

# Jean Christophe Harmand

## 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.

183  
papers

6,205  
citations

44  
h-index

73  
g-index

192  
ext. papers

6,697  
ext. citations

3.8  
avg, IF

5.54  
L-index

#	Paper	IF	Citations
183	DFT analysis of crystal polarity on graphene surface. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 2015, 012105	0.3	
182	In-Situ Transmission Electron Microscopy Observation of Germanium Growth on Freestanding Graphene: Unfolding Mechanism of 3D Crystal Growth During Van der Waals Epitaxy. <i>Small</i> , <b>2021</b> , e2101890	11.9	11
181	Investigation of the effect of the doping order in GaN nanowire p-n junctions grown by molecular-beam epitaxy. <i>Nanotechnology</i> , <b>2021</b> , 32, 085705	3.4	3
180	Crystal polarity discrimination in GaN nanowires on graphene. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 9997-10004	7.1	
179	Quantitative Assessment of Carrier Density by Cathodoluminescence. I. GaAs Thin Films and Modeling. <i>Physical Review Applied</i> , <b>2021</b> , 15,	4.3	2
178	Quantitative Assessment of Carrier Density by Cathodoluminescence. II. GaAs Nanowires. <i>Physical Review Applied</i> , <b>2021</b> , 15,	4.3	1
177	Dynamics of Droplet Consumption in Vapor-Liquid-Solid III-V Nanowire Growth. <i>Crystal Growth and Design</i> , <b>2021</b> , 21, 4647-4655	3.5	1
176	In Situ X-ray Diffraction Study of GaN Nucleation on Transferred Graphene. <i>Crystal Growth and Design</i> , <b>2020</b> , 20, 4013-4019	3.5	3
175	Phase Selection in Self-catalyzed GaAs Nanowires. <i>Nano Letters</i> , <b>2020</b> , 20, 1669-1675	11.5	49
174	Selective Area Growth of GaN Nanowires on Graphene Nanodots. <i>Crystal Growth and Design</i> , <b>2020</b> , 20, 552-559	3.5	11
173	Nanoscale electrical analyses of axial-junction GaAsP nanowires for solar cell applications. <i>Nanotechnology</i> , <b>2020</b> , 31, 145708	3.4	9
172	Influence of surface passivation on the electrical properties of p-i-n GaAsP nanowires. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 123104	3.4	2
171	Stable and high yield growth of GaP and InGaAs nanowire arrays using In as a catalyst. <i>Nanoscale</i> , <b>2020</b> , 12, 18240-18248	7.7	4
170	GaN/Ga <sub>2</sub> O <sub>3</sub> Core/Shell Nanowires Growth: Towards High Response Gas Sensors. <i>Applied Sciences (Switzerland)</i> , <b>2019</b> , 9, 3528	2.6	5
169	Growth Dynamics of Gallium Nanodroplets Driven by Thermally Activated Surface Diffusion. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 5082-5089	6.4	2
168	Importance of point defect reactions for the atomic-scale roughness of III-V nanowire sidewalls. <i>Nanotechnology</i> , <b>2019</b> , 30, 324002	3.4	2
167	Investigation of GaN nanowires containing AlN/GaN multiple quantum discs by EBIC and CL techniques. <i>Nanotechnology</i> , <b>2019</b> , 30, 214006	3.4	4

