Jun Tatebayashi

List of Publications by Year in Descending Order

102 papers	2,014 citations	25 h-index	40 g-index
137 ext. papers	2,287 ext. citations	3 avg, IF	4.46 L-index

#	Paper	IF	Citations
102	Modeling defect mediated color-tunability in LEDs with Eu-doped GaN-based active layers. *Journal of Applied Physics*, **2022**, 131, 045701	2.5	1
101	Elucidation of the excitation mechanism of Tb ions doped in AlxGa1−xN grown by OMVPE toward a wavelength-stable green emitter. *Journal of Applied Physics*, **2022**, 131, 073102	2.5	1
100	Droop-free amplified red emission from Eu ions in GaN. *Japanese Journal of Applied Physics*, **2021**, 60, 120905	1.4	2
99	Enhanced Red Emission of Eu,O-Codoped GaN Embedded in a Photonic Crystal Nanocavity with Hexagonal Air Holes. *Physical Review Applied*, **2021**, 15,	4.3	3
98	Formation and optical characteristics of ZnO:Eu/ZnO nanowires grown by sputtering-assisted metalorganic chemical vapor deposition. *Japanese Journal of Applied Physics*, **2021**, 60, SCCE05	1.4	1
97	Eu-doped GaN and InGaN monolithically stacked full-color LEDs with a wide color gamut. *Applied Physics Express*, **2021**, 14, 031008	2.4	15
96	Enhancement of Er luminescence in microdisk resonators made of Er,O-codoped GaAs. *Journal of Applied Physics*, **2020**, 127, 233101	2.5	
95	Room-temperature operation of near-infrared light-emitting diode based on Tm-doped GaN with ultra-stable emission wavelength. *Journal of Applied Physics*, **2020**, 127, 113103	2.5	5
94	Excitation Efficiency and Limitations of the Luminescence of Eu3+ Ions in GaN. *Physical Review Applied*, **2020**, 13,	4.3	13
93	GaN:Eu,O-Based Resonant-Cavity Light Emitting Diodes with Conductive AlInN/GaN Distributed Bragg Reflectors. *ACS Applied Electronic Materials*, **2020**, 2, 732-738	4	9
92	Purcell-Effect-Enhanced Radiative Rate of Eu3+ Ions in GaN Microdisks. *Physical Review Applied*, **2020**, 14,	4.3	6
91	Investigation on Suitable Structure for Laser Oscillation in Eu-doped GaN with Two-Dimensional Photonic Crystal Nanocavities. *Zairyo/Journal of the Society of Materials Science, Japan*, **2020**, 69, 721-726	0.1	0
90	Perspective of Semiconductor Technologies Contributed to the IoT Society. *Zairyo/Journal of the Society of Materials Science, Japan*, **2020**, 69, 762-766	0.1	
89	Enhanced Photoluminescence in High-Q Photonic Crystal Nanocavities with Er,O-Codoped GaAs. *Zairyo/Journal of the Society of Materials Science, Japan*, **2020**, 69, 823-828	0.1	
88	Quantitative evaluation of enhanced Er luminescence in GaAs-based two-dimensional photonic crystal nanocavities. *Applied Physics Letters*, **2020**, 116, 181102	3.4	1
87	Direct detection of rare earth ion distributions in gallium nitride and its influence on growth morphology. *Journal of Applied Physics*, **2020**, 127, 013102	2.5	4
86	47-3: Invited Paper: High Brightness and RGB Integration of Eu-doped GaN-based Red LEDs for Ultrahigh-resolution Micro-LED Display. *Digest of Technical Papers SID International Symposium*, **2020**, 51, 691-694	0.5	

85	16.3: Invited Paper: New development in Red Light-emitting Diodes (LEDs) using Eu-doped GaN for Monolithic Micro-LED Displays. *Digest of Technical Papers SID International Symposium*, **2019**, 50, 167-167	0.5	
84	Enhanced luminescence efficiency of GaN:Eu-based light-emitting diodes by localized surface plasmons utilizing gold nanoparticles. *Japanese Journal of Applied Physics*, **2019**, 58, SCCC09	1.4	1
