

Maria Tchernycheva

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9165458/publications.pdf>

Version: 2024-02-01

243
papers

6,784
citations

44042

48
h-index

79644

73
g-index

251
all docs

251
docs citations

251
times ranked

5134
citing authors

#	ARTICLE	IF	CITATIONS
1	Systematic experimental and theoretical investigation of intersubband absorption in GaN/AlN quantum wells. <i>Physical Review B</i> , 2006, 73, .	1.1	239
2	M-Plane Core-Shell InGaN/GaN Multiple-Quantum-Wells on GaN Wires for Electroluminescent Devices. <i>Nano Letters</i> , 2011, 11, 4839-4845.	4.5	186
3	InGaN/GaN Core-Shell Single Nanowire Light Emitting Diodes with Graphene-Based P-Contact. <i>Nano Letters</i> , 2014, 14, 2456-2465.	4.5	173
4	Flexible Light-Emitting Diodes Based on Vertical Nitride Nanowires. <i>Nano Letters</i> , 2015, 15, 6958-6964.	4.5	172
5	Integrated Photonic Platform Based on InGaN/GaN Nanowire Emitters and Detectors. <i>Nano Letters</i> , 2014, 14, 3515-3520.	4.5	171
6	GaN/AlN short-period superlattices for intersubband optoelectronics: A systematic study of their epitaxial growth, design, and performance. <i>Journal of Applied Physics</i> , 2008, 104, 093501.	1.1	165
7	Nanometer Scale Spectral Imaging of Quantum Emitters in Nanowires and Its Correlation to Their Atomically Resolved Structure. <i>Nano Letters</i> , 2011, 11, 568-573.	4.5	165
8	Ultraviolet Photodetector Based on GaN/AlN Quantum Disks in a Single Nanowire. <i>Nano Letters</i> , 2010, 10, 2939-2943.	4.5	155
9	Au-assisted molecular beam epitaxy of InAs nanowires: Growth and theoretical analysis. <i>Journal of Applied Physics</i> , 2007, 102, 094313.	1.1	136
10	GaN nanowire ultraviolet photodetector with a graphene transparent contact. <i>Applied Physics Letters</i> , 2013, 103, 201103.	1.5	136
11	Near infrared quantum cascade detector in GaN/AlGaIn/AlN heterostructures. <i>Applied Physics Letters</i> , 2008, 92, .	1.5	116
12	Epitaxy of GaN Nanowires on Graphene. <i>Nano Letters</i> , 2016, 16, 4895-4902.	4.5	115
13	Growth and Characterization of InP Nanowires with InAsP Insertions. <i>Nano Letters</i> , 2007, 7, 1500-1504.	4.5	110
14	Growth of GaN free-standing nanowires by plasma-assisted molecular beam epitaxy: structural and optical characterization. <i>Nanotechnology</i> , 2007, 18, 385306.	1.3	109
15	Temperature conditions for GaAs nanowire formation by Au-assisted molecular beam epitaxy. <i>Nanotechnology</i> , 2006, 17, 4025-4030.	1.3	107
16	Characterization and modeling of a ZnO nanowire ultraviolet photodetector with graphene transparent contact. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	106
17	Flexible White Light Emitting Diodes Based on Nitride Nanowires and Nanophosphors. <i>ACS Photonics</i> , 2016, 3, 597-603.	3.2	89
18	Terahertz intersubband absorption in GaN/AlGaIn step quantum wells. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	87

#	ARTICLE	IF	CITATIONS
19	Intersubband spectroscopy of doped and undoped GaN/AlN quantum wells grown by molecular-beam epitaxy. Applied Physics Letters, 2003, 83, 5196-5198.	1.5	85
20	GaN/AlGaN intersubband optoelectronic devices. New Journal of Physics, 2009, 11, 125023.	1.2	84
21	Facet and in-plane crystallographic orientations of GaN nanowires grown on Si(111). Nanotechnology, 2008, 19, 155704.	1.3	82
22	Midinfrared intersubband absorption in lattice-matched AlInN/GaN multiple quantum wells. Applied Physics Letters, 2005, 87, 111106.	1.5	81
23	Si-doped GaN/AlN quantum dot superlattices for optoelectronics at telecommunication wavelengths. Journal of Applied Physics, 2006, 100, 044326.	1.1	77
24	Visible-blind photodetector based on p-n junction GaN nanowire ensembles. Nanotechnology, 2010, 21, 315201.	1.3	75
25	GaAs nanowires formed by Au-assisted molecular beam epitaxy: Effect of growth temperature. Journal of Crystal Growth, 2007, 301-302, 853-856.	0.7	73
26	Room temperature demonstration of GaN/AlN quantum dot intraband infrared photodetector at fiber-optics communication wavelength. Applied Physics Letters, 2006, 88, 143101.	1.5	71
27	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, 107-114.	4.5	70
28	Core-shell InGaN/GaN nanowire light emitting diodes analyzed by electron beam induced current microscopy and cathodoluminescence mapping. Nanoscale, 2015, 7, 11692-11701.	2.8	70
29	Flexible Photodiodes Based on Nitride Core/Shell p-n Junction Nanowires. ACS Applied Materials & Interfaces, 2016, 8, 26198-26206.	4.0	66
30	Wurtzite to Zinc Blende Phase Transition in GaAs Nanowires Induced by Epitaxial Burying. Nano Letters, 2008, 8, 1638-1643.	4.5	63
31	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, .	1.5	63
32	Optical properties of wurtzite/zinc-blende heterostructures in GaN nanowires. Journal of Applied Physics, 2011, 110, .	1.1	62
33	Correlation of optical and structural properties of GaN/AlN core-shell nanowires. Physical Review B, 2011, 83, .	1.1	60
34	Shape modification of III-V nanowires: The role of nucleation on sidewalls. Physical Review E, 2008, 77, 031606.	0.8	59
35	Single-Wire Light-Emitting Diodes Based on GaN Wires Containing Both Polar and Nonpolar InGaN/GaN Quantum Wells. Applied Physics Express, 2012, 5, 014101.	1.1	58
36	Short wavelength ($\lambda = 2.13 \mu\text{m}$) intersubband luminescence from GaN/AlN quantum wells at room temperature. Applied Physics Letters, 2007, 90, 121106.	1.5	56

