

# Yvon Cordier

## List of Publications by Year in descending order

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224  
papers

3,625  
citations

159585

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223800

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g-index

226  
all docs

226  
docs citations

226  
times ranked

2833  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gallium Nitride as an Electromechanical Material. Journal of Microelectromechanical Systems, 2014, 23, 1252-1271.	2.5	173
2	Molecular Beam Epitaxy of Group-III Nitrides on Silicon Substrates: Growth, Properties and Device Applications. Physica Status Solidi A, 2001, 188, 501-510.	1.7	142
3	Amplified piezoelectric transduction of nanoscale motion in gallium nitride electromechanical resonators. Applied Physics Letters, 2009, 94, .	3.3	110
4	Growth of thick, continuous GaN layers on 4-in. Si substrates by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2011, 314, 85-91.	1.5	100
5	InAlAs/InGaAs metamorphic HEMT with high current density and high breakdown voltage. IEEE Electron Device Letters, 1998, 19, 345-347.	3.9	85
6	Electromechanical Transconductance Properties of a GaN MEMS Resonator With Fully Integrated HEMT Transducers. Journal of Microelectromechanical Systems, 2012, 21, 370-378.	2.5	82
7	GaN transistor characteristics at elevated temperatures. Journal of Applied Physics, 2009, 106, .	2.5	67
8	AlGaIn/GaN HEMTs on Si(111) with 6.6 W/mm <sup>2</sup> output power density. Electronics Letters, 2003, 39, 626.	1.0	59
9	Analysis of the AlGaIn/GaN vertical bulk current on Si, sapphire, and free-standing GaN substrates. Journal of Applied Physics, 2013, 113, .	2.5	57
10	Tuning the electromagnetic local density of states in graphene-covered systems via strong coupling with graphene plasmons. Physical Review B, 2013, 87, .	3.2	56
11	Power Performance at 40 GHz of AlGaIn/GaN High-Electron Mobility Transistors Grown by Molecular Beam Epitaxy on Si(111) Substrate. IEEE Electron Device Letters, 2015, 36, 303-305.	3.9	55
12	Indium content measurements in metamorphic high electron mobility transistor structures by combination of x-ray reciprocal space mapping and transmission electron microscopy. Journal of Applied Physics, 2003, 93, 4219-4225.	2.5	53
13	The critical role of growth temperature on the structural and electrical properties of AlGaIn/GaN high electron mobility transistor heterostructures grown on Si(111). Journal of Applied Physics, 2009, 105, 033701.	2.5	50
14	Power Performance of AlGaIn/GaN High-Electron-Mobility Transistors on (110) Silicon Substrate at 40 GHz. IEEE Electron Device Letters, 2013, 34, 490-492.	3.9	48
15	Micro and nano analysis of 0.2 μm Ti/Al/Ni/Au ohmic contact to AlGaIn/GaN. Applied Physics Letters, 2011, 99, 213504.	3.3	47
16	Demonstration of AlGaIn/GaN High-Electron-Mobility Transistors Grown by Molecular Beam Epitaxy on Si(110). IEEE Electron Device Letters, 2008, 29, 1187-1189.	3.9	44
17	Metamorphic In <sub>0.4</sub> Al <sub>0.6</sub> As/In <sub>0.4</sub> Ga <sub>0.6</sub> As HEMTs on GaAs substrate. IEEE Electron Device Letters, 1999, 20, 123-125.	3.9	43
18	Growth of thick GaN layers on 4-in. and 6-in. silicon (111) by metalorganic vapor phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1479-1482.	0.8	42

