

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	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
2	Effect of CO ₂ Bubbling into Aqueous Solutions Used for Electrochemical Reduction of CO ₂ for Energy Conversion and Storage. <i>Journal of Physical Chemistry C</i> , 2015, 119, 55-61.	3.1	129
3	Characteristics of hydrogen generation from water splitting by polymer electrolyte electrochemical cell directly connected with concentrated photovoltaic cell. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 14424-14432.	7.1	89
4	100-period, 1.23-eV bandgap InGaAs/GaAsP quantum wells for high-efficiency GaAs solar cells: toward current-matched Ge-based tandem cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2014, 22, 784-795.	8.1	77
5	Sub-10-nm Extremely Thin Body InGaAs-on-Insulator MOSFETs on Si Wafers With Ultrathin Al_2O_3 Buried Oxide Layers. <i>IEEE Electron Device Letters</i> , 2011, 32, 1218-1220.	3.9	60
6	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
7	Absorption threshold extended to 1.15 eV using InGaAs/GaAsP quantum wells for over 50% efficient lattice-matched quad-junction solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2016, 24, 533-542.	8.1	56
8	Ghost imaging using a large-scale silicon photonic phased array chip. <i>Optics Express</i> , 2019, 27, 3817.	3.4	55
9	Organic solid-state distributed feedback dye laser with a nonmorphological modification grating. <i>Applied Physics Letters</i> , 2000, 77, 2641-2643.	3.3	45
10	Large-Capacity Compact Optical Buffer Based on InP Integrated Phased-Array Switch and Coiled Fiber Delay Lines. <i>Journal of Lightwave Technology</i> , 2011, 29, 396-402.	4.6	45
11	Ten-Port Unitary Optical Processor on a Silicon Photonic Chip. <i>ACS Photonics</i> , 2021, 8, 2074-2080.	6.6	45
12	Single-Pixel Imaging Using Multimode Fiber and Silicon Photonic Phased Array. <i>Journal of Lightwave Technology</i> , 2021, 39, 839-844.	4.6	44
13	Integrated Reconfigurable Unitary Optical Mode Converter Using MMI Couplers. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 971-974.	2.5	42
14	Monolithically Integrated InP 1 \times 16 Optical Switch With Wavelength-Insensitive Operation. <i>IEEE Photonics Technology Letters</i> , 2010, 22, 143-145.	2.5	41
15	InP-InGaAsP Integrated 1 \times 5 Optical Switch Using Arrayed Phase Shifters. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 1063-1065.	2.5	40
16	An InP-based vortex beam emitter with monolithically integrated laser. <i>Nature Communications</i> , 2018, 9, 2652.	12.8	40
17	A quantum-well superlattice solar cell for enhanced current output and minimized drop in open-circuit voltage under sunlight concentration. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 024001.	2.8	39
18	Suppressed lattice relaxation during InGaAs/GaAsP MQW growth with InGaAs and GaAs ultra-thin interlayers. <i>Journal of Crystal Growth</i> , 2012, 352, 239-244.	1.5	37

#	ARTICLE	IF	CITATIONS
19	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
20	Experimental demonstration of self-aligned InP/InGaAsP polarization converter for polarization multiplexed photonic integrated circuits. Optics Express, 2013, 21, 6910.	3.4	36
21	Robust Integrated Optical Unitary Converter Using Multiport Directional Couplers. Journal of Lightwave Technology, 2020, 38, 60-66.	4.6	34
22	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
23	Effect of KHCO ₃ Concentration on Electrochemical Reduction of CO ₂ on Copper Electrode. Journal of the Electrochemical Society, 2017, 164, F923-F927.	2.9	33
24	Electrical tuning of metal-insulator-metal metasurface with electro-optic polymer. Applied Physics Letters, 2018, 113, .	3.3	33
25	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
26	Reconfigurable all-optical on-chip MIMO three-mode demultiplexing based on multi-plane light conversion. Optics Letters, 2018, 43, 1798.	3.3	32
27	Non-redundant optical phased array. Optica, 2021, 8, 1350.	9.3	32
28	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
29	Monolithic InP strictly non-blocking 8×8 switch for high-speed WDM optical interconnection. Optics Express, 2012, 20, 28734.	3.4	31
