

# Philippe Venngus

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

203  
papers

4,693  
citations

38  
h-index

58  
g-index

211  
ext. papers

4,981  
ext. citations

2.5  
avg, IF

5.05  
L-index

#	Paper	IF	Citations
203	Coulomb blockade: Toward charge control of self-assembled GaN quantum dots at room temperature. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 012105	3.4	
202	Microstructure of epitaxial Mg <sub>3</sub> N <sub>2</sub> thin films grown by MBE. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 095303	3.5	3
201	Wetting-Layer-Free AlGa <sub>x</sub> N Quantum Dots for Ultraviolet Emitters. <i>ACS Applied Nano Materials</i> , <b>2020</b> , 3, 4054-4060	5.6	
200	Luminescence behavior of semipolar (10-11) InGa <sub>x</sub> N/GaN Bow-tie structures on patterned Si substrates. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 035705	2.5	0
199	Crystalline magnesium nitride (Mg <sub>3</sub> N <sub>2</sub> ): From epitaxial growth to fundamental physical properties. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	5
198	Freestanding-quality dislocation density in semipolar GaN epilayers grown on SOI: aspect ratio trapping. <i>Applied Physics Express</i> , <b>2020</b> , 13, 115504	2.4	1
197	Correlative investigation of Mg doping in GaN layers grown at different temperatures by atom probe tomography and off-axis electron holography. <i>Nanotechnology</i> , <b>2020</b> , 31, 045702	3.4	6
196	On the morphologies of oxides particles in optical fibers: Effect of the drawing tension and composition. <i>Optical Materials</i> , <b>2019</b> , 87, 74-79	3.3	8
195	Semipolar (10-11) GaN growth on silicon-on-insulator substrates: Defect reduction and meltback etching suppression. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 035703	2.5	6
194	Reduced nonradiative recombination in semipolar green-emitting III-N quantum wells with strain-reducing AlInN buffer layers. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 202103	3.4	4
193	Demonstration of Electrically Injected Semipolar Laser Diodes Grown on Low-Cost and Scalable Sapphire Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 47106-47111	9.5	11
192	AlSiN, a new Nitride compound. <i>Scientific Reports</i> , <b>2019</b> , 9, 15907	4.9	2
191	Internal quantum efficiencies of AlGa <sub>x</sub> N quantum dots grown by molecular beam epitaxy and emitting in the UVA to UVC ranges. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 205701	2.5	11
190	γ precipitates with a twin orientation relationship to their hosting grain in a γ nickel-based superalloy. <i>Scripta Materialia</i> , <b>2018</b> , 153, 10-13	5.6	9
189	Properties of AlN layers grown on c-sapphire substrate using ammonia assisted MBE. <i>Journal of Crystal Growth</i> , <b>2018</b> , 499, 40-46	1.6	9
188	Proposition of a model elucidating the AlN-on-Si (111) microstructure. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 215701	2.5	16
187	On the effect of high Mg doping on the polarity of GaN <b>2018</b> , 307-310		

186 Atomic structure of Mg-induced pyramidal inversion domains in bulk GaN **2018**, 273-276

185 Intentional polarity conversion of AlN epitaxial layers by oxygen. *Scientific Reports*, **2018**, 8, 14111 4.9 17

184 Breaking the Intersubband Selection Rules for Absorption with ZnO Quantum Wells: Light Polarization Sensitivity under Normal Incidence. *Physical Review Applied*, **2018**, 10, 4.3 1

183 UVA and UVB light emitting diodes with Al<sub>y</sub>Ga<sub>1-y</sub>N quantum dot active regions covering the 305-335 nm range. *Semiconductor Science and Technology*, **2018**, 33, 075007 1.8 5

182 Turning the undesired voids in silicon into a tool: In-situ fabrication of free-standing 3C-SiC membranes. *Applied Physics Letters*, **2017**, 110, 081602 3.4 3

181 Fiber-draw-induced elongation and break-up of particles inside the core of a silica-based optical fiber. *Journal of the American Ceramic Society*, **2017**, 100, 1814-1819 3.8 18

180 Dislocation densities reduction in MBE-grown AlN thin films by high-temperature annealing. *Journal of Crystal Growth*, **2017**, 461, 10-15 1.6 30