83	Color-Tunablility in GaN LEDs Based on Atomic Emission Manipulation under Current Injection. *ACS Photonics*, **2019**, 6, 1153-1161	6.3	9
82	Localized-surface-plasmon-enhanced GaN:Eu-based red light-emitting diodes utilizing silver nanoparticles. *Applied Physics Express*, **2019**, 12, 095003	2.4	4
81	Picosecond time-resolved dynamics of energy transfer between GaN and the various excited states of Eu3+ ions. *Physical Review B*, **2019**, 100,	3.3	3
80	Growth and optical characteristics of Tm-doped AlGaN layer grown by organometallic vapor phase epitaxy. *Journal of Applied Physics*, **2018**, 123, 161406	2.5	3
79	Quantitative study of energy-transfer mechanism in Eu,O-codoped GaN by time-resolved photoluminescence spectroscopy. *Journal of Applied Physics*, **2018**, 123, 161419	2.5	4
78	Control of the energy transfer between Tm3+ and Yb3+ ions in Tm,Yb-codoped ZnO grown by sputtering-assisted metalorganic chemical vapor deposition. *Journal of Applied Physics*, **2018**, 123, 161409	2.5	5
77	Formation and optical properties of Tm,Yb-codoped ZnO nanowires grown by sputtering-assisted metalorganic chemical vapor deposition. *Journal of Crystal Growth*, **2018**, 503, 13-19	1.6	5
76	Nanowire quantum-dot lasers on flexible membranes. *Applied Physics Express*, **2018**, 11, 065002	2.4	3
75	Growth of InGaAs/GaAs nanowire-quantum dots on AlGaAs/GaAs distributed Bragg reflectors for laser applications. *Journal of Crystal Growth*, **2017**, 468, 144-148	1.6	10
74	Circularly polarized vacuum field in three-dimensional chiral photonic crystals probed by quantum dot emission. *Physical Review B*, **2017**, 96,	3.3	7
73	A Nanowire-Based Plasmonic Quantum Dot Laser. *Nano Letters*, **2016**, 16, 2845-50	11.5	53
72	Room-temperature lasing in a single nanowire with quantum dots. *Nature Photonics*, **2015**, 9, 501-505	33.9	132
71	Room-temperature lasing in GaAs nanowires embedding multi-stacked InGaAs/GaAs quantum dots **2015**,		1
70	Demonstration of a three-dimensional photonic crystal nanocavity in a <110>-layered diamond structure. *Applied Physics Letters*, **2015**, 107, 071102	3.4	8
69	Low-Threshold near-Infrared GaAs AlGaAs Core Shell Nanowire Plasmon Laser. *ACS Photonics*, **2015**, 2, 165-171	6.3	75
68	Circular dichroism in a three-dimensional semiconductor chiral photonic crystal. *Applied Physics Letters*, **2014**, 105, 051107	3.4	22

67	Highly uniform, multi-stacked InGaAs/GaAs quantum dots embedded in a GaAs nanowire. *Applied Physics Letters*, **2014**, 105, 103104	3.4	20
66	Formation and optical properties of multi-stack InGaAs quantum dots embedded in GaAs nanowires by selective metalorganic chemical vapor deposition. *Journal of Crystal Growth*, **2013**, 370, 299-302	1.6	4
65	Giant optical rotation in a three-dimensional semiconductor chiral photonic crystal. *Optics Express*, **2013**, 21, 29905-13	3.3	17
64	Formation of a single In(Ga)As/GaAs quantum dot embedded in a site-controlled GaAs nanowire by metalorganic chemical vapor deposition for application to single photon sources. *Materials Research Society Symposia Proceedings*, **2012**, 1439, 115-119		
63	Site-controlled formation of InAs/GaAs quantum-dot-in-nanowires for single photon emitters. *Applied Physics Letters*, **2012**, 100, 263101	3.4	40