30	Evaluation of Carrier Collection Efficiency in Multiple Quantum Well Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 237-243.	2.5	31
31	Light-Emitting Devices Based on Top-down Fabricated GaAs Quantum Nanodisks. Scientific Reports, 2015, 5, 9371.	3.3	31
32	Active metasurface modulator with electro-optic polymer using bimodal plasmonic resonance. Optics Express, 2017, 25, 30304.	3.4	30
33	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
34	Dislocation-Free InGaAs on Si(111) Using Micro-Channel Selective-Area Metalorganic Vapor Phase Epitaxy. Applied Physics Express, 2009, 2, 011101.	2.4	28
35	Design and scalability analysis of optical phased-array 1 * N switch on planar lightwave circuit. IEICE Electronics Express, 2008, 5, 603-609.	0.8	27
36	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

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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
40	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
41	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
42	Quantum wire-on-a-well (WoW) cell with long carrier lifetime for efficient carrier transport. Progress in Photovoltaics: Research and Applications, 2016, 24, 1606-1614.	8.1	22
43	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
44	Large-Scale Monolithic InP-Based Optical Phased Array. IEEE Photonics Technology Letters, 2021, 33, 1123-1126.	2.5	22
45	InGaAlAs Multiple-Quantum-Well Optical Phase Modulators Based on Carrier Depletion. IEEE Photonics Technology Letters, 2007, 19, 1816-1818.	2.5	21
46	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
47	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
48	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
49	Photocurrent Generation by Two-Step Photon Absorption With Quantum-Well Superlattice Cell. IEEE Journal of Photovoltaics, 2012, 2, 298-302.	2.5	20
50	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
51	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
52	Monolithic InP Stokes Vector Receiver With Multiple-Quantum-Well Photodetectors. Journal of Lightwave Technology, 2018, 36, 1268-1274.	4.6	19
53	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
54	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

#	ARTICLE	IF	CITATIONS
55	Wavelength-multiplexed optical packet switching using InP phased-array switch. Optics Express, 2009, 17, 9454.	3.4	18
56	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
57	Monolithic InP 100-port photonic switch. , 2010, , .		18
58	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
59	Monolithic InP optical unitary converter based on multi-plane light conversion. Optics Express, 2020, 28, 25392.	3.4	18
60	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
61	Effective mobility for sequential carrier transport in multiple quantum well structures. Physical Review B, 2017, 96, .	3.2	17
62	Polarization-analyzing circuit on InP for integrated Stokes vector receiver. Optics Express, 2017, 25, 12303.	3.4	17
63	Decoding of Multilevel Stokes-Vector Modulated Signal by Polarization-Analyzing Circuit on InP. Journal of Lightwave Technology, 2018, 36, 187-194.	4.6	17
64	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
65	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
66	Optimization of Modulation-Canceling Reflective Semiconductor Optical Amplifier for Colorless WDM Transmitter Applications. Journal of Lightwave Technology, 2017, 35, 274-279.	4.6	16
67	A broad parameter range for selective methane production with bicarbonate solution in electrochemical CO ₂ reduction. Sustainable Energy and Fuels, 2017, 1, 1734-1739.	4.9	16
68	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
69	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
70	Reflective semiconductor optical amplifier with segmented electrodes for high-speed self-seeded colorless transmitter. Optics Express, 2017, 25, 28547.	3.4	15
71	Generalized Reciprocity Relations in Solar Cells with Voltage-Dependent Carrier Collection: Application to p-i-n Junction Devices. Physical Review Applied, 2019, 11, .	3.8	15
72	Effect of GaAs Step Layer on InGaAs/GaAsP Quantum Well Solar Cells. Applied Physics Express, 2011, 4, 122301.	2.4	14

#	ARTICLE	IF	CITATIONS
73	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