166	Morphology Tailoring and Growth Mechanism of Indium-Rich InGaN/GaN Axial Nanowire Heterostructures by Plasma-Assisted Molecular Beam Epitaxy. <i>Crystal Growth and Design</i> , <b>2018</b> , 18, 2545-2554	3.5	11
165	Measuring and Modeling the Growth Dynamics of Self-Catalyzed GaP Nanowire Arrays. <i>Nano Letters</i> , <b>2018</b> , 18, 701-708	11.5	35
164	Atomic Step Flow on a Nanofacet. <i>Physical Review Letters</i> , <b>2018</b> , 121, 166101	7.4	82
163	Energy harvesting efficiency in GaN nanowire-based nanogenerators: the critical influence of the Schottky nanocontact. <i>Nanoscale</i> , <b>2017</b> , 9, 4610-4619	7.7	24
162	Determination of n-Type Doping Level in Single GaAs Nanowires by Cathodoluminescence. <i>Nano Letters</i> , <b>2017</b> , 17, 6667-6675	11.5	24
161	In situ passivation of GaAsP nanowires. <i>Nanotechnology</i> , <b>2017</b> , 28, 495707	3.4	18
160	Shiba Bound States across the Mobility Edge in Doped InAs Nanowires. <i>Physical Review Letters</i> , <b>2017</b> , 119, 097701	7.4	7
159	Magnetic two-dimensional field effect transistor. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 233508	3.4	1
158	Class-A operation of an optically-pumped 1.6 $\mu\text{m}$ -emitting quantum dash-based vertical-external-cavity surface-emitting laser on InP. <i>Optics Express</i> , <b>2017</b> , 25, 11760-11766	3.3	5
157	Epitaxy of GaN Nanowires on Graphene. <i>Nano Letters</i> , <b>2016</b> , 16, 4895-902	11.5	94
156	Electron beam induced current microscopy investigation of GaN nanowire arrays grown on Si substrates. <i>Materials Science in Semiconductor Processing</i> , <b>2016</b> , 55, 72-78	4.3	8
155	Sharpening the Interfaces of Axial Heterostructures in Self-Catalyzed AlGaAs Nanowires: Experiment and Theory. <i>Nano Letters</i> , <b>2016</b> , 16, 1917-24	11.5	41
154	Photon Cascade from a Single Crystal Phase Nanowire Quantum Dot. <i>Nano Letters</i> , <b>2016</b> , 16, 1081-5	11.5	28
153	Piezo-generator integrating a vertical array of GaN nanowires. <i>Nanotechnology</i> , <b>2016</b> , 27, 325403	3.4	41
152	Nitride Nanowires: From Rigid to Flexible Piezo-generators. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 773, 012010	0.3	1
151	Self-induced growth of vertical GaN nanowires on silica. <i>Nanotechnology</i> , <b>2016</b> , 27, 135602	3.4	28
150	Abrupt GaP/GaAs Interfaces in Self-Catalyzed Nanowires. <i>Nano Letters</i> , <b>2015</b> , 15, 6036-41	11.5	42
149	Crystallization of Si Templates of Controlled Shape, Size, and Orientation: Toward Micro- and Nanosubstrates. <i>Crystal Growth and Design</i> , <b>2015</b> , 15, 2102-2109	3.5	3

148	Modeling, synthesis and study of highly efficient solar cells based on III-nitride nanowire arrays grown on Si substrates. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 643, 012115	0.3	10
147	Voltage bistability of coherent electron injection and nonlinear dynamics of a Bloch oscillation in a semiconductor superlattice. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	2
146	Optical polarization properties of InAs/InP quantum dot and quantum rod nanowires. <i>Nanotechnology</i> , <b>2015</b> , 26, 395701	3.4	11
145	Recent advances in development of vertical-cavity based short pulse source at 1.55 $\mu\text{m}$ . <i>Frontiers of Optoelectronics</i> , <b>2014</b> , 7, 1-19	2.8	0
144	GaN nanowires for piezoelectric generators. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2014</b> , 8, 414-419	1.5	21
143	Design of III-V nanowires based microwires vertically coupled to a Si waveguide for optical interconnects <b>2014</b> ,		1
142	Impact of the GaN nanowire polarity on energy harvesting. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 213105	3.4	15
141	Record pure zincblende phase in GaAs nanowires down to 5 nm in radius. <i>Nano Letters</i> , <b>2014</b> , 14, 3938-44	1.5	72
140	Class-A dual-frequency VECSEL at telecom wavelength. <i>Optics Letters</i> , <b>2014</b> , 39, 5586-9	3	17
139	Room-temperature optical manipulation of nuclear spin polarization in GaAsN. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	14
138	Random stacking sequences in III-V nanowires are correlated. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	13
137	Palladium assisted heteroepitaxial growth of an InAs nanowire by molecular beam epitaxy. <i>Semiconductor Science and Technology</i> , <b>2014</b> , 29, 115005	1.8	3
136	Fabrication of an InGaAs spin filter by implantation of paramagnetic centers. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 052403	3.4	13
135	Bistability and nonlinear negative differential conductance in semiconductor superlattices illuminated by laser light. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 092106	3.4	
134	Photoreflectance, photoluminescence, and microphotoluminescence study of optical transitions between delocalized and localized states in GaN <sub>0.02</sub> As <sub>0.98</sub> , Ga <sub>0.95</sub> In <sub>0.05</sub> N <sub>0.02</sub> As <sub>0.98</sub> , and GaN <sub>0.02</sub> As <sub>0.90</sub> Sb <sub>0.08</sub> layers. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	44
133	Phase coherent transport in GaAs/AlGaAs core-shell nanowires. <i>Journal of Crystal Growth</i> , <b>2013</b> , 378, 546-548	1.6	6
132	Growth of vertical GaAs nanowires on an amorphous substrate via a fiber-textured Si platform. <i>Nano Letters</i> , <b>2013</b> , 13, 2743-7	11.5	29
131	Improvement of the oxidation interface in an AlGaAs/Al <sub>x</sub> O <sub>y</sub> waveguide structure by using a GaAs/AlAs superlattice. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2013</b> , 210, 1171-1177 <sup>1.6</sup>		

