

# Fernando Calle

## List of Publications by Year in descending order

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203  
papers

7,046  
citations

76196

40  
h-index

66788

78  
g-index

204  
all docs

204  
docs citations

204  
times ranked

6364  
citing authors

#	ARTICLE	IF	CITATIONS
1	Wide-bandgap semiconductor ultraviolet photodetectors. <i>Semiconductor Science and Technology</i> , 2003, 18, R33-R51.	1.0	1,196
2	Luminescence properties and defects in GaN nanocolumns grown by molecular beam epitaxy. <i>Physical Review B</i> , 2000, 62, 16826-16834.	1.1	345
3	The effect of the III/V ratio and substrate temperature on the morphology and properties of GaN- and AlN-layers grown by molecular beam epitaxy on Si(1 1 1). <i>Journal of Crystal Growth</i> , 1998, 183, 23-30.	0.7	303
4	III nitrides and UV detection. <i>Journal of Physics Condensed Matter</i> , 2001, 13, 7115-7137.	0.7	229
5	High-performance GaN p-n junction photodetectors for solar ultraviolet applications. <i>Semiconductor Science and Technology</i> , 1998, 13, 1042-1046.	1.0	205
6	Yellow luminescence and related deep states in undoped GaN. <i>Physical Review B</i> , 1997, 55, 4689-4694.	1.1	203
7	Growth of III-nitrides on Si(111) by molecular beam epitaxy Doping, optical, and electrical properties. <i>Journal of Crystal Growth</i> , 1999, 201-202, 296-317.	0.7	189
8	AlGaIn-based UV photodetectors. <i>Journal of Crystal Growth</i> , 2001, 230, 537-543.	0.7	153
9	Synthesis of c-axis oriented AlN thin films on different substrates: A review. <i>Materials Research Bulletin</i> , 2010, 45, 1039-1045.	2.7	129
10	AlGaIn metal-semiconductor-metal photodiodes. <i>Applied Physics Letters</i> , 1999, 74, 3401-3403.	1.5	126
11	Wet etching of GaN grown by molecular beam epitaxy on Si(111). <i>Semiconductor Science and Technology</i> , 2000, 15, 996-1000.	1.0	120
12	A review on 2D transition metal di-chalcogenides and metal oxide nanostructures based NO <sub>2</sub> gas sensors. <i>Materials Science in Semiconductor Processing</i> , 2020, 107, 104865.	1.9	110
13	Recent trends in graphene supercapacitors: from large area to microsupercapacitors. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1235-1254.	2.5	105
14	Analysis and modeling of Al <sub>x</sub> Ga <sub>1-x</sub> N-based Schottky barrier photodiodes. <i>Journal of Applied Physics</i> , 2000, 88, 2081-2091.	1.1	97
15	Coupling Light into Graphene Plasmons through Surface Acoustic Waves. <i>Physical Review Letters</i> , 2013, 111, 237405.	2.9	95
16	Super-High-Frequency SAW Resonators on AlN/Diamond. <i>IEEE Electron Device Letters</i> , 2012, 33, 495-497.	2.2	93
17	Effect of Ga/Si interdiffusion on optical and transport properties of GaN layers grown on Si(111) by molecular-beam epitaxy. <i>Physical Review B</i> , 1998, 58, 1550-1559.	1.1	92
18	Metalorganic vapor-phase epitaxy-grown AlGaIn materials for visible-blind ultraviolet photodetector applications. <i>Journal of Applied Physics</i> , 1999, 86, 5286-5292.	1.1	92

