Nicolas Grandjean

List of Publications by Year
in descending order

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559 papers	17,787 citations	15503 65 h-index	27402 106 g-index
566 all docs	566 docs citations	566 times ranked	8667 citing authors

#	Article	IF	Citations
1	Room-Temperature Polariton Lasing in Semiconductor Microcavities. Physical Review Letters, 2007, 98, 126405.	7.8	833
2	Temperature quenching of photoluminescence intensities in undoped and doped GaN. Journal of Applied Physics, 1999, 86, 3721-3728.	2.5	458
3	Quantum confined Stark effect due to built-in internal polarization fields in (Al,Ga)N/GaN quantum wells. Physical Review B, 1998, 58, R13371-R13374.	3.2	400
4	Current status of AlInN layers lattice-matched to GaN for photonics and electronics. Journal Physics D: Applied Physics, 2007, 40, 6328-6344.	2.8	304
5	High electron mobility lattice-matched AlInNâ•GaN field-effect transistor heterostructures. Applied Physics Letters, 2006, 89, 062106.	3.3	291
6	From visible to white light emission by GaN quantum dots on Si(111) substrate. Applied Physics Letters, 1999, 75, 962-964.	3.3	276
7	Room temperature polariton lasing in a GaNâ•AlGaN multiple quantum well microcavity. Applied Physics Letters, 2008, 93, .	3.3	267
8	Built-in electric-field effects in wurtzite AlGaN/GaN quantum wells. Journal of Applied Physics, 1999, 86, 3714-3720.	2.5	248
9	High internal electric field in a graded-width InGaN/GaN quantum well: Accurate determination by time-resolved photoluminescence spectroscopy. Applied Physics Letters, 2001, 78, 1252-1254.	3.3	208
10	Spontaneous Polarization Buildup in a Room-Temperature Polariton Laser. Physical Review Letters, 2008, 101, 136409.	7.8	197
11	Nitridation of sapphire. Effect on the optical properties of GaN epitaxial overlayers. Applied Physics Letters, 1996, 69, 2071-2073.	3.3	183
12	Barrier-width dependence of group-III nitrides quantum-well transition energies. Physical Review B, 1999, 60, 1496-1499.	3.2	181
13	Two-dimensional electron gas density in Al1â”xInxN/AlN/GaN heterostructures (0.03â‰xâ‰0.23). Journal of Applied Physics, 2008, 103, .	2.5	154
14	Epitaxial growth of highly strained InxGa1â”xAs on GaAs(001): the role of surface diffusion length. Journal of Crystal Growth, 1993, 134, 51-62.	1.5	148
15	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
16	Time-resolved photoluminescence as a probe of internal electric fields in GaN-(GaAl)N quantum wells. Physical Review B, 1999, 59, 15363-15367.	3.2	140
17	Progresses in III-nitride distributed Bragg reflectors and microcavities using AlInN/GaN materials. Physica Status Solidi (B): Basic Research, 2005, 242, 2326-2344.	1.5	140
18	Blue monolithic AlInN-based vertical cavity surface emitting laser diode on free-standing GaN substrate. Applied Physics Letters, 2012, 101, .	3.3	138

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19	Delayed relaxation by surfactant action in highly strained III-V semiconductor epitaxial layers. Physical Review Letters, 1992, 69, 796-799.	7.8	137
20	Composition of Wide Bandgap Semiconductor Materials and Nanostructures Measured by Atom Probe Tomography and Its Dependence on the Surface Electric Field. Journal of Physical Chemistry C, 2014, 118, 24136-24151.	3.1	135
21	Oscillation of the lattice relaxation in layer-by-layer epitaxial growth of highly strained materials. Physical Review Letters, 1993, 71, 1411-1414.	7.8	132
22	205-GHz (Al,In)N/GaN HEMTs. IEEE Electron Device Letters, 2010, 31, 957-959.	3.9	132
23	High-electron-mobility AlGaN/GaN heterostructures grown on Si(111) by molecular-beam epitaxy. Applied Physics Letters, 2001, 78, 335-337.	3.3	125
