Integrating photonics with silicon nanoelectronics for t a chip

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Citation Report

#	Article	IF	CITATIONS
1	A Novel photodetector with the embedded field-induced p-n photodiode in the SOI Substrate. , 2018, , .		0
2	Strategy Design for Controlling On-Chip Photonic Circuits. , 2018, , .		0
3	A general strategy for printing colloidal nanomaterials into one-dimensional micro/nanolines. Nanoscale, 2018, 10, 22374-22380.	2.8	20
4	The Largest Cognitive Systems Will be Optoelectronic. , 2018, , .		3
5	An integrated microring circuit design for optoelectronic transformer applications. Results in Physics, 2018, 11, 706-708.	2.0	0
6	Open-Access Silicon Photonics: Current Status and Emerging Initiatives. Proceedings of the IEEE, 2018, 106, 2313-2330.	16.4	164
7	Monolithic III–nitride photonic circuit towards on-chip optical interconnection. Applied Physics Express, 2018, 11, 122201.	1.1	14
8	Tunable Optical Delay Line Based on SOI Contradirectional Couplers with Sidewall-Rnodulated Bragg Gratings. , 2018, , .		2
9	1.5 <i>μ</i> m quantum-dot diode lasers directly grown on CMOS-standard (001) silicon. Applied Physics Letters, 2018, 113, .	1.5	50
10	Meditation mathematical formalism and Lorentz factor calculation based-on Mindfulness foundation. Results in Physics, 2018, 11, 1034-1038.	2.0	2
11	Propulsion and assembly of remotely powered p-type silicon microparticles. APL Materials, 2018, 6, 121102.	2.2	2
12	Silicon Photonics in Optical Coherent Systems. Proceedings of the IEEE, 2018, 106, 2291-2301.	16.4	73
13	Characteristics of an on-chip polariton successively filtered circuit. Results in Physics, 2018, 11, 410-413.	2.0	5
14	Optical Conductivity of Two-Dimensional Silicon: Evidence of Dirac Electrodynamics. Nano Letters, 2018, 18, 7124-7132.	4.5	34
15	Angular-momentum nanometrology in an ultrathin plasmonic topological insulator film. Nature Communications, 2018, 9, 4413.	5.8	61
16	Grating-Assisted Fiber to Chip Coupling for SOI Photonic Circuits. Applied Sciences (Switzerland), 2018, 8, 1142.	1.3	38
17	On-chip polariton generation using an embedded nanograting microring circuit. Results in Physics, 2018, 10, 913-916.	2.0	6
18	Towards systems-on-a-chip. Nature Photonics, 2018, 12, 311-311.	15.6	3

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		CITATION R	EPORT	
#	Article		IF	CITATIONS
19	On-chip silicon photonic signaling and processing: a review. Science Bulletin, 2018, 63	1267-1310.	4.3	118
20	Towards heterogeneous integration of optical isolators and circulators with lasers on s [Invited]. Optical Materials Express, 2018, 8, 2471.	licon	1.6	43
21	Electronics and photonics united. Nature, 2018, 556, 316-318.		13.7	11
22	Tackling multicore DSP programming. , 2018, , .			1
23	Nano-capacitor-like model using light trapping in plasmonic island embedded microring Results in Physics, 2018, 10, 727-730.	; system.	2.0	5
24	Programmable multifunctional integrated nanophotonics. Nanophotonics, 2018, 7, 13	51-1371.	2.9	60
25	Electro-Optic Ripple-Carry Adder in Integrated Silicon Photonics for Optical Computing of Selected Topics in Quantum Electronics, 2018, 24, 1-10.	. IEEE Journal	1.9	40
26	Building blocks of silicon photonics. Semiconductors and Semimetals, 2019, 101, 1-41		0.4	3
27	A 4×25-Gbps Monolithically Integrated Si Photonic WDM Transmitter with Ring Mod	ulators. , 2019, , .		3
28	PWMâ€Driven Thermally Tunable Silicon Microring Resonators: Design, Fabrication, an Characterization. Laser and Photonics Reviews, 2019, 13, 1800275.	d	4.4	33
29	Fully integrated CMOS-compatible polarization analyzer. Nanophotonics, 2019, 8, 467	-474.	2.9	28
30	Dynamic Coupling Effect in Z ² -FET and Its Application for Photodetection the Electron Devices Society, 2019, 7, 846-854.	. IEEE Journal of	1.2	10
31	THz-to-optical conversion in wireless communications using an ultra-broadband plasmo modulator. Nature Photonics, 2019, 13, 519-524.	onic	15.6	170
32	Advanced 22nm FD-SOI Technolgy With Metal Gate Last Process. , 2019, , .			0
33	CMOS-Compatible Optical Phased Array Powered by a Monolithically-Integrated Erbiun of Lightwave Technology, 2019, 37, 5982-5987.	ו Laser. Journal	2.7	38
34	Silicon optical sensor arrays for environmental and health applications. Current Opinio Environmental Science and Health, 2019, 10, 22-29.	n in	2.1	7
35	Monolithic integration of deep ultraviolet LED with a multiplicative photoelectric conve Energy, 2019, 66, 104181.	rter. Nano	8.2	17
36	Fabrication and characterization of Schottky diode on ultra thin ZnO film and its applic detection. Materials Research Express, 2019, 6, 116445.	ation for UV	0.8	8

ARTICLE IF CITATIONS # Finite Element Stress Model of Direct Band Gap Ge Implementation Method Compatible with Si Process. 37 0.4 0 Advances in Condensed Matter Physics, 2019, 2019, 1-9. Nonvolatile integrated optical phase shifter with flash memory technology. Applied Physics Express, 1.1 2019, 12, 102<mark>005.</mark> Photovoltaic field effect transistor (PVFET)-based Ge/Si photodetector for low-power silicon 39 0.6 2 photonics. AIP Advances, 2019, 9, . Roadmap on material-function mapping for photonic-electronic hybrid neural networks. APL 2.2 Materials, 2019, 7, . NIR-Emitting Erbium/Oxygen-Doped Silicon by Self-Assembled Techniques., 2019,,. 42 0 Waveguide-Integrated, Plasmonic Enhanced Graphene Photodetectors. Nano Letters, 2019, 19, 7632-7644. 4.5 High-Performance O-Band Quantum-Dot Semiconductor Optical Amplifiers Directly Grown on a CMOS 44 3.2 27 Compatible Silicon Substrate. ACS Photonics, 2019, 6, 2523-2529. Nanosystems, Edge Computing, and the Next Generation Computing Systems. Sensors, 2019, 19, 4048. 2.1 Piezophototronic gated optofluidic logic computations empowering intrinsic reconfigurable 46 5.8 29 switches. Nature Communications, 2019, 10, 4381. Michelson interferometer modulator based on hybrid silicon and lithium niobate platform. APL Photonics, 2019, 4, . New Molecular-Based Materials for Enabling Electro-Optical Bistability in the Silicon Photonics 48 0 Platform., 2019, , . The impact of strained layers on current and emerging semiconductor laser systems. Journal of 1.1 Applied Physics, 2019, 125, . Dramatically Enhanced Broadband Photodetection by Dual Inversion Layers and Fowler–Nordheim 50 7.3 11 Tunneling. ÁCS Nano, 2019, 13, 2289-2297. An Ultrasensitive Silicon Photonic Ion Sensor Enabled by 2D Plasmonic Molybdenum Oxide. Small, 5.2 2019, 15, e1805251. 100 Gb/s Silicon Photonic WDM Transmitter with Misalignment-Tolerant Surface-Normal Optical 52 1.4 4 Interfaces. Micromachines, 2019, 10, 336. Van der Waals materials integrated nanophotonic devices [Invited]. Optical Materials Express, 2019, 9, 58 384. WDM-compatible multimode optical switching system-on-chip. Nanophotonics, 2019, 8, 889-898. 54 42 2.9 An array of SiGe nanodisks with Ge quantum dots on bulk Si substrates demonstrating a unique 2.8 light–matter interaction associated with dual coupling. Nanoscale, 2019, 11, 15487-15496.

#	Article	IF	CITATIONS
56	Heteroepitaxial Integration of Mid-Infrared InAsSb Light Emitting Diodes on Silicon. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	9
57	Broadband and High Extinction Ratio Mode Converter Using the Tapered Hybrid Plasmonic Waveguide. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	18
58	All-Silicon Spectrally Resolved Interferometric Circuit for Multiplexed Diagnostics: A Monolithic Lab-on-a-Chip Integrating All Active and Passive Components. ACS Photonics, 2019, 6, 1694-1705.	3.2	14
59	Optoelectronic platform and technology. Frontiers of Information Technology and Electronic Engineering, 2019, 20, 439-457.	1.5	6
60	Guiding and controlling light at nanoscale in field effect transistor. Applied Physics B: Lasers and Optics, 2019, 125, 1.	1.1	2
61	Highâ€5peed and Highâ€Responsivity Hybrid Silicon/Blackâ€Phosphorus Waveguide Photodetectors at 2µm. Laser and Photonics Reviews, 2019, 13, 1900032.	4.4	91
62	Large-Scale Optical Neural Networks Based on Photoelectric Multiplication. Physical Review X, 2019, 9,	2.8	179
63	Broadband photon squeezing control using microring embedded gold grating for LiFi-quantum link. SN Applied Sciences, 2019, 1, 1.	1.5	2
64	Elimination of anti-phase boundaries in a GaAs layer directly-grown on an on-axis Si(001) substrate by optimizing an AlGaAs nucleation layer. Japanese Journal of Applied Physics, 2019, 58, SBBE07.	0.8	15
65	Foundry-Enabled Scalable All-to-All Optical Interconnects Using Silicon Nitride Arrayed Waveguide Router Interposers and Silicon Photonic Transceivers. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-9.	1.9	20
66	Time-resolved imaging of mode-conversion process of terahertz transients in subwavelength waveguides. Frontiers of Physics, 2019, 14, 1.	2.4	4
67	Strain-Induced Enhancement of Electroluminescence from Highly Strained Germanium Light-Emitting Diodes. ACS Photonics, 2019, 6, 915-923.	3.2	21
68	Ultrahigh photosensitive organic phototransistors by photoelectric dual control. Journal of Materials Chemistry C, 2019, 7, 4725-4732.	2.7	22
69	Silicon photonic biosensors. IET Optoelectronics, 2019, 13, 48-54.	1.8	11
70	Blue Electroluminescent Al2O3/Tm2O3 Nanolaminate Films Fabricated by Atomic Layer Deposition on Silicon. Nanomaterials, 2019, 9, 413.	1.9	14
71	Development of transmon qubits solely from optical lithography on 300 mm wafers. Quantum Science and Technology, 2019, 4, 025012.	2.6	9
72	Achieving wide-range photonics applications based on a compact grating-assisted silicon micro-ring resonator. Optik, 2019, 183, 887-896.	1.4	8
73	Machine Learning With Neuromorphic Photonics. Journal of Lightwave Technology, 2019, 37, 1515-1534.	2.7	129