62	Coulomb-induced emission dynamics and self-consistent calculations of type-II Sb-containing quantum dot systems. *Physical Review B*, **2012**, 85,	3.3	26
61	Optical Properties of Site-Controlled InGaAs Quantum Dots Embedded in GaAs Nanowires by Selective Metalorganic Chemical Vapor Deposition. *Japanese Journal of Applied Physics*, **2012**, 51, 11PE13	1.4	2
60	Lateral interdot carrier transfer in an InAs quantum dot cluster grown on a pyramidal GaAs surface. *Nanotechnology*, **2011**, 22, 055706	3.4	20
59	Visible light emission from self-catalyzed GaInP/GaP core-shell double heterostructure nanowires on silicon. *Journal of Applied Physics*, **2010**, 108, 034315	2.5	17
58	1.52 μm photoluminescence emissions from InAs quantum dots grown on nanopatterned GaAs buffers. *Applied Physics Letters*, **2010**, 97, 143111	3.4	4
57	Optical characteristics of GaInP/GaP double-heterostructure core-shell nanowires embedded in polydimethylsiloxane membranes. *Applied Physics Letters*, **2010**, 96, 253101	3.4	9
56	Controlled Formation and Dynamic Wulff Simulation of Equilibrium Crystal Shapes of GaAs Pyramidal Structures on Nanopatterned Substrates. *Crystal Growth and Design*, **2010**, 10, 2509-2514	3.5	8
55	Complex emission dynamics of type-II GaSb/GaAs quantum dots. *Applied Physics Letters*, **2009**, 95, 061102	3.4	33
54	GaSb/GaAs type-II quantum dots grown by droplet epitaxy. *Nanotechnology*, **2009**, 20, 455604	3.4	34
53	Fabrication and characteristics of broad-area light-emitting diode based on nanopatterned quantum dots. *Nanotechnology*, **2009**, 20, 035302	3.4	13
52	Continuous-Wave, Room-Temperature Operation of 2-μm Sb-Based Optically-Pumped Vertical-External-Cavity Surface-Emitting Laser Monolithically Grown on GaAs Substrates. *Applied Physics Express*, **2009**, 2, 112102	2.4	8
51	Monolithically Integrated III-Sb-Based Laser Diodes Grown on Miscut Si Substrates. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 716-723	3.8	19
50	Coulomb effects in type-II Ga(As)Sb quantum dots. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 752-755	1.3	19

49	Optical transition pathways in type-II Ga(As)Sb quantum dots. *Journal of Luminescence*, **2009**, 129, 456-460	3.8	14
48	Formation and Optical Characteristics of Type-II Strain-Relieved GaSb/GaAs Quantum Dots by Using an Interfacial Misfit Growth Mode. *IEEE Nanotechnology Magazine*, **2009**, 8, 269-274	2.6	7
47	Strain compensation technique in self-assembled InAs/GaAs quantum dots for applications to photonic devices. *Journal Physics D: Applied Physics*, **2009**, 42, 073002	3	35
46	Time-resolved photoluminescence of type-II Ga(As)Sb/GaAs quantum dots embedded in an InGaAs quantum well. *Nanotechnology*, **2008**, 19, 295704	3.4	21
45	Improved photoluminescence efficiency of patterned quantum dots incorporating a dots-in-the-well structure. *Nanotechnology*, **2008**, 19, 435710	3.4	16
44	Electric field modulation of exciton recombination in InAs/GaAs quantum dots emitting at 1.3□m. *Journal of Applied Physics*, **2008**, 104, 013504	2.5	3
43	Device Characteristics of GaInSb/AlGaSb Quantum Well Lasers Monolithically Grown on GaAs Substrates by Using an Interfacial Misfit Array. *Journal of Electronic Materials*, **2008**, 37, 1758-1763	1.9	3
42	Effects of accumulated strain on the surface and optical properties of stacked 1.3□m InAs/GaAs quantum dot structures. *Physica E: Low-Dimensional Systems and Nanostructures*, **2008**, 40, 2182-2184	3	9
