Kouta Tateno

List of Publications by Year
in descending order

76 papers	1,184 citations	304743 22 h-index	414414 32 g-index
76 all docs	76 docs citations	76 times ranked	1143 citing authors

#	Article	IF	Citations
1	Movable high-Q nanoresonators realized by semiconductor nanowires on a Si photonic crystal platform. Nature Materials, 2014, 13, 279-285.	27.5	94
2	Telecom-band lasing in single InP/InAs heterostructure nanowires at room temperature. Science Advances, 2019, 5, eaat8896.	10.3	68
3	Continuous-wave operation and 10-Gb/s direct modulation of InAsP/InP sub-wavelength nanowire laser on silicon photonic crystal. APL Photonics, 2017, 2, .	5.7	60
4	VLS Growth of Alternating InAsP/InP Heterostructure Nanowires for Multiple-Quantum-Dot Structures. Nano Letters, 2012, 12, 2888-2893.	9.1	52
5	All-Optical InAsP/InP Nanowire Switches Integrated in a Si Photonic Crystal. ACS Photonics, 2020, 7, 1016-1021.	6.6	42
6	Synthesis of GaAs nanowires with very small diameters and their optical properties with the radial quantum-confinement effect. Applied Physics Letters, 2009, 95, 123104.	3.3	39
7	Optical interconnection using VCSELs and polymeric waveguide circuits. Journal of Lightwave Technology, 2000, 18, 1487-1492.	4.6	38
8	Growth of vertical-cavity surface-emitting laser structures on GaAs (311)B substrates by metalorganic chemical vapor deposition. Applied Physics Letters, 1997, 70, 3395-3397.	3.3	37
9	Carbon doping and etching effects of CBr4 during metalorganic chemical vapor deposition of GaAs and AlAs. Journal of Crystal Growth, 1997, 172, 5-12.	1.5	37
10	Flip-chip bonded 0.85-Î¼m bottom-emitting vertical-cavity laser array on an AlGaAs substrate. IEEE Photonics Technology Letters, 1996, 8, 1115-1117.	2.5	35
11	Subwavelength Nanowire Lasers on a Silicon Photonic Crystal Operating at Telecom Wavelengths. ACS Photonics, 2017, 4, 355-362.	6.6	35
12	Site-controlled InP nanowires grown on patterned Si substrates. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 133-137.	2.7	33
13	Optical beam direction compensating system for board-to-board free space optical interconnection in high-capacity ATM switch. Journal of Lightwave Technology, 1997, 15, 874-882.	4.6	32
14	GaAsâˆ•AlGaAs nanowires capped with AlGaAs layers on GaAs(311)B substrates. Applied Physics Letters, 2004, 85, 1808-1810.	3.3	32
15	Novel technology for hybrid integration of photonic and electronic circuits. IEEE Photonics Technology Letters, 1996, 8, 1507-1509.	2.5	30
16	Use of polyimide bonding for hybrid integration of a vertical cavity surface emitting laser on a silicon substrate. Electronics Letters, 1997, 33, 1148.	1.0	29
17	1.55 [micro sign]m vertical-cavity surface-emitting lasers with wafer-fused InGaAsP/InP-GaAs/AlAs DBRs. Electronics Letters, 1996, 32, 1483.	1.0	28
18	Vertically Aligned GaP/GaAs Core-Multishell Nanowires Epitaxially Grown on Si Substrate. Applied Physics Express, 2008, 1, 064003.	2.4	28