#	ARTICLE	IF	CITATIONS
37	GaN/AlGaN waveguide quantum cascade photodetectors at $\lambda = 1.55 \mu\text{m}$ with enhanced responsivity and $\sim 40\text{ GHz}$ frequency bandwidth. Applied Physics Letters, 2013, 102, .	1.5	55
38	Intraband absorptions in GaN/AlN quantum dots in the wavelength range of $1.27 - 2.4 \mu\text{m}$. Applied Physics Letters, 2003, 82, 868-870.	1.5	54
39	Short-wavelength intersubband electroabsorption modulation based on electron tunneling between GaN/AlN coupled quantum wells. Applied Physics Letters, 2007, 90, 223511.	1.5	54
40	Band offsets in cubic GaN/AlN superlattices. Physical Review B, 2011, 83, .	1.1	54
41	Towards Nanowire Tandem Junction Solar Cells on Silicon. IEEE Journal of Photovoltaics, 2018, 8, 733-740.	1.5	53
42	Indium surfactant effect on AlN/GaN heterostructures grown by metal-organic vapor-phase epitaxy: Applications to intersubband transitions. Applied Physics Letters, 2006, 88, 151902.	1.5	52
43	High-speed operation of GaN/AlGaN quantum cascade detectors at $\lambda = 1.55 \mu\text{m}$. Applied Physics Letters, 2008, 93, .	1.5	52
44	Two-color GaN/AlGaN quantum cascade detector at short infrared wavelengths of 1 and $1.7 \mu\text{m}$. Applied Physics Letters, 2012, 100, .	1.5	52
45	Flexible inorganic light emitting diodes based on semiconductor nanowires. Chemical Science, 2017, 8, 7904-7911.	3.7	51
46	Intersubband absorption of cubic GaN/Al(GaN) quantum wells in the near-infrared to terahertz spectral range. Physical Review B, 2011, 83, .	1.1	50
47	Piezo-generator integrating a vertical array of GaN nanowires. Nanotechnology, 2016, 27, 325403.	1.3	50
48	Self-assembled GaN quantum wires on GaN/AlN nanowire templates. Nanoscale, 2012, 4, 7517.	2.8	49
49	Influence of shadow effect on the growth and shape of InAs nanowires. Journal of Applied Physics, 2012, 111, .	1.1	49
50	Electron confinement in strongly coupled GaN/AlN quantum wells. Applied Physics Letters, 2006, 88, 153113.	1.5	48
51	The role of surface diffusion of adatoms in the formation of nanowire crystals. Semiconductors, 2006, 40, 1075-1082.	0.2	48
52	Photovoltaic properties of GaAsP core-shell nanowires on Si(001) substrate. Nanotechnology, 2012, 23, 265402.	1.3	45
53	From single III-nitride nanowires to piezoelectric generators: New route for powering nomad electronics. Semiconductor Science and Technology, 2016, 31, 103002.	1.0	45
54	Midinfrared intersubband absorption in GaN/AlGaN superlattices on Si(111) templates. Applied Physics Letters, 2009, 95, .	1.5	44

