John Bowers

List of Publications by Year in Descending Order

950 papers	31,427 citations	85 h-index	145 g-index
1,270 ext. papers	39,061 ext. citations	4.3 avg, IF	7.48 L-index

#	Paper	IF	Citations
950	Crack propagation in low dislocation density quantum dot lasers epitaxially grown on Si. *APL Materials*, **2022**, 10, 011114	5.7	0
949	Compact Wavelength Selective Crossbar Switch with Cascaded First Order Micro-Ring Resonators. *Photonics*, **2022**, 9, 60	2.2	1
948	Silicon-integrated nonlinear III-V photonics. *Photonics Research*, **2022**, 10, 535	6	3
947	High-Efficiency Quantum Dot Lasers as Comb Sources for DWDM Applications. *Applied Sciences (Switzerland)*, **2022**, 12, 1836	2.6	0
946	Integrated optical frequency comb technologies. *Nature Photonics*, **2022**, 16, 95-108	33.9	25
945	High-Performance Silicon Photonics Using Heterogeneous Integration. *IEEE Journal of Selected Topics in Quantum Electronics*, **2022**, 28, 1-15	3.8	10
944	Carrier Recombination Properties of Low-Threshold 1.3 Îm Quantum Dot Lasers on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2022**, 28, 1-10	3.8	0
943	Origin of the Diffusion-Related Optical Degradation of 1.3 Îm Inas QD-LDs Epitaxially Grown on Silicon Substrate. *IEEE Journal of Selected Topics in Quantum Electronics*, **2022**, 28, 1-9	3.8	0
942	Spectral dispersion of the linewidth enhancement factor and four wave mixing conversion efficiency of an InAs/GaAs multimode quantum dot laser. *Applied Physics Letters*, **2022**, 120, 081105	3.4	2
941	Multimode Physics in the Mode Locking of Semiconductor Quantum Dot Lasers. *Applied Sciences (Switzerland)*, **2022**, 12, 3504	2.6	1
940	Platicon microcomb generation using laser self-injection locking.. *Nature Communications*, **2022**, 13, 1771	17.4	8
939	Microcomb-driven silicon photonic systems.. *Nature*, **2022**, 605, 457-463	50.4	8
938	A Review of the Reliability of Integrated IR Laser Diodes for Silicon Photonics. *Electronics (Switzerland)*, **2021**, 10, 2734	2.6	1
937	High-performance lasers for fully integrated silicon nitride photonics. *Nature Communications*, **2021** , 12, 6650	17.4	11
936	Low power consumption silicon photonics datacenter interconnects enabled by a parallel architecture **2021**,		1
935	. *Journal of Lightwave Technology*, **2021**, 1-1	4	3
934	Integrated Coherent Tunable Laser (ICTL) with 118 nm Tuning Range and sub-100 Hz Lorentzian Linewidth **2021**,		2