74	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
75	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
76	Scalable and Robust Photonic Integrated Unitary Converter Based on Multiplane Light Conversion. Physical Review Applied, 2022, 17, .	3.8	14
77	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
78	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
79	Low-temperature MOVPE using TEGa for suppressed layer undulation in $\text{In}_x\text{Ga}_{1-x}\text{As}/\text{GaAs}_{1-y}\text{Py}$ superlattice on vicinal substrates. Journal of Crystal Growth, 2015, 414, 3-9.	1.5	13
80	Silicon rib waveguide electro-absorption optical modulator using transparent conductive oxide bilayer. Japanese Journal of Applied Physics, 2016, 55, 042201.	1.5	13
81	Ghost imaging using integrated optical phased array. , 2017, , .		13
82	Double-layer stepped $\text{Si}(1\hat{\text{e}}\hat{\text{e}}\text{O})$ surfaces prepared in As-rich CVD ambience. Applied Surface Science, 2018, 462, 1002-1007.	6.1	13
83	Fabrication-Tolerant Half-Ridge InP/InGaAsP Polarization Rotator With Etching-Stop Layer. IEEE Photonics Technology Letters, 2020, 32, 663-666.	2.5	13
84	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
85	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
86	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
87	Low Temperature Metal Organic Vapor Phase Epitaxial Growth of AlN by Pulse Injection Method at 800 $\hat{\text{A}}^\circ\text{C}$. Japanese Journal of Applied Physics, 2007, 46, L927-L929.	1.5	12
88	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
89	Optimized interfacial management for InGaAs/GaAsP strain-compensated superlattice structure. Journal of Crystal Growth, 2013, 370, 157-162.	1.5	12
90	Growth of InGaAs/GaAsP multiple quantum well solar cells on mis-orientated GaAs substrates. Journal of Applied Physics, 2014, 115, 233104.	2.5	12

#	ARTICLE	IF	CITATIONS
91	Thickness-modulated InGaAs/GaAsP superlattice solar cells on vicinal substrates. Journal of Applied Physics, 2015, 117, .	2.5	12
92	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
93	Experimental Demonstration of Optically Determined Solar Cell Current Transport Efficiency Map. IEEE Journal of Photovoltaics, 2016, 6, 528-531.	2.5	12
94	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
95	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
96	Proposal and numerical study on capsule-shaped nanometallic semiconductor lasers. Japanese Journal of Applied Physics, 2014, 53, 112703.	1.5	11
97	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
98	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
99	Suppressed indium diffusion and enhanced absorption in InGaAs/GaAsP stepped quantum well solar cell. Applied Physics Letters, 2012, 100, 053902.	3.3	10
100	Strain effect for different phosphorus content of InGaAs/GaAsP super-lattice in GaAs μ n single junction solar cell. Journal of Crystal Growth, 2014, 401, 712-716.	1.5	10
101	High-Speed Carrier-Injection-Based Polarization Controller With InGaAlAs/InAlAs Multiple-Quantum Wells. IEEE Photonics Technology Letters, 2017, 29, 1951-1954.	2.5	10
102	Sensitivity Analysis of Photonic Integrated Direct-Detection Stokes-Vector Receiver. Journal of Lightwave Technology, 2020, 38, 447-456.	4.6	10
103	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
104	Intersubband Transition at 1.52 μ m in GaN/AlN Multiple Quantum Wells Grown by Metal Organic Vapor Phase Epitaxy. Applied Physics Express, 0, 2, 061002.	2.4	9
105	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
106	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
107	Uniformity improvement of selectively-grown InGaAs micro-discs on Si. Journal of Crystal Growth, 2012, 352, 229-234.	1.5	9
108	Proposal and experimental demonstration of monolithic InP/InGaAsP polarization modulator. , 2014, , .		9

#	ARTICLE	IF	CITATIONS
109	A nitride based polarization-engineered photocathode for water splitting without a p-type semiconductor. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 15326.	2.8	9
