

Guilhem Almuneau

List of Publications by Year in descending order

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102
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102
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542
citing authors

#	ARTICLE	IF	CITATIONS
1	Degradation Study of InGaAsN p-i-n Solar Cell Under 1-MeV Electron Irradiation. IEEE Transactions on Nuclear Science, 2021, 68, 1694-1700.	1.2	3
2	Engineering the anisotropy of AlAs wet oxidation using silicon implantation. Optical Materials Express, 2021, 11, 3600.	1.6	0
3	As-Grown InGaAsN Subcells for Multijunction Solar Cells by Molecular Beam Epitaxy. IEEE Journal of Photovoltaics, 2021, 11, 1271-1277.	1.5	5
4	Selective wet oxidation of AlAsSb alloys on GaAs. AIP Advances, 2021, 11, 125010.	0.6	0
5	Progress in Interband Cascade Lasers: From Edge Emitting Lasers to VCSELs. , 2020, , .		0
6	Development of 1 eV InGaAsN PIN subcell for MJSC integration and space application. , 2020, , .		0
7	3.3 Åµm interband-cascade resonant-cavity light-emitting diode with narrow spectral emission linewidth. Semiconductor Science and Technology, 2020, 35, 125029.	1.0	6
8	Electro-Absorption Modulator Vertically Integrated on a VCSEL: Microstrip-Based High-Speed Electrical Injection on Top of a BCB Layer. Journal of Lightwave Technology, 2019, 37, 3861-3868.	2.7	3
9	29GHz-Bandwidth Monolithically Integrated EAM-VCSEL. , 2019, , .		2
10	Controlled Oxidation of III-V Semiconductors for Photonic Devices. , 2019, , .		0
11	Modeling the Lateral Wet Oxidation of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ Arbitrary Mesa Geometries. Physical Review Applied, 2019, 11, .	1.5	3
12	Toward MIR VCSELs operating in CW at RT. , 2019, , .		0
13	Thickness Limitation of Band-to-Band Tunneling Process in GaAsSb/InGaAs Type-II Tunnel Junctions Designed for Multi-Junction Solar Cells. ACS Applied Energy Materials, 2019, 2, 1149-1154.	2.5	7
14	High frequency operation of an integrated electro-absorption modulator onto a vertical-cavity surface-emitting laser. JPhys Photonics, 2019, 1, 02LT01.	2.2	5
15	Anisotropic lateral oxidation of Al-III-V semiconductors: inverse problem and circular aperture fabrication. Semiconductor Science and Technology, 2019, 34, 015014.	1.0	4
16	Interband cascade Lasers with AlGaAsSb cladding layers emitting at 33 Åµm. Optics Express, 2019, 27, 31425.	1.7	10
17	Vertical electro-absorption modulator design and its integration in a VCSEL. Journal Physics D: Applied Physics, 2018, 51, 145101.	1.3	7
18	Effect of low and staggered gap quantum wells inserted in GaAs tunnel junctions. Journal Physics D: Applied Physics, 2018, 51, 145107.	1.3	7

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19	Scanning microwave microscopy applied to semiconducting GaAs structures. Review of Scientific Instruments, 2018, 89, 023704.	0.6	11
20	Coupled-Mode Analysis of Vertically Coupled AlGaAs/AlOx Microdisk Resonators. IEEE Journal of Quantum Electronics, 2018, 54, 1-8.	1.0	0
21	High frequency characterization of a vertical electro-absorption modulator for data communications. , 2018, , .		2
22	Numerical Modeling of ARROW-VCSELs with Oxide Island. , 2018, , .		0
23	Antiresonant Oxide Island as a Measure for Improved Single-Mode Emission in VCSELs. , 2018, , .		0
24	Shaping vertical-cavity surface-emitting laser mode profiles with an antiresonant oxide island for improved single-mode emission. Journal of the Optical Society of America B: Optical Physics, 2018, 35, 2259.	0.9	3
25	Modelling anisotropic lateral oxidation from circular mesas. Optical Materials Express, 2018, 8, 1762.	1.6	9
26	Anisotropy in the wet thermal oxidation of AlGaAs: influence of process parameters. Optical Materials Express, 2018, 8, 1788.	1.6	12
27	Integration of electro-absorption modulator in a vertical-cavity surface-emitting laser. , 2018, , .		0
28	Single lithography-step self-aligned fabrication process for Vertical-Cavity Surface-Emitting Lasers. Materials Science in Semiconductor Processing, 2017, 61, 35-38.	1.9	10
29	Coupled mode analysis of micro-disk resonators with an asymmetric-index-profile coupling region. , 2017, , .		3
30	Oxide-confined VCSELs fabricated with a simple self-aligned process flow. Semiconductor Science and Technology, 2017, 32, 125004.	1.0	2
31	Multiband corrections for the semi-classical simulation of interband tunneling in GaAs tunnel junctions. Journal Physics D: Applied Physics, 2017, 50, 385109.	1.3	5
32	Anisotropic oxidation of circular mesas for complex confinement in photonic devices: Experiments and modelling. , 2017, , .		0
33	Low-loss buried AlGaAs/AlOx waveguides using a quasi-planar process. Optics Express, 2017, 25, 19275.	1.7	3
34	Vertical integration of an electro-absorption modulator within a VCSEL device. , 2017, , .		0
35	Type II heterojunction tunnel diodes based on GaAs for multi-junction solar cells: Fabrication, characterization and simulation. , 2016, , .		0
36	Self-aligned BCB planarization method for high-frequency signal injection in a VCSEL with an integrated modulator. Proceedings of SPIE, 2016, , .	0.8	2