24	Monolithic White Light Emitting Diodes Based on InGaN/GaN Multiple-Quantum Wells. Japanese Journal of Applied Physics, 2001, 40, L918-L920.	1.5	120
25	Efficiency of NH3 as nitrogen source for GaN molecular beam epitaxy. Applied Physics Letters, 1998, 72, 350-352.	3.3	119
26	High electron mobility in AlGaN/GaN heterostructures grown on bulk GaN substrates. Applied Physics Letters, 2000, 77, 2551-2553.	3.3	119
27	Room-temperature blue-green emission from InGaN/GaN quantum dots made by strain-induced islanding growth. Applied Physics Letters, 1999, 75, 3751-3753.	3.3	115
28	Testing the Temperature Limits of GaN-Based HEMT Devices. IEEE Transactions on Device and Materials Reliability, 2010, 10, 427-436.	2.0	115
29	Can InAlN/GaN be an alternative to high power / high temperature AlGaN/GaN devices?. , 2006, , .		110
30	Radiative lifetime of a single electron-hole pair inGaNâˆ•AlNquantum dots. Physical Review B, 2006, 73, .	3.2	106
31	GaN and AlxGa1âˆ’xN molecular beam epitaxy monitored by reflection high-energy electron diffraction. Applied Physics Letters, 1997, 71, 1816-1818.	3.3	104
32	Luminescence and reflectivity studies of undoped, n- and p-doped GaN on (0001) sapphire. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1997, 50, 97-104.	3.5	104
33	Barrier-Layer Scaling of InAlN/GaN HEMTs. IEEE Electron Device Letters, 2008, 29, 422-425.	3.9	104
34	GaN evaporation in molecular-beam epitaxy environment. Applied Physics Letters, 1999, 74, 1854-1856.	3.3	103
35	Crack-free fully epitaxial nitride microcavity using highly reflective AlInNâˆ•GaN Bragg mirrors. Applied Physics Letters, 2005, 86, 031107.	3.3	102
36	Burying non-radiative defects in InGaN underlayer to increase InGaN/GaN quantum well efficiency. Applied Physics Letters, 2017, 111, .	3.3	99

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37	Surfactant effect on the surface diffusion length in epitaxial growth. Physical Review B, 1993, 48, 8502-8505.	3.2	97
38	Polariton lasing in a hybrid bulk ZnO microcavity. Applied Physics Letters, 2011, 99, .	3.3	97
39	Analysis of degradation mechanisms in lattice-matched InAlN/GaN high-electron-mobility transistors. Journal of Applied Physics, 2009, 106, .	2.5	96
40	GaN surface as the source of non-radiative defects in InGaN/GaN quantum wells. Applied Physics Letters, 2018, 113, .	3.3	93
41	Recent Progress in the Growth of Highly Reflective Nitride-Based Distributed Bragg Reflectors and Their Use in Microcavities. Japanese Journal of Applied Physics, 2005, 44, 7207-7216.	1.5	88
42	Condensation phase diagram of cavity polaritons in GaN-based microcavities: Experiment and theory. Physical Review B, 2010, 81, .	3.2	88
43	Technology and Performance of InAlN/AlN/GaN HEMTs With Gate Insulation and Current Collapse Suppression Using Zr$hbox{O}_{m 2}$ or Hf $hbox{O}_{m 2}$. IEEE Transactions on Electron Devices, 2008, 55, 937-941.	3.0	86
44	Molecular-beam epitaxy of gallium nitride on (0001) sapphire substrates using ammonia. Journal of Applied Physics, 1998, 83, 1379-1383.	2.5	84
45	Self-limitation of AlGaN/GaN quantum well energy by built-in polarization field. Applied Physics Letters, 1999, 74, 2361-2363.	3.3	82
46	InAlN/GaN HEMTs for Operation in the 1000 $^{circ} hbox{C}$ Regime: A First Experiment. IEEE Electron Device Letters, 2012, 33, 985-987.	3.9	82
47	Midinfrared intersubband absorption in lattice-matched AlInNâ•GaN multiple quantum wells. Applied Physics Letters, 2005, 87, 111106.	3.3	81
48	InGaN based micro light emitting diodes featuring a buried GaN tunnel junction. Applied Physics Letters, 2015, 107, .	3.3	81
49	Surfactant mediated epitaxial growth of InxGa1â^'xAs on GaAs (001). Applied Physics Letters, 1992, 61, 99-101.	3.3	80
