

Yoshiaki Nakano

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3695038/publications.pdf>

Version: 2024-02-01

290
papers

3,216
citations

159585

30
h-index

254184

43
g-index

291
all docs

291
docs citations

291
times ranked

2766
citing authors

#	ARTICLE	IF	CITATIONS
1	Gain-Coupled 4Å–56 Gb/s EML Array with Optimized Bonding-Wire Inductance. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-7.	2.9	4
2	Robust InP/InGaAsP Polarization Rotator Based on Mode Evolution. IEEE Photonics Technology Letters, 2022, 34, 109-112.	2.5	7
3	Compact symmetric polarization rotator-splitter on InP. Optics Express, 2022, 30, 4179.	3.4	6
4	Scalable and Robust Photonic Integrated Unitary Converter Based on Multiplane Light Conversion. Physical Review Applied, 2022, 17, .	3.8	14
5	Surface-Normal Stokes Vector Receiver based on Superimposed Metasurface. , 2022, , .		1
6	Photonic Integrated Unitary Processor based on Multi-Plane Light Conversion. , 2022, , .		1
7	Single-Pixel Imaging Using Multimode Fiber and Silicon Photonic Phased Array. Journal of Lightwave Technology, 2021, 39, 839-844.	4.6	44
8	Integrated dual-polarization coherent receiver without a polarization splitter-rotator. Optics Express, 2021, 29, 1711.	3.4	6
9	Single-Pixel Imaging Using Carrier-Depletion Optical Phased Array With Reduced Phase Shift Requirement. IEEE Photonics Journal, 2021, 13, 1-5.	2.0	6
10	Efficient InGaAsP MQW-based polarization controller without active-passive integration. Optics Express, 2021, 29, 10538.	3.4	6
11	Band Bending of n-GaN under Ambient H ₂ O Vapor Studied by X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2021, 125, 9011-9019.	3.1	6
12	Straight-Line Dual-Polarization PSK Transmitter with Polarization Differential Modulation. IEICE Transactions on Communications, 2021, E104.B, 490-496.	0.7	0
13	Ten-Port Unitary Optical Processor on a Silicon Photonic Chip. ACS Photonics, 2021, 8, 2074-2080.	6.6	45
14	Robustness Analysis of Generalized Optical Unitary Converter. , 2021, , .		0
15	Impact of Laser Phase Noise on Self-Coherent Transceivers Employing High-Order QAM Formats. Journal of Lightwave Technology, 2021, 39, 6150-6158.	4.6	13
16	Large-Scale Monolithic InP-Based Optical Phased Array. IEEE Photonics Technology Letters, 2021, 33, 1123-1126.	2.5	22
17	Resolution limit of single-pixel speckle imaging using multimode fiber and optical phased array. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 379.	2.1	17
18	Non-redundant optical phased array. Optica, 2021, 8, 1350.	9.3	32

#	ARTICLE	IF	CITATIONS
19	Mode-Evolution-based InP/InGaAsP Polarization Rotator with Etching-Stop Layer. , 2021, , .		2
20	Effect of Limited Phase Shift on Single-Pixel Imaging using Carrier-Depletion Silicon Photonic Phased Array. , 2021, , .		0
21	Mode-Evolution-based Symmetrical Polarization Splitter-Rotator on Monolithic InP Platform. , 2021, , .		1
22	Comparative Study of H ₂ O and O ₂ Adsorption on the GaN Surface. Journal of Physical Chemistry C, 2021, 125, 25807-25815.	3.1	5
23	Demonstration of 10-port Integrated Optical Unitary Converter. , 2021, , .		0
24	Monolithic InP 100-Port Optical Phased Array. , 2021, , .		0
25	Integrated Optical Unitary Converter based on Nonuniform Multimode Interference Coupler. , 2021, , .		0
26	Integrated InP optical unitary converter with compact half-integer multimode interferometers. Optics Express, 2021, 29, 43414.	3.4	8
27	Robust Integrated Optical Unitary Converter Using Multiport Directional Couplers. Journal of Lightwave Technology, 2020, 38, 60-66.	4.6	34
28	Sensitivity Analysis of Photonic Integrated Direct-Detection Stokes-Vector Receiver. Journal of Lightwave Technology, 2020, 38, 447-456.	4.6	10
29	Modeling and design for low-cost multijunction solar cell via light-trapping rear texture technique: Applied in InGaP/GaAs/InGaAs triple junction. Progress in Photovoltaics: Research and Applications, 2020, 28, 251-265.	8.1	11
30	Atomistic-Level Description of GaN/Water Interface by a Combined Spectroscopic and First-Principles Computational Approach. Journal of Physical Chemistry C, 2020, 124, 12466-12475.	3.1	6
31	Fabrication-Tolerant Half-Ridge InP/InGaAsP Polarization Rotator With Etching-Stop Layer. IEEE Photonics Technology Letters, 2020, 32, 663-666.	2.5	13
32	A general design guideline for strain-balanced quantum-wells toward high-efficiency photovoltaics. Solar Energy, 2020, 206, 655-669.	6.1	4
33	Comparison of Effective Carrier Mobility Between Wire on Well and Planar Superlattice Using Time-of-Flight Measurement. IEEE Journal of Photovoltaics, 2020, 10, 1008-1014.	2.5	3
34	High-Speed MOVPE Growth of InGaP Solar Cells. IEEE Journal of Photovoltaics, 2020, 10, 480-486.	2.5	9
35	Monolithic InP optical unitary converter based on multi-plane light conversion. Optics Express, 2020, 28, 25392.	3.4	18
36	Design of InGaAsP phase modulator with asymmetrically coupled quantum wells for efficient polarization modulation. Japanese Journal of Applied Physics, 2020, 59, 082004.	1.5	3