#	ARTICLE	IF	CITATIONS
55	Effect of doping on the mid-infrared intersubband absorption in GaN/AlGaIn superlattices grown on Si(111) templates. Applied Physics Letters, 2010, 96, .	1.5	42
56	Ballistic transport in GaN/AlGaIn resonant tunneling diodes. Journal of Applied Physics, 2011, 109, .	1.1	40
57	GaN-based quantum dot infrared photodetector operating at 1.38 μm . Electronics Letters, 2005, 41, 1077.	0.5	39
58	Intraband absorption of doped GaN/AlN quantum dots at telecommunication wavelengths. Applied Physics Letters, 2005, 87, 101912.	1.5	39
59	Investigation of Photovoltaic Properties of Single Core-Shell GaN/InGaIn Wires. ACS Applied Materials & Interfaces, 2015, 7, 21898-21906.	4.0	39
60	Intersubband resonant enhancement of second-harmonic generation in GaN/AlN quantum wells. Applied Physics Letters, 2006, 89, 151101.	1.5	37
61	Determination of n-Type Doping Level in Single GaAs Nanowires by Cathodoluminescence. Nano Letters, 2017, 17, 6667-6675.	4.5	35
62	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.	1.3	34
63	Origin of the electrical instabilities in GaN/AlGaIn double-barrier structure. Applied Physics Letters, 2011, 99, .	1.5	33
64	Self-induced growth of vertical GaN nanowires on silica. Nanotechnology, 2016, 27, 135602.	1.3	33
65	Interband and intersubband optical characterization of semipolar (112 $\bar{2}$)-oriented GaN/AlN multiple-quantum-well structures. Applied Physics Letters, 2008, 93, 111906.	1.5	32
66	Femto-second electron transit time characterization in GaN/AlGaIn quantum cascade detector at 1.5 micron. Applied Physics Letters, 2011, 99, .	1.5	32
67	Double strain state in a single GaN/AlN nanowire: Probing the core-shell effect by ultraviolet resonant Raman scattering. Physical Review B, 2011, 83, .	1.1	32
68	Core-Shell Heterojunction Solar Cells Based on Disordered Silicon Nanowire Arrays. Journal of Physical Chemistry C, 2016, 120, 2962-2972.	1.5	32
69	Electrooptical Modulator at Telecommunication Wavelengths Based on GaN/AlN Coupled Quantum Wells. IEEE Photonics Technology Letters, 2008, 20, 724-726.	1.3	31
70	Investigation of the electronic transport in GaN nanowires containing GaN/AlN quantum discs. Nanotechnology, 2010, 21, 425206.	1.3	31
71	Visualizing highly localized luminescence in GaN/AlN heterostructures in nanowires. Nanotechnology, 2012, 23, 455205.	1.3	31
72	Excitonic Diffusion in InGaIn/GaN Core-Shell Nanowires. Nano Letters, 2016, 16, 243-249.	4.5	31

#	ARTICLE	IF	CITATIONS
73	Interplay of the photovoltaic and photoconductive operation modes in visible-blind photodetectors based on axial p-i-n junction GaN nanowires. Applied Physics Letters, 2014, 104, .	1.5	30
74	Dopant-stimulated growth of GaN nanotube-like nanostructures on Si(111) by molecular beam epitaxy. Beilstein Journal of Nanotechnology, 2018, 9, 146-154.	1.5	30
75	Growth of thin AlInN ^x GaNN quantum wells for applications to high-speed intersubband devices at telecommunication wavelengths. Journal of Vacuum Science & Technology B, 2006, 24, 1505.	1.3	29
76	Origin of energy dispersion in $\text{Al}_x\text{Ga}_{1-x}\text{N}$ quantum discs with low Al content. Physical Review B, 2010, 82, .	1.1	28
77	Photoluminescence polarization properties of single GaN nanowires containing $\text{Al}_x\text{Ga}_{1-x}\text{N}$ discs. Physical Review B, 2010, 81, .	1.1	28
78	A simplified GaN/AlGaIn quantum cascade detector with an alloy extractor. Applied Physics Letters, 2012, 101, .	1.5	28
79	Multi-microscopy study of the influence of stacking faults and three-dimensional In distribution on the optical properties of m-plane InGaIn quantum wells grown on microwire sidewalls. Applied Physics Letters, 2016, 108, .	1.5	28
80	In situ passivation of GaAsP nanowires. Nanotechnology, 2017, 28, 495707.	1.3	27
81	Modified silicone rubber for fabrication and contacting of flexible suspended membranes of n-/p-GaP nanowires with a single-walled carbon nanotube transparent contact. Journal of Materials Chemistry C, 2020, 8, 3764-3772.	2.7	27
82	Green Electroluminescence from Radial m-Plane InGaIn Quantum Wells Grown on GaN Wire Sidewalls by Metal-Organic Vapor Phase Epitaxy. ACS Photonics, 2018, 5, 4330-4337.	3.2	26
83	Structural and optical characterizations of nitrogen-doped ZnO nanowires grown by MOCVD. Materials Letters, 2010, 64, 2112-2114.	1.3	25
84	Photoluminescence polarization in strained GaN/AlGaIn core/shell nanowires. Nanotechnology, 2012, 23, 325701.	1.3	25
85	Selective-Area Remote Epitaxy of ZnO Microrods Using Multilayered Monolayer-Patterned Graphene for Transferable and Flexible Device Fabrications. ACS Applied Nano Materials, 2020, 3, 8920-8930.	2.4	25
86	Three-dimensional atomic-scale investigation of ZnO-MgxZn1-xO m-plane heterostructures. Applied Physics Letters, 2017, 111, .	1.5	24
87	Short infrared wavelength quantum cascade detectors based on m-plane ZnO/ZnMgO quantum wells. Applied Physics Letters, 2018, 113, .	1.5	24
88	Intraband emission at $\lambda = 1.48\ \mu\text{m}$ from GaN/AlN quantum dots at room temperature. Applied Physics Letters, 2008, 92, 161105.	1.5	23
89	Growth of Inclined GaAs Nanowires by Molecular Beam Epitaxy: Theory and Experiment. Nanoscale Research Letters, 2010, 5, 1692-1697.	3.1	23
90	Assessing individual radial junction solar cells over millions on VLS-grown silicon nanowires. Nanotechnology, 2013, 24, 275401.	1.3	23