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19	High precision pressure sensors based on SAW devices in the GHz range. Sensors and Actuators A: Physical, 2013, 189, 364-369.	2.0	89
20	Assessment of GaN metal-semiconductor-metal photodiodes for high-energy ultraviolet photodetection. Applied Physics Letters, 2002, 80, 3198-3200.	1.5	86
21	Neutrino physics with the PTOLEMY project: active neutrino properties and the light sterile case. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 047-047.	1.9	85
22	Al <sub>x</sub> Ga <sub>1-x</sub> N:Si Schottky barrier photodiodes with fast response and high detectivity. Applied Physics Letters, 1998, 73, 2146-2148.	1.5	73
23	Strong localization in InGaN layers with high In content grown by molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 231-233.	1.5	72
24	Nanoindentation on AlGaIn thin films. Journal of Applied Physics, 1999, 86, 6773-6778.	1.1	65
25	Engineering of an insulating buffer and use of AlN interlayers: two optimisations for AlGaIn/GaN HEMT-like structures. Physica Status Solidi A, 2003, 195, 93-100.	1.7	64
26	Simple and Accurate Method to Estimate Channel Temperature and Thermal Resistance in AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2013, 60, 4105-4111.	1.6	55
27	Exciton and donor-acceptor recombination in undoped GaN on Si(111). Semiconductor Science and Technology, 1997, 12, 1396-1403.	1.0	53
28	Optimization of AlN thin layers on diamond substrates for high frequency SAW resonators. Materials Letters, 2012, 66, 339-342.	1.3	52
29	Direct comparison of traps in InAlN/GaN and AlGaIn/GaN high electron mobility transistors using constant drain current deep level transient spectroscopy. Applied Physics Letters, 2013, 103, .	1.5	51
30	Simulation of thermal management in AlGaIn/GaN HEMTs with integrated diamond heat spreaders. Semiconductor Science and Technology, 2013, 28, 055010.	1.0	50
31	High-responsivity submicron metal-semiconductor-metal ultraviolet detectors. Applied Physics Letters, 2002, 81, 1902-1904.	1.5	49
32	Polyaniline nanofiber sponge filled graphene foam as high gravimetric and volumetric capacitance electrode. Journal of Power Sources, 2016, 317, 35-42.	4.0	49
33	Visible-blindness in photoconductive and photovoltaic AlGaIn ultraviolet detectors. Journal of Electronic Materials, 1999, 28, 240-245.	1.0	46
34	Reduced graphene oxide/polyaniline electrochemical supercapacitors fabricated by laser. Applied Surface Science, 2019, 467-468, 691-697.	3.1	45
35	Experimental evidence for a Be shallow acceptor in GaN grown on Si(111) by molecular beam epitaxy. Semiconductor Science and Technology, 1998, 13, 1130-1133.	1.0	43
36	Resonant-cavity InGaIn multiple-quantum-well green light-emitting diode grown by molecular-beam epitaxy. Applied Physics Letters, 2002, 80, 2198-2200.	1.5	43

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37	The Kink Effect at Cryogenic Temperatures in Deep Submicron AlGaIn/GaN HEMTs. IEEE Electron Device Letters, 2009, 30, 209-212.	2.2	43
38	Conduction band engineering in piezoelectric [111] multiple quantum well photodiodes. Applied Physics Letters, 1994, 65, 2214-2216.	1.5	42
39	High visible rejection AlGaIn photodetectors on Si(111) substrates. Applied Physics Letters, 2000, 76, 2785-2787.	1.5	42
40	Si-doped Al <sub>x</sub> Ga <sub>1-x</sub> N photoconductive detectors. Semiconductor Science and Technology, 1999, 14, 685-689.	1.0	40
41	Molecular beam epitaxy growth and doping of III-nitrides on Si(111): layer morphology and doping efficiency. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 82, 2-8.	1.7	40
42	Thermal stability of Pt- and Ni-based Schottky contacts on GaN and Al <sub>0.31</sub> Ga <sub>0.69</sub> N. Semiconductor Science and Technology, 2002, 17, L47-L54.	1.0	40
43	Time response analysis of ZnSe-based Schottky barrier photodetectors. Applied Physics Letters, 2000, 77, 2761-2763.	1.5	39
44	Growth optimization and doping with Si and Be of high quality GaN on Si(111) by molecular beam epitaxy. Journal of Electronic Materials, 1998, 27, 276-281.	1.0	37
45	Anisotropy-induced polarization mixture of surface acoustic waves in GaN/c-sapphire heterostructures. Physical Review B, 2005, 72, .	1.1	37
46	Impact of Intrinsic Stress in Diamond Capping Layers on the Electrical Behavior of AlGaIn/GaN HEMTs. IEEE Transactions on Electron Devices, 2013, 60, 3149-3156.	1.6	37
47	Effects of $\text{N}_2$ Plasma Pretreatment on the SiN Passivation of AlGaIn/GaN HEMT. IEEE Electron Device Letters, 2008, 29, 209-211.	2.2	36
48	Nanotechnology for SAW devices on AlN epilayers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 154-158.	1.7	34
49	Automatic graphene transfer system for improved material quality and efficiency. Scientific Reports, 2016, 6, 21676.	1.6	34
50	GaN-based solar-ultraviolet detection instrument. Applied Optics, 1998, 37, 5058.	2.1	33
51	Nitride-based surface acoustic wave devices and applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 976-983.	0.8	32
52	Relaxation of InGaAs layers grown on (111)B GaAs. Applied Physics Letters, 1994, 65, 3212-3214.	1.5	31
53	Analysis of the Visible and UV Electroluminescence in Homojunction GaN LED's. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	30
54	Visible-blind ultraviolet photodetectors based on ZnMgBeSe Schottky barrier diodes. Applied Physics Letters, 2001, 78, 4190-4192.	1.5	29