#	ARTICLE	IF	CITATIONS
37	Simplified optical transceivers for Stokes-vector transmission systems. , 2020, , .		0
38	Resolution enhancement of optical-phased-array-based single-pixel imaging by using a multimode fiber. , 2020, , .		1
39	Rear homo and hetero junctions III-V n-on-p solar cells grown with high speed MOVPE. , 2020, , .		0
40	Scalability of Universal Nanophotonic Processing Circuits based on Multi-Plane Light Conversion. , 2020, , .		0
41	Single-pixel imaging through multimode fiber using silicon optical phased array chip. , 2020, , .		2
42	Monolithic Polarization Controller on Regrowth-Free InGaAsP/InP Platform with Strained MQW Layer. , 2020, , .		1
43	Single-Pixel Imaging Using Optical Phased Array Chip. , 2020, , .		0
44	Trade-off study on the radiative efficiency and carrier transport of multiple-quantum-well solar cells. , 2020, , .		0
45	Offset-Quantum-Well-Based Integrated Stokes Vector Modulator on InP. IEEE Photonics Technology Letters, 2019, 31, 1233-1236.	2.5	1
46	Photoluminescence of InGaAs/GaAs Quantum Nanodisk in Pillar Fabricated by Biotemplate, Dry Etching, and MOVPE Regrowth. ACS Applied Electronic Materials, 2019, 1, 1945-1951.	4.3	3
47	Current transport efficiency analysis of multijunction solar cells by luminescence imaging. Progress in Photovoltaics: Research and Applications, 2019, 27, 835-843.	8.1	4
48	Design of Efficient Polarization Modulator with Asymmetrically Coupled MQW. , 2019, , .		0
49	Numerical Demonstration of Trade-off between Carrier Confinement Effect and Carrier Transport for Multiple-Quantum-Well Based High-efficiency InGaP Solar Cells. , 2019, , .		0
50	Compact Reconfigurable Optical Unitary Converter based on Non-Uniform Multimode Interference Coupler. , 2019, , .		0
51	On Ghost Imaging Using Multimode Fiber and Integrated Optical Phased Array. , 2019, , .		1
52	24.5% efficient GaAs p-on-n solar cells with 120 μm \times 1 μm MOVPE growth. Journal Physics D: Applied Physics, 2019, 52, 105501.	2.8	7
53	First-principles modeling of GaN(0001)/water interface: Effect of surface charging. Journal of Chemical Physics, 2019, 150, 154703.	3.0	6
54	Gain-Coupled 4 Å— 25 Gb/s EML Array Based on an Identical Epitaxial Layer Integration Scheme. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-6.	2.9	6

#	ARTICLE	IF	CITATIONS
55	Generalized Reciprocity Relations in Solar Cells with Voltage-Dependent Carrier Collection: Application to p-n Junction Devices. <i>Physical Review Applied</i> , 2019, 11, .	3.8	15
56	Fully Integrated 4-port Stokes Vector Receiver for Multi-Level 3D Signal Detection. , 2019, , .		1
57	Horn-Shaped Metal-Clad Modulator Coupled to InP Waveguide. , 2019, , .		0
58	Design evolution of MOVPE reactors for improved productivity: Adaptation to nitrides and feedback to classical III-V. <i>Journal of Crystal Growth</i> , 2019, 507, 134-138.	1.5	9
59	Strain control of GaN grown on Si substrates using an AlGaIn interlayer. <i>Journal of Crystal Growth</i> , 2019, 514, 65-69.	1.5	3
60	High throughput MOVPE and accelerated growth rate of GaAs for PV application. <i>Journal of Crystal Growth</i> , 2019, 509, 87-90.	1.5	3
61	Electro-optic polymer surface-normal modulator using silicon high-contrast grating resonator. , 2019, , .		2
62	Ghost imaging using a large-scale silicon photonic phased array chip. <i>Optics Express</i> , 2019, 27, 3817.	3.4	55
63	Complete retrieval of multi-level Stokes vector signal by an InP-based photonic integrated circuit. <i>Optics Express</i> , 2019, 27, 36449.	3.4	9
64	Stokes Vector Modulation and Detection with Monolithic InP Photonic Integrated Circuits. , 2019, , .		1
65	8-ary Stokes-Vector Signal Generation and Transmission Employing a Simplified Transmitter. , 2019, , .		1
66	Integrated Reconfigurable 4×4 Optical Unitary Converter Using Multiport Directional Couplers. , 2019, , .		2
67	4-port Integrated Stokes Vector Receiver Circuit for Multi-level 3D Signal Detection and OSNR Monitoring. , 2019, , .		0
68	Large-scale silicon photonic phased array chip for single-pixel ghost imaging. , 2019, , .		0
69	Effective mobility map for InGaP/InGaP multiple quantum-well-based solar cells. , 2019, , .		0
70	Decoding of Multilevel Stokes-Vector Modulated Signal by Polarization-Analyzing Circuit on InP. <i>Journal of Lightwave Technology</i> , 2018, 36, 187-194.	4.6	17
71	Accelerated GaAs growth through MOVPE for low-cost PV applications. <i>Journal of Crystal Growth</i> , 2018, 489, 63-67.	1.5	8
72	Material challenges for solar cells in the twenty-first century: directions in emerging technologies. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 336-369.	6.1	162

