John Bowers

List of Publications by Citations

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	Unravelling angiosperm genome evolution by phylogenetic analysis of chromosomal duplication events. *Nature*, **2003**, 422, 433-8	50.4	1207
949	Electrically pumped hybrid AlGaInAs-silicon evanescent laser. *Optics Express*, **2006**, 14, 9203-10	3.3	807
948	Ancient polyploidization predating divergence of the cereals, and its consequences for comparative genomics. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 9903-8	11.5	782
947	Recent progress in lasers on silicon. *Nature Photonics*, **2010**, 4, 511-517	33.9	735
946	Roadmap on silicon photonics. *Journal of Optics (United Kingdom)*, **2016**, 18, 073003	1.7	567
945	Effective band gap inhomogeneity and piezoelectric field in InGaN/GaN multiquantum well structures. *Applied Physics Letters*, **1998**, 73, 2006-2008	3.4	380
944	Monolithic germanium/silicon avalanche photodiodes with 340 GHz gain□bandwidth product. *Nature Photonics*, **2009**, 3, 59-63	33.9	366
943	III-V/silicon photonics for on-chip and intra-chip optical interconnects. *Laser and Photonics Reviews*, **2010**, 4, 751-779	8.3	323
942	Passive technologies for future large-scale photonic integrated circuits on silicon: polarization handling, light non-reciprocity and loss reduction. *Light: Science and Applications*, **2012**, 1, e1-e1	16.7	308
941	An optical-frequency synthesizer using integrated photonics. *Nature*, **2018**, 557, 81-85	50.4	297
940	Heterostructure integrated thermionic coolers. *Applied Physics Letters*, **1997**, 71, 1234-1236	3.4	280
939	Demonstration of electron filtering to increase the Seebeck coefficient in In0.53Ga0.47As□In0.53Ga0.28Al0.19As superlattices. *Physical Review B*, **2006**, 74,	3.3	279
938	Thermal conductivity of Si/SiGe and SiGe/SiGe superlattices. *Applied Physics Letters*, **2002**, 80, 1737-1739	3.4	276
937	Ultra-low-loss high-aspect-ratio Si3N4 waveguides. *Optics Express*, **2011**, 19, 3163-74	3.3	273
936	A genome triplication associated with early diversification of the core eudicots. *Genome Biology*, **2012**, 13, R3	18.3	266
935	Roadmap of optical communications. *Journal of Optics (United Kingdom)*, **2016**, 18, 063002	1.7	264
934	Ultrawide-band long-wavelength p-i-n photodetectors. *Journal of Lightwave Technology*, **1987**, 5, 1339-1350	4	262

933	Hybrid Silicon Photonic Integrated Circuit Technology. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 6100117-6100117	3.8	258
932	Planar waveguides with less than 0.1 dB/m propagation loss fabricated with wafer bonding. *Optics Express*, **2011**, 19, 24090-101	3.3	247
931	Status and Potential of Lithium Niobate on Insulator (LNOI) for Photonic Integrated Circuits. *Laser and Photonics Reviews*, **2018**, 12, 1700256	8.3	245
930	Novel concept for ultracompact polarization splitter-rotator based on silicon nanowires. *Optics Express*, **2011**, 19, 10940-9	3.3	238
929	High performance continuous wave 1.3 μm quantum dot lasers on silicon. *Applied Physics Letters*, **2014**, 104, 041104	3.4	229
928	Two-dimensional free-space beam steering with an optical phased array on silicon-on-insulator. *Optics Express*, **2011**, 19, 21595-604	3.3	221
927	1.3 μm photoluminescence from InGaAs quantum dots on GaAs. *Applied Physics Letters*, **1995**, 67, 3795-3797	3.4	220
926	Time-resolved optical characterization of InGaAs/GaAs quantum dots. *Applied Physics Letters*, **1994**, 64, 2815-2817	3.4	204
925	SiGeC/Si superlattice microcoolers. *Applied Physics Letters*, **2001**, 78, 1580-1582	3.4	196
924	Fully integrated hybrid silicon two dimensional beam scanner. *Optics Express*, **2015**, 23, 5861-74	3.3	182
923	Hybrid Integrated Platforms for Silicon Photonics. *Materials*, **2010**, 3, 1782-1802	3.5	174
922	Hybrid silicon evanescent laser fabricated with a silicon waveguide and III-V offset quantum wells. *Optics Express*, **2005**, 13, 9460-4	3.3	171
921	Silicon-based on-chip multiplexing technologies and devices for Peta-bit optical interconnects. *Nanophotonics*, **2014**, 3, 283-311	6.3	167
920	Heterogeneous Silicon Photonic Integrated Circuits. *Journal of Lightwave Technology*, **2016**, 34, 20-35	4	166
919	Thin film wavelength converters for photonic integrated circuits. *Optica*, **2016**, 3, 531	8.6	161
918	Silicon ring isolators with bonded nonreciprocal magneto-optic garnets. *Optics Express*, **2011**, 19, 11740-5	3.3	157
917	Mode conversion in tapered submicron silicon ridge optical waveguides. *Optics Express*, **2012**, 20, 13425-39	3.3	156
916	Buffering of crucial functions by paleologous duplicated genes may contribute cyclicality to angiosperm genome duplication. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 2730-5	11.5	153

915	Many gene and domain families have convergent fates following independent whole-genome duplication events in Arabidopsis, Oryza, Saccharomyces and Tetraodon. *Trends in Genetics*, **2006**, 22, 597-602	8.5	152
914	Emission mechanisms of bulk GaN and InGaN quantum wells prepared by lateral epitaxial overgrowth. *Applied Physics Letters*, **1999**, 74, 1460-1462	3.4	149
913	Ultrashort broadband polarization beam splitter based on an asymmetrical directional coupler. *Optics Letters*, **2011**, 36, 2590-2	3	148
912	Effects of carrier transport on high-speed quantum well lasers. *Applied Physics Letters*, **1991**, 59, 1835-1837	3.4	146
911	Novel ultra-short and ultra-broadband polarization beam splitter based on a bent directional coupler. *Optics Express*, **2011**, 19, 18614-20	3.3	144
910	Hybrid Silicon Photonics for Optical Interconnects. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 333-346	3.8	144
909	A distributed feedback silicon evanescent laser. *Optics Express*, **2008**, 16, 4413-9	3.3	143
908	Room temperature lasing from InGaAs quantum dots. *Electronics Letters*, **1996**, 32, 1732	1.1	142
907	Integrated waveguide coupled Si_3N_4 resonators in the ultrahigh-Q regime. *Optica*, **2014**, 1, 153	8.6	141
906	Optical investigations of the dynamic behavior of GaSb/GaAs quantum dots. *Applied Physics Letters*, **1996**, 68, 1543-1545	3.4	138
905	High-speed InGaAsP constricted-mesa lasers. *IEEE Journal of Quantum Electronics*, **1986**, 22, 833-844	2	138
904	Integrated AlGaInAs-silicon evanescent race track laser and photodetector. *Optics Express*, **2007**, 15, 2315-22	3.3	136
903	A hybrid AlGaInAs-silicon evanescent waveguide photodetector. *Optics Express*, **2007**, 15, 6044-52	3.3	130
902	Electrically-pumped compact hybrid silicon microring lasers for optical interconnects. *Optics Express* , **2009**, 17, 20355-64	3.3	123
901	Perspective: The future of quantum dot photonic integrated circuits. *APL Photonics*, **2018**, 3, 030901	5.2	117
900	Effect of nanoparticle scattering on thermoelectric power factor. *Applied Physics Letters*, **2009**, 94, 202105	3.4	117
899	Thermoelectric power factor in semiconductors with buried epitaxial semimetallic nanoparticles. *Applied Physics Letters*, **2005**, 87, 112102	3.4	117
898	Quantum dot lasers for silicon photonics [Invited]. *Photonics Research*, **2015**, 3, B1	6	116

897	Time-resolved photoluminescence from poly[2-methoxy, 5-(2□ethyl-hexyloxy)-p-phenylene-vinylene]: Solutions, gels, films, and blends. *Journal of Chemical Physics*, **1993**, 98, 6504-6509	3.9	116
896	Comparative genomic analysis of C4 photosynthetic pathway evolution in grasses. *Genome Biology*, **2009**, 10, R68	18.3	113
895	Annotated portfolios. *Interactions*, **2012**, 19, 40-49	1	112
894	Integrated turnkey soliton microcombs. *Nature*, **2020**, 582, 365-369	50.4	111
893	Right sizes of nano- and microstructures for high-performance and rigid bulk thermoelectrics. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 10949-54	11.5	108
892	13 □n submilliamp threshold quantum dot micro-lasers on Si. *Optica*, **2017**, 4, 940	8.6	108
891	Self-assembled ErAs islands in GaAs: Growth and subpicosecond carrier dynamics. *Applied Physics Letters*, **1999**, 75, 3548-3550	3.4	106
890	Electrically pumped continuous-wave 1.3 □n quantum-dot lasers epitaxially grown on on-axis (001) GaP/Si. *Optics Letters*, **2017**, 42, 338-341	3	104
889	Low-loss Si3N4 arrayed-waveguide grating (de)multiplexer using nano-core optical waveguides. *Optics Express*, **2011**, 19, 14130-6	3.3	104
888	Silicon on ultra-low-loss waveguide photonic integration platform. *Optics Express*, **2013**, 21, 544-55	3.3	99
887	Mode-locked silicon evanescent lasers. *Optics Express*, **2007**, 15, 11225-33	3.3	99
886	Comparison of timing jitter in external and monolithic cavity mode-locked semiconductor lasers. *Applied Physics Letters*, **1991**, 59, 3372-3374	3.4	98
885	4 Gbps direct modulation of 450 nm GaN laser for high-speed visible light communication. *Optics Express*, **2015**, 23, 16232-7	3.3	97
884	Widely tunable Vernier ring laser on hybrid silicon. *Optics Express*, **2013**, 21, 19718-22	3.3	96
883	Ultra-high quality factor planar Si3N4 ring resonators on Si substrates. *Optics Express*, **2011**, 19, 13551-6	3.3	96
882	The logic of annotated portfolios **2012**,		96
881	Over 67 GHz bandwidth hybrid silicon electroabsorption modulator with asymmetric segmented electrode for 1.3 □n transmission. *Optics Express*, **2012**, 20, 11529-35	3.3	96
880	Compact Polarization Beam Splitter Using an Asymmetrical Mach□ehnder Interferometer Based on Silicon-on-Insulator Waveguides. *IEEE Photonics Technology Letters*, **2012**, 24, 673-675	2.2	95

879	Low threshold, wafer fused long wavelength vertical cavity lasers. *Applied Physics Letters*, **1994**, 64, 1463-1465	3.4	95
878	Ultra-low loss waveguide platform and its integration with silicon photonics. *Laser and Photonics Reviews*, **2014**, 8, 667-686	8.3	94
877	Compact broadband polarizer based on shallowly-etched silicon-on-insulator ridge optical waveguides. *Optics Express*, **2010**, 18, 27404-15	3.3	92
876	A Distributed Bragg Reflector Silicon Evanescent Laser. *IEEE Photonics Technology Letters*, **2008**, 20, 1667-1669	2.1	92
875	Hybrid silicon evanescent devices. *Materials Today*, **2007**, 10, 28-35	21.8	92
874	Realization of an ultra-short silicon polarization beam splitter with an asymmetrical bent directional coupler. *Optics Letters*, **2013**, 38, 4-6	3	91
873	A Hybrid AlGaInAsSilicon Evanescent Amplifier. *IEEE Photonics Technology Letters*, **2007**, 19, 230-232	2.2	91
872	High Thermoelectric Performance of a Heterogeneous PbTe Nanocomposite. *Chemistry of Materials* , **2015**, 27, 944-949	9.6	90
871	Heterogeneous integration of lithium niobate and silicon nitride waveguides for wafer-scale photonic integrated circuits on silicon. *Optics Letters*, **2017**, 42, 803-806	3	89
870	Observation of the Unconventional Photon Blockade. *Physical Review Letters*, **2018**, 121, 043601	7.4	86
869	Structure and evolution of cereal genomes. *Current Opinion in Genetics and Development*, **2003**, 13, 644-650	4.9	86
868	Workflow From Within and Without: Technology and Cooperative Work on the Print Industry Shopfloor **1995**, 51-66		86
867	Widely Tunable Narrow-Linewidth Monolithically Integrated External-Cavity Semiconductor Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 214-222	3.8	85
866	8 □ 40 Gbps fully integrated silicon photonic network on chip. *Optica*, **2016**, 3, 785	8.6	85
865	Impact of threading dislocation density on the lifetime of InAs quantum dot lasers on Si. *Applied Physics Letters*, **2018**, 112, 153507	3.4	84
864	Passive microring-resonator-coupled lasers. *Applied Physics Letters*, **2001**, 79, 3561-3563	3.4	84
863	Thermionic emission cooling in single barrier heterostructures. *Applied Physics Letters*, **1999**, 74, 88-89	3.4	84
862	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

861	Low-Loss Silicon Nitride AWG Demultiplexer Heterogeneously Integrated With Hybrid III/V/Silicon Photodetectors. *Journal of Lightwave Technology*, **2014**, 32, 817-823	4	83
860	High efficiency low threshold current 1.3 μm InAs quantum dot lasers on on-axis (001) GaP/Si. *Applied Physics Letters*, **2017**, 111, 122107	3.4	82
859	Heterogeneously Integrated InP/Silicon Photonics: Fabricating Fully Functional Transceivers. *IEEE Nanotechnology Magazine*, **2019**, 13, 17-26	1.7	82
858	Highly efficient vertical outgassing channels for low-temperature InP-to-silicon direct wafer bonding on the silicon-on-insulator substrate. *Journal of Vacuum Science & Technology B*, **2008**, 26, 1560		82
857	Quantum cascade laser on silicon. *Optica*, **2016**, 3, 545	8.6	81
856	Optically pumped 1.3 μm room-temperature InAs quantum-dot micro-disk lasers directly grown on (001) silicon. *Optics Letters*, **2016**, 41, 1664-7	3	81
855	Monolithic integration of broadband optical isolators for polarization-diverse silicon photonics. *Optica*, **2019**, 6, 473	8.6	80
854	Sparse aperiodic arrays for optical beam forming and LIDAR. *Optics Express*, **2017**, 25, 2511-2528	3.3	78
853	Extensive concerted evolution of rice paralogs and the road to regaining independence. *Genetics*, **2007**, 177, 1753-63	4	78
852	Ultra-efficient frequency comb generation in AlGaAs-on-insulator microresonators. *Nature Communications*, **2020**, 11, 1331	17.4	77
851	Low threshold and high speed short cavity distributed feedback hybrid silicon lasers. *Optics Express*, **2014**, 22, 10202-9	3.3	77
850	Electrically pumped continuous wave quantum dot lasers epitaxially grown on patterned, on-axis (001) Si. *Optics Express*, **2017**, 25, 3927-3934	3.3	77
849	Device and Integration Technology for Silicon Photonic Transmitters. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 671-688	3.8	76
848	Measurement of Asymmetries of Inclusive Pion Production in Proton-Proton Interactions at 6 and 11.8 GeV/c. *Physical Review Letters*, **1976**, 36, 929-931	7.4	76
847	Energy Efficient and Energy Proportional Optical Interconnects for Multi-Core Processors: Driving the Need for On-Chip Sources. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 332-343	3.8	75
846	Low threading dislocation density GaAs growth on on-axis GaP/Si (001). *Journal of Applied Physics*, **2017**, 122, 225703	2.5	75
845	Large and small signal dynamics of vertical cavity surface emitting lasers. *Applied Physics Letters*, **1993**, 62, 325-327	3.4	75
844	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

