Takeyoshi Sugaya

List of Publications by Year
in descending order

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185 papers	2,850 citations	201674 27 h-index	243625 44 g-index
186 all docs	186 docs citations	186 times ranked	2508 citing authors

#	ARTICLE	IF	CITATIONS
1	Photocatalytic generation of hydrogen by core-shell WO3/BiVO4 nanorods with ultimate water splitting efficiency. Scientific Reports, 2015, 5, 11141.	3.3	464
2	Low-Temperature Cleaning of GaAs Substrate by Atomic Hydrogen Irradiation. Japanese Journal of Applied Physics, 1991, 30, L402-L404.	1.5	155
3	Ultra-high stacks of InGaAs/GaAs quantum dots for high efficiency solar cells. Energy and Environmental Science, 2012, 5, 6233.	30.8	75
4	Self-starting mode-locked femtosecond forsterite laser with a semiconductor saturable-absorber mirror. Optics Letters, 1997, 22, 1006.	3.3	63
5	Multi-stacked quantum dot solar cells fabricated by intermittent deposition of InGaAs. Solar Energy Materials and Solar Cells, 2011, 95, 163-166.	6.2	56
6	Highly stacked and well-aligned In0.4Ga0.6As quantum dot solar cells with In0.2Ga0.8As cap layer. Applied Physics Letters, 2010, 97, 183104.	3.3	50
7	Low Temperature Surface Cleaning of InP by Irradiation of Atomic Hydrogen. Japanese Journal of Applied Physics, 1993, 32, L287-L289.	1.5	47
8	Selective Growth of GaAs by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1992, 31, L713-L716.	1.5	46
9	Anisotropic Lateral Growth of GaAs by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1989, 28, L1077-L1079.	1.5	44
10	Broadband semiconductor saturable-absorber mirror for a self-starting mode-locked Cr:forsterite laser. Optics Letters, 1998, 23, 1465.	3.3	43
11	IIIâ€•V//Si multijunction solar cells with 30% efficiency using smart stack technology with Pd nanoparticle array. Progress in Photovoltaics: Research and Applications, 2020, 28, 16-24.	8.1	43
12	Femtosecond Cr:forsterite laser with mode locking initiated by a quantum-well saturable absorber. IEEE Journal of Quantum Electronics, 1997, 33, 1975-1981.	1.9	41
13	Miniband formation in InGaAs quantum dot superlattice. Applied Physics Letters, 2010, 97, .	3.3	41
14	Palladium nanoparticle array-mediated semiconductor bonding that enables high-efficiency multi-junction solar cells. Japanese Journal of Applied Physics, 2016, 55, 025001.	1.5	37
15	Improved optical properties of InAs quantum dots grown with an As2 source using molecular beam epitaxy. Journal of Applied Physics, 2006, 100, 063107.	2.5	35
16	Self-starting mode-locked Cr^4+:YAG laser with a low-loss broadband semiconductor saturable-absorber mirror. Optics Letters, 1999, 24, 1768.	3.3	34
17	High-efficiency IIIâ€“V//Si tandem solar cells enabled by the Pd nanoparticle array-mediated â€œsmart stackâ€• approach. Applied Physics Express, 2017, 10, 072301.	2.4	34
18	InGaP-based InGaAs quantum dot solar cells with GaAs spacer layer fabricated using solid-source molecular beam epitaxy. Applied Physics Letters, 2012, 101, .	3.3	32

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19	Experimental studies of the electronâ€“phonon interaction in InGaAs quantum wires. Applied Physics Letters, 2002, 81, 727-729.	3.3	30
20	Quantum-interference characteristics of a 25 nm trench-type InGaAs/InAlAs quantum-wire field-effect transistor. Applied Physics Letters, 2002, 80, 434-436.	3.3	30
21	Single-crystal Cu(In,Ga)Se₂solar cells grown on GaAs substrates. Applied Physics Express, 2018, 11, 082302.	2.4	30
22	Highest Density 1.3 Âµm InAs Quantum Dots Covered with Gradient Composition InGaAs Strain Reduced Layer Grown with an As2Source Using Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2005, 44, L432-L434.	1.5	29
23	Laser Characteristics of 1.3-mum Quantum Dots Laser With High-Density Quantum Dots. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1273-1278.	2.9	29