130	Arsenic Pathways in Self-Catalyzed Growth of GaAs Nanowires. <i>Crystal Growth and Design</i> , <b>2013</b> , 13, 91-96	3.5	119
129	InP $\delta$ As $\delta$ x quantum dots in InP nanowires: A route for single photon emitters. <i>Journal of Crystal Growth</i> , <b>2013</b> , 378, 519-523	1.6	17
128	Predictive modeling of self-catalyzed III-V nanowire growth. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	142
127	. <i>IEEE Journal of Quantum Electronics</i> , <b>2012</b> , 48, 643-650	2	12
126	Effect of diffusion from a lateral surface on the rate of GaN nanowire growth. <i>Semiconductors</i> , <b>2012</b> , 46, 838-841	0.7	11
125	N-Polar GaN Nanowires Seeded by Al Droplets on Si(111). <i>Crystal Growth and Design</i> , <b>2012</b> , 12, 2724-2729	3.5	51
124	Influence of shadow effect on the growth and shape of InAs nanowires. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 104317	2.5	40
123	Conduction band structure in wurtzite GaAs nanowires: A resonant Raman scattering study. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 073102	3.4	27
122	Magnetic thaw down and boil-off of electrons in the quantum Hall effect regime due to magnetoacceptors in GaAs/GaAlAs heterostructures. <i>Physical Review B</i> , <b>2012</b> , 86,	3.3	5
121	Kinetics and Statistics of Vapor-Liquid-Solid Growth of III-V Nanowires. <i>Materials Research Society Symposia Proceedings</i> , <b>2012</b> , 1408, 81		
120	Morphology of self-catalyzed GaN nanowires and chronology of their formation by molecular beam epitaxy. <i>Nanotechnology</i> , <b>2011</b> , 22, 245606	3.4	55
119	New mode of vapor-liquid-solid nanowire growth. <i>Nano Letters</i> , <b>2011</b> , 11, 1247-53	11.5	125
118	Subpicosecond pulse generation from a 1.56 fm mode-locked VECSEL. <i>Optics Letters</i> , <b>2011</b> , 36, 4377-9	3	21
117	Giant spin-dependent photo-conductivity in GaAsN dilute nitride semiconductor. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	15
116	GaP/GaAs $\delta$ Px nanowires fabricated with modulated fluxes: A step towards the realization of superlattices in a single nanowire. <i>Journal of Crystal Growth</i> , <b>2011</b> , 323, 293-296	1.6	21
115	Quasi one-dimensional transport in single GaAs/AlGaAs core-shell nanowires. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 142114	3.4	22
114	Picosecond carrier lifetimes in dilute GaInNAs grown on InP substrate. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 141902	3.4	4
113	Effects of temperature on transition energies of GaAsSbN/GaAs single quantum wells. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 325801	1.8	2

