

Yoshio Honda

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10891650/publications.pdf>

Version: 2024-02-01

76
papers

1,479
citations

361413

20
h-index

345221

36
g-index

77
all docs

77
docs citations

77
times ranked

1564
citing authors

#	ARTICLE	IF	CITATIONS
1	Correlation between dislocations and leakage current of p-n diodes on a free-standing GaN substrate. Applied Physics Letters, 2018, 112, .	3.3	142
2	Growth of () GaN on a 7-degree off-oriented (001)Si substrate by selective MOVPE. Journal of Crystal Growth, 2002, 242, 82-86.	1.5	86
3	Morphology development of GaN nanowires using a pulsed-mode MOCVD growth technique. CrystEngComm, 2014, 16, 2273-2282.	2.6	82
4	Growth and properties of semi-polar GaN on a patterned silicon substrate. Journal of Crystal Growth, 2009, 311, 2867-2874.	1.5	75
5	Selective Area Growth of GaN on Si Substrate Using SiO ₂ Mask by Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 1998, 37, L966-L969.	1.5	63
6	Vertical GaN p-n diode with deeply etched mesa and the capability of avalanche breakdown. Applied Physics Express, 2019, 12, 026502.	2.4	59
7	Uneven AlGaIn multiple quantum well for deep-ultraviolet LEDs grown on macrosteps and impact on electroluminescence spectral output. Japanese Journal of Applied Physics, 2017, 56, 061002.	1.5	54
8	Improvement of Light Extraction Efficiency for AlGaIn-Based Deep Ultraviolet Light-Emitting Diodes. Japanese Journal of Applied Physics, 2011, 50, 122101.	1.5	52
9	Highly ordered catalyst-free InGaIn/GaN core-shell architecture arrays with expanded active area region. Nano Energy, 2015, 11, 294-303.	16.0	47
10	Deeply and vertically etched butte structure of vertical GaN p-n diode with avalanche capability. Japanese Journal of Applied Physics, 2019, 58, SCCD25.	1.5	42
11	On-wafer fabrication of etched-mirror UV-C laser diodes with the ALD-deposited DBR. Applied Physics Letters, 2020, 116, .	3.3	42
12	Reduction of Efficiency Droop in Semipolar (111) InGaIn/GaN Light Emitting Diodes Grown on Patterned Silicon Substrates. Applied Physics Express, 2011, 4, 012105.	2.4	39
13	Effects of exciton localization on internal quantum efficiency of InGaIn nanowires. Journal of Applied Physics, 2013, 114, .	2.5	38
14	Emission Characteristics of InGaIn/GaN Core-Shell Nanorods Embedded in a 3D Light-Emitting Diode. Nanoscale Research Letters, 2016, 11, 215.	5.7	35
15	Development of highly durable deep-ultraviolet AlGaIn-based LED multichip array with hemispherical encapsulated structures using a selected resin through a detailed feasibility study. Japanese Journal of Applied Physics, 2016, 55, 082101.	1.5	34
16	Highly elongated vertical GaN nanorod arrays on Si substrates with an AlN seed layer by pulsed-mode metal-organic vapor deposition. CrystEngComm, 2016, 18, 1505-1514.	2.6	33
17	Structural characterization of GaN laterally overgrown on a (111)Si substrate. Applied Physics Letters, 2001, 79, 955-957.	3.3	30
18	Correlation between nanopipes formed from screw dislocations during homoepitaxial growth by metal-organic vapor-phase epitaxy and reverse leakage current in vertical p-n diodes on a free-standing GaN substrates. Japanese Journal of Applied Physics, 2019, 58, SCCB24.	1.5	30