#	ARTICLE	IF	CITATIONS
73	Monolithic InP Stokes Vector Receiver With Multiple-Quantum-Well Photodetectors. Journal of Lightwave Technology, 2018, 36, 1268-1274.	4.6	19
74	GaAsP/Si tandem solar cells: Realistic prediction of efficiency gain by applying strain-balanced multiple quantum wells. Solar Energy Materials and Solar Cells, 2018, 180, 303-310.	6.2	19
75	Investigation and modeling of photocurrent collection process in multiple quantum well solar cells. Solar Energy Materials and Solar Cells, 2018, 174, 146-156.	6.2	18
76	GaAsP/Si tandem solar cells: In situ study on GaP/Si:As virtual substrate preparation. Solar Energy Materials and Solar Cells, 2018, 180, 343-349.	6.2	12
77	Growth of InGaAs(P) in planetary metalorganic vapor phase epitaxy reactor using tertiarybutylarsine and tertiarybutylphosphine for photovoltaic applications. Japanese Journal of Applied Physics, 2018, 57, 08RD09.	1.5	9
78	Transport efficiency imaging in multi-junction solar cells by luminescence analysis. , 2018, , .		4
79	Low-temperature InGaAs oxidation using oxygen neutral beam. Japanese Journal of Applied Physics, 2018, 57, 070305.	1.5	0
80	Impacts of V/III ratio on the quality and performance of GaAs p-n solar cells by ultrafast MOVPE. , 2018, , .		0
81	As-modified Si(100) Surfaces for III-V-on-Si Tandem Solar Cells. , 2018, , .		0
82	Gain Coupled 4Å—25 Gb/s EML Array Based on Identical Epitaxial Layer Scheme. , 2018, , .		0
83	Experimental Demonstration of Surface-Normal MIM Modulator with Electro-Optic Polymer. , 2018, , .		0
84	Carrier Collection Improvement in InGaAs/GaAsN Multiple Quantum Well Solar Cell with Flat Conduction Band. , 2018, , .		1
85	Waveguide Coupling of Wavelength-Scale Capsule-Shaped Metal-Clad Laser. , 2018, , .		0
86	Comparison of Effective Carrier Mobility between Wire on Well and Multiple Quantum Well by Time of Flight Measurement. , 2018, , .		1
87	Electrical tuning of metal-insulator-metal metasurface with electro-optic polymer. Applied Physics Letters, 2018, 113, .	3.3	33
88	Analytic Approach for Global Structure Optimization of Multiple Quantum Well Solar Cells. , 2018, , .		0
89	Reconfigurable all-optical on-chip MIMO three-mode demultiplexing based on multi-plane light conversion. Optics Letters, 2018, 43, 1798.	3.3	32
90	Double-layer stepped Si(111) surfaces prepared in As-rich CVD ambience. Applied Surface Science, 2018, 462, 1002-1007.	6.1	13

#	ARTICLE	IF	CITATIONS
91	An InP-based vortex beam emitter with monolithically integrated laser. Nature Communications, 2018, 9, 2652.	12.8	40
92	Surface Grating Fabrication by Inductively Coupled Plasma Dry Etching for InP-Based Photonic Integrated Circuits. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800406.	1.8	0
93	Extremely High-Speed GaAs Growth by MOVPE for Low-Cost PV Application. IEEE Journal of Photovoltaics, 2018, , 1-8.	2.5	8
94	Thin-film multiple-quantum-well solar cells fabricated by epitaxial lift-off process. Japanese Journal of Applied Physics, 2018, 57, 08RF03.	1.5	4
95	Reconfigurable 3-Channel All-Optical MIMO Circuit on Silicon Based on Multi-Plane Light Conversion. , 2018, , .		2
96	Monolithically Integrated Stokes Vector Modulator Based on Quantum-Confined Stark Effect. , 2018, , .		1
97	Characterization of InGaAs/GaAsN multiple quantum well with flat conduction band for improving carrier transport in multijunction solar cell. , 2018, , .		0
98	Compact InP Stokes-Vector Modulator and Receiver Circuits for Short-Reach Direct-Detection Optical Links. IEICE Transactions on Electronics, 2018, E101.C, 594-601.	0.6	21
99	Effects of NiO-loading on n-type GaN photoanode for photoelectrochemical water splitting using different aqueous electrolytes. International Journal of Hydrogen Energy, 2017, 42, 9493-9499.	7.1	22
100	Measurement of 3-dimensional dopant distribution in InGaAs microdiscs grown selectively on Si (111). Journal of Crystal Growth, 2017, 464, 33-38.	1.5	0
101	Characterisation of multi-junction solar cells by mapping of the carrier transport efficiency using luminescence emission. , 2017, , .		0
102	Effects of hydrogen etching on stress control in AlN interlayer inserted GaN MOVPE on Si. Semiconductor Science and Technology, 2017, 32, 075003.	2.0	4
103	Integrated Reconfigurable Unitary Optical Mode Converter Using MMI Couplers. IEEE Photonics Technology Letters, 2017, 29, 971-974.	2.5	42
104	Development of GaAs//Si current-balanced dual junction solar cell integrated by surface-activated bonding. , 2017, , .		0
105	Band Alignment at n-GaN/Electrolyte Interface Explored by Photo-Induced Offset of Open-Circuit Potential for Efficient Water Splitting. ECS Transactions, 2017, 77, 25-30.	0.5	5
106	Electroluminescence-based quality characterization of quantum wells for solar cell applications. Journal of Crystal Growth, 2017, 464, 94-99.	1.5	8
107	Mechanism of stress control for GaN growth on Si using AlN interlayers. Journal of Crystal Growth, 2017, 464, 148-152.	1.5	6
108	Optimization of Modulation-Canceling Reflective Semiconductor Optical Amplifier for Colorless WDM Transmitter Applications. Journal of Lightwave Technology, 2017, 35, 274-279.	4.6	16

