to graphene. Applied Physics Letters, 2011, 99, .	1.5	133
46	Temperature and time dependent threshold voltage characterization of AlGaIn/GaN high electron mobility transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2232-2234.	0.8	5