179 Use of thulium-doped LaF<sub>3</sub> nanoparticles to lower the phonon energy of the thulium's environment in silica-based optical fibres. *Optical Materials*, **2017**, 68, 24-28 3.3 18

178 Evolution and prevention of meltback etching: Case study of semipolar GaN growth on patterned silicon substrates. *Journal of Applied Physics*, **2017**, 122, 105108 2.5 24

177 Impact of sapphire nitridation on formation of Al-polar inversion domains in N-polar AlN epitaxial layers. *Journal of Applied Physics*, **2017**, 122, 155303 2.5 18

176 Influence of the heterostructure design on the optical properties of GaN and Al<sub>0.1</sub>Ga<sub>0.9</sub>N quantum dots for ultraviolet emission. *Journal of Applied Physics*, **2017**, 122, 085706 2.5 11

175 Structural Study of the Innovative 3C-SiC/Si/3C-SiC/Si Heterostructure for Electro-Mechanical Applications. *Materials Science Forum*, **2016**, 858, 143-146 0.4 2

174 Polarity Control in Group-III Nitrides beyond Pragmatism. *Physical Review Applied*, **2016**, 5, 4.3 68

173 Defect blocking via laterally induced growth of semipolar (1 0 1 - 1) GaN on patterned substrates. *Journal Physics D: Applied Physics*, **2016**, 49, 475104 3 13

172 Quantifying Mg doping in AlGa<sub>N</sub> layers **2016**, 602-603

171 Evidence of multimetric coherent  $\delta$ -precipitates in a hot-forged  $\delta$ -nickel-based superalloy. *Journal of Microscopy*, **2016**, 263, 106-12 1.9 23

170 Dislocation filtering and polarity in the selective area growth of GaN nanowires by continuous-flow metal organic vapor phase epitaxy. *Applied Physics Express*, **2016**, 9, 015502 2.4 26

169 Optimized In composition and quantum well thickness for yellow-emitting (Ga,In)N/GaN multiple quantum wells. *Journal of Crystal Growth*, **2016**, 434, 25-29 1.6 4

168	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> , <b>2016</b> , 433, 165-171	1.6	6
167	Mechanisms of polarity inversion during the MOVPE growth of III-nitrides on sapphire investigated by high resolution transmission electron microscopy <b>2016</b> , 600-601		1
166	TEM study of defect reduction in the growth of semipolar GaN grown on patterned substrates <b>2016</b> , 590-591		
165	Selective heteroepitaxy on deeply grooved substrate: A route to low cost semipolar GaN platforms of bulk quality. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 082101	3-4	7
164	Investigation of Al <sub>0.5</sub> Ga <sub>0.5</sub> N quantum dot properties for the design of ultraviolet emitters. <i>Japanese Journal of Applied Physics</i> , <b>2016</b> , 55, 05FG06	1.4	11
163	Realization of minimum number of rotational domains in heteroepitaxied Si(110) on 3C-SiC(001). <i>Applied Physics Letters</i> , <b>2016</b> , 108, 011608	3-4	4
162	On the interplay between Si(110) epilayer atomic roughness and subsequent 3C-SiC growth direction. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 185306	2.5	3
161	Deep level traps in semi-polar n-GaN grown on patterned sapphire substrate by metalorganic vapor phase epitaxy. <i>Physica Status Solidi (B): Basic Research</i> , <b>2016</b> , 253, 2225-2229	1.3	4
160	Green emission from semipolar InGaIn quantum wells grown on low-defect GaN templates fabricated on patterned r-sapphire. <i>Physica Status Solidi (B): Basic Research</i> , <b>2016</b> , 253, 105-111	1.3	6
159	Growth of semipolar (202 1) GaN layers on patterned silicon (114) 1° off by Metal Organic Vapor Phase Epitaxy. <i>Journal of Crystal Growth</i> , <b>2015</b> , 419, 88-93	1.6	22
158	Study of defect management in the growth of semipolar (11-22) GaN on patterned sapphire. <i>Journal Physics D: Applied Physics</i> , <b>2015</b> , 48, 325103	3	14
157	Successive selective growth of semipolar (11-22) GaN on patterned sapphire substrate. <i>Semiconductor Science and Technology</i> , <b>2015</b> , 30, 065001	1.8	11
156	Strain-compensated (Ga,In)N/(Al,Ga)N/GaN multiple quantum wells for improved yellow/amber light emission. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 142101	3-4	38
155	Direct insight into grains formation in Si layers grown on 3C-SiC by chemical vapor deposition. <i>Acta Materialia</i> , <b>2015</b> , 98, 336-342	8.4	12
154	Silicon Growth on 3C-SiC(001)/Si(001): Pressure Influence and Thermal Effect. <i>Materials Science Forum</i> , <b>2015</b> , 821-823, 978-981	0.4	5
153	Optical properties and structural investigations of (11-22)-oriented GaN/Al <sub>0.5</sub> Ga <sub>0.5</sub> N quantum wells grown by molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 024303	2.5	2
152	Strain- and surface-induced modification of photoluminescence from self-assembled GaN/Al <sub>0.5</sub> Ga <sub>0.5</sub> N quantum dots: strong effect of capping layer and atmospheric condition. <i>Nanotechnology</i> , <b>2014</b> , 25, 305703	3-4	6
151	Quantitative determination of compositional profiles using HAADF image simulations. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2014</b> , 11, 284-288		1

