Michal Lipson

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8571304/publications.pdf

Version: 2024-02-01

346 papers	40,775 citations	2091 103 h-index	2896 196 g-index
351 all docs	351 docs citations	351 times ranked	21094 citing authors

#	Article	IF	Citations
1	Nano-spectroscopy of excitons in atomically thin transition metal dichalcogenides. Nature Communications, 2022, 13, 542.	5.8	23
2	Active tuning of dispersive waves in Kerr soliton combs. Optics Letters, 2022, 47, 2234.	1.7	9
3	Exploiting Ultra-Low Loss Silicon Nitride Platform for Various Applications (Invited). , 2022, , .		0
4	Measurements and Modeling of Atomicâ€Scale Sidewall Roughness and Losses in Integrated Photonic Devices. Advanced Optical Materials, 2022, 10, .	3.6	6
5	Exploiting Ultralow Loss Multimode Waveguides for Broadband Frequency Combs. Laser and Photonics Reviews, 2021, 15, .	4.4	64
6	Photonic-Chip-Based Nonlinear Compression of Picosecond Pulses. , 2021, , .		0
7	Fully Integrated Broad-Band High Power Frequency Comb Based on a Multimode Gain Chip. , 2021, , .		0
8	2D beam steerer based on metalens on silicon photonics. Optics Express, 2021, 29, 854.	1.7	39
9	Broadband Dual-Pumped Normal-GVD Kerr Combs. , 2021, , .		0
10	Narrow Linewidth, Widely Tunable Integrated Lasers from Visible to Near-IR. , 2021, , .		2
11	Parametric sideband generation in CMOS-compatible oscillators from visible to telecom wavelengths. Optica, 2021, 8, 316.	4.8	22
12	Methods to achieve ultra-high quality factor silicon nitride resonators. APL Photonics, 2021, 6, .	3.0	65
13	Conversion efficiency of soliton Kerr combs. Optics Letters, 2021, 46, 3657.	1.7	35
14	Soliton-effect compression of picosecond pulses on a photonic chip. Optics Letters, 2021, 46, 4706.	1.7	8
15	Dynamic control of photon lifetime for quantum random number generation. Optica, 2021, 8, 1458.	4.8	8
16	Millimeter-scale chipâ€"based supercontinuum generation for optical coherence tomography. Science Advances, 2021, 7, eabg8869.	4.7	19
17	Optical Modulator Based on Transition-Metal Dichalcogenides (TMDs). , 2021, , .		1
18	Optomechanical synchronization across multi-octave frequency spans. Nature Communications, 2021, 12, 5625.	5.8	10

#	Article	IF	Citations
19	Synchronization of nonsolitonic Kerr combs. Science Advances, 2021, 7, eabi4362.	4.7	23
20	High carrier mobility in graphene doped using a monolayer of tungsten oxyselenide. Nature Electronics, 2021, 4, 731-739.	13.1	41
21	Kerr Comb-Driven Silicon Photonic Transmitter. , 2021, , .		6
22	Robust, efficient, micrometre-scale phase modulators at visible wavelengths. Nature Photonics, 2021, 15, 908-913.	15.6	53
23	Fabrication-Robust Silicon Photonics Platform in Standard 220 nm Silicon Processes. , 2021, , .		4
24	Tunable single-mode chip-scale mid-infrared laser. Communications Physics, 2021, 4, .	2.0	14
25	Nanophotonic devices for power-efficient communications. , 2020, , 103-141.		1
26	Femtosecond exciton dynamics in WSe2 optical waveguides. Nature Communications, 2020, 11, 3567.	5.8	31
27	Demonstration of chip-based coupled degenerate optical parametric oscillators for realizing a nanophotonic spin-glass. Nature Communications, 2020, 11, 4119.	5.8	60
28	Near-Degenerate Quadrature-Squeezed Vacuum Generation on a Silicon-Nitride Chip. Physical Review Letters, 2020, 124, 193601.	2.9	87
29	Low-loss composite photonic platform based on 2D semiconductor monolayers. Nature Photonics, 2020, 14, 256-262.	15.6	140
30	Reconfigurable nanophotonic silicon probes for sub-millisecond deep-brain optical stimulation. Nature Biomedical Engineering, 2020, 4, 223-231.	11.6	101
31	Frequency-Domain Quantum Interference with Correlated Photons from an Integrated Microresonator. Physical Review Letters, 2020, 124, 143601.	2.9	41
32	Integrated near-field thermo-photovoltaics for heat recycling. Nature Communications, 2020, 11, 2545.	5.8	85
33	Robust Hybrid III-V/Si3N4 Laser with kHz-Linewidth and GHz-Pulling Range. , 2020, , .		6
34	PINE: Photonic Integrated Networked Energy efficient datacenters (ENLITENED Program) [Invited]. Journal of Optical Communications and Networking, 2020, 12, 443.	3.3	26
35	Performance scaling of a 10-GHz solid-state laser enabling self-referenced CEO frequency detection without amplification. Optics Express, 2020, 28, 12755.	1.7	19
36	Chip-scale blue light phased array. Optics Letters, 2020, 45, 1934.	1.7	93