112 Growth of III-Arsenide/Phosphide Nanowires by Molecular Beam Epitaxy **2011**, 68-88

111	Investigation of the electronic transport in GaN nanowires containing GaN/AlN quantum discs. <i>Nanotechnology</i> , <b>2010</b> , 21, 425206	3-4	30
110	Nucleation antibunching in catalyst-assisted nanowire growth. <i>Physical Review Letters</i> , <b>2010</b> , 104, 135507	3-4	95
109	Growth kinetics of a single InP <sub>1-x</sub> As <sub>x</sub> nanowire. <i>Physical Review B</i> , <b>2010</b> , 81,	3-3	78
108	Effect of nitrogen on the GaAs <sub>0.9</sub> N <sub>x</sub> Sb <sub>0.1</sub> dielectric function from the near-infrared to the ultraviolet. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 201903	3-4	15
107	Silicon nanowires: Diameter dependence of growth rate and delay in growth. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 133109	3-4	58
106	Local structure of indium in quinary (InGa)(AsSbN)/GaAs quantum wells. <i>Physical Review B</i> , <b>2010</b> , 82,	3-3	3
105	Crystal phase quantum dots. <i>Nano Letters</i> , <b>2010</b> , 10, 1198-201	11.5	207
104	Growth, structure and phase transitions of epitaxial nanowires of III-V semiconductors. <i>Journal of Physics: Conference Series</i> , <b>2010</b> , 209, 012002	0-3	11
103	Wide InP nanowires with wurtzite/zincblende superlattice segments are type-II whereas narrower nanowires become type-I: an atomistic pseudopotential calculation. <i>Nano Letters</i> , <b>2010</b> , 10, 4055-60	11.5	68
102	Ultrashort pulse generation from 1.56 $\mu\text{m}$ mode-locked VECSEL at room temperature. <i>Optics Express</i> , <b>2010</b> , 18, 19902-13	3-3	11
101	Nanowires for quantum optics <b>2010</b> ,		1
100	Growth of Inclined GaAs Nanowires by Molecular Beam Epitaxy: Theory and Experiment. <i>Nanoscale Research Letters</i> , <b>2010</b> , 5, 1692-7	5	18
99	Effect of arsenic species on the kinetics of GaAs nanowires growth by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , <b>2010</b> , 312, 2073-2077	1.6	27
98	Effects of repulsive and attractive ionized impurities on the resistivity of semiconductor heterostructures in the quantum Hall regime. <i>Physical Review B</i> , <b>2009</b> , 80,	3-3	5
97	Spin-dependent photoconductivity in nonmagnetic semiconductors at room temperature. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 241104	3-4	19
96	Epitaxial growth and picosecond carrier dynamics of GaInAs/GaInNAs superlattices. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 141910	3-4	6
95	Wurtzite GaAs/AlGaAs core-shell nanowires grown by molecular beam epitaxy. <i>Nanotechnology</i> , <b>2009</b> , 20, 415701	3-4	31