50	Real time control of InxGa1â^'xN molecular beam epitaxy growth. Applied Physics Letters, 1998, 72, 1078-1080.	3.3	80
51	High spatial resolution picosecond cathodoluminescence of InGaN quantum wells. Applied Physics Letters, 2006, 89, 232109.	3.3	80
52	Gas source molecular beam epitaxy of wurtzite GaN on sapphire substrates using GaN buffer layers. Applied Physics Letters, 1997, 71, 240-242.	3.3	79
53	Room-temperature polariton luminescence from a bulk GaN microcavity. Physical Review B, 2006, 73, .	3.2	79
54	Thermal stability of GaN investigated by Raman scattering. Applied Physics Letters, 1998, 73, 960-962.	3.3	78

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55	Crack-free highly reflective AlInNâˆ•AlGaN Bragg mirrors for UV applications. Applied Physics Letters, 2006, 88, 051108.	3.3	78
56	Recombination coefficients of GaN-based laser diodes. Journal of Applied Physics, 2011, 109, .	2.5	77
57	Large vacuum Rabi splitting in a multiple quantum well GaN-based microcavity in the strong-coupling regime. Physical Review B, 2008, 77, .	3.2	76
58	InGaN/GaN quantum wells grown by molecular-beam epitaxy emitting from blue to red at 300 K. Applied Physics Letters, 2000, 77, 1268-1270.	3.3	75
59	Piezoelectric field and its influence on the pressure behavior of the light emission from GaN/AlGaN strained quantum wells. Applied Physics Letters, 2001, 79, 1483-1485.	3.3	72
60	Fully Passivated AlInN/GaN HEMTs With $f_{m T}/f_{m MAX}$ of 205/220 GHz. IEEE Electron Device Letters, 2011, 32, 1364-1366.	3.9	72
61	Gate insulation and drain current saturation mechanism in InAlNâˆ•GaN metal-oxide-semiconductor high-electron-mobility transistors. Applied Physics Letters, 2007, 91, .	3.3	71
62	Role of stable and metastable Mgâ€“H complexes in p-type GaN for cw blue laser diodes. Applied Physics Letters, 2011, 98, .	3.3	70
63	Exciton localization on basal stacking faults in a-plane epitaxial lateral overgrown GaN grown by hydride vapor phase epitaxy. Journal of Applied Physics, 2009, 105, 043102.	2.5	69
64	Influence of pressure on the optical properties ofInxGa1â^'xNepilayers and quantum structures. Physical Review B, 2001, 64, .	3.2	68
65	Polarity inversion of GaN(0001) by a high Mg doping. Journal of Crystal Growth, 2004, 269, 249-256.	1.5	68
66	Broadband blue superluminescent light-emitting diodes based on GaN. Applied Physics Letters, 2009, 95, 081107.	3.3	67
67	Large size dependence of exciton-longitudinal-optical-phonon coupling in nitride-based quantum wells and quantum boxes. Applied Physics Letters, 2002, 80, 428-430.	3.3	66
68	Impact of disorder on high quality factor III-V nitride microcavities. Applied Physics Letters, 2006, 89, 261101.	3.3	66
69	Complex behavior of biexcitons in GaN quantum dots due to a giant built-in polarization field. Physical Review B, 2008, 77, .	3.2	64
70	High quality factor two dimensional GaN photonic crystal cavity membranes grown on silicon substrate. Applied Physics Letters, 2012, 100, .	3.3	64
71	Status of the Emerging InAlN/GaN Power HEMT Technology. Open Electrical and Electronic Engineering Journal, 2008, 2, 1-7.	0.6	64
72	Group-III nitride quantum heterostructures grown by molecular beam epitaxy. Journal of Physics Condensed Matter, 2001, 13, 6945-6960.	1.8	63

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73	MOCVD of HfO₂ and ZrO₂ high-k gate dielectrics for InAlN/AlN/GaN MOS-HEMTs. Semiconductor Science and Technology, 2007, 22, 1272-1275.	2.0	62
74	Critical impact of Ehrlichâ€“SchwÃ¶bel barrier on GaN surface morphology during homoepitaxial growth. Journal of Crystal Growth, 2016, 433, 36-42.	1.5	61