#	Article	IF	Citations
37	Large-scale optical phased array using a low-power multi-pass silicon photonic platform. Optica, 2020, 7, 3.	4.8	202
38	Visible nonlinear photonics via high-order-mode dispersion engineering. Optica, 2020, 7, 135.	4.8	43
39	Ultra-Low Threshold Broadband Soliton Frequency Comb Generation. , 2020, , .		0
40	Universal Conversion Efficiency Scaling with Free-Spectral-Range for Soliton Kerr Combs. , 2020, , .		2
41	On-Chip Synchronization of Kerr Frequency Combs. , 2020, , .		0
42	Robust Miniature Pure-Phase Modulators at ƙ = 488 nm. , 2020, , .		1
43	Turn-Key, High-Efficiency Kerr Comb Source. , 2020, , .		0
44	High-performance integrated graphene electro-optic modulator at cryogenic temperature. Nanophotonics, 2020, 10, 99-104.	2.9	26
45	Observation of Arnold Tongues in Coupled Soliton Kerr Frequency Combs. Physical Review Letters, 2019, 123, 153901.	2.9	26
46	3D microphotonic probe for high resolution deep tissue imaging. Optics Express, 2019, 27, 22352.	1.7	9
47	On-chip tunable photonic delay line. APL Photonics, 2019, 4, 090803.	3.0	35
48	Real-time vibrations of a carbon nanotube. Nature, 2019, 566, 89-93.	13.7	58
49	Strong Nonlinear Coupling in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Si</mml:mi></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub><mml:msub><mml:mrow><mml:mi mathvariant="normal">N</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> Ring Resonator. Physical Review Letters, 2019, 122, 153906.	2.9	32
50	Photonic-chip-based frequency combs. Nature Photonics, 2019, 13, 158-169.	15.6	618
51	How lasing happens in CsPbBr3 perovskite nanowires. Nature Communications, 2019, 10, 265.	5.8	168
52	Patterning metal contacts on monolayer MoS2 with vanishing Schottky barriers using thermal nanolithography. Nature Electronics, 2019, 2, 17-25.	13.1	113
53	High Quality Factor PECVD Si3N4 Ring Resonators Compatible with CMOS Process. , 2019, , .		3
54	Chip-based frequency comb sources for optical coherence tomography. Optics Express, 2019, 27, 19896.	1.7	34

#	Article	IF	Citations
55	Plug-and-play fiber to waveguide connector. Optics Express, 2019, 27, 20305.	1.7	28
56	Microfluidic mid-infrared spectroscopy via microresonator-based dual-comb source. Optics Letters, 2019, 44, 4259.	1.7	12
57	Turn-key, high-efficiency Kerr comb source. Optics Letters, 2019, 44, 4475.	1.7	104
58	Microfluidic Mid-Infrared Spectroscopy via Microresonator-Based Dual-Comb Source. , 2019, , .		0
59	Micron-scale, Efficient, Robust Phase Modulators in the Visible. , 2019, , .		2
60	Sub-Harmonic Synchronization of Kerr Frequency Combs. , 2019, , .		0
61	Broadband enhancement of thermal radiation. Optics Express, 2019, 27, A818.	1.7	0
62	On-chip dual-comb source for spectroscopy. Science Advances, 2018, 4, e1701858.	4.7	256
63	Silicon Photonics Integration for Future Generation Optical Network. , 2018, , .		4
64	Synchronization of coupled optical microresonators. Nature Photonics, 2018, 12, 688-693.	15.6	89
65	Battery-operated integrated frequency comb generator. Nature, 2018, 562, 401-405.	13.7	453
66	Carrier envelope offset detection via simultaneous supercontinuum and second-harmonic generation in a silicon nitride waveguide. Optics Letters, 2018, 43, 4627.	1.7	40
67	Counter-rotating cavity solitons in a silicon nitride microresonator. Optics Letters, 2018, 43, 547.	1.7	38
68	Silicon-chip-based mid-infrared dual-comb spectroscopy. Nature Communications, 2018, 9, 1869.	5.8	234
69	Nanophotonic lithium niobate electro-optic modulators. Optics Express, 2018, 26, 1547.	1.7	439
70	On-chip platform for a phased array with minimal beam divergence and wide field-of-view. Optics Express, 2018, 26, 2528.	1.7	76
71	Dissipative Kerr solitons in optical microresonators. Science, 2018, 361, .	6.0	1,069
72	Microphotonic needle for minimally invasive endoscopic imaging with sub-cellular resolution. Scientific Reports, 2018, 8, 10756.	1.6	8

#	Article	IF	Citations
73	Gas-Phase Microresonator-Based Comb Spectroscopy without an External Pump Laser. ACS Photonics, 2018, 5, 2780-2785.	3.2	23
74	Silicon Optical Phased Array with Grating Lobe-Free Beam Formation Over 180 Degree Field of View. , 2018, , .		35
75	Quantum interference between transverse spatial waveguide modes. Nature Communications, 2017, 8, 14010.	5.8	57
76	Breather soliton dynamics in microresonators. Nature Communications, 2017, 8, 14569.	5.8	122
77	Hot Carrier-Based Near-Field Thermophotovoltaic Energy Conversion. ACS Nano, 2017, 11, 3001-3009.	7.3	64
78	High-performance near-field thermophotovoltaics for waste heat recovery. Nano Energy, 2017, 41, 344-350.	8.2	115
79	Photonic Needles for Light Delivery in Deep Tissue-like Media. Scientific Reports, 2017, 7, 5627.	1.6	3
80	Competition between Raman and Kerr effects in microresonator comb generation. Optics Letters, 2017, 42, 2786.	1.7	56
81	Ultra-low-loss on-chip resonators with sub-milliwatt parametric oscillation threshold. Optica, 2017, 4, 619.	4.8	370
82	Low-loss silicon platform for broadband mid-infrared photonics. Optica, 2017, 4, 707.	4.8	148
83	On-chip thermo-optic tuning of suspended microresonators. Optics Express, 2017, 25, 12109.	1.7	27
84	Compact narrow-linewidth integrated laser based on a low-loss silicon nitride ring resonator. Optics Letters, 2017, 42, 4541.	1.7	115
85	Coherent, directional supercontinuum generation. Optics Letters, 2017, 42, 4466.	1.7	32
86	Integrated Graphene Electro-Optic Phase Modulator. , 2017, , .		7
87	Microresonator-based high-resolution gas spectroscopy. Optics Letters, 2017, 42, 4442.	1.7	39
88	Dynamics of mode-coupling-induced microresonator frequency combs in normal dispersion. Optics Express, 2016, 24, 28794.	1.7	47
89	Thermally controlled comb generation and soliton modelocking in microresonators. Optics Letters, 2016, 41, 2565.	1.7	295
90	Quantum random number generator using a microresonator-based Kerr oscillator. Optics Letters, 2016, 41, 4194.	1.7	44