94	Si Incorporation in InP Nanowires Grown by Au-Assisted Molecular Beam Epitaxy. <i>Journal of Nanomaterials</i> , <b>2009</b> , 2009, 1-7	3.2	11
93	Electron spin control in dilute nitride semiconductors. <i>Journal of Physics Condensed Matter</i> , <b>2009</b> , 21, 174211	1.8	13
92	Semiconductor quantum-wires and nano-wires for optoelectronic applications. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2009</b> , 20, 94-101	2.1	5
91	Vibrational spectroscopies: a natural mesoscope for the study of spontaneous ordering in alloys. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2009</b> , 6, 1303-1306		
90	Room-temperature defect-engineered spin filter based on a non-magnetic semiconductor. <i>Nature Materials</i> , <b>2009</b> , 8, 198-202	27	78
89	Growth and structural characterization of GaAs/GaAsSb axial heterostructured nanowires. <i>Journal of Crystal Growth</i> , <b>2009</b> , 311, 1847-1850	1.6	19
88	Critical diameters and temperature domains for MBE growth of III-V nanowires on lattice mismatched substrates. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2009</b> , 3, 112-114	2.5	108
87	Towards a monolithic optical cavity for atom detection and manipulation. <i>European Physical Journal D</i> , <b>2009</b> , 53, 107-111	1.3	3
86	Role of nonlinear effects in nanowire growth and crystal phase. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	83
85	Potential of semiconductor nanowires for single photon sources <b>2009</b> ,		4
84	Photoluminescence study of nitrogen effects on confined states in GaAs <sub>1-x</sub> N <sub>x</sub> GaAs quantum wells. <i>EPJ Applied Physics</i> , <b>2009</b> , 47, 30302	1.1	6
83	Growth kinetics and crystal structure of semiconductor nanowires. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	263
82	Shape modification of III-V nanowires: the role of nucleation on sidewalls. <i>Physical Review E</i> , <b>2008</b> , 77, 031606	2.4	52
81	Femtosecond pulse generation around 1500 nm using a GaInNAsSb SESAM. <i>Optics Express</i> , <b>2008</b> , 16, 18739-44	3.3	8
80	Facet and in-plane crystallographic orientations of GaN nanowires grown on Si(111). <i>Nanotechnology</i> , <b>2008</b> , 19, 155704	3.4	77
79	Wurtzite to zinc blende phase transition in GaAs nanowires induced by epitaxial burying. <i>Nano Letters</i> , <b>2008</b> , 8, 1638-43	11.5	60
78	Zinc blende GaAsSb nanowires grown by molecular beam epitaxy. <i>Nanotechnology</i> , <b>2008</b> , 19, 275605	3.4	46
77	Competition between confinement potential fluctuations and band-gap renormalization effects in In <sub>0.53</sub> Ga <sub>0.47</sub> As/In <sub>0.525</sub> Ga <sub>0.235</sub> Al <sub>0.25</sub> As single and double quantum wells. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	8



76	Strain effects of InP/Si and InP/porous Si studied by spectroscopic ellipsometry. <i>EPJ Applied Physics</i> , <b>2008</b> , 42, 99-102	1.1	
75	Thermal optimization of 1.55 $\mu\text{m}$ OP-VECSEL with hybrid metal/metamorphic mirror for single-mode high power operation. <i>Optical and Quantum Electronics</i> , <b>2008</b> , 40, 155-165	2.4	36
74	Optical constants and critical-point parameters of GaAs $_{1-x}$ Sb $_x$ alloy films grown on GaAs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2008</b> , 205, 833-836	1.6	2
73	Growth and characterization of InP nanowires with InAsP insertions. <i>Nano Letters</i> , <b>2007</b> , 7, 1500-4	11.5	102
72	Redistribution of nitrogen localized states in GaAsN layer doped Silicon. <i>EPJ Applied Physics</i> , <b>2007</b> , 38, 221-225	1.1	
71	Diffusion-controlled growth of semiconductor nanowires: Vapor pressure versus high vacuum deposition. <i>Surface Science</i> , <b>2007</b> , 601, 4395-4401	1.8	53
70	Large intrinsic birefringence in zinc-blende based artificial semiconductors. <i>Comptes Rendus Physique</i> , <b>2007</b> , 8, 1174-1183	1.4	1
69	Effect of deposition conditions on nanowisker morphology. <i>Semiconductors</i> , <b>2007</b> , 41, 865-874	0.7	5
68	Nucleation at the lateral surface and the shape of whisker nanocrystals. <i>Semiconductors</i> , <b>2007</b> , 41, 1240-1247	0.7	2
67	Photoluminescence properties of a Si doped InGaAs/InGaAlAs superlattice. <i>Journal of Physics Condensed Matter</i> , <b>2007</b> , 19, 086207	1.8	5
66	Combined Raman study of InGaAsN from the N-impurity and InGaAs-matrix sides. <i>Applied Physics Letters</i> , <b>2007</b> , 91, 051910	3.4	4
65	Au-assisted molecular beam epitaxy of InAs nanowires: Growth and theoretical analysis. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 094313	2.5	123
64	Growth of GaN free-standing nanowires by plasma-assisted molecular beam epitaxy: structural and optical characterization. <i>Nanotechnology</i> , <b>2007</b> , 18, 385306	3.4	103
63	Why does wurtzite form in nanowires of III-V zinc blende semiconductors?. <i>Physical Review Letters</i> , <b>2007</b> , 99, 146101	7.4	615
62	Calculation of the temperature profile in nanowiskers growing on a hot substrate. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	32
61	Scaling of the saturation energy in microcavity saturable absorber devices. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 153513	3.4	13
60	Quantum-well saturable absorber at 1.55 $\mu\text{m}$ on GaAs substrate with a fast recombination rate. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 201110	3.4	27
59	Temperature conditions for GaAs nanowire formation by Au-assisted molecular beam epitaxy. <i>Nanotechnology</i> , <b>2006</b> , 17, 4025-30	3.4	101



