Keijiro Suzuki

List of Publications by Year
in descending order

90 papers	1,445 citations	361413 20 h-index	345221 36 g-index
90 all docs	90 docs citations	90 times ranked	904 citing authors

#	ARTICLE	IF	CITATIONS
1	Wavelength (DE)MUX-and-Switch Based on 5.5%-Î"-Silica PLC/Silicon Photonics Hybrid Platform. Journal of Lightwave Technology, 2022, 40, 1810-1814.	4.6	2
2	Scalable and Fast Optical Circuit Switch Exploiting Colorless Coherent Detection. , 2022, , .		1
3	Path-Independent Insertion-Loss (PILOSS) 8 Ã— 8 Silicon Photonics Switch with <8 nsec Switching Time. , 2022, , .		4
4	Recent Advances in Large-scale Optical Switches Based on Silicon Photonics. , 2022, , .		3
5	Strictly Non-Blocking 8 Ã— 8 Silicon Photonics Switch Operating in the O-Band. Journal of Lightwave Technology, 2021, 39, 1096-1101.	4.6	6
6	Port-Alternated Switch-and-Select Optical Switches. Journal of Lightwave Technology, 2021, 39, 1102-1107.	4.6	2
7	Scalable and Fast Optical Circuit Switch Based on Colorless Coherent Detection: Design Principle and Experimental Demonstration. Journal of Lightwave Technology, 2021, 39, 2263-2274.	4.6	11
8	Silicon Based 1 Ã— <i>M</i> Wavelength Selective Switch Using Arrayed Waveguide Gratings With Fold-Back Waveguides. Journal of Lightwave Technology, 2021, 39, 2413-2420.	4.6	5
9	Large-Scale Optical Switches Based on Silicon Photonics. , 2021, , .		2
10	Fully-Loaded Operation of 0.29-pJ/bit Wall-plug Efficiency, 81.9-Tb/s Throughput 32 Ã— 32 Silicon Photonics Switch. , 2021, , .		4
11	Fast Optical Switch Utilizing Coherent Detection Enabled by Cooperative Filtering of Transmission Signal and Local Oscillator (LO) Wavelength Sourced from an LO Bank. , 2021, , .		2
12	5.5%-Î"-PLC/Silicon Photonics Hybrid Wavelength MUX/DEMUX-and-Switch Device. , 2021, , .		2
13	Design and verification of a LO bank enabled by fixed-wavelength lasers and fast tunable silicon ring filters for creating large scale optical switches. Optics Express, 2021, 29, 39930.	3.4	8
14	CMOS-Compatible Silicon Nitride Waveguide on Silicon Photonics Platform. , 2021, , .		1
15	Nonduplicate Polarization-Diversity 32 Ã— 32 Silicon Photonics Switch Based on a SiN/Si Double-Layer Platform. Journal of Lightwave Technology, 2020, 38, 226-232.	4.6	36
16	Low-Loss, Low-Crosstalk, and Large-Scale Optical Switch Based on Silicon Photonics. Journal of Lightwave Technology, 2020, 38, 233-239.	4.6	37
17	Wavelength-Division Demultiplexing Enhanced by Silicon-Photonic Tunable Filters in Ultra-Wideband Optical-Path Networks. Journal of Lightwave Technology, 2020, 38, 1002-1009.	4.6	13
18	Silicon Photonics Wavelength Selective Switch With Unlimited Free Spectral Range. Journal of Lightwave Technology, 2020, 38, 3268-3272.	4.6	9