843	High-power sub-kHz linewidth lasers fully integrated on silicon. *Optica*, **2019**, 6, 745	8.6	75
842	Reliability of InAs/GaAs Quantum Dot Lasers Epitaxially Grown on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 690-697	3.8	74
841	High gain-bandwidth-product silicon heterointerface photodetector. *Applied Physics Letters*, **1997**, 70, 303-305	3.4	74
840	Cross-plane lattice and electronic thermal conductivities of ErAs:InGaAs□hGaAlAs superlattices. *Applied Physics Letters*, **2006**, 88, 242107	3.4	74
839	110-GHz GaInAs/InP double heterostructure p-i-n photodetectors. *Journal of Lightwave Technology*, **1995**, 13, 1490-1499	4	73
838	Photonic Integrated Circuits Using Heterogeneous Integration on Silicon. *Proceedings of the IEEE*, **2018**, 106, 2246-2257	14.3	73
837	Experimental and theoretical thermal analysis of a Hybrid Silicon Evanescent Laser. *Optics Express*, **2007**, 15, 15041-6	3.3	72
836	Characterization of high-quality InGaN/GaN multiquantum wells with time-resolved photoluminescence. *Applied Physics Letters*, **1998**, 72, 1066-1068	3.4	71
835	Heterogeneous silicon photonics sensing for autonomous cars. *Optics Express*, **2019**, 27, 3642-3663	3.3	70
834	Highly Ordered Vertical Silicon Nanowire Array Composite Thin Films for Thermoelectric Devices. *Journal of Electronic Materials*, **2012**, 41, 887-894	1.9	70
833	High efficiency semimetal/semiconductor nanocomposite thermoelectric materials. *Journal of Applied Physics*, **2010**, 108, 123702	2.5	70
832	Femtosecond studies of carrier dynamics in InGaN. *Applied Physics Letters*, **1997**, 70, 2004-2006	3.4	70
831	1310nm silicon evanescent laser. *Optics Express*, **2007**, 15, 11466-71	3.3	70
830	Design and characterization of thin film microcoolers. *Journal of Applied Physics*, **2001**, 89, 4059-4064	2.5	70
829	High-power high-linearity flip-chip bonded modified uni-traveling carrier photodiode. *Optics Express* , **2011**, 19, B385-90	3.3	69
828	A hybrid AlGaInAs-silicon evanescent preamplifier and photodetector. *Optics Express*, **2007**, 15, 13539-46	3.3	69
827	Hertz-linewidth semiconductor lasers using CMOS-ready ultra-high-Q microresonators. *Nature Photonics*, **2021**, 15, 346-353	33.9	69
826	Heterogeneous Silicon/III□V Semiconductor Optical Amplifiers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 78-88	3.8	68

825	Photonic Integration With Epitaxial III□V on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-12	3.8	68
824	Ultrafast dynamics in field-enhanced saturable absorbers. *Applied Physics Letters*, **1994**, 64, 676-678	3.4	68
823	Actively mode-locked GaInAsP laser with subpicosecond output. *Applied Physics Letters*, **1988**, 52, 348-350	3.4	68
822	Comparative inference of illegitimate recombination between rice and sorghum duplicated genes produced by polyploidization. *Genome Research*, **2009**, 19, 1026-32	9.7	66
821	Radiative recombination lifetime measurements of InGaN single quantum well. *Applied Physics Letters*, **1996**, 69, 1936-1938	3.4	66
820	Tutorial on narrow linewidth tunable semiconductor lasers using Si/III-V heterogeneous integration. *APL Photonics*, **2019**, 4, 111101	5.2	65
819	Low internal loss separate confinement heterostructure InGaAs/InGaAsP quantum well laser. *Applied Physics Letters*, **1987**, 51, 1744-1746	3.4	64
818	Narrow-linewidth III-V/Si/Si3N4 laser using multilayer heterogeneous integration. *Optica*, **2020**, 7, 20	8.6	64
817	Roadmap on all-optical processing. *Journal of Optics (United Kingdom)*, **2019**, 21, 063001	1.7	63
816	Effects of Si-doping in the barriers of InGaN multiquantum well purplish-blue laser diodes. *Applied Physics Letters*, **1998**, 73, 496-498	3.4	63
815	Minimum temperature sensitivity of 1.55 □m vertical-cavity lasers at □0 nm gain offset. *Applied Physics Letters*, **1998**, 72, 1814-1816	3.4	62
814	Enhanced Thermionic Emission Cooling in High Barrier Superlattice Heterostructures. *Materials Research Society Symposia Proceedings*, **1998**, 545, 449		62
813	Ultra-low-loss Ta_2O_5-core/SiO_2-clad planar waveguides on Si substrates. *Optica*, **2017**, 4, 532	8.6	60
812	High-speed InGaAs/GaAs strained multiple quantum well lasers with low damping. *Applied Physics Letters*, **1991**, 58, 2326-2328	3.4	60
811	High speed hybrid silicon evanescent electroabsorption modulator. *Optics Express*, **2008**, 16, 9936-41	3.3	59
810	Low-Temperature, Strong SiO2-SiO2 Covalent Wafer Bonding for III□V Compound Semiconductors-to-Silicon Photonic Integrated Circuits. *Journal of Electronic Materials*, **2008**, 37, 1552-1559	1.9	59
809	Silicon heterointerface photodetector. *Applied Physics Letters*, **1996**, 68, 3692-3694	3.4	58
808	50 Gb/s hybrid silicon traveling-wave electroabsorption modulator. *Optics Express*, **2011**, 19, 5811-6	3.3	57

807	Monolithically integrated InAs/InGaAs quantum dot photodetectors on silicon substrates. *Optics Express*, **2017**, 25, 27715-27723	3.3	56
806	Hybrid Silicon Laser Technology: A Thermal Perspective. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 1490-1498	3.8	56
805	GaAs to InP wafer fusion. *Journal of Applied Physics*, **1995**, 78, 4227-4237	2.5	56
804	. *Journal of Lightwave Technology*, **2017**, 35, 1429-1437	4	55
803	Heterogeneously Integrated GaAs Waveguides on Insulator for Efficient Frequency Conversion. *Laser and Photonics Reviews*, **2018**, 12, 1800149	8.3	55
802	Low Threshold Electrically-Pumped Hybrid Silicon Microring Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 1528-1533	3.8	55
801	A Review of High-Performance Quantum Dot Lasers on Silicon. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-11	2	53
800	Monolithic hybrid mode-locked 1.3 μm semiconductor lasers. *Applied Physics Letters*, **1990**, 56, 111-113	3.4	53
799	Time-resolved photoluminescence studies of InGaN/GaN single-quantum-wells at room temperature. *Applied Physics Letters*, **1997**, 71, 425-427	3.4	52
798	. *Journal of Lightwave Technology*, **2008**, 26, 209-216	4	52
797	Cross-plane Seebeck coefficient of ErAs:InGaAs□InGaAlAs superlattices. *Journal of Applied Physics*, **2007**, 101, 034502	2.5	52
796	Double-fused 1.52-μm vertical-cavity lasers. *Applied Physics Letters*, **1995**, 66, 1030-1032	3.4	52
795	Electrically Driven and Thermally Tunable Integrated Optical Isolators for Silicon Photonics. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 271-278	3.8	51
794	Calculated thermoelectric properties of InxGa1−xN, InxAl1−xN, and AlxGa1−xN. *Journal of Applied Physics*, **2013**, 113, 183707	2.5	51
793	Integrated TE and TM optical circulators on ultra-low-loss silicon nitride platform. *Optics Express*, **2013**, 21, 5041-52	3.3	51
792	Perspective on the future of silicon photonics and electronics. *Applied Physics Letters*, **2021**, 118, 220501	3.4	51
791	Ultra-Sharp Multimode Waveguide Bends with Subwavelength Gratings. *Laser and Photonics Reviews*, **2019**, 13, 1800119	8.3	50
790	Ultra-Low-Loss Silicon Waveguides for Heterogeneously Integrated Silicon/III-V Photonics. *Applied Sciences (Switzerland)*, **2018**, 8, 1139	2.6	50

789	Integrated heterogeneous silicon/III-V mode-locked lasers. *Photonics Research*, **2018**, 6, 468	6	49
788	Integrated Microwave Photonic Filter on a Hybrid Silicon Platform. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 3213-3219	4.1	48
787	144 °C operation of 1.3 μm InGaAsP vertical cavity lasers on GaAs substrates. *Applied Physics Letters* , **1992**, 61, 3095-3097	3.4	48
786	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
785	Dynamically reconfigurable integrated optical circulators. *Optica*, **2017**, 4, 23	8.6	47
784	An Integrated Hybrid Silicon Multiwavelength AWG Laser. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 1521-1527	3.8	47
783	Frequency response and bandwidth enhancement in Ge/Si avalanche photodiodes with over 840 GHz gain-bandwidth-product. *Optics Express*, **2009**, 17, 12641-9	3.3	47
782	Sub-wavelength InAs quantum dot micro-disk lasers epitaxially grown on exact Si (001) substrates. *Applied Physics Letters*, **2016**, 108, 221101	3.4	47
781	Photonic Generation and Wireless Transmission of Linearly/Nonlinearly Continuously Tunable Chirped Millimeter-Wave Waveforms With High Time-Bandwidth Product at W-Band. *IEEE Photonics Journal*, **2012**, 4, 215-223	1.8	46
780	1550-nm InGaAsP multi-quantum-well structures selectively grown on v-groove-patterned SOI substrates. *Applied Physics Letters*, **2017**, 111, 032105	3.4	46
779	Design of integrated hybrid silicon waveguide optical gyroscope. *Optics Express*, **2014**, 22, 24988-93	3.3	46
778	GaN-Based Integrated Lateral Thermoelectric Device for Micro-Power Generation. *Applied Physics Express*, **2009**, 2, 111003	2.4	46
777	Cross-plane Seebeck coefficient and Lorenz number in superlattices. *Physical Review B*, **2007**, 76,	3.3	46
776	LPE growth of Hg0.60Cd0.40Te from Te-rich solution. *Applied Physics Letters*, **1979**, 35, 457-458	3.4	46
775	Directly modulated quantum dot lasers on silicon with a milliampere threshold and high temperature stability. *Photonics Research*, **2018**, 6, 776	6	45
774	Considerations for the Design of Asymmetrical Mach–Zehnder Interferometers Used as Polarization Beam Splitters on a Submicrometer Silicon-On-Insulator Platform. *Journal of Lightwave Technology*, **2011**, 29, 1808-1817	4	45
773	Integrated Ultra-Low-Loss 4-Bit Tunable Delay for Broadband Phased Array Antenna Applications. *IEEE Photonics Technology Letters*, **2013**, 25, 1165-1168	2.2	44
772	O-band electrically injected quantum dot micro-ring lasers on on-axis (001) GaP/Si and V-groove Si. *Optics Express*, **2017**, 25, 26853-26860	3.3	44

771	Anatomy of a failure **2009**,		44
770	Single-Wavelength Silicon Evanescent Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2009**, 15, 535-544	3.8	44
769	A racetrack mode-locked silicon evanescent laser. *Optics Express*, **2008**, 16, 1393-8	3.3	44
768	Forty Gb/s hybrid silicon Mach-Zehnder modulator with low chirp. *Optics Express*, **2011**, 19, 1455-60	3.3	43
767	High temperature thermoelectric properties of optimized InGaN. *Journal of Applied Physics*, **2011**, 110, 123709	2.5	43
766	Ultra-low loss Si3N4 waveguides with low nonlinearity and high power handling capability. *Optics Express*, **2010**, 18, 23562-8	3.3	43
765	Hybrid III/V silicon photonic source with integrated 1D free-space beam steering. *Optics Letters*, **2012**, 37, 4257-9	3	43
764	Heterogeneous Integration for Mid-infrared Silicon Photonics. *IEEE Journal of Selected Topics in Quantum Electronics*, **2017**, 23, 1-10	3.8	42
763	Heterogeneously integrated 2.0 μm CW hybrid silicon lasers at room temperature. *Optics Letters*, **2015**, 40, 1480-3	3	42
762	Directly modulated 1.3 μm quantum dot lasers epitaxially grown on silicon. *Optics Express*, **2018**, 26, 7022-7033	3.3	42
761	Indoor weather stations **2013**,		42
760	Frequency comb generation in the green using silicon nitride microresonators. *Laser and Photonics Reviews*, **2016**, 10, 631-638	8.3	42
759	High-performance broadband optical coatings on InGaN/GaN solar cells for multijunction device integration. *Applied Physics Letters*, **2014**, 104, 163902	3.4	41
758	Rigorous calculation of the Seebeck coefficient and mobility of thermoelectric materials. *Journal of Applied Physics*, **2010**, 107, 083707	2.5	41
757	The visitor as virtual archaeologist **2001**,		41
756	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
755	Semiconductor quantum dot lasers epitaxially grown on silicon with low linewidth enhancement factor. *Applied Physics Letters*, **2018**, 112, 251111	3.4	41
754	Integrated hybrid silicon triplexer. *Optics Express*, **2010**, 18, 23891-9	3.3	40

753	. *IEEE Photonics Technology Letters*, **2012**, 24, 533-535	2.2	40
752	Asymmetries in inclusive proton-nucleon scattering at 11.75 GeV/c. *Physical Review D*, **1978**, 18, 3939-3954	4.9	40
751	Analysis of the optical feedback dynamics in InAs/GaAs quantum dot lasers directly grown on silicon. *Journal of the Optical Society of America B: Optical Physics*, **2018**, 35, 2780	1.7	40
750	. *IEEE Photonics Journal*, **2011**, 3, 209-219	1.8	39
749	Multi-wavelength selective crossbar switch. *Optics Express*, **2019**, 27, 5203-5216	3.3	39
748	Vernier spectrometer using counterpropagating soliton microcombs. *Science*, **2019**, 363, 965-968	33.3	39
747	Effect of strain on the resonant frequency and damping factor in InGaAs/InP multiple quantum well lasers. *Applied Physics Letters*, **1991**, 58, 1244-1246	3.4	38
746	Ultrafast graded double-heterostructure GaInAs/InP photodiode. *Applied Physics Letters*, **1991**, 58, 2156-2158	3.4	38
745	Strong frequency conversion in heterogeneously integrated GaAs resonators. *APL Photonics*, **2019**, 4, 036103	5.2	37
744	Surface structured optical coatings with near-perfect broadband and wide-angle antireflective properties. *Nano Letters*, **2014**, 14, 5960-4	11.5	37
743	Photonic integrated circuit optical buffer for packet-switched networks. *Optics Express*, **2009**, 17, 6629-35	3.3	37
742	Simulation and analysis of 1.55 μm double-fused vertical-cavity lasers. *Journal of Applied Physics*, **1997**, 81, 3382-3390	2.5	37
741	A Hybrid Silicon/AlGaInAs Phase Modulator. *IEEE Photonics Technology Letters*, **2008**, 20, 1920-1922	2.2	37
740	High speed hybrid silicon evanescent Mach-Zehnder modulator and switch. *Optics Express*, **2008**, 16, 20571-6	3.5	37
739	Laser soliton microcombs heterogeneously integrated on silicon. *Science*, **2021**, 373, 99-103	33.3	37
738	InP/InGaAsP/InGaAs avalanche photodiodes with 70 GHz gain-bandwidth product. *Applied Physics Letters*, **1987**, 51, 1454-1456	3.4	36
737	Characterization of Insertion Loss and Back Reflection in Passive Hybrid Silicon Tapers. *IEEE Photonics Journal*, **2013**, 5, 6600410-6600410	1.8	35
736	High Power Silicon-Germanium Photodiodes for Microwave Photonic Applications. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 3336-3343	4.1	35