24	Tandem photovoltaicâ€“photoelectrochemical GaAs/InGaAsPâ€“WO₃/BiVO₄ device for solar hydrogen generation. Japanese Journal of Applied Physics, 2016, 55, 04ES01.	1.5	28
25	Low-Temperature Substrate Annealing of Vicinal Si(100) for Epitaxial Growth of GaAs on Si. Japanese Journal of Applied Physics, 1991, 30, 3774-3776.	1.5	27
26	Enhanced peak-to-valley current ratio in InGaAsâˆ•InAlAs trench-type quantum-wire negative differential resistance field-effect transistors. Journal of Applied Physics, 2005, 97, 034507.	2.5	27
27	1.3-/spl mu/m InAs quantum-dot laser with high dot density and high uniformity. IEEE Photonics Technology Letters, 2006, 18, 619-621.	2.5	27
28	InGaP solar cells fabricated using solid-source molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 576-578.	1.5	27
29	Type-II InP quantum dots in wide-bandgap InGaP host for intermediate-band solar cells. Applied Physics Letters, 2016, 108, .	3.3	27
30	1.3â€‚Î¼m InAs quantum dots grown with an As[sub 2] source using molecular-beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1243.	1.6	25
31	Characteristics of 1.3Î¼m quantum-dot lasers with high-density and high-uniformity quantum dots. Applied Physics Letters, 2006, 89, 171122.	3.3	25
32	Trench-type narrow InGaAs quantum wires fabricated on a (311)A InP substrate. Applied Physics Letters, 2001, 78, 76-78.	3.3	24
33	Highly Stacked and High-Quality Quantum Dots Fabricated by Intermittent Deposition of InGaAs. Japanese Journal of Applied Physics, 2010, 49, 030211.	1.5	24
34	Tunnel current through a miniband in InGaAs quantum dot superlattice solar cells. Solar Energy Materials and Solar Cells, 2011, 95, 2920-2923.	6.2	24
35	Impact of Nonplanar Panels on Photovoltaic Power Generation in the Case of Vehicles. IEEE Journal of Photovoltaics, 2019, 9, 1721-1726.	2.5	24
36	Suppressed bimodal size distribution of InAs quantum dots grown with an As2 source using molecular beam epitaxy. Journal of Applied Physics, 2008, 104, 083106.	2.5	23

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37	Atomic Hydrogen-Assisted GaAs Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1995, 34, 238-244.	1.5	22
38	Effects of As2Flux and Atomic Hydrogen Irradiation for Growth of InGaAs Quantum Wires by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1998, 37, 1497-1500.	1.5	22
39	IIIâ€V//Cu_{<i>x</i>}In_{1âˆ’<i>y</i>}Ga_{<i>y</i>}Se₂ multijunction solar cells with 27.2% efficiency fabricated using modified smart stack technology with Pd nanoparticle array and adhesive material. Progress in Photovoltaics: Research and Applications, 2021, 29, 887-898.	8.1	21
40	Difference in Diffusion Length of Ga Atoms underAs2andAs4Flux in Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1997, 36, 5670-5673.	1.5	20
41	Low-loss broadband semiconductor saturable absorber mirror for mode-locked Ti:sapphire lasers. Optics Communications, 2000, 176, 171-175.	2.1	20
42	Highly stacked InGaAs quantum dot structures grown with two species of As. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C3C4-C3C8.	1.2	19
43	Investigation of the properties of semiconductor wafer bonding in multijunction solar cells via metal-nanoparticle arrays. Journal of Applied Physics, 2017, 122, .	2.5	19
44	Feasibility study of two-terminal tandem solar cells integrated with smart stack, areal current matching, and low concentration. Progress in Photovoltaics: Research and Applications, 2017, 25, 255-263.	8.1	18
45	Improvement of Heterointerface Properties of GaAs Solar Cells Grown With InGaP Layers by Hydride Vapor-Phase Epitaxy. IEEE Journal of Photovoltaics, 2019, 9, 154-159.	2.5	18
46	Femtosecond Cr:forsterite laser diode pumped by a double-clad fiber. Optics Letters, 1998, 23, 129.	3.3	17
