

Miguel Ángel Sánchez García

List of Publications by Year in descending order

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94
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96
times ranked

2279
citing authors

#	ARTICLE	IF	CITATIONS
1	Titanium induced polarity inversion in ordered (In,Ga)N/GaN nanocolumns. <i>Nanotechnology</i> , 2016, 27, 065705.	1.3	16
2	Lattice pulling effect and strain relaxation in axial (In,Ga)N/GaN nanowire heterostructures grown on GaN-buffered Si(111) substrate. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 736-739.	0.8	12
3	Correlation among Growth Conditions, Morphology, and Optical Properties of Nanocolumnar InGaN/GaN Heterostructures Selectively Grown by Molecular Beam Epitaxy. <i>Crystal Growth and Design</i> , 2015, 15, 2661-2666.	1.4	17
4	Advances in MBE Selective Area Growth of III-Nitride Nanostructures: From NanoLEDs to Pseudo Substrates. , 2015, , .		0
5	Demonstration of (In, Ga)N/GaN Core-Shell Micro Light-Emitting Diodes Grown by Molecular Beam Epitaxy on Ordered MOVPE GaN Pillars. <i>Crystal Growth and Design</i> , 2015, 15, 3661-3665.	1.4	17
6	Selective area growth of III-nitride nanorods on polar, semi-polar, and non-polar orientations: device applications. , 2015, , .		2
7	Light-Emitting-Diodes based on ordered InGaN nanocolumns emitting in the blue, green and yellow spectral range. <i>Nanotechnology</i> , 2014, 25, 435203.	1.3	18
8	Growth of InGaN/GaN core-shell structures on selectively etched GaN rods by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2014, 392, 5-10.	0.7	13
9	Selective Area Growth of III-Nitrides on Polar and Semi-Polar Orientations: from Light Emitters to Pseudo-Substrates. , 2014, , .		1
10	Selective area growth of GaN nanostructures: A key to produce high quality (111) a-plane pseudo-substrates. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	11
11	Investigation of III-V Nanowires by Plan-View Transmission Electron Microscopy: InN Case Study. <i>Microscopy and Microanalysis</i> , 2014, 20, 1471-1478.	0.2	5
12	Selective area growth and characterization of InGaN nanocolumns for phosphor-free white light emission. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	33
13	Investigation of AlInN barrier ISFET structures with GaN capping for pH detection. <i>Sensors and Actuators B: Chemical</i> , 2013, 176, 704-707.	4.0	22
14	Monolithic integration of InGaN segments emitting in the blue, green, and red spectral range in single ordered nanocolumns. <i>Applied Physics Letters</i> , 2013, 102, 181103.	1.5	39
15	Selective area growth and characterization of GaN nanocolumns, with and without an InGaN insertion, on semi-polar (111) GaN templates. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	15
16	Selective area growth of In(Ga)N/GaN nanocolumns by molecular beam epitaxy on GaN-buffered Si(111): from ultraviolet to infrared emission. <i>Nanotechnology</i> , 2013, 24, 175303.	1.3	54
17	ORDERED GAN/INGAN NANORODS ARRAYS GROWN BY MOLECULAR BEAM EPITAXY FOR PHOSPHOR-FREE WHITE LIGHT EMISSION. <i>International Journal of High Speed Electronics and Systems</i> , 2012, 21, 1250010.	0.3	7
18	Plasmon excitation in electron energy-loss spectroscopy for determination of indium concentration in (In,Ga)N/GaN nanowires. <i>Nanotechnology</i> , 2012, 23, 485701.	1.3	32