735	High-Quality 150 mm InP-to-Silicon Epitaxial Transfer for Silicon Photonic Integrated Circuits. *Electrochemical and Solid-State Letters*, **2009**, 12, H101		35
734	ErAs:InGaAs□hGaAlAs superlattice thin-film power generator array. *Applied Physics Letters*, **2006**, 88, 113502	3.4	35
733	Carrier nonuniformity effects on the internal efficiency of multiquantum-well lasers. *Applied Physics Letters*, **1999**, 74, 489-491	3.4	35
732	Picosecond dynamics of a gain-switched InGaAsP laser. *IEEE Journal of Quantum Electronics*, **1987**, 23, 1039-1047	2	35
731	Ultra-narrow linewidth laser based on a semiconductor gain chip and extended SiN Bragg grating. *Optics Letters*, **2019**, 44, 3825-3828	3	35
730	1.3-□m InAs quantum-dot micro-disk lasers on V-groove patterned and unpatterned (001) silicon. *Optics Express*, **2016**, 24, 21038-45	3.3	35
729	InP-based waveguide photodiodes heterogeneously integrated on silicon-on-insulator for photonic microwave generation. *Optics Express*, **2013**, 21, 25901-6	3.3	34
728	SOA gate array recirculating buffer with fiber delay loop. *Optics Express*, **2008**, 16, 8451-6	3.3	34
727	Wafer bonded 1.55 □m vertical-cavity lasers with continuous-wave operation up to 105 °C. *Applied Physics Letters*, **2001**, 78, 2632-2633	3.4	34
726	Fiber-optic signal processor with applications to matrix-vector multiplication and lattice filtering. *Optics Letters*, **1982**, 7, 463-5	3	34
725	Low Dark Current High Gain InAs Quantum Dot Avalanche Photodiodes Monolithically Grown on Si. *ACS Photonics*, **2020**, 7, 528-533	6.3	34
724	Ultralinear heterogeneously integrated ring-assisted Mach□ehnder interferometer modulator on silicon. *Optica*, **2016**, 3, 1483	8.6	34
723	Data-Things **2015**,		33
722	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
721	Integrated broadband Ce:YIG/Si Mach-Zehnder optical isolators with over 100 nm tuning range. *Optics Letters*, **2017**, 42, 4901-4904	3	33
720	Integrated hybrid silicon DFB laser-EAM array using quantum well intermixing. *Optics Express*, **2011**, 19, 13692-9	3.3	33
719	. *IEEE/ACM Transactions on Networking*, **2010**, 18, 1599-1609	3.8	33
718	Thermoelectric power generator module of 16□16 Bi2Te3 and 0.6% ErAs:(InGaAs)1□(InAlAs)x segmented elements. *Applied Physics Letters*, **2009**, 95, 083503	3.4	33

717	GaN-Based Miniaturized Cyan Light-Emitting Diodes on a Patterned Sapphire Substrate With Improved Fiber Coupling for Very High-Speed Plastic Optical Fiber Communication. *IEEE Photonics Journal*, **2012**, 4, 1520-1529	1.8	33
716	Optical Properties of InGaN/GaN Quantum Wells with Si Doped Barriers. *Japanese Journal of Applied Physics*, **1998**, 37, L1362-L1364	1.4	33
715	Photoluminescence study of strain-induced quantum well dots by wet-etching technique. *Applied Physics Letters*, **1992**, 61, 300-302	3.4	33
714	High-frequency constricted mesa lasers. *Applied Physics Letters*, **1985**, 47, 78-80	3.4	33
713	Fiber-optical sensor for surface acoustic waves. *Applied Physics Letters*, **1982**, 41, 231-233	3.4	33
712	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-9	3.8	32
711	Reflection sensitivity of 1.3 μm quantum dot lasers epitaxially grown on silicon. *Optics Express*, **2017**, 25, 9535-9543	3.3	32
710	Polarization field engineering of GaN/AlN/AlGaN superlattices for enhanced thermoelectric properties. *Applied Physics Letters*, **2014**, 104, 042106	3.4	32
709	High Output Saturation and High-Linearity Uni-Traveling-Carrier Waveguide Photodiodes. *IEEE Photonics Technology Letters*, **2007**, 19, 149-151	2.2	32
708	Highly Linear Coherent Receiver With Feedback. *IEEE Photonics Technology Letters*, **2007**, 19, 940-942	2.2	32
707	Assembling the senses **2004**,		32
706	Interface of directly bonded GaAs and InP. *Journal of Applied Physics*, **2001**, 89, 1017-1024	2.5	32
705	Simulation and optimization of 420-nm InGaN/GaN laser diodes **2000**,		32
704	Recent Progress in Heterogeneous III-V-on-Silicon Photonic Integration. *Light Advanced Manufacturing*, **2021**, 2, 1-25	1	32
703	Integrated Photonics for Low-Power Packet Networking. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 458-471	3.8	31
702	Uniformity study of wafer-scale InP-to-silicon hybrid integration. *Applied Physics A: Materials Science and Processing*, **2011**, 103, 213-218	2.6	31
701	Thermoelectric figure of merit of (In0.53Ga0.47As)0.8(In0.52Al0.48As)0.2 III-V semiconductor alloys. *Physical Review B*, **2010**, 81,	3.3	31
700	Bridging, Patching and Keeping the Work Flowing: Defect Resolution in Distributed Software Development. *Computer Supported Cooperative Work*, **2009**, 18, 477-507	2.4	31

699	Growth and properties of InGaN nanoscale islands on GaN. *Journal of Crystal Growth*, **1998**, 189-190, 29-32	1.6	31
698	Integration of hybrid silicon lasers and electroabsorption modulators. *Optics Express*, **2008**, 16, 12478-86	3.3	31
697	Continuous wave-pumped wavelength conversion in low-loss silicon nitride waveguides. *Optics Letters*, **2015**, 40, 875-8	3	30
696	40 GHz Si/Ge Uni-Traveling Carrier Waveguide Photodiode. *Journal of Lightwave Technology*, **2014**, 32, 3502-3508	4	30
695	Field-effect modulation of thermoelectric properties in multigated silicon nanowires. *Nano Letters*, **2013**, 13, 5503-8	11.5	30
694	Fully integrated microwave frequency synthesizer on heterogeneous silicon-III/V. *Optics Express*, **2017**, 25, 2422-2431	3.3	30
693	Semimetal/semiconductor nanocomposites for thermoelectrics. *Advanced Materials*, **2011**, 23, 2377-83	24	30
692	25Gb/s hybrid silicon switch using a capacitively loaded traveling wave electrode. *Optics Express*, **2010**, 18, 1070-5	3.3	30
691	Epitaxially-grown Ge/Si avalanche photodiodes for 1.3 microm light detection. *Optics Express*, **2008**, 16, 9365-71	3.3	30
690	Propagation delays and transition times in pulse-modulated semiconductor lasers. *Applied Physics Letters*, **1986**, 48, 1707-1709	3.4	30
689	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
688	Phase tuning by length contraction. *Optics Express*, **2018**, 26, 3174-3187	3.3	29
687	Towards heterogeneous integration of optical isolators and circulators with lasers on silicon [Invited]. *Optical Materials Express*, **2018**, 8, 2471	2.6	29
686	Teardrop Reflector-Assisted Unidirectional Hybrid Silicon Microring Lasers. *IEEE Photonics Technology Letters*, **2012**, 24, 1988-1990	2.2	29
685	Ultralow-Loss Planar $hbox{Si}_{3}hbox{N}_{4}$ Waveguide Polarizers. *IEEE Photonics Journal*, **2013**, 5, 6600207-6600207	1.8	29
684	MODELING AND OPTIMIZATION OF SINGLE-ELEMENT BULK SiGe THIN-FILM COOLERS. *Microscale Thermophysical Engineering*, **2005**, 9, 99-118		29
683	Laterally oxidized long wavelength cw vertical-cavity lasers. *Applied Physics Letters*, **1996**, 69, 471-472	3.4	29
682	Temperature characteristics of epitaxially grown InAs quantum dot micro-disk lasers on silicon for on-chip light sources. *Applied Physics Letters*, **2016**, 109, 011104	3.4	29

681	Interband cascade laser on silicon. *Optica*, **2018**, 5, 996	8.6	29
680	. *Journal of Lightwave Technology*, **2018**, 36, 1185-1191	4	28
679	Athermal silicon ring resonators clad with titanium dioxide for 1.3μm wavelength operation. *Optics Express*, **2015**, 23, 25653-60	3.3	28
678	Effect of Nanoparticles on Electron and Thermoelectric Transport. *Journal of Electronic Materials*, **2009**, 38, 954-959	1.9	28
677	An APD/FET optical receiver operating at 8 Gbit/s. *Journal of Lightwave Technology*, **1987**, 5, 344-347	4	28
676	Multi-octave spectral beam combiner on ultra-broadband photonic integrated circuit platform. *Optics Express*, **2015**, 23, 11272-83	3.3	27
675	Dissipative Kerr Solitons in a III-V Microresonator. *Laser and Photonics Reviews*, **2020**, 14, 2000022	8.3	27
674	Inverse-Designed Photonics for Semiconductor Foundries. *ACS Photonics*, **2020**, 7, 569-575	6.3	27
673	Optical nonreciprocal devices for silicon photonics using wafer-bonded magneto-optical garnet materials. *MRS Bulletin*, **2018**, 43, 419-424	3.2	27
672	Thermal stress implications in athermal TiO2 waveguides on a silicon substrate. *Optics Express*, **2014**, 22, 661-6	3.3	27
671	Multilayer Platform for Ultra-Low-Loss Waveguide Applications. *IEEE Photonics Technology Letters*, **2012**, 24, 876-878	2.2	27
670	Large interband second-order susceptibilities in InxGa1⊠N/GaN quantum wells. *Applied Physics Letters*, **1999**, 75, 3611-3613	3.4	27
669	High-Speed Dynamics in InP Based Multiple Quantum Well Lasers. *Japanese Journal of Applied Physics*, **1993**, 32, 70-83	1.4	27
668	Systematic observation of strain-induced lateral quantum confinement in GaAs quantum well wires prepared by chemical dry etching. *Applied Physics Letters*, **1991**, 59, 1875-1877	3.4	27
667	Microwave intensity and frequency modulation of heteroepitaxial-ridge-overgrown distributed feedback lasers. *Applied Physics Letters*, **1985**, 46, 233-235	3.4	27
666	Ultra-broadband polarization beam splitter with silicon subwavelength-grating waveguides. *Optics Letters*, **2020**, 45, 2259-2262	3	27
665	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-15	3.8	26
664	The Importance of p-Doping for Quantum Dot Laser on Silicon Performance. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-11	2	26

663	Photonic Switching for Data Center Applications. *IEEE Photonics Journal*, **2011**, 3, 834-844	1.8	26
662	An integrated recirculating optical buffer. *Optics Express*, **2008**, 16, 11124-31	3.3	26
661	ErAs:(InGaAs)1−(InAlAs)x alloy power generator modules. *Applied Physics Letters*, **2007**, 91, 263510	3.4	26
660	Design and Fabrication of Optically Pumped Hybrid Silicon-AlGaInAs Evanescent Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2006**, 12, 1657-1663	3.8	26
659	. *IEEE Photonics Technology Letters*, **1994**, 6, 1067-1069	2.2	26
658	In-line single-mode fiber polarization controllers at 1.55, 1.30, and 0.63 Mum. *Applied Optics*, **1985**, 24, 349	1.7	26
657	Dynamic characteristics of 410 nm semipolar (202−1−) III-nitride laser diodes with a modulation bandwidth of over 5 GHz. *Applied Physics Letters*, **2016**, 109, 101104	3.4	26
656	Highly linear heterogeneous-integrated Mach-Zehnder interferometer modulators on Si. *Optics Express*, **2016**, 24, 19040-7	3.3	26
655	Quasi-Phase-Matched Supercontinuum Generation in Photonic Waveguides. *Physical Review Letters* , **2018**, 120, 053903	7.4	25
654	III-Nitride-Based Cyan Light-Emitting Diodes With GHz Bandwidth for High-Speed Visible Light Communication. *IEEE Electron Device Letters*, **2016**, 1-1	4.4	25
653	Design of phase-shifted hybrid silicon distributed feedback lasers. *Optics Express*, **2011**, 19, 9255-61	3.3	25
652	Integrated optical frequency comb technologies. *Nature Photonics*, **2022**, 16, 95-108	33.9	25
651	The Datacatcher **2016**,		25
650	Low dark current III-V on silicon photodiodes by heteroepitaxy. *Optics Express*, **2018**, 26, 13605-13613	3.3	24
649	Effects of modulation p doping in InAs quantum dot lasers on silicon. *Applied Physics Letters*, **2018**, 113, 061105	3.4	24
648	Harmonically Mode-Locked Hybrid Silicon Laser With Intra-Cavity Filter to Suppress Supermode Noise. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 8-15	3.8	24
647	Integrated optical driver for interferometric optical gyroscopes. *Optics Express*, **2017**, 25, 3826-3840	3.3	24
646	Fano resonances in a multimode waveguide coupled to a high-Q silicon nitride ring resonator. *Optics Express*, **2014**, 22, 6778-90	3.3	24

645	Optimization of Hybrid Silicon Microring Lasers. *IEEE Photonics Journal*, **2011**, 3, 580-587	1.8	24
644	Design of integrated III-nitride/non-III-nitride tandem photovoltaic devices. *Journal of Applied Physics*, **2012**, 111, 054503	2.5	24
643	Applications of large-scale optical 3D-MEMS switches in fiber-based broadband-access networks. *Photonic Network Communications*, **2010**, 19, 62-73	1.7	24
642	Fused vertical couplers. *Applied Physics Letters*, **1998**, 72, 2637-2638	3.4	24
641	Microbend optical fiber tapped delay line for gigahertz signal processing. *Applied Physics Letters*, **1982**, 41, 139-141	3.4	24
640	Coupled-Ring-Resonator-Mirror-Based Heterogeneous IIIV Silicon Tunable Laser. *IEEE Photonics Journal*, **2015**, 7, 1-8	1.8	23
639	Design of antireflective nanostructures and optical coatings for next-generation multijunction photovoltaic devices. *Optics Express*, **2014**, 22 Suppl 5, A1243-56	3.3	23
638	Direct measurement of thin-film thermoelectric figure of merit. *Applied Physics Letters*, **2009**, 94, 212508	3.4	23
637	. *IEEE Photonics Technology Letters*, **2011**, 23, 1670-1672	2.2	23
636	Photonic Integration on the Hybrid Silicon Evanescent Device Platform. *Advances in Optical Technologies*, **2008**, 2008, 1-17		23
635	Generation of picosecond pulses with a gain-switched GaAs surface-emitting laser. *Applied Physics Letters*, **1990**, 57, 963-965	3.4	23
634	Long distance fiber-optic transmission of C-band microwave signals to and from a satellite antenna. *Journal of Lightwave Technology*, **1987**, 5, 1733-1741	4	23
633	Heterogeneously Integrated Distributed Feedback Quantum Cascade Lasers on Silicon. *Photonics*, **2016**, 3, 35	2.2	23
632	Purification of a single-photon nonlinearity. *Nature Communications*, **2016**, 7, 12578	17.4	23
631	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
630	Semiconductor optical amplifiers at 2.0-μm wavelength on silicon. *Laser and Photonics Reviews*, **2017**, 11, 1600165	8.3	22
629	Broadband TE Optical Isolators and Circulators in Silicon Photonics Through Ce:YIG Bonding. *Journal of Lightwave Technology*, **2019**, 37, 1463-1473	4	22
628	Widely-Tunable Ring-Resonator Semiconductor Lasers. *Applied Sciences (Switzerland)*, **2017**, 7, 732	2.6	22