47	InGaAs quantum dot superlattice with vertically coupled states in InGaP matrix. Journal of Applied Physics, 2013, 114, .	2.5	17
48	In(Ga)As quantum dots on InGaP layers grown by solid-source molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 430-434.	1.5	17
49	InGaP/GaAs tandem solar cells fabricated using solid-source molecular beam epitaxy. Japanese Journal of Applied Physics, 2014, 53, 05FV06.	1.5	17
50	Fabrication of GaAs Quantum Wire Structures by Hydrogen-Assisted Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1993, 32, L1834-L1836.	1.5	16
51	Observation of interdot correlation in single pair of electromagnetically coupled quantum dots. Applied Physics Letters, 2005, 87, 182103.	3.3	16
52	Realization of 1.3Î¼m InAs quantum dots with high-density, uniformity, and quality. Journal of Crystal Growth, 2006, 295, 162-165.	1.5	16
53	Ultrafast Coherent Control of Excitons Using Pulse-Shaping Technique. Japanese Journal of Applied Physics, 2000, 39, 2347-2352.	1.5	15
54	Negative differential resistance effects of trench-type InGaAs quantum-wire field-effect transistors with 50-nm gate-length. Applied Physics Letters, 2003, 83, 701-703.	3.3	15

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55	Fabrication of hydrogenated amorphous Si/crystalline Si_{1âˆ’}<i>_x</i>Ge<i>_x</i>(<i>x</i>â‰ 0.84) heterojunction solar cells grown by solid source molecular beam epitaxy. Japanese Journal of Applied Physics, 2015, 54, 012301.	1.5	15
56	Ultrafast growth of InGaP solar cells via hydride vapor phase epitaxy. Applied Physics Express, 2019, 12, 052004.	2.4	15
57	All-Solid-State, THz Radiation Source Using a Saturable Bragg Reflector in a Femtosecond Mode-Locked Laser. Japanese Journal of Applied Physics, 1997, 36, L560-L562.	1.5	14
58	Operation of InGaAs quasi-quantum-wire FET fabricated by selective growth using molecular beam epitaxy. Electronics Letters, 1998, 34, 926.	1.0	14
59	Gold-reflector-based semiconductor saturable absorber mirror for femtosecond mode-locked Cr4+:YAG lasers. Applied Physics B: Lasers and Optics, 2000, 70, S59-S62.	2.2	14
60	Analysis of two-dimensional photonic crystal L-type cavities with low-refractive-index material cladding. Journal of Optics (United Kingdom), 2010, 12, 075101.	2.2	14
61	Change in the electrical performance of GaAs solar cells with InGaAs quantum dot layers by electron irradiation. Solar Energy Materials and Solar Cells, 2013, 108, 263-268.	6.2	14
62	Dual-junction GaAs solar cells and their application to smart stacked IIIâ€“V//Si multijunction solar cells. Applied Physics Express, 2018, 11, 052301.	2.4	14
63	Fabrication of GaAs solar cells grown with InGaP layers by hydride vapor-phase epitaxy. Japanese Journal of Applied Physics, 2018, 57, 08RD06.	1.5	14
64	High-power self-starting femtosecond Cr:forsterite laser. Electronics Letters, 1998, 34, 559.	1.0	13
65	Observation of negative differential resistance of a trench-type narrow InGaAs quantum-wire field-effect transistor on a (311)A InP substrate. Applied Physics Letters, 2001, 78, 2369-2371.	3.3	13
66	Observation of exciton molecule consisting of two different excitons in coupled quantum dots. Applied Physics Letters, 2005, 87, 253110.	3.3	13
67	Impact of nanometer air gaps on photon recycling in mechanically stacked multi-junction solar cells. Optics Express, 2019, 27, A1.	3.4	13
68	Optical Characteristics of InAs/GaAs Double Quantum Dots Grown by MBE with the Indium-Flush Method. Japanese Journal of Applied Physics, 2004, 43, 2083-2087.	1.5	12
69	Investigation of the open-circuit voltage in mechanically stacked InGaP/GaAs//InGaAsP/InGaAs solar cells. Japanese Journal of Applied Physics, 2017, 56, 08MC01.	1.5	12
70	Effects of As2 flux for fabrication of GaAs/AlGaAs quantum wires on V-grooved substrates in molecular beam epitaxy. Journal of Crystal Growth, 1998, 186, 27-32.	1.5	11
