Joel Eymery

List of Publications by Year in Descending Order

147 papers	3,613 citations	31 h-index	57 g-index
165 ext. papers	3,884 ext. citations	4.1 avg, IF	4.81 L-index

#	Paper	IF	Citations
147	Spatially and Time-Resolved Carrier Dynamics in Core-Shell InGaN/GaN Multiple-Quantum Wells on GaN Wire. *Nano Letters*, **2021**, 21, 9494-9501	11.5	
146	Dual-Color Emission from Monolithic m-Plane Core□Shell InGaN/GaN Quantum Wells. *Advanced Photonics Research*, **2021**, 2, 2000148	1.9	1
145	Self-powered proton detectors based on GaN core□shell p□i microwires. *Applied Physics Letters*, **2021**, 118, 193501	3.4	1
144	Stretchable Transparent Light-Emitting Diodes Based on InGaN/GaN Quantum Well Microwires and Carbon Nanotube Films. *Nanomaterials*, **2021**, 11,	5.4	2
143	Scanning x-ray microscopy imaging of strain relaxation and fluctuations in thin patterned SiGe-on-insulator nanostructures. *Journal of Applied Physics*, **2021**, 129, 095302	2.5	1
142	Carrier dynamics near a crack in GaN microwires with AlGaN multiple quantum wells. *Applied Physics Letters*, **2020**, 117, 221105	3.4	4
141	Role of Underlayer for Efficient Core-Shell InGaN QWs Grown on -plane GaN Wire Sidewalls. *ACS Applied Materials & Interfaces*, **2020**, 12, 19092-19101	9.5	12
140	A helium mini-cryostat for the nanoprobe beamline ID16B at ESRF: characteristics and performance. *Journal of Synchrotron Radiation*, **2020**, 27, 1074-1079	2.4	4
139	Heat Dissipation in Flexible Nitride Nanowire Light-Emitting Diodes. *Nanomaterials*, **2020**, 10,	5.4	1
138	Mapping Inversion Domain Boundaries along Single GaN Wires with Bragg Coherent X-ray Imaging. *ACS Nano*, **2020**, 14, 10305-10312	16.7	4
137	Ion beam induced current analysis in GaN microwires. *EPJ Web of Conferences*, **2020**, 233, 05001	0.3	1
136	UV Emission from GaN Wires with -Plane Core-Shell GaN/AlGaN Multiple Quantum Wells. *ACS Applied Materials & Interfaces*, **2020**, 12, 44007-44016	9.5	7
135	Colour optimization of phosphor-converted flexible nitride nanowire white light emitting diodes. *JPhys Photonics*, **2019**, 1, 035003	2.5	3
134	A study of the strain distribution by scanning X-ray diffraction on GaP/Si for III□V monolithic integration on silicon. *Journal of Applied Crystallography*, **2019**, 52, 809-815	3.8	2
133	Nitride Nanowires for Light Emitting Diodes. *Solid State Lighting Technology and Application Series*, **2019**, 425-484	0.7	5
132	Crystallographic orientation of facets and planar defects in functional nanostructures elucidated by nano-focused coherent diffractive X-ray imaging. *Nanoscale*, **2018**, 10, 4833-4840	7.7	11
131	Flexible Capacitive Piezoelectric Sensor with Vertically Aligned Ultralong GaN Wires. *ACS Applied Materials & Interfaces*, **2018**, 10, 4794-4800	9.5	22