110	Growth of InGaAs(P) in planetary metalorganic vapor phase epitaxy reactor using tertiarybutylarsine and tertiarybutylphosphine for photovoltaic applications. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 08RD09.	1.5	9
111	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
112	High-Speed MOVPE Growth of InGaP Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2020, 10, 480-486.	2.5	9
113	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
114	Surface stability of n-type GaN depending on carrier concentration and electrolytes under photoelectrochemical reactions. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2014, 11, 821-823.	0.8	8
115	Numerical Study on Fabrication Tolerance of Half-Ridge InP Polarization Converters. <i>IEICE Transactions on Electronics</i> , 2014, E97.C, 731-735.	0.6	8
116	Electroluminescence-based quality characterization of quantum wells for solar cell applications. <i>Journal of Crystal Growth</i> , 2017, 464, 94-99.	1.5	8
117	Accelerated GaAs growth through MOVPE for low-cost PV applications. <i>Journal of Crystal Growth</i> , 2018, 489, 63-67.	1.5	8
118	Extremely High-Speed GaAs Growth by MOVPE for Low-Cost PV Application. <i>IEEE Journal of Photovoltaics</i> , 2018, , 1-8.	2.5	8
119	Integrated InP optical unitary converter with compact half-integer multimode interferometers. <i>Optics Express</i> , 2021, 29, 43414.	3.4	8
120	Selectivity enhancement by hydrogen addition in selective area metal-organic vapor phase epitaxy of GaN and InGaN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1375-1378.	1.8	7
121	SOI platform and III-V integrated active photonic device by direct bonding for data communication. , 2012, , .		7
122	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. <i>Journal of Applied Physics</i> , 2015, 117, 084307.	2.5	7
123	Photoelectrochemical Property Differences between NiO Dots and Layer on n-Type GaN for Water Splitting. <i>Journal of the Electrochemical Society</i> , 2016, 163, H1091-H1095.	2.9	7
124	Surface-normal electro-optic-polymer modulator with silicon subwavelength grating. <i>IEICE Electronics Express</i> , 2016, 13, 20160595-20160595.	0.8	7
125	Q-factor improvement by capsule-shaped metallic cavity structure for subwavelength lasers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 965-969.	1.8	7
126	24.5% efficient GaAs p-on-n solar cells with 120 μm MOVPE growth. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 105501.	2.8	7

#	ARTICLE	IF	CITATIONS
127	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
128	Robust InP/InGaAsP Polarization Rotator Based on Mode Evolution. IEEE Photonics Technology Letters, 2022, 34, 109-112.	2.5	7
129	Mechanism of stress control for GaN growth on Si using AlN interlayers. Journal of Crystal Growth, 2017, 464, 148-152.	1.5	6
130	Robust reconfigurable optical mode mux/demux using multiport directional couplers. , 2017, , .		6
131	First-principles modeling of GaN(0001)/water interface: Effect of surface charging. Journal of Chemical Physics, 2019, 150, 154703.	3.0	6
132	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
133	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
134	Integrated dual-polarization coherent receiver without a polarization splitter-rotator. Optics Express, 2021, 29, 1711.	3.4	6
135	Single-Pixel Imaging Using Carrier-Depletion Optical Phased Array With Reduced Phase Shift Requirement. IEEE Photonics Journal, 2021, 13, 1-5.	2.0	6
136	Efficient InGaAsP MQW-based polarization controller without active-passive integration. Optics Express, 2021, 29, 10538.	3.4	6
137	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
138	Simple direct-detection-based Stokes vector receiver circuit on InP. , 2017, , .		6
139	Compact symmetric polarization rotator-splitter on InP. Optics Express, 2022, 30, 4179.	3.4	6
140	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
141	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
142	Electrical pumping Fabry-Perot lasing of a III-V layer on a highly doped silicon micro rib. Laser Physics Letters, 2014, 11, 115807.	1.4	5
143	Strictly non-blocking 8x8 silicon photonic switch based on optical phased array. , 2015, , .		5
144	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

#	ARTICLE	IF	CITATIONS
145	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