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19	AlGaIn/GaN high electron mobility transistors grown on 3C-SiC/Si(111). Journal of Crystal Growth, 2008, 310, 4417-4423.	1.5	41
20	Role of magnetic polarons in ferromagnetic GdN. Physical Review B, 2013, 87, .	3.2	40
21	High Microwave and Noise Performance of 0.17- $\mu\text{m}$ AlGaIn/GaN HEMTs on High-Resistivity Silicon Substrates. IEEE Electron Device Letters, 2004, 25, 167-169.	3.9	38
22	Graphene integration with nitride semiconductors for high power and high frequency electronics. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600460.	1.8	38
23	High-Performance Graphene/AlGaIn/GaN Schottky Junctions for Hot Electron Transistors. ACS Applied Electronic Materials, 2019, 1, 2342-2354.	4.3	35
24	Thickness and substrate effects on AlN thin film growth at room temperature. EPJ Applied Physics, 2008, 43, 309-313.	0.7	34
25	Metamorphic In <sub>0.3</sub> Ga <sub>0.7</sub> As/In <sub>0.29</sub> Al <sub>0.71</sub> As layer on GaAs: A new structure for high performance high electron mobility transistor realization. Applied Physics Letters, 1992, 61, 922-924.	3.3	33
26	Effect of surface preparation and interfacial layer on the quality of SiO <sub>2</sub> /GaN interfaces. Journal of Applied Physics, 2011, 109, .	2.5	33
27	InAlAs/InGaAs Metamorphic High Electron Mobility Transistors on GaAs Substrate: Influence of Indium Content on Material Properties and Device Performance. Japanese Journal of Applied Physics, 1999, 38, 1164-1168.	1.5	32
28	AlGaIn/GaN HEMTs regrown by MBE on epi-ready semi-insulating GaN-on-sapphire with inhibited interface contamination. Journal of Crystal Growth, 2007, 309, 1-7.	1.5	32
29	Homoepitaxy of non-polar ZnO/(Zn,Mg)O multi-quantum wells: From a precise growth control to the observation of intersubband transitions. Applied Physics Letters, 2017, 111, .	3.3	32
30	Capture time versus barrier thickness in quantum well structures measured by infrared photoconductive gain. Applied Physics Letters, 1993, 63, 3312-3314.	3.3	30
31	InAlAs buffer layers grown lattice mismatched on GaAs with inverse steps. Journal of Crystal Growth, 1999, 201-202, 263-266.	1.5	30
32	The indium content in metamorphic As/As HEMTs on GaAs substrate: a new structure parameter. Solid-State Electronics, 2000, 44, 1021-1027.	1.4	30
33	MBE growth of AlGaIn/GaN HEMTs on resistive Si(111) substrate with RF small signal and power performances. Journal of Crystal Growth, 2003, 251, 811-815.	1.5	29
34	Development and analysis of low resistance ohmic contact to n-AlGaIn/GaN HEMT. Diamond and Related Materials, 2007, 16, 262-266.	3.9	29
35	Elaboration of (111) oriented 3C-SiC/Si layers for template application in nitride epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 9-14.	3.5	28
36	High Lateral Breakdown Voltage in Thin Channel AlGaIn/GaN High Electron Mobility Transistors on AlN/Sapphire Templates. Micromachines, 2019, 10, 690.	2.9	28

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37	High-electron-mobility AlGaIn <sup>x</sup> GaN heterostructures grown on Si(001) by molecular-beam epitaxy. Applied Physics Letters, 2005, 87, 133505.	3.3	27
38	Growth mode and electric properties of graphene and graphitic phase grown by argon <sup>o</sup> propane assisted CVD on 3C <sup>o</sup> SiC/Si and 6H <sup>o</sup> SiC. Journal of Crystal Growth, 2012, 349, 27-35.	1.5	27
39	AlGaN Channel High Electron Mobility Transistors with Regrown Ohmic Contacts. Electronics (Switzerland), 2021, 10, 635.	3.1	27
40	Interplay between relaxation, surface morphology and composition modulation in InAlAs graded buffer layers. Journal of Crystal Growth, 2003, 251, 112-117.	1.5	26
41	Thermal effects in AlGaIn/GaN/Si high electron mobility transistors. Solid-State Electronics, 2011, 61, 1-6.	1.4	26
42	Microwave performance of 0.4 $\mu$ m gate metamorphic In <sub>0.29</sub> Al <sub>0.71</sub> As/In <sub>0.3</sub> Ga <sub>0.7</sub> As HEMT on GaAs substrate. Electronics Letters, 1993, 29, 169.	1.0	25
43	Growth of GaN based structures on Si(110) by molecular beam epitaxy. Journal of Crystal Growth, 2010, 312, 2683-2688.	1.5	25
44	MBE grown InAlAs/InGaAs lattice mismatched layers for HEMT application on GaAs substrate. Applied Surface Science, 1998, 123-124, 734-737.	6.1	24
45	Enhancement-mode Al/sub 0.66/In/sub 0.34/As/Ga/sub 0.67/In/sub 0.33/As metamorphic HEMT, modeling and measurements. IEEE Transactions on Electron Devices, 2001, 48, 1037-1044.	3.0	24
46	AlGaIn/GaN HEMTs on (001) Silicon Substrate With Power Density Performance of 2.9 W/mm at 10 GHz. IEEE Transactions on Electron Devices, 2010, 57, 1497-1503.	3.0	24
47	Temperature dependence of Al/Ti-based Ohmic contact to GaN devices: HEMT and MOSFET. Microelectronic Engineering, 2011, 88, 3140-3144.	2.4	24
48	Effect of carbon doping on crystal quality, electrical isolation and electron trapping in GaN based structures grown silicon substrates. Solid-State Electronics, 2012, 75, 86-92.	1.4	24
49	First Power Performance Demonstration of Flexible AlGaIn/GaN High Electron Mobility Transistor. IEEE Electron Device Letters, 2016, 37, 553-555.	3.9	24
50	AlGaIn/GaN/AlGaIn DH-HEMTs grown by MBE on Si(111). Journal of Crystal Growth, 2005, 278, 393-396.	1.5	23
51	Strain engineering in GaN layers grown on silicon by molecular beam epitaxy: The critical role of growth temperature. Journal of Crystal Growth, 2009, 311, 2002-2005.	1.5	23
52	Dyakonov-Perel electron spin relaxation in a wurtzite semiconductor: From the nondegenerate to the highly degenerate regime. Physical Review B, 2011, 84, .	3.2	23
53	Optimization of $\{m\text{ Al}\}_{0.29}\{m\text{ Ga}\}_{0.71}\{m\text{ N}\}/\{m\text{ GaN}\}$ High Electron Mobility Heterostructures for High-Power/Frequency Performances. IEEE Transactions on Electron Devices, 2013, 60, 3105-3111.	3.0	22
54	Influence of AlN Growth Temperature on the Electrical Properties of Buffer Layers for GaN HEMTs on Silicon. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700637.	1.8	22

