Masato Takiguchi

List of Publications by Year in descending order

54	705	566801 15	552369 26
papers	citations	h-index	g-index

54	54	54	812
all docs	docs citations	times ranked	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.	13.3	94
2	Telecom-band lasing in single InP/InAs heterostructure nanowires at room temperature. Science Advances, 2019, 5, eaat8896.	4.7	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, .	3.0	60
4	All-Optical InAsP/InP Nanowire Switches Integrated in a Si Photonic Crystal. ACS Photonics, 2020, 7, 1016-1021.	3.2	42
5	Systematic study of thresholdless oscillation in high-Î² buried multiple-quantum-well photonic crystal nanocavity lasers. Optics Express, 2016, 24, 3441.	1.7	39
6	Subwavelength Nanowire Lasers on a Silicon Photonic Crystal Operating at Telecom Wavelengths. ACS Photonics, 2017, 4, 355-362.	3.2	35
7	Nanomanipulating and Tuning Ultraviolet ZnO-Nanowire-Induced Photonic Crystal Nanocavities. ACS Photonics, 2017, 4, 1040-1047.	3.2	30
8	Saturated absorption spectroscopy of acetylene molecules with an optical nanofiber. Optics Letters, 2011, 36, 1254.	1.7	24
9	Carbon nanotube/polymer composite coated tapered fiber for four wave mixing based wavelength conversion. Optics Express, 2013, 21, 3651.	1.7	24
10	Mid-Infrared Lasing of Single Wurtzite InAs Nanowire. Nano Letters, 2019, 19, 8059-8065.	4.5	22
11	Direct modulation of a single InP/InAs nanowire light-emitting diode. Applied Physics Letters, 2018, 112, .	1.5	21
12	Design for ultrahigh-Q position-controlled nanocavities of single semiconductor nanowires in two-dimensional photonic crystals. Journal of Applied Physics, 2012, 112, .	1.1	19
13	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.	7.3	17
14	Lasing thresholds and photon statistics in high- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î²</mml:mi></mml:math> buried multiple quantum well photonic crystal nanocavity lasers. Physical Review A, 2019, 99, .	1.0	17
15	Subliming GaN into Ordered Nanowire Arrays for Ultraviolet and Visible Nanophotonics. ACS Photonics, 2019, 6, 3321-3330.	3.2	17
16	Enhanced and suppressed spontaneous emission from a buried heterostructure photonic crystal cavity. Applied Physics Letters, 2013, 103, .	1.5	16
17	Design of nanowire-induced nanocavities in grooved 1D and 2D SiN photonic crystals for the ultra-violet and visible ranges. Optics Express, 2016, 24, 26792.	1.7	16
18	Hybrid Nanowire Photodetector Integrated in a Silicon Photonic Crystal. ACS Photonics, 2020, 7, 3467-3473.	3.2	15