146	Low-temperature growth of AlN and GaN by metal organic vapor phase epitaxy for polarization engineered water splitting photocathode. Journal of Crystal Growth, 2017, 464, 180-184.	1.5	5
147	Room-temperature capsule-shaped wavelength-scale metal-clad laser with enhanced side mode suppression. Applied Physics Letters, 2017, 111, .	3.3	5
148	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
149	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
150	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
151	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
152	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
153	Uncooled (25–50 °C) operation of self-seeded RSOA for low-cost colorless WDM-PON transmitter. , 2015, , .		4
154	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
155	Effective drift mobility approximation in multiple quantum-well solar cell. , 2016, , .		4
156	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
157	Design of free-barrier InGaAs/GaNAs multiple quantum well solar cells with 1.2 eV energy gap. Japanese Journal of Applied Physics, 2017, 56, 08MA04.	1.5	4
158	Stability and controllability of InGaAs/GaAsP wire-on-well (WoW) structure for multi-junction solar cells. Journal of Crystal Growth, 2017, 464, 86-93.	1.5	4
159	Waveguide-coupled metal-clad cavity with integrated feedback stub. Japanese Journal of Applied Physics, 2017, 56, 082201.	1.5	4
160	Transport efficiency imaging in multi-junction solar cells by luminescence analysis. , 2018, , .		4
161	Thin-film multiple-quantum-well solar cells fabricated by epitaxial lift-off process. Japanese Journal of Applied Physics, 2018, 57, 08RF03.	1.5	4
162	Current transport efficiency analysis of multijunction solar cells by luminescence imaging. Progress in Photovoltaics: Research and Applications, 2019, 27, 835-843.	8.1	4

#	ARTICLE	IF	CITATIONS
163	A general design guideline for strain-balanced quantum-wells toward high-efficiency photovoltaics. <i>Solar Energy</i> , 2020, 206, 655-669.	6.1	4
164	Optimization based on the condition number of the speckle patterns in single-pixel imaging using optical phased arrays. <i>Japanese Journal of Applied Physics</i> , 0, , .	1.5	4
165	Gain-Coupled 4Å–56 Gb/s EML Array with Optimized Bonding-Wire Inductance. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2022, 28, 1-7.	2.9	4
166	Semiconductor photonic integrated devices. <i>Electronics and Communications in Japan</i> , 1994, 77, 99-112.	0.2	3
167	Lasing characteristics of InGaAs/InGaAsP multiple-quantum-well optical thyristor operating at 1.561 μ m. <i>Applied Physics Letters</i> , 2003, 82, 158-160.	3.3	3
168	Kinetic analysis of surface adsorption layer for InGaAsP-related binary materials using in situ RAS. <i>Journal of Crystal Growth</i> , 2008, 310, 4736-4740.	1.5	3
169	Semiconductive properties of heterointegration of INP/INGAAS on high doped silicon wire waveguide for silicon hybrid laser. , 2009, , .		3
170	Light trapping structure with backside scatterer for enhanced photo-absorption by quantum structures. , 2012, , .		3
171	High-aspect-ratio structures for efficient light absorption and carrier transport in InGaAs/GaAsP multiple quantum well solar cells. , 2012, , .		3
172	Comprehensive validation of Carrier Collection Efficiency in multiple quantum well solar cells: For more effective and direct evaluation of carrier transport dynamics. , 2013, , .		3
173	Surface activated Ge/GaAs wafer bonding for multi-junction solar cells. , 2014, , .		3
174	Optical analysis of the photon recycling effect in InGaAs/GaAsP multiple quantum well solar cell with light trapping structure. , 2016, , .		3
175	Investigation of miniband formation and optical properties of strain-balanced InGaAs/GaAsP superlattice structure embedded in μ c-Si solar cells. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 08MC07.	1.5	3
176	Photoluminescence of InGaAs/GaAs Quantum Nanodisk in Pillar Fabricated by Biotemplate, Dry Etching, and MOVPE Regrowth. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1945-1951.	4.3	3
177	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
178	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