#	Article	IF	CITATIONS
74	Controlling phonons and photons at the wavelength scale: integrated photonics meets integrated phononics. Optica, 2019, 6, 213.	4.8	125
75	Siliconâ€Compatible Photodetectors: Trends to Monolithically Integrate Photosensors with Chip Technology. Advanced Functional Materials, 2019, 29, 1808182.	7.8	198
76	Integrated photonics chip with InGaN/GaN light-emitting diode and bended waveguide for visible-light communications. Optics and Laser Technology, 2019, 114, 103-109.	2.2	12
77	Low-loss, compact, spot-size-converter based vertical couplers for photonic integrated circuits. Journal Physics D: Applied Physics, 2019, 52, 214001.	1.3	9
78	Near-field photonic cooling through control of the chemical potential of photons. Nature, 2019, 566, 239-244.	13.7	96
79	Monolithic high-speed transmitter enabled by bicmos-plasmonic platform. , 2019, , .		3
80	Microring Circulator Embedded Plasmonic Island for Multi-probe Bio-cell Sensors. IOP Conference Series: Materials Science and Engineering, 2019, 536, 012009.	0.3	0
81	MODULATION ON SILICON FOR DATACOM: PAST, PRESENT, AND FUTURE (INVITED REVIEW). Progress in Electromagnetics Research, 2019, 166, 119-145.	1.6	13
82	A Novel 2D Plasmonic MoO3 Driven pH Sensor on Silicon Photonics Platform. , 2019, , .		0
83	Photodiode with Low Dark Current Built in Silicon-on-Insulator by Electrostatic Doping. , 2019, , .		0
84	Dielectric and Plasmonic Vivaldi Antennas for On-Chip Wireless Communication. , 2019, , .		7
85	Amplitude and Phase Control of Guided Modes Excitation from a Single Dipole Source: Engineering Far― and Nearâ€Field Directionality. Laser and Photonics Reviews, 2019, 13, 1900250.	4.4	17
86	Adaptive Patterning of Optical and Electrical Fan-Out for Photonic Chip Packaging. , 2019, , .		4
87	Low-Damage Reactive Ion Etching of Nanoplasmonic Waveguides with Ultrathin Noble Metal Films. Applied Sciences (Switzerland), 2019, 9, 4441.	1.3	4
88	Exploiting supramolecular assemblies for filterless ultra-narrowband organic photodetectors with inkjet fabrication capability. Journal of Materials Chemistry C, 2019, 7, 14639-14650.	2.7	24
89	Silicon Waveguides for High-Speed Optical Transmissions and Parametric Conversion Around 2 \$~mu\$ m. IEEE Photonics Technology Letters, 2019, 31, 165-168.	1.3	14
90	MIMO multi-channels for simultaneous electro-optic distributed sensors. Results in Physics, 2019, 12, 943-946.	2.0	1
91	Structural Engineering of Si/TiO ₂ /P3HT Heterojunction Photodetectors for a Tunable Response Range. ACS Applied Materials & Interfaces, 2019, 11, 3241-3250.	4.0	30

#	ARTICLE	IF	CITATIONS
92	A 128 Gb/s PAM4 Silicon Microring Modulator With Integrated Thermo-Optic Resonance Tuning. Journal of Lightwave Technology, 2019, 37, 110-115.	2.7	171
93	Electroâ€optic conversion circuit incorporating a fiber optic loop for light fidelity upâ€down link use. Microwave and Optical Technology Letters, 2019, 61, 526-531.	0.9	9
94	Design Investigation of 2Â×Â2 Mach–Zehnder Optical Switch Based on a Metal–Polymer–Silicon Hybrid Plasmonic Waveguide. Fiber and Integrated Optics, 2019, 38, 21-42.	1.7	4
95	MoS ₂ /Silicon-on-Insulator Heterojunction Field-Effect-Transistor for High-Performance Photodetection. IEEE Electron Device Letters, 2019, 40, 423-426.	2.2	21
96	Anapole Modes in Hollow Nanocuboid Dielectric Metasurfaces for Refractometric Sensing. Nanomaterials, 2019, 9, 30.	1.9	56
97	286 nm monolithic multicomponent system. Japanese Journal of Applied Physics, 2019, 58, 010909.	0.8	3
98	Microring Distributed Sensors Using Space-Time Function Control. IEEE Sensors Journal, 2020, 20, 799-805.	2.4	11
99	Monolithic Integration of CMOS Temperature Control Circuit and Si ₃ N ₄ Microring Filters for Wavelength Stabilization Within Ultra Wide Operating Temperature Range. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-7.	1.9	3
100	Neuromorphic Photonics With Coherent Linear Neurons Using Dual-IQ Modulation Cells. Journal of Lightwave Technology, 2020, 38, 811-819.	2.7	56
101	Photonic Multiply-Accumulate Operations for Neural Networks. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-18.	1.9	166
102	Double Vision Model Using Space-Time Function Control within Silicon Microring System. Silicon, 2020, 12, 2635-2640.	1.8	3
103	Broadband Bias-Magnet-Free On-Chip Optical Isolators With Integrated Thin Film Polarizers. Journal of Lightwave Technology, 2020, 38, 827-833.	2.7	15
104	Fluorinated polycarbonate photoresists with adjustable double bond density for electro-optic switch applications by directly written method. Polymer, 2020, 186, 121987.	1.8	0
105	Nonlinear Dark-Field Imaging of One-Dimensional Defects in Monolayer Dichalcogenides. Nano Letters, 2020, 20, 284-291.	4.5	34
106	3Dâ€Printed Scanningâ€Probe Microscopes with Integrated Optical Actuation and Readâ€Out. Small, 2020, 16, e1904695.	5.2	22
107	Nonlinear performance and small signal model of junction-less microring modulator. Optics Communications, 2020, 459, 124984.	1.0	7
108	Comprehensive Study on Chip-Integrated Germanium Pin Photodetectors for Energy-Efficient Silicon Interconnects. IEEE Journal of Quantum Electronics, 2020, 56, 1-9.	1.0	25
109	The Ci(Sil)n defect in neutron-irradiated silicon. Journal of Materials Science: Materials in Electronics, 2020, 31, 930-934.	1.1	1

#	Article	IF	CITATIONS
110	Photodiode with low dark current built in silicon-on-insulator using electrostatic doping. Solid-State Electronics, 2020, 168, 107733.	0.8	7
111	Analysis of Microresonator-Based Logic Gate for High-Speed Optical Computing in Integrated Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-8.	1.9	9
112	Designing All-Electric Subwavelength Metasources for Near-Field Photonic Routings. Physical Review Letters, 2020, 125, 157401.	2.9	27
113	Exploration of the green electroluminescence from Al2O3/Ho2O3 nanolaminate films fabricated by atomic layer deposition on silicon. Optical Materials, 2020, 107, 110125.	1.7	5
114	Sequential Logic and Pipelining in Chip-Based Electronic-Photonic Digital Computing. IEEE Photonics Journal, 2020, 12, 1-11.	1.0	4
115	InGaN-Based Lasers with an Inverted Ridge Waveguide Heterogeneously Integrated on Si(100). ACS Photonics, 2020, 7, 2636-2642.	3.2	8
116	Giant electrochemical actuation in a nanoporous silicon-polypyrrole hybrid material. Science Advances, 2020, 6, .	4.7	26
117	Hybrid Nanowire Photodetector Integrated in a Silicon Photonic Crystal. ACS Photonics, 2020, 7, 3467-3473.	3.2	15
118	Scaled III-V optoelectronic devices on silicon. , 2020, , .		1
119	A Reliability-Aware Joint Design Method of Application Mapping and Wavelength Assignment for WDM-Based Silicon Photonic Interconnects on Chip. IEEE Access, 2020, 8, 73457-73474.	2.6	4
120	Efficient Er/Oâ€Doped Silicon Lightâ€Emitting Diodes at Communication Wavelength by Deep Cooling. Advanced Optical Materials, 2020, 8, 2000720.	3.6	23
121	Direct-Bandgap Electroluminescence From Germanium With Subband Engineering Utilizing a Metal-Oxide-Semiconductor Structure. IEEE Transactions on Electron Devices, 2020, 67, 2016-2021.	1.6	1
122	Hybrid III–V Silicon Photonic Crystal Cavity Emitting at Telecom Wavelengths. Nano Letters, 2020, 20, 8768-8772.	4.5	18
123	Enhanced dynamic properties of Ge-on-Si mode-evolution waveguide photodetectors. , 2020, , .		2
124	Design and Modelling of a Novel Integrated Photonic Device for Nano-Scale Magnetic Memory Reading. Applied Sciences (Switzerland), 2020, 10, 8267.	1.3	2
125	Rejuvenating a Versatile Photonic Material: Thinâ€Film Lithium Niobate. Laser and Photonics Reviews, 2020, 14, 2000088.	4.4	89
126	Giant photothermal nonlinearity in a single silicon nanostructure. Nature Communications, 2020, 11, 4101.	5.8	42
127	Highly Efficient Room-Temperature Electron-Photon Spin Conversion Using a Semiconductor Hybrid Nanosystem with Gradual Quantum Dimensionality Reduction. Physical Review Applied, 2020, 14, .	1.5	4