627	Microbiological quality of fresh produce obtained from retail stores on the Eastern Shore of Maryland, United States of America. *Food Microbiology*, **2016**, 56, 29-34	6	22
626	Simple Epitaxial Lateral Overgrowth Process as a Strategy for Photonic Integration on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 380-386	3.8	22
625	Ultrafast (370 GHz bandwidth) p-i-n traveling wave photodetector using low-temperature-grown GaAs. *Applied Physics Letters*, **1997**, 71, 2508-2510	3.4	22
624	Overgrowth of InGaAs quantum dots formed by alternating molecular beam epitaxy. *Journal of Crystal Growth*, **1997**, 175-176, 696-701	1.6	22
623	Numerical analysis of 1.54 Îm double-fused vertical-cavity lasers operating continuous-wave up to 33 °C. *Applied Physics Letters*, **1996**, 68, 2630-2632	3.4	22
622	Mode-locked GaAs vertical cavity surface emitting lasers. *Applied Physics Letters*, **1992**, 60, 677-679	3.4	22
621	Efficient second harmonic generation in nanophotonic GaAs-on-insulator waveguides. *Optics Express*, **2020**, 28, 9521-9532	3.3	22
620	Roadmap on integrated quantum photonics. *JPhys Photonics*,	2.5	22
619	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
618	Monolithically Integrated High- Q Rings for Narrow Linewidth Widely Tunable Lasers. *IEEE Journal of Quantum Electronics*, **2015**, 51, 1-10	2	21
617	Study of planar defect filtering in InP grown on Si by epitaxial lateral overgrowth. *Optical Materials Express*, **2013**, 3, 1960	2.6	21
616	. *IEEE Photonics Technology Letters*, **1993**, 5, 642-645	2.2	21
615	Inherent bandwidth limits in semiconductor lasers due to distributed microwave effects. *Applied Physics Letters*, **1994**, 64, 1610-1612	3.4	21
614	Millimeter-wave signal generation using semiconductor diode lasers (invited paper). *Microwave and Optical Technology Letters*, **1993**, 6, 1-5	1.2	21
613	Polarization-selective fiber directional coupler. *Journal of Lightwave Technology*, **1985**, 3, 1125-1129	4	21
612	Multidimensional Purcell effect in an ytterbium-doped ring resonator. *Nature Photonics*, **2016**, 10, 385-388	39.9	21
611	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
610	A Robust Method for Characterization of Optical Waveguides and Couplers. *IEEE Photonics Technology Letters*, **2016**, 28, 1517-1520	2.2	20

609	Low phase noise hybrid silicon mode-locked lasers. *Frontiers of Optoelectronics*, **2014**, 7, 265-276	2.8	20
608	Compact Tb doped fiber optic current sensor with high sensitivity. *Optics Express*, **2015**, 23, 29993-9	3.3	20
607	A "2-omega" technique for measuring anisotropy of thermal conductivity. *Review of Scientific Instruments*, **2012**, 83, 124903	1.7	20
606	Sidewall gratings in ultra-low-loss Si3N4 planar waveguides. *Optics Express*, **2013**, 21, 1181-8	3.3	20
605	Fabrication of Silicon-on-Diamond Substrate and Low-Loss Optical Waveguides. *IEEE Photonics Technology Letters*, **2011**, 23, 657-659	2.2	20
604	Fiber optic laser probe for acoustic wave measurements. *Applied Physics Letters*, **1982**, 40, 313-315	3.4	20
603	Tunable quantum dot lasers grown directly on silicon. *Optica*, **2019**, 6, 1394	8.6	20
602	Defect filtering for thermal expansion induced dislocations in III□V lasers on silicon. *Applied Physics Letters*, **2020**, 117, 122101	3.4	20
601	Low-Threshold Continuous-Wave Operation of Electrically Pumped 1.55 □m InAs Quantum Dash Microring Lasers. *ACS Photonics*, **2019**, 6, 279-285	6.3	20
600	Self-Calibrated Microwave Characterization of High-Speed Optoelectronic Devices by Heterodyne Spectrum Mapping. *Journal of Lightwave Technology*, **2017**, 35, 1952-1961	4	19
599	High Linearity InP-Based Phase Modulators Using a Shallow Quantum-Well Design. *IEEE Photonics Technology Letters*, **2010**, 22, 1340-1342	2.2	19
598	Hybrid silicon evanescent approach to optical interconnects. *Applied Physics A: Materials Science and Processing*, **2009**, 95, 1045-1057	2.6	19
597	Energy-Efficient Hybrid Silicon Electroabsorption Modulator for 40-Gb/s 1-V Uncooled Operation. *IEEE Photonics Technology Letters*, **2012**, 24, 1689-1692	2.2	19
596	Vertical and lateral heterogeneous integration. *Applied Physics Letters*, **2001**, 79, 1760-1762	3.4	19
595	Ultrahigh power-bandwidth-product performance of low-temperature-grown-GaAs based metal-semiconductor-metal traveling-wave photodetectors. *Applied Physics Letters*, **2002**, 80, 4054-4056	3.4	19
594	Improved second harmonic performance in periodically poled LNOI waveguides through engineering of lateral leakage. *Optics Express*, **2019**, 27, 23919-23928	3.3	19
593	Heterogeneously Integrated Waveguide-Coupled Photodiodes on SOI with 12 dBm Output Power at 40 GHz **2015**,		19
592	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

591	The Interactional Affordances of Technology: An Ethnography of Human-Computer Interaction in an Ambulance Control Centre **1997**, 263-281		19
590	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
589	Reliability of Hybrid Silicon Distributed Feedback Lasers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 1501305-1501305	3.8	18
588	Low kappa, narrow bandwidth Si(3)N(4) Bragg gratings. *Optics Express*, **2015**, 23, 30329-36	3.3	18
587	Thermal Management of Hybrid Silicon Ring Lasers for High Temperature Operation. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 385-391	3.8	18
586	Minority carrier barrier heterojunctions for improved thermoelectric efficiency. *Nano Energy*, **2015**, 12, 735-741	17.1	18
585	Heterogeneous lasers and coupling to Si□□near 1060 nm. *Optics Letters*, **2014**, 39, 6017-20	3	18
584	Ultrabroadband and Wide-Angle Hybrid Antireflection Coatings With Nanostructures. *IEEE Journal of Photovoltaics*, **2014**, 4, 962-967	3.7	18
583	Integrated hybrid Si/InGaAs 50 Gb/s DQPSK receiver. *Optics Express*, **2012**, 20, 19726-34	3.3	18
582	Model for trap filling and avalanche breakdown in semi-insulating Fe:InP. *Journal of Applied Physics*, **1997**, 82, 259-269	2.5	18
581	Ultrafast valence intersubband hole relaxation in InGaN multiple-quantum-well laser diodes. *Applied Physics Letters*, **2004**, 84, 4675-4677	3.4	18
580	Partial-integration method for analysis of mode-locked semiconductor lasers. *Optics Letters*, **1990**, 15, 112	3	18
579	Low-dark current 10 Gbit/s operation of InAs/InGaAs quantum dot p-i-n photodiode grown on on-axis (001) GaP/Si. *Applied Physics Letters*, **2018**, 113, 093506	3.4	18
578	Non-radiative recombination at dislocations in InAs quantum dots grown on silicon. *Applied Physics Letters*, **2019**, 115, 131102	3.4	17
577	Micro-Resonator Soliton Generated Directly with a Diode Laser. *Laser and Photonics Reviews*, **2018**, 12, 1700307	8.3	17
576	MBE growth of P-doped 1.3 □m InAs quantum dot lasers on silicon. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2014**, 32, 02C108	1.3	17
575	MOCVD Regrowth of InP on Hybrid Silicon Substrate. *ECS Solid State Letters*, **2013**, 2, Q82-Q86		17
574	Design of transverse electric ring isolators for ultra-low-loss Si3N4 waveguides based on the finite element method. *Optics Letters*, **2011**, 36, 4599-601	3	17

573	Hybrid silicon lasers for optical interconnects. *New Journal of Physics*, **2009**, 11, 125016	2.9	17
572	An apparatus for simultaneous measurement of electrical conductivity and thermopower of thin films in the temperature range of 300-750 K. *Review of Scientific Instruments*, **2011**, 82, 015108	1.7	17
571	Multi-Degree ROADM's with Agile Add-Drop Access **2007**,		17
570	Ultraviolet picosecond optical pulse generation from a mode-locked InGaN laser diode. *Applied Physics Letters*, **2001**, 79, 1951-1952	3.4	17
569	High-power mode-locked semiconductor lasers using flared waveguides. *Applied Physics Letters*, **1995**, 66, 3558-3560	3.4	17
568	InGaAs quantum well wires grown on patterned GaAs substrates. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1992**, 10, 697-700	2.9	17
567	SFDR Improvement of a Coherent Receiver Using Feedback **2006**,		17
566	Multimode description of self-mode locking in a single-section quantum-dot laser. *Optics Express*, **2020**, 28, 5317-5330	3.3	17
565	Physics and applications of quantum dot lasers for silicon photonics. *Nanophotonics*, **2020**, 9, 1271-1286	6.3	17
564	Chip-scale nonlinear photonics for quantum light generation. *AVS Quantum Science*, **2020**, 2, 041702	10.3	17
563	Hybrid Silicon Colliding-Pulse Mode-Locked Lasers With On-Chip Stabilization. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 24-29	3.8	16
562	On quantum-dot lasing at gain peak with linewidth enhancement factor = 0. *APL Photonics*, **2020**, 5, 026101	5.2	16
561	Stabilization of heterogeneous silicon lasers using Pound-Drever-Hall locking to Si3N4 ring resonators. *Optics Express*, **2016**, 24, 13511-7	3.3	16
560	Flip-Chip Bonding Packaged THz Photodiode With Broadband High-Power Performance. *IEEE Photonics Technology Letters*, **2014**, 26, 2462-2464	2.2	16
559	Nonlinear modeling of waveguide photodetectors. *Optics Express*, **2013**, 21, 15634-44	3.3	16
558	Resonant normal-incidence separate-absorption-charge-multiplication Ge/Si avalanche photodiodes. *Optics Express*, **2009**, 17, 16549-57	3.3	16
557	Electronic Furniture for the Curious Home: Assessing Ludic Designs in the Field. *International Journal of Human-Computer Interaction*, **2007**, 22, 119-152	3.6	16
556	Cleaved GaN facets by wafer fusion of GaN to InP. *Applied Physics Letters*, **1996**, 68, 2147-2149	3.4	16

555	Reduced thermal conductivity of epitaxial GaAs on Si due to symmetry-breaking biaxial strain. *Physical Review Materials*, **2019**, 3,	3.2	16
554	On-chip wavelength locking for photonic switches. *Optics Letters*, **2017**, 42, 4934-4937	3	16
553	Widely tunable, heterogeneously integrated quantum-dot O-band lasers on silicon. *Photonics Research*, **2020**, 8, 1551	6	16
552	Epitaxial quantum dot lasers on silicon with high thermal stability and strong resistance to optical feedback. *APL Photonics*, **2020**, 5, 016103	5.2	16
551	High-temperature reliable quantum-dot lasers on Si with misfit and threading dislocation filters. *Optica*, **2021**, 8, 749	8.6	16
550	Low-loss arrayed waveguide grating at 760 nm. *Optics Letters*, **2016**, 41, 1785-8	3	16
549	A Monolithically Integrated ACP-OPLL Receiver for RF/Photonic Links. *IEEE Photonics Technology Letters*, **2011**, 23, 1475-1477	2.2	15
548	Si/Ge uni-traveling carrier photodetector. *Optics Express*, **2012**, 20, 7488-95	3.3	15
547	20 GHz high performance planar Si/InGaAs p-i-n photodetector. *Applied Physics Letters*, **1997**, 70, 2449-2451	3.4	15
546	Analog measurements of long wavelength vertical-cavity lasers. *Applied Physics Letters*, **1998**, 72, 2084-2086	3.4	15
545	. *IEEE Journal of Quantum Electronics*, **2008**, 44, 354-359	2	15
544	Power Generator Modules of Segmented Bi2Te3 and ErAs:(InGaAs)1 (InAlAs) x. *Journal of Electronic Materials*, **2008**, 37, 1786-1792	1.9	15
543	Linear Coherent Receiver based on a Broadband and Sampling Optical Phase-Locked Loop **2007**,		15
542	Comparison of bulk and quantum wire photodetectors. *Applied Physics Letters*, **1991**, 58, 1629-1631	3.4	15
541	Cleaved-coupled-cavity lasers with large cavity length ratios for enhanced stability. *Applied Physics Letters*, **1984**, 44, 821-823	3.4	15
540	Broadband efficient thin-film Sezawa wave interdigital transducers. *Applied Physics Letters*, **1980**, 36, 806-807	3.4	15
539	Compact Modeling for Silicon Photonic Heterogeneously Integrated Circuits. *Journal of Lightwave Technology*, **2017**, 35, 2973-2980	4	15
538	Passively mode-locked semiconductor quantum dot on silicon laser with 400 Hz RF line width. *Optics Express*, **2019**, 27, 27256-27266	3.3	15

537	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
536	Dynamic and nonlinear properties of epitaxial quantum dot lasers on silicon for isolator-free integration. *Photonics Research*, **2019**, 7, 1222	6	15
535	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
534	An Ultra-Low Phase-Noise 20-GHz PLL Utilizing an Optoelectronic Voltage-Controlled Oscillator. *IEEE Transactions on Microwave Theory and Techniques*, **2015**, 63, 1046-1052	4.1	14
533	Calibration-free measurement of high-speed Mach-Zehnder modulator based on low-frequency detection. *Optics Letters*, **2016**, 41, 460-3	3	14
532	Low-Threshold Epitaxially Grown 1.3-Ħn InAs Quantum Dot Lasers on Patterned (001) Si. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-7	3.8	14
531	Athermal laser design. *Optics Express*, **2014**, 22, 19357-64	3.3	14
530	Design and demonstration of ultra-fast W-band photonic transmitter-mixer and detectors for 25 Gbits/sec error-free wireless linking. *Optics Express*, **2012**, 20, 21223-34	3.3	14
529	Fabrication of high-aspect-ratio InP-based vertical-cavity laser mirrors using CH4/H2/O2/Ar reactive ion etching. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1997**, 15, 2031		14
528	Self-assembled ErAs islands in GaAs for THz applications. *Physica E: Low-Dimensional Systems and Nanostructures*, **2000**, 7, 97-100	3	14
527	Scaling laws for gain-guided vertical cavity lasers with distributed Bragg reflectors. *Applied Physics Letters*, **1994**, 64, 1762-1764	3.4	14
526	Effects of nonuniform current injection in GaInAsP/InP vertical- cavity lasers. *Applied Physics Letters* , **1992**, 60, 2974-2976	3.4	14
525	Single Mode Fiber Recirculating Delay Line **1982**, 0326, 108		14
524	Ultrahigh-Q AlGaAs-on-insulator microresonators for integrated nonlinear photonics. *Optics Express* , **2020**, 28, 32894-32906	3.3	14
523	Ultrabright Entangled-Photon-Pair Generation from an AlGaAs-On-Insulator Microring Resonator. *PRX Quantum*, **2021**, 2,	6.1	14
522	Frequency modulated lasers for interferometric optical gyroscopes. *Optics Letters*, **2016**, 41, 1773-6	3	14
521	Directly Modulated Single-Mode Tunable Quantum Dot Lasers at 1.3´µm. *Laser and Photonics Reviews*, **2020**, 14, 1900348	8.3	13
520	Heterogeneous silicon light sources for datacom applications. *Optical Fiber Technology*, **2018**, 44, 43-52	2.4	13