150	GaN high electron mobility transistors on silicon substrates with MBE/PVD AlN seed layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2014</b> , 11, 498-501		4
149	Dual-polarity GaN micropillars grown by metalorganic vapour phase epitaxy: Cross-correlation between structural and optical properties. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 153504	2.5	39
148	Defect reduction method in (11-22) semipolar GaN grown on patterned sapphire substrate by MOCVD: Toward heteroepitaxial semipolar GaN free of basal stacking faults. <i>Journal of Crystal Growth</i> , <b>2014</b> , 404, 177-183	1.6	54
147	Growth of Ga- and N-polar GaN layers on O face ZnO substrates by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , <b>2014</b> , 388, 35-41	1.6	7
146	Influence of 3C-SiC/Si (111) template properties on the strain relaxation in thick GaN films. <i>Journal of Crystal Growth</i> , <b>2014</b> , 398, 23-32	1.6	12
145	Polar and semipolar GaN/Al <sub>0.5</sub> Ga <sub>0.5</sub> N nanostructures for UV light emitters. <i>Semiconductor Science and Technology</i> , <b>2014</b> , 29, 084001	1.8	25
144	Growth of GaN nanostructures with polar and semipolar orientations for the fabrication of UV LEDs <b>2014</b> ,		1
143	Capping green emitting (Ga,In)N quantum wells with (Al,Ga)N: impact on structural and optical properties. <i>Semiconductor Science and Technology</i> , <b>2014</b> , 29, 035016	1.8	7
142	Monolithic white light emitting diodes using a (Ga,In)N-based light converter <b>2014</b> ,		1
141	Imaging and counting threading dislocations in c-oriented epitaxial GaN layers. <i>Semiconductor Science and Technology</i> , <b>2013</b> , 28, 035006	1.8	29
140	AlGaN/GaN HEMTs with an InGaN back-barrier grown by ammonia-assisted molecular beam epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2013</b> , 210, 480-483	1.6	10
139	Plasmon energy from strained GaN quantum wells. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 021901	3.4	6
138	Metal Organic Vapor Phase Epitaxy of Monolithic Two-Color Light-Emitting Diodes Using an InGaN-Based Light Converter. <i>Applied Physics Express</i> , <b>2013</b> , 6, 092105	2.4	13
137	Blue Light-Emitting Diodes Grown on ZnO Substrates. <i>Applied Physics Express</i> , <b>2013</b> , 6, 042101	2.4	9
136	AlGaN-Based Light Emitting Diodes Using Self-Assembled GaN Quantum Dots for Ultraviolet Emission. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 08JG01	1.4	13
135	Recent TEM developments applied to quantum structures. <i>MATEC Web of Conferences</i> , <b>2013</b> , 5, 02001	0.3	
134	On the growth of Zn <sub>1-x</sub> Mn <sub>x</sub> O thin films by plasma-assisted MBE. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2013</b> , 10, 1322-1324		2
133	Fabrication and growth of GaN-based micro and nanostructures. <i>International Journal of Nanotechnology</i> , <b>2012</b> , 9, 412	1.5	6

