

CITATION REPORT

List of articles citing

Broad-band optical parametric gain on a silicon photonic chip

DOI: [10.1038/nature04932](https://doi.org/10.1038/nature04932)
Nature, 2006, 441, 960-3.

Source: <https://exaly.com/paper-pdf/40444304/citation-report.pdf>

Version: 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
744	Temporal-imaging system with simple external-clock triggering. 2010 , 18, 14262		
743	Controlling free-carrier temporal effects in silicon by dispersion engineering. 2014 , 1, 299		
742	Terahertz nonlinear conduction and absorption saturation in silicon waveguides. 2015 , 2, 553		
741	Modulation instability in silicon photonic nanowires. 2006 , 31, 3609-11		37
740	Imaging highly confined modes in sub-micron scale silicon waveguides using Transmission-based Near-field Scanning Optical Microscopy. <i>Optics Express</i> , 2006 , 14, 10588-95	3.3	38
739	Demonstration of wavelength conversion at 40 Gb/s data rate in silicon waveguides. <i>Optics Express</i> , 2006 , 14, 11721-6	3.3	111
738	Energy harvesting in silicon wavelength converters. <i>Optics Express</i> , 2006 , 14, 12327-33	3.3	48
737	Modulational instability of discrete solitons in coupled waveguides with group velocity dispersion. <i>Optics Express</i> , 2006 , 14, 12347-52	3.3	15
736	Ultrafast-pulse self-phase modulation and third-order dispersion in Si photonic wire-waveguides. <i>Optics Express</i> , 2006 , 14, 12380-7	3.3	109
735	Generation of correlated photons in nanoscale silicon waveguides. <i>Optics Express</i> , 2006 , 14, 12388-93	3.3	238
734	Silicon Photonics. <i>Journal of Lightwave Technology</i> , 2006 , 24, 4600-4615	4	933
733	Nanowire photonics. 2006 , 9, 36-45		376
732	Applications of nanophotonics to classical and quantum information technology. 2006 ,		1
731	. 2006 ,		
730	Dispersion Engineering of Highly Nonlinear As ₂ S ₃ Waveguides for Parametric Gain and Wavelength Conversion. 2007 ,		
729	Integrated Optical Regenerator on a Silicon Chip. 2007 ,		1
728	Lasers. 2007 , 359-531		

727	Broadband Raman amplification in silicon. 2007,	1
726	Applications of Nanophotonics to Classical and Quantum Information Technology. 2007,	0
725	Effect of TPA and FCA Interplay on Pulse Compression in Silicon. 2007,	
724	Light diffusion and localization in three-dimensional nonlinear disordered media. 2007, 75,	24
723	Four-wave-mixing parametric oscillations in dispersion-compensated high-Q silica microspheres. 2007, 76,	75
722	Influence of nonlinear loss competition on pulse compression and nonlinear optics in silicon. 2007, 91, 201115	9
721	Time dependent density of free carriers generated by two photon absorption in silicon waveguides. 2007, 90, 211105	37
720	Dispersion of silicon nonlinearities in the near infrared region. 2007, 91, 021111	158
719	Silicon based organic semiconductor laser. 2007, 91, 051124	19
718	Anisotropic nonlinear response of silicon in the near-infrared region. 2007, 91, 071113	45
717	Grating-assisted superresolution of slow waves in Fourier space. 2007, 76,	18
716	Enhancement of Self Phase Modulation Induced Spectral Broadening in Silicon Waveguides by Ion Implantation. 2007,	
715	Dispersion Inversion in High Index Contrast AlGaAs-Nanowires. 2007,	
714	Prospects for future developments. 315-332	
713	Analysis of a third-order optical parametric oscillator in TiO ₂ . 2007,	
712	Soliton fission and supercontinuum generation in silicon waveguides. 2007, 32, 391-3	226
711	Multichannel dispersion compensation using a silicon waveguide-based optical phase conjugator. 2007, 32, 2393-5	20
710	Solid phase formation of silicon nanocrystals by bulk ultrafast laser-matter interaction. 2007, 32, 3474-6	3