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55	Hexagonal c-axis GaN layers grown by metalorganic vapor-phase epitaxy on Si(001). Journal of Crystal Growth, 2005, 280, 44-53.	1.5	21
56	Developments for the production of high-quality and high-uniformity AlGaIn/GaN heterostructures by ammonia MBE. Journal of Crystal Growth, 2007, 301-302, 434-436.	1.5	21
57	High temperature behaviour of GaN HEMT devices on Si(111) and sapphire substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1971-1973.	0.8	21
58	Blue (Ga,In)N/GaN Light Emitting Diodes on Si(110) Substrate. Applied Physics Express, 0, 1, 121101.	2.4	21
59	Surface morphology and strain relaxation of InAlAs buffer layers grown lattice mismatched on GaAs with inverse steps. Applied Surface Science, 2000, 166, 442-445.	6.1	20
60	Deposited Thin SiO <sub>2</sub> for Gate Oxide on n-Type and p-Type GaN. Journal of the Electrochemical Society, 2010, 157, H1008.	2.9	20
61	Electrical activity at the AlN/Si Interface: identifying the main origin of propagation losses in GaN-on-Si devices at microwave frequencies. Scientific Reports, 2020, 10, 14166.	3.3	20
62	Fabrication, Characterization, and Physical Analysis of AlGaIn/GaN HEMTs on Flexible Substrates. IEEE Transactions on Electron Devices, 2013, 60, 1054-1059.	3.0	19
63	AlGaIn/GaN HEMTs on resistive Si(111) substrate grown by gas-source MBE. Electronics Letters, 2002, 38, 91.	1.0	18
64	Influence of MBE growth conditions on the quality of InAlAs/InGaAs metamorphic HEMTs on GaAs. Journal of Crystal Growth, 2003, 251, 822-826.	1.5	18
65	Structural and electrical properties of AlGaIn/GaN HEMTs grown by MBE on SiC, Si(111) and GaN templates. Journal of Crystal Growth, 2005, 278, 383-386.	1.5	18
66	In situ measurements of wafer bending curvature during growth of group-III-nitride layers on silicon by molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 71-74.	1.5	18
67	Temperature impact and analytical modeling of the AlGaIn/GaN-on-Si saturation drain current and transconductance. Semiconductor Science and Technology, 2012, 27, 125010.	2.0	18
68	Gate current analysis of AlGaIn/GaN on silicon heterojunction transistors at the nanoscale. Applied Physics Letters, 2012, 101, 093505.	3.3	18
69	Molecular beam epitaxy of ferromagnetic epitaxial GdN thin films. Journal of Crystal Growth, 2014, 404, 146-151.	1.5	18
70	Highly resistive epitaxial Mg-doped GdN thin films. Applied Physics Letters, 2015, 106, .	3.3	18
71	Recent improvements of flexible GaN-based HEMT technology. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600484.	1.8	18
72	RF Performance of AlGaIn/GaN High-Electron-Mobility Transistors Grown on Silicon (110). Applied Physics Express, 2011, 4, 064105.	2.4	17