132	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. <i>Journal of Crystal Growth</i> , <b>2012</b> , 338, 20-29	1.6	9
131	Nature and origin of V-defects present in metalorganic vapor phase epitaxy-grown (In <sub>x</sub> Al <sub>1-x</sub> )N layers as a function of InN content, layer thickness and growth parameters. <i>Journal of Crystal Growth</i> , <b>2012</b> , 353, 108-114	1.6	17
130	Mechanism of GaN quantum dot overgrowth by Al <sub>0.5</sub> Ga <sub>0.5</sub> N: Strain evolution and phase separation. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 084309	2.5	4
129	On the origin of basal stacking faults in nonpolar wurtzite films epitaxially grown on sapphire substrates. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 113518	2.5	20
128	Defect reduction methods for III-nitride heteroepitaxial films grown along nonpolar and semipolar orientations. <i>Semiconductor Science and Technology</i> , <b>2012</b> , 27, 024004	1.8	38
127	On the polarity of GaN micro- and nanowires epitaxially grown on sapphire (0001) and Si(111) substrates by metal organic vapor phase epitaxy and ammonia-molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 011914	3.4	42
126	GaN/Al <sub>0.5</sub> Ga <sub>0.5</sub> N (11-22) semipolar nanostructures: A way to get high luminescence efficiency in the near ultraviolet range. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 084318	2.5	20
125	Study of the growth mechanisms of GaN/(Al, Ga)N quantum dots: Correlation between structural and optical properties. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 053514	2.5	11
124	Influence of Stacking Sequences and Lattice Parameter Differences on the Microstructure of Nonpolar AlN Films Grown on (11 $\bar{2}$ 0) 6H-SiC by Plasma-Assisted Molecular Beam Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2010</b> , 49, 040201	1.4	4
123	Study of the epitaxial relationships between III-nitrides and M-plane sapphire. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 113521	2.5	33
122	Filtering of Defects in Semipolar (11-22) GaN Using 2-Steps Lateral Epitaxial Overgrowth. <i>Nanoscale Research Letters</i> , <b>2010</b> , 5, 1878-81	5	11
121	Stacking faults blocking process in (11 $\bar{2}$ 2) semipolar GaN growth on sapphire using asymmetric lateral epitaxy. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 2625-2630	1.6	41
120	Transmission electron microscopy investigation of microtwins and double positioning domains in (111) 3C-SiC in relation with the carbonization conditions. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 081903	3.4	22
119	Effects of capping on GaN quantum dots deposited on Al <sub>0.5</sub> Ga <sub>0.5</sub> N by molecular beam epitaxy. <i>Applied Physics Letters</i> , <b>2009</b> , 94, 143105	3.4	28
118	The critical role of growth temperature on the structural and electrical properties of AlGaIn/GaN high electron mobility transistor heterostructures grown on Si(111). <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 033701	2.5	47
117	In-Plane Polarities of Nonpolar Wurtzite Epitaxial Films Deposited on m- and r-plane Sapphire Substrates. <i>Japanese Journal of Applied Physics</i> , <b>2009</b> , 48, 090211	1.4	11
116	AlInN optical confinement layers for edge emitting group III-nitride laser structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, S897-S901		4
115	Strain engineering in GaN layers grown on silicon by molecular beam epitaxy: The critical role of growth temperature. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 2002-2005	1.6	20