#	ARTICLE	IF	CITATIONS
19	Optically pumped lasing properties of $(1\bar{1}01)$ InGaN/GaN stripe multiquantum wells with ridge cavity structure on patterned (001) Si substrates. Applied Physics Express, 2015, 8, 022702.	2.4	28
20	Growth of InGaN nanowires on a (111)Si substrate by RF-MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 646-649.	0.8	21
21	Nature of yellow luminescence band in GaN grown on Si substrate. Japanese Journal of Applied Physics, 2014, 53, 11RC02.	1.5	21
22	Semi-polar GaN LEDs on Si substrate. Science China Technological Sciences, 2011, 54, 38-41.	4.0	20
23	Optical properties of $(1\bar{1}\bar{0}1)$ semi-polar InGaN/GaN multiple quantum wells grown on patterned silicon substrates. Journal of Crystal Growth, 2011, 318, 500-504.	1.5	17
24	Mg doping in $(11\bar{1}01)$ GaN grown on a $7\bar{A}^\circ$ off-axis (001)Si substrate by selective MOVPE. Journal of Crystal Growth, 2007, 298, 207-210.	1.5	16
25	Excitation density dependence of radiative and nonradiative recombination lifetimes in InGaN/GaN multiple quantum wells. Physica Status Solidi (B): Basic Research, 2015, 252, 940-945.	1.5	16
26	III-nitride core-shell nanorod array on quartz substrates. Scientific Reports, 2017, 7, 45345.	3.3	16
27	Improved crystal quality of semipolar $(101\bar{1}3)$ GaN on Si(001) substrates using AlN/GaN superlattice interlayer. Journal of Crystal Growth, 2016, 454, 114-120.	1.5	15
28	Maskless selective growth of semi-polar $(112\bar{1}2)$ GaN on Si (311) substrate by metal organic vapor phase epitaxy. Journal of Crystal Growth, 2009, 311, 2914-2918.	1.5	14
29	Effect of dislocations on the growth of p-type GaN and on the characteristics of p-n diodes. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600837.	1.8	14
30	Selective-area growth of doped GaN nanorods by pulsed-mode MOCVD: Effect of Si and Mg dopants. Physica Status Solidi (B): Basic Research, 2017, 254, 1600722.	1.5	14
31	The surface diffusion of Ga on an AlGaIn/GaN facet structure in the MOVPE growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2154-2158.	0.8	12
32	The surface diffusion of Ga on an AlGaIn/GaN stripe structure in the selective MOVPE. Physica Status Solidi (B): Basic Research, 2006, 243, 1665-1668.	1.5	12
33	The surface diffusion of Ga species on an AlGaIn facet structure in low pressure MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2506-2509.	0.8	12
34	Achieving high-growth-rate in GaN homoepitaxy using high-density nitrogen radical source. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2089-2091.	0.8	12
35	Two-dimensional analysis of the nonuniform quantum yields of multiple quantum wells for AlGaIn-based deep-ultraviolet LEDs grown on AlN templates with dense macrosteps using cathodoluminescence spectroscopy. Journal of Applied Physics, 2019, 126, .	2.5	12
36	Study on the Main-Chain Structure of Amorphous Fluorine Resins for Encapsulating AlGaIn-Based DUV-LEDs. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700525.	1.8	11

#	ARTICLE	IF	CITATIONS
37	Optical properties of neodymium ions in nanoscale regions of gallium nitride. <i>Optical Materials Express</i> , 2020, 10, 2614.	3.0	11
38	Vertical GaN p+-n junction diode with ideal avalanche capability grown by halide vapor phase epitaxy. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	11
39	Incorporation of carbon on a facet of GaN by MOVPE. <i>Journal of Crystal Growth</i> , 2005, 284, 341-346.	1.5	10
40	Selective-area growth of GaN microrods on strain-induced templates by hydride vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 05FF03.	1.5	10
41	Development of AlGaIn-based deep-ultraviolet (DUV) LEDs focusing on the fluorine resin encapsulation and the prospect of the practical applications. <i>Proceedings of SPIE</i> , 2016, , .	0.8	10
42	Low Voltage High-Energy $\hat{I}\pm$ -Particle Detectors by GaN-on-GaN Schottky Diodes with Record-High Charge Collection Efficiency. <i>Sensors</i> , 2019, 19, 5107.	3.8	10
43	In situ X-ray investigation of changing barrier growth temperatures on InGaIn single quantum wells in metal-organic vapor phase epitaxy. <i>Journal of Applied Physics</i> , 2014, 115, 094906.	2.5	9
44	Effect of photoelectrochemical etching and post-metallization annealing on gate controllability of AlGaIn/GaN high electron mobility transistors. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SCCD20.	1.5	9
45	Fabrication of GaN/AlGaIn heterostructures on a (111)Si substrate by selective MOVPE. <i>Journal of Crystal Growth</i> , 2002, 237-239, 1099-1103.	1.5	8
46	Optical properties of (111) InGaIn/GaN MQW stripe laser structure on Si substrate. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2160-2162.	0.8	8
47	Controlled morphology of regular GaN microrod arrays by selective area growth with HVPE. <i>Journal of Crystal Growth</i> , 2016, 447, 55-61.	1.5	8
48	V-shaped dislocations in a GaN epitaxial layer on GaN substrate. <i>AIP Advances</i> , 2019, 9, .	1.3	8
49	Effect of lateral vapor phase diffusion during the selective growth of InGaIn/GaN MQW on semipolar and nonpolar GaN stripes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 1175-1178.	1.8	7
50	Characteristics of a-plane GaN films grown on optimized silicon-dioxide-patterned r-plane sapphire substrates. <i>Thin Solid Films</i> , 2013, 546, 108-113.	1.8	7
51	Structural and optical study of core-shell InGaIn layers of nanorod arrays with multiple stacks of InGaIn/GaN superlattices for absorption of longer solar spectrum. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 05FG03.	1.5	7
52	Smart-cut-like laser slicing of GaN substrate using its own nitrogen. <i>Scientific Reports</i> , 2021, 11, 17949.	3.3	7
53	Transmission Electron Microscopy Study of the Microstructure in Selective-Area-Grown GaN and an AlGaIn/GaN Heterostructure on a 7-Degree Off-Oriented (001) Si Substrate. <i>Japanese Journal of Applied Physics</i> , 2002, 41, L846-L848.	1.5	6
54	Transmission electron microscopy study of an AlN nucleation layer for the growth of GaN on a 7-degree off-oriented (001) Si substrate by metalorganic vapor phase epitaxy. <i>Journal of Crystal Growth</i> , 2004, 260, 360-365.	1.5	6