41	Effects of rapid thermal annealing on the emission properties of highly uniform self-assembled InAs□GaAs quantum dots emitting at 1.3□m. *Applied Physics Letters*, **2007**, 90, 111912	3.4	21
40	Room-Temperature Operation of Buffer-Free GaSb□AlGaSb Quantum-Well Diode Lasers Grown on a GaAs Platform Emitting at 1.65 mum. *IEEE Photonics Technology Letters*, **2007**, 19, 1628-1630	2.2	23
39	Measurement of electro-optic coefficients of 1.3 [micro sign]m self-assembled InAs/GaAs quantum dots. *Electronics Letters*, **2007**, 43, 410	1.1	3
38	1.54 [micro sign]m GaSb/AlGaSb multi-quantum-well monolithic laser at 77 K grown on miscut Si substrate using interfacial misfit arrays. *Electronics Letters*, **2007**, 43, 1198	1.1	26
37	Localized strain reduction in strain-compensated InAs□GaAs stacked quantum dot structures. *Applied Physics Letters*, **2007**, 90, 163121	3.4	18
36	Optical properties of patterned InAs quantum dot ensembles grown on GaAs nanopyramids. *Applied Physics Letters*, **2007**, 91, 243106	3.4	16
35	Single dot spectroscopy of site-controlled InAs quantum dots nucleated on GaAs nanopyramids. *Applied Physics Letters*, **2007**, 91, 133104	3.4	25
34	Room-temperature lasing at 1.82□m of GaInSb□AlGaSb quantum wells grown on GaAs substrates using an interfacial misfit array. *Applied Physics Letters*, **2007**, 91, 141102	3.4	18
33	Lasing characteristics of GaSb□GaAs self-assembled quantum dots embedded in an InGaAs quantum well. *Applied Physics Letters*, **2007**, 90, 261115	3.4	45
32	Controlled InAs quantum dot nucleation on faceted nanopatterned pyramids. *Applied Physics Letters*, **2007**, 90, 183103	3.4	43

31	Development of Electrically Driven Single-Quantum-Dot Device at Optical Fiber Bands. *Japanese Journal of Applied Physics*, **2006**, 45, 3621-3624	1.4	12
30	Formation and optical characteristics of strain-relieved and densely stacked GaSb□GaAs quantum dots. *Applied Physics Letters*, **2006**, 89, 203116	3.4	49
29	Improved surface morphology of stacked 1.3□m InAs□GaAs quantum dot active regions by introducing annealing processes. *Applied Physics Letters*, **2006**, 89, 081902	3.4	10
28	Ground-state lasing of stacked InAs□GaAs quantum dots with GaP strain-compensation layers grown by metal organic chemical vapor deposition. *Applied Physics Letters*, **2006**, 88, 221107	3.4	18
27	III/V ratio based selectivity between strained Stranski-Krastanov and strain-free GaSb quantum dots on GaAs. *Applied Physics Letters*, **2006**, 89, 161104	3.4	80
26	Room temperature continuous wave lasing in InAs quantum-dot microdisks with air cladding. *Optics Express*, **2005**, 13, 1615-20	3.3	35
25	1.28□m lasing from stacked InAs□GaAs quantum dots with low-temperature-grown AlGaAs cladding layer by metalorganic chemical vapor deposition. *Applied Physics Letters*, **2005**, 86, 053107	3.4	48
24	Tuning of g-factor in self-assembled In(Ga)As quantum dots through strain engineering. *Physical Review B*, **2005**, 71,	3.3	45
23	Highly uniform self-assembled InAs/GaAs quantum dots emitting at 1.3□m by metalorganic chemical vapor deposition. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 26, 77-80	3	2
22	InAs/AlAs quantum dots with InGaAs insertion layer: dependence of the indium composition and the thickness. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 26, 138-142	3	3