#	Article	IF	Citations
91	Gigahertz frequency comb offset stabilization based on supercontinuum generation in silicon nitride waveguides. Optics Express, 2016, 24, 11043.	1.7	88
92	Mode-locked mid-infrared frequency combs in a silicon microresonator. Optica, 2016, 3, 854.	4.8	149
93	Coherent mid-infrared frequency combs in silicon-microresonators in the presence of Raman effects. Optics Express, 2016, 24, 13044.	1.7	41
94	Tunable squeezing using coupled ring resonators on a silicon nitride chip. Optics Letters, 2016, 41, 223.	1.7	32
95	Near-field radiative heat transfer between parallel structures in the deep subwavelength regime. Nature Nanotechnology, 2016, 11, 515-519.	15.6	189
96	Integrated Nanophotonic Platform for High Bandwidth and High Resolution Optogenetic Excitation. , 2016, , .		1
97	Silicon-Microresonator-Based Mid-Infrared Dual-Comb Source. , 2016, , .		8
98	On-Chip Optical Squeezing. Physical Review Applied, 2015, 3, .	1.5	165
99	Synchronization and Phase Noise Reduction in Micromechanical Oscillator Arrays Coupled through Light. Physical Review Letters, 2015, 115, 163902.	2.9	140
100	Scalable Integration of Long-Lived Quantum Memories into a Photonic Circuit. Physical Review X, 2015, 5, .	2.8	74
101	Octave-spanning coherent supercontinuum generation in a silicon nitride waveguide. Optics Letters, 2015, 40, 5117.	1.7	153
102	Broadband mid-infrared frequency comb generation in a Si_3N_4 microresonator. Optics Letters, 2015, 40, 4823.	1.7	417
103	Dual-pumped degenerate Kerr oscillator in a silicon nitride microresonator. Optics Letters, 2015, 40, 5267.	1.7	66
104	Silicon-chip mid-infrared frequency comb generation. Nature Communications, 2015, 6, 6299.	5.8	312
105	Graphene electro-optic modulator with 30â€…GHz bandwidth. Nature Photonics, 2015, 9, 511-514.	15.6	666
106	Master-Slave Locking of Optomechanical Oscillators over a Long Distance. Physical Review Letters, 2015, 114, 113602.	2.9	37
107	Tunable frequency combs based on dual microring resonators. Optics Express, 2015, 23, 21527.	1.7	94
108	Controlling thermo-optic response in microresonators using bimaterial cantilevers. Optics Letters, 2015, 40, 103.	1.7	10

#	Article	IF	Citations
109	On-chip mode-division multiplexing switch. Optica, 2015, 2, 530.	4.8	257
110	Optical nonlinearities in high-confinement silicon carbide waveguides. Optics Letters, 2015, 40, 4138.	1.7	59
111	Fast Wavelength Locking of a Microring Resonator. IEEE Photonics Technology Letters, 2014, 26, 2365-2368.	1.3	15
112	High RF carrier frequency modulation in silicon resonators by coupling adjacent free-spectral-range modes. Optics Letters, 2014, 39, 1799.	1.7	29
113	Strong polarization mode coupling in microresonators. Optics Letters, 2014, 39, 5134.	1.7	93
114	Microresonator-based comb generation without an external laser source. Optics Express, 2014, 22, 1394.	1.7	44
115	On-chip frequency comb generation at visible wavelengths via simultaneous second- and third-order optical nonlinearities. Optics Express, 2014, 22, 26517.	1.7	73
116	Demonstration of Strong Near-Field Radiative Heat Transfer between Integrated Nanostructures. Nano Letters, 2014, 14, 6971-6975.	4.5	138
117	Eliminating anchor loss in optomechanical resonators using elastic wave interference. Applied Physics Letters, 2014, 105, .	1.5	18
118	Octave-spanning mid-infrared supercontinuum generation in silicon nanowaveguides. Optics Letters, 2014, 39, 4518.	1.7	114
119	High Coupling Efficiency Etched Facet Tapers in Silicon Waveguides. IEEE Photonics Technology Letters, 2014, 26, 2380-2382.	1.3	98
120	Nanophotonic trapping for precise manipulation of biomolecular arrays. Nature Nanotechnology, 2014, 9, 448-452.	15.6	138
121	WDM-compatible mode-division multiplexing on a silicon chip. Nature Communications, 2014, 5, 3069.	5.8	604
122	Intermodulation Crosstalk Characteristics of WDM Silicon Microring Modulators. IEEE Photonics Technology Letters, 2014, 26, 1478-1481.	1.3	28
123	Non-reciprocal phase shift induced by an effective magnetic flux for light. Nature Photonics, 2014, 8, 701-705.	15.6	295
124	Fast wavelength locking of a microring resonator. , 2014, , .		4
125	Bandwidth shaping of microresonator-based frequency combs via dispersion engineering. Optics Letters, 2014, 39, 3535.	1.7	106
126	New CMOS-compatible platforms based on silicon nitride and Hydex for nonlinear optics. Nature Photonics, 2013, 7, 597-607.	15.6	1,042