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55	Role of surface trap states on two-dimensional electron gas density in InAlN/AlN/GaN heterostructures. Applied Physics Letters, 2012, 100, .	1.5	28
56	Physics-Based Analytical Model for Input, Output, and Reverse Capacitance of a GaN HEMT With the Field-Plate Structure. IEEE Transactions on Power Electronics, 2017, 32, 2189-2202.	5.4	28
57	Hypersonic characterization of sound propagation velocity in Al <sub>x</sub> Ga <sub>1-x</sub> N thin films. Journal of Applied Physics, 2002, 92, 6868-6874.	1.1	27
58	Effects of Bias on the Responsivity of GaN Metal-Semiconductor-Metal Photodiodes. Physica Status Solidi A, 1999, 176, 157-161.	1.7	26
59	Submicron technology for III-nitride semiconductors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 2071.	1.6	26
60	High-quality distributed Bragg reflectors based on Al <sub>x</sub> Ga <sub>1-x</sub> N/GaN multilayers grown by molecular-beam epitaxy. Applied Physics Letters, 2001, 79, 2136-2138.	1.5	25
61	Active SAW devices on 2DEG heterostructures. Electronics Letters, 2004, 40, 1384.	0.5	25
62	A design for an electromagnetic filter for precision energy measurements at the tritium endpoint. Progress in Particle and Nuclear Physics, 2019, 106, 120-131.	5.6	24
63	Low frequency noise and screening effects in AlGa <sub>x</sub> N/GaN HEMTs. Electronics Letters, 1998, 34, 2357.	0.5	23
64	AlGa <sub>x</sub> N Photodiodes For Monitoring Solar UV Radiation. Journal of Geophysical Research, 2000, 105, 4865-4871.	3.3	23
65	In situ growth monitoring of distributed Ga <sub>x</sub> Al <sub>1-x</sub> N Bragg reflectors by metalorganic vapor phase epitaxy. Applied Physics Letters, 2002, 80, 174-176.	1.5	23
66	High UV/visible contrast photodiodes based on epitaxial lateral overgrown GaN layers. Electronics Letters, 1999, 35, 1488.	0.5	22
67	Application and Performance of GaN Based UV Detectors. Physica Status Solidi A, 2001, 185, 91-97.	1.7	22
68	Structural and optical characterization of thick InGa <sub>x</sub> N layers and InGa <sub>x</sub> N/GaN MQW grown by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 131-134.	1.7	22
69	Morphology and optical properties of InN layers grown by molecular beam epitaxy on silicon substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 2289-2292.	0.8	22
70	Static and dynamic determination of the mechanical properties of nanocrystalline diamond micromachined structures. Journal of Micromechanics and Microengineering, 2009, 19, 115016.	1.5	22
71	Impact of $\text{N}_2$ Plasma Power Discharge on AlGa <sub>x</sub> N/GaN HEMT Performance. IEEE Transactions on Electron Devices, 2012, 59, 374-379.	1.6	22
72	Investigation of AlInN barrier ISFET structures with GaN capping for pH detection. Sensors and Actuators B: Chemical, 2013, 176, 704-707.	4.0	22