75	Epitaxial relationships between GaN and Al2O3(0001) substrates. Applied Physics Letters, 1997, 70, 643-645.	3.3	59
76	InAlN/GaN MOSHEMT With Self-Aligned Thermally Generated Oxide Recess. IEEE Electron Device Letters, 2009, 30, 1131-1133.	3.9	59
77	Observation and modeling of the time-dependent descreening of internal electric field in a wurtziteGaN/Al0.15Ga0.85Nquantum well after high photoexcitation. Physical Review B, 2004, 69, .	3.2	58
78	94-GHz Large-Signal Operation of AlInN/GaN High-Electron-Mobility Transistors on Silicon With Regrown Ohmic Contacts. IEEE Electron Device Letters, 2015, 36, 17-19.	3.9	58
79	GaN grown on Si(111) substrate: From two-dimensional growth to quantum well assessment. Applied Physics Letters, 1999, 75, 82-84.	3.3	57
80	High quality nitride based microdisks obtained via selective wet etching of AlInN sacrificial layers. Applied Physics Letters, 2008, 92, .	3.3	57
81	Ultrathin InAlN/AlN Barrier HEMT With High Performance in Normally Off Operation. IEEE Electron Device Letters, 2009, 30, 1030-1032.	3.9	57
82	Surface segregation in (Ga,In)As/GaAs quantum boxes. Physical Review B, 1997, 55, R10189-R10192.	3.2	56
83	Effects of GaAlN barriers and of dimensionality on optical recombination processes in InGaN quantum wells and quantum boxes. Applied Physics Letters, 2001, 78, 1538-1540.	3.3	56
84	Diamond overgrown InAlN/GaN HEMT. Diamond and Related Materials, 2011, 20, 604-608.	3.9	56
85	Integrated photonics on silicon with wide bandgap GaN semiconductor. Applied Physics Letters, 2013, 102, .	3.3	56
86	Monte Carlo simulation of In surface segregation during the growth ofInxGa1â^'xAs on GaAs(001). Physical Review B, 1996, 53, 998-1001.	3.2	55
87	In surface segregation in InGaN/GaN quantum wells. Journal of Crystal Growth, 2003, 251, 471-475.	1.5	55
88	Intrinsic degradation mechanism of nearly lattice-matched InAlN layers grown on GaN substrates. Journal of Applied Physics, 2013, 113, 063506.	2.5	55
89	Intraband absorptions in GaN/AlN quantum dots in the wavelength range of 1.27â€“2.4 Î¼m. Applied Physics Letters, 2003, 82, 868-870.	3.3	54
90	Effects of strain and composition on the lattice parameters and applicability of Vegardâ€™s rule in Al-rich Al1â^'xInxN films grown on sapphire. Journal of Applied Physics, 2008, 103, .	2.5	54

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91	Strain compensation in AlInN/GaN multilayers on GaN substrates: Application to the realization of defect-free Bragg reflectors. Applied Physics Letters, 2011, 98, .	3.3	54
92	Indium surfactant effect on AlNâˆ•GaN heterostructures grown by metal-organic vapor-phase epitaxy: Applications to intersubband transitions. Applied Physics Letters, 2006, 88, 151902.	3.3	52
93	Blue lasing at room temperature in high quality factor GaNâˆ•AlInN microdisks with InGaN quantum wells. Applied Physics Letters, 2007, 90, 061106.	3.3	52
94	AlGaN/GaN HEMT on (111) single crystalline diamond. Electronics Letters, 2010, 46, 299.	1.0	52
95	Two-color GaN/AlGaN quantum cascade detector at short infrared wavelengths of 1 and 1.7â€‰Î¼m. Applied Physics Letters, 2012, 100, .	3.3	52
96	Ultraviolet GaN light-emitting diodes grown by molecular beam epitaxy using NH3. Applied Physics Letters, 1998, 72, 82-84.	3.3	51
97	Acoustic phonon scattering of two-dimensional electrons in GaN/AlGaN heterostructures. Applied Physics Letters, 2002, 80, 1228-1230.	3.3	51
98	Blue lasing at room temperature in an optically pumped lattice-matched AlInN/GaN VCSEL structure. Electronics Letters, 2007, 43, 924.	1.0	51
99	Continuous Wave Blue Lasing in III-Nitride Nanobeam Cavity on Silicon. Nano Letters, 2015, 15, 1259-1263.	9.1	51
