Henryk Turski

List of Publications by Year
in descending order

80 papers	969 citations	471371 17 h-index	580701 25 g-index
88 all docs	88 docs citations	88 times ranked	715 citing authors

#	Article	IF	Citations
1	Nitride-based laser diodes grown by plasma-assisted molecular beam epitaxy. Journal Physics D: Applied Physics, 2014, 47, 073001.	1.3	56
2	Nonequivalent atomic step edgesâ€”Role of gallium and nitrogen atoms in the growth of InGaN layers. Journal of Crystal Growth, 2013, 367, 115-121.	0.7	46
3	Optically pumped 500 nm InGaN green lasers grown by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 2011, 110, .	1.1	44
4	True-blue laser diodes with tunnel junctions grown monolithically by plasma-assisted molecular beam epitaxy. Applied Physics Express, 2018, 11, 034103.	1.1	39
5	Beyond Quantum Efficiency Limitations Originating from the Piezoelectric Polarization in Light-Emitting Devices. ACS Photonics, 2019, 6, 1963-1971.	3.2	33
6	Enhancement of optical confinement factor by InGaN waveguide in blue laser diodes grown by plasma-assisted molecular beam epitaxy. Applied Physics Express, 2015, 8, 032103.	1.1	32
7	Stack of two III-nitride laser diodes interconnected by a tunnel junction. Optics Express, 2019, 27, 5784.	1.7	32
8	Elimination of leakage of optical modes to GaN substrate in nitride laser diodes using a thick InGaN waveguide. Applied Physics Express, 2016, 9, 092103.	1.1	28
9	Growth mechanism of InGaN by plasma assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 03C136.	0.6	25
10	Hydrogen diffusion in GaN:Mg and GaN:Si. Journal of Alloys and Compounds, 2018, 747, 354-358.	2.8	24
11	Polarization control in nitride quantum well light emitters enabled by bottom tunnel-junctions. Journal of Applied Physics, 2019, 125, 203104.	1.1	24
12	Unusual step meandering due to Ehrlich-Schwoebel barrier in GaN epitaxy on the N-polar surface. Applied Surface Science, 2019, 484, 771-780.	3.1	22
13	Step-flow anisotropy of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>m</mml:mi></mml:mrow></mml:math>-plane GaN (<mml:math) Tj ETQq1 1 0.784314 rgBT /Ov	1.1	20
14	Growth mechanisms in semipolar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0020.gif" overflow="scroll"><mml:mo stretchy="false">(</mml:mo><mml:mn>2</mml:mn><mml:mspace width=".5em") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td (/><mm ... assisted molecular beam epitaxy. Physical Review B,	0.7	20
15	Indium incorporation in semipolar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0010.gif" overflow="scroll"><mml:mrow><mml:mo <mml		

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19	InGaN laser diodes operating at 450â€“460 nm grown by rf-plasma MBE. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 02B102.	0.6	17
20	Vertical Integration of Nitride Laser Diodes and Light Emitting Diodes by Tunnel Junctions. Electronics (Switzerland), 2020, 9, 1481.	1.8	17
21	AlGaN-Free Laser Diodes by Plasma-Assisted Molecular Beam Epitaxy. Applied Physics Express, 2012, 5, 022104.	1.1	16
22	MBE fabrication of III-N-based laser diodes and its development to industrial system. Journal of Crystal Growth, 2013, 378, 278-282.	0.7	16
23	Optical properties of III-nitride laser diodes with wide InGaN quantum wells. Applied Physics Express, 2019, 12, 072003.	1.1	16
24	Step-flow growth mode instability of N-polar GaN under N-excess. Applied Physics Letters, 2013, 103, .	1.5	15
25	Investigation on the origin of luminescence quenching in N-polar (In,Ga)N multiple quantum wells. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2013, 31, .	0.6	15
26	Role of Metal Vacancies in the Mechanism of Thermal Degradation of InGaN Quantum Wells. ACS Applied Materials & Interfaces, 2021, 13, 7476-7484.	4.0	15
27	Determination of gain in AlGaN cladding free nitride laser diodes. Applied Physics Letters, 2013, 103, .	1.5	14
28	III-nitride optoelectronic devices containing wide quantum wellsâ€"unexpectedly efficient light sources. Japanese Journal of Applied Physics, 2022, 61, SA0801.	0.8	14
29	Ultraviolet laser diodes grown on semipolar (202Â¯1) GaN substrates by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2013, 102, .	1.5	13
30	High power nitride laser diodes grown by plasma assisted molecular beam epitaxy. Journal of Crystal Growth, 2015, 425, 398-400.	0.7	13
31	Luminescent N-polar (In,Ga)N/GaN quantum wells achieved by plasma-assisted molecular beam epitaxy at temperatures exceeding 700â€‰Â°C. Applied Physics Letters, 2018, 112, .	1.5	13
32	Dependence of InGaN Quantum Well Thickness on the Nature of Optical Transitions in LEDs. Materials, 2022, 15, 237.	1.3	13
33	Nitride LEDs and Lasers with Buried Tunnel Junctions. ECS Journal of Solid State Science and Technology, 2020, 9, 015018.	0.9	12
34	Cyan laser diode grown by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2014, 104, 023503.	1.5	11
35	Revealing inhomogeneous Si incorporation into GaN at the nanometer scale by electrochemical etching. Nanoscale, 2020, 12, 6137-6143.	2.8	11
36	Tunnel Junctions with a Doped (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 mathvariant="normal">N</mml:mi></mml:mrow></mml:mrow></mml:math> Quantum Well for Vertical Integration of <i>III</i> -Nitride Optoelectronic Devices. Physical Review Applied, 2021, 15, .	1.5	11