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73	Graphene growth on AlN templates on silicon using propane-hydrogen chemical vapor deposition. Applied Physics Letters, 2014, 104, .	3.3	17
74	Quality and uniformity assessment of AlGaIn/GaN quantum wells and HEMT heterostructures grown by molecular beam epitaxy with ammonia source. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2325-2328.	0.8	16
75	Investigation of AlGaIn <sup>x</sup> AlN <sup>y</sup> GaN heterostructures for magnetic sensor application from liquid helium temperature to 300°C. Applied Physics Letters, 2008, 92, .	3.3	16
76	Comparison of In <sub>0.33</sub> Al <sub>0.67</sub> As/In <sub>0.34</sub> Ga <sub>0.66</sub> As on GaAs metamorphic high electron mobility transistors grown by molecular beam epitaxy with normal and inverse step on linear graded buffer layers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2513.	1.6	15
77	fmax of 490 GHz metamorphic In <sub>0.52</sub> Al <sub>0.48</sub> As <sup>x</sup> In <sub>0.53</sub> Ga <sub>0.47</sub> As HEMTs on GaAs substrate. Electronics Letters, 2002, 38, 389.	1.0	15
78	60-GHz high power performance In <sub>0.35</sub> Al <sub>0.65</sub> As-In <sub>0.35</sub> Ga <sub>0.65</sub> As metamorphic HEMTs on GaAs. IEEE Electron Device Letters, 2003, 24, 724-726.	3.9	15
79	AlGaIn/GaN HEMTs grown on silicon (001) substrates by molecular beam epitaxy. Superlattices and Microstructures, 2006, 40, 295-299.	3.1	15
80	Gate traps inducing band-bending fluctuations on AlGaIn/GaN heterojunction transistors. Applied Physics Letters, 2013, 102, 023511.	3.3	15
81	High temperature electrical investigations of (Al,Ga)N/GaN heterostructures - Hall sensor applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1438-1443.	0.8	14
82	Young's modulus extraction of epitaxial heterostructure AlGaIn/GaN for MEMS application. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1655-1659.	1.8	14
83	Nanoscale conductive pattern of the homoepitaxial AlGaIn/GaN transistor. Nanotechnology, 2015, 26, 115203.	2.6	14
84	Electron mobility and transfer characteristics in AlGaIn/GaN HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2720-2723.	0.8	13
85	Growth of wurtzite-GaN on silicon (100) substrate by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2187-2190.	0.8	13
86	AlGaIn/GaN HEMTs on a (001)-Oriented Silicon Substrate Based on 100-nm SiN Recessed Gate Technology for Microwave Power Amplification. IEEE Transactions on Electron Devices, 2007, 54, 2843-2848.	3.0	13
87	Subsurface Fe-doped semi-insulating GaN templates for inhibition of regrowth interface pollution in AlGaIn/GaN HEMT structures. Journal of Crystal Growth, 2008, 310, 948-954.	1.5	13
88	AlGaIn/GaN high electron mobility transistor grown by molecular beam epitaxy on Si(110): comparisons with Si(111) and Si(001). Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S1020.	0.8	13
89	Voltage-controlled sub-terahertz radiation transmission through GaN quantum well structure. Applied Physics Letters, 2011, 99, 082101.	3.3	13
90	Nanoscale investigation of AlGaIn/GaN-on-Si high electron mobility transistors. Nanotechnology, 2012, 23, 395204.	2.6	13

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91	Integration of Micro Resistance Thermometer Detectors in AlGaIn/GaN Devices. IEEE Journal of the Electron Devices Society, 2014, 2, 145-148.	2.1	13
92	Magnetic properties of Gd-doped GaN. Physica Status Solidi (B): Basic Research, 2014, 251, 1673-1684.	1.5	13
93	Influence of 3C-SiC/Si (111) template properties on the strain relaxation in thick GaN films. Journal of Crystal Growth, 2014, 398, 23-32.	1.5	13
94	Al(Ga)N/GaN high electron mobility transistors on silicon. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1049-1058.	1.8	13
95	Room-Temperature AlGaIn/GaN Terahertz Plasmonic Detectors with a Zero-Bias Grating. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 243-257.	2.2	13
96	Trap states analysis in AlGaIn/AlN/GaN and InAlN/AlN/GaN high electron mobility transistors. Current Applied Physics, 2017, 17, 1601-1608.	2.4	13
97	Enhancement mode metamorphic Al <sub>sub 0.67</sub> /In <sub>sub 0.33</sub> /As/Ga <sub>sub 0.66</sub> /In <sub>sub 0.34</sub> /As HEMT on GaAs substrate with high breakdown voltage. IEEE Electron Device Letters, 2000, 21, 512-514.	3.9	12
98	Stress distribution of 12 μm thick crack free continuous GaN on patterned Si(110) substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 425-428.	0.8	12
99	Characterization of m-GaN and a-GaN Crystallographic Planes after Being Chemically Etched in TMAH Solution. Energies, 2021, 14, 4241.	3.1	12
100	High-power AlGaIn-GaN HEMTs on resistive silicon substrate. Electronics Letters, 2002, 38, 750.	1.0	11
101	AlGaIn/GaN HEMTs with an InGaIn back-barrier grown by ammonia-assisted molecular beam epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 480-483.	1.8	11
102	Structural and electrical properties of AlN thin films on GaN substrates grown by plasma enhanced-Atomic Layer Deposition. Materials Science in Semiconductor Processing, 2019, 97, 35-39.	4.0	11
103	Temperature dependence of GaAs chemical etching using AsCl <sub>3</sub> . Journal of Crystal Growth, 1996, 164, 97-103.	1.5	10
104	Thermal characterisation of AlGaIn/GaN HEMTs grown on silicon and sapphire substrates based on pulsed I-V measurements. EPJ Applied Physics, 2003, 22, 77-82.	0.7	10
105	Electronic properties of deep defects in n-type GaN. Superlattices and Microstructures, 2004, 36, 435-443.	3.1	10
106	Temperature measurement in AlGaIn/GaN High-Electron-Mobility Transistors using micro-Raman scattering spectroscopy. EPJ Applied Physics, 2005, 30, 77-82.	0.7	10
107	AlGaIn-GaN HEMTs on (001) silicon substrates. Electronics Letters, 2006, 42, 117.	1.0	10
108	Magnetotransport in Gd-implanted wurtzite Ga <sub>1-x</sub> Al <sub>x</sub> GaN high electron mobility transistor structures. Applied Physics Letters, 2008, 92, 112111.	3.3	10