519	Improvements in epitaxial lateral overgrowth of InP by MOVPE. *Journal of Crystal Growth*, **2014**, 402, 234-242	1.6	13
518	Electronic and photonic integrated circuits for fast data center optical circuit switches **2013**, 51, 53-59		13
517	A Comparison of Four Approaches to Photonic Integration **2017**,		13
516	Low-loss demonstration and refined characterization of silicon arrayed waveguide gratings in the near-infrared. *Optics Express*, **2017**, 25, 30651-30663	3.3	13
515	Heterogeneously integrated III-V-on-silicon multibandgap superluminescent light-emitting diode with 290 nm optical bandwidth. *Optics Letters*, **2014**, 39, 4784-7	3	13
514	Measurement of intermodulation distortion in high-linearity photodiodes. *Optics Express*, **2010**, 18, 2317-24	3.3	13
513	High Performance Ge/Si Avalanche Photodiodes Development in Intel **2011**,		13
512	Derivation of the Small Signal Response and Equivalent Circuit Model for a Separate Absorption and Multiplication Layer Avalanche Photodetector. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 1328-1336	3.8	13
511	Novel Optical Phase Demodulator Based on a Sampling Phase-Locked Loop. *IEEE Photonics Technology Letters*, **2007**, 19, 686-688	2.2	13
510	Compact and scalable three-dimensional microelectromechanical system optical switches [Invited]. *Journal of Optical Networking*, **2007**, 6, 19		13
509	1.3 Ēh wavelength vertical cavity surface emitting laser fabricated by orientation-mismatched wafer bonding: A prospect for polarization control. *Applied Physics Letters*, **2003**, 82, 2377-2379	3.4	13
508	Volvelles, domes and wristbands **2014**,		13
507	. *IEEE Journal of Quantum Electronics*, **2019**, 55, 1-7	2	12
506	Spatio-temporal optical random number generator. *Optics Express*, **2015**, 23, 11619-31	3.3	12
505	1.3 ΄μm Quantum Dot-Distributed Feedback Lasers Directly Grown on (001) Si. *Laser and Photonics Reviews*, **2020**, 14, 2000037	8.3	12
504	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
503	Silicon photonic terabit/s network-on-chip for datacenter interconnection. *Optical Fiber Technology*, **2018**, 44, 2-12	2.4	12
502	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

501	Recent advances in silicon photonic integrated circuits **2016**,		12
500	Strain-Compensated InGaAsP Superlattices for Defect Reduction of InP Grown on Exact-Oriented (001) Patterned Si Substrates by Metal Organic Chemical Vapor Deposition. *Materials*, **2018**, 11,	3.5	12
499	Integrated Hybrid Silicon Transmitters. *Journal of Lightwave Technology*, **2012**, 30, 671-678	4	12
498	Metal Pillar Interconnection Topology for Bonded Two-Terminal Multijunction III Solar Cells. *IEEE Journal of Photovoltaics*, **2013**, 3, 868-872	3.7	12
497	Characterization of wafer bonded photodetectors fabricated using various annealing temperatures and ambients. *Applied Physics Letters*, **1997**, 71, 1507-1509	3.4	12
496	Deuterated silicon dioxide for heterogeneous integration of ultra-low-loss waveguides. *Optics Letters*, **2020**, 45, 3340-3343	3	12
495	III-V on silicon avalanche photodiodes by heteroepitaxy. *Optics Letters*, **2019**, 44, 3538-3541	3	12
494	. *Journal of Lightwave Technology*, **2020**, 38, 3376-3386	4	11
493	Silicon arrayed waveguide gratings at 2.0- m wavelength characterized with an on-chip resonator. *Optics Letters*, **2018**, 43, 1135-1138	3	11
492	Design and characterization of arrayed waveguide gratings using ultra-low loss Si3N4 waveguides. *Applied Physics A: Materials Science and Processing*, **2014**, 116, 427-432	2.6	11
491	Realization of a Novel $1times{rm N}$ Power Splitter With Uniformly Excited Ports. *IEEE Photonics Technology Letters*, **2013**, 25, 36-39	2.2	11
490	Control of Widely Tunable Lasers With High-Q Resonator as an Integral Part of the Cavity. *Journal of Lightwave Technology*, **2017**, 35, 3934-3939	4	11
489	Ultra-Low Loss Large Area Waveguide Coils for Integrated Optical Gyroscopes. *IEEE Photonics Technology Letters*, **2017**, 29, 185-188	2.2	11
488	Extraction of inhomogeneous broadening and nonradiative losses in InAs quantum-dot lasers. *Applied Physics Letters*, **2015**, 107, 171106	3.4	11
487	Integrated Microwave Photonic Isolators: Theory, Experimental Realization and Application in a Unidirectional Ring Mode-Locked Laser Diode. *Photonics*, **2015**, 2, 957-968	2.2	11
486	Thermoelectric power factor enhancement with gate-all-around silicon nanowires. *Journal of Applied Physics*, **2014**, 115, 143704	2.5	11
485	Thermoelectric properties of lattice matched InAlN on semi-insulating GaN templates. *Journal of Applied Physics*, **2012**, 112, 083716	2.5	11
484	Towards a monolithically integrated III laser on silicon: optimization of multi-quantum well growth on InP on Si. *Semiconductor Science and Technology*, **2013**, 28, 094008	1.8	11

483	Hybrid silicon integration. *Journal of Materials Science: Materials in Electronics*, **2009**, 20, 3-9	2.1	11
482	SOA Gate Array Recirculating Buffer for Optical Packet Switching **2008**,		11
481	Dynamic range enhancement of a novel phase-locked coherent optical phase demodulator. *Optics Express*, **2007**, 15, 33-44	3.3	11
480	Design of Large, MEMS-Based Photonic Switches. *Optics and Photonics News*, **2002**, 13, 40	1.9	11
479	Etching of deep grooves for the precise positioning of cleaves in semiconductor lasers. *Applied Physics Letters*, **1985**, 46, 453-455	3.4	11
478	Chip-based soliton microcomb module using a hybrid semiconductor laser. *Optics Express*, **2020**, 28, 2714-2721	3.3	11
477	Integrated Ultra-Low-Loss Silicon Nitride Waveguide Coil for Optical Gyroscopes **2016**,		11
476	High-performance lasers for fully integrated silicon nitride photonics. *Nature Communications*, **2021**, 12, 6650	17.4	11
475	Recombination-enhanced dislocation climb in InAs quantum dot lasers on silicon. *Journal of Applied Physics*, **2020**, 128, 025703	2.5	11
474	A High Spur-Free Dynamic Range Silicon DC Kerr Ring Modulator for RF Applications. *Journal of Lightwave Technology*, **2019**, 37, 3261-3272	4	10
473	GaSb-Based p-i-n Photodiodes With Partially Depleted Absorbers for High-Speed and High-Power Performance at 2.5- $mu text{m}$ Wavelength. *IEEE Transactions on Electron Devices*, **2016**, 63, 2796-2801	2.9	10
472	Photodetectors for silicon photonic integrated circuits **2016**, 3-20		10
471	Effect of growth interruption in 1.55 Ìm InAs/InAlGaAs quantum dots on InP grown by molecular beam epitaxy. *Journal of Applied Physics*, **2018**, 123, 205302	2.5	10
470	On-wafer probing-kit for RF characterization of silicon photonic integrated transceivers. *Optics Express*, **2017**, 25, 13340-13350	3.3	10
469	Forward bias operation of silicon photonic Mach Zehnder modulators for RF applications. *Optics Express*, **2017**, 25, 23181-23190	3.3	10
468	Variation-aware adaptive tuning for nanophotonic interconnects **2015**,		10
467	A compact heat transfer model based on an enhanced Fourier law for analysis of frequency-domain thermoreflectance experiments. *Applied Physics Letters*, **2015**, 106, 263102	3.4	10
466	Two-terminal metal-inter-connected multijunction III‐V solar cells. *Progress in Photovoltaics: Research and Applications*, **2015**, 23, 593-599	6.8	10

465	Analysis of the 3-Omega method for substrates and thick films of anisotropic thermal conductivity. *Journal of Applied Physics*, **2012**, 112, 043516	2.5	10
464	Silicon fab-compatible contacts to n-InP and p-InGaAs for photonic applications. *Applied Physics Letters*, **2012**, 100, 201103	3.4	10
463	Electrical properties of Er-doped In0.53Ga0.47As. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 03C117	1.3	10
462	150 mm InP-to-Silicon Direct Wafer Bonding for Silicon Photonic Integrated Circuits. *ECS Transactions*, **2009**, 16, 235-241	1	10
461	Cryogenic performance of a high-speed GaInAs/InP p-i-n photodiode. *Journal of Lightwave Technology*, **1997**, 15, 529-533	4	10
460	Characterization of InGaAs quantum dot lasers with a single quantum dot layer as an active region. *Physica E: Low-Dimensional Systems and Nanostructures*, **1998**, 2, 738-742	3	10
459	Monolithic Mode-Locked Laser and Optical Amplifier for Regenerative Pulsed Optical Clock Recovery. *IEEE Photonics Technology Letters*, **2007**, 19, 641-643	2.2	10
458	Edge-coupled membrane terahertz photonic transmitters based on metal semiconductor metal traveling-wave photodetectors. *Applied Physics Letters*, **2002**, 81, 5108-5110	3.4	10
457	Improved Extinction Ratio in Ultra Short Directional Couplers Using Asymmetric Structures. *Japanese Journal of Applied Physics*, **1998**, 37, L930-L932	1.4	10
456	. *IEEE Photonics Technology Letters*, **1993**, 5, 1355-1359	2.2	10
455	Carrier heating dynamics in semiconductor waveguide saturable absorbers. *Applied Physics Letters*, **1994**, 65, 2708-2710	3.4	10
454	Temperature dependence of damping in high-speed quantum-well lasers. *Applied Physics Letters*, **1992**, 61, 396-398	3.4	10
453	Reduced dynamic linewidth in three-terminal two-section diode lasers. *Applied Physics Letters*, **1985** , 46, 125-127	3.4	10
452	The heteroepitaxial ridge-overgrown distributed feedback laser. *IEEE Journal of Quantum Electronics*, **1985**, 21, 519-526	2	10
451	High-speed, hybrid InGaAs p-i-n/photoconductor circuit. *Applied Physics Letters*, **1986**, 49, 430-431	3.4	10
450	A Tunable Hybrid III-V-on-Si MOS Microring Resonator with Negligible Tuning Power Consumption **2016**,		10
449	High-Performance Silicon Photonics Using Heterogeneous Integration. *IEEE Journal of Selected Topics in Quantum Electronics*, **2022**, 28, 1-15	3.8	10
448	High Speed Mid-Wave Infrared Uni-Traveling Carrier Photodetector. *IEEE Journal of Quantum Electronics*, **2020**, 56, 1-7	2	10

447	Large-Area Direct Hetero-Epitaxial Growth of 1550-nm InGaAsP Multi-Quantum-Well Structures on Patterned Exact-Oriented (001) Silicon Substrates by Metal Organic Chemical Vapor Deposition. *Journal of Electronic Materials*, **2018**, 47, 982-987	1.9	10
446	Reaching fiber-laser coherence in integrated photonics. *Optics Letters*, **2021**, 46, 5201-5204	3	10
445	. *IEEE Journal of Quantum Electronics*, **2017**, 53, 1-8	2	9
444	Influence of the polarization anisotropy on the linewidth enhancement factor and reflection sensitivity of 1.55-μm InP-based InAs quantum dash lasers. *Applied Physics Letters*, **2019**, 115, 091101	3.4	9
443	Integration of Mid-Infrared Light Sources on Silicon-Based Waveguide Platforms in 3.5–4.7 μm Wavelength Range. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-9	3.8	9
442	Coalescence of InP Epitaxial Lateral Overgrowth by MOVPE with V/III Ratio Variation. *Journal of Electronic Materials*, **2012**, 41, 845-852	1.9	9
441	Thermoelectric transport in the coupled valence-band model. *Journal of Applied Physics*, **2011**, 109, 033704	2.5	9
440	Monolithic Ge/Si avalanche photodiodes **2009**,		9
439	Equivalent circuit model of a waveguide-type Ge/Si avalanche photodetector. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2532-2535		9
438	Current spreading in apertured vertical-cavity lasers **1997**,		9
437	Simplified optoelectronic 3R regenerator using nonlinear electro-optical transformation in an electroabsorption modulator. *Optics Express*, **2005**, 13, 2742-6	3.3	9
436	Dynamically reconfigurable optical packet switch (DROPS). *Optics Express*, **2006**, 14, 12008-14	3.3	9
435	Wafer-bonded 1.55 [micro sign]m vertical cavity laser arrays for wavelength division multiplexing. *Electronics Letters*, **2001**, 37, 431	1.1	9
434	High-temperature optically pumped 1.55-μm VCSEL operating at 6 Gb/s. *IEEE Photonics Technology Letters*, **2000**, 12, 116-118	2.2	9
433	Subpicosecond carrier dynamics in low-temperature grown GaAs on Si substrates. *Applied Physics Letters*, **1999**, 75, 2575-2577	3.4	9
432	Ultrahigh speed performance of a quantum well laser at cryogenic temperatures. *Applied Physics Letters*, **1994**, 65, 528-530	3.4	9
431	Electrically pumped mode-locked vertical-cavity semiconductor lasers. *Optics Letters*, **1993**, 18, 1937-9	3	9
430	1.5-μm GaInAsP planar buried heterostructure lasers grown using chemical-beam-epitaxial base structures. *Journal of Applied Physics*, **1988**, 63, 1218-1220	2.5	9

429	Semipolar GaN-based laser diodes for Gbit/s white lighting communication: devices to systems **2018**,		9
428	Integrated Triplexer on Hybrid Silicon Platform **2010**,		9
427	Low Dark Current 1.55 Micrometer InAs Quantum Dash Waveguide Photodiodes. *ACS Nano*, **2020**, 14, 3519-3527	16.7	8
426	Chip-scale optical resonator enabled synthesizer (CORES) miniature systems for optical frequency synthesis **2016**,		8
425	A Path to 300 mm Hybrid Silicon Photonic Integrated Circuits **2014**,		8
424	$hbox{GaAs/In}_{0.5}hbox{Ga}_{0.5}hbox{P}$ Laser Power Converter With Undercut Mesa for Simultaneous High-Speed Data Detection and DC Electrical Power Generation. *IEEE Electron Device Letters*, **2012**, 33, 561-563	4.4	8
423	Fully integrated hybrid silicon free-space beam steering source with 32-channel phased array **2014**,		8
422	Ultra-low-loss Single-mode Si3N4 Waveguides with 0.7 dB/m Propagation Loss **2011**,		8
421	High-Temperature Thermoelectric Characterization of III–V Semiconductor Thin Films by Oxide Bonding. *Journal of Electronic Materials*, **2010**, 39, 1125-1132	1.9	8
420	Wafer Fusion for Surface-Normal Optoelectronic Device Applications. *International Journal of High Speed Electronics and Systems*, **1997**, 08, 357-376	0.5	8
419	Phase-Locked Coherent Demodulator With Feedback and Sampling for Optically Phase-Modulated Microwave Links. *Journal of Lightwave Technology*, **2008**, 26, 2460-2475	4	8
418	A hybrid silicon sampled grating DBR tunable laser **2008**,		8
417	Comparison of Wavelength-Selective Cross-Connect Architectures for Reconfigurable All-Optical Networks **2006**,		8
416	Self-mode-locking of a semiconductor laser using positive feedback. *Applied Physics Letters*, **1990**, 56, 7-9	3.4	8
415	Effect of p-doping on the intensity noise of epitaxial quantum dot lasers on silicon. *Optics Letters*, **2020**, 45, 4887-4890	3	8
414	Ultra-precise optical-frequency stabilization with heterogeneous III-V/Si lasers. *Optics Letters*, **2020**, 45, 5275-5278	3	8
413	Integrated dispersion compensated mode-locked quantum dot laser. *Photonics Research*, **2020**, 8, 1428	6	8
412	CMOS-foundry-based blue and violet photonics. *Optica*, **2021**, 8, 755	8.6	8