#	ARTICLE	IF	CITATIONS
91	Influence of Substrate Microstructure on the Transport Properties of CVD-Graphene. ACS Applied Materials & Interfaces, 2016, 8, 240-246.	4.0	23
92	Systematic study of near-infrared intersubband absorption of polar and semipolar GaN/AlN quantum wells. Journal of Applied Physics, 2013, 113, .	1.1	22
93	Color control of nanowire InGaN/GaN light emitting diodes by post-growth treatment. Nanotechnology, 2015, 26, 465203.	1.3	22
94	Selective Area Growth of GaN Nanowires on Graphene Nanodots. Crystal Growth and Design, 2020, 20, 552-559.	1.4	20
95	Structural and Optical Properties of Self-Catalyzed Axially Heterostructured GaPN/GaP Nanowires Embedded into a Flexible Silicone Membrane. Nanomaterials, 2020, 10, 2110.	1.9	20
96	Substrate-Free InGaN/GaN Nanowire Light-Emitting Diodes. Nanoscale Research Letters, 2015, 10, 447.	3.1	19
97	Ultrafast relaxation and optical saturation of intraband absorption of GaN/AlN quantum dots. Applied Physics Letters, 2009, 94, .	1.5	18
98	Lateral growth and shape of semiconductor nanowires. Semiconductors, 2013, 47, 50-57.	0.2	18
99	InGaN/GaN core/shell nanowires for visible to ultraviolet range photodetection. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 936-940.	0.8	18
100	Resonant Tunneling Transport in a GaN/AlN Multiple-Quantum-Well Structure. Applied Physics Express, 2012, 5, 052203.	1.1	17
101	Contact properties to CVD-graphene on GaAs substrates for optoelectronic applications. Nanotechnology, 2014, 25, 335707.	1.3	17
102	Lasing of multiperiod quantum-cascade lasers in the spectral range of (5.6–5.8)- μ m under current pumping. Semiconductors, 2015, 49, 1527-1530.	0.2	17
103	Nanometer-scale monitoring of quantum-confined Stark effect and emission efficiency droop in multiple GaN/AlN quantum disks in nanowires. Physical Review B, 2016, 93, .	1.1	17
104	Light emission from localised point defects induced in GaN crystal by a femtosecond-pulsed laser. Optical Materials Express, 2018, 8, 2703.	1.6	17
105	ALD of ZnO:Ti: Growth Mechanism and Application as an Efficient Transparent Conductive Oxide in Silicon Nanowire Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 21036-21044.	4.0	17
106	GaN/AlN free-standing nanowires grown by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1556-1558.	0.8	16
107	Characterization of the Resonant Third-Order Nonlinear Susceptibility of Si-Doped GaN-AlN Quantum Wells and Quantum Dots at 1.5 μ m. IEEE Photonics Technology Letters, 2008, 20, 1366-1368.	1.3	16
108	GaN-based quantum cascade photodetector with 1.5- μ m peak detection wavelength. Electronics Letters, 2010, 46, 1685.	0.5	16