709	Raman amplification of 40 Gb/s data in low-loss silicon waveguides. <i>Optics Express</i> , 2007 , 15, 357-62	3-3	23
708	Cross-phase modulation-induced spectral and temporal effects on co-propagating femtosecond pulses in silicon photonic wires. <i>Optics Express</i> , 2007 , 15, 1135-46	3-3	86
707	Pulse compression and modelocking by using TPA in silicon waveguides. <i>Optics Express</i> , 2007 , 15, 6500-63	3-3	40
706	Multiple-channel silicon micro-resonator based filters for WDM applications. <i>Optics Express</i> , 2007 , 15, 7489-98	3-3	117
705	Optical solitons in a silicon waveguide. <i>Optics Express</i> , 2007 , 15, 7682-8	3-3	69
704	All-optical regeneration on a silicon chip. <i>Optics Express</i> , 2007 , 15, 7802-9	3-3	47
703	Dispersion engineering of highly nonlinear As ₂ S ₃ waveguides for parametric gain and wavelength conversion. <i>Optics Express</i> , 2007 , 15, 9458-63	3-3	71
702	All-optical compact silicon comb switch. <i>Optics Express</i> , 2007 , 15, 9600-5	3-3	90
701	High speed and high responsivity germanium photodetector integrated in a Silicon-On-Insulator microwaveguide. <i>Optics Express</i> , 2007 , 15, 9843-8	3-3	153
700	Group velocity inversion in AlGaAs nanowires. <i>Optics Express</i> , 2007 , 15, 12755-62	3-3	24
699	Nonlinear optical phenomena in silicon waveguides: modeling and applications. <i>Optics Express</i> , 2007 , 15, 16604-44	3-3	608
698	Two-Photon Photovoltaic Effect in Silicon. 2007 , 43, 1211-1217		27
697	Ultrafast nonlinear all-optical processes in silicon-on-insulator waveguides. 2007 , 40, R249-R271		125
696	Dispersion compensation by optical phase conjugation in silicon waveguide. 2007 , 43, 1037		10
695	Two-photon absorption and Kerr coefficients of silicon for 850-200nm. 2007 , 90, 191104		425
694	Integrated micro- and nanophotonic dynamic devices: a review. 2007 , 1, 012504		14
693	Anisotropic nonlinear response of silicon in the near-infrared region. 2007 ,		1
692	. 2007 ,		

691	Spectral measurements of the third-order nonlinearity of bulk silicon in the near infrared region. 2007,		
690	Energy Harvesting in Silicon Photonics. 2007,		
689	Extraordinary optical gain from silicon implanted with erbium. 2007, 91, 141122		17
688	Error-free wavelength conversion via cross-phase modulation in 5 cm of As ₂ S ₃ chalcogenide glass rib waveguide. 2007, 43, 945		20
687	Silicon as an emissive optical medium. 2007, 1, 334-348		40
686	Amplified spontaneous emission from GaSb quantum dots in Si grown by MBE. 2007, 301-302, 718-721		6
685	Low-threshold continuous-wave Raman silicon laser. 2007, 1, 232-237		202
684	Teaching silicon new tricks. 2007, 1, 193-195		37
683	Changing the colour of light in a silicon resonator. 2007, 1, 293-296		176
682	All-optical injection of ballistic electrical currents in unbiased silicon. 2007, 3, 632-635		60
681	Optical frequency comb generation from a monolithic microresonator. <i>Nature,</i> 2007, 450, 1214-7	50.4	1151
680	All-optical injection of ballistic electrical currents in unbiased silicon. 2008, 5, 340-342		1
679	Can silicon change photonics?. 2008, 205, 213-224		37
678	Weak-guidance-theory review of dispersion and birefringence management by laser inscription. 2008, 5, 11-20		5
677	Silicon-chip-based ultrafast optical oscilloscope. <i>Nature,</i> 2008, 456, 81-4	50.4	301
676	Signal regeneration using low-power four-wave mixing on silicon chip. 2008, 2, 35-38		256
675	Brillouin bioimaging. 2008, 2, 13-14		4
674	Nanoscale signal regeneration. 2008, 2, 12-13		6