179	Comparison of Effective Carrier Mobility Between Wire on Well and Planar Superlattice Using Time-of-Flight Measurement. <i>IEEE Journal of Photovoltaics</i> , 2020, 10, 1008-1014.	2.5	3
180	Design of InGaAsP phase modulator with asymmetrically coupled quantum wells for efficient polarization modulation. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 082004.	1.5	3

#	ARTICLE	IF	CITATIONS
181	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
182	InGaAs/GaAsP asymmetric quantum wells for enhancing carrier escape through resonant tunneling. , 2012, , .		2
183	Design of photonic crystal cavity for hexagonal islands. , 2012, , .		2
184	Performance of monolithic integrated series-connected GaAs solar cells under concentrated light. , 2013, , .		2
185	Near-infrared electroluminescence and photo detection in InGaAs <i>p-i-n</i> microdisks grown by selective area growth on silicon. Applied Physics Letters, 2014, 104, .	3.3	2
186	Effect of KHCO ₃ , K ₂ CO 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
187	Narrow line-width photoluminescence spectrum of GaAs nanodisks fabricated using bio-template ultimate top-down processes. , 2014, , .		2
188	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
189	Design and experimental investigation of monolithic polarization controller with InGaAlAs/InAlAs multiple quantum wells. , 2015, , .		2
190	Concentrated photovoltaic electrochemical cell (CPEC): A route toward high-efficiency, cost-effective solar hydrogen production. , 2015, , .		2
191	Effect of ion species for the surface activated bonding of GaAs wafers on the characteristics of the bonded interfaces. , 2015, , .		2
192	Effects of various dopants on properties of GaAs tunneling junctions and <i>p-i-n</i> solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MC11.	1.5	2
193	Electro-optic polymer surface-normal modulator using silicon high-contrast grating resonator. , 2019, , .		2
194	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
195	Reconfigurable 3-Channel All-Optical MIMO Circuit on Silicon Based on Multi-Plane Light Conversion. , 2018, , .		2
196	Integrated Reconfigurable 4×4 Optical Unitary Converter Using Multipoint Directional Couplers. , 2019, , .		2
197	Mode-Evolution-based InP/InGaAsP Polarization Rotator with Etching-Stop Layer. , 2021, , .		2
198	Single-pixel imaging through multimode fiber using silicon optical phased array chip. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
199	Effects of quantum wells position and background doping on the performance of multiple quantum well solar cells. , 2011, , .		1
200	Fabrication of n-Type GaN Layers by the Pulse Injection Method at 950Å°C for Intersubband Devices. Electrochemical and Solid-State Letters, 2011, 14, H143.	2.2	1
201	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
202	Optimization of compact photonic crystal cavity using the gentle confinement method. , 2013, , .		1
203	Analysis for current-voltage characteristics of the InGaAs/GaAsP super-lattice solar cells under optical concentration. , 2013, , .		1
204	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
205	Development of the monolithically interconnected InGaP/GaAs dual junction solar cell with bypass diode for ultrahigh concentrator application. , 2014, , .		1
206	Synthesis of CaMn ₂ O ₄ -related electrocatalyst for oxygen evolution electrode of water-splitting. Materials Research Society Symposia Proceedings, 2014, 1640, 1.	0.1	1
207	Lattice-matched 3-junction cell with 1.2-eV InGaAs/GaAsP superlattice middle cell for improved current matching. , 2015, , .		1
208	Investigation of carrier collection in multi-quantum well solar cells by luminescence spectra analysis. , 2015, , .		1
209	Compact silicon rib-waveguide electro-absorption modulator using multiple indium-tin-oxide layers. , 2015, , .		1
210	Observation of mini-band formation in the ground and high-energy electronic states of super-lattice solar cells. , 2016, , .		1
211	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
212	Photocurrent collection mechanism and role of carrier distribution in p-i-n quantum well solar cells. , 2016, , .		1
213	Comprehensive analysis on electrically pumped metallic cavity lasers. , 2016, , .		1