#	Article	IF	Citations
127	Overcoming SiN film stress limitations for high quality factor ring resonators. , 2013, , .		0
128	High Q SiC microresonators. Optics Express, 2013, 21, 16882.	1.7	63
129	Linearized silicon modulator based on a ring assisted Mach Zehnder inteferometer. Optics Express, 2013, 21, 22549.	1.7	73
130	Overcoming Si_3N_4 film stress limitations for high quality factor ring resonators. Optics Express, 2013, 21, 22829.	1.7	176
131	Athermal silicon microring resonators with titanium oxide cladding. Optics Express, 2013, 21, 26557.	1.7	147
132	Deposited low temperature silicon GHz modulator. Optics Express, 2013, 21, 26688.	1.7	16
133	Modelocking and femtosecond pulse generation in chip-based frequency combs. Optics Express, 2013, 21, 1335.	1.7	217
134	FPGA controlled microring based tunable add-drop filter. , 2013, , .		2
135	Back-End Deposited Silicon Photonics for Monolithic Integration on CMOS. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 8200207-8200207.	1.9	54
136	Transformation inverse design. Optics Express, 2013, 21, 14223.	1.7	67
137	Breakthroughs in Nonlinear Silicon Photonics 2011. IEEE Photonics Journal, 2012, 4, 601-606.	1.0	11
138	Thermal stabilization of a microring modulator using feedback control. Optics Express, 2012, 20, 27999.	1.7	121
139	Wavelength conversion and unicast of 10-Gb/s data spanning up to 700 nm using a silicon nanowaveguide. Optics Express, 2012, 20, 6488.	1.7	17
140	Error-free transmission of microring-modulated BPSK. Optics Express, 2012, 20, 8681.	1.7	37
141	High quality factor and high confinement silicon resonators using etchless process. Optics Express, 2012, 20, 21341.	1.7	67
142	Electro-optofluidics: achieving dynamic control on-chip. Optics Express, 2012, 20, 22314.	1.7	24
143	Broadband parametric frequency comb generation with a 1-Î¼m pump source. Optics Express, 2012, 20, 26935.	1.7	33
144	Athermal silicon microring electro-optic modulator. Optics Letters, 2012, 37, 2253.	1.7	54

#	Article	IF	Citations
145	Asynchronous single-shot characterization of high-repetition-rate ultrafast waveforms using a time-lens-based temporal magnifier. Optics Letters, 2012, 37, 4892.	1.7	68
146	Chip-based frequency combs with sub-100 GHz repetition rates. Optics Letters, 2012, 37, 875.	1.7	68
147	Power insensitive silicon microring resonators. Optics Letters, 2012, 37, 590.	1.7	36
148	UWB monocycle pulse generation using two-photon absorption in a silicon waveguide. Optics Letters, 2012, 37, 551.	1.7	21
149	Experimental characterization of the optical-power upper bound in a silicon microring modulator. , 2012, , .		16
150	4$,imes,$44 Gb/s Packet-Level Switching in a Second-Order Microring Switch. IEEE Photonics Technology Letters, 2012, 24, 1555-1557.	1.3	18
151	Tailored resonance dependence on input optical power in silicon microring resonators. , 2012, , .		0
152	Nonlinear silicon photonics. , 2012, , .		0
153	Characterization of Nonlinear Optical Crosstalk in Silicon Nanowaveguides. IEEE Photonics Technology Letters, 2012, 24, 185-187.	1.3	15
154	Near-Field Radiative Cooling of Nanostructures. Nano Letters, 2012, 12, 4546-4550.	4.5	184
155	Synchronization of Micromechanical Oscillators Using Light. Physical Review Letters, 2012, 109, 233906.	2.9	315
156	High-Performance Silicon-Nitride-Based Multiple-Wavelength Source. IEEE Photonics Technology Letters, 2012, 24, 1375-1377.	1.3	67
157	Colorless Optical Network Unit Based on Silicon Photonic Components for WDM PON. IEEE Photonics Technology Letters, 2012, 24, 1372-1374.	1.3	16
158	Broadband Silicon Photonic Packet-Switching Node for Large-Scale Computing Systems. IEEE Photonics Technology Letters, 2012, 24, 688-690.	1.3	11
159	40-Gb/s DPSK Data Transmission Through a Silicon Microring Switch. IEEE Photonics Technology Letters, 2012, 24, 473-475.	1.3	30
160	All-Optical Control of an Individual Resonance in a Silicon Microresonator. Physical Review Letters, 2012, 108, 223907.	2.9	37
161	Broadband Silicon Photonic Electrooptic Switch for Photonic Interconnection Networks. IEEE Photonics Technology Letters, 2011, 23, 504-506.	1.3	61
162	10-Gb/s Access Network Architecture Based on Micro-Ring Modulators With Colorless ONU and Mitigated Rayleigh Backscattering. IEEE Photonics Technology Letters, 2011, 23, 914-916.	1.3	2