#	ARTICLE	IF	CITATIONS
109	Low-temperature growth of AlN and GaN by metal organic vapor phase epitaxy for polarization engineered water splitting photocathode. <i>Journal of Crystal Growth</i> , 2017, 464, 180-184.	1.5	5
110	Room-temperature capsule-shaped wavelength-scale metal-clad laser with enhanced side mode suppression. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	5
111	A broad parameter range for selective methane production with bicarbonate solution in electrochemical CO ₂ reduction. <i>Sustainable Energy and Fuels</i> , 2017, 1, 1734-1739.	4.9	16
112	Effective mobility for sequential carrier transport in multiple quantum well structures. <i>Physical Review B</i> , 2017, 96, .	3.2	17
113	Effects of various dopants on properties of GaAs tunneling junctions and p-i-n solar cells. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 08MC11.	1.5	2
114	Effect of KHCO ₃ Concentration on Electrochemical Reduction of CO ₂ on Copper Electrode. <i>Journal of the Electrochemical Society</i> , 2017, 164, F923-F927.	2.9	33
115	Design of free-barrier InGaAs/GaNAs multiple quantum well solar cells with 1.2 eV energy gap. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 08MA04.	1.5	4
116	Stability and controllability of InGaAs/GaAsP wire-on-well (WoW) structure for multi-junction solar cells. <i>Journal of Crystal Growth</i> , 2017, 464, 86-93.	1.5	4
117	From sewing thread to sensor: Nylon® fiber strain and pressure sensors. <i>Sensors and Actuators B: Chemical</i> , 2017, 240, 1083-1090.	7.8	58
118	High-Speed Carrier-Injection-Based Polarization Controller With InGaAlAs/InAlAs Multiple-Quantum Wells. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 1951-1954.	2.5	10
119	Fully Integrated Stokes Vector Receiver with MQW-based Photodetectors on InP. , 2017, , .		0
120	Room-temperature capsule-shaped wavelength-scale metal-clad laser operating at 1550 nm. , 2017, , .		1
121	Robust reconfigurable optical mode mux/demux using multiport directional couplers. , 2017, , .		6
122	Waveguide-coupled metal-clad cavity with integrated feedback stub. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 082201.	1.5	4
123	Efficiency of GaAs P/Si Two-junction Solar Cells with Multi-Quantum Wells: a Realistic Modeling with Carrier Collection Efficiency. , 2017, , .		0
124	Reconfigurable Integrated MIMO Optical Mode Demultiplexer using MMI Couplers. , 2017, , .		1
125	Active metasurface modulator with electro-optic polymer using bimodal plasmonic resonance. <i>Optics Express</i> , 2017, 25, 30304.	3.4	30
126	Polarization-analyzing circuit on InP for integrated Stokes vector receiver. <i>Optics Express</i> , 2017, 25, 12303.	3.4	17

#	ARTICLE	IF	CITATIONS
127	Reflective semiconductor optical amplifier with segmented electrodes for high-speed self-seeded colorless transmitter. Optics Express, 2017, 25, 28547.	3.4	15
128	Ghost imaging using integrated optical phased array. , 2017, , .		13
129	Effect of low-V/III-ratio metalorganic vapor-phase epitaxy on GaAs solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MC06.	1.5	5
130	Investigation of miniband formation and optical properties of strain-balanced InGaAs/GaAsP superlattice structure embedded in p-i-n GaAs solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MC07.	1.5	3
131	Analysis of Deposited Residues and Its Cleaning Process on GaAs Substrate after Epitaxial Lift-Off. , 2017, , .		0
132	Carrier Collection Model and Design Rule for Quantum Well Solar Cells. , 2017, , .		0
133	Design of InGaP/GaAs/InGaAs multi-junction cells with reduced layer thicknesses using light-trapping rear texture. , 2017, , .		0
134	Performance of reinforced concrete buildings in the 2016 Kumamoto earthquakes and seismic design in Japan. Bulletin of the New Zealand Society for Earthquake Engineering, 2017, 50, 394-435.	0.5	13
135	Simple direct-detection-based Stokes vector receiver circuit on InP. , 2017, , .		6
136	Quantum wire-on-well (WoW) cell with long carrier lifetime for efficient carrier transport. Progress in Photovoltaics: Research and Applications, 2016, 24, 1606-1614.	8.1	22
137	Observation of mini-band formation in the ground and high-energy electronic states of super-lattice solar cells. , 2016, , .		1
138	Photoelectrochemical Property Differences between NiO Dots and Layer on n-Type GaN for Water Splitting. Journal of the Electrochemical Society, 2016, 163, H1091-H1095.	2.9	7
139	Optical analysis of the photon recycling effect in InGaAs/GaAsP multiple quantum well solar cell with light trapping structure. , 2016, , .		3
140	Silicon rib waveguide electro-absorption optical modulator using transparent conductive oxide bilayer. Japanese Journal of Applied Physics, 2016, 55, 042201.	1.5	13
141	Effect of Built-in Electric Field on Miniband Structure and Carrier Nonradiative Recombination in InGaAs/GaAsP Superlattice Investigated Using Photoreflectance and Photoluminescence Spectroscopy. Energy Procedia, 2016, 102, 121-125.	1.8	1
142	Photocurrent collection mechanism and role of carrier distribution in p-i-n quantum well solar cells. , 2016, , .		1
143	Admittance spectroscopy analysis on the interfacial defect levels in the surface-activated bonding of GaAs. , 2016, , .		0
144	Quasi-Fermi level splitting evaluation based on electroluminescence analysis in multiple quantum-well solar cells for investigating cell performance under concentrated light. Proceedings of SPIE, 2016, , .	0.8	4

#	ARTICLE	IF	CITATIONS
145	Capsule-shaped metallic-cavity semiconductor lasers for low-energy on-chip light sources. , 2016, , .		0
146	Effective drift mobility approximation in multiple quantum-well solar cell. , 2016, , .		4
147	Anomalous Ga incorporation into InGaAs microdiscs selectively grown on Si (111). , 2016, , .		0
148	Surface-normal electro-optic-polymer modulator with silicon subwavelength grating. IEICE Electronics Express, 2016, 13, 20160595-20160595.	0.8	7
149	Comprehensive analysis on electrically pumped metallic cavity lasers. , 2016, , .		1
150	<i>Q</i> -factor improvement by capsule-shaped metallic cavity structure for subwavelength lasers. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 965-969.	1.8	7
151	Experimental Demonstration of Optically Determined Solar Cell Current Transport Efficiency Map. IEEE Journal of Photovoltaics, 2016, 6, 528-531.	2.5	12
152	Electroactive species study in the electrochemical reduction of CO ₂ in KHCO ₃ solution at elevated temperature. Journal of Energy Chemistry, 2016, 25, 517-522.	12.9	15
153	Absorption threshold extended to 1.15 eV using InGaAs/GaAsP quantum wells for over 50% efficient lattice-matched quad-junction solar cells. Progress in Photovoltaics: Research and Applications, 2016, 24, 533-542.	8.1	56
154	Polarization Manipulation in Monolithic InP-based PICs. , 2016, , .		0
155	InGaAs/GaAsP quantum wells and wires for high-efficiency photovoltaic applications. , 2016, , .		0
156	Light-Emitting Devices Based on Top-down Fabricated GaAs Quantum Nanodisks. Scientific Reports, 2015, 5, 9371.	3.3	31
157	Thin-film solar cells with InGaAs/GaAsP multiple quantum wells and a rear surface etched with light trapping micro-hole array. Japanese Journal of Applied Physics, 2015, 54, 08KA13.	1.5	2
158	Microscopic observation of carrier-transport dynamics in quantum-structure solar cells using a time-of-flight technique. Applied Physics Letters, 2015, 107, .	3.3	13
159	Errata to "High-Aspect-Ratio Structures for Efficient Light Absorption and Carrier Transport in InGaAs/GaAsP Multiple Quantum Well Solar Cells" [Apr 13 859-867]. IEEE Journal of Photovoltaics, 2015, 5, 704-704.	2.5	0
160	Effect of number of stack on the thermal escape and non-radiative and radiative recombinations of photoexcited carriers in strain-balanced InGaAs/GaAsP multiple quantum-well-inserted solar cells. Journal of Applied Physics, 2015, 117, 084307.	2.5	7
161	Lattice-matched 3-junction cell with 1.2-eV InGaAs/GaAsP superlattice middle cell for improved current matching. , 2015, , .		1
162	Strictly non-blocking 8x8 silicon photonic switch based on optical phased array. , 2015, , .		5