673	Low-power continuous-wave nonlinear optics in doped silica glass integrated waveguide structures. 2008 , 2, 737-740		184
672	Inducing photonic transitions between discrete modes in a silicon optical microcavity. <i>Physical Review Letters</i> , 2008 , 100, 033904	7-4	79
671	All-optical coherent control of electrical currents in centrosymmetric semiconductors. 2008 , 77,		32
670	Nonlinear optical properties of silicon waveguides. 2008 , 23, 064007		97
669	Silicon Photonic Applications. 297-325		1
668	Polymer Silicon Hybrid Systems: A Platform for Practical Nonlinear Optics□ 2008 , 112, 8085-8090		53
667	Silicon photonics. 2008 , 381-429		5
666	Single-photon level ultrafast all-optical switching. 2008 , 92, 151109		26
665	Optical time lens based on four-wave mixing on a silicon chip. 2008 , 33, 1047-9		130
664	Conformal dielectric overlayers for engineering dispersion and effective nonlinearity of silicon nanophotonic wires. 2008 , 33, 2889-91		52
663	Chip-scale dispersion engineering using chirped vertical gratings. 2008 , 33, 3013-5		62
662	Nonlinear-optical phase modification in dispersion-engineered Si photonic wires. <i>Optics Express</i> , 2008 , 16, 1280-99	3-3	73
661	Solitons and spectral broadening in long silicon-on-insulator photonic wires. <i>Optics Express</i> , 2008 , 16, 3310-9	3-3	27
660	Ultra-low power parametric frequency conversion in a silicon microring resonator. <i>Optics Express</i> , 2008 , 16, 4881-7	3-3	185
659	Multi-order dispersion engineering for optimal four-wave mixing. <i>Optics Express</i> , 2008 , 16, 7551-63	3-3	24
658	Electrical control of parametric processes in silicon waveguides. <i>Optics Express</i> , 2008 , 16, 9838-43	3-3	12
657	Large tunable delays using parametric mixing and phase conjugation in Si nanowaveguides. <i>Optics Express</i> , 2008 , 16, 10349-57	3-3	30
656	Gain and noise characteristics of high-bit-rate silicon parametric amplifiers. <i>Optics Express</i> , 2008 , 16, 13132-32	3-3	45

655	Characterization of efficient wavelength conversion by four-wave mixing in sub-micron silicon waveguides. <i>Optics Express</i> , 2008 , 16, 16735-45	3.3	75
654	Growth, processing, and optical properties of epitaxial Er ₂ O ₃ on silicon. <i>Optics Express</i> , 2008 , 16, 19649-66	3.3	49
653	Net-gain from a parametric amplifier on a chalcogenide optical chip. <i>Optics Express</i> , 2008 , 16, 20374-81	3.3	65
652	Silicon photonics: The inside story. 2008 ,		
651	Fiber Optic Mechanical Sensor Based on a Triangular-lattice Photonic Crystal. 2008 ,		2
650	Pico Sensors for All Seasons ¶When Light Performs Its Marvels. 2008 ,		
649	. 2008 ,		
648	Dual-wavelength mode-locked laser in silicon. 2008 ,		
647	Ultra-low power CW ¶conversion in silica glass micro-ring resonators. 2008 ,		
646	Low-power optical regeneration using four-wave mixing in a silicon chip. 2008 ,		2
645	Implementation of a coupling-tunable resonator for efficient high-bandwidth nonlinear silicon photonics applications. 2008 ,		
644	Silicon waveguide based nonlinear directional coupler as a soliton switch. 2008 , 47, 120503		5
643	Dislocation-engineered silicon light emitters for photonic integration. 2008 , 23, 064005		5
642	Broadband Raman amplification in silicon. 2008 , 93, 191105		10
641	Temperature dependence of ambipolar diffusion in silicon on insulator. 2008 , 92, 112104		27
640	Three photon absorption in silicon for 2300¶300nm. 2008 , 93, 131102		69
639	Electrical tuning of birefringence in silicon waveguides. 2008 , 92, 061109		22
638	Ultra-low CW power wavelength conversion in high-index glass micro ring resonators. 2008 ,		