#	Article	IF	Citations
163	DPSK Transmission Through Silicon Microring Switch for Photonic Interconnection Networks. IEEE Photonics Technology Letters, 2011, 23, 1103-1105.	1.3	11
164	Continuous Wavelength Conversion of 40-Gb/s Data Over 100 nm Using a Dispersion-Engineered Silicon Waveguide. IEEE Photonics Technology Letters, 2011, 23, 73-75.	1.3	24
165	On-chip spectrophotometry for bioanalysis using microring resonators. Biomedical Optics Express, 2011, 2, 271.	1.5	55
166	Broadband tuning of optomechanical cavities. Optics Express, 2011, 19, 2782.	1.7	52
167	High quality factor etchless silicon photonic ring resonators. Optics Express, 2011, 19, 6284.	1.7	96
168	Harmonic generation in silicon nitride ring resonators. Optics Express, 2011, 19, 11415.	1.7	255
169	Simultaneous wavelength conversion of ASK and DPSK signals based on four-wave-mixing in dispersion engineered silicon waveguides. Optics Express, 2011, 19, 12172.	1.7	13
170	Silicon-based monolithic optical frequency comb source. Optics Express, 2011, 19, 14233.	1.7	162
171	Scalable 3D dense integration of photonics on bulk silicon. Optics Express, 2011, 19, 17758.	1.7	116
172	Direction-dependent optical modes in nanoscale Silicon waveguides. Optics Express, 2011, 19, 18380.	1.7	3
173	CMOS compatible reconfigurable filter for high bandwidth non-blocking operation. Optics Express, 2011, 19, 20115.	1.7	21
174	Integrated Luneburg lens via ultra-strong index gradient on silicon. Optics Express, 2011, 19, 20122.	1.7	52
175	A hybrid optical packet and wavelength selective switching platform for high-performance data center networks. Optics Express, 2011, 19, 24258.	1.7	30
176	Absorption bleaching by stimulated emission in erbium-doped silicon-rich silicon nitride waveguides. Optics Letters, 2011, 36, 4.	1.7	7
177	Waveguide-integrated telecom-wavelength photodiode in deposited silicon. Optics Letters, 2011, 36, 52.	1.7	58
178	Continuous-wave mid-infrared frequency conversion in silicon nanowaveguides. Optics Letters, 2011, 36, 1263.	1.7	62
179	All-optical switching of a single resonance in silicon ring resonators. Optics Letters, 2011, 36, 1413.	1.7	60
180	Octave-spanning frequency comb generation in a silicon nitride chip. Optics Letters, 2011, 36, 3398.	1.7	452

#	Article	IF	Citations
181	Introduction to the Special Issue on Silicon Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 4-5.	1.9	8
182	CMOS-compatible multiple-wavelength oscillator for on-chip optical interconnects. Nature Photonics, 2010, 4, 37-40.	15.6	847
183	Intermodulation crosstalk from silicon microring modulators in wavelength-parallel photonic networks-on-chip. , 2010, , .		7
184	Broadband wavelength conversion of 10-Gb/s DPSK signals in silicon waveguides. , 2010, , .		0
185	Focusing light in a curved-space. Optics Express, 2010, 18, 3181.	1.7	28
186	CMOS-compatible athermal silicon microring resonators. Optics Express, 2010, 18, 3487.	1.7	149
187	Ultrashort free-carrier lifetime in low-loss silicon nanowaveguides. Optics Express, 2010, 18, 3582.	1.7	176
188	Oxidized Silicon-On-Insulator (OxSOI) from bulk silicon: a new photonic platform. Optics Express, 2010, 18, 5785.	1.7	37
189	Temporal-imaging system with simple external-clock triggering. Optics Express, 2010, 18, 14262.	1.7	37
190	First demonstration of long-haul transmission using silicon microring modulators. Optics Express, 2010, 18, 15544.	1.7	52
191	Ultra high bandwidth WDM using silicon microring modulators. Optics Express, 2010, 18, 16858.	1.7	71
192	Wavelength multicasting in silicon photonic nanowires. Optics Express, 2010, 18, 18047.	1.7	77
193	Ultra-low voltage, ultra-small mode volume silicon microring modulator. Optics Express, 2010, 18, 18235.	1.7	86
194	High bandwidth on-chip silicon photonic interleaver. Optics Express, 2010, 18, 23079.	1.7	75
195	Wide-bandwidth continuously tunable optical delay line using silicon microring resonators. Optics Express, 2010, 18, 26525.	1.7	139
196	On-chip supercontinuum optical trapping and resonance excitation of microspheres. Optics Letters, 2010, 35, 1626.	1.7	11
197	Sub-nm resolution cavity enhanced microspectrometer. Optics Express, 2010, 18, 102.	1.7	78
198	Ultralong continuously tunable parametric delays via a cascading discrete stage. Optics Express, 2010, 18, 333.	1.7	27

#	Article	IF	Citations
199	Minimizing temperature sensitivity of silicon Mach-Zehnder interferometers. Optics Express, 2010, 18, 1879.	1.7	108
200	Frequency conversion over two-thirds of an octave in silicon nanowaveguides. Optics Express, 2010, 18, 1904.	1.7	136
201	Broadband Operation of Nanophotonic Router for Silicon Photonic Networks-on-Chip. IEEE Photonics Technology Letters, 2010, 22, 926-928.	1.3	88
202	Demonstration of 1.28-Tb/s transmission in next-generation nanowires for photonic networks-on-chip. , 2010, , .		3
203	Magnetic Field Measurements in Wire-Array Z-Pinches using Magneto-Optically Active Waveguides. , 2009, , .		2
204	Optical Nonreciprocity in Optomechanical Structures. Physical Review Letters, 2009, 102, 213903.	2.9	207
205	CMOS-compatible waveguiding platform on bulk silicon. , 2009, , .		0
206	Optical manipulation of nanoparticles and biomolecules in sub-wavelength slot waveguides. Nature, 2009, 457, 71-75.	13.7	744
207	Controlling photonic structures using optical forces. Nature, 2009, 462, 633-636.	13.7	332
208	Silicon nanostructure cloak operating at optical frequencies. Nature Photonics, 2009, 3, 461-463.	15.6	587
209	Ultrafast waveform compression using a time-domain telescope. Nature Photonics, 2009, 3, 581-585.	15.6	158
210	Purification and mechanical nanosizing of Eu-doped GaN. Journal of Crystal Growth, 2009, 311, 4402-4407.	0.7	14
211	Nonlinear optics in photonics nanowires. , 2009, , .		1
212	Study of nanosecond pulsed magnetic fields using temporally resolved Faraday rotation through a magneto-optical waveguide. Optics Letters, 2009, 34, 1009.	1.7	6
213	On-chip generation of high-intensity short optical pulses using dynamic microcavities. Optics Letters, 2009, 34, 2315.	1.7	10
214	Ultrafast Measurements Using a Silicon- Chip-Based Temporal Lens. Optics and Photonics News, 2009, 20, 40.	0.4	13
215	Slot waveguides with polycrystalline silicon for electrical injection. Optics Express, 2009, 17, 1527.	1.7	51
216	High-speed optical sampling using a silicon-chip temporal magnifier. Optics Express, 2009, 17, 4324.	1.7	125