58	Theoretical analysis of the vapor-liquid-solid mechanism of nanowire growth during molecular beam epitaxy. <i>Physical Review E</i> , <b>2006</b> , 73, 021603	2.4	154
57	The effect of potential fluctuations on the optical properties of InGaAsInGaAlAs single and coupled double quantum wells. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 053519	2.5	7
56	Clustering in GaAsSbN alloys as a possible origin of their atypical optical behavior: a Sb K-edge X-ray absorption study. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2006</b> , 3, 1931-1934		6
55	The role of surface diffusion of adatoms in the formation of nanowire crystals. <i>Semiconductors</i> , <b>2006</b> , 40, 1075-1082	0.7	45
54	Optimization and Characterization of InGaAsN/GaAs Quantum-well Ridge Laser Diodes for High Frequency Operation. <i>Optical and Quantum Electronics</i> , <b>2006</b> , 38, 313-324	2.4	7
53	The effect of potential fluctuations on the optical properties of InGaAsInAlAs superlattices. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 103518	2.5	17
52	Floor free 10-Gb/s transmission with directly modulated GaInNAs-GaAs 1.35- $\mu\text{m}$ laser for metropolitan applications. <i>IEEE Photonics Technology Letters</i> , <b>2005</b> , 17, 971-973	2.2	14
51	Analysis of vapor-liquid-solid mechanism in Au-assisted GaAs nanowire growth. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 203101	3.4	231
50	Continuous wave and time resolved spectroscopy of InAsN/GaAsN based quantum dots. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2005</b> , 202, 2598-2603	1.6	3
49	MBE growth of InAsN on (100) InAs substrates. <i>Physica Status Solidi (B): Basic Research</i> , <b>2005</b> , 242, R43-R45		16
48	The Free Exciton Binding Energy in a Strained GaN <sub>0.02</sub> As <sub>0.98</sub> Layer. <i>AIP Conference Proceedings</i> , <b>2005</b> ,	0	4
47	Spin dynamics in dilute nitride semiconductors at room temperature. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 252115	3.4	40
46	GaInAs/GaAs quantum-well growth assisted by Sb surfactant: Toward 1.3 $\mu\text{m}$ emission. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3981-3983	3.4	70
45	Photoreflectance investigations of the energy level structure in GaInNAs-based quantum wells. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S3071-S3094	1.8	43
44	Photoreflectance investigations of oscillator strength and broadening of optical transitions for GaAsSbInGaInAs/GaAs bilayer quantum wells. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 3453-3455	3.4	35
43	Ultrafast InGaAs/InGaAlAs multiple-quantum-well electro-absorption modulator for wavelength conversion at high bit rates. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 4268-4270	3.4	13
42	Experimental investigation of the CMN matrix element in the band anticrossing model for GaAsN and GaInAsN layers. <i>Solid State Communications</i> , <b>2004</b> , 129, 353-357	1.6	29
41	Photoluminescence characteristics of GaAsSbN/GaAs epilayers lattice-matched to GaAs substrates. <i>Solid State Communications</i> , <b>2004</b> , 132, 707-711	1.6	32