#	ARTICLE	IF	CITATIONS
163	Design and experimental investigation of monolithic polarization controller with InGaAlAs/InAlAs multiple quantum wells. , 2015, , .		2
164	Comparison of electron and hole mobilities in multiple quantum well solar cells using a time-of-flight technique. , 2015, , .		0
165	Uncooled (25–50 °C) operation of self-seeded RSOA for low-cost colorless WDM-PON transmitter. , 2015, , .		4
166	Concentrated photovoltaic electrochemical cell (CPEC): A route toward high-efficiency, cost-effective solar hydrogen production. , 2015, , .		2
167	Low-temperature MOVPE using TEGa for suppressed layer undulation in In _x Ga _{1-x} As/GaAs _{1-y} Py superlattice on vicinal substrates. Journal of Crystal Growth, 2015, 414, 3-9.	1.5	13
168	Enhanced Light Trapping in Multiple Quantum Wells by Thin-Film Structure and Backside Grooves With Dielectric Interface. IEEE Journal of Photovoltaics, 2015, 5, 697-703.	2.5	24
169	Investigation of carrier collection in multi-quantum well solar cells by luminescence spectra analysis. , 2015, , .		1
170	Compact photonic crystal disk cavity optimized using the gentle confinement method and boundary design. Japanese Journal of Applied Physics, 2015, 54, 042001.	1.5	0
171	Effect of Barrier Thickness on Carrier Transport Inside Multiple Quantum Well Solar Cells Under High-Concentration Illumination. IEEE Journal of Photovoltaics, 2015, 5, 846-853.	2.5	5
172	Effect of ion species for the surface activated bonding of GaAs wafers on the characteristics of the bonded interfaces. , 2015, , .		2
173	Compact silicon rib-waveguide electro-absorption modulator using multiple indium-tin-oxide layers. , 2015, , .		1
174	Thickness-modulated InGaAs/GaAsP superlattice solar cells on vicinal substrates. Journal of Applied Physics, 2015, 117, .	2.5	12
175	Comparison of Electron and Hole Mobilities in Multiple-Quantum-Well Solar Cells Using a Time-of-Flight Technique. IEEE Journal of Photovoltaics, 2015, 5, 1613-1620.	2.5	12
176	Effect of CO ₂ Bubbling into Aqueous Solutions Used for Electrochemical Reduction of CO ₂ for Energy Conversion and Storage. Journal of Physical Chemistry C, 2015, 119, 55-61.	3.1	129
177	Proposal and experimental demonstration of monolithic InP/InGaAsP polarization modulator. , 2014, , .		9
178	Surface activated Ge/GaAs wafer bonding for multi-junction solar cells. , 2014, , .		3
179	InGaAs/GaAsP superlattice solar cells with reduced carbon impurity grown by low-temperature metal-organic vapor phase epitaxy using triethylgallium. Journal of Applied Physics, 2014, 116, .	2.5	14
180	Quantum GaAs Nanodisk Light Emitting Diode Fabricated by Ultimate Top-Down Neutral Beam Etching. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
181	Growth of InGaAs/GaAsP multiple quantum well solar cells on mis-orientated GaAs substrates. Journal of Applied Physics, 2014, 115, 233104.	2.5	12
182	Development of the monolithically interconnected InGaP/GaAs dual junction solar cell with bypass diode for ultrahigh concentrator application. , 2014, , .		1
183	100-period, 1.23-eV bandgap InGaAs/GaAsP quantum wells for high-efficiency GaAs solar cells: toward current-matched Ge-based tandem cells. Progress in Photovoltaics: Research and Applications, 2014, 22, 784-795.	8.1	77
184	Carrier Escape Time and Temperature-Dependent Carrier Collection Efficiency of Tunneling-Enhanced Multiple Quantum Well Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 607-613.	2.5	19
185	Near-infrared electroluminescence and photo detection in InGaAs $\langle i \rangle p-i-n \langle /i \rangle$ microdisks grown by selective area growth on silicon. Applied Physics Letters, 2014, 104, .	3.3	2
186	Synthesis of $\text{CaMn}_{2}\text{O}_{4}$ -related electrocatalyst for oxygen evolution electrode of water-splitting. Materials Research Society Symposia Proceedings, 2014, 1640, 1.	0.1	1
187	Effect of KHCO_3 , K_2CO_3 and CO_2 on the Electrochemical Reduction of CO_2 into Organics on a Cu Electrode for the Solar Energy Conversion and Storage. Materials Research Society Symposia Proceedings, 2014, 1640, 1.	0.1	2
188	Electrical pumping Fabry-Pérot lasing of a III-V layer on a highly doped silicon micro rib. Laser Physics Letters, 2014, 11, 115807.	1.4	5
189	Carrier Time-of-Flight Measurement Using a Probe Structure for Direct Evaluation of Carrier Transport in Multiple Quantum Well Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 1518-1525.	2.5	13
190	Surface Stabilities of n-type GaN Dependent on Electrolyte under Photoelectrochemical Reactions. Materials Research Society Symposia Proceedings, 2014, 1647, 1.	0.1	0
191	Strain effect for different phosphorus content of InGaAs/GaAsP super-lattice in GaAs $p-i-n$ single junction solar cell. Journal of Crystal Growth, 2014, 401, 712-716.	1.5	10
192	Effect of internal electric field on non-radiative carrier recombination in the strain-balanced InGaAs/GaAsP multiple quantum well solar cells. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 444-448.	1.8	4
193	Void formation during GaN MOVPE on Si (111) employing low temperature AlN interlayers. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 293-296.	0.8	0
194	In-situ growth condition analysis of AlN interlayers for wafer curvature control in GaN MOVPE on Si (111). Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 598-603.	0.8	4
195	Proposal and numerical study on capsule-shaped nanometallic semiconductor lasers. Japanese Journal of Applied Physics, 2014, 53, 112703.	1.5	11
196	Directly bonded Ge/GaAs by surface activated bonding for high efficiency III-V multi-junction solar cells. , 2014, , .		0
197	Detection of miniband formation in strain-balanced InGaAs/GaAsP quantum well solar cells by using a piezoelectric photothermal spectroscopy. Journal of Applied Physics, 2014, 116, 044509.	2.5	11
198	Surface stability of n-type GaN depending on carrier concentration and electrolytes under photoelectrochemical reactions. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 821-823.	0.8	8