#	Article	IF	Citations
217	Low loss etchless silicon photonic waveguides. Optics Express, 2009, 17, 4752.	1.7	240
218	Deposited silicon high-speed integrated electro-optic modulator. Optics Express, 2009, 17, 5118.	1.7	106
219	High-resolution spectroscopy using a frequency magnifier. Optics Express, 2009, 17, 5691.	1.7	40
220	Silicon-waveguide-coupled high-Q chalcogenide microspheres. Optics Express, 2009, 17, 5998.	1.7	50
221	1 Î¼s tunable delay using parametric mixing and optical phase conjugation in Si waveguides. Optics Express, 2009, 17, 7004.	1.7	37
222	Ultra-low capacitance and high speed germanium photodetectors on silicon. Optics Express, 2009, 17, 7901.	1.7	168
223	High confinement micron-scale silicon nitride high Q ring resonator. Optics Express, 2009, 17, 11366.	1.7	265
224	Integrated GHz silicon photonic interconnect with micrometer-scale modulators and detectors. Optics Express, 2009, 17, 15248.	1.7	183
225	1 Î¼s tunable delay using parametric mixing and optical phase conjugation in Si waveguides: reply. Optics Express, 2009, 17, 16029.	1.7	2
226	Spectral phase conjugation via temporal imaging. Optics Express, 2009, 17, 20605.	1.7	43
227	Broadband hitless silicon electro-optic switch â€¨for on-chip optical networks. Optics Express, 2009, 17, 22271.	1.7	121
228	High-Speed 2$, imes ,$2 Switch for Multiwavelength Silicon-Photonic Networksâ€“On-Chip. Journal of Lightwave Technology, 2009, 27, 2900-2907.	2.7	67
229	50 Gbit/s wavelength division multiplexing using silicon microring modulators. , 2009, , .		4
230	Large bandwidth continuously tunable delay using silicon microring resonators. , 2009, , .		0
231	Broadband hitless silicon electro-optic switch for optical networkson-chip. , 2009, , .		1
232	Silicon photonic interconnect with micrometer-scale devices. , 2009, , .		4
233	Silicon-chip-based ultrafast optical oscilloscope. Nature, 2008, 456, 81-84.	13.7	442
234	Signal regeneration using low-power four-wave mixing on silicon chip. Nature Photonics, 2008, 2, 35-38.	15.6	350

#	Article	IF	Citations
235	All-Optical Comb Switch for Multiwavelength Message Routing in Silicon Photonic Networks. IEEE Photonics Technology Letters, 2008, 20, 767-769.	1.3	159
236	High Performance Photonics on Silicon. , 2008, , .		2
237	High-speed all-optical modulation using polycrystalline silicon microring resonators. Applied Physics Letters, 2008, 92, .	1.5	68
238	Optical time lens based on four-wave mixing on a silicon chip. Optics Letters, 2008, 33, 1047.	1.7	199
239	High-speed electro-optic control of the optical quality factor of a silicon microcavity. Optics Letters, 2008, 33, 1644.	1.7	61
240	Wide temperature range operation of micrometer-scale silicon electro-optic modulators. Optics Letters, 2008, 33, 2185.	1.7	97
241	Tunable superluminal propagation on a silicon microchip. Optics Letters, 2008, 33, 2928.	1.7	29
242	Nonlinear optics in photonic nanowires. Optics Express, 2008, 16, 1300.	1.7	363
243	On-chip gas detection in silicon optical microcavities. Optics Express, 2008, 16, 4296.	1.7	296
244	Ultra-low power parametric frequency conversion in a silicon microring resonator. Optics Express, 2008, 16, 4881.	1.7	247
245	Large tunable delays using parametric mixing and phase conjugation in Si nanowaveguides. Optics Express, 2008, 16, 10349.	1.7	40
246	High performance germanium photodetectors integrated on submicron silicon waveguides by low temperature wafer bonding. Optics Express, 2008, 16, 11513.	1.7	136
247	Cavity-enhanced on-chip absorption spectroscopy using microring resonators. Optics Express, 2008, 16, 11930.	1.7	183
248	Optical 4x4 hitless slicon router for optical networks-on-chip (NoC). Optics Express, 2008, 16, 15915.	1.7	355
249	First-principle derivation of gain in high-index-contrast waveguides. Optics Express, 2008, 16, 16659.	1.7	184
250	Low modal volume dipole-like dielectric slab resonator. Optics Express, 2008, 16, 17689.	1.7	52
251	High-Speed 2×2 switch for multi-wavelength message routing in on-chip silicon photonic networks. , 2008, , .		6
252	Thermally active 4×4 non-blocking switch for networks-on-chip. , 2008, , .		8