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109	Bulk Temperature Impact on the AlGaIn/GaN HEMT Forward Current on Si, Sapphire and Free-Standing GaN. ECS Solid State Letters, 2012, 2, P4-P7.	1.4	10
110	Growth optimization and characterization of lattice-matched Al <sub>0.82</sub> In <sub>0.18</sub> N optical confinement layer for edge emitting nitride laser diodes. Journal of Crystal Growth, 2012, 338, 20-29.	1.5	10
111	High temperature annealing and CVD growth of few-layer graphene on bulk AlN and AlN templates. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600436.	1.8	10
112	2 W mm <sup>-2</sup> power density of an AlGaIn/GaN HEMT grown on free-standing GaN substrate at 40 GHz. Semiconductor Science and Technology, 2019, 34, 12LT01.	2.0	10
113	0.1- $\frac{1}{4}$ $\mu$ m high performance double heterojunction In <sub>0.32</sub> Al <sub>0.68</sub> As/In <sub>0.33</sub> Ga <sub>0.67</sub> As metamorphic HEMTs on GaAs. Solid-State Electronics, 2000, 44, 1685-1688.	1.4	9
114	Realization of AlGaIn/GaN HEMTs on 3C-SiC/Si(111) substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1983-1985.	0.8	9
115	High temperature behaviour of AlGaIn/AlN/GaN Hall-FET sensors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 1-4.	3.5	9
116	Signature of monolayer and bilayer fluctuations in the width of (Al,Ga)N/GaN quantum wells. Physical Review B, 2009, 79, .	3.2	9
117	Delta-Doping of Epitaxial GaN Layers on Large Diameter Si(111) Substrates. Applied Physics Express, 2012, 5, 025504.	2.4	9
118	Assessment of transistors based on GaN on silicon substrate in view of integration with silicon technology. Semiconductor Science and Technology, 2013, 28, 094003.	2.0	9
119	On the correlation between kink effect and effective mobility in InAlN/GaN HEMTs. , 2014, , .		9
120	AlGaIn/GaN HEMTs with very thin buffer on Si (111) for nanosystems applications. Semiconductor Science and Technology, 2014, 29, 115018.	2.0	9
121	Growth of nitride-based light emitting diodes with a high-reflectivity distributed Bragg reflector on mesa-patterned silicon substrate. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2297-2301.	1.8	9
122	Anomalous DC and RF behavior of virgin AlGaIn/AlN/GaN HEMTs. Semiconductor Science and Technology, 2017, 32, 035011.	2.0	9
123	Trapping Dipolar Exciton Fluids in GaN/(AlGa)N Nanostructures. Nano Letters, 2019, 19, 4911-4918.	9.1	9
124	Modelling of pseudomorphic AlGaAs/GaInAs/AlGaAs layers using selfconsistent approach. European Transactions on Telecommunications, 1990, 1, 429-432.	1.2	8
125	0.1 [ $\mu$ m] high performance metamorphic In <sub>0.32</sub> Al <sub>0.68</sub> As/In <sub>0.33</sub> Ga <sub>0.67</sub> As HEMT on GaAs using inverse step InAlAs buffer. Electronics Letters, 1999, 35, 1670.	1.0	8
126	Stacking of metamorphic InAlAs/InGaAs heterostructures on GaAs substrate. Journal of Applied Physics, 2001, 90, 5774-5777.	2.5	8



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127	Role of Substrate Misorientation in Relaxation of 3C-SiC Layers on Silicon. <i>Materials Science Forum</i> , 0, 615-617, 169-172.	0.3	8
128	A comparative study of graphene growth on SiC by hydrogen-CVD or Si sublimation through thermodynamic simulations. <i>CrystEngComm</i> , 2018, 20, 3702-3710.	2.6	8
129	Metalorganic Chemical Vapor Phase Epitaxy Growth of Buffer Layers on 3C-SiC/Si(111) Templates for AlGaIn/GaN High Electron Mobility Transistors with Low RF Losses. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2020, 217, 1900760.	1.8	8
130	High pressure study of the electrical transport phenomena in AlGaIn/GaN heterostructures. <i>Physica Status Solidi (B): Basic Research</i> , 2003, 235, 232-237.	1.5	7
131	Power results at 4 GHz of AlGaIn/GaN HEMTs on high resistive silicon [111] substrate. <i>IEEE Microwave and Wireless Components Letters</i> , 2003, 13, 99-101.	3.2	7
132	Temperature measurement by micro-Raman scattering spectroscopy in the active zone of AlGaIn/GaN high-electron-mobility transistors. <i>EPJ Applied Physics</i> , 2004, 27, 293-296.	0.7	7
133	Advances in quality and uniformity of (Al,Ga)N/GaN quantum wells grown by molecular beam epitaxy with plasma source. <i>Journal of Crystal Growth</i> , 2009, 311, 2029-2032.	1.5	7
134	Bias Dependence of Gallium Nitride Micro-Electro-Mechanical Systems Actuation Using a Two-Dimensional Electron Gas. <i>Applied Physics Express</i> , 2012, 5, 067201.	2.4	7
135	AlGaIn/GaN high electron mobility transistors on diamond substrate obtained through aluminum nitride bonding technology. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2020, 38, .	1.2	7
136	Composition analysis of semiconductor quantum wells by energy filtered convergent-beam electron diffraction. <i>Ultramicroscopy</i> , 2008, 108, 358-366.	1.9	6
137	Evaluation of SiN films for AlGaIn/GaN MIS-HEMTs on Si(111). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, S1016.	0.8	6
138	Selective area growth of GaN-based structures by molecular beam epitaxy on micrometer and nanometer size patterns. <i>Materials Science in Semiconductor Processing</i> , 2009, 12, 16-20.	4.0	6
139	Effects of substrate orientation on the optical anisotropy spectra of GaN/AlN/Si heterostructures in the energy range from 2.0 to 3.5 eV. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	6
140	Fabrication and growth of GaN-based micro and nanostructures. <i>International Journal of Nanotechnology</i> , 2012, 9, 412.	0.2	6
141	Impact of the Bending on the Electroluminescence of Flexible InGaIn/GaN Light-Emitting Diodes. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 1661-1664.	2.5	6
142	GaN films and GaN/AlGaIn quantum wells grown by plasma assisted molecular beam epitaxy using a high density radical source. <i>Journal of Crystal Growth</i> , 2016, 433, 165-171.	1.5	6
143	AlGaIn/GaN/AlGaIn DH-HEMTs Grown on a Patterned Silicon Substrate. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700642.	1.8	6
144	Kapitza thermal resistance characterization of epitaxial graphene-SiC(0001) interface. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	6