#	ARTICLE	IF	CITATIONS
199	Evaluation of Carrier Collection Efficiency in Multiple Quantum Well Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 237-243.	2.5	31
200	A nitride based polarization-engineered photocathode for water splitting without a p-type semiconductor. Physical Chemistry Chemical Physics, 2014, 16, 15326.	2.8	9
201	Thin-Film InGaAs/GaAsP MQWs Solar Cell With Backside Nanoimprinted Pattern for Light Trapping. IEEE Journal of Photovoltaics, 2014, 4, 1086-1090.	2.5	14
202	Numerical study on hollow hexagonal InGaAs microdisk laser on silicon. , 2014, , .		0
203	Monolithic InGaAs-on-Si micro-disk ensemble LED with peak luminescence at 1.58 μm. , 2014, , .		0
204	Numerical Study on Fabrication Tolerance of Half-Ridge InP Polarization Converters. IEICE Transactions on Electronics, 2014, E97.C, 731-735.	0.6	8
205	Narrow line-width photoluminescence spectrum of GaAs nanodisks fabricated using bio-template ultimate top-down processes. , 2014, , .		2
206	Large Scale Switching and Polarization Control in Photonic Integrated Circuits on InP and Si. , 2014, , .		0
207	High-Aspect Ratio Structures for Efficient Light Absorption and Carrier Transport in InGaAs/GaAsP Multiple Quantum-Well Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 859-867.	2.5	22
208	Optimization of compact photonic crystal cavity using the gentle confinement method. , 2013, , .		1
209	Comprehensive validation of Carrier Collection Efficiency in multiple quantum well solar cells: For more effective and direct evaluation of carrier transport dynamics. , 2013, , .		3
210	A quantum-well superlattice solar cell for enhanced current output and minimized drop in open-circuit voltage under sunlight concentration. Journal Physics D: Applied Physics, 2013, 46, 024001.	2.8	39
211	Optimized interfacial management for InGaAs/GaAsP strain-compensated superlattice structure. Journal of Crystal Growth, 2013, 370, 157-162.	1.5	12
212	Effect of GaAs Step Layer Thickness in InGaAs/GaAsP Stepped Quantum-Well Solar Cell. IEEE Journal of Photovoltaics, 2013, 3, 289-294.	2.5	11
213	Characteristics of hydrogen generation from water splitting by polymer electrolyte electrochemical cell directly connected with concentrated photovoltaic cell. International Journal of Hydrogen Energy, 2013, 38, 14424-14432.	7.1	89
214	Experimental demonstration of self-aligned InP/InGaAsP polarization converter for polarization multiplexed photonic integrated circuits. Optics Express, 2013, 21, 6910.	3.4	36
215	Analysis for current-voltage characteristics of the InGaAs/GaAsP super-lattice solar cells under optical concentration. , 2013, , .		1
216	Performance of monolithic integrated series-connected GaAs solar cells under concentrated light. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
217	Evaluation of asymmetric tunneling-assisted structure for InGaAs/GaAsP MQWs solar cell. , 2013, , .		0
218	Compensation doping in InGaAs / GaAsP multiple quantum well solar cells for efficient carrier transport and improved cell performance. Journal of Applied Physics, 2013, 114, .	2.5	25
219	Photoluminescence of high-density and sub-20-nm GaAs nanodisks fabricated with a neutral beam etching process and MOVPE regrowth for high performance QDs devices. , 2013, , .		1
220	Orange/yellow InGaN/AlN nanodisk light emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 1525-1528.	0.8	5
221	Effects of Strain on the Performance of InGaAs/GaAsP Multiple-Quantum-Well Solar Cells Correlated with In situ Curvature Monitoring. Applied Physics Express, 2012, 5, 062301.	2.4	9
222	Strain-Balanced InGaAs/GaAsP Superlattice Solar Cell with Enhanced Short-Circuit Current and a Minimal Drop in Open-Circuit Voltage. Applied Physics Express, 2012, 5, 052301.	2.4	5
223	Monolithic InP strictly non-blocking 8Å—8 switch for high-speed WDM optical interconnection. Optics Express, 2012, 20, 28734.	3.4	31
224	Carrier sweep-out time in InGaAs/GaAsP multiple quantum well solar cells by time-resolved photoluminescence: effects of well depth and barrier thickness. , 2012, , .		1
225	SOI platform and III-V integrated active photonic device by direct bonding for data communication. , 2012, , .		7
226	Suppressed indium diffusion and enhanced absorption in InGaAs/GaAsP stepped quantum well solar cell. Applied Physics Letters, 2012, 100, 053902.	3.3	10
227	Effect of Quantum Well on the Efficiency of Carrier Collection in InGaAs/GaAsP Multiple Quantum Well Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10ND04.	1.5	14
228	InGaAs/GaAsP asymmetric quantum wells for enhancing carrier escape through resonant tunneling. , 2012, , .		2
229	A Superlattice Solar Cell With Enhanced Short-Circuit Current and Minimized Drop in Open-Circuit Voltage. IEEE Journal of Photovoltaics, 2012, 2, 387-392.	2.5	20
230	Photocurrent Generation by Two-Step Photon Absorption With Quantum-Well Superlattice Cell. IEEE Journal of Photovoltaics, 2012, 2, 298-302.	2.5	20
231	Light trapping structure with backside scatterer for enhanced photo-absorption by quantum structures. , 2012, , .		3
232	High-aspect-ratio structures for efficient light absorption and carrier transport in InGaAs/GaAsP multiple quantum well solar cells. , 2012, , .		3
233	Design of photonic crystal cavity for hexagonal islands. , 2012, , .		2
234	Suppressed lattice relaxation during InGaAs/GaAsP MQW growth with InGaAs and GaAs ultra-thin interlayers. Journal of Crystal Growth, 2012, 352, 239-244.	1.5	37