	CITATION R	CITATION REPORT	
#	Article	IF	Citations
128	Mid-infrared type-II InAs/InAsSb quantum wells integrated on silicon. Applied Physics Letters, 2020, 117, .	1.5	15
129	Quasiperiodic Dielectric Gratings for Multiband Fiber-To-Chip Couplers. IEEE Photonics Journal, 2020, 12, 1-10.	1.0	0
130	Electron cloud spin generated by microring spaceâ€ŧime control circuit for 3D quantum printing. Microwave and Optical Technology Letters, 2020, 62, 3702-3708.	0.9	2
131	Deformation-induced silicon nanostructures. APL Materials, 2020, 8, .	2.2	2
132	In-Depth Optical Characterization of Femtosecond-Written Waveguides in Silicon. Physical Review Applied, 2020, 14, .	1.5	17
133	Room-temperature 1550-nm lasing from tensile strain N-doped Ge quantum dots on Si. Journal of Modern Optics, 2020, 67, 1120-1127.	0.6	1
134	High-speed III-V nanowire photodetector monolithically integrated on Si. Nature Communications, 2020, 11, 4565.	5.8	120
135	Tunable microwave-photonic filtering with high out-of-band rejection in silicon. APL Photonics, 2020, 5, .		31
136	Slow thermo-optomechanical pulsations in suspended one-dimensional photonic crystal nanocavities. Physical Review A, 2020, 102, .		2
137	Model of thermo-optic nonlinear dynamics of photonic crystal cavities. Physical Review B, 2020, 102, .		8
138	Electronic-photonic arithmetic logic unit for high-speed computing. Nature Communications, 2020, 11, 2154.	5.8	84
139	Silicon-Waveguide-Integrated Carbon Nanotube Optoelectronic System on a Single Chip. ACS Nano, 2020, 14, 7191-7199.	7.3	30
140	Mesh-Structure-Enabled Programmable Multitask Photonic Signal Processor on a Silicon Chip. ACS Photonics, 2020, 7, 2658-2675.	3.2	10
141	Promising modulation of self-assembled Ge-rich QDs by ultra-heavy phosphorus doping. Nanoscale, 2020, 12, 13137-13144.	2.8	6
142	Silicon-based multimode waveguide crossings. JPhys Photonics, 2020, 2, 022002.	2.2	10
143	A monolithic bipolar CMOS electronic–plasmonic high-speed transmitter. Nature Electronics, 2020, 3, 338-345.	13.1	89
144	Near-field mapping of the edge mode of a topological valley slab waveguide at λ â€^ = 1.55 <i>μ </i> m. Applied Physics Letters, 2020, 116, .	1.5	16
145	High-Density Wavelength Multiplexing Model for THz-EMI Transmission. Wireless Personal Communications, 2020, 113, 1225-1239.	1.8	1

		CITATION REPOR	Т	
#	Article	IF	(Citations
146	Towards an intelligent photonic system. Science China Information Sciences, 2020, 63, 1.	2.7	. 7	7
147	CMOS and plasmonics get close. Nature Electronics, 2020, 3, 302-303.	13.	.1 (D
148	Quarter-Millimeter Propagating Plasmons in Thin-Gold-Film-Based Waveguides for Visible Spectra Range. Journal of Lightwave Technology, 2020, 38, 4794-4800.	al 2.7	' 1	1
149	64 Gbps PAM4 Si-Ge Waveguide Avalanche Photodiodes With Excellent Temperature Stability. Jo of Lightwave Technology, 2020, 38, 4857-4866.	ournal 2.7	1	15
150	The Rise of the Dynamic Crystals. Journal of the American Chemical Society, 2020, 142, 13256-1	3272. 6.6) 2	229
151	Microwave Filtering Using Forward Brillouin Scattering in Photonic-Phononic Emit-Receive Device Journal of Lightwave Technology, 2020, 38, 5248-5261.	2S. 2.7		16
152	Metastable Group IV Allotropes and Solid Solutions: Nanoparticles and Nanowires. Chemistry of Materials, 2020, 32, 2703-2741.	3.2	2 2	26
153	Inverse-designed non-reciprocal pulse router for chip-based LiDAR. Nature Photonics, 2020, 14, 3	69-374. 15.	.6 1	145
154	Ultra-broadband mid-infrared Ge-on-Si waveguide polarization rotator. APL Photonics, 2020, 5, 0	26102. 3.0) 2	21
155	Electron density transport using microring circuit for dual-mode power transmission. Optical and Quantum Electronics, 2020, 52, 1.	1.5		3
156	Thermally-Reconfigurable Silicon Photonic Devices and Circuits. IEEE Journal of Selected Topics ir Quantum Electronics, 2020, 26, 1-20.	1.9		36
157	Large-scale integration of artificial atoms in hybrid photonic circuits. Nature, 2020, 583, 226-231	13.	.7 2	248
158	Nonvolatile Electrically Reconfigurable Integrated Photonic Switch Enabled by a Silicon PIN Diode Heater. Advanced Materials, 2020, 32, e2001218.	2 11.	1 1	152
159	A Silicon Photonic Data Link with a Monolithic Erbium-Doped Laser. Scientific Reports, 2020, 10,	1114. 1.6	2	27
160	Wafer-scale mono-crystalline GeSn alloy on Ge by sputtering and solid phase epitaxy. Journal Phy D: Applied Physics, 2020, 53, 21LT01.	isics 1.3	Ę	5
161	Nanophotonic Polarization Routers Based on an Intelligent Algorithm. Advanced Optical Materia 2020, 8, 1902018.	ls, 3.6	. 2	22
162	Photonic architecture for reinforcement learning. New Journal of Physics, 2020, 22, 045002.	1.2	: 1	19
163	Design of a disulfide bond-containing photoresist with extremely low volume shrinkage and exce degradation ability for UV-nanoimprinting lithography. Chemical Engineering Journal, 2020, 390, 124625.	llent 6.6	5 2	25

		CITATION REI	PORT	
#	Article		IF	CITATIONS
164	An Electrically Controlled Wavelength-Tunable Nanoribbon Laser. ACS Nano, 2020, 14, 3397	·3404.	7.3	26
165	Reconfigurable nanophotonic silicon probes for sub-millisecond deep-brain optical stimulatio Nature Biomedical Engineering, 2020, 4, 223-231.	n.	11.6	101
166	Si microring resonator crossbar arrays for deep learning accelerator. Japanese Journal of Appli Physics, 2020, 59, SGGE04.	ed	0.8	18
167	Silicon Photonic 2.5D Multi-Chip Module Transceiver for High-Performance Data Centers. Jou Lightwave Technology, 2020, 38, 3346-3357.	rnal of	2.7	38
168	OE-CAM: A Hybrid Opto-Electronic Content Addressable Memory. IEEE Photonics Journal, 202	20, 12, 1-14.	1.0	11
169	Terahertz plasmonic SWAP and Fredkin gates utilizing graphene nano-ribbon waveguides. Op Communications, 2020, 463, 125397.	otics	1.0	3
170	Plasmonics for Telecommunications Applications. Sensors, 2020, 20, 2488.		2.1	18
171	Hybrid multi-chip assembly of optical communication engines by in situ 3D nano-lithography. Science and Applications, 2020, 9, 71.	Light:	7.7	77
172	Direct-bandgap emission from hexagonal Ge and SiGe alloys. Nature, 2020, 580, 205-209.		13.7	231
173	Photonic Convolutional Neural Networks Using Integrated Diffractive Optics. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-8.		1.9	16
174	Modeling Electrical Switching of Nonvolatile Phase-Change Integrated Nanophotonic Structu with Graphene Heaters. ACS Applied Materials & Interfaces, 2020, 12, 21827-21836.	res	4.0	78
175	Chip-Scale Reconfigurable Optical Full-Field Manipulation: Enabling a Compact Grooming Pho Signal Processor. ACS Photonics, 2020, 7, 1235-1245.	otonic	3.2	12
176	Subspace stabilization analysis for a class of non-Markovian open quantum systems. Physical 2020, 101, .	Review A,	1.0	0
177	Microring Plasmonic Circuit Characteristics Using Space–Time Modulation Control. Plasmo 16, 533-539.	nics, 2021,	1.8	1
178	Non-volatile polarization-insensitive <mml:math xmins:mml="http://www.w3.org/1998/Math/<br">display="inline" id="d1e1288" altimg="si178.svg"><mml:mrow><mml:mn>1</mml:mn><mm linebreak="goodbreak" linebreakstyle="after">×<mml:mn>2</mml:mn></mm </mml:mrow></mml:math> silic	MathML Il:mo con optical	1.0	7
179	Roadmap on emerging hardware and technology for machine learning. Nanotechnology, 202 012002.	1, 32,	1.3	104
180	Advances in Silicon Quantum Photonics. IEEE Journal of Selected Topics in Quantum Electron 27, 1-24.	ics, 2021,	1.9	41
181	Ultra-Compact Non-Travelling-Wave Silicon Carrier-Depletion Mach-Zehnder Modulators Tow High Channel Density Integration. IEEE Journal of Selected Topics in Quantum Electronics, 20	ards 21, 27, 1-11.	1.9	10