40	Morphology and composition of highly strained InGaAs and InGaAsN layers grown on GaAs substrate. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 203-205	3-4	49
39	Band structure calculations for dilute nitride quantum wells under compressive or tensile strain. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, S3215-S3227	1.8	12
38	Investigation of recombination processes involving defect-related states in (Ga,In)(As,Sb,N) compounds. <i>EPJ Applied Physics</i> , <b>2004</b> , 27, 313-316	1.1	29
37	Low switching energy saturable absorber device for 40Gbit/s networks <b>2004</b> ,		1
36	Role of nitrogen in the mobility drop of electrons in modulation-doped GaAsN/AlGaAs heterostructures. <i>Solid State Communications</i> , <b>2003</b> , 126, 333-337	1.6	46
35	Doping dependence of millimeterwave negative differential conductance in strain-compensated GaInAs/AlInAs superlattices. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2003</b> , 17, 294-296	3	2
34	Effect of temperature on the optical properties of GaAsSbN/GaAs single quantum wells grown by molecular-beam epitaxy. <i>Journal of Applied Physics</i> , <b>2003</b> , 93, 4475-4479	2.5	48
33	Influence of carrier localization on modulation mechanism in photoreflectance of GaAsN and GaInAsN. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1379-1381	3-4	35
32	Investigations on GaInNAsSb quinary alloy for 1.5 $\mu$ m laser emission on GaAs. <i>Applied Physics Letters</i> , <b>2003</b> , 83, 1298-1300	3-4	45
31	Effect of nitrogen in the electronic structure of GaAsN and GaAsSb(N) compounds. <i>Materials Science and Engineering C</i> , <b>2002</b> , 21, 251-254	8.3	23
30	Photoluminescence study of interfaces between heavily doped Al <sub>0.48</sub> In <sub>0.52</sub> As:Si layers and InP (Fe) substrates. <i>Journal of Applied Physics</i> , <b>2002</b> , 91, 8999-9004	2.5	6
29	Effect of nitrogen and temperature on the electronic band structure of GaAs <sub>1-x</sub> N <sub>x</sub> alloys. <i>Applied Physics Letters</i> , <b>2002</b> , 80, 2075-2077	3-4	33
28	GaNAsSb: how does it compare with other dilute IIIV-nitride alloys?. <i>Semiconductor Science and Technology</i> , <b>2002</b> , 17, 778-784	1.8	80
27	Comparison of light- and heavy-ion-irradiated quantum-wells for use as ultrafast saturable absorbers. <i>Applied Physics Letters</i> , <b>2001</b> , 79, 2722-2724	3-4	32
26	Temperature-dependent valence band offset and band-gap energies of pseudomorphic GaAsSb on GaAs. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 5473-5477	2.5	96
25	Ultrafast saturable absorption at 1.55 $\mu$ m in heavy-ion-irradiated quantum-well vertical cavity. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1371-1373	3-4	27
24	Comparison of nitrogen incorporation in molecular-beam epitaxy of GaAsN, GaInAsN, and GaAsSbN. <i>Applied Physics Letters</i> , <b>2000</b> , 77, 2482-2484	3-4	92
23	GaAsSbN: a new low-bandgap material for GaAs substrates. <i>Electronics Letters</i> , <b>1999</b> , 35, 1246	1.1	79