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73	Frequency gaps for folded acoustic phonons in superlattices. Solid State Communications, 1989, 72, 1153-1158.	0.9	21
74	High detectivity ZnSe-based Schottky barrier photodetectors for blue and near-ultraviolet spectral range. Electronics Letters, 2000, 36, 826.	0.5	21
75	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
76	MBE growth of GaN and AlGaIn layers on Si(111) substrates: doping effects. Journal of Crystal Growth, 1999, 201-202, 415-418.	0.7	20
77	AlGaIn photodetectors grown on Si(111) by molecular beam epitaxy. Journal of Crystal Growth, 2001, 230, 544-548.	0.7	20
78	Acoustically-driven surface and hyperbolic plasmon-phonon polaritons in graphene/h-BN heterostructures on piezoelectric substrates. Journal Physics D: Applied Physics, 2018, 51, 204004.	1.3	20
79	Double Raman resonances induced by a magnetic field in GaAs-AlAs multiple quantum wells. Physical Review B, 1991, 44, 1113-1117.	1.1	19
80	Low-noise metal-insulator-semiconductor UV photodiodes based on GaN. Electronics Letters, 2000, 36, 2096.	0.5	19
81	Voltage tunable surface acoustic wave phase shifter on AlGaIn/GaN. Applied Physics Letters, 2010, 96, .	1.5	19
82	Strain diagnosis of (001) and (111) InGaAs layers by optical techniques. Physica Status Solidi A, 1995, 152, 201-209.	1.7	18
83	Yellow Band and Deep levels in Undoped MOVPE GaN.. MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	18
84	Schottky Barrier Ultraviolet Photodetectors on Epitaxial Lateral Overgrown GaN. Physica Status Solidi A, 1999, 176, 141-145.	1.7	18
85	Reliability of Schottky Contacts on AlGaIn. Physica Status Solidi A, 2001, 188, 367-370.	1.7	18
86	Ultraviolet Photodetectors Based on Al <sub>x</sub> Ga <sub>1-x</sub> N Schottky Barriers. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	17
87	Luminescence of Be-doped GaN layers grown by molecular beam epitaxy on Si (111).. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	17
88	Remote collection and measurement of photogenerated carriers swept by surface acoustic waves in GaN. Applied Physics Letters, 2004, 84, 3166-3168.	1.5	17
89	High-Temperature Microwave Performance of Submicron AlGaIn/GaN HEMTs on SiC. IEEE Electron Device Letters, 2009, 30, 808-810.	2.2	17
90	MBE-grown high-quality (Al,Ga)N/GaN distributed Bragg reflectors for resonant cavity LEDs. Semiconductor Science and Technology, 2001, 16, 913-917.	1.0	16