#	ARTICLE	IF	CITATIONS
235	Effect of hetero-interfaces on in situ wafer curvature behavior in InGaAs/GaAsP strain-balanced MQWs. Journal of Crystal Growth, 2012, 352, 245-248.	1.5	16
236	Uniformity improvement of selectively-grown InGaAs micro-discs on Si. Journal of Crystal Growth, 2012, 352, 229-234.	1.5	9
237	Management of highly-strained heterointerface in InGaAs/GaAsP strain-balanced superlattice for photovoltaic application. Journal of Crystal Growth, 2012, 352, 194-198.	1.5	32
238	The effect of thin gap insertion layer on InP nanostructure grown by metal-organic vapour phase epitaxys. Canadian Journal of Chemical Engineering, 2012, 90, 915-918.	1.7	0
239	Effect of Quantum Well on the Efficiency of Carrier Collection in InGaAs/GaAsP Multiple Quantum Well Solar Cells. Japanese Journal of Applied Physics, 2012, 51, 10ND04.	1.5	27
240	Optimization of Gas-Switching Sequence for InGaAs/GaAsP Superlattice Structures Using In situ Wafer Curvature Monitoring. Japanese Journal of Applied Physics, 2012, 51, 10ND09.	1.5	2
241	Impact of Strain Accumulation on InGaAs/GaAsP Multiple-Quantum-Well Solar Cells: Direct Correlation between In situ Strain Measurement and Cell Performances. Japanese Journal of Applied Physics, 2012, 51, 10ND16.	1.5	7
242	Sub-10-nm Extremely Thin Body InGaAs-on-Insulator MOSFETs on Si Wafers With Ultrathin Al_2O_3 Buried Oxide Layers. IEEE Electron Device Letters, 2011, 32, 1218-1220.	3.9	60
243	Large-Capacity Compact Optical Buffer Based on InP Integrated Phased-Array Switch and Coiled Fiber Delay Lines. Journal of Lightwave Technology, 2011, 29, 396-402.	4.6	45
244	In situ curvature monitoring for metal-organic vapor phase epitaxy of strain-balanced stacks of InGaAs/GaAsP multiple quantum wells. Journal of Crystal Growth, 2011, 315, 1-4.	1.5	31
245	High-Temperature Annealing Effect of Si in Group-V Ambient Prior to Heteroepitaxy of InAs in Metal-Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2011, 50, 04DH07.	1.5	2
246	Effects of quantum wells position and background doping on the performance of multiple quantum well solar cells. , 2011, , .		1
247	Effect of GaAs Step Layer on InGaAs/GaAsP Quantum Well Solar Cells. Applied Physics Express, 2011, 4, 122301.	2.4	14
248	Strain-compensation measurement and simulation of InGaAs/GaAsP multiple quantum wells by metal organic vapor phase epitaxy using wafer-curvature. Journal of Applied Physics, 2011, 110, .	2.5	21
249	Fabrication of n-Type GaN Layers by the Pulse Injection Method at 950°C for Intersubband Devices. Electrochemical and Solid-State Letters, 2011, 14, H143.	2.2	1
250	Monolithically Integrated Phased-Array Switch for Optical Packet Switching and Interconnection. , 2010, , .		0
251	In situ reflectance monitoring for the MOVPE of strain-balanced InGaAs/GaAsP quantum-wells. Journal of Crystal Growth, 2010, 312, 1364-1369.	1.5	26
252	Twin-free InGaAs thin layer on Si by multi-step growth using micro-channel selective-area MOVPE. Journal of Crystal Growth, 2010, 312, 1353-1358.	1.5	18