130	Radiation sensors based on GaN microwires. *Journal Physics D: Applied Physics*, **2018**, 51, 175105	3	6
129	Piezo-Potential Generation in Capacitive Flexible Sensors Based on GaN Horizontal Wires. *Nanomaterials*, **2018**, 8,	5.4	3
128	Detailed geometrical characterisation of a surfacial Si (100) grain boundary **2018**, 425-428		
127	Diffusion and Aggregation of Mg Implanted in GaN on Si **2018**,		1
126	Towards simulation at picometer-scale resolution: Revisiting inversion domain boundaries in GaN. *Physical Review B*, **2018**, 98,	3.3	5
125	Green Electroluminescence from Radial m-Plane InGaN Quantum Wells Grown on GaN Wire Sidewalls by Metal□Organic Vapor Phase Epitaxy. *ACS Photonics*, **2018**, 5, 4330-4337	6.3	18
124	Silane-Induced N-Polarity in Wires Probed by a Synchrotron Nanobeam. *Nano Letters*, **2017**, 17, 946-952	11.5	14
123	Thin-Wall GaN/InAlN Multiple Quantum Well Tubes. *Nano Letters*, **2017**, 17, 3347-3355	11.5	9
122	Comprehensive analyses of core□shell InGaN/GaN single nanowire photodiodes. *Journal Physics D: Applied Physics*, **2017**, 50, 484001	3	12
121	Capping stability of Mg-implanted GaN layers grown on silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2017**, 214, 1600487	1.6	3
120	Thermal Evolution of Implantation Damages in Mg-Implanted GaN Layers Grown on Si. *ECS Transactions*, **2017**, 80, 131-138	1	4
119	PyNX.Ptycho: a computing library for X-ray coherent diffraction imaging of nanostructures. *Journal of Applied Crystallography*, **2016**, 49, 1842-1848	3.8	30
118	Picometre-precision atomic structure of inversion domain boundaries in GaN **2016**, 564-565		
117	Flexible White Light Emitting Diodes Based on Nitride Nanowires and Nanophosphors. *ACS Photonics*, **2016**, 3, 597-603	6.3	72
116	InGaN/GaN core/shell nanowires for visible to ultraviolet range photodetection. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 936-940	1.6	15
115	Flexible optoelectronic devices based on nitride nanowires embedded in polymer films **2016**,		2
114	Multi-microscopy study of the influence of stacking faults and three-dimensional In distribution on the optical properties of m-plane InGaN quantum wells grown on microwire sidewalls. *Applied Physics Letters*, **2016**, 108, 042102	3.4	23
113	Dependence of the photovoltaic performance of pseudomorphic InGaN/GaN multiple-quantum-well solar cells on the active region thickness. *Applied Physics Letters*, **2016**, 108, 161907	3.4	16

112	Flexible Photodiodes Based on Nitride Core/Shell p-n Junction Nanowires. *ACS Applied Materials & Interfaces*, **2016**, 8, 26198-26206	9.5	52
111	Optical properties of photodetectors based on single GaN nanowires with a transparent graphene contact. *Semiconductors*, **2016**, 50, 1097-1101	0.7	1
110	Growth of GaN-based nanorod heterostructures (core-shell) for optoelectronics and their nanocharacterization **2015**, 323-335		
109	XTOP: high-resolution X-ray diffraction and imaging. *Journal of Applied Crystallography*, **2015**, 48, 620	3.8	2
108	Effect of the barrier thickness on the performance of multiple-quantum-well InGaN photovoltaic cells. *Japanese Journal of Applied Physics*, **2015**, 54, 072302	1.4	16
107	Investigation of Photovoltaic Properties of Single Core-Shell GaN/InGaN Wires. *ACS Applied Materials & Interfaces*, **2015**, 7, 21898-906	9.5	32
106	Nitride nanowire light emitting diodes **2015**,		1
105	Flexible Light-Emitting Diodes Based on Vertical Nitride Nanowires. *Nano Letters*, **2015**, 15, 6958-64	11.5	149
104	Inversion Domain Boundaries in GaN Wires Revealed by Coherent Bragg Imaging. *ACS Nano*, **2015**, 9, 9210-6	16.7	54
103	Substrate-Free InGaN/GaN Nanowire Light-Emitting Diodes. *Nanoscale Research Letters*, **2015**, 10, 447	5	14
102	M-Plane GaN/InAlN Multiple Quantum Wells in Core–Shell Wire Structure for UV Emission. *ACS Photonics*, **2014**, 1, 38-46	6.3	37
101	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	3.8	114
100	Integrated photonic platform based on InGaN/GaN nanowire emitters and detectors. *Nano Letters*, **2014**, 14, 3515-20	11.5	148
99	Improved conversion efficiency of as-grown InGaN/GaN quantum-well solar cells for hybrid integration. *Applied Physics Express*, **2014**, 7, 032301	2.4	17
98	Correlation of microphotoluminescence spectroscopy, scanning transmission electron microscopy, and atom probe tomography on a single nano-object containing an InGaN/GaN multiquantum well system. *Nano Letters*, **2014**, 14, 107-14	11.5	63
97	Experimental and theoretical analysis of transport properties of core-shell wire light emitting diodes probed by electron beam induced current microscopy. *Nanotechnology*, **2014**, 25, 255201	3.4	30
96	Effect of the quantum well thickness on the performance of InGaN photovoltaic cells. *Applied Physics Letters*, **2014**, 105, 131105	3.4	47
95	Metal-Organic Vapor Phase Epitaxy Growth of GaN Nanorods **2014**, 245-264		