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19	Selective area growth and characterization of InGaN nano-disks implemented in GaN nanocolumns with different top morphologies. Applied Physics Letters, 2012, 100, .	1.5	34
20	Fabrication of GaN nanorods by focused ion beam. Microelectronic Engineering, 2012, 98, 250-253.	1.1	3
21	Oxygen photo-adsorption related quenching of photoluminescence in group-III nitride nanocolumns. Superlattices and Microstructures, 2012, 52, 165-171.	1.4	14
22	Selective area growth of a- and c-plane GaN nanocolumns by molecular beam epitaxy using colloidal nanolithography. Journal of Crystal Growth, 2012, 353, 1-4.	0.7	44
23	E-beam nano-patterning for the ordered growth of GaN/InGaN nanorods. Microelectronic Engineering, 2012, 98, 374-377.	1.1	4
24	Evidence of charge carrier number fluctuations in InN thin films?. , 2011, , .		0
25	Radiative defects in GaN nanocolumns: Correlation with growth conditions and sample morphology. Applied Physics Letters, 2011, 98, 083104.	1.5	34
26	Understanding the selective area growth of GaN nanocolumns by MBE using Ti nanomasks. Journal of Crystal Growth, 2011, 325, 89-92.	0.7	97
27	Polarity determination by electron energy-loss spectroscopy: application to ultra-small III-nitride semiconductor nanocolumns. Nanotechnology, 2011, 22, 415701.	1.3	29
28	Volume charge carrier number fluctuations probed by low frequency noise measurements in InN layers. Applied Physics Letters, 2011, 98, 252104.	1.5	8
29	InN/InGaN multiple quantum wells emitting at 1.5 μ m grown by molecular beam epitaxy. Applied Physics Letters, 2011, 98, .	1.5	24
30	Emission control of InGaN nanocolumns grown by molecular-beam epitaxy on Si(111) substrates. Applied Physics Letters, 2011, 99, .	1.5	29
31	GaN and InN nanocolumns as electrochemical sensing elements: Potentiometric response to KCl, pH and urea. Materials Letters, 2010, 64, 1332-1335.	1.3	17
32	Optical properties of InN grown on Si(111) substrate. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1066-1069.	0.8	16
33	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
34	Electron Accumulation Layers in InN Nanocolumns Studied by Raman Scattering. , 2010, , .		0
35	InN nanocolumns grown by plasma-assisted molecular beam epitaxy on A-plane GaN templates. Applied Physics Letters, 2009, 94, 221908.	1.5	9
36	Direct immobilization of enzymes in GaN and InN nanocolumns: The urease case study. Applied Physics Letters, 2009, 95, 113701.	1.5	11

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37	Ultrathin GaN/AlN/GaN solution-gate field effect transistor with enhanced resolution at low source-gate voltage. <i>Sensors and Actuators B: Chemical</i> , 2009, 142, 304-307.	4.0	25
38	Non-linear properties of nitride-based nanostructures for optically controlling the speed of light at 1.51 μ m. <i>Microelectronics Journal</i> , 2009, 40, 349-352.	1.1	4
39	A growth diagram for plasma-assisted molecular beam epitaxy of GaN nanocolumns on Si(111). <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	110
40	Characterization of a pH sensor based on an AlGaN/GaN transistor. , 2009, , .		1
41	Raman scattering by coupled plasmon-LO phonons in InN nanocolumns. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1562-1564.	0.8	2
42	Space charged region in GaN and InN nanocolumns investigated by atomic force microscopy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1609-1611.	0.8	1
43	Fabrication and stress relief modelling of GaN based MEMS test structures grown by MBE on Si(111). <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 1974-1976.	0.8	2
44	Raman scattering by longitudinal optical phonons in InN nanocolumns grown on Si(1 1 1) and Si(0 0 1) substrates. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 2087-2090.	1.3	8
45	Band bending at the surfaces of In-rich InGaN alloys. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	33
46	Accommodation mechanism of InN nanocolumns grown on Si(111) substrates by molecular beam epitaxy. <i>Applied Physics Letters</i> , 2007, 91, 021902.	1.5	66
47	Evidence of electron accumulation at nonpolar surfaces of InN nanocolumns. <i>Applied Physics Letters</i> , 2007, 90, 262110.	1.5	81
48	Phonon-plasmon coupling in electron surface accumulation layers in InN nanocolumns. <i>Physical Review B</i> , 2007, 76, .	1.1	41
49	Inelastic light scattering spectroscopy of semiconductor nitride nanocolumns. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 2838-2846.	0.7	4
50	Growth, morphology, and structural properties of group-III-nitride nanocolumns and nanodisks. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 2816-2837.	0.7	148
51	Epitaxial growth and characterization of InN nanorods and compact layers on silicon substrates. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1490-1493.	0.7	30
52	InN layers grown on silicon substrates: effect of substrate temperature and buffer layers. <i>Journal of Crystal Growth</i> , 2005, 278, 373-377.	0.7	48
53	GaN reactive ion etching using SiCl ₄ :Ar:SF ₆ chemistry. <i>Journal of Materials Science: Materials in Electronics</i> , 2005, 16, 409-413.	1.1	5
54	Morphology and optical properties of InN layers grown by molecular beam epitaxy on silicon substrates. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 2289-2292.	0.8	22