411	High Speed Evanescent Quantum-Dot Lasers on Si. *Laser and Photonics Reviews*, **2021**, 15, 2100057	8.3	8
410	Investigation of Current-Driven Degradation of 1.3 μm Quantum-Dot Lasers Epitaxially Grown on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26, 1-8	3.8	8
409	Platicon microcomb generation using laser self-injection locking.. *Nature Communications*, **2022**, 13, 1771	17.4	8
408	Microcomb-driven silicon photonic systems.. *Nature*, **2022**, 605, 457-463	50.4	8
407	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
406	Characterization of heterogeneous InP-on-Si optical modulators operating between 77 K and room temperature. *APL Photonics*, **2019**, 4, 100805	5.2	7
405	. *IEEE Micro*, **2013**, 33, 22-31	1.8	7
404	Unidirectional hybrid silicon ring laser with an intracavity S-bend. *Optics Express*, **2015**, 23, 26369-76	3.3	7
403	High temperature thermoreflectance imaging and transient Harman characterization of thermoelectric energy conversion devices. *Journal of Applied Physics*, **2014**, 116, 034501	2.5	7
402	Measurement of the high-temperature Seebeck coefficient of thin films by means of an epitaxially regrown thermometric reference material. *Review of Scientific Instruments*, **2012**, 83, 093905	1.7	7
401	Quadratic Electrooptic Effect for Frequency Down-Conversion. *IEEE Transactions on Microwave Theory and Techniques*, **2010**, 58, 665-673	4.1	7
400	Cooling Power Density of SiGe/Si Superlattice Micro Refrigerators. *Materials Research Society Symposia Proceedings*, **2003**, 793, 124		7
399			7
398	Study of partial strain release and surface states formed on the sidewall of InGaAs quantum-well wires. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1992**, 10, 1971		7
397	Spectral Structure Of Phase-Induced Intensity Noise In Recirculating Delay Lines **1983**, 0412, 22		7
396	Optical Phase Demodulation of a 10GHz RF Signal using Optical Sampling **2008**,		7
395	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
394	High Efficiency, High Gain and High Saturation Output Power Quantum Dot SOAs Grown on Si and applications **2020**,		7

393	Low loss (Al)GaAs on an insulator waveguide platform. *Optics Letters*, **2019**, 44, 4075-4078	3	7
392	Research Toward a Heterogeneously Integrated InGaN Laser on Silicon. *Physica Status Solidi (A) Applications and Materials Science*, **2020**, 217, 1900770	1.6	7
391	Quantum dot lasers History and future prospects. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 020802	2.9	7
390	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
389	**2016**,		7
388	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
387	Heterogeneous Integration of III V Lasers on Si by Bonding. *Semiconductors and Semimetals*, **2018**, 99, 139-188	0.6	7
386	Perspectives on Advances in Quantum Dot Lasers and Integration with Si Photonic Integrated Circuits. *ACS Photonics*, **2021**, 8, 2555-2566	6.3	7
385	Quantum dot microcavity lasers on silicon substrates. *Semiconductors and Semimetals*, **2019**, 305-354	0.6	6
384	Integrated chip-scale Si3N4 wavemeter with narrow free spectral range and high stability. *Optics Letters*, **2016**, 41, 3309-12	3	6
383	Effect of phonon confinement on the thermal conductivity of In0.53Ga0.47As nanofilms. *Journal of Applied Physics*, **2018**, 123, 245103	2.5	6
382	Multi-Spectral Quantum Cascade Lasers on Silicon With Integrated Multiplexers. *Photonics*, **2019**, 6, 6	2.2	6
381	. *IEEE Photonics Technology Letters*, **2014**, 26, 1321-1324	2.2	6
380	Bidirectional Crosstalk and Back-Reflection Free WDM Active Optical Interconnects. *IEEE Photonics Technology Letters*, **2013**, 25, 1973-1976	2.2	6
379	Integrated microwave photonics **2015**,		6
378	A metal thermal shunt design for hybrid silicon microring laser **2012**,		6
377	Ultra-low loss silica-based waveguides with millimeter bend radius **2010**,		6
376	The impact of commonly used approximations on the computation of the Seebeck coefficient and mobility of polar semiconductors. *Applied Physics Letters*, **2012**, 101, 173905	3.4	6

375	Novel Phase Modulator Linearity Measurement. *IEEE Photonics Technology Letters*, **2009**, 21, 1405-1407	2.2	6
374	Equivalent circuit model of a Ge/Si avalanche photodiode **2009**,		6
373	Three-tone characterization of high-linearity waveguide uni-traveling-carrier photodiodes **2008**,		6
372	Fully Integrated NxN MEMS Wavelength Selective Switch with 100% Colorless Add-Drop Ports **2008**,		6
371	**2006**,		6
370	Optical Buffering and Switching for Optical Packet Switching **2006**,		6
369	Experimental Characterization and Modeling of InP-based Microcoolers. *Materials Research Society Symposia Proceedings*, **2003**, 793, 87		6
368	Transient Harman Measurement of the Cross-plane ZT of InGaAs/InGaAlAs Superlattices with Embedded ErAs Nanoparticles. *Materials Research Society Symposia Proceedings*, **2005**, 886, 1		6
367	A wavelength multiplexer using cascaded three-dimensional vertical couplers. *Applied Physics Letters*, **2000**, 76, 282-284	3.4	6
366	Analog modulation of 1.55-ĕh vertical-cavity lasers **1999**,		6
365	Analysis of the effects of doping and barrier design on the small-signal modulation characteristics of long-wavelength multiple quantum well lasers. *Optical and Quantum Electronics*, **1994**, 26, S805-S816	2.4	6
364	Strain-induced lateral confinement of excitons in GaAs/AlGaAs quantum well by chemical dry etching. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **1991**, 9, 3498		6
363	Actively mode-locked external-cavity semiconductor lasers with transform-limited single-pulse output. *Optics Letters*, **1992**, 17, 868	3	6
362	Thermal resistance of 1.3ĕh InGaAsP vertical cavity lasers. *Microwave and Optical Technology Letters*, **1993**, 6, 455-457	1.2	6
361	Design of 1.3-microm GaInAsP surface-emitting lasers for high-bandwidth operation. *Optics Letters*, **1990**, 15, 679-81	3	6
360	Sub-mA threshold 1.3 µm CW lasing from electrically pumped micro-rings grown on (001) Si **2017**,		6
359	PINE: Photonic Integrated Networked Energy efficient datacenters (ENLITENED Program) [Invited]. *Journal of Optical Communications and Networking*, **2020**, 12, 443	4.1	6
358	Integrated Green DWDM Photonics For Next-Gen High-Performance Computing **2020**,		6

357	40 Gbit/s waveguide photodiode using III-V on silicon heteroepitaxy. *Optics Letters*, **2020**, 45, 2954-2956	3	6
356	2 ×2 switch. *Optics Letters*, **2020**, 45, 5340-5343	3	6
355	Elastic WDM optoelectronic crossbar switch with on-chip wavelength control **2017**,		6
354	On-chip polarization rotator for type I second harmonic generation. *APL Photonics*, **2019**, 4, 126105	5.2	6
353	Hybrid InP and SiN integration of an octave-spanning frequency comb. *APL Photonics*, **2021**, 6, 026102	5.2	6
352	Low Crosstalk Bent Multimode Waveguide for On-chip Mode-Division Multiplexing Interconnects **2018**,		6
351	Low noise, tunable silicon photonic lasers. *Applied Physics Reviews*, **2021**, 8, 031306	17.3	6
350	A Generalized Enhanced Fourier Law. *Journal of Heat Transfer*, **2017**, 139,	1.8	5
349	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
348	Thermoelectric properties of holey silicon at elevated temperatures. *Materials Today Physics*, **2020**, 14, 100224	8	5
347	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
346	Narrow linewidth tunable laser using coupled resonator mirrors **2015**,		5
345	Photonic Generation of Few-Cycle Millimeter-Wave Pulse Using a Waveguide-Based Photonic-Transmitter-Mixer. *IEEE Photonics Journal*, **2012**, 4, 1071-1079	1.8	5
344	Microwave generation using an integrated hybrid silicon mode-locked laser in a coupled optoelectronic oscillator configuration **2013**,		5
343	Demonstration of Enhanced III-V-On-Silicon Hybrid Integration by Using a Strained Superlattice as a Defect Blocking Layer. *ECS Transactions*, **2010**, 33, 421-426	1	5
342	A Novel Micromachining Process Using DRIE, Thermal Oxidation, Electroplating, and Planarization to Create High Aspect Ratio Coplanar Waveguides. *Journal of Microelectromechanical Systems*, **2010**, 19, 55-63	2.5	5
341	High speed silicon modulators **2009**,		5
340	Integrated recirculating optical hybrid silicon buffers **2011**,		5

339	Ultra-Long Cavity Hybrid Silicon Mode-locked Laser Diode Operating at 930 MHz **2010**,		5
338	Synchronously Loaded Optical Packet Buffer. *IEEE Photonics Technology Letters*, **2008**, 20, 1757-1759	2.2	5
337	Recent progress on LASOR optical router and related integrated technologies **2008**,		5
336	A Dynamic Measurement Technique for Third-Order Distortion in Optical Phase Modulators. *IEEE Photonics Technology Letters*, **2007**, 19, 170-172	2.2	5
335	High-Speed OTDM and WDM Networks Using Traveling-Wave Electroabsorption Modulators. *IEEE Journal of Selected Topics in Quantum Electronics*, **2007**, 13, 58-69	3.8	5
334	Investigation of a Novel Optical Phase Demodulator Based on a Sampling Phase-Locked Loop **2006**,		5
333	Electron relaxation and transport dynamics in low-temperature-grown GaAs under 1 eV optical excitation. *Applied Physics Letters*, **2003**, 83, 911-913	3.4	5
332	P-type InGaAsP coolers for integrated optic devices **2001**, 4284, 139		5
331	Modeling of traveling-wave amplification photodetectors (TAP detectors) **2001**, 4283, 528		5
330	Improvement of Internal Quantum Efficiency in 1.55 μm Laser Diodes with InGaP Electron Stopper Layer. *Japanese Journal of Applied Physics*, **1999**, 38, 1239-1242	1.4	5
329	Single-mode-fiber 1 x N directional coupler. *Optics Letters*, **1983**, 8, 60-2	3	5
328	6 GHz direct frequency modulation of cleaved-coupled-cavity channeled-substrate buried-heterostructure lasers. *IEEE Journal of Quantum Electronics*, **1984**, 20, 1230-1232	2	5
327	Integrated photonics for NASA applications **2019**,		5
326	A Widely-Tunable High-SMSR Narrow-Linewidth Laser Heterogeneously Integrated on Silicon **2018**,		5
325	Towards an Integrated-Photonics Optical-Frequency Synthesizer With **2017**,		5
324	Chip-Scale, Optical-Frequency-Stabilized PLL for DSP-Free, Low-Power Coherent QAM in the DCI **2020**,		5
323	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
322	Silicon nitride chirped spiral Bragg grating with large group delay. *APL Photonics*, **2020**, 5, 101302	5.2	5

321	Artificial Coherent States of Light by Multiphoton Interference in a Single-Photon Stream. *Physical Review Letters*, **2021**, 126, 143601	7.4	5
320	A broadband optical switch based on adiabatic couplers **2016**,		5
319	Electro-optic polarization tuning of microcavities with a single quantum dot. *Optics Letters*, **2018**, 43, 4280-4283	3	5
318	Optical and structural properties of sulfur-doped ELOG InP on Si. *Journal of Applied Physics*, **2015**, 117, 215303	2.5	4
317	Highly-Sensitive Phase and Frequency Noise Measurement Technique Using Bayesian Filtering. *IEEE Photonics Technology Letters*, **2019**, 31, 1866-1869	2.2	4
316	Monolithic Germanium/Silicon Photodetectors With Decoupled Structures: Resonant APDs and UTC Photodiodes. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 43-56	3.8	4
315	Athermal characteristics of TiO2-clad silicon waveguides at 1.3μm **2014**,		4
314	On the solenoidal heat-flux in quasi-ballistic thermal conduction. *Journal of Applied Physics*, **2015**, 118, 125106	2.5	4
313	American Institute for Manufacturing Integrated Photonics (AIM Photonics) **2015**,		4
312	Flexible, compact WDM receivers using cascaded optical and electrical down-conversion. *Optics Express*, **2014**, 22, 102-9	3.3	4
311	Thermoelectric Transport in InGaAs with High Concentration of Rare-Earth TbAs Embedded Nanoparticles. *Journal of Electronic Materials*, **2012**, 41, 1820-1825	1.9	4
310	Thermoelectric properties of single crystal Sc1−ErxAs:InGaAs nanocomposites. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2013**, 31, 041401	1.3	4
309	High-gain high-sensitivity resonant Ge/Si APD photodetectors **2010**,		4
308	(Invited) Ge/Si Waveguide Avalanche Photodiodes on SOI Substrates for High Speed Communication. *ECS Transactions*, **2010**, 33, 757-764	1	4
307	Polarization characteristics of low-loss nano-core buried optical waveguides and directional couplers **2010**,		4
306	Ultra-high speed (270 GHz) near-ballistic uni-traveling-carrier photodiode with very-high saturation current (17 mA) under a 50 Ω load **2011**,		4
305	Low-loss hybrid silicon tapers **2011**,		4
304	Free-space beam steering using silicon waveguide surface gratings **2011**,		4

303	Compact beam splitters with deep gratings for miniature photonic integrated circuits: design and implementation aspects. *Applied Optics*, **2009**, 48, F68-75	0.2	4
302	Highly Linear Integrated Coherent Receivers for Microwave Photonic Links **2009**,		4
301	Demonstration of Contention Resolution for Labeled Packets at 40 Gb/s Using Autonomous Optical Buffers **2009**,		4
300	Recent advances in Ge/Si PIN and APD photodetectors. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2526-2531		4
299	All-Optical Clock Recovery with Retiming and Reshaping Using a Silicon Evanescent Mode Locked Ring Laser **2008**,		4
298	A 40 GHz Mode Locked Silicon Evanescent Laser **2007**,		4
297	Monolithically Integrated Coherent Receiver for Highly Linear Microwave Photonic Links. *Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS*, **2007**,		4
296	Analog modulation of semiconductor lasers **2002**, 57-80		4
295	High-speed traveling-wave electro-absorption modulators **2001**,		4
294	Intraband carrier kinetics and picosecond pulse shaping in field-enhanced bulk semiconductor absorbers. *Optics Letters*, **1998**, 23, 376-8	3	4
293	Study of temperature effects on loss mechanisms in laser diodes with electron stopper layer. *Semiconductor Science and Technology*, **1999**, 14, 419-424	1.8	4
292	Fabrication and characteristics of double-fused vertical-cavity lasers. *Optical and Quantum Electronics*, **1996**, 28, 475-485	2.4	4
291	Packaged clock recovery integrated circuits for 40 Gbit/s optical communication links		4
290	. *IEEE Transactions on Electron Devices*, **1991**, 38, 1968-1970	2.9	4
289	Effect of nonuniform piezoelectric films on monolithic surface acoustic wave devices. *Applied Physics Letters*, **1982**, 41, 805-807	3.4	4
288	Progress in hybrid-silicon photonic integrated circuit technology. *SPIE Newsroom*,		4
287	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
286	Realities and challenges of III-V/Si integration technologies **2019**,		4

285	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
284	A High efficiency, Current Injection Based Quantum-Well Phase Modulator Monolithically Integrated with a Tunable Laser for Coherent Systems **2006**,		4
283	High resolution, high channel count mid-infrared arrayed waveguide gratings in silicon. *Optics Letters*, **2020**, 45, 4551-4554	3	4
282	Efficient second harmonic generation in lithium niobate on insulator waveguides and its pitfalls. *JPhys Photonics*, **2021**, 3, 012008	2.5	4
281	Nonlinear Optics: Heterogeneously Integrated GaAs Waveguides on Insulator for Efficient Frequency Conversion (Laser Photonics Rev. 12(10)/2018). *Laser and Photonics Reviews*, **2018**, 12, 1870044	8.3	4
280	2.6 GHz high-speed visible light communication of 450 nm GaN laser diode by direct modulation **2015**,		3
279	Low-dark current III-V photodiodes grown on silicon substrate **2017**,		3
278	Many Makings **2016**,		3
277	Intensity and Phase Modulators at 1.55 µm in GaAs/AlGaAs Layers Directly Grown on Silicon. *Journal of Lightwave Technology*, **2018**, 36, 4205-4210	4	3
276	Photonic High-Power 160-GHz Signal Generation by Using Ultrafast Photodiode and a High-Repetition-Rate Femtosecond Optical Pulse Train Generator. *IEEE Journal of Selected Topics in Quantum Electronics*, **2014**, 20, 10-16	3.8	3
275	Integrated Fourier-Domain Mode-Locked Lasers: Analysis of a Novel Coherent Comb Laser. *IEEE Journal of Selected Topics in Quantum Electronics*, **2012**, 18, 201-209	3.8	3
274	Piezoelectric tuning of a suspended silicon nitride ring resonator **2017**,		3
273	Integrated single and multi-layer Si3N4 platform for ultra-low loss propagation and small bending radii **2014**,		3
272	Reliability of hybrid III-V on Si distributed feedback lasers **2012**,		3
271	Photonic Generation, Wireless Transmission, and Detection of Continuously Tunable Chirped Millimeter-Wave Waveforms with Ultra-High Compression Ratio at W-band **2012**,		3
270	InP/InGaAsP-Based Integrated 3-dB Trench Couplers for Ultra-Compact Coherent Receivers. *IEEE Photonics Technology Letters*, **2011**, 23, 311-313	2.2	3
269	Ultra-compact integrated coherent receiver for high linearity RF photonic links **2010**,		3
268	Demonstration of a linear ultra-compact integrated coherent receiver **2010**,		3