637	Ion implantation in silicon waveguides for nonlinear effective length enhancement and power monitoring applications. 2008,		
636	Development of Silicon Photonics Devices Using Microelectronic Tools for the Integration on Top of a CMOS Wafer. 2008, 2008, 1-15		41
635	Four-wave Mixing in Integrated Silicon Nitride Waveguides. 2009,		4
634	OPTIMAL DESIGN OF A SILICON-ON-INSULATOR NANOWIRE WAVEGUIDE FOR BROADBAND WAVELENGTH CONVERSION. 2009, 89, 183-198		23
633	Hybrid InP-based photonic crystal lasers on silicon on insulator wires. 2009, 95, 201119		17
632	Silicon photonics: the optical spice rack. 2009, 45, 576		19
631	Nanophotonic interferometer realizing all-optical exclusive or gate on a silicon chip. 2009, 48, 064601		6
630	Silicon Nanocrystals as an Enabling Material for Silicon Photonics. 2009, 97, 1250-1268		62
629	Nanosilicon photonics. 2009, 3, 508-534		133
628	Enhanced parametric amplification in slow-light photonic crystal waveguides. 2009, 54, 2221-2224		4
627	Direct observation of an exoplanet. 2009, 3, 10-10		1
626	Silicon's time lens. 2009, 3, 8-10		18
625	Ultrafast waveform compression using a time-domain telescope. 2009, 3, 581-585		103
624	Performance investigation of microphotonic-silicon devices in a field-trial all-optical network. 2009, 282, 849-855		4
623	Effects of waveguide length and pump power on the efficiency of wavelength conversion in silicon nanowire waveguides. 2009, 34, 3502-4		10
622	Ultrashort pulse polarization control in silicon waveguides. <i>Optics Express</i> , 2009, 17, 1795-805	3-3	1
621	Dispersion engineered As(2)S(3) planar waveguides for broadband four-wave mixing based wavelength conversion of 40 Gb/s signals. <i>Optics Express</i> , 2009, 17, 3514-20	3-3	54
620	High-speed optical sampling using a silicon-chip temporal magnifier. <i>Optics Express</i> , 2009, 17, 4324-9	3-3	79

619	High-resolution spectroscopy using a frequency magnifier. <i>Optics Express</i> , 2009 , 17, 5691-7	3.3	32
618	Coupling induced anomalous group velocity dispersion in nonlinear arrays of silicon photonic wires. <i>Optics Express</i> , 2009 , 17, 5879-84	3.3	17
617	Continuous wave photon pair generation in silicon-on-insulator waveguides and ring resonators. <i>Optics Express</i> , 2009 , 17, 16558-70	3.3	165
616	Spectral phase conjugation via temporal imaging. <i>Optics Express</i> , 2009 , 17, 20605-14	3.3	36
615	Engineering nonlinearities in nanoscale optical systems: physics and applications in dispersion-engineered silicon nanophotonic wires. 2009 , 1, 162		157
614	Demonstration of Broadband Wavelength Conversion at 40 Gb/s in Silicon Waveguides. 2009 , 21, 182-184		70
613	Total gain of silicon Raman amplifiers: Scaling with group velocity in slow-light waveguides. 2009 ,		
612	Interactive hierarchical RSM applied to parameter optimization of photonic crystal nanocavities. 2009 ,		0
611	Silicon-based ultra-wide discrete band conversion. 2010 ,		
610	Nonlinear silicon photonics. 2010 ,		
609	Integrated photonic devices based on silicon photonic wire waveguide platform. 2010 ,		1
608	On-the-Fly Wavelength Conversion of Photons by Dynamic Control of Photonic Waveguides. 2010 , 3, 062001		35
607	Spectral Amplitude and Phase Measurement of Ultrafast Pulses Using All-Optical Differential Tomography. 2010 ,		
606	Spatiotemporal nonlinear optics in arrays of subwavelength waveguides. 2010 , 82,		19
605	Cross-talk dynamics of optical solitons in a broadband Kerr nonlinear system with weak cubic loss. 2010 , 82,		23
604	Nontransparency and optical phase erasure characteristic of four-wave mixing. 2010 , 98, 821-830		
603	Performance analysis of dual-pump optical parametric amplifiers in silicon waveguide. 2010 , 283, 3043-3048		9
602	Theoretical Analysis of Pulse Dynamics in Silicon Photonic Crystal Wire Waveguides. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 257-266	3.8	36