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19	Large-scale silicon photonics switch based on 45-nm CMOS technology. Optics Communications, 2020, 466, 125677.	2.1	22
20	Gain-Integrated 8 Ã— 8 Silicon Photonics Multicast Switch With On-Chip 2 Ã— 4-ch. SOAs. Journal of Lightwave Technology, 2020, 38, 2930-2937.	4.6	6
21	2 Ã— 2 16-ch silicon photonics wavelength-selective switch based on waveguide gratings. Optics Express, 2020, 28, 26861.	3.4	10
22	Simple and fully CMOS-compatible low-loss fiber coupling structure for a silicon photonics platform. Optics Letters, 2020, 45, 2095.	3.3	22
23	Inter-layer light transition in hybrid III-V/Si waveguides integrated by Âµ-transfer printing. Optics Express, 2020, 28, 19772.	3.4	11
24	5.7-dB Fiber-to-Fiber Loss 8 Ã— 8 Silicon Photonics Switch with Port-Alternated Switch-and-Select Architecture. , 2020, , .		1
25	O-Band Strictly Non-Blocking 8 Ã— 8 Silicon-Photonics Switch. , 2020, , .		1
26	Scalable and Fast Optical Circuit Switch Created with Silicon-Photonic Tunable-Filter-based Local Oscillator Bank and Colorless Coherent Detection. , 2020, , .		2
27	Strictly Non-Blocking Silicon Photonics Switches. IEICE Transactions on Electronics, 2020, E103.C, 627-634.	0.6	1
28	A 300-mm-wafer silicon photonics technology for advanced information systems. , 2019, , .		0
29	Low-Crosstalk Bandwidth Expansion in $32 imes 32$ Silicon Optical Switch with Port-Exchanged Mach-Zehnder Switch. , 2019, , .		2
30	Characteristics of 1Ã—2 Silicon Wavelength Selective Switch Using Arrayed - Waveguide Gratings with Fold-Back Waveguides. , 2019, , .		0
31	Low-Insertion-Loss and Power-Efficient 32 Ã— 32 Silicon Photonics Switch With Extremely High-Î" Silica PLC Connector. Journal of Lightwave Technology, 2019, 37, 116-122.	4.6	102
32	Hybrid-Integration of SOA on Silicon Photonics Platform Based on Flip-Chip Bonding. Journal of Lightwave Technology, 2019, 37, 307-313.	4.6	54
33	SOA-Integrated Silicon Photonics Switch and Its Lossless Multistage Transmission of High-Capacity WDM Signals. Journal of Lightwave Technology, 2019, 37, 123-130.	4.6	23
34	High-Capacity Multi-Stage Operation of Polarization-Diversity Silicon Photonics 8 Ã— 8 Optical Switch. Journal of Lightwave Technology, 2019, 37, 131-137.	4.6	11
35	Ultra-compact silicon photonics switch with high-density thermo-optic heaters. Optics Express, 2019, 27, 10332.	3.4	18
36	SiN/Si double-layer platform for ultralow-crosstalk multiport optical switches. Optics Express, 2019, 27, 21130.	3.4	22

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37	Polarization-Diversity 32 x 32 Si Photonics Switch with Non-Duplicate Diversity Circuit in Double-Layer Platform. , 2019, , .		4
38	Low-Loss, Low-Crosstalk, and Large-Scale Silicon Photonics Switch. , 2019, , .		2
39	Fast Optical Circuit Switch Using Monolithically Integrated Silicon-Photonic Space Switch and Wavelength-Tuneable Filter. , 2018, , .		1
40	Switching Devices and Systems Based on Advanced Silicon Photonics. , 2018, , .		0
41	Ultra-Compact Silicon Photonics Switch with Ultra-Dense Thermo-Optic MZI Matrix and Multi-Layer Wiring. , 2018, , .		1
42	A Large-Scale Optical Circuit Switch Using Fast Wavelength-Tunable and Bandwidth-Variable Filters. IEEE Photonics Technology Letters, 2018, 30, 1439-1442.	2.5	11
43	Integrated silicon photonic wavelength-selective switch using wavefront control waveguides. Optics Express, 2018, 26, 13573.	3.4	15
44	Reconfigurable all-optical on-chip MIMO three-mode demultiplexing based on multi-plane light conversion. Optics Letters, 2018, 43, 1798.	3.3	32
45	Silicon photonics based 1 × 2 wavelength selective switch using fold-back arrayed-waveguide gratings. IEICE Electronics Express, 2018, 15, 20180532-20180532.	0.8	6
46	Silicon Photonic Multiport Optical Switch and Its Control Electronics. , 2018, , .		0
47	Fast Frequency Tuning of Silicon-Photonic Thermo-optic MZI Filters using â€œTurbo Pulseâ€•Method. , 2018, , .		9
48	Low Insertion Loss and Power Efficient 32 × 32 Silicon Photonics Switch with Extremely-High-Î" PLC Connector. , 2018, , .		12
49	Fully-Loaded and Cascaded Operation of Polarization-Diversity 8 × 8 Silicon Photonics Optical Switch with 11-ch × 32/44-Gbaud DP-16QAM WDM Transmission. , 2018, , .		2
50	32-Port 5.5%-Î" Silica-Based Connecting Device for Low-Loss Coupling between SMFs and Silicon Waveguides. , 2018, , .		9
51	Reconfigurable 3-Channel All-Optical MIMO Circuit on Silicon Based on Multi-Plane Light Conversion. , 2018, , .		2
52	Next-Generation ROADM Employing Bandwidth-Adaptive Silicon-Photonic Filters for Flexible Drop Operation. , 2018, , .		2
53	Silicon photonics C-band tunable filter for large-scale optical circuit switches. , 2017, , .		3
54	Silicon photonic bandwidth-tunable filter based on 16-tap finite impulse response. , 2017, , .		1