94	Exploring single semiconductor nanowires with a multimodal hard X-ray nanoprobe. *Advanced Materials*, **2014**, 26, 7873-9	24	24
93	GaN wire-based Langmuir-Blodgett films for self-powered flexible strain sensors. *Nanotechnology*, **2014**, 25, 375502	3.4	14
92	Metal organic vapour-phase epitaxy growth of GaN wires on Si (111) for light-emitting diode applications. *Nanoscale Research Letters*, **2013**, 8, 61	5	25
91	Time-dependent relaxation of strained silicon-on-insulator lines using a partially coherent x-ray nanobeam. *Physical Review Letters*, **2013**, 111, 215502	7.4	8
90	Self-organized and self-catalyst growth of semiconductor and metal wires by vapour phase epitaxy: GaN rods versus Cu whiskers. *Comptes Rendus Physique*, **2013**, 14, 221-227	1.4	11
89	InGaN/GaN multiple-quantum well heterostructures for solar cells grown by MOVPE: case studies. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2013**, 10, 350-354		6
88	Determination of the biaxial stress in strained silicon nano-stripes through polarized oblique incidence Raman spectroscopy. *Journal of Applied Physics*, **2013**, 114, 164309	2.5	3
87	Photovoltaic Response of InGaN/GaN Multiple-Quantum Well Solar Cells. *Japanese Journal of Applied Physics*, **2013**, 52, 08JH05	1.4	21
86	Single-Wire Light-Emitting Diodes Based on GaN Wires Containing Both Polar and Nonpolar InGaN/GaN Quantum Wells. *Applied Physics Express*, **2012**, 5, 014101	2.4	54
85	Coherent x-ray wavefront reconstruction of a partially illuminated Fresnel zone plate. *Optics Express*, **2011**, 19, 19223-32	3.3	32
84	Catalyst-free growth of high-optical quality GaN nanowires by metal-organic vapor phase epitaxy. *Applied Physics Letters*, **2011**, 99, 251910	3.4	36
83	M-plane core-shell InGaN/GaN multiple-quantum-wells on GaN wires for electroluminescent devices. *Nano Letters*, **2011**, 11, 4839-45	11.5	172
82	Wafer-scale selective area growth of GaN hexagonal prismatic nanostructures on c-sapphire substrate. *Journal of Crystal Growth*, **2011**, 322, 15-22	1.6	27
81	Metal positioning on silicon surfaces using the etching of buried dislocation arrays. *Nanotechnology* , **2011**, 22, 215301	3.4	
80	Enhanced Sb incorporation in InAsSb nanowires grown by metalorganic vapor phase epitaxy. *Applied Physics Letters*, **2011**, 98, 113104	3.4	49
79	Single-wire photodetectors based on InGaN/GaN radial quantum wells in GaN wires grown by catalyst-free metal-organic vapor phase epitaxy. *Applied Physics Letters*, **2011**, 98, 233107	3.4	59
78	Light emitting diodes based on GaN core/shell wires grown by MOVPE on n-type Si substrate. *Electronics Letters*, **2011**, 47, 765-767	1.1	47
77	Analysis of strain and stacking faults in single nanowires using Bragg coherent diffraction imaging. *New Journal of Physics*, **2010**, 12, 035013	2.9	64