#	ARTICLE	IF	CITATIONS
109	Growth optimization and characterization of regular arrays of GaAs/AlGaAs core/shell nanowires for tandem solar cells on silicon. <i>Nanotechnology</i> , 2019, 30, 084005.	1.3	16
110	The elevated colour rendering of white-LEDs by microwave-synthesized red-emitting (Li, Tj) ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (M Transactions, 2021, 50, 3044-3059.	1.6	16
111	High degree of polarization of the near-band-edge photoluminescence in ZnO nanowires. <i>Nanoscale Research Letters</i> , 2011, 6, 501.	3.1	15
112	Nitride intersubband devices: prospects and recent developments. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007, 204, 1987-1995.	0.8	14
113	First demonstration of plasmonic GaN quantum cascade detectors with enhanced efficiency at normal incidence. <i>Optics Express</i> , 2014, 22, 21069.	1.7	14
114	Comprehensive analyses of core-shell InGaN/GaN single nanowire photodiodes. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 484001.	1.3	14
115	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> , 2018, 18, 2545-2554.	1.4	14
116	High Piezoelectric Conversion Properties of Axial InGaN/GaN Nanowires. <i>Nanomaterials</i> , 2018, 8, 367.	1.9	14
117	Nanoscale electrical analyses of axial-junction GaAsP nanowires for solar cell applications. <i>Nanotechnology</i> , 2020, 31, 145708.	1.3	14
118	Electroabsorption and refractive index modulation induced by intersubband transitions in GaN/AlN multiple quantum wells. <i>Optics Express</i> , 2012, 20, 12541.	1.7	13
119	GaN/Ga ₂ O ₃ Core/Shell Nanowires Growth: Towards High Response Gas Sensors. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3528.	1.3	13
120	A GaN/AlN quantum cascade detector with a broad response from the mid-infrared (4.1 μm) to the visible (550 nm) spectral range. <i>Applied Physics Letters</i> , 2020, 116, 171102.	1.5	13
121	Observation of hot luminescence and slow inter-sub-band relaxation in Si-doped GaN _{1-x} Al _x GaN _{1-x} N _x (x=0.11, 0.25) multi-quantum-well structures. <i>Journal of Applied Physics</i> , 2006, 99, 093513.	1.1	12
122	Latest developments in GaN-based quantum devices for infrared optoelectronics. <i>Journal of Materials Science: Materials in Electronics</i> , 2008, 19, 821-827.	1.1	12
123	Intersubband optics in GaN-based nanostructures - physics and applications. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1622-1627.	0.7	12
124	Yellow and green luminescence in single-crystal Ge-catalyzed GaN nanowires grown by low pressure chemical vapor deposition. <i>Optical Materials Express</i> , 2017, 7, 1995.	1.6	12
125	Si Incorporation in InP Nanowires Grown by Au-Assisted Molecular Beam Epitaxy. <i>Journal of Nanomaterials</i> , 2009, 2009, 1-7.	1.5	11
126	Effect of diffusion from a lateral surface on the rate of GaN nanowire growth. <i>Semiconductors</i> , 2012, 46, 838-841.	0.2	11

#	ARTICLE	IF	CITATIONS
127	Effect of postgrowth heat treatment on the structural and optical properties of InP/InAsP/InP nanowires. <i>Semiconductors</i> , 2012, 46, 175-178.	0.2	11
128	Optical properties of GaN nanowires grown on chemical vapor deposited-graphene. <i>Nanotechnology</i> , 2019, 30, 214005.	1.3	11
129	Image-based autofocusing system for nonlinear optical microscopy with broad spectral tuning. <i>Optics Express</i> , 2019, 27, 19915.	1.7	11
130	GaN/AlN quantum disc single-nanowire photodetectors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1323-1327.	0.8	10
131	Vertical Transport in GaN/AlGaIn Resonant Tunneling Diodes and Superlattices. <i>Journal of Electronic Materials</i> , 2012, 41, 965-970.	1.0	10
132	Optical properties of GaN-based nanowires containing a single Al _{0.14} Ga _{0.86} N/GaN quantum disc. <i>Nanotechnology</i> , 2013, 24, 125201.	1.3	10
133	Nanoscale investigation of a radial p-n junction in self-catalyzed GaAs nanowires grown on Si (111). <i>Nanoscale</i> , 2018, 10, 20207-20217.	2.8	10
134	Nanoscale analysis of electrical junctions in InGaP nanowires grown by template-assisted selective epitaxy. <i>Applied Physics Letters</i> , 2019, 114, .	1.5	10
135	Hydrogen passivation of the n-GaN nanowire/p-Si heterointerface. <i>Nanotechnology</i> , 2020, 31, 244003.	1.3	10
136	Stretchable Transparent Light-Emitting Diodes Based on InGaIn/GaN Quantum Well Microwires and Carbon Nanotube Films. <i>Nanomaterials</i> , 2021, 11, 1503.	1.9	10
137	Fabrication and electrical study of large area free-standing membrane with embedded GaP NWs for flexible devices. <i>Nanotechnology</i> , 2020, 31, 46LT01.	1.3	10
138	New developments for nitride unipolar devices at 1.3–1.5 μ m wavelengths. <i>Superlattices and Microstructures</i> , 2006, 40, 412-417.	1.4	9
139	High structural quality InGaIn/GaN multiple quantum well solar cells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2015, 12, 1412-1415.	0.8	9
140	Electron beam induced current microscopy investigation of GaN nanowire arrays grown on Si substrates. <i>Materials Science in Semiconductor Processing</i> , 2016, 55, 72-78.	1.9	9
141	Probing elastic properties of nanowire-based structures. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	9
142	Colour optimization of phosphor-converted flexible nitride nanowire white light emitting diodes. <i>JPhys Photonics</i> , 2019, 1, 035003.	2.2	9
143	Optical and theoretical study of strong electron coupling in double GaN/AlN quantum wells. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1630-1633.	0.7	8
144	GaN/AlN quantum dot photodetectors at 1.3–1.5 μ m. <i>Superlattices and Microstructures</i> , 2006, 40, 262-267.	1.4	8

