

Phil Dawson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5245721/publications.pdf>

Version: 2024-02-01

94
papers

2,923
citations

318942

23
h-index

190340

53
g-index

95
all docs

95
docs citations

95
times ranked

2956
citing authors

#	ARTICLE	IF	CITATIONS
1	Carrier dynamics at trench defects in InGaN/GaN quantum wells revealed by time-resolved cathodoluminescence. <i>Nanoscale</i> , 2022, 14, 402-409. Polar ($\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle$) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 727 Td	2.8	13
2	$\text{xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"}$ $\text{overflow="scroll"} < \text{mml:mrow} > < \text{mml:mrow} > < \text{mml:mi}$ Insight into the impact of atomic and nano-scale indium distributions on the optical properties of	1.5	36
3	InGaN/GaN quantum well structures grown on m-plane freestanding GaN substrates. <i>Journal of Applied Physics</i> , 2019, 125, 225704.	1.1	5
4	Optical properties of c-Plane InGaN/GaN single quantum wells as a function of total electric field strength. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SCCB09.	0.8	5
5	Optical and structural properties of dislocations in InGaN. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	11
6	Impact of alloy fluctuations and Coulomb effects on the electronic and optical properties of c-plane GaN/AlGaIn quantum wells. <i>Scientific Reports</i> , 2019, 9, 18862.	1.6	11
7	Resonant photoluminescence studies of carrier localisation in c-plane InGaN/GaN quantum well structures. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 175303.	0.7	9
8	Recombination from polar InGaN/GaN quantum well structures at high excitation carrier densities. <i>Physical Review B</i> , 2018, 98, .	1.1	13
9	Effects of a Si-doped InGaIn Underlayer on the Optical Properties of InGaIn/GaN Quantum Well Structures with Different Numbers of Quantum Wells. <i>Materials</i> , 2018, 11, 1736.	1.3	6
10	Effect of stacking faults on the photoluminescence spectrum of zincblende GaN. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	10
11	The atomic structure of polar and non-polar InGaIn quantum wells and the green gap problem. <i>Ultramicroscopy</i> , 2017, 176, 93-98.	0.8	24
12	Photoluminescence studies of cubic GaN epilayers. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600733.	0.7	16
13	Theoretical and experimental analysis of the photoluminescence and photoluminescence excitation spectroscopy spectra of $\langle \text{m} \rangle$ -plane InGaIn/GaN quantum wells. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	7
14	Comparative studies of efficiency droop in polar and non-polar InGaIn quantum wells. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	18
15	Terahertz cyclotron resonance spectroscopy of an AlGaIn/GaN heterostructure using a high-field pulsed magnet and an asynchronous optical sampling technique. <i>Applied Physics Letters</i> , 2016, 108, 212101.	1.5	8
16	A comparison of the optical properties of InGaIn/GaN multiple quantum well structures grown with and without Si-doped InGaIn prelayers. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	13
17	The nature of carrier localisation in polar and nonpolar InGaIn/GaN quantum wells. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	66
18	The microstructure of non-polar a-plane (112 \hat{A} 0) InGaIn quantum wells. <i>Journal of Applied Physics</i> , 2016, 119, .	1.1	22

#	ARTICLE	IF	CITATIONS
19	Local carrier recombination and associated dynamics in m -plane InGaN/GaN quantum wells probed by picosecond cathodoluminescence. Applied Physics Letters, 2016, 109, .	1.5	9
20	Terahertz magnetospectroscopy studies of an AlGaIn/GaN heterostructure. , 2016, , .		0
21	Effect of QW growth temperature on the optical properties of blue and green InGaIn/GaN QW structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 209-213.	0.8	5
22	Investigating efficiency droop in InGaIn/GaN quantum well structures using ultrafast time-resolved terahertz and photoluminescence spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 252-255.	0.8	1
23	Room temperature PL efficiency of InGaIn/GaN quantum well structures with prelayers as a function of number of quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 248-251.	0.8	7
24	Effect of electron blocking layers on the conduction and valence band profiles of InGaIn/GaN LEDs. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 262-265.	0.8	1
25	A study of the optical and polarisation properties of InGaIn/GaN multiple quantum wells grown on a-plane and m-plane GaN substrates. Science and Technology of Advanced Materials, 2016, 17, 736-743.	2.8	5
26	Structural, electronic, and optical properties of m -plane InGaIn/GaN quantum wells: Insights from experiment and atomistic theory. Physical Review B, 2015, 92, .	1.1	57
27	Effects of quantum well growth temperature on the recombination efficiency of InGaIn/GaN multiple quantum wells that emit in the green and blue spectral regions. Applied Physics Letters, 2015, 107, .	1.5	58
28	Optical studies of non-polar m -plane InGaIn/GaN multiple quantum wells grown on freestanding bulk GaN. Physica Status Solidi (B): Basic Research, 2015, 252, 965-970.	0.7	14
29	Investigation of unintentional indium incorporation into GaN barriers of InGaIn/GaN quantum well structures. Physica Status Solidi (B): Basic Research, 2015, 252, 928-935.	0.7	15
30	A study of the inclusion of prelayers in InGaIn/GaN single and multiple quantum well structures. Physica Status Solidi (B): Basic Research, 2015, 252, 866-872.	0.7	16
31	Carrier distributions in InGaIn/GaN light-emitting diodes. Physica Status Solidi (B): Basic Research, 2015, 252, 890-894.	0.7	6
32	Polarized photoluminescence excitation spectroscopy of a-plane InGaIn/GaN multiple quantum wells grown on r-plane sapphire. Journal of Applied Physics, 2014, 115, 113106.	1.1	11
33	The effects of Si-doped prelayers on the optical properties of InGaIn/GaN single quantum well structures. Applied Physics Letters, 2014, 105, .	1.5	20
34	The impact of trench defects in InGaIn/GaN light emitting diodes and implications for the "green gap" problem. Applied Physics Letters, 2014, 105, .	1.5	54
35	Low temperature carrier redistribution dynamics in InGaIn/GaN quantum wells. Journal of Applied Physics, 2014, 115, .	1.1	17
36	Dynamics of carrier redistribution processes in InGaIn/GaN quantum well structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 738-741.	0.8	2