21	Lasing at 1.28 /spl mu/m of InAs-GaAs quantum dots with AlGaAs cladding layer grown by metal-organic chemical vapor deposition. *IEEE Journal of Selected Topics in Quantum Electronics*, **2005**, 11, 1027-1034	3.8	15
20	Observation of 1.55 □m Light Emission from InAs Quantum Dots in Photonic Crystal Microcavity. *Japanese Journal of Applied Physics*, **2005**, 44, 2579-2583	1.4	8
19	Narrow photoluminescence linewidth (. *Applied Physics Letters*, **2004**, 84, 2817-2819	3.4	51
18	Lasing characteristics of InAs quantum-dot microdisk from 3K to room temperature. *Applied Physics Letters*, **2004**, 85, 1326-1328	3.4	26
17	Improvement of the uniformity of self-assembled InAs quantum dots grown on InGaAs□GaAs by low-pressure metalorganic chemical vapor deposition. *Applied Physics Letters*, **2004**, 85, 2753-2755	3.4	18
16	Carrier relaxation in closely stacked InAs quantum dots. *Journal of Applied Physics*, **2004**, 96, 150-154	2.5	16
15	Enhanced Optical Properties of High-Density (>1011/cm2) InAs/AlAs Quantum Dots by Hydrogen Passivation. *Japanese Journal of Applied Physics*, **2004**, 43, 2118-2121	1.4	4
14	Numerical analysis of DFB lasing action in photonic crystals with quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 814-819	3	2

13	Structural and optical properties of high-density (>1011/cm2) InAs QDs with varying Al(Ga)As matrix layer thickness. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 279-284	3	6
12	Spectroscopy on single columns of vertically aligned InAs quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 409-413	3	3
11	Formation of ultrahigh-density InAs/AlAs quantum dots by metalorganic chemical vapor deposition. *Applied Physics Letters*, **2004**, 84, 1877-1879	3.4	19
10	Size, shape, and strain dependence of the g factor in self-assembled In(Ga)As quantum dots. *Physical Review B*, **2004**, 70,	3.3	95
9	Control of optical polarization anisotropy in edge emitting luminescence of InAs/GaAs self-assembled quantum dots. *Applied Physics Letters*, **2004**, 84, 1820-1822	3.4	48
8	InAs□GaAs self-assembled quantum-dot lasers grown by metalorganic chemical vapor deposition□Effects of postgrowth annealing on stacked InAs quantum dots. *Applied Physics Letters* , **2004**, 85, 1024-1026	3.4	41
7	Optical Characteristics of Two-Dimensional Photonic Crystal Slab Nanocavities with Self-Assembled InAs Quantum Dots for 1.3 □m Light Emission. *Japanese Journal of Applied Physics*, **2003**, 42, 2391-2394	1.4	4
6	Low threshold current operation of self-assembled InAs□GaAs quantum dot lasers by metal organic chemicalvapour deposition. *Electronics Letters*, **2003**, 39, 1130	1.1	35
5	Luminescence in excess of 1.5 □m at room-temperature of InAs quantum dots capped by a thin InGaAs strain-reducing layer. *Journal of Crystal Growth*, **2002**, 237-239, 1296-1300	1.6	21
4	Growth area control of InAs quantum dots for photonic-crystal-based optical devices by selective MOCVD **2001**,		2
3	Over 1.5 □m light emission from InAs quantum dots embedded in InGaAs strain-reducing layer grown by metalorganic chemical vapor deposition. *Applied Physics Letters*, **2001**, 78, 3469-3471	3.4	209
2	Area-Controlled Growth of InAs Quantum Dots by Selective MOCVD. *Japanese Journal of Applied Physics*, **2000**, 39, 2344-2346	1.4	4
1	Area-controlled growth of InAs quantum dots and improvement of density and size distribution. *Applied Physics Letters*, **2000**, 77, 3382-3384	3.4	36