#	ARTICLE	IF	CITATIONS
145	Evaluation of Effective Elastic Properties of Nitride NWs/Polymer Composite Materials Using Laser-Generated Surface Acoustic Waves. Applied Sciences (Switzerland), 2018, 8, 2319.	1.3	8
146	Red GaPAs/GaP Nanowire-Based Flexible Light-Emitting Diodes. Nanomaterials, 2021, 11, 2549.	1.9	8
147	MBE growth of nitride-based photovoltaic intersubband detectors. Superlattices and Microstructures, 2006, 40, 418-425.	1.4	7
148	Surface potential investigation on interdigitated back contact solar cells by Scanning Electron Microscopy and Kelvin Probe Force Microscopy: Effect of electrical bias. Solar Energy Materials and Solar Cells, 2017, 161, 263-269.	3.0	7
149	Correlated optical and structural analyses of individual GaAsP/GaP core-shell nanowires. Nanotechnology, 2019, 30, 304001.	1.3	7
150	In Situ X-ray Diffraction Study of GaN Nucleation on Transferred Graphene. Crystal Growth and Design, 2020, 20, 4013-4019.	1.4	7
151	Investigation of the effect of the doping order in GaN nanowire p-n junctions grown by molecular-beam epitaxy. Nanotechnology, 2021, 32, 085705.	1.3	7
152	Intraband spectroscopy of self-organized GaN/AlN quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 60-63.	1.3	6
153	Intraband light absorption in InAs/GaAs quantum dots covered with InGaAs quantum wells. Semiconductor Science and Technology, 2006, 21, 1341-1347.	1.0	6
154	Strain effects in GaN/AlN multi-quantum-well structures for infrared optoelectronics. Microelectronics Journal, 2009, 40, 336-338.	1.1	6
155	Homogeneous linewidth of the intraband transition at 1.55 μm in GaN/AlN quantum dots. Applied Physics Letters, 2010, 97, 061903.	1.5	6
156	Terahertz intersubband absorption of GaN/AlGaIn step quantum wells grown by MOVPE on Si(111) and Si(110) substrates. Applied Physics Letters, 2019, 115, .	1.5	6
157	Nitride Nanowires for Light Emitting Diodes. Solid State Lighting Technology and Application Series, 2019, , 425-484.	0.3	6
158	Review on deep red-emitting rare-earth free germanates and their efficiency as well as adaptability for various applications. Applied Materials Today, 2021, 24, 101094.	2.3	6
159	Correlated optical and electrical analyses of inhomogeneous core/shell InGaIn/GaN nanowire light emitting diodes. Nanotechnology, 2021, 32, 105202.	1.3	6
160	Growth and characterization of AlInN/GaN quantum wells for high-speed intersubband devices at telecommunication wavelengths. , 2006, , .		5
161	Nitride-based heterostructures grown by MOCVD for near- and mid-infrared intersubband transitions. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1100-1104.	0.8	5
162	Effect of deposition conditions on nanowisker morphology. Semiconductors, 2007, 41, 865-874.	0.2	5

#	ARTICLE	IF	CITATIONS
163	Growth of intersubband GaN/AlGaIn heterostructures. Proceedings of SPIE, 2010, , .	0.8	5
164	Cathodoluminescence spectra of gallium nitride nanorods. Nanoscale Research Letters, 2011, 6, 631.	3.1	5
165	Compound Semiconductor Nanowire Photodetectors. Semiconductors and Semimetals, 2016, 94, 75-107.	0.4	5
166	Investigation of GaN nanowires containing AlN/GaN multiple quantum discs by EBIC and CL techniques. Nanotechnology, 2019, 30, 214006.	1.3	5
167	Dual-Color Emission from Monolithic m -Plane Core-Shell InGaIn/GaN Quantum Wells. Advanced Photonics Research, 2021, 2, 2000148.	1.7	5
168	Porous Nitride Light-Emitting Diodes. ACS Photonics, 2022, 9, 1256-1263.	3.2	5
169	Contactless electroreflectance spectroscopy of inter- and intersubband transitions in AlInN/GaN quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 503-507.	0.8	4
170	Near-infrared intersubband emission from GaN/AlN quantum dots and quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2120-2122.	0.8	4
171	Potential of semiconductor nanowires for single photon sources. Proceedings of SPIE, 2009, , .	0.8	4
172	Polar and semipolar III-nitrides for long wavelength intersubband devices. Proceedings of SPIE, 2010, , .	0.8	4
173	GaN/AlGaIn nanostructures for intersubband optoelectronics. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1421-1424.	0.8	4
174	Improvement of carrier collection in Si/a-Si:H nanowire solar cells by using hybrid ITO/silver nanowires contacts. Nanotechnology, 2020, 31, 435408.	1.3	4
175	Influence of surface passivation on the electrical properties of n GaAsP nanowires. Applied Physics Letters, 2020, 117, 123104.	1.5	4
176	III-Nitride Nanostructures for Infrared Optoelectronics. Acta Physica Polonica A, 2006, 110, 295-301.	0.2	4
177	A 5.7 THz GaN/AlGaIn quantum cascade detector based on polar step quantum wells. Applied Physics Letters, 2022, 120, .	1.5	4
178	Spectroscopy of the electron states in self-organized GaN/AlN quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1456-1460.	0.8	3
179	Si-doped GaN/AlN quantum dot superlattices for optoelectronics at telecommunication wavelengths. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1754-1758.	0.8	3
180	Characterization of high index microsphere resonators in fiber-integrated microfluidic platforms. Proceedings of SPIE, 2011, , .	0.8	3