114	Catalytic unzipping of carbon nanotubes to few-layer graphene sheets under microwaves irradiation. <i>Applied Catalysis A: General</i> , <b>2009</b> , 371, 22-30	5.1	46
113	Anisotropic chemical etching of semipolar [1011]/[101+1] ZnO crystallographic planes: polarity versus dangling bonds. <i>Nanotechnology</i> , <b>2009</b> , 20, 065701	3.4	10
112	Phase separation in GaN/AlGaN quantum dots. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 141901	3.4	14
111	Interfacial structure and defect analysis of nonpolar ZnO films grown on R-plane sapphire by molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 083525	2.5	44
110	Non-polar-a-plane ZnMgO1/ZnO quantum wells grown by molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , <b>2008</b> , 23, 035005	1.8	54
109	Interface structure and anisotropic strain relaxation of nonpolar wurtzite (112 $\bar{0}$ ) and (101 $\bar{0}$ ) orientations: ZnO epilayers grown on sapphire. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 073535	2.5	55
108	Band-edge photoluminescence and reflectivity of nonpolar (112 $\bar{0}$ ) and semipolar (112 $\bar{2}$ ) GaN formed by epitaxial lateral overgrowth on sapphire. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	32
107	Symmetry of wurtzite nanostructures with the c-axis in the layer plane. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	1
106	Interfacial properties of thermally oxidized Ta2Si on Si. <i>Surface and Interface Analysis</i> , <b>2008</b> , 40, 1164-1167	5	2
105	Indium incorporation dynamics into AlInN ternary alloys for laser structures lattice matched to GaN. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 081116	3.4	47
104	Symmetry and optical properties of wurtzite nanostructures with the c axis in the layer plane. <i>Physics of the Solid State</i> , <b>2008</b> , 50, 1803-1807	0.8	
103	Microstructural Characterization of Semipolar GaN Templates and Epitaxial-Lateral-Overgrown Films Deposited on M-Plane Sapphire by Metalorganic Vapor Phase Epitaxy. <i>Japanese Journal of Applied Physics</i> , <b>2007</b> , 46, 4089-4095	1.4	68
102	Growth of non-polar ZnO/(Zn,Mg)O quantum well structures on R-sapphire by plasma-assisted molecular beam epitaxy. <i>Journal of Crystal Growth</i> , <b>2007</b> , 301-302, 366-369	1.6	40
101	High indium content AlInGaN films: growth, structure and optoelectronic properties. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2007</b> , 4, 137-140		2
100	Reduction of stacking faults in (11 $\bar{2}$ 0) and (11 $\bar{2}$ 2) GaN films by ELO techniques and benefit on GaN wells emission. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2007</b> , 204, 282-289	1.6	37
99	X-ray and transmission electron microscopy characterization of twinned CdO thin films grown on a-plane sapphire by metalorganic vapour phase epitaxy. <i>Applied Physics A: Materials Science and Processing</i> , <b>2007</b> , 88, 61-64	2.6	
98	Growth and characterization of A-plane ZnO and ZnCoO based heterostructures. <i>Applied Physics A: Materials Science and Processing</i> , <b>2007</b> , 88, 65-69	2.6	27
97	Anisotropic morphology of nonpolar a-plane GaN quantum dots and quantum wells. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 074304	2.5	35