76	Self-assembled growth of catalyst-free GaN wires by metal-organic vapour phase epitaxy. *Nanotechnology*, **2010**, 21, 015602	3.4	167
75	Homoepitaxial growth of catalyst-free GaN wires on N-polar substrates. *Applied Physics Letters*, **2010**, 97, 151909	3.4	108
74	Fully depleted Silicon-On-Insulator with back bias and strain for low power and high performance applications **2010**,		2
73	Fully Depleted Strained Silicon-on-Insulator p-MOSFETs With Recessed and Embedded Silicon Germanium Source/Drain. *IEEE Electron Device Letters*, **2010**, 31, 1074-1076	4.4	9
72	Electrical and diffraction characterization of short and narrow MOSFETs on fully depleted strained silicon-on-insulator (sSOI). *Solid-State Electronics*, **2010**, 54, 861-869	1.7	15
71	X-ray measurements of the strain and shape of dielectric/metallic wrap-gated InAs nanowires. *Applied Physics Letters*, **2009**, 94, 131911	3.4	11
70	Growth and characterization of ZnO nanowires on p-type GaN. *Microelectronics Journal*, **2009**, 40, 250-252	1.28	4
69	Coherent-diffraction imaging of single nanowires of diameter 95 nanometers. *Physical Review B*, **2009**, 79,	3.3	27
68	Elastic relaxation in patterned and implanted strained silicon on insulator. *Journal of Applied Physics* , **2009**, 105, 114302	2.5	25
67	Width and orientation effects in strained FDSOI MOSFETs: strain and device characterization **2009**,		4
66	Stress and Strain Measurement in Stressed Silicon Lines. *Springer Proceedings in Physics*, **2008**, 419-422	0.2	
65	Impact of Mobility Boosters (XsSOI, CESL, TiN gate) on the Performance of or oriented FDSOI cMOSFETs for the 32nm Node **2007**,		8
64	Strain and shape of epitaxial InAs/InP nanowire superlattice measured by grazing incidence X-ray techniques. *Nano Letters*, **2007**, 7, 2596-601	11.5	56
63	Quantum communication with quantum dot spins. *Physical Review B*, **2007**, 75,	3.3	32
62	Direct Wafer Bonding for Nanostructure Preparations. *Solid State Phenomena*, **2007**, 121-123, 29-32	0.4	3
61	Surface Evolution of Strained Thin Solid Films: Stability Analysis and Time Evolution of Local Surface Perturbations **2007**,		1
60	Nanoscaled MOSFET Transistors on Strained Si, SiGe, Ge Layers: Some Integration and Electrical Properties Features. *ECS Transactions*, **2006**, 3, 947-961	1	2
59	Orientation-Dependent Dewetting of Patterned Thin Si Film on SiO2. *Materials Research Society Symposia Proceedings*, **2006**, 910, 5		6