933	Degradation mechanisms of 1.3 μm C-doped quantum dot lasers grown on native substrate. *Microelectronics Reliability*, **2021**, 114222	1.2	0
932	Ultrabright Entangled-Photon-Pair Generation from an AlGaAs-On-Insulator Microring Resonator. *PRX Quantum*, **2021**, 2,	6.1	14
931	Quantum dot lasers—history and future prospects. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 020802	2.9	7
930	Dynamic and nonlinear properties of epitaxial quantum-dot lasers on silicon operating under long- and short-cavity feedback conditions for photonic integrated circuits. *Physical Review A*, **2021**, 103,	2.6	7
929	Higher order mode supercontinuum generation in tantalum pentoxide (TaO) channel waveguide. *Scientific Reports*, **2021**, 11, 7978	4.9	0
928	Artificial Coherent States of Light by Multiphoton Interference in a Single-Photon Stream. *Physical Review Letters*, **2021**, 126, 143601	7.4	5
927	. *IEEE Nanotechnology Magazine*, **2021**, 15, 8-22	1.7	3
926	Chromosome number is key to longevity of polyploid lineages. *New Phytologist*, **2021**, 231, 19-28	9.8	2
925	Integrated photonic high extinction short and long pass filters based on lateral leakage. *Optics Express*, **2021**, 29, 18905-18914	3.3	1
924	CMOS-foundry-based blue and violet photonics. *Optica*, **2021**, 8, 755	8.6	8
923	Perspective on the future of silicon photonics and electronics. *Applied Physics Letters*, **2021**, 118, 220501	3.4	51
922	Towards integrated photonic interposers for processing octave-spanning microresonator frequency combs. *Light: Science and Applications*, **2021**, 10, 109	16.7	2
921	High-temperature reliable quantum-dot lasers on Si with misfit and threading dislocation filters. *Optica*, **2021**, 8, 749	8.6	16
920	Identification of dislocation-related and point-defects in III-As layers for silicon photonics applications. *Journal Physics D: Applied Physics*, **2021**, 54, 285101	3	2
919	Reduced dislocation growth leads to long lifetime InAs quantum dot lasers on silicon at high temperatures. *Applied Physics Letters*, **2021**, 118, 192101	3.4	3
918	High Speed Evanescent Quantum-Dot Lasers on Si. *Laser and Photonics Reviews*, **2021**, 15, 2100057	8.3	8
917	Seamless multi-reticle photonics. *Optics Letters*, **2021**, 46, 2984-2987	3	2
916	Quantum Hall effect of the topological insulator state of cadmium arsenide in Corbino geometry. *Applied Physics Letters*, **2021**, 118, 261901	3.4	0

915	Laser soliton microcombs heterogeneously integrated on silicon. *Science*, **2021**, 373, 99-103	33.3	37
914	Dynamic performance and reflection sensitivity of quantum dot distributed feedback lasers with large optical mismatch. *Photonics Research*, **2021**, 9, 1550	6	3
913	Second Order Nonlinear Photonic Integrated Platforms for Optical Signal Processing. *IEEE Journal of Selected Topics in Quantum Electronics*, **2021**, 27, 1-11	3.8	7
912	. *IEEE Journal of Quantum Electronics*, **2021**, 57, 1-8	2	3
911	A Pathway to Thin GaAs Virtual Substrate on On-Axis Si (001) with Ultralow Threading Dislocation Density. *Physica Status Solidi (A) Applications and Materials Science*, **2021**, 218, 2000402	1.6	21
910	Efficient second harmonic generation in lithium niobate on insulator waveguides and its pitfalls. *JPhys Photonics*, **2021**, 3, 012008	2.5	4
909	Scalable multicast hybrid broadband-crossbar wavelength selective switch: proposal and analysis. *Optics Letters*, **2021**, 46, 448-451	3	3
908	Reliability of lasers on silicon substrates for silicon photonics **2021**, 239-271		3
907	Mode-locked dark-pulse Kerr combs in normal-dispersion AlGaAs-on-insulator microresonators **2021**,		1
906	Recent Progress in Heterogeneous III-V-on-Silicon Photonic Integration. *Light Advanced Manufacturing*, **2021**, 2, 1-25	1	32
905	Design of an on-chip electrically driven, position-adapted, fully integrated erbium-based waveguide amplifier for silicon photonics. *OSA Continuum*, **2021**, 4, 790	1.4	2
904	Hertz-linewidth semiconductor lasers using CMOS-ready ultra-high-Q microresonators. *Nature Photonics*, **2021**, 15, 346-353	33.9	69
903	Hybrid InP and SiN integration of an octave-spanning frequency comb. *APL Photonics*, **2021**, 6, 026102	5.2	6
902	Advances in heteroepitaxial integration of III-V and IV-VI semiconductors with electron channeling contrast imaging. *Microscopy and Microanalysis*, **2021**, 27, 908-910	0.5	
901	Perspectives on Advances in Quantum Dot Lasers and Integration with Si Photonic Integrated Circuits. *ACS Photonics*, **2021**, 8, 2555-2566	6.3	7
900	Kinetically limited misfit dislocations formed during post-growth cooling in III$\mathbb{V}$ lasers on silicon. *Journal Physics D: Applied Physics*, **2021**, 54, 494001	3	1
899	Low noise, tunable silicon photonic lasers. *Applied Physics Reviews*, **2021**, 8, 031306	17.3	6
898	Reaching fiber-laser coherence in integrated photonics. *Optics Letters*, **2021**, 46, 5201-5204	3	10