#	Article	IF	CITATIONS
182	Direct observation of ultra-rapid solid phase crystallization of amorphous silicon films irradiated by micro-thermal-plasma-jet. Materials Science in Semiconductor Processing, 2021, 121, 105357.	1.9	3
183	Recent Progress of Optoelectronic and Allâ€Optical Neuromorphic Devices: A Comprehensive Review of Device Structures, Materials, and Applications. Advanced Intelligent Systems, 2021, 3, 2000119.	3.3	38
184	Direct-binary-search-optimized compact silicon-based polarization beam splitter using a pixelated directional coupler. Optics Communications, 2021, 484, 126670.	1.0	5
185	DNAâ€Based Strategies for Siteâ€Specific Doping. Advanced Functional Materials, 2021, 31, .	7.8	3
186	Optical reversible logic gates based on graphene-silicon slot waveguides. Optik, 2021, 228, 166182.	1.4	2
187	High-Speed Femto-Joule per Bit Silicon-Conductive Oxide Nanocavity Modulator. Journal of Lightwave Technology, 2021, 39, 178-185.	2.7	17
188	Microring Plasmonic Transducer Circuits for Up-Downstream Communications. Plasmonics, 2021, 16, 123-129.	1.8	0
189	Silicon-organic hybrid photonics: Overview of recent advances, electro-optical effects and CMOS-integration concepts. JPhys Photonics, 0, , .	2.2	8
190	Vertical field enhancement of a spot-size converter using a nanopixel waveguide and window structure. Optics Express, 2021, 29, 2757.	1.7	5
191	Quantum Processors in Silicon Photonics. Topics in Applied Physics, 2021, , 449-489.	0.4	0
192	Programmable phase-change metasurfaces on waveguides for multimode photonic convolutional neural network. Nature Communications, 2021, 12, 96.	5.8	186
193	Silicon-Germanium Avalanche Receivers With fJ/bit Energy Consumption. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-8.	1.9	15
194	Enhanced luminescence/photodetecting bifunctional devices based on ZnO:Ga microwire/p-Si heterojunction by incorporating Ag nanowires. Nanoscale Advances, 2021, 3, 5605-5617.	2.2	20
195	Monolithically Integrated Electronic-Photonic Ultrasound Receiver Using Microring Resonator. , 2021, , .		2
196	Parallel convolutional processing using an integrated photonic tensor core. Nature, 2021, 589, 52-58.	13.7	723
197	Subtractive photonics. Optics Express, 2021, 29, 877.	1.7	9
198	Edge-Assisted Democratized Learning Toward Federated Analytics. IEEE Internet of Things Journal, 2022, 9, 572-588.	5.5	16
199	Compact Broadband Rapid-Adiabatic Polarization Splitter- Rotators in a Monolithic Electronic-Photonic SOI Platform. , 2021, , .		1

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Сп	ΆΤΙ	ON		DORT
<u> </u>	/ \			

#	Article	IF	CITATIONS
200	Effective Modulation of GaN-on-Si LED via Indigenous MOSFET Engineering. IEEE Transactions on Electron Devices, 2021, 68, 5640-5644.	1.6	4
201	DIRECTIONAL POLARITONIC EXCITATION OF CIRCULAR, HUYGENS AND JANUS DIPOLES IN GRAPHENE-HEXAGONAL BORON NITRIDE HETEROSTRUCTURES. Progress in Electromagnetics Research, 2021, 170, 169-176.	1.6	16
202	Recent Trends in Nanoelectronic Device Fabrication. Current Nanoscience, 2021, 16, 851-862.	0.7	0
203	Numerical and Experimental Analysis of On-Chip Optical Wireless Links in Presence of Obstacles. IEEE Photonics Journal, 2021, 13, 1-11.	1.0	8
204	High-power Si-Ge photodiode assisted by doping regulation. Optics Express, 2021, 29, 7389.	1.7	8
205	Silicon Mode (de)Multiplexer Based on Cascaded Particle-Swarm-Optimized Counter-Tapered Couplers. IEEE Photonics Journal, 2021, 13, 1-10.	1.0	3
206	A review: Photonics devices, architectures, and algorithms for optical neural computing. Journal of Semiconductors, 2021, 42, 023105.	2.0	48
207	Silicon-based inorganic-organic hybrid optoelectronic synaptic devices simulating cross-modal learning. Science China Information Sciences, 2021, 64, 1.	2.7	17
208	GaSb-based laser diodes grown on MOCVD GaAs-on-Si templates. Optics Express, 2021, 29, 11268.	1.7	9
209	Light-induced pyroelectric property of self-powered photodetectors based on all-inorganic perovskite quantum dots. Nanotechnology, 2021, 32, 235203.	1.3	9
210	Optically Tunable Photoluminescence and Up-Conversion Lasing on a Chip. Physical Review Applied, 2021, 15, .	1.5	8
211	Ingenuities of graphyne and graphdiyne with polymers: design insights to high performance nanocomposite. Polymer-Plastics Technology and Materials, 2021, 60, 1149-1165.	0.6	1
212	Nonâ€Volatile Reconfigurable Integrated Photonics Enabled by Broadband Low‣oss Phase Change Material. Advanced Optical Materials, 2021, 9, 2002049.	3.6	102
213	Electronic properties and tunability of the hexagonal SiGe alloys. Applied Physics Letters, 2021, 118, .	1.5	10
214	Plasmonics—high-speed photonics for co-integration with electronics. Japanese Journal of Applied Physics, 2021, 60, SB0806.	0.8	12
215	Repairing slight damages on monocrystalline silicon surface by thermal annealing. Materials Research Express, 2021, 8, 045005.	0.8	4
216	Memory-centric neuromorphic computing for unstructured data processing. Nano Research, 2021, 14, 3126-3142.	5.8	21
217	High-speed and high-responsivity p-i-n waveguide photodetector at a 2  µm wavelength with a Ge _{0.92} Sn _{0.08} /Ge multiple-quantum-well active layer. Optics Letters, 2021, 46, 2009	1.7	16

#	Article	IF	CITATIONS
218	A Review on the Recent Progress of Siliconâ€onâ€Insulatorâ€Based Photodetectors. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000751.	0.8	16
219	Perspective on the future of silicon photonics and electronics. Applied Physics Letters, 2021, 118, .	1.5	246
220	Bricked Subwavelength Gratings: A Tailorable Onâ€Chip Metamaterial Topology. Laser and Photonics Reviews, 2021, 15, 2000478.	4.4	18
221	Toward Nonvolatile Switching in Silicon Photonic Devices. Laser and Photonics Reviews, 2021, 15, 2000501.	4.4	31
222	Magneto-optical micro-ring resonators for dynamic tuning of add/drop channels in dense wavelength division multiplexing applications. Optics Letters, 2021, 46, 2396.	1.7	9
223	Laser Thermal Processing of Group IV Semiconductors for Integrated Photonic Systems. Advanced Photonics Research, 2021, 2, 2000159.	1.7	7
224	Breaking the Coupling Efficiency–Bandwidth Tradeâ€Off in Surface Grating Couplers Using Zeroâ€Order Radiation. Laser and Photonics Reviews, 2021, 15, 2000542.	4.4	15
225	Ten-Port Unitary Optical Processor on a Silicon Photonic Chip. ACS Photonics, 2021, 8, 2074-2080.	3.2	45
226	High-responsivity graphene photodetectors integrated on silicon microring resonators. Nature Communications, 2021, 12, 3733.	5.8	57
227	Hybrid and heterogeneous photonic integration. APL Photonics, 2021, 6, .	3.0	59
228	C and L band room-temperature continuous-wave InP-based microdisk lasers grown on silicon. Optics Letters, 2021, 46, 2836.	1.7	10
229	Bidirectional grating based interleaved angled MMI for high-uniformity wavelength division (de)multiplexing and surface-normal fiber packaging. Applied Optics, 2021, 60, 5615.	0.9	4
230	First Demonstration of Waveguide-Coupled Ge0.92Sn0.08/Ge Multiple-Quantum-Well Photodetector on the SOI Platform for 2-μm Wavelength Optoelectronic Integrated Circuit. , 2021, , .		1
231	Versatile Logic and Nonvolatile Memory Based on a van der Waals Heterojunction. ACS Applied Electronic Materials, 2021, 3, 3079-3084.	2.0	3
232	Aluminium nitride integrated photonics: a review. Nanophotonics, 2021, 10, 2347-2387.	2.9	49
233	Waveguide Enhanced Raman Spectroscopy for Biosensing: A Review. ACS Sensors, 2021, 6, 2025-2045.	4.0	19
234	Toward Highâ€Speed and Energyâ€Efficient Computing: A WDMâ€Based Scalable Onâ€Chip Silicon Integrated Optical Comparator. Laser and Photonics Reviews, 2021, 15, 2000275.	4.4	11
235	Uniting a Illâ€Nitride Transmitter, Waveguide, Modulator, and Receiver on a Single Chip. Advanced Engineering Materials, 2021, 23, 2100582.	1.6	10

	Ci	TATION REPORT	
#	Article	IF	Citations
236	Silicon Photonics for Artificial Intelligence and Neuromorphic Computing. , 2021, , .		0
237	High Spectral Efficiency Coherent Superchannel Transmission With Soliton Microcombs. Journal of Lightwave Technology, 2021, 39, 4367-4373.	2.7	34
238	Low-power swept-source Raman spectroscopy. Optics Express, 2021, 29, 24723.	1.7	5
239	Sensitized electroluminescence from erbium doped silicon rich oxynitride light emitting devices. Journal of Luminescence, 2021, 235, 118009.	1.5	5
240	Polarization-insensitive optical modulators based on single ENZ-graphene layers. , 2021, , .		0
241	A review on laser drilling and cutting of silicon. Journal of the European Ceramic Society, 2021, 41, 4997-5015.	2.8	35
242	High-performance germanium avalanche photodetector for 100  Gbit/s photonics receivers. Letters, 2021, 46, 3837.	Optics 1.7	8
243	Quantum networks based on color centers in diamond. Journal of Applied Physics, 2021, 130, .	1.1	105
244	SiP-ML., 2021, , .		26
245	A review of silicon subwavelength gratings: building break-through devices with anisotropic metamaterials. Nanophotonics, 2021, 10, 2765-2797.	2.9	70
246	A Temperature-Aware Large-Signal SPICE Model for Depletion-Type Silicon Ring Modulators. IEEE Photonics Technology Letters, 2021, 33, 947-950.	1.3	6
247	Error-protected qubits in a silicon photonic chip. Nature Physics, 2021, 17, 1137-1143.	6.5	53
248	Edge computing with optical neural networks via WDM weight broadcasting. , 2021, , .		5
249	Ge-on-Si waveguide photodetectors: multiphysics modeling and experimental validation. , 2021, , .		Ο
250	Top-down convergence of near-infrared photonics with silicon substrate-integrated electronics. Optica, 2021, 8, 1363.	4.8	9
251	A monolithic InP/SOI platform for integrated photonics. Light: Science and Applications, 2021, 10, 20	0. 7.7	47
252	(INVITED) Emerging routes to light-matter interaction in two-dimensional materials. Optical Materials X, 2021, 12, 100088.	: 0.3	1
253	Integrated non-volatile plasmonic switches based on phase-change-materials and their application to plasmonic logic circuits. Scientific Reports, 2021, 11, 18811.	1.6	19