#	ARTICLE	IF	CITATIONS
181	Photovoltaic properties of GaAs:Be nanowire arrays. <i>Semiconductors</i> , 2013, 47, 808-811.	0.2	3
182	Cubic III-nitride coupled quantum wells towards unipolar optically pumped lasers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013, 210, 455-458.	0.8	3
183	Controlling the properties of electrodeposited ZnO nanowire arrays for light emitting diode, photodetector and gas sensor applications. <i>Proceedings of SPIE</i> , 2014, , .	0.8	3
184	Heat Dissipation in Flexible Nitride Nanowire Light-Emitting Diodes. <i>Nanomaterials</i> , 2020, 10, 2271.	1.9	3
185	Electromechanical conversion efficiency of GaN NWs: critical influence of the NW stiffness, the Schottky nano-contact and the surface charge effects. <i>Nanoscale</i> , 2022, 14, 4965-4976.	2.8	3
186	Review of nitride infrared intersubband devices. <i>Proceedings of SPIE</i> , 2010, , .	0.8	2
187	Electrical detection of picosecond acoustic pulses in vertical transport devices with nanowires. <i>Applied Physics Letters</i> , 2014, 104, 062102.	1.5	2
188	Study of the electrical properties of individual (Ga,Mn)As nanowires. <i>Semiconductors</i> , 2014, 48, 344-349.	0.2	2
189	Flexible optoelectronic devices based on nitride nanowires embedded in polymer films. , 2016, , .		2
190	Intersubband absorption in m-plane ZnO/ZnMgO MQWs. <i>Proceedings of SPIE</i> , 2017, , .	0.8	2
191	Fabrication and Study of Optical Properties of LEDs Based on GaN Micropyramids with a Ni/Au/Graphene Semi-Transparent Contact. <i>Technical Physics Letters</i> , 2018, 44, 1111-1114.	0.2	2
192	Intraband photodetection at 1.3-1.5 μm in self-organized GaN/AlN quantum dots. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 3993-3997.	0.7	1
193	Electro-optical intersubband modulators at telecommunication wavelengths based on GaN/AlN quantum wells. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 1093-1095.	0.8	1
194	Semiconductor nanowires in InP and related material systems: MBE growth and properties. , 2008, , .		1
195	GaN/AlGaIn intersubband optoelectronic devices at telecommunication wavelengths. <i>Proceedings of SPIE</i> , 2009, , .	0.8	1
196	Broadening of intersubband transitions in InGaInN multiquantum wells. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C3B17-C3B21.	0.6	1
197	III-nitride semiconductors for intersubband devices. , 2011, , .		1
198	Electrical and Electro-Optical Characterization of Semiconductor Nanowires. , 2013, , 641-684.		1

#	ARTICLE	IF	CITATIONS
199	Nitride nanowire light emitting diodes. , 2015, , .		1
200	Nitride Nanowires: From Rigid to Flexible Piezo-generators. Journal of Physics: Conference Series, 2016, 773, 012010.	0.3	1
201	Optical properties of photodetectors based on single GaN nanowires with a transparent graphene contact. Semiconductors, 2016, 50, 1097-1101.	0.2	1
202	InGaN/GaN nanowire flexible light emitting diodes and photodetectors. , 2017, , .		1
203	Nanoscale Analyses Applied to Nanowire Devices. Semiconductors and Semimetals, 2018, , 231-319.	0.4	1
204	Electroluminescence of Single InGaN/GaN Micropyramids. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10,Tf 50 542	0.2	1
205	Crystal polarity discrimination in GaN nanowires on graphene. Journal of Materials Chemistry C, 2021, 9, 9997-10004.	2.7	1
206	Photocurrent Spectroscopy and Luminescence of GaN/AlN Quantum Discs in GaN Nanowires. , 2010, , .		1
207	Growth of III-Arsenide/Phosphide Nanowires by Molecular Beam Epitaxy. , 2011, , 68-88.		1
208	Axial junction GaAsP nanowires for solar cells applications (Conference Presentation). , 2019, , .		1
209	GaAs/GaAsPBi core-shell nanowires grown by molecular beam epitaxy. Nanotechnology, 2022, 33, 095602.	1.3	1
210	Polarization-resolved photoluminescence study of an atom probe tip containing a ZnO-(Mg,Zn)O heterostructure. , 2022, , .		1
211	Modeling of the electron beam induced current signal in nanowires with an axial p-n junction. Nanotechnology, 2022, 33, 395701.	1.3	1
212	Preferential sublimation along threading dislocations in InGaN/GaN single quantum well for improved photoluminescence. Journal of Applied Physics, 2022, 132, 035302.	1.1	1
213	Intersubband Absorptions in Doped and Undoped GaN/AlN Quantum Wells at Telecommunication Wavelengths Grown on Sapphire and 6H-SiC Substrates. Materials Research Society Symposia Proceedings, 2003, 798, 418.	0.1	0
214	Spectroscopy of Intraband Electron Confinement in Self-Assembled GaN/AlN Quantum Dots. Materials Research Society Symposia Proceedings, 2003, 798, 575.	0.1	0
215	Intraband Transitions on GaN/AlN Quantum Wells Grown on Sapphire (0001) and 6H-SiC Substrates. Materials Science Forum, 2004, 457-460, 1589-1592.	0.3	0
216	Intersubband absorptions in doped and undoped GaN/AlN quantum wells at telecommunication wavelengths. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1451-1455.	0.8	0