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145	Terahertz intersubband absorption of GaN/AlGaIn step quantum wells grown by MOVPE on Si(111) and Si(110) substrates. Applied Physics Letters, 2019, 115, .	3.3	6
146	Stability of the threshold voltage in fluorine-implanted normally-off AlN/GaN HEMTs co-integrated with commercial normally-on GaN HEMT technology. Microelectronics Reliability, 2021, 126, 114291.	1.7	6
147	Nanoscale structural and electrical properties of graphene grown on AlGaIn by catalyst-free chemical vapor deposition. Nanotechnology, 2021, 32, 015705.	2.6	6
148	In-Situ Cleaning of SiO <sub>2</sub> -Patterned GaAs Surface with Trisdimethylaminoarsine for Selective Regrowth. Japanese Journal of Applied Physics, 1996, 35, 5964-5968.	1.5	5
149	Hemts™s capability for millimeter wave applications. Annales Des Telecommunications/Annals of Telecommunications, 2001, 56, 15-26.	2.5	5
150	Influence of crystal quality on electron mobility in AlGaIn/GaN HEMTs grown on Si(111), SiC and GaN templates. European Physical Journal Special Topics, 2006, 132, 365-368.	0.2	5
151	Strain in 3C-SiC Heteroepitaxial Layers Grown on (100) and (111) Oriented Silicon Substrates. Materials Science Forum, 2008, 600-603, 207-210.	0.3	5
152	Windowed growth of AlGaIn/GaN heterostructures on Silicon ~111~ substrates for future MOS integration. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 371-374.	1.8	5
153	GaN: A multifunctional material enabling MEMS resonators based on amplified piezoelectric detection. , 2011, , .		5
154	Influence of nitrogen precursor and its flow rate on the quality and the residual doping in GaN grown by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 523-526.	0.8	5
155	Reduction of the thermal budget of AlGaIn/GaN heterostructures HEMTs grown on silicon: A step towards monolithic integration of GaN-HEMTs with CMOS. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1145-1152.	1.8	5
156	Influence of metal-organic vapor phase epitaxy parameters and Si(111) substrate type on the properties of AlGaIn/GaN HEMTs with thin simple buffer. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600419.	1.8	5
157	Combination of selective area sublimation of p-GaN and regrowth of AlGaIn for the co-integration of enhancement mode and depletion mode high electron mobility transistors. Solid-State Electronics, 2022, 188, 108210.	1.4	5
158	Temperature and Gate-Length Dependence of Subthreshold RF Detection in GaN HEMTs. Sensors, 2022, 22, 1515.	3.8	5
159	Graphene/SiC Interface Control Using Propane-Hydrogen CVD on 6H-SiC(0001) and 3C-SiC(111)/Si(111). Materials Science Forum, 2012, 711, 253-257.	0.3	4
160	Analysis of the SiO <sub>2</sub> /Si <sub>3</sub> N <sub>4</sub> passivation bilayer thickness on the rectifier behavior of AlGaIn/GaN HEMTs on (111) silicon substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1083-1087.	0.8	4
161	Molecular beam epitaxial AlGaIn/GaN high electron mobility transistors leakage thermal activation on silicon and sapphire. Applied Physics Letters, 2013, 102, .	3.3	4
162	GaN high electron mobility transistors on silicon substrates with MBE/PVD AlN seed layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 498-501.	0.8	4