897	A Scalable Multicast Hybrid Broadband Crossbar Wavelength Selective Switch For Datacenters **2021**,		1
896	Extended polarized semiclassical model for quantum-dot cavity QED and its application to single-photon sources. *Physical Review A*, **2020**, 101,	2.6	1
895	Dissipative Kerr Solitons in a III-V Microresonator. *Laser and Photonics Reviews*, **2020**, 14, 2000022	8.3	27
894	Integrated turnkey soliton microcombs. *Nature*, **2020**, 582, 365-369	50.4	111
893	1.3 ́μm Quantum Dot-Distributed Feedback Lasers Directly Grown on (001) Si. *Laser and Photonics Reviews*, **2020**, 14, 2000037	8.3	12
892	Ultra-efficient frequency comb generation in AlGaAs-on-insulator microresonators. *Nature Communications*, **2020**, 11, 1331	17.4	77
891	Directly Modulated Single-Mode Tunable Quantum Dot Lasers at 1.3 ́μm. *Laser and Photonics Reviews*, **2020**, 14, 1900348	8.3	13
890	On quantum-dot lasing at gain peak with linewidth enhancement factor = 0. *APL Photonics*, **2020** , 5, 026101	5.2	16
889	Inverse-Designed Photonics for Semiconductor Foundries. *ACS Photonics*, **2020**, 7, 569-575	6.3	27
888	Low Dark Current 1.55 Micrometer InAs Quantum Dash Waveguide Photodiodes. *ACS Nano*, **2020**, 14, 3519-3527	16.7	8
887	Low Voltage, High Optical Power Handling Capable, Bulk Compound Semiconductor Electro-Optic Modulators at 1550 nm. *Journal of Lightwave Technology*, **2020**, 38, 2308-2314	4	5
886	Low Threshold Quantum Dot Lasers Directly Grown on Unpatterned Quasi-Nominal (001) Si. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26, 1-9	3.8	12
885	Thermoelectric properties of holey silicon at elevated temperatures. *Materials Today Physics*, **2020**, 14, 100224	8	5
884	. *Journal of Lightwave Technology*, **2020**, 38, 3376-3386	4	11
883	Experiments on Multiwavelength Selective Crossbar Switches **2020**,		1
882	Quantum dot lasers based photonics integrated circuits **2020**,		2
881	Optical self-injection stabilization of a passively mode-locked quantum dot on silicon laser **2020**,		2
880	Integrated turnkey soliton microcombs operated at CMOS frequencies **2020**,		1

879	Laser Self-Injection Locked Frequency Combs in a Normal GVD Integrated Microresonator **2020**,		1
878	Semiconductor laser integration for octave-span Kerr-soliton frequency combs **2020**,		1
877	Ultra-Narrow Linewidth Chip-Scale Heterogeneously Integrated Silicon/III-V Tunable Laser Pumped Si/Si3N4 SBS Laser **2020**,		2
876	PINE: Photonic Integrated Networked Energy efficient datacenters (ENLITENED Program) [Invited]. *Journal of Optical Communications and Networking*, **2020**, 12, 443	4.1	6
875	Chip-based soliton microcomb module using a hybrid semiconductor laser. *Optics Express*, **2020**, 28, 2714-2721	3.3	11
874	Multimode description of self-mode locking in a single-section quantum-dot laser. *Optics Express*, **2020**, 28, 5317-5330	3.3	17
873	Efficient second harmonic generation in nanophotonic GaAs-on-insulator waveguides. *Optics Express*, **2020**, 28, 9521-9532	3.3	22
872	Effects of nonlinear loss in high-Q Si ring resonators for narrow-linewidth III-V/Si heterogeneously integrated tunable lasers. *Optics Express*, **2020**, 28, 19926-19936	3.3	15
871	Dependence of carrier escape lifetimes on quantum barrier thickness in InGaN/GaN multiple quantum well photodetectors. *Optics Express*, **2020**, 28, 23796-23805	3.3	4
870	Ultrahigh-Q AlGaAs-on-insulator microresonators for integrated nonlinear photonics. *Optics Express* , **2020**, 28, 32894-32906	3.3	14
869	Chip-Scale, Optical-Frequency-Stabilized PLL for DSP-Free, Low-Power Coherent QAM in the DCI **2020**,		5
868	High Efficiency, High Gain and High Saturation Output Power Quantum Dot SOAs Grown on Si and applications **2020**,		7
867	Ultra-broadband and Low-loss Polarization Beam Splitter on Silicon **2020**,		2
866	Integrated Green DWDM Photonics For Next-Gen High-Performance Computing **2020**,		6
865	Terabit Transmitters Using Heterogeneous III-V/Si Photonic Integrated Circuits **2020**,		1
864	Ultra-broadband polarization beam splitter with silicon subwavelength-grating waveguides. *Optics Letters*, **2020**, 45, 2259-2262	3	27
863	40 Gbit/s waveguide photodiode using III-V on silicon heteroepitaxy. *Optics Letters*, **2020**, 45, 2954-2956	3	6
862	Deuterated silicon dioxide for heterogeneous integration of ultra-low-loss waveguides. *Optics Letters*, **2020**, 45, 3340-3343	3	12