71	THz-radiation Generation from an Intracavity Saturable Bragg Reflector in a Magnetic Field. Japanese Journal of Applied Physics, 1998, 37, L125-L126.	1.5	11
72	Observation of N-shaped negative differential resistance in ridge-type InGaAs/InAlAs quantum wire field-effect transistor. Physica B: Condensed Matter, 1999, 272, 117-122.	2.7	11

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73	Quasi-one-dimensional transport characteristics of ridge-type InGaAs quantum-wire field-effect transistors. Applied Physics Letters, 2001, 79, 371-373.	3.3	11
74	Electronic structures in single pair of InAsâˆ•GaAs coupled quantum dots with various interdot spacings. Journal of Applied Physics, 2006, 99, 033522.	2.5	11
75	Epitaxial Lift-Off of Single-Junction GaAs Solar Cells Grown Via Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2021, 11, 93-98.	2.5	11
76	Terahertz Electromagnetic Wave Generation from Quantum Nanostructure. Japanese Journal of Applied Physics, 2001, 40, 3012-3017.	1.5	10
77	InGaAs dual channel transistors with negative differential resistance. Applied Physics Letters, 2006, 88, 142107.	3.3	10
78	Over 20% Efficiency Mechanically Stacked Multi-Junction Solar Cells Fabricated by Advanced Bonding Using Conductive Nanoparticle Alignments. Materials Research Society Symposia Proceedings, 2013, 1538, 167-171.	0.1	10
79	Growth of InGaAsP solar cells and their application to triple-junction top cells used in smart stack multijunction solar cells. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	1.2	10
80	Effect of Series Resistances on Conversion Efficiency of GaAs/Si Tandem Solar Cells With Areal Current-Matching Technique. IEEE Journal of Photovoltaics, 2018, 8, 654-660.	2.5	10
81	Two-step photon absorption in InP/InGaP quantum dot solar cells. Applied Physics Letters, 2018, 113, .	3.3	10
82	High Doping Performance of Sulfur and Zinc Dopants in Tunnel Diodes Using Hydride Vapor Phase Epitaxy. IEEE Journal of Photovoltaics, 2020, 10, 749-753.	2.5	10
83	Impact of loading topology and current mismatch on currentâ€“voltage curves of three-terminal tandem solar cells with interdigitated back contacts. Solar Energy Materials and Solar Cells, 2021, 221, 110901.	6.2	10
84	28.3% Efficient IIIâ€“V Tandem Solar Cells Fabricated Using a Tripleâ€Chamber Hydride Vapor Phase Epitaxy System. Solar Rrl, 2022, 6, .	5.8	10
85	InGaAs quantum dots grown with As4 and As2 sources using molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 801-804.	1.5	9
86	Enhancement of open circuit voltage in InGaAsP-inverted thin-film solar cells grown by solid-source molecular beam epitaxy. Journal of Crystal Growth, 2017, 477, 267-271.	1.5	9
87	Cu Nanoparticle Array-Mediated IIIâ€“V/Si Integration: Application in Series-Connected Tandem Solar Cells. ACS Applied Energy Materials, 2020, 3, 3445-3453.	5.1	9
88	Integration of Si Heterojunction Solar Cells with IIIâ€“V Solar Cells by the Pd Nanoparticle Array-Mediated â€œSmart Stackâ€•Approach. ACS Applied Materials & Interfaces, 2022, 14, 11322-11329.	8.0	9
89	Electronâ€“phonon scattering in an etched InGaAs quantum wire. Physica B: Condensed Matter, 2002, 314, 99-103.	2.7	8
90	Application of narrow band-gap materials in nanoscale spin filters. Physica B: Condensed Matter, 2002, 314, 230-234.	2.7	8

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91	Pulse Area Control of Exciton Rabi Oscillation in InAs/GaAs Single Quantum Dot. Japanese Journal of Applied Physics, 2006, 45, 3625-3628.	1.5	8
92	InGaP-based InP quantum dot solar cells with extended optical absorption range. Japanese Journal of Applied Physics, 2017, 56, 04CS06.	1.5	8
93	Accelerated GaAs growth through MOVPE for low-cost PV applications. Journal of Crystal Growth, 2018, 489, 63-67.	1.5	8