#	Article	IF	CITATIONS
254	Investigation of Schottky barrier height using area as parameter: Effect of hydrogen peroxide treatment on electrical optical properties of Schottky diode. Optical Materials, 2021, 119, 111341.	1.7	6
255	Extensive Broadband Near-Infrared Emissions from GexSi1â^'x Alloys on Micro-Hole Patterned Si(001) Substrates. Nanomaterials, 2021, 11, 2545.	1.9	2
256	Vertical Fibre Interfacing Interleaved Angled MMI for Thermal-Tuning-Free Wavelength Division (de)Multiplexing and Low-Cost Fibre Packaging. Journal of Lightwave Technology, 2021, 39, 6260-6268.	2.7	3
257	Compact and Low-Insertion-Loss 1×N Power Splitter in Silicon Photonics. Journal of Lightwave Technology, 2021, 39, 6253-6259.	2.7	20
258	Uniting GaN Electronics and Photonics on A Single Chip. Journal of Lightwave Technology, 2021, 39, 6269-6275.	2.7	15
259	Stable and Reduced-Linewidth Laser Through Active Cancellation of Reflections Without a Magneto-Optic Isolator. Journal of Lightwave Technology, 2021, 39, 6215-6230.	2.7	3
260	Compact Optical TX and RX Macros for Computercom Monolithically Integrated in 45 nm CMOS. Journal of Lightwave Technology, 2021, 39, 6869-6879.	2.7	1
261	Integrated Optics: An Overview. Graduate Texts in Physics, 2021, , 1-9.	0.1	0
262	Nanoelectronics and Photonics for Next-Generation Devices. , 2021, , 293-313.		2
263	Recent progress in artificial synaptic devices: materials, processing and applications. Journal of Materials Chemistry C, 2021, 9, 8372-8394.	2.7	41
264	Dielectric Nanoaperture Metasurfaces in Silicon Waveguides for Efficient and Broadband Mode Conversion with an Ultrasmall Footprint. Advanced Optical Materials, 2020, 8, 2000529.	3.6	16
265	High-density quantum bits generation using microring plasmonic antenna. Optical and Quantum Electronics, 2020, 52, 1.	1.5	5
266	Towards silicon photonic neural networks for artificial intelligence. Science China Information Sciences, 2020, 63, 1.	2.7	27
267	Ruthenium-Assisted Chemical Etching of Silicon: Enabling CMOS-Compatible 3D Semiconductor Device Nanofabrication. ACS Applied Materials & amp; Interfaces, 2021, 13, 1169-1177.	4.0	18
268	High-bandwidth light inputting multilevel photoelectric memory based on thin-film transistor with a floating gate of CsPbBr3/CsPbI3 blend quantum dots. Nanotechnology, 2021, 32, 095204.	1.3	5
269	Phase change material-based nano-cavity as an efficient optical modulator. Nanotechnology, 2021, 32, 095207.	1.3	21
270	Deep subwavelength manipulation of THz waves by plasmonic surface. Journal of Physics Communications, 2020, 4, 105014.	0.5	1
271	Thermally activated diffusion and lattice relaxation in (Si)GeSn materials. Physical Review Materials, 2020, 4, .	0.9	8

			2
#		IF	CITATIONS
272	applications: state-of-the-art and future outlooks. Optical Engineering, 2019, 58, 1.	0.5	40
273	Tuning of 2D rod-type photonic crystal cavity for optical modulation and impact sensing. , 2019, , .		2
274	Excitation of surface plasmon polaritons in a gold nanoslab on ion-exchanged waveguide technology. Applied Optics, 2020, 59, 572.	0.9	12
275	Design of a compact silicon-based TM-polarized mode-order converter based on shallowly etched structures. Applied Optics, 2019, 58, 9075.	0.9	10
276	Network Architecture in the Era of Integrated Optics. Journal of Optical Communications and Networking, 2019, 11, A72.	3.3	8
277	Characterization method of a mid-infrared graphene-on-silicon microring with a monochromatic laser. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 1683.	0.9	3
278	Free spectral range electrical tuning of a high quality on-chip microcavity. Optics Express, 2018, 26, 33649.	1.7	18
279	Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. Optics Express, 2018, 26, 34580.	1.7	12
280	High-temperature continuous-wave operation of directly grown InAs/GaAs quantum dot lasers on on-axis Si (001). Optics Express, 2019, 27, 2681.	1.7	43
281	High-accuracy optical convolution unit architecture for convolutional neural networks by cascaded acousto-optical modulator arrays. Optics Express, 2019, 27, 19778.	1.7	45
282	Low-loss polysilicon subwavelength grating waveguides and narrowband Bragg reflectors in bulk CMOS. Optics Express, 2020, 28, 7786.	1.7	12
283	Verified equivalent-circuit model for slot-waveguide modulators. Optics Express, 2020, 28, 12951.	1.7	17
284	Suspended gallium arsenide platform for building large scale photonic integrated circuits: passive devices. Optics Express, 2020, 28, 12262.	1.7	21
285	Ultra-low loss hybrid ITO/Si thermo-optic phase shifter with optimized power consumption. Optics Express, 2020, 28, 9393.	1.7	27
286	Design of a broadband Ge _{1â^'x} Si _x electro-absorption modulator based on the Franz-Keldysh effect with thermal tuning. Optics Express, 2020, 28, 7585.	1.7	7
287	Nonlinear properties of laser-processed polycrystalline silicon waveguides for integrated photonics. Optics Express, 2020, 28, 29192.	1.7	6
288	Rigorous prediction of Raman intensity from multi-layer films. Optics Express, 2020, 28, 35272.	1.7	11
289	45nm CMOS - Silicon Photonics Monolithic Technology (45CLO) for next-generation, low power and high speed optical interconnects. , 2020, , .		46

#	Article	IF	CITATIONS
290	Ultracompact optical switch using a single semisymmetric Fano nanobeam cavity. Optics Letters, 2020, 45, 2363.	1.7	21
291	Electrically pumped 15  î¼m InP-based quantum dot microring lasers directly grown on (001) Si. Optics Letters, 2019, 44, 4566.	1.7	25
292	Ultrasmall broadband wavelength and polarization router based on hybrid waveguide of monolithic-LiNbO ₃ . Optics Letters, 2019, 44, 5772.	1.7	5
293	Bufferless 1.5  µm III-V lasers grown on Si-photonics 220  nm silicon-on-insulator platforms. O 7, 148.	ptica, 202 4.8	0 ₅₃
294	Accelerating recurrent Ising machines in photonic integrated circuits. Optica, 2020, 7, 551.	4.8	70
295	40  Gbps heterostructure germanium avalanche photo receiver on a silicon chip. Optica, 2020, 7, 775.	4.8	34
296	Exceptional coupling in photonic anisotropic metamaterials for extremely low waveguide crosstalk. Optica, 2020, 7, 881.	4.8	50
297	Cryogenic operation of silicon photonic modulators based on the DC Kerr effect. Optica, 2020, 7, 1385.	4.8	31
298	Extreme ultraviolet plasmonics and Cherenkov radiation in silicon. Optica, 2018, 5, 1590.	4.8	24
299	Photoconductive heaters enable control of large-scale silicon photonic ring resonator circuits. Optica, 2019, 6, 84.	4.8	55
300	High-channel-count 20  GHz passively mode-locked quantum dot laser directly grown on Si with 41  Tbit/s transmission capacity. Optica, 2019, 6, 128.	4.8	129
301	Scalable feedback control of single photon sources for photonic quantum technologies. Optica, 2019, 6, 335.	4.8	18
302	Brillouin-based phase shifter in a silicon waveguide. Optica, 2019, 6, 907.	4.8	28
303	Wireless THz link with optoelectronic transmitter and receiver. Optica, 2019, 6, 1063.	4.8	79
304	25  Gbps low-voltage hetero-structured silicon-germanium waveguide pin photodetectors for monolithic on-chip nanophotonic architectures. Photonics Research, 2019, 7, 437.	3.4	54
305	Large-signal SPICE model for depletion-type silicon ring modulators. Photonics Research, 2019, 7, 948.	3.4	12
306	Tunable nanophotonics enabled by chalcogenide phase-change materials. Nanophotonics, 2020, 9, 1189-1241.	2.9	294
307	Robust optical physical unclonable function using disordered photonic integrated circuits. Nanophotonics, 2020, 9, 2817-2828.	2.9	24

ARTICLE IF CITATIONS # Integrated photonic FFT for photonic tensor operations towards efficient and high-speed neural 308 2.9 17 networks. Nanophotonics, 2020, 9, 4097-4108. 309 On-chip arbitrary-mode spot size conversion. Nanophotonics, 2020, 9, 4365-4372. Wavelength-division-multiplexing (WDM)-based integrated electronic–photonic switching network 310 2.9 16 (EPSN) for high-speed data processing and transportation. Nanophotonics, 2020, 9, 4579-4588. Silicon–germanium receivers for short-wave-infrared optoelectronics and communications. 2.9 Nanophotonics, 2021, 10, 1059-1079. Single-chip imaging system that simultaneously transmits light. Applied Physics Express, 2020, 13, 312 1.1 3 101002. Silicon photonic transceivers in the field of optical communication. Nano Communication Networks, 2022, 31, 100379. 1.6 Low-threshold InP quantum dot and InGaP quantum well visible lasers on silicon (001). Optica, 2021, 8, 314 4.8 10 1495. High-Performance Waveguide-Integrated Bi₂O₂Se Photodetector for Si Photonic Integrated Circuits. ACS Nano, 2021, 15, 15982-15991. 7.3 316 Design of high-speed and high-power Si-Ge photodiode assisted by doping region regulation., 2019, , . 1 The 5G fronthaul and enabling silicon photonics technology., 2019, , . High-performance waveguide photodetectors based on lateral Si/Ge/Si heterojunction., 2019, , . 318 0 319 Optimizing x-ray optics for modulating x-ray beams with MEMS devices., 2019,,. Multi-Level Analysis of On-Chip Optical Wireless Links. Applied Sciences (Switzerland), 2020, 10, 196. 320 1.3 11 Growth and characterization of low-temperature Si1-xSnx on Si using plasma enhanced chemical 1.6 vapor deposition. Optical Materials Express, 2020, 10, 2242. High-Resolution Distributed Radiation Detector System Assisted by Intelligent Image Recognition. 322 1.0 2 Frontiers in Physics, 2021, 9, . Optical coherent dot-product chip for sophisticated deep learning regression. Light: Science and Applications, 2021, 10, 221. 324 Neuromorphic Photonics: Current Status and Challenges., 2020,,. 1 Nanoelectronics and Photonics for Next Generation Devices., 2021, , 1-21.