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55	Characterization of GaN quantum discs embedded in Al _x Ga _{1-x} N nanocolumns grown by molecular beam epitaxy. <i>Physical Review B</i> , 2003, 68, .	1.1	112
56	Interplay between GaN and AlN sublattices in wurtzite Al _x Ga _{1-x} N alloys revealed by Raman spectroscopy. <i>Journal of Applied Physics</i> , 2002, 92, 223-226.	1.1	6
57	Strong localization in InGaN layers with high In content grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2002, 80, 231-233.	1.5	72
58	Resonant-cavity InGaN multiple-quantum-well green light-emitting diode grown by molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2002, 80, 2198-2200.	1.5	43
59	AlGa _N Nanocolumns and AlGa _N /Ga _N /AlGa _N Nanostructures Grown by Molecular Beam Epitaxy. <i>Physica Status Solidi (B): Basic Research</i> , 2002, 234, 717-721.	0.7	27
60	AlGa _N Nanocolumns Grown by Molecular Beam Epitaxy: Optical and Structural Characterization. <i>Physica Status Solidi A</i> , 2002, 192, 60-66.	1.7	55
61	Nitride RCLEDs Grown by MBE for POF Applications. <i>Physica Status Solidi A</i> , 2002, 192, 277-285.	1.7	16
62	Visible and Solar-Blind AlGa _N Metal-Semiconductor-Metal Photodetectors Grown on Si(111) Substrates. <i>Physica Status Solidi A</i> , 2002, 192, 314-319.	1.7	6
63	From Ultraviolet to Green InGa _N -Based Conventional and Resonant-Cavity Light-Emitting Diodes Grown by Molecular Beam Epitaxy. <i>Physica Status Solidi A</i> , 2002, 192, 341-347.	1.7	4
64	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
65	Luminescence and Morphological Properties of GaN Layers Grown on SiC/Si(111) Substrates. <i>Physica Status Solidi A</i> , 2002, 192, 401-406.	1.7	2
66	Brillouin characterization of the acoustic waves phase-velocity in Al _x Ga _{1-x} N epilayers. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 168-171.	1.7	5
67	Growth of GaN layers on SiC/Si(111) substrate by molecular beam epitaxy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 172-176.	1.7	16
68	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
69	Structural and optical characterization of thick InGa _N layers and InGa _N /Ga _N MQW grown by molecular beam epitaxy. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 131-134.	1.7	22
70	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
71	AlGa _N ultraviolet photodetectors grown by molecular beam epitaxy on Si(111) substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 93, 159-162.	1.7	39
72	Structural and optical characterization of intrinsic GaN nanocolumns. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 13, 1070-1073.	1.3	31

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73	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
74	Fast AlGaIn metal-semiconductor-metal photodetectors grown on Si(111). Electronics Letters, 2001, 37, 239.	0.5	7
75	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
76	AlGaIn photodetectors grown on Si(111) by molecular beam epitaxy. Journal of Crystal Growth, 2001, 230, 544-548.	0.7	20
77	Study of the Effects of Mg and Be Co-Doping in GaN Layers. Physica Status Solidi A, 2000, 180, 97-102.	1.7	10
78	Wet etching of GaN grown by molecular beam epitaxy on Si(111). Semiconductor Science and Technology, 2000, 15, 996-1000.	1.0	120
79	High visible rejection AlGaIn photodetectors on Si(111) substrates. Applied Physics Letters, 2000, 76, 2785-2787.	1.5	42
80	Luminescence properties and defects in GaN nanocolumns grown by molecular beam epitaxy. Physical Review B, 2000, 62, 16826-16834.	1.1	345
81	The effect of Si doping on the defect structure of GaN/AlN/Si(111). Applied Physics Letters, 1999, 74, 3362-3364.	1.5	55
82	Growth of III-nitrides on Si(111) by molecular beam epitaxy Doping, optical, and electrical properties. Journal of Crystal Growth, 1999, 201-202, 296-317.	0.7	189
83	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
84	Influence of Si Doping on the Subgrain Structure of GaN Grown on AlN/Si(111). Physica Status Solidi A, 1999, 176, 401-406.	1.7	5
85	Properties of Homoepitaxial and Heteroepitaxial GaN Layers Grown by Plasma-Assisted MBE. Physica Status Solidi A, 1999, 176, 447-452.	1.7	6
86	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(111). Journal of Crystal Growth, 1998, 183, 23-30.	0.7	303
87	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
88	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
89	Effect of Ga/Si interdiffusion on optical and transport properties of GaN layers grown on Si(111) by molecular-beam epitaxy. Physical Review B, 1998, 58, 1550-1559.	1.1	92
90	Reactive ion etching of GaN layers using. Semiconductor Science and Technology, 1997, 12, 1654-1657.	1.0	37

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91	Growth kinetics and morphology of high quality AlN grown on Si(111) by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 1997, 82, 4681-4683.	1.1	62
92	Yellow luminescence and related deep states in undoped GaN. Physical Review B, 1997, 55, 4689-4694.	1.1	203
93	Exciton and donor - acceptor recombination in undoped GaN on Si(111). Semiconductor Science and Technology, 1997, 12, 1396-1403.	1.0	53
94	Optical and electrical characterization of GaN layers grown on silicon and sapphire substrates. Solid-State Electronics, 1996, 40, 81-84.	0.8	2