#	ARTICLE	IF	CITATIONS
163	Piezoelectric MEMS resonators based on ultrathin epitaxial GaN heterostructures on Si. Journal of Micromechanics and Microengineering, 2016, 26, 105015.	2.6	4
164	CVD Growth of Graphene on SiC (0001): Influence of Substrate Offcut. Materials Science Forum, 0, 897, 731-734.	0.3	4
165	A combined growth process for state-of-the-art GaN on silicon. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600449.	1.8	4
166	Optical and Thermal Performances of (Ga,In)N/GaN Light Emitting Diodes Transferred on a Flexible Tape. IEEE Photonics Technology Letters, 2018, 30, 1567-1570.	2.5	4
167	Cathodoluminescence and electrical study of vertical GaN-on-GaN Schottky diodes with dislocation clusters. Journal of Crystal Growth, 2020, 552, 125911.	1.5	4
168	Measurement of Pulsed Current-Voltage Characteristics of AlGaIn/GaN HEMTs from Room Temperature to 15 K. Acta Physica Polonica A, 2011, 119, 196-198.	0.5	4
169	Micro-Raman characterization of homo-epitaxial n doped GaN layers for vertical device applications. AIP Advances, 2022, 12, 025126.	1.3	4
170	A 5.7 THz GaN/AlGaIn quantum cascade detector based on polar step quantum wells. Applied Physics Letters, 2022, 120, .	3.3	4
171	Selective area etching of heterostructures using AsCl <sub>3</sub> . Journal of Crystal Growth, 1997, 170, 674-678.	1.5	3
172	Influence on power performances at 60 GHz of indium composition in metamorphic HEMTs. Electronics Letters, 1999, 35, 1489.	1.0	3
173	Growth by molecular beam epitaxy of AlGaIn/GaN high electron mobility transistors on Si-on-polySiC. Superlattices and Microstructures, 2006, 40, 359-362.	3.1	3
174	2DEG HEMT Mobility vs Inversion Channel MOSFET Mobility. Materials Science Forum, 0, 645-648, 1207-1210.	0.3	3
175	GaN Ohmic contact resistance vs temperature. , 2011, , .		3
176	Ohmic Contact Resistance to GaN Devices Dependence with on Temperature for GaN Devices T. Materials Science Forum, 0, 679-680, 816-819.	0.3	3
177	Structural and Electrical Properties of Graphene Films Grown by Propane/Hydrogen CVD on 6H-SiC(0001). Materials Science Forum, 0, 717-720, 625-628.	0.3	3
178	Reverse current thermal activation of AlGaIn/GaN HEMTs on Si(111). Microelectronics Reliability, 2012, 52, 2547-2550.	1.7	3
179	Two-dimensional dopant profiling of gallium nitride p-n junctions by scanning capacitance microscopy. Nuclear Instruments & Methods in Physics Research B, 2016, 372, 67-71.	1.4	3
180	Crack Statistics and Stress Analysis of Thick GaN on Patterned Silicon Substrate. Physica Status Solidi (B): Basic Research, 2018, 255, 1700399.	1.5	3

#	ARTICLE	IF	CITATIONS
181	Selective GaN sublimation and local area regrowth for co-integration of enhancement mode and depletion mode Al(Ga)N/GaN high electron mobility transistors. Semiconductor Science and Technology, 2021, 36, 024001.	2.0	3
182	MBE growth of high quality AlGaIn/GaN HEMTs on resistive Si[111] substrate with RF small signal and power performances. , 0, , .		2
183	Low-frequency noise behavior in GaN HEMTs on silicon substrate. , 2004, , .		2
184	High temperature pulsed measurements of AlGaIn/GaN HEMTs on high resistive Si(111) substrate. Microwave and Optical Technology Letters, 2006, 48, 2303-2305.	1.4	2
185	Growth of GaN based structures on focused ion beam patterned templates. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1516-1519.	0.8	2
186	Terahertz transmission and effective gain measurement of two-dimensional electron gas. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1454-1458.	1.8	2
187	Buried defects induced by plasma assisted molecular beam epitaxy of AlN and GaN on Silicon. Journal of Crystal Growth, 2019, 507, 220-225.	1.5	2
188	New barrier layer design for the fabrication of gallium nitride-metal-insulator-semiconductor-high electron mobility transistor normally-off transistor. Semiconductor Science and Technology, 2021, 36, 034002.	2.0	2
189	Hot Electron Transistors with Graphene Base for THz Electronics. , 2018, , 95-115.		2
190	Transport properties of a thin GaN channel formed in an Al <sub>0.9</sub> Ga <sub>0.1</sub> N/GaN heterostructure grown on AlN/sapphire template. Journal of Applied Physics, 2022, 131, 124501.	2.5	2
191	Metamorphic HEMT on GaAs: MBE growth and device performance. Microelectronic Engineering, 1992, 19, 317-320.	2.4	1
192	High-Performance In <sub>0.3</sub> Ga <sub>0.7</sub> As/In <sub>0.29</sub> Al <sub>0.71</sub> As/GaAs Metamorphic High-Electron-Mobility Transistor. Japanese Journal of Applied Physics, 1994, 33, 3343-3347.	1.5	1
193	Kinetics of AsCl <sub>3</sub> chemical beam etching of GaAs(001), (111)A and (111)B surfaces. Journal of Crystal Growth, 1999, 201-202, 614-618.	1.5	1
194	Comparison of InAs islands self-assembled on pseudomorphic and metamorphic InAlAs buffer layers grown on GaAs substrate. Journal of Crystal Growth, 2001, 227-228, 1016-1019.	1.5	1
195	Interplays between plastic relaxation, surface morphology and composition modulation in InAlAs graded buffer layers under various growth conditions. , 0, , .		1
196	Influence of growth conditions on the structural, optical and electrical quality of MBE grown InAlAs/InGaAs metamorphic HEMTs on GaAs. , 0, , .		1
197	AlGaIn/GaN HEMTs on Resistive Si(111) Substrate: From Material Assessment to RF Power Performances. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 61-64.	0.8	1
198	Layer quality and 2DEG behavior in AlGaIn/GaN HEMTs grown by Molecular Beam Epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2195-2198.	0.8	1