#	Article	IF	CITATIONS
326	10Gb/s Intra-Chip Compact Electro-Optical Interconnect. , 2021, , .		0
327	Realization of robust optical physical unclonable function using a silicon photonic quasicrystal interferometer. , 2020, , .		0
328	On-chip nanophotonic devices based on intelligent algorithm. , 2020, , .		0
329	Low-Power Data Center Transponders Enabled by Micrometer-scale Plasmonic Modulators. , 2020, , .		1
330	Integrated WDM-based Optical Comparator for High-speed Computing. , 2020, , .		2
331	A Spurless and Wideband Continuous-Time Electro-Optical Phase Locked Loop (CT-EOPLL) for High Performance LiDAR. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 235-246.	2.0	3
332	Silicon Photonic 2.5D Integrated Multi-Chip Module Receiver. , 2020, , .		2
333	28 Gbps silicon-germanium hetero-structure avalanche photodetectors. , 2020, , .		0
334	Neuromorphic computing through photonic integrated circuits. , 2020, , .		2
335	Guided mode meta-optics: metasurface-dressed waveguides for arbitrary mode couplers and on-chip OAM emitters with a configurable topological charge. Optics Express, 2021, 29, 39406.	1.7	13
336	Ultra-Compact Polarization Analyzer Based on Micro-Ring Resonators. IEEE Photonics Technology Letters, 2021, 33, 1371-1374.	1.3	2
337	Deep Learning-Assisted Enhanced Fano Resonances in Symmetry-Breaking SOI Metasurface. IEEE Photonics Journal, 2022, 14, 1-7.	1.0	3
338	A Reconfigurable Nanophotonic Architecture based on Phase Change Material. , 2021, , .		1
339	Core-shell microparticles: From rational engineering to diverse applications. Advances in Colloid and Interface Science, 2022, 299, 102568.	7.0	51
340	Optical meta-waveguides for integrated photonics and beyond. Light: Science and Applications, 2021, 10, 235.	7.7	196
341	Miniature, highly sensitive MOSCAP ring modulators in co-optimized electronic-photonic CMOS. Photonics Research, 2022, 10, A1.	3.4	8
342	Magnetite-Silica Core/Shell Nanostructures: From Surface Functionalization towards Biomedical Applications—A Review. Applied Sciences (Switzerland), 2021, 11, 11075.	1.3	20
343	Narrow-Linewidth GaN-on-Si Laser Diode with Slot Gratings. Nanomaterials, 2021, 11, 3092.	1.9	2

#	Article	IF	CITATIONS
344	Inverse nanotapers and lensed fibers for highly efficient coupling. , 2021, , .		0
345	Advances in Chip‣cale Quantum Photonic Technologies. Advanced Quantum Technologies, 2021, 4, .	1.8	13
346	From pseudo-direct hexagonal germanium to direct silicon-germanium alloys. Physical Review Materials, 2021, 5, .	0.9	7
347	High-resolution microwave frequency measurement based on dynamic frequency-to-power mapping. Optics Express, 2021, 29, 42553.	1.7	8
348	Polarization-Insensitive Optical Modulator Based on Single-Layer Graphene Sheets. IEEE Nanotechnology Magazine, 2021, 20, 883-888.	1.1	1
349	Lab-on-Chip for Everyone: Introducing an Electronic-Photonic Platform for Multiparametric Biosensing Using Standard CMOS Processes. IEEE Open Journal of the Solid-State Circuits Society, 2021, 1, 198-208.	2.0	8
350	Rational Control of GeSn Nanowires. Physica Status Solidi - Rapid Research Letters, 0, , 2100554.	1.2	2
351	Ultra-Compact Mode (De)Multiplexer and Polarization Beam Splitter Based on Tapered Bent Asymmetric Directional Couplers. IEEE Photonics Journal, 2022, 14, 1-6.	1.0	6
352	Ultra-compact spot size converter based on digital metamaterials. Optics Communications, 2022, 508, 127865.	1.0	6
353	Optical absorption sensing with dual-spectrum silicon LEDs in SOI-CMOS technology. , 2020, , .		1
354	Supermode Hybridization: A Material-Independent Route toward Record Schottky Detection Sensitivity Using <0.05 μm ³ Amorphous Absorber Volume. Nano Letters, 2020, 20, 8500-8507.	4.5	1
355	Frequency Translating Add/Drop Filters based on Electro-Optically Modulated Photonic Molecules. , 2021, , .		0
356	Numerical Analyzation of Distributed Feedback Lasers with Different Phase Shift Structures. , 2021, , .		0
357	Ultra-low threshold optically pumped single mode InP micro-lasers grown on SOI. , 2021, , .		0
358	Fundamental wave and second-harmonic focusing based on guided wave-driven phase-change materials metasurfaces. Wuli Xuebao/Acta Physica Sinica, 2022, 71, 034208.	0.2	0
359	A Compact 112-Gbaud PAM-4 Silicon Photonics Transceiver for Short-Reach Interconnects. Journal of Lightwave Technology, 2022, 40, 2265-2273.	2.7	14
360	Metasurface-Dressed Two-Dimensional on-Chip Waveguide for Free-Space Light Field Manipulation. ACS Photonics, 2022, 9, 398-404.	3.2	34
361	Giant Optical Oscillator Strengths in Perturbed Hexagonal Germanium. Physica Status Solidi - Rapid Research Letters, 0, , 2100555.	1.2	4

#	Article	IF	CITATIONS
362	Silicon nitride waveguides with directly grown WS ₂ for efficient second-harmonic generation. Nanoscale, 2021, 14, 49-54.	2.8	14
363	Optical Interconnects Finally Seeing the Light in Silicon Photonics: Past the Hype. Nanomaterials, 2022, 12, 485.	1.9	18
364	Photoelectric Logic and <i>In Situ</i> Memory Transistors with Stepped Floating Gates of Perovskite Quantum Dots. ACS Nano, 2022, 16, 2442-2451.	7.3	15
365	Dielectric Metasurfaces Enabled Ultradensely Integrated Multidimensional Optical System. Laser and Photonics Reviews, 2022, 16, .	4.4	13
366	Bulk-Si Platform: Born for DRAM, Upgraded With On-Chip Lasers, and Transplanted to LiDAR. Journal of Lightwave Technology, 2022, 40, 3137-3148.	2.7	3
367	Polysilicon Micro-heaters For Resonance Tuning in CMOS Photonics. Optics Letters, 2022, 47, 1097-1100.	1.7	6
368	Optical non-reciprocity with multiple modes in the visible range based on a hybrid metallic nanowaveguide. Journal Physics D: Applied Physics, 2022, 55, 195102.	1.3	0
369	Amplified Spontaneous Emission from Perovskite Quantum Dots Inside a Transparent Glass. Advanced Optical Materials, 2022, 10, .	3.6	13
370	Multifunctional Organic Single rystalline Microwire Arrays toward Optical Applications. Advanced Functional Materials, 2022, 32, .	7.8	9
371	Monolithic Waveguide-Integrated Group IV Multiple-Quantum-Well Photodetectors on 300 mm Si Substrates. IEEE Transactions on Electron Devices, 2022, 69, 2166-2172.	1.6	4
372	Numerical Demonstration of 800 Gbps WDM Silicon Photonic Transmitter with Sub-Decibel Surface-Normal Optical Interfaces. Micromachines, 2022, 13, 251.	1.4	3
373	An uncooled CW-WDM MSA compliant multi-wavelength laser source operating from 15-100oC for WDM CMOS applications. , 2022, , .		1
374	Mitigation of parasitic junction formation in compact resonant modulators with doped silicon heaters. , 2022, , .		1
375	Multioperation Mode Ferroelectric Channel Devices for Memory and Computation. Advanced Intelligent Systems, 2022, 4, .	3.3	3
376	A 100 Gb/s PAM4 Two-Segment Silicon Microring Resonator Modulator Using a Standard Foundry Process. ACS Photonics, 2022, 9, 1165-1171.	3.2	24
377	Performant on-chip photonic detectors with lateral p-i-n silicon-germanium heterojunctions. , 2022, , .		Ο
378	High-speed Si-Ge avalanche photodiodes. PhotoniX, 2022, 3, .	5.5	25
379	Compact waveguide bend with digital meta-structures on the silicon-on-insulator platform. Optik, 2022, 259, 168968.	1.4	0

#	Article	IF	CITATIONS
380	Tunable plasmon–polarizmon resonance and hotspots in metal–silicon core–shell nanostructures. AIP Advances, 2021, 11, .	0.6	3
381	Generalized Modular Spectrometers Combining a Compact Nanobeam Microcavity and Computational Reconstruction. ACS Photonics, 2022, 9, 74-81.	3.2	17
382	Perspectives of 2D Materials for Optoelectronic Integration. Advanced Functional Materials, 2022, 32,	7.8	62
383	3D Integration Technology for Quantum Computer based on Diamond Spin Qubits. , 2021, , .		2
384	On-chip integration of 2D Van der Waals germanium phosphide (GeP) for active silicon photonics devices. Optics Express, 2022, 30, 15986.	1.7	5
385	Chip-integrated van der Waals PN heterojunction photodetector with low dark current and high responsivity. Light: Science and Applications, 2022, 11, 101.	7.7	57
386	Experimental Demonstration and Theoretical Analysis of Simultaneous Emission–Detection Phenomenon. ACS Omega, 2022, 7, 14017-14021.	1.6	8
387	A Practical Shared Optical Cache With Hybrid MWSR/R-SWMR NoC for Multicore Processors. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-28.	1.8	1
388	Asymmetric encryption by optical Kerr nonlinearities exhibited by electrochromic NiO thin films. Optics Express, 2022, 30, 39849.	1.7	1
389	A CMOS-Compatible Carrier-Injection Plasmonic Micro-Ring Modulator (CIPMRM) with Stable Performance as Temperature Varying around 60 K. Applied Sciences (Switzerland), 2022, 12, 3947.	1.3	0
390	An Eight-Channel Switching-Linear Hybrid Dynamic Regulator With Dual-Supply LDOs for Thermo-Optic Tuning. IEEE Transactions on Circuits and Systems I: Regular Papers, 2022, 69, 3428-3437.	3.5	1
391	A photon-controlled diode with a new signal-processing behavior. National Science Review, 2022, 9, .	4.6	2
392	Broadband Nonvolatile Electrically Controlled Programmable Units in Silicon Photonics. ACS Photonics, 2022, 9, 2142-2150.	3.2	39
393	Low power reconfigurable multilevel nanophotonic devices based on Sn-doped Ge2Sb2Te5 thin films. Acta Materialia, 2022, 234, 117994.	3.8	11
394	Microwave photonics applications of stimulated Brillouin scattering. Journal of Optics (United) Tj ETQqO 0 0 rgB	Г /Qverloct	10 Tf 50 18
395	Photonic (computational) memories: tunable nanophotonics for data storage and computing. Nanophotonics, 2022, 11, 3823-3854.	2.9	37
396	Photonic Inverse Design of On-Chip Microresonators. ACS Photonics, 2022, 9, 1875-1881.	3.2	31
397	Effect of Photonic Cavity Interactions on Femtosecond Multiphoton Optical Nonlinear Absorptions from Bi ₂ O ₃ -Based One-Dimensional Photonic Crystal. ACS Photonics, 2022, 9, 2092-2100.	3.2	14