861	Effect of p-doping on the intensity noise of epitaxial quantum dot lasers on silicon. *Optics Letters*, **2020**, 45, 4887-4890	3	8
860	On-chip high-efficiency wavelength multicasting of PAM3/PAM4 signals using low-loss AlGaAs-on-insulator nanowaveguides. *Optics Letters*, **2020**, 45, 4539-4542	3	4
859	Ultra-precise optical-frequency stabilization with heterogeneous III-V/Si lasers. *Optics Letters*, **2020**, 45, 5275-5278	3	8
858	2 switch. *Optics Letters*, **2020**, 45, 5340-5343	3	6
857	Narrow-linewidth III-V/Si/Si3N4 laser using multilayer heterogeneous integration. *Optica*, **2020**, 7, 20	8.6	64
856	Widely tunable, heterogeneously integrated quantum-dot O-band lasers on silicon. *Photonics Research*, **2020**, 8, 1551	6	16
855	Integrated dispersion compensated mode-locked quantum dot laser. *Photonics Research*, **2020**, 8, 1428	6	8
854	Physics and applications of quantum dot lasers for silicon photonics. *Nanophotonics*, **2020**, 9, 1271-1286	6.3	17
853	Widely Tunable, Narrow Linewidth Quantum Dot Lasers Heterogeneously Integrated on Silicon **2020**,		1
852	Stimulated Brillouin Scattering in AlGaAs on insulator waveguides **2020**,		2
851	High resolution, high channel count mid-infrared arrayed waveguide gratings in silicon. *Optics Letters*, **2020**, 45, 4551-4554	3	4
850	An All-Optical Wavelength-Selective O-band Chip-Scale Silicon Photonic Switch **2020**,		1
849	On-chip High-efficiency Channel-selective Wavelength Multicasting of PAM3/PAM4 Signals Using an AlGaAsOI Waveguide **2020**,		1
848	Hybrid mode-locked 20 GHz colliding pulse Si/III-V laser with 890 fs pulsewidth **2020**,		1
847	1.3-μm passively mode-locked quantum dot lasers epitaxially grown on silicon: gain properties and optical feedback stabilization. *JPhys Photonics*, **2020**, 2, 045006	2.5	5
846	Foundry capabilities for photonic integrated circuits **2020**, 143-193		2
845	Low Dark Current High Gain InAs Quantum Dot Avalanche Photodiodes Monolithically Grown on Si. *ACS Photonics*, **2020**, 7, 528-533	6.3	34
844	Epitaxial quantum dot lasers on silicon with high thermal stability and strong resistance to optical feedback. *APL Photonics*, **2020**, 5, 016103	5.2	16