94	Extremely High-Speed GaAs Growth by MOVPE for Low-Cost PV Application. IEEE Journal of Photovoltaics, 2018, , 1-8.	2.5	8
95	Pd-mediated mechanical stack of IIIâ€“V solar cells fabricated via hydride vapor phase epitaxy. Solar Energy, 2021, 224, 142-148.	6.1	8
96	Application of polydimethylsiloxane surface texturing on III-V//Si tandem achieving more than 2 % absolute efficiency improvement. Optics Express, 2020, 28, 3895.	3.4	8
97	Diode-pumped Cr:forsterite laser mode locked by a semiconductor saturable absorber. Applied Optics, 1998, 37, 7080.	2.1	7
98	High-average-power self-starting mode-locked Ti:sapphire laser with a broadband semiconductor saturable-absorber mirror. Applied Optics, 2001, 40, 3539.	2.1	7
99	Electron Transport Properties in a GaAs/AlGaAs Quantum Wire Grown on V-Grooved GaAs Substrate by Metalorganic Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2003, 42, 2399-2403.	1.5	7
100	Formation and control of a correlated exciton two-qubit system in a coupled quantum dot. Physical Review B, 2009, 79, .	3.2	7
101	Optical and structural studies of highly uniform Ge quantum dots on Si (001) substrate grown by solid-source molecular beam epitaxy. Journal of Crystal Growth, 2013, 378, 439-441.	1.5	7
102	24.5% efficient GaAs p-on-n solar cells with 120 <i>Âµ</i>m h^{âˆ’1} MOVPE growth. Journal Physics D: Applied Physics, 2019, 52, 105501.	2.8	7
103	InGaP/GaAs dualâ€junction solar cells with AlInGaP passivation layer grown by hydride vapor phase epitaxy. Progress in Photovoltaics: Research and Applications, 2021, 29, 1285-1293.	8.1	7
104	Perfect Matching Factor between a Customized Double-Junction GaAs Photovoltaic Device and an Electrolyzer for Efficient Solar Water Splitting. ACS Applied Energy Materials, 2022, 5, 8241-8253.	5.1	7
105	Investigation of InGaP/(In)AlGaAs/GaAs triple-junction top cells for smart stacked multijunction solar cells grown using molecular beam epitaxy. Japanese Journal of Applied Physics, 2015, 54, 08KE02.	1.5	6
106	Multiple epitaxial lift-off of stacked GaAs solar cells for low-cost photovoltaic applications. Japanese Journal of Applied Physics, 2020, 59, 052003.	1.5	6
107	1.25-MW peak-power Kerr-lens mode-locked Ti:sapphire laser with a broadband semiconductor saturable-absorber mirror. Optics Communications, 2000, 183, 159-163.	2.1	5
108	Gate-Length Dependence of Negative Differential Resistance in InGaAs/InAlAs Quantum Well Field-Effect Transistor. Japanese Journal of Applied Physics, 2000, 39, 6152-6156.	1.5	5

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109	Electronic Structures and Carrier Correlation in Single Pair of Coupled Quantum Dots. Japanese Journal of Applied Physics, 2005, 44, 2647-2651.	1.5	5
110	Highly sensitive InGaAsâˆ•InAlAs quantum wire photo-FET. Electronics Letters, 2006, 42, 413.	1.0	5
111	Correlated photon emission in a thick barrier coupled quantum dot. Journal of Applied Physics, 2007, 102, 094303.	2.5	5
112	Highly efficient and reliable mechanically stacked multi-junction solar cells using advanced bonding method with conductive nanoparticle alignments. , 2014, , .		5
113	MBE-grown InGaAsP solar cells with 1.0 eV bandgap on InP(001) substrates for application to multijunction solar cells. Japanese Journal of Applied Physics, 2015, 54, 08KE10.	1.5	5
114	Carrier dynamics in type-II quantum dots for wide-bandgap intermediate-band solar cells. Proceedings of SPIE, 2016, , .	0.8	5
115	Enhancement of open-circuit voltage in InGaP solar cells grown by solid source molecular beam epitaxy. Japanese Journal of Applied Physics, 2018, 57, 08RD07.	1.5	5
116	Design and characterization of InGaP-based InP quantum dot solar cells. Japanese Journal of Applied Physics, 2018, 57, 08RF04.	1.5	5