96	Cathodoluminescence spectroscopy of epitaxial-lateral-overgrown nonpolar (11-20) and semipolar (11-22) GaN in relation to microstructural characterization. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 113101	2.5	95
95	Modelling of the Anomalous Field-Effect Mobility Peak of O-Ta <sub>2</sub> Si/4H-SiC High-k MOSFETs Measured in Strong Inversion. <i>Materials Science Forum</i> , <b>2006</b> , 527-529, 1059-1062	0.4	
94	Investigation of AlN films grown by molecular beam epitaxy on vicinal Si(111) as templates for GaN quantum dots. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 231903	3.4	10
93	Epitaxial orientation of III-nitrides grown on R-plane sapphire by metal-organic-vapor-phase epitaxy. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 111915	3.4	24
92	Characterization of structural defects in (11 $\bar{2}$ 0) GaN films grown on (1 $\bar{1}$ 02) sapphire substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 1658-1661		27
91	AlGa <sub>x</sub> N <sub>1-x</sub> /GaN HEMTs grown on silicon (001) substrates by molecular beam epitaxy. <i>Superlattices and Microstructures</i> , <b>2006</b> , 40, 295-299	2.8	11
90	Ductile relaxation in cracked metal-organic chemical-vapor-deposition-grown AlGa <sub>x</sub> N <sub>1-x</sub> films on GaN. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 123504	2.5	17
89	Relaxation mechanisms in metal-organic vapor phase epitaxy grown Al-rich (Al,Ga) <sub>x</sub> N <sub>1-x</sub> /GaN heterostructures. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 024912	2.5	28
88	AlGa <sub>x</sub> N <sub>1-x</sub> /GaN/AlGa <sub>x</sub> N <sub>1-x</sub> DH-HEMTs grown by MBE on Si(111). <i>Journal of Crystal Growth</i> , <b>2005</b> , 278, 393-396	1.6	19
87	Hexagonal c-axis GaN layers grown by metalorganic vapor-phase epitaxy on Si(001). <i>Journal of Crystal Growth</i> , <b>2005</b> , 280, 44-53	1.6	21
86	Structural and electronic properties of ZnMgO/ZnO quantum wells. <i>Superlattices and Microstructures</i> , <b>2005</b> , 38, 455-463	2.8	32
85	Growth of wurtzite-GaN on silicon (100) substrate by molecular beam epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2005</b> , 2, 2187-2190		10
84	Nucleation Control in FLASIC Assisted Short Time Liquid Phase Epitaxy by Melt Modification. <i>Materials Science Forum</i> , <b>2005</b> , 483-485, 213-216	0.4	2
83	Characterization of High-k Ta <sub>2</sub> Si Oxidized Films on 4H-SiC and Si Substrates as Gate Insulator. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, G259	3.9	24
82	Submicron periodic poling and chemical patterning of GaN. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 062106	3.4	24
81	Strain relaxation in (Al,Ga) <sub>x</sub> N <sub>1-x</sub> /GaN heterostructures. <i>Springer Proceedings in Physics</i> , <b>2005</b> , 51-54	0.2	
80	Plastic relaxation through buried cracks in AlGa <sub>x</sub> N <sub>1-x</sub> /GaN heterostructures. <i>EPJ Applied Physics</i> , <b>2004</b> , 27, 263-265	1.1	
79	Ta <sub>2</sub> Si Thermal Oxidation: A Simple Route to a High-k Gate Dielectric on 4H-SiC. <i>Electrochemical and Solid-State Letters</i> , <b>2004</b> , 7, F93		5



78	Polarity inversion of GaN(0001) by a high Mg doping. <i>Journal of Crystal Growth</i> , <b>2004</b> , 269, 249-256	1.6	61
77	Pyramidal defects in highly Mg-doped GaN: atomic structure and influence on optoelectronic properties. <i>EPJ Applied Physics</i> , <b>2004</b> , 27, 259-262	1.1	3
76	Control of the polarity of GaN films using an Mg adsorption layer. <i>Journal of Crystal Growth</i> , <b>2003</b> , 251, 460-464	1.6	35
75	Three-dimensionally nucleated growth of gallium nitride by low-pressure metalorganic vapour phase epitaxy. <i>Journal of Crystal Growth</i> , <b>2003</b> , 258, 232-250	1.6	17
74	Correlation between threading dislocation density and the refractive index of AlN grown by molecular-beam epitaxy on Si(111). <i>Applied Physics Letters</i> , <b>2003</b> , 82, 1386-1388	3.4	24
73	Growth of high quality crack-free AlGaIn films on GaN templates using plastic relaxation through buried cracks. <i>Journal of Applied Physics</i> , <b>2003</b> , 94, 6499-6507	2.5	80
72	Realization of waveguiding epitaxial GaN layers on Si by low-pressure metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 5139-5141	3.4	5
71	Atomic structure of pyramidal defects in Mg-doped GaN. <i>Physical Review B</i> , <b>2003</b> , 68,	3.3	66
70	Epitaxial lateral overgrowth of GaN on Si (111). <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 182-185	2.5	37
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66	Influence of high Mg doping on the microstructural and optoelectronic properties of GaN. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2002</b> , 93, 224-228	3.1	33
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62	Epitaxial Lateral Overgrowth of GaN on Silicon (111). <i>Physica Status Solidi A</i> , <b>2001</b> , 188, 733-737		12
61	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> , <b>2001</b> , 188, 899-903		9