		CITATION R	EPORT	
#	Article		IF	CITATIONS
398	Recent advances in light sources on silicon. Advances in Optics and Photonics, 2022, 14	4, 404.	12.1	39
399	Tolerating Noise Effects in Processingâ€inâ€Memory Systems for Neural Networks: A H Codesign Perspective. Advanced Intelligent Systems, 2022, 4, .	ardware–Software	3.3	9
400	A low-fabrication-temperature, high-gain chip-scale waveguide amplifier. Science China Sciences, 2022, 65, .	Information	2.7	2
401	Mid-Infrared Response from Cr/n-Si Schottky Junction with an Ultra-Thin Cr Metal. Nano 2022, 12, 1750.	materials,	1.9	5
402	A ferroelectric multilevel non-volatile photonic phase shifter. Nature Photonics, 2022, 1	6, 491-497.	15.6	39
403	Unified treatment for photoluminescence and scattering of coupled metallic multi–na Results in Physics, 2022, , 105668.	anostructures.	2.0	0
404	Silicon photonics for high-capacity data communications. Photonics Research, 2022, 10), A106.	3.4	55
405	Silicon Photonics for Neuromorphic Computing and Artificial Intelligence: Applications a , 2022, , .	and Roadmap.		3
406	Humidity-Controlled Tunable Emission in a Dye-Incorporated Metal–Hydrogel–Meta Photonics, 2022, 9, 2287-2294.	al Cavity. ACS	3.2	4
407	Experimental Quantum Key Distribution with Integrated Silicon Photonics and Electroni Review Applied, 2022, 17, .	ics. Physical	1.5	10
408	Atomic Layer Deposition of Metal Oxides and Chalcogenides for High Performance Tran Advanced Science, 2022, 9, .	isistors.	5.6	30
409	High-speed compact folded Michelson interferometer modulator. Optics Express, 2022	, 30, 23704.	1.7	3
410	Optical Computing: Status and Perspectives. Nanomaterials, 2022, 12, 2171.		1.9	28
411	Fluorineâ€Enhanced Room Temperature Luminescence of Erâ€Doped Crystalline Silicor Photonics Research, 0, , 2200115.	ı. Advanced	1.7	0
412	Ultra-low-energy programmable non-volatile silicon photonics based on phase-change n graphene heaters. Nature Nanotechnology, 2022, 17, 842-848.	naterials with	15.6	94
413	Onâ€Chip Metamaterial Antenna Array with Distributed Bragg Deflector for Generation Steerable Beams. Laser and Photonics Reviews, 2022, 16, .	of Collimated	4.4	4
414	Silicon-based optoelectronics for general-purpose matrix computation: a review. Advance 2022, 4, .	ced Photonics,	6.2	16
415	The interplay of chemical structure, physical properties, and structural design as a tool to the properties of melanins within mesopores. Scientific Reports, 2022, 12, .	to modulate	1.6	3

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#	Article	IF	CITATIONS
416	Y-branch wavelength demultiplexer based on topological valley photonic crystals. Optics and Laser Technology, 2022, 155, 108422.	2.2	3
417	Controllable Inverse Photoconductance in Semiconducting Nanowire Films. Advanced Materials, 2022, 34, .	11.1	6
418	Inverse Designed Integrated Optical Filters for Optical Transmission Shaping. , 2022, , .		0
419	Design of a Reconfigurable Receiver for Nanophotonic Interconnects. , 2022, , .		1
420	Nano Quantum Computing thin films electronic components to act as rectifier and amplifier in simulation theory. Optik, 2022, 269, 169843.	1.4	1
421	SiGeSn Quantum Well for Photonics Integrated Circuits on Si Photonics Platform: A Review. Journal Physics D: Applied Physics, 0, , .	1.3	6
422	Interaction of Ge(Si) Self-Assembled Nanoislands with Different Modes of Two-Dimensional Photonic Crystal. Nanomaterials, 2022, 12, 2687.	1.9	4
423	Onâ€Chip Plasmonic Vortex Interferometers. Laser and Photonics Reviews, 2022, 16, .	4.4	12
424	Mode division multiplexing on an InP membrane on silicon. Optics Letters, 2022, 47, 4004.	1.7	4
425	Dielectric Contrast Tailoring for Polarized Photosensitivity toward Multiplexing Optical Communications and Dynamic Encrypt Technology. ACS Nano, 2022, 16, 12852-12865.	7.3	22
426	Comparative Study of Oxygen- and Carbon-Related Defects in Electron Irradiated Cz–Si Doped with Isovalent Impurities. Applied Sciences (Switzerland), 2022, 12, 8151.	1.3	2
427	Electrical switching of Ge2Sb2Te5 memory cells based on silicon photonic waveguide microheaters. , 2022, , .		0
428	Design of a Reconfigurable Optical Computing Architecture Using Phase Change Material. IFIP Advances in Information and Communication Technology, 2022, , 155-174.	0.5	0
429	Long Short Term Memory Neural Network (Lstmnn) and Inter-Symbol Feature Extraction for 160 Gbit/S Pam4 from Silicon Micro-Ring Transmitter. SSRN Electronic Journal, 0, , .	0.4	0
430	A Superhydrophilic Silicon Surface Enhanced by Multiscale Hierarchical Structures Fabricated by Laser Direct Writing. Langmuir, 2022, 38, 11015-11021.	1.6	2
431	A 4 $ ilde{A}$ —52 Gbps PAM4 WDM Transmitter with Silicon Photonics Microring Modulator. , 2022, , .		0
432	Optical Signal Modulation in Photonic Waveguiding Heteroarchitectures with Continuously Variable Visibleâ€Toâ€Nearâ€Infrared Emission Color. Advanced Materials, 2022, 34, .	11.1	9
433	Phototunable chip-scale topological photonics: 160 Gbps waveguide and demultiplexer for THz 6G communication. Nature Communications, 2022, 13, .	5.8	79

#	Article	IF	CITATIONS
434	Opportunities and Challenges for Large-Scale Phase-Change Material Integrated Electro-Photonics. ACS Photonics, 2022, 9, 3181-3195.	3.2	23
436	Superheterodyne-inspired waveguide-integrated metasurfaces for flexible free-space light manipulation. Nanophotonics, 2022, 11, 4499-4514.	2.9	7
437	Onâ€Đemand Mode Conversion and Wavefront Shaping via Onâ€Chip Metasurfaces. Advanced Optical Materials, 2022, 10, .	3.6	14
438	Extending the spectrum of fully integrated photonics to submicrometre wavelengths. Nature, 2022, 610, 54-60.	13.7	58
439	Topological photonics by breaking the degeneracy of line node singularities in semimetal-like photonic crystals. Optics Express, 0, , .	1.7	1
440	Novel Approaches to Infrared Detection in CMOS. , 2022, , .		0
441	Multifunctional 2D MoS ₂ Optoelectronic Artificial Synapse with Integrated Arithmetic and Reconfigurable Logic Operations for Inâ€Memory Neuromorphic Computing Applications. Advanced Materials Technologies, 2023, 8, .	3.0	17
442	High-sensitivity waveguide-integrated bolometer based on free-carrier absorption for Si photonic sensors. Optics Express, 2022, 30, 42663.	1.7	2
443	Coupling strategy between high-index and mid-index micro-metric waveguides for O-band applications. Scientific Reports, 2022, 12, .	1.6	1
444	Magnetically Tunable Micro-Ring Resonators for Massive Magneto-Optical Modulation in Dense Wavelength Division Multiplexing Systems. Sensors, 2022, 22, 8163.	2.1	4
445	Crosstalk Reduction between Closely Spaced Optical Waveguides by Using Higher-Order Modes. Physical Review Applied, 2022, 18, .	1.5	2
446	High‧peed Photodetectors on Silicon Photonics Platform for Optical Interconnect. Laser and Photonics Reviews, 2022, 16, .	4.4	14
447	Upraising wavelength exactitude in laser array with spatial hole burning suppression based on the reconstruction-equivalent-chirp technique. Applied Optics, 2022, 61, 9555.	0.9	0
448	Long Short Term Memory Neural Network (LSTMNN) and inter-symbol feature extraction for 160 Gbit/s PAM4 from silicon micro-ring transmitter. Optics Communications, 2023, 529, 129067.	1.0	1
449	Photonic Bayesian Neural Network Using Programmed Optical Noises. IEEE Journal of Selected Topics in Quantum Electronics, 2023, 29, 1-6.	1.9	2
450	Two-Dimensional Phased-Array Receiver Based on Integrated Silicon True Time Delay Lines. IEEE Transactions on Microwave Theory and Techniques, 2023, 71, 1251-1261.	2.9	5
451	High Wavelength Count Laser Sources for WDM CMOS Optical Interconnects. , 2022, , .		0
452	Visible-Light Integrated PIN Avalanche Photodetectors With High Responsivity and Bandwidth. Journal of Lightwave Technology, 2023, 41, 2443-2450.	2.7	0