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37	Waveguide Design for Long Wavelength InGaN Based Laser Diodes. Acta Physica Polonica A, 2012, 122, 1031-1033.	0.2	11
38	Growth rate independence of Mg doping in GaN grown by plasma-assisted MBE. Journal of Crystal Growth, 2018, 482, 56-60.	0.7	10
39	High quality m-plane GaN grown under nitrogen-rich conditions by plasma assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, .	0.6	9
40	Ultraviolet light-emitting diodes grown by plasma-assisted molecular beam epitaxy on semipolar GaN (202Â¯1) substrates. Applied Physics Letters, 2013, 102, .	1.5	9
41	Miscut dependent surface evolution in the process of N-polar <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0021.gif" overflow="scroll"><mml:mi>GaN</mml:mi><mml:mo>(</mml:mo><mml:mn>000</mml:mn><mml:mover) Tj ETQq0 1 1 0.784314 rgBT /(growth under N-rich condition. Journal of Crystal Growth, 2017, 457, 38-45.	1.7	9
42	Extremely long lifetime of III-nitride laser diodes grown by plasma assisted molecular beam epitaxy. Materials Science in Semiconductor Processing, 2019, 91, 387-391.	1.9	9
43	Sensitivity of N-polar GaN surface barrier to ambient gases. Sensors and Actuators B: Chemical, 2019, 281, 561-567.	4.0	9
44	Distributed-feedback blue laser diode utilizing a tunnel junction grown by plasma-assisted molecular beam epitaxy. Optics Express, 2020, 28, 35321.	1.7	9
45	III-N/Siâ‚ƒNâ‚„ Integrated Photonics Platform for Blue Wavelengths. IEEE Journal of Quantum Electronics, 2020, 56, 1-9.	1.0	8
46	Optical properties of N-polar GaN: The possible role of nitrogen vacancy-related defects. Applied Surface Science, 2021, 566, 150734.	3.1	8
47	Nitride light-emitting diodes for cryogenic temperatures. Optics Express, 2020, 28, 30299.	1.7	8
48	Aluminum-free nitride laser diodes: waveguiding, electrical and degradation properties. Optics Express, 2017, 25, 33113.	1.7	7
49	Gallium nitride tunneling field-effect transistors exploiting polarization fields. Applied Physics Letters, 2020, 116, .	1.5	7
50	Ion implantation of tunnel junction as a method for defining the aperture of III-nitride-based micro-light-emitting diodes. Optics Express, 2022, 30, 27004.	1.7	7
51	Strain relaxation in semipolar (202Â¯1) InGaN grown by plasma assisted molecular beam epitaxy. Journal of Applied Physics, 2016, 119, .	1.1	6
52	Comparative study of semipolar<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mn>2</mml:mn><mml:mspace width="0.12em") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 147 Td (/><r	0.7	6
53	Enhanced efficiency in bottom tunnel junction InGaN blue LEDs. , 2021, , .		6
54	Dislocation and indium droplet related emission inhomogeneities in InGaN LEDs. Journal Physics D: Applied Physics, 2021, 54, 495106.	1.3	6