#	ARTICLE	IF	CITATIONS
217	GaN/AlGaIn superlattices for optoelectronics in the mid-infrared. Physica Status Solidi (B): Basic Research, 2006, 243, 1669-1673.	0.7	0
218	GaN/AlN Quantum Wells and Quantum Dots for Unipolar Devices at Telecommunication Wavelengths. AIP Conference Proceedings, 2007, , .	0.3	0
219	Intersubband resonant enhancement of second-harmonic generation in GaN/AlN quantum wells. AIP Conference Proceedings, 2007, , .	0.3	0
220	Observation of hot luminescence and slow intersubband relaxation in GaN/AlGaIn multi-quantum-well structures. AIP Conference Proceedings, 2007, , .	0.3	0
221	Room temperature intraband Raman emission and ultrafast carrier relaxation in GaN/AlN quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S650-S653.	0.8	0
222	Optical characterization of AlGaIn/GaN quantum disc structures in single nanowires. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2243-2245.	0.8	0
223	III-nitride intersubband photonics. Proceedings of SPIE, 2012, , .	0.8	0
224	Electroabsorption and refractive index modulation induced by intersubband transitions in GaN/AlN heterostructure waveguides. , 2013, , .		0
225	Experimental demonstration and observation of a plasmon wave occurring at a GaAs/Au/GaN interface. Optics Letters, 2013, 38, 2425.	1.7	0
226	Plasmonic-Polarization Enhancement of Novel GaN/AlN Quantum Cascade Detector. , 2013, , .		0
227	LATERAL GROWTH AND SHAPE OF SEMICONDUCTOR NANOWIRES. , 2013, , .		0
228	Flexible nitride nanowire optoelectronic devices. , 2016, , .		0
229	Cathodoluminescence mapping for the determination of n-type doping in single GaAs nanowires. , 2017, , .		0
230	Identification of whispering gallery modes in a fiber based sensor platform. , 2017, , .		0
231	Nanogenerators based on piezoelectric GaN nanowires grown by PA-MBE and MOCVD. , 2018, , .		0
232	Cathodoluminescence Characterization of Semiconductor Doping at the Nanoscale. , 2018, , .		0
233	Optimization of the optical coupling in nanowire-based integrated photonic platforms by FDTD simulation. Beilstein Journal of Nanotechnology, 2018, 9, 2248-2254.	1.5	0
234	Advances in Physics of Semiconductors. Annalen Der Physik, 2019, 531, 1900217.	0.9	0

#	ARTICLE	IF	CITATIONS
235	Advances in Physics of Semiconductors. Physica Status Solidi (B): Basic Research, 2019, 256, 1900282.	0.7	0
236	Characterization of the resonant third-order nonlinear susceptibility of Si-doped GaN/AlN quantum wells and quantum dots at 1.5 Åµm. , 2008, , .		0
237	Flexible Light Emitting Diodes Based on Nitride Nanowires. , 2017, , .		0
238	Short infrared wavelength quantum cascade detectors based on non-polar ZnO/ZnMgO quantum wells. , 2019, , .		0
239	Nanoscale Electrical Characterization of Organized GaAsP Nanowires for Photovoltaic Energy Harvesting. , 2019, , .		0
240	Characterisation of Semiconductor Nanowires by Electron Beam Induced Microscopy and Cathodoluminescence. , 2021, , 251-288.		0
241	DFT analysis of crystal polarity on graphene surface. Journal of Physics: Conference Series, 2021, 2015, 012105.	0.3	0
242	Investigating the secondary electron emission of nanomaterials induced by a high resolution proton beam. Physica Status Solidi (B): Basic Research, 0, , .	0.7	0
243	Exciton ionization induced by intersubband absorption in nonpolar ZnO-ZnMgO quantum wells at room temperature. Physical Review B, 2022, 105, .	1.1	0