100	A quantum optical study of thresholdless lasing features in high-Î² nitride nanobeam cavities. Nature Communications, 2018, 9, 564.	12.8	50
101	Photoreflectance investigations of the bowing parameter in AlGaN alloys lattice-matched to GaN. Applied Physics Letters, 1999, 74, 3353-3355.	3.3	49
102	Molecular Beam Epitaxy of GaN under N-rich Conditions using NH3. Japanese Journal of Applied Physics, 1999, 38, 618-621.	1.5	49
103	Gate-lag and drain-lag effects in (GaN)/InAlN/GaN and InAlN/AlN/GaN HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2019-2022.	1.8	49
104	102-GHz AlInN/GaN HEMTs on Silicon With 2.5-W/mm Output Power at 10 GHz. IEEE Electron Device Letters, 2009, 30, 796-798.	3.9	49
105	Exciton dynamics at a single dislocation in GaN probed by picosecond time-resolved cathodoluminescence. Applied Physics Letters, 2016, 109, .	3.3	49
106	Statistical correction of atom probe tomography data of semiconductor alloys combined with optical spectroscopy: The case of Al0.25Ga0.75N. Journal of Applied Physics, 2016, 119, .	2.5	49
107	Impact of inhomogeneous excitonic broadening on the strong exciton-photon coupling in quantum well nitride microcavities. Physical Review B, 2006, 73, .	3.2	48
108	High-Al-content crack-free AlGaN/GaN Bragg mirrors grown by molecular-beam epitaxy. Applied Physics Letters, 2003, 82, 499-501.	3.3	47

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109	Lattice-matched distributed Bragg reflectors for nitride-based vertical cavity surface emitting lasers. Electronics Letters, 2005, 41, 94.	1.0	45
110	GaN epitaxial growth on sapphire (0 0 0 1): the role of the substrate nitridation. Journal of Crystal Growth, 1997, 178, 220-228.	1.5	44
111	High doping level in Mg-doped GaN layers grown at low temperature. Journal of Applied Physics, 2008, 103, 013110.	2.5	44
112	Low-temperature time-resolved cathodoluminescence study of exciton dynamics involving basal stacking faults in a-plane GaN. Applied Physics Letters, 2009, 94, .	3.3	44
113	Doubly resonant second-harmonic generation of a vortex beam from a bound state in the continuum. Optica, 2020, 7, 1126.	9.3	44
114	Injection Dependence of the Electroluminescence Spectra of Phosphor Free GaN-Based White Light Emitting Diodes. Physica Status Solidi A, 2002, 192, 139-143.	1.7	43
115	Photoluminescence energy and linewidth in GaN/AlN stackings of quantum dot planes. Journal of Applied Physics, 2004, 96, 180-185.	2.5	43
116	High-temperature Mott transition in wide-band-gap semiconductor quantum wells. Physical Review B, 2014, 90, .	3.2	43
117	Optical properties of GaN epilayers and GaN/AlGaN quantum wells grown by molecular beam epitaxy on GaN(0001) single crystal substrate. Journal of Applied Physics, 2000, 88, 183-187.	2.5	42
118	Comparison of the In distribution in InGaN/GaN quantum well structures grown by molecular beam epitaxy and metalorganic vapor phase epitaxy. Journal of Crystal Growth, 2004, 262, 145-150.	1.5	42
119	Inhomogeneous broadening ofAlxGa1â^'xNâ•GaNquantum wells. Physical Review B, 2005, 71, .	3.2	42
120	Visible InGaN/GaN Quantum-Dot Materials and Devices. Proceedings of the IEEE, 2007, 95, 1853-1865.	21.3	42
121	M-Plane GaN/InAlN Multiple Quantum Wells in Coreâ€“Shell Wire Structure for UV Emission. ACS Photonics, 2014, 1, 38-46.	6.6	42
122	Carrier-density-dependent recombination dynamics of excitons and electron-hole plasma in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>m</mml:mi></mml:math> -plane InGaN/GaN quantum wells. Physical Review B, 2016, 94, .	3.2	41
123	Enhancement of Auger recombination induced by carrier localization in InGaN/GaN quantum wells. Physical Review B, 2017, 95, .	3.2	41