601	All-Optical Format Conversion of NRZ-OOK to RZ-OOK in a Silicon Nanowire Utilizing Either XPM or FWM and Resulting in a Receiver Sensitivity Gain of ~ 2.5 dB. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 234-249	3.8	35
600	Polarization-Independent Wavelength Conversion Using an Angled-Polarization Pump in a Silicon Nanowire Waveguide. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 250-256	3.8	23
599	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010 , 16, 1448-1459	3.8	15
598	Optical amplitude multiplexing through parametric amplification in optical fibers. 2010 , 283, 454-463		2
597	Nano-engineered silicon light emitting diodes and optically active waveguides. 2010 , 32, 1601-1605		2
596	Photoluminescence study of thulium-doped silicon substrates for light emitting diodes. 2010 , 32, 1597-1600		7
595	Subwavelength confinement of electromagnetic field by guided modes of dielectric micro- and nanowaveguides. 2010 , 91, 378-381		3
594	CMOS-compatible multiple-wavelength oscillator for on-chip optical interconnects. 2010 , 4, 37-40		600
593	Mid-infrared wavelength conversion in silicon waveguides using ultracompact telecom-band-derived pump source. 2010 , 4, 561-564		184
592	Mid-infrared optical parametric amplifier using silicon nanophotonic waveguides. 2010 , 4, 557-560		278
591	Nonlinear optics in the mid-infrared. 2010 , 4, 506-508		81
590	A spooky light-emitting diode. 2010 , 4, 508-509		3
589	Nonlinear silicon photonics. 2010 , 4, 535-544		773
588	Nonlinear Optics in Doped Silica Glass Integrated Waveguide Structures. 2010 ,		
587	High efficiency harmonic generation in LiNbO3 membranes. 2010 ,		
586	. 2010 ,		
585	Broadband optical parametric amplifier in ultra-compact plasmonic waveguide. 2010 ,		2
584	Self-phase modulation at visible wavelengths in nonlinear ZnO channel waveguides. 2010 , 97, 071105		15

583	Group velocity dispersion and self phase modulation in silicon nitride waveguides. 2010 , 96, 061101		81
582	Mid-infrared nonlinear optics in silicon photonic wire waveguides. 2010 ,		1
581	Nonlinear optics and group velocity dispersion engineering in silicon nitride waveguides. 2010 ,		0
580	Monolithic nonlinear pulse compressor on a silicon chip. <i>Nature Communications</i> , 2010 , 1, 116	17.4	62
579	Silicon Photonic Modulation Circuitry. 2010 , 79-97		
578	Experimental demonstration of on-chip optical parametric oscillation in planar tantalum pentoxide waveguides. 2010 ,		1
577	Modulation Instability in Silicon Optical Waveguide Considering Linear Loss and Two-Photonic Absorption. 2010 ,		1
576	Power-Attenuated Optimization for Four-Wave Mixing-Based Wavelength Conversion in Silicon Nanowire Waveguides. 2010 , 24, 1255-1265		13
575	VLSI Photonics: How Can We Approach Using Micro/Nano-Materials?. 2010 , 522, 159/[459]-171/[471]		
574	Ultrashort free-carrier lifetime in low-loss silicon nanowaveguides. <i>Optics Express</i> , 2010 , 18, 3582-91	3-3	143
573	Efficient wavelength conversion and net parametric gain via four wave mixing in a high index doped silica waveguide. <i>Optics Express</i> , 2010 , 18, 7634-41	3-3	42
572	Flat and low dispersion in highly nonlinear slot waveguides. <i>Optics Express</i> , 2010 , 18, 13187-93	3-3	74
571	Temporal-imaging system with simple external-clock triggering. <i>Optics Express</i> , 2010 , 18, 14262-9	3-3	26
570	Low loss shallow-ridge silicon waveguides. <i>Optics Express</i> , 2010 , 18, 14474-9	3-3	103
569	Observation of four-wave mixing in slow-light silicon photonic crystal waveguides. <i>Optics Express</i> , 2010 , 18, 15484-97	3-3	69
568	Wavelength multicasting in silicon photonic nanowires. <i>Optics Express</i> , 2010 , 18, 18047-55	3-3	60
567	Time-domain measurement of optical transport in silicon micro-ring resonators. <i>Optics Express</i> , 2010 , 18, 18438-52	3-3	39
566	Dispersion engineered Ge _{11.5} As ₂₄ Se _{64.5} nanowires with a nonlinear parameter of 136 W ⁻¹ m ⁻² at 1550 nm. <i>Optics Express</i> , 2010 , 18, 18866-74	3-3	62