117	Interdot spacing dependence of electronic structure and properties of multistacked InGaAs quantum dots fabricated without strain compensation technique. Japanese Journal of Applied Physics, 2018, 57, 06HE08.	1.5	5
118	Evaluation of GaAs solar cells grown under different conditions via hydride vapor phase epitaxy. Journal of Crystal Growth, 2020, 537, 125600.	1.5	5
119	GaAs//CuIn_{1âˆ’y}Ga_ySe₂ Three-Junction Solar Cells With 28.06% Efficiency Fabricated Using a Bonding Technique Involving Pd Nanoparticles and an Adhesive. IEEE Journal of Photovoltaics, 2022, 12, 639-645.	2.5	5
120	Coherent Control of Exciton in a Single Quantum Dot Using High-Resolution Michelson Interferometer. Japanese Journal of Applied Physics, 2004, 43, 6093-6096.	1.5	4
121	Exciton Rabi Oscillation in Single Pair of InAs/GaAs Coupled Quantum Dots. Japanese Journal of Applied Physics, 2007, 46, 2626-2628.	1.5	4
122	InAs quantum dots array grown with an As2 source on non-planar GaAs substrates. Journal of Crystal Growth, 2007, 301-302, 762-765.	1.5	4
123	Design of two-dimensional photonic crystal nanocavities with low-refractive-index material cladding. Journal of Optics (United Kingdom), 2010, 12, 015108.	2.2	4
124	Reduction of bonding resistance of two-terminal IIIâ€“V/Si tandem solar cells fabricated using smart-stack technology. Japanese Journal of Applied Physics, 2017, 56, 122302.	1.5	4
125	Spectral response measurements of each subcell in monolithic triple-junction GaAs photovoltaic devices. Applied Physics Express, 2019, 12, 102015.	2.4	4
126	Investigation of growth mechanism of GaAs in molecular beam epitaxy with atomic hydrogen irradiation. Applied Surface Science, 1992, 60-61, 251-255.	6.1	3

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127	A diode-pumped, self-starting, all-solid-state self-mode-locked Cr:LiSGAF laser. Optics and Laser Technology, 2001, 33, 71-73.	4.6	3
128	Negative differential resistance of pseudomorphic InGaAs quantum-wire FETs. Journal of Crystal Growth, 2005, 278, 94-97.	1.5	3
129	Control of subband energy levels of quantum dots using InGaAs gradient composition strain-reducing layer. Applied Physics Letters, 2006, 88, 261110.	3.3	3
130	1.3 Âµm Distributed Feedback Laser with Half-Etching Mesa and High-Density Quantum Dots. Japanese Journal of Applied Physics, 2009, 48, 050203.	1.5	3
131	Analysis of Terahertz Oscillator Using Negative Differential Resistance Dual-Channel Transistor and Integrated Antenna. Japanese Journal of Applied Physics, 2009, 48, 04C146.	1.5	3
132	Characteristics of highly stacked quantum dot solar cells fabricated by intermittent deposition of InGaAs. , 2010, , .		3
133	Change in the electrical performance of InGaAs quantum dot solar cells due to irradiation. , 2010, , .		3
134	Analysis of vertical coupling between a 2D photonic crystal cavity and a hydrogenated-amorphous-silicon-wire waveguide. Photonics and Nanostructures - Fundamentals and Applications, 2012, 10, 287-295.	2.0	3
135	Electrical performance degradation of GaAs solar cells with InGaAs quantum dot layers due to proton irradiation. , 2013, , .		3
136	Effects of substrate miscut on the properties of InGaP solar cells grown on GaAs(001) by solid-source molecular beam epitaxy. Japanese Journal of Applied Physics, 2017, 56, 08MC08.	1.5	3
137	High throughput MOVPE and accelerated growth rate of GaAs for PV application. Journal of Crystal Growth, 2019, 509, 87-90.	1.5	3
138	Growth of InGaAs Solar Cells on InP(001) Miscut Substrates Using Solidâ€Source Molecular Beam Epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900512.	1.8	3
139	Analysis of subcell open-circuit voltages of InGaP/GaAs dual-junction solar cells fabricated using hydride vapor phase epitaxy. Japanese Journal of Applied Physics, 2020, 59, SGGF02.	1.5	3