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91	Nitride RCLEDs Grown by MBE for POF Applications. <i>Physica Status Solidi A</i> , 2002, 192, 277-285.	1.7	16
92	Exciton impact-ionization dynamics modulated by surface acoustic waves in GaN. <i>Physical Review B</i> , 2007, 75, .	1.1	16
93	Influence of substrate crystallography on the room temperature synthesis of AlN thin films by reactive sputtering. <i>Applied Surface Science</i> , 2011, 257, 9306-9313.	3.1	16
94	Excitonic spectrum of [111] GaAs/GaxAl1- $\tilde{x}$ As quantum wells. <i>Physical Review B</i> , 1992, 46, 13234-13243.	1.1	15
95	Graphene foam functionalized with electrodeposited nickel hydroxide for energy applications. <i>Diamond and Related Materials</i> , 2015, 57, 63-67.	1.8	15
96	Thermal Assessment of AlGaIn/GaN MOS-HEMTs on Si Substrate Using Gd <sub>2</sub> O <sub>3</sub> as Gate Dielectric. <i>IEEE Transactions on Electron Devices</i> , 2016, 63, 2729-2734.	1.6	15
97	Effects of Gd <sub>2</sub> O <sub>3</sub> Gate Dielectric on Proton-Irradiated AlGaIn/GaN HEMTs. <i>IEEE Electron Device Letters</i> , 2017, 38, 611-614.	2.2	15
98	Advanced Graphene-Based Transparent Conductive Electrodes for Photovoltaic Applications. <i>Micromachines</i> , 2019, 10, 402.	1.4	15
99	Study of high quality AlN layers grown on Si(111) substrates by plasma-assisted molecular beam epitaxy. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1997, 2, 1.	1.0	14
100	Influence of the surface morphology on the relaxation of low-strained In <sub>x</sub> Ga <sub>1-<math>\tilde{x}</math></sub> As linear buffer structures. <i>Journal of Crystal Growth</i> , 1997, 182, 281-291.	0.7	14
101	High frequency SAW devices on AlGaIn: fabrication, characterization and integration with optoelectronics. , 0, , .		14
102	Selective etching of AlInN/GaN heterostructures for MEMS technology. <i>Microelectronic Engineering</i> , 2007, 84, 1152-1156.	1.1	14
103	Impact of device geometry at different ambient temperatures on the self-heating of GaN-based HEMTs. <i>Semiconductor Science and Technology</i> , 2014, 29, 115013.	1.0	14
104	MnO <sub>2</sub> -Based Electrochemical Supercapacitors on Flexible Carbon Substrates. <i>Journal of Electronic Materials</i> , 2014, 43, 1188-1193.	1.0	14
105	Thermal and Electrical Stability Assessment of AlGaIn/GaN Metal-oxide-Semiconductor High-Electron Mobility Transistors (MOS-HEMTs) With HfO <sub>2</sub> Gate Dielectric. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 3142-3148.	1.6	14
106	Dynamic Local Strain in Graphene Generated by Surface Acoustic Waves. <i>Nano Letters</i> , 2020, 20, 402-409.	4.5	14
107	Resonant Raman scattering in [111] GaAs/AlAs short-period superlattices. <i>Physical Review B</i> , 1991, 43, 9152-9157.	1.1	13
108	Low noise AlGaIn metal-semiconductor-metal photodiodes. <i>Electronics Letters</i> , 1999, 35, 240.	0.5	12

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109	Vertical conduction mechanism of the epitaxial graphene/n-type 4H-SiC heterojunction at cryogenic temperatures. <i>Applied Physics Letters</i> , 2012, 100, 193506.	1.5	12
110	Low pressure MOVPE grown AlGaIn for UV photodetector applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1999, 59, 401-406.	1.7	11
111	(Al,Ga)N Ultraviolet Photodetectors and Applications. <i>Physica Status Solidi A</i> , 2000, 180, 293-300.	1.7	11
112	Trapping phenomena in AlGaIn and InAlN barrier HEMTs with different geometries. <i>Semiconductor Science and Technology</i> , 2015, 30, 035015.	1.0	11
113	Exciton-Plasmon Coupling in 2D Semiconductors Accessed by Surface Acoustic Waves. <i>ACS Photonics</i> , 2021, 8, 1698-1704.	3.2	11
114	Electrical and optical characterization of Mg, Mg/P, and Mg/Ar implants into InP:Fe. <i>Journal of Electronic Materials</i> , 1995, 24, 59-67.	1.0	10
115	Plasma-assisted MBE growth of group-III nitrides: from basics to device applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 189-196.	1.7	10
116	Anisotropic propagation of surface acoustic waves on nitride layers. <i>Superlattices and Microstructures</i> , 2004, 36, 815-823.	1.4	10
117	High temperature assessment of nitride-based devices. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 189-193.	1.1	10
118	Fabrication of sub-100nm IDT SAW devices on insulating, semiconducting and conductive substrates. <i>Journal of Materials Processing Technology</i> , 2012, 212, 707-712.	3.1	10
119	Improvement of the adhesion between polyaniline and commercial carbon paper by acid treatment and its application in supercapacitor electrodes. <i>Composite Interfaces</i> , 2016, 23, 133-143.	1.3	10
120	Yellow luminescence in Mg-doped GaN. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , 1997, 2, 1.	1.0	9
121	Study of (Al,Ga)N Bragg Mirrors Grown on Al <sub>2</sub> O <sub>3</sub> (0001) and Si(111) by Metalorganic Vapor Phase Epitaxy. <i>Physica Status Solidi A</i> , 2001, 188, 899-903.	1.7	9
122	Diamond underlayer microstructure effect on the orientation of AlN piezoelectric layers for high frequency SAW resonators by TEM. <i>Microelectronic Engineering</i> , 2013, 112, 193-197.	1.1	9
123	Method for extracting relevant electrical parameters from graphene field-effect transistors using a physical model. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	9
124	Optical characterization of [111]B InGaAs layers. <i>Microelectronics Journal</i> , 1995, 26, 821-826.	1.1	8
125	Present Status of III-Nitride Based Photodetectors. <i>Materials Research Society Symposia Proceedings</i> , 2000, 622, 371.	0.1	8
126	Novel Approaches for Metal-Semiconductor-Metal GaN UV Photodetectors. <i>Physica Status Solidi A</i> , 2002, 194, 476-479.	1.7	8