#	ARTICLE	IF	CITATIONS
37	Effects of an InGaN prelayer on the properties of InGaN/GaN quantum well structures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 710-713.	0.8	10
38	An investigation into defect reduction techniques for growth of non-polar GaN on sapphire. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 541-544.	0.8	15
39	High excitation density recombination dynamics in InGaN/GaN quantum well structures in the droop regime. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 694-697.	0.8	2
40	The effects of varying threading dislocation density on the optical properties of InGaN/GaN quantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 750-753.	0.8	10
41	The impact of gross well width fluctuations on the efficiency of GaN-based light emitting diodes. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	50
42	High excitation carrier density recombination dynamics of InGaN/GaN quantum well structures: Possible relevance to efficiency droop. <i>Applied Physics Letters</i> , 2013, 102, 022106.	1.5	29
43	Recombination mechanisms in heteroepitaxial non-polar InGaN/GaN quantum wells. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	4
44	On the origin of blue-green emission from heteroepitaxial nonpolar a-plane InGaN quantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 465-468.	0.8	4
45	The consequences of high injected carrier densities on carrier localization and efficiency droop in InGaN/GaN quantum well structures. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	105
46	High efficiency InGaN/GaN quantum well structures on large area silicon substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2012, 209, 13-16.	0.8	11
47	Exciton confinement in narrow non-polar InGaN/GaN quantum wells grown on <i>r</i> -plane sapphire. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 494-497.	0.7	1
48	Modification of carrier localization in basal-plane stacking faults: The effect of Si doping in <i>a</i> -plane GaN. <i>Physica Status Solidi (B): Basic Research</i> , 2012, 249, 498-502.	0.7	5
49	Efficiency measurement of GaN-based quantum well and light-emitting diode structures grown on silicon substrates. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	45
50	Carrier localization mechanisms in InGaN/GaN quantum wells. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	165
51	Influence of intersubband scattering on shift currents in GaAs quantum wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 1133-1136.	0.8	0
52	Study of efficiency droop and carrier localisation in an InGaN/GaN quantum well structure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2194-2196.	0.8	16
53	Properties of surface-pit related emission in a -plane InGaN/GaN quantum wells grown on r -plane sapphire. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2179-2181.	0.8	0
54	All-optical generation of coherent in-plane charge oscillations in GaAs quantum wells. <i>Physical Review B</i> , 2011, 83, .	1.1	8