843	Research Toward a Heterogeneously Integrated InGaN Laser on Silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900770	1.6	7
842	An Experimental Demonstration of 160-Gbit/s PAM-4 Using a Silicon Micro-Ring Modulator. *IEEE Photonics Technology Letters*, **2020**, 32, 125-128	2.2	19
841	Chip-scale nonlinear photonics for quantum light generation. *AVS Quantum Science*, **2020**, 2, 041702	10.3	17
840	High Speed Mid-Wave Infrared Uni-Traveling Carrier Photodetector. *IEEE Journal of Quantum Electronics*, **2020**, 56, 1-7	2	10
839	Recombination-enhanced dislocation climb in InAs quantum dot lasers on silicon. *Journal of Applied Physics*, **2020**, 128, 025703	2.5	11
838	Defect filtering for thermal expansion induced dislocations in III□V lasers on silicon. *Applied Physics Letters*, **2020**, 117, 122101	3.4	20
837	Silicon nitride chirped spiral Bragg grating with large group delay. *APL Photonics*, **2020**, 5, 101302	5.2	5
836	Investigation of Current-Driven Degradation of 1.3 □m Quantum-Dot Lasers Epitaxially Grown on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26, 1-8	3.8	8
835	Ring-Resonator Based Widely-Tunable Narrow-Linewidth Si/InP Integrated Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26, 1-14	3.8	41
834	Ultra-Sharp Multimode Waveguide Bends with Subwavelength Gratings. *Laser and Photonics Reviews*, **2019**, 13, 1800119	8.3	50
833	Influence of the polarization anisotropy on the linewidth enhancement factor and reflection sensitivity of 1.55-□m InP-based InAs quantum dash lasers. *Applied Physics Letters*, **2019**, 115, 091101	3.4	9
832	High-Performance O-Band Quantum-Dot Semiconductor Optical Amplifiers Directly Grown on a CMOS Compatible Silicon Substrate. *ACS Photonics*, **2019**, 6, 2523-2529	6.3	14
831	Non-radiative recombination at dislocations in InAs quantum dots grown on silicon. *Applied Physics Letters*, **2019**, 115, 131102	3.4	17
830	1.3- mu m Reflection Insensitive InAs/GaAs Quantum Dot Lasers Directly Grown on Silicon. *IEEE Photonics Technology Letters*, **2019**, 31, 345-348	2.2	47
829	Quantum dot microcavity lasers on silicon substrates. *Semiconductors and Semimetals*, **2019**, 305-354	0.6	6
828	Linewidth Enhancement Factor in InAs/GaAs Quantum Dot Lasers and Its Implication in Isolator-Free and Narrow Linewidth Applications. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-9	3.8	21
827	Roadmap on all-optical processing. *Journal of Optics (United Kingdom)*, **2019**, 21, 063001	1.7	63
826	. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-7	2	12

825	A High Spur-Free Dynamic Range Silicon DC Kerr Ring Modulator for RF Applications. *Journal of Lightwave Technology*, **2019**, 37, 3261-3272	4	10
824	Defect Characterization of InAs/InGaAs Quantum Dot p-i-n Photodetector Grown on GaAs-on-V-Grooved-Si Substrate. *ACS Photonics*, **2019**, 6, 1100-1105	6.3	29
823	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-15	3.8	26
822	A Review of High-Performance Quantum Dot Lasers on Silicon. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-11	2	53
821	High-Power, High-Linearity, Heterogeneously Integrated III□V on Si MZI Modulators for RF Photonics Systems. *IEEE Photonics Journal*, **2019**, 1-1	1.8	2
820	Heterogeneously Integrated InP/Silicon Photonics: Fabricating Fully Functional Transceivers. *IEEE Nanotechnology Magazine*, **2019**, 13, 17-26	1.7	82
819	Strong frequency conversion in heterogeneously integrated GaAs resonators. *APL Photonics*, **2019**, 4, 036103	5.2	37
818	Heterogeneous silicon photonics sensing for autonomous cars. *Optics Express*, **2019**, 27, 3642-3663	3.3	70
817	Broadband TE Optical Isolators and Circulators in Silicon Photonics Through Ce:YIG Bonding. *Journal of Lightwave Technology*, **2019**, 37, 1463-1473	4	22
816	Multi-Spectral Quantum Cascade Lasers on Silicon With Integrated Multiplexers. *Photonics*, **2019**, 6, 6	2.2	6
815	Low-Threshold Epitaxially Grown 1.3-□m InAs Quantum Dot Lasers on Patterned (001) Si. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-7	3.8	14
814	Characterization of heterogeneous InP-on-Si optical modulators operating between 77 K and room temperature. *APL Photonics*, **2019**, 4, 100805	5.2	7
813	Highly-Sensitive Phase and Frequency Noise Measurement Technique Using Bayesian Filtering. *IEEE Photonics Technology Letters*, **2019**, 31, 1866-1869	2.2	4
812	The Importance of p-Doping for Quantum Dot Laser on Silicon Performance. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-11	2	26
811	Integration of Mid-Infrared Light Sources on Silicon-Based Waveguide Platforms in 3.5□4.7 □m Wavelength Range. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-9	3.8	9
810	Reduced thermal conductivity of epitaxial GaAs on Si due to symmetry-breaking biaxial strain. *Physical Review Materials*, **2019**, 3,	3.2	16
809	Thermally insensitive determination of the chirp parameter of InAs/GaAs quantum dot lasers epitaxially grown onto silicon **2019**,		1
808	Integrated photonics for NASA applications **2019**,		5