565	Discrete parametric band conversion in silicon for mid-infrared applications. <i>Optics Express</i> , 2010 , 18, 21981-9	3.3	46
564	Four-wave mixing in slow light engineered silicon photonic crystal waveguides. <i>Optics Express</i> , 2010 , 18, 22915-27	3.3	100
563	Low-power continuous-wave generation of visible harmonics in silicon photonic crystal nanocavities. <i>Optics Express</i> , 2010 , 18, 26613-24	3.3	82
562	Time and frequency domain measurements of solitons in subwavelength silicon waveguides using a cross-correlation technique. <i>Optics Express</i> , 2010 , 18, 26625-30	3.3	31
561	Broadband coherent anti-Stokes Raman scattering in silicon. 2010 , 35, 351-3		5
560	Performance Evaluation of Nondegenerate Wavelength Conversion in a Silicon Nanowire Waveguide. <i>Journal of Lightwave Technology</i> , 2010 ,	4	2
559	Vectorial nonlinear propagation in silicon nanowire waveguides: polarization effects. 2010 , 27, 956		49
558	Frequency conversion over two-thirds of an octave in silicon nanowaveguides. <i>Optics Express</i> , 2010 , 18, 1904-8	3.3	106
557	1.1 to 1.6 μm silicon light emitting diodes and optical gain. 2010 ,		
556	Two-photon-absorption-based optical power monitor in silicon rib waveguides. 2010 ,		2
555	Phase-sensitive parametric amplifiers in silicon waveguides. 2011 , 58, 1246-1251		3
554	Nonlinear mixing in nanowire subwavelength waveguides. 2011 , 11, 3022-5		42
553	Continuous Wavelength Conversion of 40-Gb/s Data Over 100 nm Using a Dispersion-Engineered Silicon Waveguide. 2011 , 23, 73-75		20
552	Cascaded third harmonic generation in lithium niobate nanowaveguides. 2011 , 98, 231110		23
551	Silicon Photonic Wire Waveguides: Fundamentals and Applications. 2011 , 1-29		22
550	Travelling-wave resonant four-wave mixing breaks the limits of cavity-enhanced all-optical wavelength conversion. <i>Nature Communications</i> , 2011 , 2, 296	17.4	66
549	Structured Organic Non-Linear Optics. 2011 , 143-187		7
548	Non-linear absorption of 1.3-fs wavelength femtosecond laser pulses focused inside semiconductors: Finite difference time domain-two temperature model combined computational study. 2011 , 110, 103106		14