#	ARTICLE	IF	CITATIONS
55	Coherent in-plane charge oscillations in GaAs quantum wells. , 2011, , .		0
56	Electronic and optical properties of nonpolar $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mi} \rangle \text{a} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -plane GaN quantum wells. Physical Review B, 2010, 82, .	1.1	36
57	Optical pumping of nuclear spin magnetization in GaAs/AlAs quantum wells of variable electron density. Solid State Communications, 2010, 150, 450-453.	0.9	4
58	Energy landscape and carrier waveâ€œfunctions in InGaN/GaN quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2255-2258.	0.8	7
59	Effect of overgrowth conditions on the optical properties of lateral epitaxially overgrown $\langle \text{i} \rangle \text{a} \langle \text{i} \rangle$ â€œplane GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2088-2090.	0.8	2
60	Carrier dynamics in non-polar GaN/AlGaIn quantum wells intersected by basal-plane stacking faults. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1894-1896.	0.8	3
61	Characterising the degree of polarisation anisotropy in an $\langle \text{i} \rangle \text{a} \langle \text{i} \rangle$ â€œplane GaN film. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1897-1899.	0.8	3
62	Measurement of higher-order exciton resonances in GaAs quantum wells via shift-current-THz-spectroscopy at room temperature. , 2010, , .		0
63	Low temperature photoluminescence and cathodoluminescence studies of nonpolar GaN grown using epitaxial lateral overgrowth. Journal of Applied Physics, 2010, 108, 033523.	1.1	21
64	Terahertz spectroscopy of shift currents resulting from asymmetric (110)-oriented GaAs/AlGaAs quantum wells. Applied Physics Letters, 2009, 95, .	1.5	18
65	Optical polarization anisotropy of a-plane GaN/AlGaIn multiple quantum well structures grown on r-plane sapphire substrates. Journal of Applied Physics, 2009, 105, 123112.	1.1	24
66	Optical polarisation anisotropy in $\langle \text{i} \rangle \text{a} \langle \text{i} \rangle$ â€œplane GaN/AlGaIn multiple quantum well structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S523.	0.8	2
67	Optical and microstructural properties of semi-polar (11-22) InGaIn/GaN quantum well structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S727-S730.	0.8	15
68	Spatially resolved measurements of depletion properties of large gate two-dimensional electron gas semiconductor terahertz modulators. Journal of Applied Physics, 2009, 105, .	1.1	34
69	Effects of resonant LO phonon assisted excitation on the photoluminescence spectra of InGaIn/GaN quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 2270-2273.	0.8	0
70	Electric field dependent photoluminescence studies of nanoparticle sensitized photorefractive polymers. Journal of Applied Physics, 2008, 103, 093702.	1.1	8
71	Optical properties of GaN/AlGaIn quantum wells grown on nonpolar substrates. Applied Physics Letters, 2008, 93, 101901.	1.5	34
72	Coulomb-enhanced shift currents from symmetry reduction in GaAs/AlGaAs quantum wells. , 2007, , .		1

#	ARTICLE	IF	CITATIONS
73	High photoluminescence quantum efficiency InGaN multiple quantum well structures emitting at 380nm. Journal of Applied Physics, 2007, 101, 033516.	1.1	12
74	Effects of disorder on electron spin dynamics in GaAs quantum wells. , 2007, , .		0
75	Shift currents from symmetry reduction and Coulomb effects in (110)-orientated $\text{GaAs}/\text{AlGaAs}$ quantum wells. Physical Review B, 2007, 76, .	1.1	40
76	Excitation energy dependence of the photoluminescence spectrum of an $\text{In}_x\text{Ga}_{1-x}\text{N}/\text{GaN}$ single quantum well structure. Physical Review B, 2007, 76, .	1.1	2
77	Resonant Photoluminescence Spectroscopy of InGaN/GaN Single Quantum Well Structures. AIP Conference Proceedings, 2007, , .	0.3	0
78	Effects of disorder on electron spin dynamics in a semiconductor quantum well. Nature Physics, 2007, 3, 265-269.	6.5	35
79	Resonant photoluminescence excitation studies of InGaN/GaN single quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2001-2004.	0.8	1
80	The effect of a Mg-doped GaN cap layer on the optical properties of InGaN/AlGaIn multiple quantum well structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2005-2008.	0.8	2
81	High quantum efficiency InGaN/GaN structures emitting at 540 nm. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1970-1973.	0.8	12
82	Nature and dynamics of carrier escape from InAs/GaAs quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2397-2401.	0.8	10
83	Misfit dislocations in In-rich InGaN/GaN quantum well structures. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1729-1732.	0.8	48
84	A comparative study of near-UV emitting InGaIn quantum wells with AlGaIn and AlInGaIn barriers. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1819-1823.	0.8	11
85	Electric fields in AlGaIn/GaN quantum well structures. Physica Status Solidi (B): Basic Research, 2006, 243, 1551-1559.	0.7	10
86	Resonant excitation photoluminescence studies of InGaIn/GaN single quantum well structures. Applied Physics Letters, 2006, 89, 211901.	1.5	16
87	Quantum interference currents by excitation of heavy and light hole excitons in GaAs quantum wells. , 2006, , .		0
88	Temperature-dependent optical properties of InAs/GaAs quantum dots: Independent carrier versus exciton relaxation. Physical Review B, 2005, 72, .	1.1	53
89	Determination of relative internal quantum efficiency in InGaIn/GaN quantum wells. Journal of Applied Physics, 2005, 98, 053509.	1.1	22
90	Optical and microstructural studies of InGaIn/GaN single-quantum-well structures. Journal of Applied Physics, 2005, 97, 103508.	1.1	200

#	ARTICLE	IF	CITATIONS
91	Photoluminescence studies of InGaN/GaN multi-quantum wells. Semiconductor Science and Technology, 2000, 15, 497-505.	1.0	55
92	Photoluminescence decay time measurements from self-organized InAs/GaAs quantum dots. Journal of Applied Physics, 1999, 86, 2555-2561.	1.1	73
93	Observation of resonant exciton cooling in GaAs/AlGaAs multiple quantum well structures. Solid State Communications, 1997, 101, 477-482.	0.9	3
94	Linewidth dependence of radiative exciton lifetimes in quantum wells. Physical Review Letters, 1987, 59, 2337-2340.	2.9	1,035