Nicolas Chauvin

List of Publications by Year
in descending order

66 papers	734 citations	471371 17 h-index	580701 25 g-index
66 all docs	66 docs citations	66 times ranked	1116 citing authors

#	Article	IF	Citations
1	Temperature dependence of optical properties of InAs/InP quantum rod-nanowires grown on Si substrate. Journal of Luminescence, 2021, 231, 117814.	1.5	2
2	Highly linear polarized emission at telecom bands in InAs/InP quantum dot-nanowires by geometry tailoring. Nanoscale, 2021, 13, 16952-16958.	2.8	1
3	O-Band Emitting InAs Quantum Dots Grown by MOCVD on a 300 mm Ge-Buffered Si (001) Substrate. Nanomaterials, 2020, 10, 2450.	1.9	5
4	Density-controlled growth of vertical InP nanowires on Si(111) substrates. Nanotechnology, 2020, 31, 354003.	1.3	4
5	InAs quantum dot in a needlelike tapered InP nanowire: a telecom band single photon source monolithically grown on silicon. Nanoscale, 2019, 11, 21847-21855.	2.8	19
6	Determination of the spin orbit coupling and crystal field splitting in wurtzite InP by polarization resolved photoluminescence. Applied Physics Letters, 2018, 112, .	1.5	4
7	Electroluminescence of Colloidal Quantum Dots in Electrical Contact with Metallic Nanoparticles. Advanced Optical Materials, 2018, 6, 1700658.	3.6	9
8	Nanoscale investigation of a radial pâ€“n junction in self-catalyzed GaAs nanowires grown on Si (111). Nanoscale, 2018, 10, 20207-20217.	2.8	10
9	Carrier dynamics of strain-engineered InAs quantum dots with (In)GaAs surrounding material. Journal of Optics (United Kingdom), 2017, 19, 025401.	1.0	8
10	<i>In situ</i>passivation of GaAsP nanowires. Nanotechnology, 2017, 28, 495707.	1.3	27
11	Study of the nucleation and growth of InP nanowires on silicon with gold-indium catalyst. Journal of Crystal Growth, 2017, 458, 96-102.	0.7	7
12	Detecting Spatially Localized Exciton in Self-Organized InAs/InGaAs Quantum Dot Superlattices: a Way to Improve the Photovoltaic Efficiency. Nanoscale Research Letters, 2017, 12, 450.	3.1	14
13	Pressure-Dependent Photoluminescence Study of Wurtzite InP Nanowires. Nano Letters, 2016, 16, 2926-2930.	4.5	21
14	Luminescent point defect formation in 3Câ€SiC by ion implantation. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 860-863.	0.8	9
15	GaAs nanowires with oxidation-proof arsenic capping for the growth of an epitaxial shell. Nanoscale, 2016, 8, 15637-15644.	2.8	6
16	GaAs Core/SrTiO₃ Shell Nanowires Grown by Molecular Beam Epitaxy. Nano Letters, 2016, 16, 2393-2399.	4.5	10
17	Optical and structural properties of InAs nanoclusters in crystalline Si obtained through sequential ion implantation and RTA. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2686-2691.	0.8	6
18	Optical polarization properties of InAs/InP quantum dot and quantum rod nanowires. Nanotechnology, 2015, 26, 395701.	1.3	14

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19	Low defect InGaAs quantum well selectively grown by metal organic chemical vapor deposition on Si(100) 300â€‰mm wafers for next generation non planar devices. Applied Physics Letters, 2014, 104, .	1.5	42
20	Optical Simulation of Multijunction Solar Cells Based on III-V Nanowires on Silicon. Energy Procedia, 2014, 60, 109-115.	1.8	6
21	Piezoelectric effect in InAs/InP quantum rod nanowires grown on silicon substrate. Applied Physics Letters, 2014, 104, 183101.	1.5	7
22	Photoluminescence polarization and piezoelectric properties of InAs/InP quantum rod-nanowires. , 2014, , .		0
23	Quantum efficiency of InAs/InP nanowire heterostructures grown on silicon substrates. Physica Status Solidi - Rapid Research Letters, 2013, 7, 878-881.	1.2	0
24	Optimisation of the physical properties of InAs/InGaAs/GaAs QDs heterostructures embedded p-i-n GaAs solar cell. International Journal of Nanotechnology, 2013, 10, 433.	0.1	0
25	Polarization properties of single and ensembles of InAs/InP quantum rod nanowires emitting in the telecom wavelengths. Journal of Applied Physics, 2013, 113, 193101.	1.1	7
26	Excitonic properties of wurtzite InP nanowires grown on silicon substrate. Nanotechnology, 2013, 24, 035704.	1.3	24
27	Single photon sources for quantum information applications. , 2012, , .		0
28	Impact of substrate-induced strain and surface effects on the optical properties of InP nanowires. Applied Physics Letters, 2012, 101, 072101.	1.5	8
29	Quantum integrated photonics on GaAs. , 2012, , .		1
30	InAs/InP nanowires grown by catalyst assisted molecular beam epitaxy on silicon substrates. Journal of Crystal Growth, 2012, 344, 45-50.	0.7	17
31	Growth temperature dependence of exciton lifetime in wurtzite InP nanowires grown on silicon substrates. Applied Physics Letters, 2012, 100, .	1.5	23
32	Enhanced spontaneous emission from quantum dots in short photonic crystal waveguides. Applied Physics Letters, 2012, 100, 061122.	1.5	50
33	Wurtzite InP/InAs/InP coreâ€“shell nanowires emitting at telecommunication wavelengths on Si substrate. Nanotechnology, 2011, 22, 405702.	1.3	24
34	Single photons emitted by single quantum dots into waveguides: photon guns on a chip. , 2011, , .		1
35	InGaAs Quantum Dots Grown by Molecular Beam Epitaxy for Light Emission on Si Substrates. Journal of Nanoscience and Nanotechnology, 2011, 11, 9153-9159.	0.9	4
36	Nanophotonic technologies for single-photon devices. Opto-electronics Review, 2010, 18, .	2.4	3