547	Surface-induced nonlinearity enhancement in subwavelength rod waveguides. 2011 , 84,		19
546	Large-scale integrated photonics for high-performance interconnects. 2011 , 7, 1-54		42
545	Silicon-Chip-Based Real-Time Dispersion Monitoring for 640 Gbit/s DPSK Signals. <i>Journal of Lightwave Technology</i> , 2011 , 29, 1790-1796	4	18
544	Efficient Wavelength Conversion in Optimized SOI Waveguides Via Pulsed Four-Wave Mixing. <i>Journal of Lightwave Technology</i> , 2011 , 29, 3523-3535	4	11
543	Optical frequency conversion in integrated devices [Invited]. 2011 , 28, A67		23
542	Dispersion engineering of a silicon-nanocrystal-based slot waveguide for broadband wavelength conversion. 2011 , 50, 1260-5		42
541	Influence of spectral broadening on femtosecond wavelength conversion based on four-wave mixing in silicon waveguides. 2011 , 50, 5430-6		12
540	Microresonator-based optical frequency combs. 2011 , 332, 555-9		1091
539	Carrier and thermal dynamics of silicon photonic resonators at cryogenic temperatures. <i>Optics Express</i> , 2011 , 19, 3290-6	3-3	15
538	Self-phase modulation and nonlinear loss in silicon nanophotonic wires near the mid-infrared two-photon absorption edge. <i>Optics Express</i> , 2011 , 19, 7778-89	3-3	40
537	Dispersion of nonlinearity and modulation instability in subwavelength semiconductor waveguides. <i>Optics Express</i> , 2011 , 19, 9345-51	3-3	3
536	Integrated GaN photonic circuits on silicon (100) for second harmonic generation. <i>Optics Express</i> , 2011 , 19, 10462-70	3-3	144
535	Harmonic generation in silicon nitride ring resonators. <i>Optics Express</i> , 2011 , 19, 11415-21	3-3	201
534	Simultaneous wavelength conversion of ASK and DPSK signals based on four-wave-mixing in dispersion engineered silicon waveguides. <i>Optics Express</i> , 2011 , 19, 12172-9	3-3	8
533	Compact highly-nonlinear AlGaAs waveguides for efficient wavelength conversion. <i>Optics Express</i> , 2011 , 19, 12440-55	3-3	43
532	Si micro-ring MUX/DeMUX WDM filters. <i>Optics Express</i> , 2011 , 19, 13531-9	3-3	42
531	Scalable ultrahigh-speed optical transmultiplexer using a time lens. <i>Optics Express</i> , 2011 , 19, 14051-9	3-3	10
530	Direction-dependent optical modes in nanoscale silicon waveguides. <i>Optics Express</i> , 2011 , 19, 18380-92	3-3	3

529	Optimized wavelength conversion in silicon waveguides based on "off-Raman-resonance" operation: extending the phase mismatch formalism. <i>Optics Express</i> , 2011 , 19, 18810-26	3-3	4
528	Ultra-high-speed wavelength conversion in a silicon photonic chip. <i>Optics Express</i> , 2011 , 19, 19886-94	3-3	54
527	One-to-six WDM multicasting of DPSK signals based on dual-pump four-wave mixing in a silicon waveguide. <i>Optics Express</i> , 2011 , 19, 24448-53	3-3	34
526	Impact of dispersion profiles of silicon waveguides on optical parametric amplification in the femtosecond regime. <i>Optics Express</i> , 2011 , 19, 24730-7	3-3	14
525	Nonlinear properties of and nonlinear processing in hydrogenated amorphous silicon waveguides. <i>Optics Express</i> , 2011 , 19, B146-53	3-3	73
524	Broadband stimulated four-wave parametric conversion on a tantalum pentoxide photonic chip. <i>Optics Express</i> , 2011 , 19, 26343-52	3-3	8
523	On-chip parametric amplification with 26.5 dB gain at telecommunication wavelengths using CMOS-compatible hydrogenated amorphous silicon waveguides. 2011 , 36, 552-4		69
522	Continuous-wave mid-infrared frequency conversion in silicon nanowaveguides. 2011 , 36, 1263-5		48
521	Observation of parametric gain due to four-wave mixing in dispersion engineered GaInP photonic crystal waveguides. 2011 , 36, 2629-31		16
520	Low-power continuous-wave four-wave mixing in silicon coupled-resonator optical waveguides. 2011 , 36, 2964-6		15
519	Efficient parametric interactions in a low loss GaInP photonic crystal waveguide. 2011 , 36, 3936-8		7
518	50 dB parametric on-chip gain in silicon photonic wires. 2011 , 36, 4401-3		54
517	Structured Organic Non-Linear Optics. 2011 , 261-296		0
516	Four-Wave Mixing in Silicon Nanowire Waveguides and Its Applications in Wavelength Conversion. 2011 ,		1
515	. 2011 , 6,		2
514	Active and Passive Devices Based on Silicon-on-Insulator Waveguides. 2011 , 5, 68-79		1
513	Maximization of Gain in Slow-Light Silicon Raman Amplifiers. 2011 , 2011, 1-7		5
512	Continuous-Wave Mid-Infrared Frequency Conversion in Silicon Nanowaveguides. 2011 ,		