58	X-ray scattering study of hydrogen implantation in silicon. *Journal of Applied Physics*, **2006**, 99, 103509	2.5	56
57	Surface diffusion dewetting of thin solid films: Numerical method and application to Si□SiO2. *Physical Review B*, **2006**, 73,	3.3	87
56	Controlled Silicon (001) Surface Periodic Nanopatterning by Direct Wafer Bonding. *ECS Transactions*, **2006**, 3, 261-267	1	
55	Optical properties of single non-polar GaN quantum dots. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 1652-1656	1.3	10
54	Controlled Ge quantum dots positioning with nano-patterned Si(001) substrates. *Physica Status Solidi (B): Basic Research*, **2006**, 243, 3963-3967	1.3	8
53	Nanowire-based one-dimensional electronics. *Materials Today*, **2006**, 9, 28-35	21.8	587
52	Ge quantum dots growth on nanopatterned Si(001) surface: Morphology and stress relaxation study. *Surface Science*, **2006**, 600, 3187-3193	1.8	7
51	(001) silicon surfacial grain boundaries obtained by direct wafer bonding process: accurate control of the structure before bonding. *Philosophical Magazine*, **2005**, 85, 2415-2448	1.6	7
50	Germanium growth on nanopatterned surface studied by STM. *Journal of Crystal Growth*, **2005**, 275, e1609-e1613	1.6	11
49	Growth of Ge on Si(001) studied in situ by grazing incidence small angle X-ray scattering. *Journal of Crystal Growth*, **2005**, 275, e2195-e2200	1.6	11
48	Nanometric artificial structuring of semiconductor surfaces for crystalline growth. *Comptes Rendus Physique*, **2005**, 6, 105-116	1.4	12
47	Electron hole liquid in silicon single quantum wells. *Optical Materials*, **2005**, 27, 995-999	3.3	1
46	Photoluminescence of nanometric single silicon quantum wells. *Optical Materials*, **2005**, 27, 1000-1003	3.3	1
45	Electronic and optical properties of Si□SiO2 nanostructures. I. Electron-hole collective processes in single Si□SiO2 quantum wells. *Physical Review B*, **2005**, 72,	3.3	20
44	Electronic and optical properties of Si□SiO2 nanostructures. II. Electron-hole recombination at the Si□SiO2 quantum-well□quantum-dot transition. *Physical Review B*, **2005**, 72,	3.3	18
43	Two-dimensional electron-hole liquid in single Si quantum wells with large electronic and dielectric confinement. *Physical Review Letters*, **2004**, 92, 236802	7.4	39
42	Buried hydrophobic silicon bonding studied by high-energy x-ray reflectivity. *Journal Physics D: Applied Physics*, **2003**, 36, A205-A208	3	1
41	GIXRD of nanoscale strain patterning in wafer bonding. *Nuclear Instruments & Methods in Physics Research B*, **2003**, 200, 73-78	1.2	4

40	Controlled surface nanopatterning with buried dislocation arrays. *Surface Science*, **2003**, 545, 211-219	1.8	35
39	STM study of ultra-thin (. *Journal of Non-Crystalline Solids*, **2003**, 322, 174-178	3.9	3
38	Grazing incidence x-ray scattering investigation of Si surface patterned with buried dislocation networks. *Applied Physics Letters*, **2003**, 82, 2598-2600	3.4	9
37	Ordering of Ge quantum dots with buried Si dislocation networks. *Applied Physics Letters*, **2002**, 80, 3078-3080	3.4	66
36	Dislocation strain field in ultrathin bonded silicon wafers studied by grazing incidence x-ray diffraction. *Physical Review B*, **2002**, 65,	3.3	22
35	Large and small angle x-ray scattering studies of Si/SiGe superlattices grown by gas-source molecular beam epitaxy. *Semiconductor Science and Technology*, **2002**, 17, 198-204	1.8	2
34	Accurate control of the misorientation angles in direct wafer bonding. *Applied Physics Letters*, **2002**, 80, 793-795	3.4	54
33	Toward two-dimensional self-organization of nanostructures using wafer bonding and nanopatterned silicon surfaces. *IEEE Journal of Quantum Electronics*, **2002**, 38, 995-1005	2	9
32	X-ray reflectivity of silicon on insulator wafers. *Materials Science in Semiconductor Processing*, **2001**, 4, 31-33	4.3	2
31	High-energy x-ray reflectivity of buried interfaces created by wafer bonding. *Physical Review B*, **2001**, 63,	3.3	33
30	Stress measurements in thin zirconia films at 300°C using synchrotron radiation. *Journal of Neutron Research*, **2001**, 9, 263-272	0.5	1
29	Dislocation Networks Strain Fields Induced By Si Wafer Bonding. *Materials Research Society Symposia Proceedings*, **2001**, 673, 1		4
28	Nanometric patterning with ultrathin twist bonded silicon wafers. *Thin Solid Films*, **2000**, 380, 10-14	2.2	11
27	Grazing incidence X-ray studies of twist-bonded Si/Si and Si/SiO2 interfaces. *Physica B: Condensed Matter*, **2000**, 283, 103-107	2.8	9
26	Ultra thin silicon films directly bonded onto silicon wafers. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2000**, 73, 42-46	3.1	21
25	D□ermination de contraintes r□iduelles en incidence rasante. Apport du rayonnement synchrotron. *European Physical Journal Special Topics*, **2000**, 10, Pr10-103-Pr10-113		3
24	Interface dilution and morphology of CdTe/MnTe superlattices studied by small- and large-angle x-ray scattering. *Journal of Applied Physics*, **2000**, 87, 7266-7274	2.5	5
23	X-ray reflectivity of ultrathin twist-bonded silicon wafers. *Applied Physics Letters*, **1999**, 75, 3509-3511	3.4	17