#	Article	IF	Citations
253	250 Gb/s multi-wavelength operation of microring resonator-based broadband comb switch for silicon photonic networks-on-chip. , 2008, , .		3
254	Low-power optical regeneration using four-wave mixing in a silicon chip. , 2008, , .		5
255	Demonstration of All-Optical Multi-Wavelength Message Routing for Silicon Photonic Networks. , 2008, , .		19
256	Time lens for ultrafast signal measurements based on four-wave mixing in silicon. , 2008, , .		0
257	Highly efficient, ultra low dark current germanium photodetectors integrated on submicron silicon waveguides. , 2008, , .		0
258	Ultra fast electro-optic tuning of optical quality factor. , 2008, , .		0
259	Ultra-low-power parametric frequency conversion of high data rates on-chip. , 2008, , .		1
260	Optical trapping platform based on highly confining silicon waveguiding structures with microfluidics. , 2008, , .		0
261	Optical pulse compression of a pulse trapped in an optical microcavity. , 2008, , .		0
262	On-chip high-order frequency filter with fabrication error recovery. , 2008, , .		0
263	Tunable superluminal pulse propagation on a silicon chip. , 2008, , .		0
264	Slot waveguide cavities for electrically-pumped silicon-based light sources. , 2008, , .		1
265	Far-field control of the radiative lifetime of an individual optical nanocavity. , 2007, , .		0
266	Integrated Optical Regenerator on a Silicon Chip. , 2007, , .		1
267	Polysilicon-on-Insulator Photonic Devices. , 2007, , .		1
268	Magnetic Field Measurements in Wire-Array Z-Pinches Using Magnetoactive Materials. , 2007, , .		0
269	Breaking the Tradeoff between Speed and Extinction Ratio in Silicon Electro-optic Modulators. , 2007, , .		1
270	Silicon Microring Resonator-Based Broadband Comb Switch for Wavelength-Parallel Message Routing. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	10

#	Article	IF	Citations
271	Inducing Photonic Transitions between Discrete Modes in a Microcavity. , 2007, , .		2
272	All Optical Ultrafast Broadband Silicon Switch. , 2007, , .		1
273	Demonstrated 4Ã—4 Gbps Silicon Photonic Integrated Parallel Electronic to WDM Interface. , 2007, , .		5
274	Role of radiation and surface plasmon in optical interactions between nano-objects on metal surface. , 2007, , .		0
275	Compact bandwidth-tunable microring resonators. Optics Letters, 2007, 32, 3361.	1.7	154
276	Multiple-wavelength integrated photonic networks based on microring resonator devices. Journal of Optical Networking, 2007, 6, 112.	2.5	61
277	125 Gbit/s carrier-injection-based silicon micro-ring silicon modulators. Optics Express, 2007, 15, 430.	1.7	797
278	All-optical logic based on silicon micro-ring resonators. Optics Express, 2007, 15, 924.	1.7	427
279	Compact electro-optic modulator on silicon-on-insulator substrates using cavities with ultra-small modal volumes. Optics Express, 2007, 15, 3140.	1.7	117
280	All-optical regeneration on a silicon chip. Optics Express, 2007, 15, 7802.	1.7	64
281	All-optical compact silicon comb switch. Optics Express, 2007, 15, 9600.	1.7	111
282	Broad-band continuous-wave parametric wavelength conversion in silicon nanowaveguides. Optics Express, 2007, 15, 12949.	1.7	295
283	PINIP based high-speed high-extinction ratio micron-size silicon electrooptic modulator. Optics Express, 2007, 15, 13035.	1.7	59
284	Optofluidic trapping and transport on solid core waveguides within a microfluidic device. Optics Express, 2007, 15, 14322.	1.7	242
285	Polysilicon photonic resonators for large-scale 3D integration of optical networks. Optics Express, 2007, 15, 17283.	1.7	76
286	Horizontal single and multiple slot waveguides: optical transmission at Î» = 1550 nm. Optics Express, 2007, 15, 17967.	1.7	202
287	High Speed Carrier Injection 18 Gb/s Silicon Micro-ring Electro-optic Modulator. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	56
288	12.5 Gbit/s silicon micro-ring silicon modulators. , 2007, , .		15

#	Article	IF	Citations
289	Characterization of a 4$,imes,$4 Gb/s Parallel Electronic Bus to WDM Optical Link Silicon Photonic Translator. IEEE Photonics Technology Letters, 2007, 19, 456-458.	1.3	29
290	An exercise in self control. Nature Photonics, 2007, 1, 18-19.	15.6	17
291	Changing the colour of light in a silicon resonator. Nature Photonics, 2007, 1, 293-296.	15.6	268
292	Breaking the delay-bandwidth limit in a photonic structure. Nature Physics, 2007, 3, 406-410.	6.5	307
293	Compact Electro-Optic Modulators on a Silicon Chip. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1520-1526.	1.9	113
294	Luminescence dynamics and waveguide applications of europium doped gallium nitride powder. Applied Physics Letters, 2006, 89, 111912.	1.5	8
295	Experimental realization of an on-chip all-optical analogue to electromagnetically induced transparency. , 2006, , .		1
296	Spontaneous Emergence of Periodic Patterns in a Biologically Inspired Simulation of Photonic Structures. Physical Review Letters, 2006, 96, 143904.	2.9	55
297	Carrier-induced optical bistability in silicon ring resonators. Optics Letters, 2006, 31, 341.	1.7	209
298	Subwavelength confinement in an integrated metal slot waveguide on silicon. Optics Letters, 2006, 31, 2133.	1.7	244
299	Transmission of high-data-rate optical signals through a micrometer-scale silicon ring resonator. Optics Letters, 2006, 31, 2701.	1.7	64
300	All-optical slow-light on a photonic chip. Optics Express, 2006, 14, 2317.	1.7	159
301	Tailored anomalous group-velocity dispersion in silicon channel waveguides. Optics Express, 2006, 14, 4357.	1.7	373
302	High confinement suspended micro-ring resonators in silicon-on-insulator. Optics Express, 2006, 14, 6259.	1.7	86
303	Direct measurement of tunable optical delays on chip analogue to electromagnetically induced transparency. Optics Express, 2006, 14, 6463.	1.7	96
304	High confinement in silicon slot waveguides with sharp bends. Optics Express, 2006, 14, 9197.	1.7	108
305	Cascaded silicon micro-ring modulators for WDM optical interconnection. Optics Express, 2006, 14, 9431.	1.7	252
306	Imaging highly confined modes in sub-micron scale silicon waveguides using Transmission-based Near-field Scanning Optical Microscopy. Optics Express, 2006, 14, 10588.	1.7	48