#	Article	IF	Citations
19	Temperature-dependent spontaneous emission of PbS quantum dots inside photonic nanostructures at telecommunication wavelength. Optics Communications, 2017, 383, 555-560.	1.0	14
20	ZnO-Nanowire-Induced Nanocavities in Photonic Crystal Disks. ACS Photonics, 2019, 6, 1132-1138.	3.2	11
21	Low- and high-Î² lasers in the class-A limit: photon statistics, linewidth, and the laser-phase transition analogy. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 699.	0.9	11
22	Spontaneous emission inhibition of telecom-band quantum disks inside single nanowire on different substrates. Optics Express, 2014, 22, 11713.	1.7	10
23	Room temperature continuous-wave nanolaser diode utilized by ultrahigh-Q few-cell photonic crystal nanocavities. Optics Express, 2018, 26, 26598.	1.7	10
24	Nanowire photonics toward wide wavelength range and subwavelength confinement [Invited]. Optical Materials Express, 2020, 10, 2560.	1.6	10
25	Alternating InAsP/InP heterostructure nanowires grown with tertiary-butyl chloride. Nano Futures, 2018, 2, 045006.	1.0	8
26	Thermal effect of InP/InAs nanowire lasers integrated on different optical platforms. OSA Continuum, 2021, 4, 1838.	1.8	7
27	Designs toward synchronization of optical limit cycles with coupled silicon photonic crystal microcavities. Optics Express, 2020, 28, 27657.	1.7	7
28	Low-Threshold Lasing up to 360 K in All-Dielectric Subwavelength-Nanowire Nanocavities. ACS Photonics, 2020, 7, 1104-1110.	3.2	5
29	Emulating the local Kuramoto model with an injection-locked photonic crystal laser array. Scientific Reports, 2021, 11, 8587.	1.6	5
30	Nanowire-based telecom-band light-emitting diodes with efficient light extraction. Japanese Journal of Applied Physics, 2020, 59, 105003.	0.8	5
31	Optomechanical oscillator pumped and probed by optically two isolated photonic crystal cavity systems. Optics Express, 2016, 24, 28039.	1.7	4
32	All-Optical Switching using a III-V Nanowire Integrated Si Photonic Crystal Nanocavity. , 2019, , .		4
33	Photon-correlation measurements of stochastic limit cycles emerging from high- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Q</mml:mi></mml:math> nonlinear silicon photonic crystal microcavities. Physical Review A, 2020, 102, .	1.0	4
34	A hybrid nanowire photo-detector integrated in a silicon photonic crystal. , 2019, , .		4
35	All-optical dynamic modulation of spontaneous emission rate in hybrid optomechanical emitter-cavity systems. Optica, 2022, 9, 309.	4.8	4
36	Multi-solitons in a Dispersion Managed Fiber Laser using a Carbon Nanotube-Coated Taper Fiber. , 2012, , .		3

#	Article	IF	Citations
37	Position controlled nanocavity using a single nanowire in photonic crystals. , 2013, , .		1
38	Wurtzite GaP nanowire grown by using tertiarybutylchloride and used to fabricate solar cell. Japanese Journal of Applied Physics, 2019, 58, 015004.	0.8	1
39	10-Gb/s operation of a telecom-band InAsP/InP sub-wavelength nanowire laser on silicon photonic crystal. , 2016, , .		1
40	Controlling inhibited spontaneous emission of InAs/InP nanowires in different environment. , 2013, , .		0
41	Enhanced and suppressed spontaneous emission from a buried heterostructure photonic crystal cavity. , 2013, , .		0
42	Semiconductor Nanowire Induced Photonic-Crystal Nanocavity with Selectable Resonant Wavelength. , 2014, , .		0
43	Telecom-band sub-wavelength nanowire lasers on Si photonic crystal platform. , 2015, , .		0
44	Femto-joule-per-bit integrated nanophotonics and challenge for optical computation. , 2017, , .		0
45	Movable Nanowire Laser on Silicon Photonic Crystal Using Atomic Force Microscopy. , 2018, , .		0
46	Telecom-band lasing nanowires at room temperature. , 2019, , .		0
47	Excitonic nonlinear shifts in photonic crystal nanocavities with buried multiple quantum wells. Applied Physics Letters, 2021, 118, 111101.	1.5	0
48	Movable High-Q Nanocavity using III-V Nanowire on Silicon Photonic Crystals. , 2013, , .		0
49	Smooth lasing transition in high Î² buried multiple-quantum-well 2D photonic crystal lasers. , 2015, , .		0
50	Dynamic Control of Spontaneous Emission Rate by Optomechanical Cavity QED System. , 2019, , .		0
51	Nonlinear wavelength shift induced by exciton in buried multiple quantum wells in a photonic crystal cavity. , 2020, , .		0
52	Lasing up to T = 339 K in Subwavelength Nanowire-Induced Photonic Crystal Nanocavities. , 2020, , .		0
53	Designs toward synchronization of optical limit cycles with coupled silicon photonic crystal microcavities: erratum. Optics Express, 2020, 28, 32106.	1.7	0
54	Probing the Ginzburgâ€“Landau Potential for Lasers Using Higher-order Photon Correlations. Journal of the Physical Society of Japan, 2022, 91, .	0.7	0