#	ARTICLE	IF	CITATIONS
19	Supercurrent through InAs nanowires with highly transparent superconducting contacts. Nanotechnology, 2011, 22, 445701.	2.6	25
20	Structural, Compositional, and Optical Characterizations of Vertically Aligned AlAs/GaAs/GaP Heterostructure Nanowires Epitaxially Grown on Si Substrate. Japanese Journal of Applied Physics, 2010, 49, 015001.	1.5	24
21	Growth of GaInAs/AlInAs Heterostructure Nanowires for Long-Wavelength Photon Emission. Nano Letters, 2008, 8, 3645-3650.	9.1	23
22	Au-free InAs nanowires grown in In-particle-assisted vapor-liquid-solid mode: growth, structure, and electrical property. AIP Advances, 2013, 3, .	1.3	23
23	Direct modulation of a single InP/InAs nanowire light-emitting diode. Applied Physics Letters, 2018, 112, .	3.3	21
24	Carbon doping and etching in GaxIn1â^'xAsyP1â^'y on GaAs substrates using CBr4 by metalorganic chemical vapor deposition. Journal of Electronic Materials, 1999, 28, 63-68.	2.2	19
25	Vertically Aligned InP Nanowires Grown via the Self-Assisted Vaporâ€"Liquidâ€"Solid Mode. Applied Physics Express, 2012, 5, 055201.	2.4	18
26	Encapsulated gate-all-around InAs nanowire field-effect transistors. Applied Physics Letters, 2013, 103, .	3.3	18
27	Bridging the Gap between the Nanometer-Scale Bottom-Up and Micrometer-Scale Top-Down Approaches for Site-Defined InP/InAs Nanowires. ACS Nano, 2015, 9, 10580-10589.	14.6	17
28	Anisotropy in Ultrafast Carrier and Phonon Dynamics in p-Type Heavily Doped Si. Japanese Journal of Applied Physics, 2009, 48, 100205.	1.5	16
29	Parallel-aligned GaAs nanowires with âŸ¨110âŸ© orientation laterally grown on [311]B substrates via the gold-catalyzed vaporâ€"liquidâ€"solid mode. Nanotechnology, 2010, 21, 095607.	2.6	16
30	Controlled 1.1â€"1.6<i>Î¼</i>m luminescence in gold-free multi-stacked InAs/InP heterostructure nanowires. Nanotechnology, 2015, 26, 115704.	2.6	16
31	Hybrid Nanowire Photodetector Integrated in a Silicon Photonic Crystal. ACS Photonics, 2020, 7, 3467-3473.	6.6	15
32	Direct measurement of sub-10 nm-level lateral distribution in tunneling-electron luminescence intensity on a cross-sectional 50-nm-thick AlAs layer by using a conductive transparent tip. Applied Physics Letters, 2001, 78, 3995-3997.	3.3	12
33	Multi-Quantum Structures of GaAs/AlGaAs Free-Standing Nanowires. Japanese Journal of Applied Physics, 2006, 45, 3568-3572.	1.5	11
34	Exciton and Biexciton Emissions from Single GaAs Quantum Dots in (Al,Ga)As Nanowires. Japanese Journal of Applied Physics, 2007, 46, 2578-2580.	1.5	11
35	Efficient gate control of spinâ€"orbit interaction in InSb nanowire FET with a nearby back gate. Applied Physics Express, 2019, 12, 117002.	2.4	11
36	Predominant Si Doping through Au Catalyst Particles in the Vaporâ^'Liquidâ^'Solid Mode over the Shell Layer via the Vapor-Phase Epitaxy Mode of InAs Nanowires. Journal of Physical Chemistry C, 2011, 115, 2923-2930.	3.1	9

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37	Topological Raman Band in the Carbon Nanohorn. Physical Review Letters, 2013, 111, 116801.	7.8	9
38	Diameter-tailored telecom-band luminescence in InP/InAs heterostructure nanowires grown on InP (111)B substrate with continuously-modulated diameter from microscale to nanoscale. Nanotechnology, 2018, 29, 155202.	2.6	9
39	Carbon and silicon doping in GaAs and AlAs grown on (3 1 1)-oriented GaAs substrates by metalorganic chemical vapor deposition. Journal of Crystal Growth, 1997, 181, 33-40.	1.5	8
40	Alternating InAsP/InP heterostructure nanowires grown with tertiary-butyl chloride. Nano Futures, 2018, 2, 045006.	2.2	8
41	Bending at Thinned GaAs Nodes in GaP-based Free-standing Nanowires. Japanese Journal of Applied Physics, 2007, 46, L780-L782.	1.5	7
42	Highly Selective ZEP/AlGaAs Etching for Photonic Crystal Structures Using Cl2/HI/Xe Mixed Plasma. Japanese Journal of Applied Physics, 2006, 45, L917-L919.	1.5	6
43	Characterization of Individual GaAs/AlGaAs Self-Standing Nanowires by Cathodoluminescence Technique using Transmission Electron Microscope. Japanese Journal of Applied Physics, 2008, 47, 6596-6600.	1.5	6
44	Time-Resolved Surface Photoelectron Spectroscopy of Photoexcited Electron and Hole Dynamics on GaAs Using 92 eV Laser Harmonic Source. Japanese Journal of Applied Physics, 2012, 51, 072401.	1.5	6
45	Dynamical observation of photo-Dember effect on semi-insulating GaAs using femtosecond core-level photoelectron spectroscopy. Applied Physics Express, 2015, 8, 022401.	2.4	6
46	Low-temperature formation of GeSn nanodots by Sn mediation. Japanese Journal of Applied Physics, 2019, 58, SDDG09.	1.5	6
47	Structural characterization of GaInNAs/GaAs double quantum well structures. Journal of Applied Physics, 2004, 95, 3443-3452.	2.5	5
48	X-ray diffraction analysis of GaInNAs double-quantum-well structures. Journal of Applied Crystallography, 2004, 37, 14-23.	4.5	5
49	Self-aligned gate-all-around InAs/InP coreâ€"shell nanowire field-effect transistors. Japanese Journal of Applied Physics, 2015, 54, 04DN04.	1.5	5
50	Nanowire-based telecom-band light-emitting diodes with efficient light extraction. Japanese Journal of Applied Physics, 2020, 59, 105003.	1.5	5
51	Etching effect of tertiary-butyl chloride during InP-nanowire growth. Journal of Crystal Growth, 2014, 402, 299-303.	1.5	4
52	Electrical tuning of the spinâ€"orbit interaction in nanowire by transparent ZnO gate grown by atomic layer deposition. Applied Physics Letters, 2021, 119, .	3.3	4
53	Time-Resolved Surface Photoelectron Spectroscopy of Photoexcited Electron and Hole Dynamics on GaAs Using 92 eV Laser Harmonic Source. Japanese Journal of Applied Physics, 2012, 51, 072401.	1.5	4
54	MOCVD growth on AlGaAs substrates. Journal of Crystal Growth, 1994, 145, 970-971.	1.5	3