#	Article	IF	CITATIONS
453	Anisotropic Van Der Waals 2D GeAs Integrated on Silicon Four-Waveguide Crossing. Journal of Lightwave Technology, 2023, 41, 1784-1789.	2.7	1
454	Silicon photonics interfaced with microelectronics for integrated photonic quantum technologies: a new era in advanced quantum computers and quantum communications?. Nanoscale, 2023, 15, 4682-4693.	2.8	11
455	Formation of light-emitting defects in silicon by swift heavy ion irradiation and subsequent annealing. Nuclear Instruments & Methods in Physics Research B, 2023, 535, 132-136.	0.6	3
456	Numerical Investigation of a New GeSn MIR Phototransistor based on IGZO TFT Platform. , 2022, , .		Ο
457	A Compact Butterfly-Style Silicon Photonic–Electronic Neural Chip for Hardware-Efficient Deep Learning. ACS Photonics, 2022, 9, 3906-3916.	3.2	15
458	New Ge-gate IR Phototransistor based on Doping Engineering Aspect: Photodetection Properties and Circuit Level Investigation. , 2022, , .		0
460	Broadband multimode 3 dB optical power splitter using tapered couplers. Optics Express, 2022, 30, 46236.	1.7	8
461	Low-temperature polycrystalline silicon waveguides for low loss transmission in the near-to-mid-infrared region. Optics Express, 0, , .	1.7	0
462	Computation at the speed of light: metamaterials for all-optical calculations and neural networks. Advanced Photonics, 2022, 4, .	6.2	24
463	Midâ€Infrared Siliconâ€onâ€Lithiumâ€Niobate Electroâ€Optic Modulators Toward Integrated Spectroscopic Sensing Systems. Advanced Optical Materials, 2023, 11, .	3.6	11
464	Optical Temperature Sensor Based on Polysilicon Waveguides. Sensors, 2022, 22, 9357.	2.1	1
465	Room-Temperature Excitonic Nanolaser Array with Directly Grown Monolayer WS ₂ . ACS Photonics, 2023, 10, 283-289.	3.2	3
466	Photonic parallel channel estimation of MIMO-OFDM wireless communication systems. Optics Express, 2023, 31, 1394.	1.7	2
467	Reduction in Crosstalk between Integrated Anisotropic Optical Waveguides. Photonics, 2023, 10, 59.	0.9	2
468	Experimental demonstration of a 160 Gbit/s 3D-integrated silicon photonics receiver with 1.2-pJ/bit power consumption. Optics Express, 2023, 31, 4129.	1.7	3
469	Hybrid tunnel junction enabled independent junction control of cascaded InGaN blue/green micro-light-emitting diodes. Optics Express, 2023, 31, 7572.	1.7	2
470	Cavity dumping using a microscopic Fano laser. Optica, 2023, 10, 248.	4.8	4
471	Ultraâ€Lowâ€Loss Silicon Nitride Photonics Based on Deposited Films Compatible with Foundries. Laser and Photonics Reviews, 2023, 17, .	4.4	6

#	Article	IF	CITATIONS
472	On-chip tunable parityâ \in time symmetric optoelectronic oscillator. , 2023, 2, .		2
473	Microcomb-based integrated photonic processing unit. Nature Communications, 2023, 14, .	5.8	49
474	Tunable optical properties of transition metal dichalcogenide nanoparticles synthesized by femtosecond laser ablation and fragmentation. Journal of Materials Chemistry C, 2023, 11, 3493-3503.	2.7	3
475	Platform-agnostic waveguide integration of high-speed photodetectors with evaporated tellurium thin films. Optica, 0, , .	4.8	1
476	A 128 Gbit/s 3D-Integrated Silicon Photonics Receiver with 1.5 pJ/bit Power Consumption. , 2022, , .		0
477	Polarized emission from hexagonal-silicon–germanium nanowires. Journal of Applied Physics, 2023, 133, 065702.	1.1	0
478	Polarization Conversion of Light Diffracted from InP Nanowire Photonic Crystal Arrays. Advanced Optical Materials, 2023, 11, .	3.6	1
479	Scalable architecture for sub-pJ/b multi-Tbps comb-driven DWDM silicon photonic transceiver. , 2023, ,		4
480	CMOS-compatible electro-optical SRAM cavity device based on negative differential resistance. Science Advances, 2023, 9, .	4.7	4
481	Deep Subwavelength Anti-Slot Photonic Crystals Fabricated in Monolithic Silicon Photonics Technology. IEEE Photonics Technology Letters, 2023, 35, 461-464.	1.3	1
482	A review of different techniques used to design photonic crystal-based logic gates. Optik, 2023, 280, 170794.	1.4	7
483	Optical and Electrical Memories for Analog Optical Computing. IEEE Journal of Selected Topics in Quantum Electronics, 2023, 29, 1-12.	1.9	10
484	Integrated Photonic Neural Networks: Opportunities and Challenges. ACS Photonics, 0, , .	3.2	5
485	Nonvolatile Multilevel Switching of Silicon Photonic Devices with In ₂ O ₃ /GST Segmented Structures. Advanced Optical Materials, 2023, 11, .	3.6	11
486	Sagnac interference in integrated photonics. Applied Physics Reviews, 2023, 10, .	5.5	14
487	A sub-wavelength Si LED integrated in a CMOS platform. Nature Communications, 2023, 14, .	5.8	3
488	Advances in chip-integrated silicon-germanium photodetectors. , 2023, , 233-266.		0
489	Ultrafast Carbon Nanotube Photodetectors with Bandwidth over 60 GHz. ACS Photonics, 0, , .	3.2	1

	CITATION	CITATION REPORT	
#	Article	IF	CITATIONS
490	Unified treatment for scattering, absorption, and photoluminescence of coupled metallic nanoparticles with vertical polarized excitation. New Journal of Physics, 2023, 25, 033028.	1.2	2
491	Sub-wavelength pitch optical antenna array with low crosstalk for optical phased array. , 2022, , .		1
492	Co-packaged optics (CPO): status, challenges, and solutions. Frontiers of Optoelectronics, 2023, 16, .	1.9	9
493	Allâ€Dielectric Huygens' Metaâ€Waveguides for Resonant Integrated Photonics. Laser and Photonics Reviews, 2023, 17, .	4.4	12
494	13.5 Subtractive Photonic Waveguide-Coupled Photodetectors in 180nm Bulk CMOS. , 2023, , .		0
495	Toward photonic–electronic convergence based on heterogeneous platform of merging lithium niobate into silicon. Journal of the Optical Society of America B: Optical Physics, 2023, 40, 1573.	0.9	2
496	Silicon Waveguide-Integrated Carbon Nanotube Photodetector with Low Dark Current and 48 GHz Bandwidth. ACS Nano, 2023, 17, 7466-7474.	7.3	3
497	Silicon Photonic Wavelength-Selective Switch Based on an Array of Adiabatic Elliptical-Microrings. Journal of Lightwave Technology, 2023, 41, 5660-5667.	2.7	1
498	Simultaneous measurements of Ka-band microwave angle of arrival and Doppler frequency shift based on a silicon DPMZM. Optics Express, 2023, 31, 14509.	1.7	1
499	Theoretical insights into the amplified optical gain of hexagonal germanium by strain engineering. RSC Advances, 2023, 13, 11324-11336.	1.7	0
500	Engineering epitaxy and condensation: Fabrication of Ge nanolayers, mechanism and applications. Applied Surface Science, 2023, 630, 157226.	3.1	0
501	Machine learning assisted two-dimensional beam-steering for integrated optical phased arrays. Optics Communications, 2023, 540, 129517.	1.0	4
502	The next generation of hybrid microfluidic/integrated circuit chips: recent and upcoming advances in high-speed, high-throughput, and multifunctional lab-on-IC systems. Lab on A Chip, 2023, 23, 2553-2576.	3.1	2
503	Plasmon-induced scattering, luminescence, and etching. , 2023, , 203-249.		0
504	Review of the advances in low-cost silicon production technologies with reduced carbon-emission. Research, 2023, 6, .	2.8	1
510	Hexagonal boron nitride nanophotonics: a record-breaking material for the ultraviolet and visible spectral ranges. Materials Horizons, 2023, 10, 2427-2435.	6.4	9
511	System-on-Chip Photonic Integrated Circuits in Silicon Photonics and the Role of Plasmonics. , 2023, , .		0
513	Metamaterial antenna array fed by distributed Bragg deflector for beam steering on SOI platform. , 2023, , .		0

	Сітатіс	ATION REPORT		
# 520	ARTICLE System-on-Chip Photonic Integrated Circuits in Silicon Photonics and the Role of Plasmonics. , 2023, , .	IF	CITATIONS 0	
523	Recent progress in quantum photonic chips for quantum communication and internet. Light: Science and Applications, 2023, 12, .	7.7	21	
531	Passive silicon photonic devices. , 2023, , 159-199.		1	
532	High-speed photodetectors. , 2023, , 123-157.		0	
534	A Method to Reduce the Design Complexity of Nanophotonic Interconnects. , 2023, , .		0	
539	Low-dimensional wide-bandgap semiconductors for UV photodetectors. Nature Reviews Materials, 2023, 8, 587-603.	23.3	124	
550	FDFD Inverse Design Acceleration of 3 ${\rm \tilde{A}}-$ 3 Hub Device Based on the Schur Complement Domain Decomposition Method. , 2023, , .		0	
567	Experimental Demonstration of Vertical Field Tuning using Nano-Pixel Spot-Size Converter. , 2023, , .		0	
571	On-chip fluorescence array sensor for chemical gas sensing. , 2023, , .		0	
586	Silicon Photonic Filter using an Elliptical Micro-Ring with Small Bent Radius and Ultra-Large FSR. , 2023, , .		0	
591	On-chip two-dimensional material-based waveguide-integrated photodetectors. Journal of Materials Chemistry C, 2024, 12, 2279-2316.	2.7	0	
594	Highly Responsive Broadband (250~1000 nm) DUV-NIR Photodetector and Tunable Emitter Enabled by III-V Nanowire on Silicon for Integrated Photonics. , 2023, , .		0	