#	ARTICLE	IF	CITATIONS
253	Selectivity enhancement by hydrogen addition in selective area metal-organic vapor phase epitaxy of GaN and InGaN. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1375-1378.	1.8	7
254	Monolithic InP 100-port photonic switch. , 2010, , .		18
255	Dependences of Initial Nucleation on Growth Conditions of InAs on Si by Micro-Channel Selective-Area Metal-Organic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2010, 49, 125601.	1.5	4
256	Monolithically Integrated InP 1 \times 16 Optical Switch With Wavelength-Insensitive Operation. IEEE Photonics Technology Letters, 2010, 22, 143-145.	2.5	41
257	160-Gb/s Optical Packet Switching Subsystem With a Monolithic Optical Phased-Array Switch. IEEE Photonics Technology Letters, 2010, 22, 817-819.	2.5	12
258	Self-assembled SiO ₂ particle coating on 2 layer anti-reflection films for efficiency enhancement of GaAs PV cells. , 2010, , .		0
259	InP integrated photonic circuits for optical packet switching and digital photonics. , 2010, , .		0
260	Semiconductor photonic integrated switches and buffers for optical packet routing. , 2010, , .		0
261	Blueshift of intersubband transition wavelength in AlN/GaN multiple quantum wells by low temperature metal organic vapor phase epitaxy using pulse injection method. Applied Physics Letters, 2009, 95, .	3.3	19
262	In situ passivation of InP surface using H ₂ S during metal organic vapor phase epitaxy. Applied Physics Letters, 2009, 95, 152103.	3.3	17
263	Source/drain formation by using epitaxial regrowth of N ⁺ InP for III-V nMOSFETs. , 2009, , .		0
264	Wavelength-multiplexed optical packet switching using InP phased-array switch. Optics Express, 2009, 17, 9454.	3.4	18
265	Semiconductive properties of heterointegration of INP/INGAAS on high doped silicon wire waveguide for silicon hybrid laser. , 2009, , .		3
266	Dislocation-Free InGaAs on Si(111) Using Micro-Channel Selective-Area Metalorganic Vapor Phase Epitaxy. Applied Physics Express, 2009, 2, 011101.	2.4	28
267	Effect of Ga content on crystal shape in micro-channel selective-area MOVPE of InGaAs on Si. Journal of Crystal Growth, 2008, 310, 4768-4771.	1.5	23
268	Kinetic analysis of surface adsorption layer for InGaAsP-related binary materials using in situ RAS. Journal of Crystal Growth, 2008, 310, 4736-4740.	1.5	3
269	InP-InGaAsP Integrated 1 \times 5 Optical Switch Using Arrayed Phase Shifters. IEEE Photonics Technology Letters, 2008, 20, 1063-1065.	2.5	40
270	Design and scalability analysis of optical phased-array 1 \times N switch on planar lightwave circuit. IEICE Electronics Express, 2008, 5, 603-609.	0.8	27

#	ARTICLE	IF	CITATIONS
271	Low Temperature Metal Organic Vapor Phase Epitaxial Growth of AlN by Pulse Injection Method at 800 Å°C. Japanese Journal of Applied Physics, 2007, 46, L927-L929.	1.5	12
272	InGaAlAs Multiple-Quantum-Well Optical Phase Modulators Based on Carrier Depletion. IEEE Photonics Technology Letters, 2007, 19, 1816-1818.	2.5	21
273	Single Mode and Dynamic All-Optical Flip-Flop Operation of Multimode Interference Bistable Laser Diodes with Distributed Bragg Reflectors. , 2006, , .		0
274	Simulation and design of the emission wavelength of multiple quantum well structures fabricated by selective area metalorganic chemical vapor deposition. Thin Solid Films, 2006, 498, 174-178.	1.8	18
275	Lasing characteristics of InGaAs/InGaAsP multiple-quantum-well optical thyristor operating at 1.561 μm. Applied Physics Letters, 2003, 82, 158-160.	3.3	3
276	Organic solid-state distributed feedback dye laser with a nonmorphological modification grating. Applied Physics Letters, 2000, 77, 2641-2643.	3.3	45
277	Changes in Orientational Polarization and Structure of Silicon Dioxide Film by Fluorine Addition. Journal of the Electrochemical Society, 1999, 146, 4196-4202.	2.9	36
278	In-situ As-P exchange monitoring in metal-organic vapor phase epitaxy of InGaAs/InP heterostructure by spectroscopic and kinetic ellipsometry. Thin Solid Films, 1998, 313-314, 604-608.	1.8	28
279	Strong Exciton Absorption Peak Enhancement without Redshift of Absorption Edge in Al _{0.3} Ga _{0.7} As/GaAs Five-Step Asymmetric Coupled Quantum Well with Modified Potential. Japanese Journal of Applied Physics, 1997, 36, L855-L856.	1.5	9
280	Graphical Introduction of Interconnect and Packaging Technologies for Optoelectronic Devices. What is the Difficulty in the Packaging of Optical Devices? Difference between Light and Electricity.. The Journal of Japan Institute for Interconnecting and Packaging Electronic Circuits, 1997, 12, 41-44.	0.0	0
281	Preparation of low dielectric constant F-doped SiO ₂ films by plasma enhanced chemical vapor deposition. Applied Physics Letters, 1996, 68, 832-834.	3.3	33
282	Semiconductor photonic integrated devices. Electronics and Communications in Japan, 1994, 77, 99-112.	0.2	3
283	Short wavelength distributed feedback semiconductor lasers.. The Review of Laser Engineering, 1988, 16, 732-740.	0.0	0
284	Complete single longitudinal mode oscillation in a GaAlAs/GaAs distributed feedback laser with a modulated stripe width structure fabricated using reactive ion etching. Applied Physics Letters, 1987, 51, 387-389.	3.3	12
285	Low threshold operation of a GaAlAs/GaAs distributed feedback laser with double channel planar buried heterostructure. Applied Physics Letters, 1986, 49, 1145-1147.	3.3	15
286	Intersubband Transition at 1.52 μm in GaN/AlN Multiple Quantum Wells Grown by Metal Organic Vapor Phase Epitaxy. Applied Physics Express, 0, 2, 061002.	2.4	9
287	Fabrication of Abrupt AlN/GaN Multi Quantum Wells by Low Temperature Metal Organic Vapor Phase Epitaxy. Applied Physics Express, 0, 2, 051004.	2.4	9
288	Optimization based on the condition number of the speckle patterns in single-pixel imaging using optical phased arrays. Japanese Journal of Applied Physics, 0, , .	1.5	4

#	ARTICLE	IF	CITATIONS
289	Smooth surface morphology and long carrier lifetime of InGaP realized by low-temperature-grown cover layer. Physica Status Solidi (B): Basic Research, 0, , .	1.5	1
290	Enhanced Radiative Efficiency of InGaAs/GaAsP Multiple Quantum Wells by Optimizing the Thickness of Interlayers. Physica Status Solidi (A) Applications and Materials Science, 0, , .	1.8	0