214	Room-temperature capsule-shaped wavelength-scale metal-clad laser operating at 1550 nm. , 2017, , .		1
215	Reconfigurable Integrated MIMO Optical Mode Demultiplexer using MMI Couplers. , 2017, , .		1
216	Carrier Collection Improvement in InGaAs/GaAsN Multiple Quantum Well Solar Cell with Flat Conduction Band. , 2018, , .		1

#	ARTICLE	IF	CITATIONS
217	Comparison of Effective Carrier Mobility between Wire on Well and Multiple Quantum Well by Time of Flight Measurement. , 2018, , .		1
218	Offset-Quantum-Well-Based Integrated Stokes Vector Modulator on InP. IEEE Photonics Technology Letters, 2019, 31, 1233-1236.	2.5	1
219	On Ghost Imaging Using Multimode Fiber and Integrated Optical Phased Array. , 2019, , .		1
220	Fully Integrated 4-port Stokes Vector Receiver for Multi-Level 3D Signal Detection. , 2019, , .		1
221	Monolithically Integrated Stokes Vector Modulator Based on Quantum-Confined Stark Effect. , 2018, , .		1
222	Stokes Vector Modulation and Detection with Monolithic InP Photonic Integrated Circuits. , 2019, , .		1
223	8-ary Stokes-Vector Signal Generation and Transmission Employing a Simplified Transmitter. , 2019, , .		1
224	Resolution enhancement of optical-phased-array-based single-pixel imaging by using a multimode fiber. , 2020, , .		1
225	Monolithic Polarization Controller on Regrowth-Free InGaAsP/InP Platform with Strained MQW Layer. , 2020, , .		1
226	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
227	Mode-Evolution-based Symmetrical Polarization Splitter-Rotator on Monolithic InP Platform. , 2021, , .		1
228	Surface-Normal Stokes Vector Receiver based on Superimposed Metasurface. , 2022, , .		1
229	Photonic Integrated Unitary Processor based on Multi-Plane Light Conversion. , 2022, , .		1
230	Single Mode and Dynamic All-Optical Flip-Flop Operation of Multimode Interference Bistable Laser Diodes with Distributed Bragg Reflectors. , 2006, , .		0
231	Source/drain formation by using epitaxial regrowth of N+InP for III-V nMOSFETs. , 2009, , .		0
232	Monolithically Integrated Phased-Array Switch for Optical Packet Switching and Interconnection. , 2010, , .		0
233	Self-assembled SiO ₂ particle coating on 2 layer anti-reflection films for efficiency enhancement of GaAs PV cells. , 2010, , .		0
234	InP integrated photonic circuits for optical packet switching and digital photonics. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
235	Semiconductor photonic integrated switches and buffers for optical packet routing. , 2010, , .		0
236	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
237	Evaluation of asymmetric tunneling-assisted structure for InGaAs/GaAsP MQWs solar cell. , 2013, , .		0
238	Quantum GaAs Nanodisk Light Emitting Diode Fabricated by Ultimate Top-Down Neutral Beam Etching. , 2014, , .		0
239	Surface Stabilities of n-type GaN Dependent on Electrolyte under Photoelectrochemical Reactions. Materials Research Society Symposia Proceedings, 2014, 1647, 1.	0.1	0
240	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
241	Directly bonded Ge/GaAs by surface activated bonding for high efficiency III-V multi-junction solar cells. , 2014, , .		0
242	Numerical study on hollow hexagonal InGaAs microdisk laser on silicon. , 2014, , .		0
243	Monolithic InGaAs-on-Si micro-disk ensemble LED with peak luminescence at 1.58 μm . , 2014, , .		0
244	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
245	Comparison of electron and hole mobilities in multiple quantum well solar cells using a time-of-flight technique. , 2015, , .		0
246	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
247	Admittance spectroscopy analysis on the interfacial defect levels in the surface-activated bonding of GaAs. , 2016, , .		0
248	Capsule-shaped metallic-cavity semiconductor lasers for low-energy on-chip light sources. , 2016, , .		0
249	Anomalous Ga incorporation into InGaAs microdiscs selectively grown on Si (111). , 2016, , .		0
250	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
251	Characterisation of multi-junction solar cells by mapping of the carrier transport efficiency using luminescence emission. , 2017, , .		0