124	AlN grown on Si(1 1 1) by ammonia-molecular beam epitaxy in the 900â€“1200 Â°C temperature range. Journal of Crystal Growth, 2017, 476, 58-63.	1.5	41
125	GaInN/GaN multiple-quantum-well light-emitting diodes grown by molecular beam epitaxy. Applied Physics Letters, 1999, 74, 3616-3618.	3.3	40
126	Temperature Dependence of Optical Properties of h-GaN Films Studied by Reflectivity and Ellipsometry. Japanese Journal of Applied Physics, 2000, 39, 20-25.	1.5	40

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127	Near infrared absorption and room temperature photovoltaic response in AlNâˆ•GaN superlattices grown by metal-organic vapor-phase epitaxy. Applied Physics Letters, 2006, 89, 041106.	3.3	40
128	Surfactant-mediated molecular-beam epitaxy of IIIâ€“V strained-layer heterostructures. Journal of Crystal Growth, 1995, 150, 460-466.	1.5	39
129	Time dependence of the photoluminescence of GaN/AlN quantum dots under high photoexcitation. Physical Review B, 2003, 68, .	3.2	39
130	Small-signal characteristics of AlInN/GaN HEMTs. Electronics Letters, 2006, 42, 779.	1.0	39
131	Thermally induced voltage shift in capacitanceâ€“voltage characteristics and its relation to oxide/semiconductor interface states in Ni/Al₂O₃/InAlN/GaN heterostructures. Semiconductor Science and Technology, 2009, 24, 035008.	2.0	39
132	Mg doping for p-type AlInN lattice-matched to GaN. Applied Physics Letters, 2012, 101, 082113.	3.3	39
133	Control of the polarity of GaN films using an Mg adsorption layer. Journal of Crystal Growth, 2003, 251, 460-464.	1.5	38
134	Study of the epitaxial relationships between III-nitrides and M-plane sapphire. Journal of Applied Physics, 2010, 108, 113521.	2.5	38
135	Efficient continuous-wave nonlinear frequency conversion in high-Q gallium nitride photonic crystal cavities on silicon. APL Photonics, 2017, 2, .	5.7	38
136	Strain-induced interface instability in GaNâˆ•AlN multiple quantum wells. Applied Physics Letters, 2007, 91, 061927.	3.3	37
137	Ultrahigh-Speed AlInN/GaN High Electron Mobility Transistors Grown on (111) High-Resistivity Silicon withF_T= 143 GHz. Applied Physics Express, 2010, 3, 094101.	2.4	37
138	Hot-Electron-Related Degradation in InAlN/GaN High-Electron-Mobility Transistors. IEEE Transactions on Electron Devices, 2014, 61, 2793-2801.	3.0	37
139	Observation of long-lived oblique excitons in GaN-AlGaN multiple quantum wells. Physical Review B, 1999, 59, 10246-10250.	3.2	36
140	GaN/AlGaN quantum wells for UV emission: heteroepitaxy versus homoepitaxy. Semiconductor Science and Technology, 2001, 16, 358-361.	2.0	36
141	Comprehensive description of the dynamical screening of the internal electric fields of AlGaN/GaN quantum wells in time-resolved photoluminescence experiments. Journal of Applied Physics, 2003, 93, 400-409.	2.5	36
142	Toward Bright and Pure Single Photon Emitters at 300 K Based on GaN Quantum Dots on Silicon. ACS Photonics, 2020, 7, 1515-1522.	6.6	36
143	GaN/AlxGa1âˆ’xN quantum wells grown by molecular beam epitaxy with thickness control at the monolayer scale. Applied Physics Letters, 1998, 73, 1260-1262.	3.3	35
144	Scale Effects on Exciton Localization and Nonradiative Processes in GaN/AlGaN Quantum Wells. Physica Status Solidi A, 2000, 180, 127-132.	1.7	35

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145	Influence of high Mg doping on the microstructural and optoelectronic properties of GaN. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 224-228.	3.5	35
146	Engineering the Lateral Optical Guiding in Gallium Nitride-Based Vertical-Cavity Surface-Emitting Laser Cavities to Reach the Lowest Threshold Gain. Japanese Journal of Applied Physics, 2013, 52, 08JG04.	1.5	35