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127	AlN buffer layer thickness influence on inversion domains in GaN/AlN/Si(111). <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 181-184.	1.7	8
128	High temperature characterization of Pt-based Schottky diodes on AlGaIn/GaN heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2006, 3, 1709-1712.	0.8	8
129	Effect of substrate-target distance and sputtering pressure in the synthesis of AlN thin films. <i>Microsystem Technologies</i> , 2011, 17, 381-386.	1.2	8
130	Volume charge carrier number fluctuations probed by low frequency noise measurements in InN layers. <i>Applied Physics Letters</i> , 2011, 98, 252104.	1.5	8
131	Post-CMOS compatible high-throughput fabrication of AlN-based piezoelectric microcantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 025003.	1.5	8
132	Fast AlGaIn metal-semiconductor-metal photodetectors grown on Si(111). <i>Electronics Letters</i> , 2001, 37, 239.	0.5	7
133	Effect of Dielectric Layers on the Performance of AlGaIn-Based UV Schottky Photodiodes. <i>Physica Status Solidi A</i> , 2001, 188, 307-310.	1.7	7
134	Nanocrack-induced leakage current in AlInN/AlN/GaN. <i>Scripta Materialia</i> , 2012, 66, 327-330.	2.6	7
135	Influence of interface dislocations on surface kinetics during epitaxial growth of InGaAs. <i>Applied Surface Science</i> , 1998, 123-124, 303-307.	3.1	6
136	Interplay between GaN and AlN sublattices in wurtzite Al <sub>x</sub> Ga <sub>1-x</sub> N alloys revealed by Raman spectroscopy. <i>Journal of Applied Physics</i> , 2002, 92, 223-226.	1.1	6
137	Voltage controlled SAW filters on 2DEG AlGaIn/GaN heterostructures. , 0, , .		6
138	Influence of temperature and drain current on source and drain resistances in AlGaIn/GaN HEMTs. <i>Solid-State Electronics</i> , 2011, 63, 184-188.	0.8	6
139	Thermionic-Field Emission Barrier Between Nanocrystalline Diamond and Epitaxial 4H-SiC. <i>IEEE Electron Device Letters</i> , 2014, 35, 1173-1175.	2.2	6
140	Participation of women in doctorate, research, innovation, and management activities at Universidad Politcnica de Madrid: analysis of the decade 2006-2016. <i>Scientometrics</i> , 2019, 120, 1059-1089.	1.6	6
141	Resonant Raman scattering in GaAs-AlAs quantum wells under high magnetic fields. <i>Superlattices and Microstructures</i> , 1991, 10, 217-219.	1.4	5
142	AlGaIn-based photodetectors for solar UV applications. , 1999, 3629, 200.		5
143	High-Quality Distributed Bragg Reflectors for Resonant-Cavity Light-Emitting Diode Applications. <i>Physica Status Solidi A</i> , 2002, 192, 389-393.	1.7	5
144	Brillouin characterization of the acoustic waves phase-velocity in Al <sub>x</sub> Ga <sub>1-x</sub> N epilayers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 168-171.	1.7	5