267	Compact low-threshold hybrid silicon microring resonator lasers **2010**,		3
266	Thermoelectric Properties of Silicon Nanowire Array and Spin-on Glass Composites Fabricated with CMOS-compatible Techniques. *Materials Research Society Symposia Proceedings*, **2012**, 1408, 61		3
265	A hybrid silicon colliding pulse mode-locked laser with integrated passive waveguide section **2012**,		3
264	Improvement of avalanche photodetectors through integration of InGaAs and Si **1997**, 2999, 68		3
263	Integrated Hybrid Lasers and Amplifiers on a Silicon Platform **2008**,		3
262	Multiple wavelength generation from a mode locked silicon evanescent laser **2008**,		3
261	. *IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium*, **2007**,		3
260	Analysis of Sampled Optical Phase-Lock Loops **2007**,		3
259	Physics of waveguide photodetectors with integrated amplification **2003**,		3
258	Interface of directly bonded InP wafers for vertical couplers. *Applied Physics Letters*, **2002**, 80, 1346-1348	3.4	3
257	Integrated cooling for optoelectronic devices **2000**,		3
256	Experimental Investigation of Thin Film InGaAsP Coolers. *Materials Research Society Symposia Proceedings*, **2000**, 626, 1441		3
255	High Cooling Power Density of SiGe/Si Superlattice Microcoolers. *Materials Research Society Symposia Proceedings*, **2001**, 691, 1		3
254	Intensity noise and facet correlation in Fabry-Pérot laser diodes with low facet reflectivities. *Applied Physics Letters*, **1995**, 66, 3419-3421	3.4	3
253	Modeling and optimization of 1.54 μm double-fused VCSELs for cw operation above room temperature **1996**,		3
252	In situ characterization of sputtered thin films using a normal incidence laser reflectometer. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1992**, 10, 939-944	2.9	3
251	Sputter deposition of precision Si/Si3N4 Bragg reflectors using multitasking interactive processing control. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1991**, 9, 1113-1117	2.9	3
250	Silicon-integrated nonlinear III-V photonics. *Photonics Research*, **2022**, 10, 535	6	3

249	High performance quantum dot lasers epitaxially integrated on Si **2018**,		3
248	Heterogeneous Silicon/InP Semiconductor Optical Amplifiers with High Gain and High Saturation Power **2016**,		3
247	. *Journal of Lightwave Technology*, **2021**, 1-1	4	3
246	Quadruple reduction of threshold current density for micro-ring quantum dot lasers epitaxially grown on (001) Si **2018**,		3
245	High-Speed Lasers **1999**, 177-290		3
244	. *IEEE Nanotechnology Magazine*, **2021**, 15, 8-22	1.7	3
243	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
242	Dynamic performance and reflection sensitivity of quantum dot distributed feedback lasers with large optical mismatch. *Photonics Research*, **2021**, 9, 1550	6	3
241	AIM Photonics - What merging photonics with nano-electronics will do **2016**,		3
240	GaN based Cyan light-emitting diodes with GHz bandwidth **2016**,		3
239	(Invited) Heterogeneous Photonic Integration by Direct Wafer Bonding. *ECS Transactions*, **2016**, 75, 179-183		3
238	High Thermoelectric Power Factor and ZT in TbAs:InGaAs Epitaxial Nanocomposite Material. *Advanced Electronic Materials*, **2019**, 5, 1900015	6.4	3
237	. *IEEE Journal of Quantum Electronics*, **2021**, 57, 1-8	2	3
236	Scalable multicast hybrid broadband-crossbar wavelength selective switch: proposal and analysis. *Optics Letters*, **2021**, 46, 448-451	3	3
235	Reliability of lasers on silicon substrates for silicon photonics **2021**, 239-271		3
234	**2018**,		3
233	Multi-Ring Mirror-Based Narrow-Linewidth Widely-Tunable Lasers in Heterogeneous Silicon Photonics **2018**,		3
232	High-brightness lasers on silicon by beam combining **2017**,		2

231	Effect of direct PRBS modulation on laser driven fiber optic gyroscope **2017**,		2
230	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
229	Quantum dot lasers grown on (001) Si substrate for integration with amorphous Si waveguides **2017**,		2
228	Reliability of quantum well and quantum dot lasers for silicon photonics (invited) **2017**,		2
227	Forward bias optimization of a silicon photonic modulator for analog application **2017**,		2
226	Heterodyne-based hybrid controller for wide dynamic range optoelectronic frequency synthesis. *Optics Express*, **2017**, 25, 29086	3.3	2
225	High-speed hybrid silicon microring lasers **2015**,		2
224	Frequency modulated laser optical gyroscope **2015**,		2
223	Demonstration of a tunable broadband coupler **2015**,		2
222	Optical Phase-Locking and Wavelength Synthesis **2014**,		2
221	A Hybrid Silicon/InP Integrated Feedback Stabilized Mode-Locked Laser **2014**,		2
220	Controlling n-Type Carrier Density from Er Doping of InGaAs with MBE Growth Temperature. *Journal of Electronic Materials*, **2012**, 41, 948-953	1.9	2
219	Thermal management in hybrid silicon lasers **2013**,		2
218	High-Power High-Speed Waveguide Photodiodes and Photodiode Arrays Heterogeneously Integrated on Silicon-on-Insulator **2013**,		2
217	Integrated bidirectional optical amplifier for crosstalk-free WDM communication **2013**,		2
216	High-power photonic transmitter-mixer with ultra-wide O-E (50 GHz) and IF (26 GHz) modulation bandwidths for wireless data transmission **2011**,		2
215	Hybrid silicon ring lasers **2011**,		2
214	Integrated coherent receiver for linear optical phase demodulation. *Microwave and Optical Technology Letters*, **2011**, 53, 2343-2345	1.2	2

213	(Invited) High Power Waveguide Ge/Si Photodiodes. *ECS Transactions*, **2010**, 33, 729-738	1	2
212	Propagation Delay of Waveguide Photodetector. *Journal of Lightwave Technology*, **2010**, 28, 2099-2104	4	2
211	Temperature dependence of Ge/Si avalanche photodiodes **2010**,		2
210	Fabrication, Modeling, and Characterization of High-Aspect-Ratio Coplanar Waveguide. *IEEE Transactions on Microwave Theory and Techniques*, **2010**,	4.1	2
209	Reduction of hybrid silicon laser thermal impedance using poly Si thermal shunts **2010**,		2
208	Resonant Si/Ge avalanche photodiode with an ultrahigh gain bandwidth product **2010**,		2
207	Low power 3D MEMS optical switches **2009**,		2
206	All-optical ACP-OPLL photonic integrated circuit **2011**,		2
205	Free-space Beam Steering in Two Dimensions Using a Silicon Optical Phased Array **2012**,		2
204	Electrically active Er doping in InAs, In0.53Ga0.47As, and GaAs. *Applied Physics Letters*, **2012**, 101, 232103	3.4	2
203	CMOS enabled silicon photonics for data center packet switching **2012**,		2
202	Incompatibility of standard III-V compound semiconductor processing techniques with terbium-doped InGaAs of high terbium concentration. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2012**, 30, 031508	2.9	2
201	High-power, high-linearity photodiodes for RF photonics **2012**,		2
200	A high power Ge n-i-p waveguide photodetector on silicon-on-insulator substrate **2009**,		2
199	Synchronous Optical Packet Buffers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 1413-1421	3.8	2
198	A distributed Bragg reflector silicon evanescent laser **2008**,		2
197	A hybrid silicon evanescent electroabsorption modulator **2008**,		2
196	35 Gb/s Monolithic All-Optical Clock Recovery Pulse Source **2007**,		2

195	Integrated optical payload envelope detection and label recovery device for optical packet switching networks. *Optics Express*, **2006**, 14, 5073-8	3.3	2
194	InP-based waveguide photodetector with integrated photon multiplication **2003**,		2
193	Recent advances in photodetectors with distributed optical amplification **2003**,		2
192	Solid-State and Vacuum Thermionic Energy Conversion. *Materials Research Society Symposia Proceedings*, **2005**, 886, 1		2
191	Multi-quantum-well electroabsorption modulators **2002**, 4646, 609		2
190	Characteristic equations for different ARROW structures. *Optical and Quantum Electronics*, **1999**, 31, 1267-1276	2.4	2
189	Cryogenic performance of double-fused 1.5-/spl mu/m vertical cavity lasers. *Journal of Lightwave Technology*, **1999**, 17, 503-508	4	2
188	Optimum design of 1.55-microm double heterostructures and ridge-waveguide lasers. *Optics Letters*, **1984**, 9, 330-2	3	2
187	Quantum dot lasers based photonics integrated circuits **2020**,		2
186	Optical self-injection stabilization of a passively mode-locked quantum dot on silicon laser **2020**,		2
185	2.56 Tbps (8 □B □40 Gbps) Fully-Integrated Silicon Photonic Interconnection Circuit **2016**,		2
184	100 GHz colliding pulse mode locked quantum dot lasers directly grown on Si for WDM application **2019**,		2
183	Heterogeneous III-V / Si Photonic Integration **2016**,		2
182	1550 nm laser with 320 Hz Lorentzian linewidth based on semiconductor gain chip and extended Si3N4 Bragg grating **2019**,		2
181	Ultra-Narrow Linewidth Chip-Scale Heterogeneously Integrated Silicon/III-V Tunable Laser Pumped Si/Si3N4 SBS Laser **2020**,		2
180	Efficiency Analysis of Quantum Well Lasers using PICS3D **1999**,		2
179	Modified Uni-Traveling Carrier Photodiodes Heterogeneously Integrated on Silicon-on-Insulator (SOI) **2012**,		2
178	Compact broadband polarizer based on shallowly-etched silicon-on-insulator ridge optical waveguides **2011**,		2

177	Reduction of hybrid silicon laser thermal impedance using Poly Si thermal shunts **2011**,		2
176	High Performance 1.3μm InAs Quantum Dot Lasers Epitaxially Grown on Silicon **2014**,		2
175	Low threshold current 1.3 μm Fabry-Perot III-V quantum dot lasers on (001) Si with superior reliability **2018**,		2
174	Ultra-broadband and Low-loss Polarization Beam Splitter on Silicon **2020**,		2
173	Stimulated Brillouin Scattering in AlGaAs on insulator waveguides **2020**,		2
172	Integrated Cooling for Optoelectronic Devices **2000**,		2
171	Integrated Coherent Tunable Laser (ICTL) with 118 nm Tuning Range and sub-100 Hz Lorentzian Linewidth **2021**,		2
170	Photonic Chip Recirculating Buffer for Optical Packet Switching **2008**,		2
169	Silicon Lasers and Photonic Integrated Circuits. *Springer Series in Optical Sciences*, **2012**, 625-663	0.5	2
168	Mode Locked Semiconductor Lasers **1991**, 401-410		2
167	Optical Switches. *Springer Series in Optical Sciences*, **2017**, 483-545	0.5	2
166	Origin of the Gain-Bandwidth-Product Enhancement in Separate-Absorption-Charge-Multiplication Ge/Si Avalanche Photodiodes **2009**,		2
165	Three-dimensional Thermal Analysis of a Waveguide Ge/Si Photodiode **2010**,		2
164	Low-Power, Fast Hybrid Silicon Switches for High-Capacity Optical Networks **2010**,		2
163	A Comparison of Approaches for Ultra-Low-Loss Waveguides **2012**,		2
162	25 Gbit/s Error-Free Wireless On-off-keying Data Transmission at W-band using Ultra-Fast Photonic Transmitter-Mixers and Envelop Detectors **2012**,		2
161	Characterization of a Hybrid Silicon-InP Laser Tapered Mode Converter **2013**,		2
160	Digitally Tunable Optical Power Equalization for Large Port Count Optical Switches **2013**,		2

159	Foundry capabilities for photonic integrated circuits **2020**, 143-193		2
158	Chromosome number is key to longevity of polyploid lineages. *New Phytologist*, **2021**, 231, 19-28	9.8	2
157	Towards integrated photonic interposers for processing octave-spanning microresonator frequency combs. *Light: Science and Applications*, **2021**, 10, 109	16.7	2
156	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
155	Seamless multi-reticle photonics. *Optics Letters*, **2021**, 46, 2984-2987	3	2
154	Ultra-low loss stitching for large-area waveguide based delay-line gyroscopes **2016**,		2
153	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
152	On-Chip Detection from Directly Modulated Quantum Dot Microring Lasers on Si **2018**,		2
151	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
150	Analysis of the Spontaneous Emission Limited Linewidth of an Integrated III$\overline{V}$/SiN Laser. *Laser and Photonics Reviews*,2100620	8.3	2
149	Integrated Sagnac optical gyroscope sensor using ultra-low loss high aspect ratio silicon nitride waveguide coil **2017**,		1
148	InAs quantum dot micro-disk lasers grown on (001) Si emitting at communication wavelengths **2017** ,		1
147	Extended polarized semiclassical model for quantum-dot cavity QED and its application to single-photon sources. *Physical Review A*, **2020**, 101,	2.6	1
146	Evolution of photonic integrated circuits **2017**,		1
145	On-wafer RF characterization of integrated silicon photonic transceivers with self-calibration method **2017**,		1
144	Interband cascade laser on silicon **2017**,		1
143	Fully Integrated Photonic Millimeter-Wave Tracking Generators on the Heterogeneous III$\overline{V}$/Si Platform. *IEEE Photonics Technology Letters*, **2018**, 30, 919-922	2.2	1
142	High-speed performance of III-nitride 410 nm ridge laser diode on (202 1) plane for visible light communication **2016**,		1

141	An electrical probe of the phonon mean-free path spectrum. *Scientific Reports*, **2016**, 6, 33571	4.9	1
140	Efficient and broad band coupling between silicon and ultra-low-loss silicon nitride waveguides **2016**,		1
139	The American Institute for Manufacturing Integrated Photonics: advancing the ecosystem **2016**,		1
138	High quality large area ELOG InP on silicon for photonic integration using conventional optical lithography **2014**,		1
137	InGaN-Based Solar Cells and High-Performance Broadband Optical Coatings for Ultrahigh Efficiency Hybrid Multijunction Device Designs **2013**,		1
136	Stable Arbitrary Frequency Generator. *Journal of Lightwave Technology*, **2017**, 35, 4897-4902	4	1
135	Integrated Widely Tunable Broadband Optical Isolator in Silicon Photonics **2017**,		1
134	A fiber coupled source of identical single photons **2017**,		1
133	Insights into the Common Ancestor of Eudicots. *Advances in Botanical Research*, **2014**, 69, 137-174	2.2	1
132	Reflection-assisted unidirectional hybrid silicon microring lasers **2012**,		1
131	**2012**,		1
130	Integration of ultra-low-loss silica waveguides with silicon photonics **2012**,		1
129	Hybrid III-V-on-Silicon Microring Lasers. *Materials Research Society Symposia Proceedings*, **2013**, 1538, 363-369		1
128	Hybrid silicon free-space source with integrated beam steering **2013**,		1
127	Design of ultra-broadband antireflection coatings utilizing integrated moth-eye structures for multi-junction device applications **2013**,		1
126	Optimization of the hybrid silicon photonic integrated circuit platform **2013**,		1
125	Integration of hybrid silicon DFB laser and electro-absorption modulator using quantum well intermixing **2010**,		1
124	Novel metal/semiconductor nanocomposite and superlattice materials and devices for thermoelectrics **2010**,		1