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55	<110>-Oriented In0.04Ga0.96As Nanowires Laterally Grown on GaAs (311)B Substrate in Au-Catalyzed Vaporâ€"Liquidâ€"Solid Mode. Applied Physics Express, 2010, 3, 105002.	2.4	3
56	Doping-type dependence of phonon dephasing dynamics in Si. Applied Physics Letters, 2011, 98, 141904.	3.3	3
57	Flat-Top and Stacking-Fault-Free GaAs-Related Nanopillars Grown on Si Substrates. Journal of Nanotechnology, 2012, 2012, 1-8.	3.4	3
58	Growth of InP nanowires on graphene-covered Fe. Japanese Journal of Applied Physics, 2014, 53, 015504.	1.5	3
59	Novel Fabrication Technique of Suspended Nanowire Devices for Nanomechanical Applications. Physica Status Solidi (B): Basic Research, 2020, 257, 1900401.	1.5	3
60	Nanoholes in InP and C60Layers on GaAs Substrates by Using AlGaAs Nanowire Templates. Japanese Journal of Applied Physics, 2005, 44, L428-L431.	1.5	2
61	Study on the formation mechanism of bismuth-mediated Ge nanodots fabricated by vacuum evaporation. Japanese Journal of Applied Physics, 2019, 58, SDDG10.	1.5	2
62	Nanoholes Formed by Au Particles Digging into GaAs and InP Substrates by Reverse Vapor-Liquid-Solid Mechanism. Japanese Journal of Applied Physics, 2005, 44, L1553-L1555.	1.5	1
63	Distinctive Feature of Ripening During Growth Interruption of InGaAs Quantum Dot Epitaxy Using Bi as a Surfactant. Japanese Journal of Applied Physics, 2011, 50, 06GH07.	1.5	1
64	Wurtzite GaP nanowire grown by using tertiarybutylchloride and used to fabricate solar cell. Japanese Journal of Applied Physics, 2019, 58, 015004.	1.5	1
65	Hybrid-integrated smart pixels for MCM and board-level optical interconnects. , 1999, , .		1
66	InP/InAs Quantum Heterostructure Nanowires Toward Telecom-Band Nanowire Lasers. , 2021, , 433-454.		1
67	Enhanced emission of single quantum dot formed by interface fluctuations in photonic-crystal microcavities. Photonics and Nanostructures - Fundamentals and Applications, 2006, 4, 89-93.	2.0	0
68	X-ray Diffraction Measurement of GaInNAs/GaAs Double Quantum Well Structures with Novel Analysis Method for Broadening Factors. Japanese Journal of Applied Physics, 2006, 45, 7167-7174.	1.5	0
69	Photoluminescence study of bare freestanding gallium arsenide nanowires grown by vapor-liquid-solid method. , 2009, , .		0
70	Heterostructures in GaP-based free-standing nanowires on Si substrates. , 2009, , .		0
71	Real-Time Observation of Ultrafast Carrier and Phonon Dynamics in p-Type Silicon. The Review of Laser Engineering, 2010, 38, 130-135.	0.0	0
72	Deep-level transient spectroscopy characterization of In(Ga)As quantum dots fabricated using Bi as a surfactant. Japanese Journal of Applied Physics, 2014, 53, 06JG11.	1.5	0

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73	TBCl etching for uniform-diameter InAsP nanowires. , 2014, , .		0
74	Semiconductor Nanowire Induced Photonic-Crystal Nanocavity with Selectable Resonant Wavelength. , 2014, , .		0
75	Site-defined InP/InAs heterostructure nanowires with tunable diameter by in-situ diameter-tuning technique. , 2016, , .		0
76	InP/InAs Quantum Heterostructure Nanowires. , 2017, , 397-436.		0