22	Equilibrium Shape of Steps and Islands on Polar II-VI Semiconductors Surfaces. *Physical Review Letters*, **1999**, 83, 2366-2369	7.4	22
21	Localized destructive interference in X-ray specular reflectivity. *Journal of Applied Crystallography*, **1999**, 32, 859-863	3.8	
20	Large and small angle x-ray scattering studies of CdTe/MgTe superlattices. *Journal of Applied Physics*, **1999**, 86, 1951-1957	2.5	5
19	Epitaxial growth of CdTe(0 0 1) studied by scanning tunnelling microscopy. *Journal of Crystal Growth*, **1998**, 184-185, 203-207	1.6	18
18	Interface roughness correlation in CdTe/CdZnTe strained quantum wells. *Journal of Crystal Growth*, **1998**, 184-185, 886-889	1.6	4
17	Interface dilution and morphology of CdTe/MnTe superlattices studied by small angle X-ray scattering. *Journal of Crystal Growth*, **1998**, 184-185, 109-113	1.6	7
16	X-ray Reflectivity Study of Porous Silicon Formation. *Materials Research Society Symposia Proceedings*, **1998**, 536, 293		1
15	X-ray-diffraction study of the lattice distortions induced by a fractional monolayer:ZnTe embedded in vicinal CdTe(001). *Physical Review B*, **1997**, 55, 15804-15812	3.3	1
14	Anisotropic relaxation during the first stages of the growth of ZnTe/(001) CdTe strained layers studied by reflection high energy electron diffraction. *Applied Physics Letters*, **1995**, 66, 3456-3458	3.4	14
13	Extended synchrotron X-ray reflectivity study of a Sm-based layer buried into CdTe(001). *Surface Science*, **1995**, 327, L515-L520	1.8	3
12	Investigation of the epitaxial growth mechanism of ZnTe on (001) CdTe. *Journal of Applied Physics*, **1995**, 77, 3104-3110	2.5	12
11	A first-principles phase stability study on the Au-Ni system. *Journal of Physics Condensed Matter*, **1994**, 6, L47-L52	1.8	14
10	Study of the first-stage relaxation in ZnTe/(001)CdTe strained layers. *Applied Physics Letters*, **1994**, 64, 3631-3633	3.4	14
9	In situ characterization of rare earth-CdTe heterostructures by ion beam analysis. *Thin Solid Films*, **1994**, 249, 266-270	2.2	3
8	MBE growth of Fe(211)/Au(110) multilayers on MgO(110) substrates. *Journal of Magnetism and Magnetic Materials*, **1993**, 121, 57-59	2.8	15
7	Molecular beam epitaxial growth of Au(110) layers on MgO(110) substrates. *Applied Surface Science* , **1993**, 68, 203-207	6.7	13
6	Au-Ni solid solutions studied by numerical relaxation. *Journal De Physique, I*, **1993**, 3, 787-802		14
5	An Auger depth profile analysis of a sputtered Fe-Ti multilayer structure. *Applied Surface Science*, **1991**, 47, 127-138	6.7	1

4	The Growth of Ni Overlayers on Au(100) Buffers Deposited on GaAs(100) and MgO(100) Substrates.. *Materials Research Society Symposia Proceedings*, **1991**, 237, 511		14
3	Surface segregation in binary Cu-Ni and Pt-Ni alloys using Monte Carlo simulation. *Surface Science*, **1990**, 231, 419-426	1.8	32
2	Co-integrated dual strained channels on fully depleted sSDOI CMOSFETs with HfO/sub 2//TiN gate stack down to 15nm gate length		1
1	Semiconductor Templates for the Fabrication of Nano-Objects169-188		