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. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2136-2138	3.4	24
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58	MBE-grown high-quality (Al,Ga)N/GaN distributed Bragg reflectors for resonant cavity LEDs. <i>Semiconductor Science and Technology</i> , <b>2001</b> , 16, 913-917	1.8	16
57	Stress control in GaN grown on silicon (111) by metalorganic vapor phase epitaxy. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 3230-3232	3.4	227
56	Growth modes and microstructures of ZnO layers deposited by plasma-assisted molecular-beam epitaxy on (0001) sapphire. <i>Journal of Applied Physics</i> , <b>2001</b> , 90, 5115-5119	2.5	41
55	Optimisation of AlN and GaN growth by metalorganic vapour-phase epitaxy (MOVPE) on Si (1 1 1). <i>Journal of Crystal Growth</i> , <b>2000</b> , 217, 13-25	1.6	87
54	Molecular beam epitaxy of Zn <sub>x</sub> Be <sub>1-x</sub> Se: Influence of the substrate nature and epilayer properties. <i>Journal of Electronic Materials</i> , <b>2000</b> , 29, 883-886	1.9	5
53	In situ imaging of threading dislocation terminations at the surface of GaN(0001) epitaxially grown on Si(111). <i>Physical Review B</i> , <b>2000</b> , 61, 7618-7621	3.3	30
52	Pyramidal defects in metalorganic vapor phase epitaxial Mg doped GaN. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 880-882	3.4	101
51	Phase separation in metalorganic vapor-phase epitaxy Al <sub>x</sub> Ga <sub>(1-x)</sub> N films deposited on 6H-SiC. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 4310-4312	3.4	26
50	High Quality GaN on Si(111) using (AlN/GaN) <sub>x</sub> Superlattice and Maskless ELO. <i>Materials Science Forum</i> , <b>2000</b> , 338-342, 1487-1490	0.4	2
49	Microstructural analysis of III <sub>N</sub> nitrides grown on 6H-SiC by metalorganic vapour phase epitaxy (MOVPE). <i>Diamond and Related Materials</i> , <b>2000</b> , 9, 452-455	3.5	4
48	Reduction mechanisms for defect densities in GaN using one- or two-step epitaxial lateral overgrowth methods. <i>Journal of Applied Physics</i> , <b>2000</b> , 87, 4175-4181	2.5	165
47	Electron energy-loss spectroscopy characterization of pyramidal defects in metalorganic vapor-phase epitaxy Mg-doped GaN thin films. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2115-2117	3.4	20
46	Molecular Beam Epitaxy of High Quality InGaN Alloys Using Ammonia: Optical and Structural Properties. <i>MRS Internet Journal of Nitride Semiconductor Research</i> , <b>1999</b> , 4, 333-338		
45	Comparative study of GaN layers grown on insulating AlN and conductive AlGaIn buffer layers. <i>Semiconductor Science and Technology</i> , <b>1999</b> , 14, L33-L36	1.8	23
44	High quality ELO-GaN layers on GaN/Al <sub>2</sub> O <sub>3</sub> patterned substrates by halide vapour phase epitaxy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>1999</b> , 59, 112-116	3.1	2
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42	Effect of the nucleation layer deposition temperature on the nature of defects in GSMBE GaN films. <i>Journal of Crystal Growth</i> , <b>1999</b> , 201-202, 423-428	1.6	9
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38	TEM Study of the Behavior of Dislocations during ELO of GaN. <i>Physica Status Solidi (B): Basic Research</i> , <b>1999</b> , 216, 691-695	1.3	4
37	Metal Organic Vapour Phase Epitaxy (MOVPE) Growth of GaN(n)/SiC(p) Heterostructures. <i>Physica Status Solidi A</i> , <b>1999</b> , 176, 109-112		
36	A Two-Step Method for Epitaxial Lateral Overgrowth of GaN. <i>Physica Status Solidi A</i> , <b>1999</b> , 176, 567-571		39
35	Optimization of Si/N Treatment Time of Sapphire Surface and Its Effect on the MOVPE GaN Overlayers. <i>Physica Status Solidi A</i> , <b>1999</b> , 176, 677-681		25
34	Transmission electron microscopy study of the nitridation of the (0001) sapphire surface. <i>Applied Physics Letters</i> , <b>1999</b> , 75, 4115-4117	3.4	37
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