22	Investigation of optical properties of interfaces between heavily doped Al <sub>0.48</sub> In <sub>0.52</sub> As:Si and InP (Fe) substrates by photoreflectance analysis. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 4184-4188	2.5	6
21	Shubnikov-de Haas - like oscillations in the vertical transport of semiconductor superlattices. <i>Brazilian Journal of Physics</i> , <b>1999</b> , 29, 375-379	1.2	6
20	Electrical and optical characteristics of n-type-doped distributed Bragg mirrors on InP. <i>IEEE Photonics Technology Letters</i> , <b>1998</b> , 10, 763-765	2.2	30
19	Optical polarization relaxation in In <sub>x</sub> Ga <sub>1-x</sub> As-based quantum wells: Evidence of the interface symmetry-reduction effect. <i>Physical Review B</i> , <b>1998</b> , 58, R10179-R10182	3.3	30
18	Potential-inserted InGaAs - AlGaInAs shallow quantum wells for electro-optical modulation at. <i>Semiconductor Science and Technology</i> , <b>1997</b> , 12, 729-732	1.8	4
17	Band discontinuities in In <sub>x</sub> Ga <sub>1-x</sub> As-InP and InP-Al <sub>y</sub> In <sub>1-y</sub> As heterostructures: Evidence of noncommutativity. <i>Physical Review B</i> , <b>1997</b> , 55, 2274-2279	3.3	17
16	Second-harmonic generation in a doubly resonant semiconductor microcavity. <i>Optics Letters</i> , <b>1997</b> , 22, 1775-7	3	51
15	Electroabsorption modulators for high-bit-rate optical communications: a comparison of strained InGaAs/InAlAs and InGaAsP/InGaAsP MQW. <i>Semiconductor Science and Technology</i> , <b>1995</b> , 10, 887-901	1.8	34
14	Investigation of low-power all-optical bistability in an InGaAs-InAs superlattice. <i>Semiconductor Science and Technology</i> , <b>1995</b> , 10, 881-885	1.8	9
13	Observation of the Wannier-Stark ladders associated to the light-hole ground state and to the heavy-hole first excited state in GaInAs/AlGaInAs superlattices. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , <b>1995</b> , 17, 1763-1768		4
12	Low power all-optical bistability in InGaAs-AlInAs superlattices: Demonstration of a wireless self-electro-optical effect device operating at 1.5 $\mu$ m. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 742-744	3.4	10
11	Highly thermally stable electrical compensation in oxygen implanted p-InAlAs. <i>Applied Physics Letters</i> , <b>1993</b> , 62, 867-869	3.4	6
10	Compatible laser emission and optical waveguide modulation at 1.5 $\mu$ m using Wannier-Stark localization. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 1936-1938	3.4	4
9	Electroabsorption modulator based on Wannier-Stark localization with 20 GHz/V efficiency. <i>Applied Physics Letters</i> , <b>1992</b> , 61, 2773-2775	3.4	15
8	High-quality In <sub>x</sub> Ga <sub>1-x</sub> As/InAlAs modulation-doped heterostructures grown lattice-mismatched on GaAs substrates. <i>Journal of Crystal Growth</i> , <b>1991</b> , 111, 313-317	1.6	63
7	In <sub>y</sub> Ga <sub>1-y</sub> As/In <sub>y</sub> Al <sub>1-y</sub> As resonant tunneling diodes on GaAs. <i>Applied Physics Letters</i> , <b>1991</b> , 59, 111-113	3.4	8
6	Photoluminescence of an InAlAs/InGaAs Quantum Well Structure Grown on a GaAs Substrate. <i>Japanese Journal of Applied Physics</i> , <b>1990</b> , 29, L233-L235	1.4	12
5	InGaAs/InAlAs(Si) modulation-doped heterostructures intentionally lattice mismatched to InP substrates. <i>Journal of Applied Physics</i> , <b>1989</b> , 66, 2633-2636	2.5	5

4	Lattice-Mismatched Growth and Transport Properties of InAlAs/InGaAs Heterostructures on GaAs Substrates. <i>Japanese Journal of Applied Physics</i> , <b>1989</b> , 28, L1101-L1103	1.4	35
3	Secondary ion mass spectrometry quantification of Be in Al <sub>x</sub> Ga <sub>1-x</sub> As/GaAs multilayer structures. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1988</b> , 6, 2243-2247	2.9	8
2	Observation of Bloch conduction perpendicular to interfaces in a superlattice bipolar transistor. <i>Applied Physics Letters</i> , <b>1986</b> , 49, 1260-1262	3.4	45
1	Statistics of Nucleation and Growth of Single Monolayers in Nanowires: Towards a Deterministic Regime. <i>Physica Status Solidi - Rapid Research Letters</i> , 2100647	2.5	0