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37	Optical and structural properties of INP nanowires grown on silicon substrate. , 2010, , .		0
38	Origin of the non-resonant quantum dot-cavity coupling. , 2010, , .		0
39	Controlling the charge environment of single quantum dots in a photonic-crystal cavity. Physical Review B, 2009, 80, .	1.1	55
40	Control of the spontaneous emission from a single quantum dash using a slow-light mode in a two-dimensional photonic crystal on a Bragg reflector. Physical Review B, 2009, 80, .	1.1	15
41	Low density 1.55â€‚Î¼m InAs/InGaAsP/InP (100) quantum dots enabled by an ultrathin GaAs interlayer. Applied Physics Letters, 2009, 95, 113110.	1.5	12
42	Cavity-enhanced photonic crystal light-emitting diode at 1300 nm. Microelectronic Engineering, 2009, 86, 1093-1095.	1.1	4
43	Controlling Energy and Charge Environment of Single Excitons in a Photonic-Crystal Diode. , 2009, , .		0
44	Towards a LED based on a photonic crystal nanocavity for single photon sources at telecom wavelength. Microelectronic Engineering, 2008, 85, 1162-1165.	1.1	3
45	Controlling the Aspect Ratio of Quantum Dots: From Columnar Dots to Quantum Rods. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 1204-1213.	1.9	17
46	Influence of surface reconstructions on the shape of InAs quantum dots grown on InP(001). , 2008, , .		1
47	Electrical injection of a photonic crystal nanocavity. , 2008, , .		0
48	Growth-interruption-induced low-density InAs quantum dots on GaAs. Journal of Applied Physics, 2008, 104, .	1.1	23
49	Enhanced spontaneous emission in a photonic-crystal light-emitting diode. Applied Physics Letters, 2008, 93, .	1.5	42
50	Shape-engineered epitaxial InGaAs quantum rods for laser applications. Applied Physics Letters, 2008, 92, 121102.	1.5	23
51	Enhancement of the recombination rate of InAs quantum dots in a photonic crystal light emitting diode. , 2008, , .		0
52	Enhanced spontaneous emission rate from single InAs quantum dots in a photonic crystal nanocavity at telecom wavelengths. Applied Physics Letters, 2007, 91, .	1.5	38
53	Enhanced spontaneous emission from InAs/GaAs quantum dots in pillar microcavities emitting at telecom wavelengths. Optics Letters, 2007, 32, 2747.	1.7	3
54	Control of the Spontaneous Emission of Single InAs Quantum Dots at 1.3μm in Point-Defect Photonic Crystal Nanocavities. , 2007, , .		0

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55	Single-Photon Detection System for Quantum Optics Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 944-951.	1.9	37
56	Low density of self-assembled InAs quantum dots grown by solid-source molecular beam epitaxy on InP(001). Applied Physics Letters, 2006, 89, 123112.	1.5	19
57	Optical characterisation of single InAs quantum dots on GaAs substrate emitting at 1.3 Î¼m. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3672-3675.	0.8	1
58	Shape and size effects on multi-exciton complexes in single InAs quantum dots grown on InP(001) substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3912-3915.	0.8	2
59	InAs/InP quantum dots: from single to coupled dots applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4039-4042.	0.8	1
60	Photoreflectance spectroscopy of self-organized InAs/InP(001) quantum sticks emitting at 1.55Î¼m. Applied Surface Science, 2006, 253, 90-94.	3.1	7
61	Neutral and charged multi-exciton complexes in single InAs quantum dots grown on InP(001). Nanotechnology, 2006, 17, 1831-1834.	1.3	9
62	Size and shape effects on excitons and biexcitons in single InAsâˆ•InP quantum dots. Journal of Applied Physics, 2006, 100, 073702.	1.1	18
63	Photoluminescence studies of stacked InAs/InP quantum sticks. Journal of Crystal Growth, 2005, 275, e2327-e2331.	0.7	4
64	Micro-photoluminescence study of single self-organized InAs/InP quantum sticks. Materials Science and Engineering C, 2005, 25, 650-653.	3.8	0
65	Optical investigation of single self-organized InAs/InP quantum dashes emitting in the 1.3â€“1.5 Âµm range. Nanotechnology, 2005, 16, 444-447.	1.3	5
66	Hexagonal Ge Grown by Molecular Beam Epitaxy on Self-Assisted GaAs Nanowires. Crystal Growth and Design, 0, , .	1.4	2