#	Article	IF	Citations
307	Generation of correlated photons in nanoscale silicon waveguides. Optics Express, 2006, 14, 12388.	1.7	317
308	Role of radiation and surface plasmon polaritons in the optical interactions between a nano-slit and a nano-groove on a metal surface. Optics Express, 2006, 14, 12629.	1.7	50
309	Broad-band optical parametric gain on a silicon photonic chip. Nature, 2006, 441, 960-963.	13.7	794
310	Photolithographic patterning of organic electronic materials. Organic Electronics, 2006, 7, 22-28.	1.4	201
311	Electron-beam Directed Layer-by-Layer Assembly of Dendrimer Scaffold for Biomolecule Patterning. Materials Research Society Symposia Proceedings, 2006, 921, 1.	0.1	0
312	Broad-bandwidth optical gain and efficient wavelength conversion in silicon waveguides. , 2006, , .		0
313	Origin of Shape Dependence in Nano-Aperture Transmission. , 2006, , .		0
314	Raman-induced slow-light on a silicon photonic chip. , 2006, , .		0
315	Imaging Sub-micron Scale Light Confinement in Silicon Waveguides with Apertureless Transmission-based Near-field Scanning Optical Microscopy. , 2006, , .		0
316	High data rate signal integrity in micron-scale silicon ring resonators. , 2006, , .		4
317	Metal slot waveguide with silicon for deep subwavelength confinement and on-chip integration. , 2006, , .		0
318	Experimental Realization of an On-Chip All-Optical Analogue to Electromagnetically Induced Transparency. Physical Review Letters, 2006, 96, 123901.	2.9	626
319	Tailored anomalous group-velocity dispersion in silicon waveguides. , 2006, , .		1
320	WDM Silicon Modulators Based on Micro-ring Resonators. , 2006, , .		4
321	Suspended Silicon-On-Insulator ring resonators. , 2006, , .		0
322	Switching light on a silicon chip. Optical Materials, 2005, 27, 731-739.	1.7	27
323	Micrometre-scale silicon electro-optic modulator. Nature, 2005, 435, 325-327.	13.7	2,133
324	Green emission from Er-doped GaN powder. Applied Physics Letters, 2005, 86, 191918.	1.5	28

#	Article	IF	Citations
325	Luminescence and Lifetime Properties of Europium Doped Gallium Nitride Compatible with CMOS Technology. Materials Research Society Symposia Proceedings, 2005, 866, 71.	0.1	2
326	Electrically driven silicon resonant light emitting device based on slot-waveguide. Optics Express, 2005, 13, 10092.	1.7	151
327	Demonstration of high Raman gain in a submicrometer-size silicon-on-insulator waveguide. Optics Letters, 2005, 30, 35.	1.7	79
328	Ultrafast integrated semiconductor optical modulator based on the plasma-dispersion effect. Optics Letters, 2005, 30, 2403.	1.7	25
329	Micrometer-scale all-optical wavelength converter on silicon. Optics Letters, 2005, 30, 2733.	1.7	89
330	Ultrafast all-optical modulation on a silicon chip. Optics Letters, 2005, 30, 2891.	1.7	124
331	Ultrasmall Mode Volumes in Dielectric Optical Microcavities. Physical Review Letters, 2005, 95, 143901.	2.9	225
332	Raman Gain in Silicon Using Highly Confined Waveguide Structure. Materials Research Society Symposia Proceedings, 2004, 832, 146.	0.1	0
333	All-optical control of light on a silicon chip. Nature, 2004, 431, 1081-1084.	13.7	1,366
334	Er2O3 for high-gain waveguide amplifiers. Journal of Electronic Materials, 2004, 33, 809-814.	1.0	39
335	Nanocavity in a silicon waveguide for ultrasensitive nanoparticle detection. Applied Physics Letters, 2004, 85, 4854-4856.	1.5	68
336	Overcoming the limitations of microelectronics using Si nanophotonics: solving the coupling, modulation and switching challenges. Nanotechnology, 2004, 15, S622-S627.	1.3	60
337	Time-resolved study of Raman gain in highly confined silicon-on-insulator waveguides. Optics Express, 2004, 12, 4437.	1.7	125
338	Guiding and confining light in void nanostructure. Optics Letters, 2004, 29, 1209.	1.7	1,561
339	Experimental demonstration of guiding and confining light in nanometer-size low-refractive-index material. Optics Letters, 2004, 29, 1626.	1.7	604
340	Optical bistability on a silicon chip. Optics Letters, 2004, 29, 2387.	1.7	328
341	All-optical switching on a silicon chip. Optics Letters, 2004, 29, 2867.	1.7	205
342	Nanotaper for compact mode conversion. Optics Letters, 2003, 28, 1302.	1.7	766

#	Article	IF	Citations
343	3C-SiC modulator for high-speed integrated photonics. Materials Research Society Symposia Proceedings, 2003, 799, 158.	0.1	2
344	Light Guiding in Low Index Materials using High-Index-Contrast Waveguides. Materials Research Society Symposia Proceedings, 2003, 797, 178.	0.1	10
345	Photoluminescence enhancement of colloidal quantum dots embedded in a monolithic microcavity. Applied Physics Letters, 2003, 82, 4032-4034.	1.5	65
346	Silicon Micro-Photonic Structure for Ultra-Sensitive Biosensing. Materials Research Society Symposia Proceedings, 2003, 797, 31.	0.1	0