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55	2.5-dB loss, 100-nm Operating Bandwidth, and Low Power Consumption Strictly-Non-Blocking 8 Ã— 8 Si Switch. , 2017, , .		11
56	Ultralow-crosstalk and broadband multi-port optical switch using SiN/Si double-layer platform. , 2017, , .		5
57	Polarization diversity circuit based on silica waveguides and photonic crystal waveplates for a 4Ã—4 silicon optical switch. IEICE Electronics Express, 2017, 14, 20170252-20170252.	0.8	0
58	Broadband silicon photonics 8 Ã— 8 switch based on double-Machâ€"Zehnder element switches. Optics Express, 2017, 25, 7538.	3.4	62
59	Non-duplicate polarization-diversity 8 Ã— 8 Si-wire PILOSS switch integrated with polarization splitter-rotators. Optics Express, 2017, 25, 10885.	3.4	31
60	Silicon-Photonics Polarization-Insensitive Broadband Strictly-Non-Blocking 8 Ã— 8 Blade Switch. , 2017, , .		1
61	Accelerating Switching Speed of Thermo-optic MZI Silicon-Photonic Switches with â€œTurbo Pulseâ€•in PWM Control. , 2017, , .		21
62	Fast and Accurate Automatic Calibration of a 32 Ã— 32 Silicon Photonic Strictly-Non-Blocking Switch. , 2017, , .		9
63	Fully Integrated Non-Duplicate Polarization-Diversity 8 Ã— 8 Si-Wire PILOSS Switch. , 2017, , .		1
64	1Ã—2 Silicon Wavelength Selective Switch Using Fold Back Arrayed-Waveguide Gratings. , 2017, , .		4
65	Novel PILOSS Port Assignment for Compact Polarization-Diversity Si-Wire Optical Switch. , 2016, , .		0
66	Novel polarization diversity without switch duplication of a Si-wire PILOSS optical switch. Optics Express, 2016, 24, 6861.	3.4	15
67	Silicon optical switch monolithically integrated with driver electronics and its power efficient driving. , 2016, , .		0
68	Off-Chip Polarization-Diversity $4 \,, imes \,, 4$ Si-Wire Optical Switch With Digital DGD Compensation. IEEE Photonics Technology Letters, 2016, 28, 457-460.	2.5	17
69	Multi-port Optical Switch Based on Silicon Photonics. , 2016, , .		1
70	Ultra-compact 32 Ã— 32 strictly-non-blocking Si-wire PILOSS switch. , 2016, , .		0
71	Strictly Non-Blocking Silicon Photonics Switches. , 2016, , .		1
72	Evaluation of the phase error in Si-wire arrayed-waveguide gratings fabricated by ArF-immersion photolithography. IEICE Electronics Express, 2015, 12, 20150019-20150019.	0.8	3

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73	4Ã—4 Si-wire optical path switch with off-chip polarization diversity. , 2015, , .		2
74	Silicon photonics based switching technology for telecom, datacom and computercom. , 2015, , .		2
75	Ultra-high-extinction-ratio 2 Ã— 2 silicon optical switch with variable splitter. Optics Express, 2015, 23, 9086.	3.4	92
76	Ultra-compact 32 Ã— 32 strictly-non-blocking Si-wire optical switch with fan-out LGA interposer. Optics Express, 2015, 23, 17599.	3.4	161
77	32Ã—32 Strictly Non-Blocking Si-Wire Optical Switch on Ultra-Small Die of 11Ã—25 mm2. , 2015, , .		17
78	Compact 2 Ã— 2 polarization-diversity Si-wire switch. Optics Express, 2014, 22, 29818.	3.4	21
79	Ultra-compact 8 Ã— 8 strictly-non-blocking Si-wire PILOSS switch. Optics Express, 2014, 22, 3887.	3.4	105
80	Multiport optical switches integrated on Si photonics platform. IEICE Electronics Express, 2014, 11, 20142011-20142011.	0.8	4
81	Ultra-Compact 8 Ã— 8 Strictly Non-Blocking PILOSS Switch Based on Si-Wire. , 2014, , .		2
82	Photonic crystal slow light devices fabricated by CMOS-compatible process. IEICE Electronics Express, 2013, 10, 20132002-20132002.	0.8	9
83	Slow-light-based variable symbol-rate silicon photonics DQPSK receiver. Optics Express, 2012, 20, 4796.	3.4	45
84	Nonlinear enhancement in photonic crystal slow light waveguides fabricated using CMOS-compatible process. Optics Express, 2011, 19, 22208.	3.4	89
85	Nonlinear light propagation in chalcogenide photonic crystal slow light waveguides. Optics Express, 2010, 18, 26675.	3.4	39
86	Nonlinearity Enhancement with Low-Dispersion Slow-Light in Chalcogenide Glass Photonic Crystal Waveguide. , 2010, , .		0
87	Fabrication and characterization of chalcogenide glass photonic crystal waveguides. Optics Express, 2009, 17, 22393.	3.4	67
88	Simple and accurate measurement of the absorption coefficient of an absorbing plate by use of the Brewster angle. Optics Letters, 2006, 31, 909.	3.3	17
89	Single-mode Ag-As2Se3 strip-loaded waveguides for applications to all-optical devices. Optics Express, 2005, 13, 8634.	3.4	23
90	Polarization-Insensitive Local-Oscillator-Carrier Loopback Modulation for Cost-effective and High-port-count Wavelength Routing Optical Switch. Optics Letters, 0, , .	3.3	0