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55	Electrically pumped blue laser diodes with nanoporous bottom cladding. Optics Express, 2022, 30, 10709.	1.7	6
56	Electrical transport properties of highly doped N-type GaN materials. Semiconductor Science and Technology, 2022, 37, 055012.	1.0	6
57	Nitrogen-rich growth for device quality N-polar InGaN/GaN quantum wells by plasma-assisted MBE. Journal of Crystal Growth, 2019, 512, 208-212.	0.7	5
58	Stacking faults in plastically relaxed InGaN epilayers. Semiconductor Science and Technology, 2020, 35, 034003.	1.0	5
59	Role of Nonequivalent Atomic Step Edges in the Growth of InGaN by Plasma-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2013, 52, 08JE02.	0.8	4
60	Trueâ€blue laser diodes grown by plasmaâ€assisted MBE on bulk GaN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 666-669.	0.8	3
61	Photoluminescence characterization of InGaN/InGaN quantum wells grown by plasmaâ€assisted molecular beam epitaxy: Impact of nitrogen and galium fluxes. Physica Status Solidi (B): Basic Research, 2015, 252, 983-988.	0.7	3
62	Influence of Growth Polarity Switching on the Optical and Electrical Properties of GaN/AlGaN Nanowire LEDs. Electronics (Switzerland), 2021, 10, 45.	1.8	3
63	Nitride-based laser diodes and superluminescent diodes. Photonics Letters of Poland, 2014, 6, .	0.2	3
64	Role of nonequivalent atomic step edges in the growth of InGaN by plasma-assisted molecular beam epitaxy. Proceedings of SPIE, 2013, , .	0.8	2
65	Monolithically p-down nitride laser diodes and LEDs obtained by MBE using buried tunnel junction design. , 2020, , .		2
66	Semipolar (202Â¯1) GaN laser diodes operating at 388â€‰nm grown by plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 02C115.	0.6	1
67	S-shaped negative differential resistance in III-Nitride blue quantum-well laser diodes grown by plasma-assisted MBE. , 2017, , .		1
68	Realization of the First GaN Based Tunnel Field-Effect Transistor. , 2018, , .		1
69	Inhomogeneous broadening of optical transitions observed in photoluminescence and modulated reflectance of polar and non-polar InGaN quantum wells. Journal of Applied Physics, 2020, 127, 035702.	1.1	1
70	Composition Inhomogeneity in Nonpolar (101Ì…0) and Semipolar (202Ì…1) InAlN Layers Grown by Plasma-Assisted Molecular Beam Epitaxy. Crystal Growth and Design, 2021, 21, 5223-5230.	1.4	1
71	InAlGaN laser diodes grown by plasma assisted molecular beam epitaxy. Lithuanian Journal of Physics, 2011, 51, 276-282.	0.1	1
72	Bottom tunnel junction-based blue LED with a thin Ge-doped current spreading layer. Applied Physics Letters, 2022, 120, 171104.	1.5	1

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73	True-blue nitride laser diodes grown by plasma assisted MBE on low dislocation density GaN substrates. Proceedings of SPIE, 2013, , .	0.8	0
74	AlGaN cladding-free 482 nm continuous wave nitride laser diodes grown by plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2014, 32, 02C112.	0.6	0
75	â€œAluminum free nitride laser diodes grown by plasma assisted MBEâ€• , 2016, , .		0
76	Tunnel junctions for two-color nitride light emitting diodes and laser diodes grown by plasma assisted molecular beam epitaxy. , 2018, , .		0
77	Tunnel junctions for vertically integrated multiple nitrides laser diodes. , 2019, , .		0
78	Buried tunnel junction for p-down nitride laser diodes. , 2019, , .		0
79	Free Excitonic Emission in Homoepitaxial Layers Grown on Bulk GaN Substrates. Acta Physica Polonica A, 2021, 139, 300-303.	0.2	0
80	Magnetic Liquid Crystals for Molecular Spintronics. Acta Physica Polonica A, 2008, 114, 1383-1386.	0.2	0