#	ARTICLE	IF	CITATIONS
55	Optical spectra of (1-101) InGaN/GaN and GaN/AlGaIn MQW structure grown on a 7 degree off axis (001) Si substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1992-1996.	0.8	5
56	Structural evolution of AlN buffer and crystal quality of GaN films on a- and c-sapphire grown by metalorganic vapor phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 369-372.	0.8	5
57	Fabrication of InGaN/GaN Multiple Quantum Wells on (111̄,01) GaN. Japanese Journal of Applied Physics, 2013, 52, 08JC05.	1.5	5
58	Demonstration of Observation of Dislocations in GaN by Novel Birefringence Method. Physica Status Solidi (B): Basic Research, 2020, 257, 1900553.	1.5	5
59	Recovery of quantum efficiency on Cs/O-activated GaN and GaAs photocathodes by thermal annealing in vacuum. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2020, 38, .	1.2	5
60	Development of Pulsed TEM Equipped with Nitride Semiconductor Photocathode for High-Speed Observation and Material Nanofabrication. Quantum Beam Science, 2021, 5, 5.	1.2	5
61	Series resistance in a GaN/AlGaIn/n-Si structure grown by MOVPE. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2740-2743.	0.8	4
62	Enhancement of light output power on GaN-based light-emitting diodes using two-direction stripe-patterned sapphire substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 722-725.	0.8	4
63	Laser slice thinning of GaN-on-GaN high electron mobility transistors. Scientific Reports, 2022, 12, 7363.	3.3	4
64	HVPE growth of c-plane GaN on a GaN template (110)Si substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1760-1763.	0.8	3
65	Strain relaxation in thick (100) InGaIn grown on GaN/Si substrate. Physica Status Solidi (B): Basic Research, 2012, 249, 468-471.	1.5	3
66	Gallium nitride wafer slicing by a sub-nanosecond laser: effect of pulse energy and laser shot spacing. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	3
67	Optical spectra of GaN/InGaIn/GaN MQW structure grown on a (111̄) GaN facet. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 2512-2515.	0.8	2
68	DAP emission band in a carbon doped (111̄)GaIn grown on (001)Si substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S772.	0.8	2
69	Impurity incorporation in semipolar (1-1 0 1) GaN grown on an Si substrate. Semiconductor Science and Technology, 2012, 27, 024006.	2.0	2
70	Time-resolved photoluminescence spectroscopy in a GaN/AlGaIn SQW structure grown on a (111) Si substrate. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2838-2841.	0.8	1
71	Time-resolved spectroscopy in an undoped GaN (1-101). Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 367-369.	0.8	1
72	Selective MOVPE growth of InGaIn/GaN MQW on microfacet GaN stripes. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2038-2040.	0.8	1

#	ARTICLE	IF	CITATIONS
73	Electronic structure analysis of core structures of threading dislocations in GaN. , 2019, , .		1
74	Subband structure and transport properties of two-dimensional electron gas in $\text{Al}_x\text{Ga}_{1-x}\text{N}/\text{GaN}$ heterostructures. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2007, 4, 2334-2337.	0.8	0
75	Drain bias stress and memory effects in AlGaIn/GaN heterostructure field-effect transistors with $\text{p}^+\text{-GaIn}$ gate. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 2424-2426.	0.8	0
76	X-ray investigations of GaInN single quantum wells grown by atomic layer epitaxy and metalorganic vapor phase epitaxy. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 393-396.	0.8	0