807	100 GHz colliding pulse mode locked quantum dot lasers directly grown on Si for WDM application **2019**,		2
806	1550 nm laser with 320 Hz Lorentzian linewidth based on semiconductor gain chip and extended Si3N4 Bragg grating **2019**,		2
805	Multi-wavelength selective crossbar switch. *Optics Express*, **2019**, 27, 5203-5216	3.3	39
804	Integrated microwave photonic phase shifter with full tunable phase shifting range (> 360°) and RF power equalization. *Optics Express*, **2019**, 27, 14798-14808	3.3	7
803	Improved second harmonic performance in periodically poled LNOI waveguides through engineering of lateral leakage. *Optics Express*, **2019**, 27, 23919-23928	3.3	19
802	Passively mode-locked semiconductor quantum dot on silicon laser with 400 Hz RF line width. *Optics Express*, **2019**, 27, 27256-27266	3.3	15
801	Realities and challenges of III-V/Si integration technologies **2019**,		4
800	III-V on silicon avalanche photodiodes by heteroepitaxy. *Optics Letters*, **2019**, 44, 3538-3541	3	12
799	Ultra-narrow linewidth laser based on a semiconductor gain chip and extended SiN Bragg grating. *Optics Letters*, **2019**, 44, 3825-3828	3	35
798	Low loss (Al)GaAs on an insulator waveguide platform. *Optics Letters*, **2019**, 44, 4075-4078	3	7
797	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	8.6	75
796	Monolithic integration of broadband optical isolators for polarization-diverse silicon photonics. *Optica*, **2019**, 6, 473	8.6	80
795	High-power sub-kHz linewidth lasers fully integrated on silicon. *Optica*, **2019**, 6, 745	8.6	75
794	Tunable quantum dot lasers grown directly on silicon. *Optica*, **2019**, 6, 1394	8.6	20
793	Dynamic and nonlinear properties of epitaxial quantum dot lasers on silicon for isolator-free integration. *Photonics Research*, **2019**, 7, 1222	6	15
792	A Low-noise High-channel-count 20 GHz Passively Mode Locked Quantum Dot Laser Grown on Si **2019**,		1
791	Thermoelectric transport at F4TCNQ/silicon interface. *APL Materials*, **2019**, 7, 021104	5.7	0
790	Vernier spectrometer using counterpropagating soliton microcombs. *Science*, **2019**, 363, 965-968	33.3	39