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55	AlOx/GaAs high contrast grating mirrors for mid infrared VCSELs. , 2012, , .		0
56	A new approach of planar oxidation of buried Al _x Ga _{1-x} As/GaAs epitaxial structures for optical and electrical confinement applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 338-341.	0.8	8
57	Efficient lateral confinement by an oxide aperture in a mid-infrared GaSb-based vertical light-emitting source. Journal Physics D: Applied Physics, 2011, 44, 142001.	1.3	7
58	Observation of overstrain in the coalescence zone of AlAs/AlOx oxidation fronts. Applied Physics Letters, 2011, 98, 261921.	1.5	16
59	High reflectivity monolithic sub-wavelength diffraction grating with GaAs/AlOxstack. Journal of Optics (United Kingdom), 2011, 13, 015505.	1.0	10
60	Management of the electrical injection uniformity in broad-area top-emitting VCSELs. European Physical Journal D, 2010, 59, 53-57.	0.6	5
61	Editorial on Dissipative Optical Solitons. European Physical Journal D, 2010, 59, 1-2.	0.6	28
62	Spotted Custom Lenses to Tailor the Divergence of Vertical-Cavity Surface-Emitting Lasers. IEEE Photonics Technology Letters, 2010, 22, 1592-1594.	1.3	20
63	Optimal control of AlAs oxidation via digital alloy heterostructure compositions. Journal Physics D: Applied Physics, 2009, 42, 175105.	1.3	10
64	Real-time <i>in situ</i> monitoring of wet thermal oxidation for precise confinement in VCSELs. Semiconductor Science and Technology, 2008, 23, 105021.	1.0	22
65	Structure-induced effects on the selective wet thermal oxidation of digital Al _x Ga _{1-x} As alloys. Journal of Materials Research, 2008, 23, 3006-3012.	1.2	4
66	Study and fabrication of buried oxide layers in GaAs/AlAs structures for confinement engineering in photonic devices. Proceedings of SPIE, 2008, , .	0.8	0
67	Free engineering of buried oxide patterns in GaAs/AlAs epitaxial structures. Electronics Letters, 2007, 43, 730.	0.5	10
68	Numerical Analysis of High-Index Nano-Composite Encapsulant for Light-Emitting Diodes. Japanese Journal of Applied Physics, 2006, 45, 2546-2549.	0.8	32
69	Carrier lifetime reduction in 1.5 μ m AlGaAsSb saturable absorbers with air and AlAsSb barriers. Applied Physics Letters, 2006, 89, 071114.	1.5	2
70	Highly reflective AlGaAsSb/InP Bragg reflector at 1.55 μ m grown by MOVPE. Journal of Crystal Growth, 2006, 286, 247-254.	0.7	12
71	Lateral Waveguiding Properties of VCSELs for Integrated Optical Monitoring. Optical and Quantum Electronics, 2006, 38, 523-534.	1.5	2
72	Photoluminescence and band offset of type-II AlGaAsSb/InP heterostructures. Semiconductor Science and Technology, 2006, 21, 681-685.	1.0	13