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145	GaN reactive ion etching using SiCl <sub>4</sub> :Ar:SF <sub>6</sub> chemistry. Journal of Materials Science: Materials in Electronics, 2005, 16, 409-413.	1.1	5
146	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
147	Gate Oxide Stability of 4H-SiC MOSFETs under On/Off-State Bias-Temperature Stress. Materials Science Forum, 0, 740-742, 553-556.	0.3	5
148	Electroreflectance characterization of AlInGaIn/GaN high-electron mobility heterostructures. Semiconductor Science and Technology, 2015, 30, 085014.	1.0	5
149	Simulation of temperature and electric field-dependent barrier traps effects in AlGaIn/GaN HEMTs. Semiconductor Science and Technology, 2015, 30, 015010.	1.0	5
150	Effect of quasiparticle excitations and exchange-correlation in Coulomb drag in graphene. Communications Physics, 2019, 2, .	2.0	5
151	Crystal Morphology and Optical Emissions of GaN layers grown on Si(111) substrates by Molecular Beam Epitaxy. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	5
152	From Ultraviolet to Green InGaIn-Based Conventional and Resonant-Cavity Light-Emitting Diodes Grown by Molecular Beam Epitaxy. Physica Status Solidi A, 2002, 192, 341-347.	1.7	4
153	Growth and characterization of high-quality 10-period AlGaIn/GaN Bragg reflectors grown by molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 31-34.	1.7	4
154	AlGaIn/GaN HEMTs: material, processing, and characterization. Journal of Materials Science: Materials in Electronics, 2003, 14, 271-277.	1.1	4
155	Investigation of InN layers grown by molecular beam epitaxy on GaN templates. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1079-1082.	0.8	4
156	Structural and morphological studies on wet-etched InAlGaIn barrier HEMT structures. Semiconductor Science and Technology, 2013, 28, 055007.	1.0	4
157	Physical modeling and optimization of a GaN HEMT design with a field plate structure for high frequency application. , 2014, , .		4
158	Non-uniform strain relaxation in In <sub>x</sub> Ga <sub>1-x</sub> As layers. Solid-State Electronics, 1996, 40, 647-651.	0.8	3
159	High-quality Si-implanted In <sub>0.53</sub> Ga <sub>0.47</sub> As epitaxial layers and their application to n+p junction devices. Journal of Applied Physics, 2000, 87, 3478-3482.	1.1	3
160	Fabrication and characterization at high temperature of AlGaIn/GaN enhancement-mode HEMTs. , 2011, , .		3
161	Modification of strain and 2DEG density induced by wafer bending of AlGaIn/GaN heterostructure: Influence of edges caused by processing. AIP Advances, 2018, 8, 035318.	0.6	3
162	Double Raman resonances by light and heavy magneto-excitons in GaAs/AlAs multi-quantum wells. Surface Science, 1992, 267, 418-421.	0.8	2

#	ARTICLE	IF	CITATIONS
163	Resonance raman scattering in CdTe/CdMnTe superlattices under a magnetic field. Solid State Communications, 1992, 83, 539-543.	0.9	2
164	Incorporation of Be Into In <sub>x</sub> Ga <sub>1-x</sub> As (0.004â%â%0.17) Studied by Photoluminescence and Resonant Raman Spectroscopy of Local Vibrational Modes. Materials Science Forum, 1993, 143-147, 241-246.	0.3	2
165	Optical and electrical characterization of GaN layers grown on silicon and sapphire substrates. Solid-State Electronics, 1996, 40, 81-84.	0.8	2
166	Novel Sensor Applications of group-III nitrides. Materials Research Society Symposia Proceedings, 2001, 693, 253.	0.1	2
167	Characterization of schottky contacts on n-GaN at high temperature. , 0, , .		2
168	6C-3 Field-Effect-Modulated SAW Devices on AlGaIn/GaN Heterostructures. , 2006, , .		2
169	Fabrication and stress relief modelling of GaN based MEMS test structures grown by MBE on Si(111). Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1974-1976.	0.8	2
170	Etching of AlGaIn/GaN HEMT structures by Cl <sup>2</sup> -based ICP. , 2013, , .		2
171	Impact of AlN Spacer on Metalâ€“Semiconductorâ€“Metal Ptâ€“InAlGaIn/GaN Heterostructures for Ultraviolet Detection. Japanese Journal of Applied Physics, 2013, 52, 08JK04.	0.8	2
172	PostCMOS compatible sacrificial layers for aluminum nitride microcantilevers. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2014, 13, 043012.	1.0	2
173	Physical model for GaN HEMT design optimization in high frequency switching applications. , 2014, , .		2
174	Impact of 2D-Graphene on SiN Passivated AlGaIn/GaN MIS-HEMTs Under Mist Exposure. IEEE Electron Device Letters, 2017, 38, 1441-1444.	2.2	2
175	Resonant Raman Scattering in GaAs-AlAs Multiquantum Wells Under Magnetic Fields. NATO ASI Series Series B: Physics, 1991, , 53-61.	0.2	2
176	Resonant raman scattering in GaAsâ€“AlAs coupled double wells. Surface Science, 1990, 228, 176-179.	0.8	1
177	Conduction band engineering in InGaAs/GaAs [111] multiple quantum well p-i-n photodiodes. Superlattices and Microstructures, 1993, 14, 287.	1.4	1
178	Influence of In on Si local vibrational modes in In <sub>x</sub> Ga <sub>1-x</sub> As (0â%â%0.12). Journal of Applied Physics, 1994, 76, 7797-7804.	1.1	1
179	A Raman spectroscopic study of the Si, Be, and C incorporation in In <sub>x</sub> Ga <sub>1-x</sub> As relaxed layers. Journal of Applied Physics, 1995, 78, 4690-4695.	1.1	1
180	Interplay between Interface Dislocations and Surface Kinetic: A Contribution to the Roughness of Strained Epitaxial Layers. Defect and Diffusion Forum, 1998, 157-159, 211-0.	0.4	1