147	Optical study of segregation effects on the electronic properties of molecular-beam-epitaxy grown (In,Ga)As/GaAs quantum wells. Physical Review B, 1997, 55, 2406-2412.	3.2	34
148	Microroughness and exciton localization in (Al,Ga)As/GaAs quantum wells. Physical Review B, 1997, 55, 5253-5258.	3.2	34
149	Surface kinetics of GaN evaporation and growth by molecular-beam epitaxy. Surface Science, 2000, 450, 191-203.	1.9	34
150	Submicron metalâ€“semiconductorâ€“metal ultraviolet detectors based on AlGaN grown on silicon: Results and simulation. Journal of Applied Physics, 2002, 92, 5602-5604.	2.5	34
151	Al 0.83 In 0.17 N lattice-matched to GaN used as an optical blocking layer in GaN-based edge emitting lasers. Applied Physics Letters, 2009, 94, .	3.3	34
152	RF Performance of InAlN/GaN HFETs and MOSHFETs With <formula formulatype="inline"><tex Notation="TeX"> $f_{T} imes L_{G}$</tex></formula> up to 21 <formula formulatype="inline"><tex Notation="TeX">$hbox{GHz}cdot muhbox{m}$</tex> </formula>. IEEE Electron Device Letters, 2010, 31, 180-182.	3.9	34
153	Analysis of structurally sensitive loss in GaN-based VCSEL cavities and its effect on modal discrimination. Optics Express, 2014, 22, 411.	3.4	34
154	Submicron periodic poling and chemical patterning of GaN. Applied Physics Letters, 2005, 87, 062106.	3.3	33
155	Pinning and Depinning of the Polarization of Exciton-Polariton Condensates at Room Temperature. Physical Review Letters, 2010, 104, 166402.	7.8	33
156	Schottky-barrier normally off GaN/InAlN/AlN/GaN HEMT with selectively etched access region. IEEE Electron Device Letters, 2013, 34, 432-434.	3.9	33
157	Critical thickness of GaN on AlN: impact of growth temperature and dislocation density. Semiconductor Science and Technology, 2017, 32, 075010.	2.0	33
158	Elastic misfit stress relaxation in highly strained InGaAs/GaAs structures. Applied Physics Letters, 1994, 65, 1162-1164.	3.3	32
159	Stranski-Krastanov GaNâˆ•AlN quantum dots grown by metal organic vapor phase epitaxy. Journal of Applied Physics, 2006, 99, 083509.	2.5	32
160	Phase diagram of a polariton laser from cryogenic to room temperature. Physical Review B, 2009, 80, .	3.2	32
161	Polarization field mapping of Al0.85In0.15N/AlN/GaN heterostructure. Applied Physics Letters, 2009, 94, .	3.3	32
162	Combining diamond electrodes with GaN heterostructures for harsh environment ISFETs. Diamond and Related Materials, 2009, 18, 884-889.	3.9	32

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163	Current transport and barrier height evaluation in Ni/InAlN/GaN Schottky diodes. Applied Physics Letters, 2010, 96, 223501.	3.3	32
164	Exciton recombination dynamics in a-plane (Al,Ga)N/GaN quantum wells probed by picosecond photo and cathodoluminescence. Journal of Applied Physics, 2010, 107, .	2.5	32
165	Sputtering of (001)AlN thin films: Control of polarity by a seed layer. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, L61-L63.	1.2	32
166	Propagating Polaritons in III-Nitride Slab Waveguides. Physical Review Applied, 2017, 7, .	3.8	32
167	InAlN underlayer for near ultraviolet InGaN based light emitting diodes. Applied Physics Express, 2019, 12, 034002.	2.4	32
168	In situimaging of threading dislocation terminations at the surface of GaN(0001) epitaxially grown on Si(111). Physical Review B, 2000, 61, 7618-7621.	3.2	31
169	Room temperature polariton luminescence from a GaNâˆ•AlGaN quantum well microcavity. Applied Physics Letters, 2006, 89, 071107.	3.3	31
170	Proposal and Performance Analysis of Normally Off $ hbox{n}^{++}$ GaN/InAlN/AlN/GaN HEMTs With 1-nm-Thick InAlN Barrier. IEEE Transactions on Electron Devices, 2010, 57, 2144-2154.	3.0	31
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