140	Quasi-quantum-wire field-effect transistor fabricated by composition-controlled, selective growth in molecular beam epitaxy. Journal of Crystal Growth, 1999, 201-202, 833-836.	1.5	2
141	Negative differential resistance of a ridge-type InGaAs quantum wire field-effect transistor. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 1680.	1.6	2
142	Gate-length dependence of negative differential resistance in ridge-type InGaAs/InAlAs quantum wire field-effect transistor. Solid-State Electronics, 2001, 45, 1099-1105.	1.4	2
143	Observation of Bonding States in Single Pair of Coupled Quantum Dots Using Microspectroscopy. Japanese Journal of Applied Physics, 2005, 44, 2684-2687.	1.5	2
144	Ultra-high stacks of InGaAs quantum dots for high efficiency solar cells. , 2011, , .		2

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145	Miniband formation in InGaAs quantum dot superlattice with InGaP matrix for application to intermediate-band solar cells. , 2013, , .		2
146	1.3-Âµm Quantum Dot Distributed Feedback Laser with Half-Etched Mesa Vertical Grating Fabricated by Cl2Dry Etching. Japanese Journal of Applied Physics, 2013, 52, 06GE03.	1.5	2
147	Thermal Conductive Properties of a Semiconductor Laser on a Polymer Interposer. Japanese Journal of Applied Physics, 2013, 52, 04CG05.	1.5	2
148	Radiation response of the fill-factor for GaAs solar cells with InGaAs quantum dot layers. , 2014, , .		2
149	Effect of deposition rate on the characteristics of Ge quantum dots on Si (001) substrates. Thin Solid Films, 2014, 557, 80-83.	1.8	2
150	MBE-grown InGaP/GaAs/InGaAsP triple junction solar cells fabricated by advanced bonding technique. , 2014, , .		2
151	Electrical characteristics of amorphous Si:H/crystalline Si0.3Ge0.7 heterojunction solar cells grown on compositionally graded buffer layers. Journal of Crystal Growth, 2015, 425, 162-166.	1.5	2
152	A proposal for wide-bandgap intermediate-band solar cells using type-II InP/InGaP quantum dots. , 2016, , .		2
153	Investigation of the open-circuit voltage in wide-bandgap InGaP-host InP quantum dot intermediate-band solar cells. Japanese Journal of Applied Physics, 2018, 57, 04FS04.	1.5	2
154	Effects of front InGaP layer thickness on solar cell characteristics in InP/InGaP quantum dot solar cells. Japanese Journal of Applied Physics, 2019, 58, SBBF09.	1.5	2
155	Effects of growth interruption on InGaP fabricated via hydride vapor phase epitaxy. Journal of Crystal Growth, 2020, 544, 125712.	1.5	2
156	Optoelectronic Inactivity of Dislocations in Cu(In,Ga)Se₂ Thin Films. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2100042.	2.4	2
157	Trench-type InGaAs quantum-wire field effect transistor with negative differential conductance fabricated by hydrogen-assisted molecular beam epitaxy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1192.	1.6	1
158	V-grooved InGaAs quantum-wire FET fabricated under an As2 flux in molecular-beam epitaxy. Journal of Crystal Growth, 2003, 251, 843-847.	1.5	1
159	Magneto-conductance fluctuations in a V-grooved GaAs quantum-wire. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 102-106.	2.7	1
160	Optical Characteristics of Self-Aligned InAs Quantum Dots in the Presence of GaAs Oval Strain. Japanese Journal of Applied Physics, 2006, 45, 1030-1032.	1.5	1
161	Optical Control of 2-Qubit Exciton States in a Coupled Quantum Dot. Japanese Journal of Applied Physics, 2008, 47, 3111-3114.	1.5	1
162	Electric-Field Control of Coupled States in Weakly Coupled Quantum Dots. Japanese Journal of Applied Physics, 2008, 47, 2884-2887.	1.5	1

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163	Development of high resolution Michelson interferometer for stable phase-locked ultrashort pulse pair generation. Review of Scientific Instruments, 2008, 79, 103101.	1.3	1
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