#	ARTICLE	IF	CITATIONS
181	Blue-U.V. Homojunction GaN LEDs Fabricated by MOVPE. Materials Science Forum, 1998, 264-268, 1425-1428.	0.3	1
182	AlGaIn-based UV detectors and applications. , 0, , .		1
183	Surface-acoustic-wave-controlled photodetectors. , 2004, 5502, 439.		1
184	Noise study in photodiodes based on InGaIn/GaN MQW. , 2007, , .		1
185	Temperatureâ€dependent highâ€frequency performance of deep submicron AlGaIn/GaN HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2994-2997.	0.8	1
186	AlGaIn/GaNâ€based SAW delayâ€line oscillators. Microwave and Optical Technology Letters, 2008, 50, 2967-2970.	0.9	1
187	Characterization of a pH sensor based on an AlGaIn/GaN transistor. , 2009, , .		1
188	Application of GaN FET in 1MHz large signal bandwidth power supply for radio frequency power amplifier. , 2013, , .		1
189	Systematic Optical Characterization of Two-Dimensional Electron Gases in InAlN/GaN-Based Heterostructures with Different In Content. Japanese Journal of Applied Physics, 2013, 52, 08JK02.	0.8	1
190	Influence of fabrication steps on optical and electrical properties of InN thin films. Semiconductor Science and Technology, 2014, 29, 095010.	1.0	1
191	Analysis of InAl(Ga)N/GaN wet-etching by structural, morphological and electrical methods. Semiconductor Science and Technology, 2014, 29, 075003.	1.0	1
192	Electro-optical characterization of IC compatible microcantilevers. Microsystem Technologies, 2016, 22, 2467-2474.	1.2	1
193	Coupling Light into Graphene Plasmons through Surface Acoustic Waves. Physical Review Letters, 2013, 111, .	2.9	1
194	Photoluminescence and electrical characterization of shallow Mg, Mg/Ar and Mg/P implants into InP:Fe. , 0, , .		0
195	AlGaIn-based structures on sapphire for visible blind Schottky-barrier UV photodetectors: toward high-performance device applications. , 2000, , .		0
196	Technology and performance of submicron metal-semiconductor-metal GaN ultraviolet detectors. , 0, , .		0
197	OPTIMAL SYNTHESIS OF C-AXIS ORIENTED ALN THIN FILMS. Integrated Ferroelectrics, 2010, 113, 139-148.	0.3	0
198	Evidence of charge carrier number fluctuations in InN thin films?. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
199	High frequency high-order Rayleigh modes in ZnO/GaAs. , 2011, , .		0
200	Sputter optimization of AlN on diamond substrates for high frequency SAW resonators. , 2011, , .		0
201	Fabrication of high frequency SAW resonators using AlN/Diamond/Si technology. , 2011, , .		0
202	Double Raman Resonances in Semiconductor Multiquantum Wells Induced by High Magnetic Fields. , 1993, , 121-130.		0
203	Hot Exciton Luminescence in Quantum Wells as a Spectroscopic Tool. NATO ASI Series Series B: Physics, 1993, , 421-430.	0.2	0