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73	Longitudinal-optical phonon broadening due to nitrogen atom incorporation in InGaAsN/GaAs quantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 3887-3890.	0.8	2
74	High sensitivity integrated lateral detection in VCSELs. <i>Electronics Letters</i> , 2005, 41, 129.	0.5	8
75	MOVPE growth of long wavelength AlGaAsSb-InP Bragg mirrors. <i>Electronics Letters</i> , 2004, 40, 940.	0.5	9
76	Coupled-cavity vertical-emitting semiconductor laser for continuous-wave terahertz emission. <i>IEE Proceedings: Optoelectronics</i> , 2002, 149, 88-92.	0.8	7
77	Selectively etched undercut apertures in AlAsSb-based VCSELs. <i>IEEE Photonics Technology Letters</i> , 2001, 13, 97-99.	1.3	12
78	1.55- μ m InP-lattice-matched VCSELs with AlGaAsSb-AlAsSb DBRs. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2001, 7, 224-230.	1.9	48
79	88 \pm 5 $^{\circ}$ C, continuous-wave operation of apertured, intracavity contacted, 1.55 μ m vertical-cavity surface-emitting lasers. <i>Applied Physics Letters</i> , 2001, 78, 1337-1339.	1.5	49
80	Lateral oxidation kinetics of AlAsSb and related alloys lattice matched to InP. <i>Journal of Applied Physics</i> , 2001, 89, 2458-2464.	1.1	11
81	<title>Long-wavelength VCSELs with AlGaAsSb/AlAsSb Bragg mirrors lattice-matched on InP substrates</title>. , 2000, 3946, 48.		0
82	Accurate control of Sb composition in AlGaAsSb alloys on InP substrates by molecular beam epitaxy. <i>Journal of Crystal Growth</i> , 2000, 208, 113-116.	0.7	20
83	Wet oxidation of AlAsSb alloys catalyzed by methanol. <i>Applied Surface Science</i> , 2000, 161, 426-433.	3.1	9
84	Room-temperature, CW operation of lattice-matched long-wavelength VCSELs. <i>Electronics Letters</i> , 2000, 36, 1465.	0.5	32
85	Molecular beam epitaxial growth of monolithic 1.55 μ m vertical cavity surface emitting lasers with AlGaAsSb/AlAsSb Bragg mirrors. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 1601.	1.6	8
86	Improved electrical and thermal properties of InP-AlGaAsSb Bragg mirrors for long-wavelength vertical-cavity lasers. <i>IEEE Photonics Technology Letters</i> , 2000, 12, 1322-1324.	1.3	20
87	Room-temperature, electrically-pumped multiple-active-region VCSELs with high differential efficiency at 1.55 μ m. <i>Electronics Letters</i> , 1999, 35, 1084.	0.5	42
88	GaInSb/AlGaAsSb strained quantum well semiconductor lasers for 1.55 μ m operation. <i>Semiconductor Science and Technology</i> , 1999, 14, 89-92.	1.0	29
89	Growth and characterization of vertical cavity structures on InP with GaAsSb/AlAsSb Bragg mirrors for 1.55 μ m emission. <i>Journal of Crystal Growth</i> , 1999, 201-202, 1024-1027.	0.7	16
90	Epitaxial long wavelength DBRs on InP-AlAsSb or lateral oxidation. , 1999, , .		0

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91	Electrically-pumped, single-epitaxial VCSELs at 1.55 [micro sign]m with Sb-based mirrors. Electronics Letters, 1999, 35, 1337.	0.5	41
92	Molecular beam epitaxy growth and characterizations of AlGaAsSb/AlAsSb Bragg reflectors on InP. Journal of Crystal Growth, 1998, 183, 15-22.	0.7	21
93	Long-wavelength (Ga, In)Sb/GaSb strained quantum well lasers grown by molecular beam epitaxy. Semiconductor Science and Technology, 1998, 13, 936-940.	1.0	22
94	High reflectivity Te-doped GaAsSb/AlAsSb Bragg mirror for 1.5 [micro sign]m surface emitting lasers. Electronics Letters, 1997, 33, 140.	0.5	21
95	Molecular beam epitaxy growth of 1.3 [micro sign]m high-reflectivity AlGaAsSb/AlAsSb Bragg mirror. Electronics Letters, 1997, 33, 1227.	0.5	5
96	Nearâ€infrared electroabsorption in p+/n~/n+GaSb diodes. Journal of Applied Physics, 1996, 79, 49-52.	1.1	1
97	Design considerations in electrically-pumped, single-epitaxial VCSELs at 1.55 Î¼m with Sb-based mirrors. , 0, , .		0
98	1.55 Î¼m room temperature electrically pumped operation of fully lattice-matched Sb-based vertical cavity surface emitting lasers. , 0, , .		0
99	1.55-Î¼m, InP-lattice-matched VCSELs operating at RT under CW. , 0, , .		0
100	Integrated photodetection in VCSELs. , 0, , .		1
101	Integrated lateral detection in VCSELs for optical system monitoring. , 0, , .		0
102	Impact of 1 MeV proton irradiation on InGaAsN solar cells. Semiconductor Science and Technology, 0, , .	1.0	1