789	High Thermoelectric Power Factor and ZT in TbAs:InGaAs Epitaxial Nanocomposite Material. *Advanced Electronic Materials*, **2019**, 5, 1900015	6.4	3
788	Demonstration of a Spectrally-Partitioned $4mathrm{x}4$ Crossbar Switch with 3 Drops per Cross-point **2019**,		1
787	On-chip polarization rotator for type I second harmonic generation. *APL Photonics*, **2019**, 4, 126105	5.2	6
786	Ultra-low Noise Widely-Tunable Semiconductor Lasers Fully Integrated on Silicon **2019**,		1
785	Tutorial on narrow linewidth tunable semiconductor lasers using Si/III-V heterogeneous integration. *APL Photonics*, **2019**, 4, 111101	5.2	65
784	A Spectrally-Partitioned Crossbar Switch with Three Drops Per Cross-Point Controlled with a Driver **2019**,		1
783	Low-Threshold Continuous-Wave Operation of Electrically Pumped 1.55 μm InAs Quantum Dash Microring Lasers. *ACS Photonics*, **2019**, 6, 279-285	6.3	20
782	Recent Advances in InAs Quantum Dot Lasers Grown on On-Axis (001) Silicon by Molecular Beam Epitaxy. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1800602	1.6	23
781	Status and Potential of Lithium Niobate on Insulator (LNOI) for Photonic Integrated Circuits. *Laser and Photonics Reviews*, **2018**, 12, 1700256	8.3	245
780	An optical-frequency synthesizer using integrated photonics. *Nature*, **2018**, 557, 81-85	50.4	297
779	Impact of threading dislocation density on the lifetime of InAs quantum dot lasers on Si. *Applied Physics Letters*, **2018**, 112, 153507	3.4	84
778	Micro-Resonator Soliton Generated Directly with a Diode Laser. *Laser and Photonics Reviews*, **2018**, 12, 1700307	8.3	17
777	490 fs pulse generation from passively mode-locked single section quantum dot laser directly grown on on-axis GaP/Si. *Electronics Letters*, **2018**, 54, 432-433	1.1	33
776	Electrical Probing Test for Characterizing Wideband Optical Transceiving Devices with Self-Reference and On-Chip Capability. *Journal of Lightwave Technology*, **2018**, 36, 4326-4336	4	5
775	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-9	3.8	32
774	Quasi-Phase-Matched Supercontinuum Generation in Photonic Waveguides. *Physical Review Letters* , **2018**, 120, 053903	7.4	25
773	Heterogeneous silicon light sources for datacom applications. *Optical Fiber Technology*, **2018**, 44, 43-52	2.4	13
772	Silicon photonic terabit/s network-on-chip for datacenter interconnection. *Optical Fiber Technology*, **2018**, 44, 2-12	2.4	12

771	Highly Reliable Low-Threshold InAs Quantum Dot Lasers on On-Axis (001) Si with 87% Injection Efficiency. *ACS Photonics*, **2018**, 5, 1094-1100	6.3	83
770	High Performance 7 $times$ 8 Ge-on-Si Arrayed Waveguide Gratings for the Midinfrared. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-8	3.8	12
769	Fully Integrated Photonic Millimeter-Wave Tracking Generators on the Heterogeneous III□V/Si Platform. *IEEE Photonics Technology Letters*, **2018**, 30, 919-922	2.2	1
768	. *Journal of Lightwave Technology*, **2018**, 36, 1185-1191	4	28
767	Perspective: The future of quantum dot photonic integrated circuits. *APL Photonics*, **2018**, 3, 030901	5.2	117
766	Monolithic 9 GHz passively mode locked quantum dot lasers directly grown on on-axis (001) Si. *Applied Physics Letters*, **2018**, 113, 041108	3.4	18
765	Phase tuning by length contraction. *Optics Express*, **2018**, 26, 3174-3187	3.3	29
764	Characterization of a fully integrated heterogeneous silicon/III-V colliding pulse mode-locked laser with on-chip feedback. *Optics Express*, **2018**, 26, 9714-9723	3.3	7
763	Low dark current III-V on silicon photodiodes by heteroepitaxy. *Optics Express*, **2018**, 26, 13605-13613	3.3	24
762	Integrated heterogeneous silicon/III□V mode-locked lasers. *Photonics Research*, **2018**, 6, 468	6	49
761	Directly modulated quantum dot lasers on silicon with a milliampere threshold and high temperature stability. *Photonics Research*, **2018**, 6, 776	6	45
760	Photonic Integration With Epitaxial III□V on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-12	3.8	68
759	Directly modulated 1.3 □m quantum dot lasers epitaxially grown on silicon. *Optics Express*, **2018**, 26, 7022-7033	3.3	42
758	Towards heterogeneous integration of optical isolators and circulators with lasers on silicon [Invited]. *Optical Materials Express*, **2018**, 8, 2471	2.6	29
757	Observation of the Unconventional Photon Blockade. *Physical Review Letters*, **2018**, 121, 043601	7.4	86
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