252	Development of GaAs/Si current-balanced dual junction solar cell integrated by surface-activated bonding. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
253	Fully Integrated Stokes Vector Receiver with MQW-based Photodetectors on InP. , 2017, , .		0
254	Efficiency of GaAs P/Si Two-junction Solar Cells with Multi-Quantum Wells: a Realistic Modeling with Carrier Collection Efficiency. , 2017, , .		0
255	Analysis of Deposited Residues and Its Cleaning Process on GaAs Substrate after Epitaxial Lift-Off. , 2017, , .		0
256	Carrier Collection Model and Design Rule for Quantum Well Solar Cells. , 2017, , .		0
257	Design of InGaP/GaAs/InGaAs multi-junction cells with reduced layer thicknesses using light-trapping rear texture. , 2017, , .		0
258	Low-temperature InGaAs oxidation using oxygen neutral beam. Japanese Journal of Applied Physics, 2018, 57, 070305.	1.5	0
259	Impacts of V/III ratio on the quality and performance of GaAs p-n solar cells by ultrafast MOVPE. , 2018, , .		0
260	As-modified Si(100) Surfaces for III-V-on-Si Tandem Solar Cells. , 2018, , .		0
261	Gain Coupled 4Å–25 Gb/s EML Array Based on Identical Epitaxial Layer Scheme. , 2018, , .		0
262	Experimental Demonstration of Surface-Normal MIM Modulator with Electro-Optic Polymer. , 2018, , .		0
263	Waveguide Coupling of Wavelength-Scale Capsule-Shaped Metal-Clad Laser. , 2018, , .		0
264	Analytic Approach for Global Structure Optimization of Multiple Quantum Well Solar Cells. , 2018, , .		0
265	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
266	Design of Efficient Polarization Modulator with Asymmetrically Coupled MQW. , 2019, , .		0
267	Numerical Demonstration of Trade-off between Carrier Confinement Effect and Carrier Transport for Multiple-Quantum-Well Based High-efficiency InGaP Solar Cells. , 2019, , .		0
268	Compact Reconfigurable Optical Unitary Converter based on Non-Uniform Multimode Interference Coupler. , 2019, , .		0
269	Horn-Shaped Metal-Clad Modulator Coupled to InP Waveguide. , 2019, , .		0
270	Straight-Line Dual-Polarization PSK Transmitter with Polarization Differential Modulation. IEICE Transactions on Communications, 2021, E104.B, 490-496.	0.7	0

#	ARTICLE	IF	CITATIONS
271	Robustness Analysis of Generalized Optical Unitary Converter. , 2021, , .		0
272	Large Scale Switching and Polarization Control in Photonic Integrated Circuits on InP and Si. , 2014, , .		0
273	Short wavelength distributed feedback semiconductor lasers.. The Review of Laser Engineering, 1988, 16, 732-740.	0.0	0
274	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
275	Polarization Manipulation in Monolithic InP-based PICs. , 2016, , .		0
276	InGaAs/GaAsP quantum wells and wires for high-efficiency photovoltaic applications. , 2016, , .		0
277	Characterization of InGaAs/GaAsN multiple quantum well with flat conduction band for improving carrier transport in multijunction solar cell. , 2018, , .		0
278	4-port Integrated Stokes Vector Receiver Circuit for Multi-level 3D Signal Detection and OSNR Monitoring. , 2019, , .		0
279	Large-scale silicon photonic phased array chip for single-pixel ghost imaging. , 2019, , .		0
280	Effective mobility map for InGaP/InGaP multiple quantum-well-based solar cells. , 2019, , .		0
281	Simplified optical transceivers for Stokes-vector transmission systems. , 2020, , .		0
282	Rear homo and hetero junctions III-V n-on-p solar cells grown with high speed MOVPE. , 2020, , .		0
283	Scalability of Universal Nanophotonic Processing Circuits based on Multi-Plane Light Conversion. , 2020, , .		0
284	Single-Pixel Imaging Using Optical Phased Array Chip. , 2020, , .		0
285	Trade-off study on the radiative efficiency and carrier transport of multiple-quantum-well solar cells. , 2020, , .		0
286	Effect of Limited Phase Shift on Single-Pixel Imaging using Carrier-Depletion Silicon Photonic Phased Array. , 2021, , .		0
287	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
288	Demonstration of 10-port Integrated Optical Unitary Converter. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
289	Monolithic InP 100-Port Optical Phased Array. , 2021, , .		0
290	Integrated Optical Unitary Converter based on Nonuniform Multimode Interference Coupler. , 2021, , .		0