123	Simple Matrix-Method Modeling for Avalanche Photodetectors With Arbitrary Layer Structures and Absorption/Multiplication Coefficients. *Journal of Lightwave Technology*, **2010**, 28, 1404-1413	4	1
122	Integrated broadband hybrid silicon DFB laser array using quantum well intermixing **2010**,		1
121	Semiconductor lasers on silicon **2010**,		1
120	25 Gbaud DQPSK receiver integrated on the hybrid silicon platform **2011**,		1
119	RF frequency down-conversion with quadratic electro-optic effect **2009**,		1
118	High aspect ratio CPW fabricated using silicon bulk micromachining with substrate removal **2009**,		1
117	Ultrashort and ultrabroadband silicon polarization beam splitter based on a bent directional coupler **2011**,		1
116	**2011**,		1
115	An integrated and compact hybrid silicon 2R regenerator **2012**,		1
114	Dynamic Characterization of Distortion in Hybrid Silicon Evanescent Phase Modulators. *IEEE Photonics Technology Letters*, **2009**, 21, 833-835	2.2	1
113	A high speed Mach-Zehnder silicon evanescent modulator using capacitively loaded traveling wave electrode **2009**,		1
112	Microwave characteristics of Ge n-i-p waveguide photodetectors on silicon-on-insulator substrate **2009**,		1
111	Epitaxially-grown germanium/silicon avalanche photodiodes for near infrared light detection **2009**,		1
110	Hybrid silicon modulators **2009**,		1
109	Grating based hybrid silicon lasers **2009**,		1
108	Microwave Nonlinearities in Ge/Si Avalanche Photodiodes having a Gain-Bandwidth Product of 300 GHz **2009**,		1
107	Integrated recirculating optical buffers **2010**,		1
106	Linear Coherent Optical Receivers **2010**,		1

105	Compact, High-Speed Hybrid Silicon Microring Lasers for Computer Interconnects **2010**,		1
104	Demonstration of contention resolution between two 40 Gb/s packet streams using multiple photonic chip optical buffers **2008**,		1
103	Algorithms for a Sparse Reconfigurable Adaptive Filter and a Photonic Switch Architecture. *IEEE Transactions on Circuits and Systems I: Regular Papers*, **2008**, 55, 347-360	3.9	1
102	DSP based Coherent Receiver for Phase-Modulated Radio-over-Fiber Optical Links **2008**,		1
101	Integrated AlGaInAs-silicon evanescent racetrack laser and photodetector **2008**,		1
100	Hybrid silicon evanescent photodetectors **2008**,		1
99	**2007**,		1
98	Experimental and Theoretical Analysis of Thermal Impedance in a Hybrid Silicon Evanescent Laser **2007**,		1
97	An electrically pumped hybrid silicon evanescent amplifier **2007**,		1
96	Hybrid Silicon Evanescent Laser in a Silicon-on-Insulator Waveguide **2007**,		1
95	Hybrid Silicon Evanescent Photonic Integrated Circuit Technology **2007**,		1
94	Integrated-cavity surface-emitting lasers **2003**, 5248, 148		1
93	High doping incorporation on (311)B InP/InGaAs by metalorganic chemical vapor deposition and its application to tunnel junction fabrication. *Applied Physics Letters*, **2004**, 84, 3483-3485	3.4	1
92	High output power 1540-nm vertical-cavity semiconductor optical amplifiers		1
91	400 element ErAs:InGaAs/InGaAlAs superlattice power generator. *Materials Research Society Symposia Proceedings*, **2005**, 886, 1		1
90	Modeling and optimization of vertical-cavity semiconductor laser amplifiers **2001**, 4283, 129		1
89	3D photonic integrated circuits for WDM applications **1999**,		1
88	30-Gbit/s transmission experiment using directly modulated semiconductor lasers **1996**, 2684, 54		1

87	Transverse-mode & polarization characteristics of double-fused 1.52 μm vertical-cavity lasers. *III-Vs Review*, **1996**, 9, 36-40		1
86	Effect of carrier transport on wavelength chirp in quantum well semiconductor lasers **1994**, 2146, 198		1
85	Optical study of strained quantum well wires. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1992**, 10, 664-668	2.9	1
84	Carrier transport effects in high-speed quantum-well lasers **1992**,		1
83	Mode-locking of high-power resonant-optical-waveguide diode laser arrays		1
82	Experiments on Multiwavelength Selective Crossbar Switches **2020**,		1
81	Compact Wavelength Selective Crossbar Switch with Cascaded First Order Micro-Ring Resonators. *Photonics*, **2022**, 9, 60	2.2	1
80	Thermally insensitive determination of the chirp parameter of InAs/GaAs quantum dot lasers epitaxially grown onto silicon **2019**,		1
79	Toward fully monolithic 1550-nm lasers on silicon by direct hetero-epitaxy growth on patterned substrates **2017**,		1
78	Sub-micron periodically-poled lithium niobate waveguide for integrated nonlinear optics **2016**,		1
77	Integrated turnkey soliton microcombs operated at CMOS frequencies **2020**,		1
76	Laser Self-Injection Locked Frequency Combs in a Normal GVD Integrated Microresonator **2020**,		1
75	Semiconductor laser integration for octave-span Kerr-soliton frequency combs **2020**,		1
74	Intensity and Phase Modulators in Epitaxial III-V Layers Directly Grown on Silicon Operating at 1.55 μm **2017**,		1
73	1550-nm InGaAsP multi-quantum-well structures in InP nano-ridges by selective MOCVD growth on SOI substrates **2017**,		1
72	Terabit Transmitters Using Heterogeneous III-V/Si Photonic Integrated Circuits **2020**,		1
71	Widely Tunable, Narrow Linewidth Quantum Dot Lasers Heterogeneously Integrated on Silicon **2020**,		1
70	Monolithic Passive–Active Integration of Epitaxially Grown Quantum Dot Lasers on Silicon. *Physica Status Solidi (A) Applications and Materials Science*,2100522	1.6	1

69	A Review of the Reliability of Integrated IR Laser Diodes for Silicon Photonics. *Electronics (Switzerland)*, **2021**, 10, 2734	2.6	1
68	Low power consumption silicon photonics datacenter interconnects enabled by a parallel architecture **2021**,		1
67	OFDR on Photonic Circuits: Fiber Optic Sensing Infrastructure and Applications **2018**,		1
66	A Low-noise High-channel-count 20 GHz Passively Mode Locked Quantum Dot Laser Grown on Si **2019**,		1
65	An All-Optical Wavelength-Selective O-band Chip-Scale Silicon Photonic Switch **2020**,		1
64	On-chip High-efficiency Channel-selective Wavelength Multicasting of PAM3/PAM4 Signals Using an AlGaAsOI Waveguide **2020**,		1
63	Hybrid mode-locked 20 GHz colliding pulse Si/III-V laser with 890 fs pulsewidth **2020**,		1
62	Silicon Lasers and Photonic Integrated Circuits. *Springer Series in Optical Sciences*, **2017**, 739-797	0.5	1
61	Modulation Properties of Semiconductor Lasers **1989**, 299-334		1
60	100 GHz Double Heterostructure GaInAs/InP p-i-n Photodiode **1993**,		1
59	High Temperature Hybrid Silicon Micro-ring Lasers with Thermal Shunts **2015**,		1
58	Frequency Modulate Laser Based Interferometric Optical Gyroscope **2016**,		1
57	A Direct Comparison between Heterogeneously Integrated Widely-Tunable Ring-Based Laser Designs **2017**,		1
56	Fully Integrated Photonic Microwave Tracking Generator on Heterogeneous III-V/Si Platform **2017**,		1
55	Asynchronous 2□ Optical Packet Synchronization, Buffering, and Forwarding **2010**,		1
54	Integrated photonic high extinction short and long pass filters based on lateral leakage. *Optics Express*, **2021**, 29, 18905-18914	3.3	1
53	High temperature stability, low coherence and low relative intensity noise semiconductor sources for interferometric sensors. *Optics Express*, **2016**, 24, 22777-22787	3.3	1
52	Integrated photonics for MWP **2016**,		1

51	High speed performance of III-nitride laser diode grown on (2021) semipolar plane for visible light communication **2016**,		1
50	Demonstration of a Spectrally-Partitioned $4mathrm{x}4$ Crossbar Switch with 3 Drops per Cross-point **2019**,		1
49	Ultra-low Noise Widely-Tunable Semiconductor Lasers Fully Integrated on Silicon **2019**,		1
48	A Spectrally-Partitioned Crossbar Switch with Three Drops Per Cross-Point Controlled with a Driver **2019**,		1
47	Mode-locked dark-pulse Kerr combs in normal-dispersion AlGaAs-on-insulator microresonators **2021**,		1
46	High performance and reliable 1.3 μm InAs quantum dot lasers epitaxially grown on Si **2018**,		1
45	Heterogeneous Photonic Integration on Silicon **2018**,		1
44	Kinetically limited misfit dislocations formed during post-growth cooling in III–V lasers on silicon. *Journal Physics D: Applied Physics*, **2021**, 54, 494001	3	1
43	A Scalable Multicast Hybrid Broadband Crossbar Wavelength Selective Switch For Datacenters **2021**,		1
42	Multimode Physics in the Mode Locking of Semiconductor Quantum Dot Lasers. *Applied Sciences (Switzerland)*, **2022**, 12, 3504	2.6	1
41	Estimation of roughness-induced scattering losses in III-nitride laser diodes with a photoelectrochemically etched current aperture. *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 953-957	1.6	0
40	Crack propagation in low dislocation density quantum dot lasers epitaxially grown on Si. *APL Materials*, **2022**, 10, 011114	5.7	0
39	High-Efficiency Quantum Dot Lasers as Comb Sources for DWDM Applications. *Applied Sciences (Switzerland)*, **2022**, 12, 1836	2.6	0
38	HIGH SPEED SEMICONDUCTOR LASERS. *Selected Topics in Electornics and Systems*, **1994**, 1-44	0	0
37	Degradation mechanisms of 1.3 μm C-doped quantum dot lasers grown on native substrate. *Microelectronics Reliability*, **2021**, 114222	1.2	0
36	Noncontacting Measurement of Surface Acoustic Waves **1983**, 1749-1762		0
35	Characteristics, Packaging and Physics of Ultra High Speed Diode Lasers and Detectors. *Springer Series in Electrophysics*, **1987**, 194-197		0
34	Higher order mode supercontinuum generation in tantalum pentoxide (TaO) channel waveguide. *Scientific Reports*, **2021**, 11, 7978	4.9	0

33	Quantum Hall effect of the topological insulator state of cadmium arsenide in Corbino geometry. *Applied Physics Letters*, **2021**, 118, 261901	3.4	0
32	Thermoelectric transport at F4TCNQ□ilicon interface. *APL Materials*, **2019**, 7, 021104	5.7	0
31	Carrier Recombination Properties of Low-Threshold 1.3 □m Quantum Dot Lasers on Silicon. *IEEE Journal of Selected Topics in Quantum Electronics*, **2022**, 28, 1-10	3.8	0
30	Origin of the Diffusion-Related Optical Degradation of 1.3 □m Inas QD-LDs Epitaxially Grown on Silicon Substrate. *IEEE Journal of Selected Topics in Quantum Electronics*, **2022**, 28, 1-9	3.8	0
29	Hybrid Silicon Lasers **2013**, 461-500		
28	Stereotactic body radiation therapy (SBRT) for centrally located primary and recurrent non-small cell lung cancer (NSCLC): analysis of toxicity and local control. *Journal of Radiation Oncology*, **2017**, 6, 247-253	0.7	
27	. *IEEE Photonics Technology Letters*, **2012**, 24, 1069-1071	2.2	
26	Hybrid and Heterogeneous Photonic Integration. *Series in Optics and Optoelectronics*, **2013**, 553-610		
25	The mesa merging oxidation method for creating low-loss dielectrics and transmission lines on low-resistivity silicon. *Journal of Micromechanics and Microengineering*, **2011**, 21, 065020	2	
24	High-temperature 1.55-um vertical-cavity lasers through wafer fusion **1997**, 3003, 169		
23	Analysis of the effect of an electric-field profile on the gain bandwidth product of avalanche photodetectors. *Optics Letters*, **1997**, 22, 1183-5	3	
22	6 Watt Segmented Power Generator Modules using Bi2Te3 and (InGaAs)1-x(InAlAs)x Elements Embedded with ErAs Nanoparticles.. *Materials Research Society Symposia Proceedings*, **2008**, 1129, 1		
21	Heterogeneous integration of silicon and AlGaInAs for a silicon evanescent laser **2006**, 6133, 212		
20	Segmented Power Generator Modules of Bi2Te3 and ErAs: InGaAlAs Embedded with ErAs Nanoparticles. *Materials Research Society Symposia Proceedings*, **2007**, 1044, 1		
19	SiGeC Cantilever Micro Cooler. *Materials Research Society Symposia Proceedings*, **2003**, 793, 80		
18	Ultrafast carrier dynamics in InGaN MQW laser diode **2003**, 4992, 83		
17	Simplified nonplanar wafer bonding for heterogeneous device integration. *Applied Physics Letters*, **2004**, 85, 170-172	3.4	
16	Thermal Conductivity Reduction in Nanostructured Semiconductor Using Broad-Band-Phonon Scattering **2004**, 55		

15	DYNAMICS OF WIDE BANDWIDTH SEMICONDUCTOR LASERS. *Selected Topics in Electornics and Systems*, **1998**, 1-40	0
14	High-yield 3.55-GHz repetition rate monolithic mode-locked semiconductor lasers. *Microwave and Optical Technology Letters*, **1995**, 9, 115-117	1.2
13	40-Gbit/s fiber optic transmission systems: are solitons needed? **1996**, 2684, 182	
12	Cleaved Facets in GaN by Wafer Fusion of GaN to InP. *Materials Research Society Symposia Proceedings*, **1996**, 421, 165	
11	High-power characteristics of ultrawideband surface-normal photodetectors **1996**, 2844, 139	
10	Photoexcitation spectroscopy of photoinduced electron transfer in conducting polymer-Buckminsterfullerene composites **1993**, 1852, 316	
9	Resonant enhancement of semiconductor laser modulation response for efficient analog transmission at 35 GHz **1993**, 1850, 354	
8	Study of the Surface Cleaning Effects to the InGaAs Quantum Well Wires by Atomic Force Microscopy and Photoluminescence Spectroscopy. *Materials Research Society Symposia Proceedings*, **1992**, 259, 317	
7	Modelocked Semiconductor Lasers: Short Pulse, Small Package!. *Optics and Photonics News*, **1992**, 3, 14	1.9
6	P-type SiGe/Si Superlattice Cooler. *Materials Research Society Symposia Proceedings*, **2000**, 626, 1151	
5	All-Optical Traffic Grooming. *Optical Networks Series*, **2008**, 279-290	
4	High Bandwidth Photodetectors. *Springer Series in Photonics*, **1999**, 134-151	
3	Estimation of roughness-induced scattering losses in III-nitride laser diodes with a photoelectrochemically etched current aperture (Phys. Status Solidi A 4□2016). *Physica Status Solidi (A) Applications and Materials Science*, **2016**, 213, 1096-1096	1.6
2	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
1	Reflection sensitivity of InAs/GaAs epitaxial quantum dot lasers under direct modulation. *Electronics Letters*,	1.1