#	ARTICLE	IF	CITATIONS
199	Realization of AlGa <sub>x</sub> N/GaN HEMTs on Si-on-polySiC substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2670-2673.	0.8	1
200	Anomalous Hall Effect in Gd-implanted Wurtzite Al <sub>x</sub> Ga <sub>1-x</sub> N High Electron Mobility Transistor Structures. Materials Research Society Symposia Proceedings, 2008, 1111, 1.	0.1	1
201	Performance of Unstuck $\hat{\Delta}$ Gate AlGa <sub>x</sub> N/GaN HEMTs on (001) Silicon Substrate at 10 GHz. , 2008, , .		1
202	Luminescence and reflectivity characterization of AlGa <sub>x</sub> N/GaN high electron mobility transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S715.	0.8	1
203	Gallium nitride approach for MEMS resonators with highly tunable piezo-amplified transducers. , 2011, , .		1
204	CVD Growth of Graphene on 2 $\times$ 3C-SiC/Si Templates: Influence of Substrate Orientation and Wafer Homogeneity. Materials Science Forum, 0, 717-720, 621-624.	0.3	1
205	Magnetotransport in a two-subband AlGa <sub>x</sub> N/GaN heterostructure in the presence of mixed disorder. EPJ Applied Physics, 2014, 68, 20102.	0.7	1
206	Development of technological building blocks for the monolithic integration of ammonia-MBE-grown GaN-HEMTs with silicon CMOS. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 917-924.	1.8	1
207	Voltage Controlled Terahertz Transmission Enhancement through GaN Quantum Wells. Acta Physica Polonica A, 2011, 119, 107-110.	0.5	1
208	Effects of mismatch strain and alloy composition on the formation of InAs islands on InAlAs templates. Journal of Electronic Materials, 2001, 30, 453-458.	2.2	0
209	AlGa <sub>x</sub> N/GaN HEMTs on (001) oriented silicon substrate based on 100nm SiN recessed gate technology for low cost device fabrication. , 2007, , .		0
210	Growth of AlGa <sub>x</sub> N/GaN HEMTs on Silicon Substrates by MBE. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	0
211	Growth of AlGa <sub>x</sub> N/GaN HEMTs on 3C-SiC/Si(111) Substrates. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	0
212	Analysis of the C-V characteristic in SiO <sub>2</sub> /Ga <sub>x</sub> N MOS capacitors. , 2009, , .		0
213	Preliminary results of bench implementation for the study of terahertz amplification in gallium nitride quantum wells. Journal of Physics: Conference Series, 2009, 193, 012094.	0.4	0
214	Comparison of GaN-based MOS structures with different interfacial layer treatments. , 2010, , .		0
215	Enhanced terahertz transmission of GaN quantum wells. , 2010, , .		0
216	Comparison of Electrical Behavior of GaN-Based MOS Structures Obtained by Different PECVD Process. Materials Science Forum, 0, 711, 228-232.	0.3	0

#	ARTICLE	IF	CITATIONS
217	Magnetotransport studies of AlGaN/GaN heterostructures with two-dimensional electron gas in parallel with a three-dimensional Al-graded layer: Incorrect hole type determination. Journal of Applied Physics, 2013, 114, 023704.	2.5	0
218	Room temperature generation of THz radiation in GaN quantum wells structures. Proceedings of SPIE, 2013, , .	0.8	0
219	Polarization Engineering of Al(Ga)N/GaN HEMT Structures for Microwave High Power Applications. Materials Science Forum, 0, 806, 81-87.	0.3	0
220	Erratum to "Gallium Nitride as an Electromechanical Material"[Dec 14 1252-1271]. Journal of Microelectromechanical Systems, 2015, 24, 249-249.	2.5	0
221	Characterization and modeling of traps and RF frequency dispersion in AlGaN/AlN/GaN HEMTs. , 2016, , .		0
222	Transport characteristics of AlGaN/GaN structures for amplification of terahertz radiations. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	0
223	AlGaN/GaN High Electron Mobility Transistors Grown by MOVPE on 3C-SiC/Si(111) for RF Applications. Materials Science Forum, 0, 1062, 482-486.	0.3	0
224	Selective sublimation of GaN and regrowth of AlGaN to co-integrate enhancement mode and depletion mode high electron mobility transistors. Journal of Crystal Growth, 2022, , 126779.	1.5	0