511	Four-Wave-Mixing Gain and All-optical Signal Processing in Silicon Nanowires. 2011,		
510	Broadband Wavelength Conversion of Incoherent Light in Silicon Nanowaveguides. 2011,		
509	Mapping the modal effective area in submicrometer strip and slot waveguides. 2011,		
508	Efficient Frequency Conversion at Low-Powers in a Silicon Microresonator Using Carrier Extraction. 2011,		2
507	Crystalline-silicon-based infra-red LEDs and routes to laser diodes. 2011, 519, 8441-8445		4
506	Low-power nanophotonic devices based on photonic crystals towards dense photonic network on chip. 2011, 5, 84		41
505	Wavelength Conversion Based on Raman- and Non-Resonant Four-Wave Mixing in Silicon Nanowire Rings Without Dispersion Engineering. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2011, 17, 1078-1091	3.8	21
504	Electrically controlled nonlinear generation of light with plasmonics. 2011, 333, 1720-3		194
503	Influence of the initial chirp on the supercontinuum generation in silicon-on-insulator waveguide. 2011, 104, 867-871		18
502	Silicon slow light photonic crystals structures: present achievements and future trends. 2011, 4, 243-253		3
501	Modulation instability in lossy silicon optical waveguide. 2011, 85, 607-614		8
500	All-optically tunable waveform synthesis by a silicon nanowaveguide ring resonator coupled with a photonic-crystal fiber frequency shifter. 2011, 284, 1652-1655		5
499	Analysis of the Nonlinear Optical Parameter of ZnO Channel Waveguides. 2011, 50, 04DG01		2
498	On-chip Spectrally-Bright Photon-Pair Source from SiN Ring Micro-Cavity. 2011,		
497	Phase Sensitive Fiber Optic Parametric Amplifiers. 2011,		2
496	Laser control of free-carrier density in solids through field-enhanced multiphonon tunneling recombination. 2011, 109, 033109		6
495	15-THz Tunable Wavelength Conversion of Picosecond Pulses in a Silicon Waveguide. 2011, 23, 1409-1411		14
494	Nonlinear silicon nanophotonics for mid-infrared applications. 2011,		

493	Optimization of Optical Wavelength Conversion in SOI Waveguide. 2011 , 110-116, 4498-4504		
492	Nonlinear Optics in Silicon Wire Waveguides: Towards Integrated Long Wavelength Light Sources. 2012 , 1437, 58		
491	Breakthroughs in Nonlinear Silicon Photonics 2011. 2012 , 4, 601-606		9
490	Dispersion engineering of thick high-Q silicon nitride ring-resonators via atomic layer deposition. <i>Optics Express</i> , 2012 , 20, 27661-9	3-3	72
489	Widely tunable femtosecond optical parametric oscillator based on silicon-on-insulator waveguides. <i>Optics Express</i> , 2012 , 20, 3490-8	3-3	16
488	Wavelength conversion and unicast of 10-Gb/s data spanning up to 700 nm using a silicon nanowaveguide. <i>Optics Express</i> , 2012 , 20, 6488-95	3-3	13
487	Highly nonlinear fiber with dispersive characteristic invariant to fabrication fluctuations. <i>Optics Express</i> , 2012 , 20, 7716-25	3-3	18
486	High efficiency and ultra broadband optical parametric four-wave mixing in chalcogenide-PMMA hybrid microwires. <i>Optics Express</i> , 2012 , 20, 9572-80	3-3	38
485	Highly efficient CW parametric conversion at 1550 nm in SOI waveguides by reverse biased p-i-n junction. <i>Optics Express</i> , 2012 , 20, 13100-7	3-3	46
484	Polarization insensitive wavelength conversion in a dispersion-engineered silicon waveguide. <i>Optics Express</i> , 2012 , 20, 16374	3-3	21
483	Continuous-wave, short-wavelength infrared mixer using dispersion-stabilized highly-nonlinear fiber. <i>Optics Express</i> , 2012 , 20, 18422-31	3-3	41
482	Second-order nonlinear silicon-organic hybrid waveguides. <i>Optics Express</i> , 2012 , 20, 20506-15	3-3	31
481	Amorphous silicon nanowires combining high nonlinearity, FOM and optical stability. <i>Optics Express</i> , 2012 , 20, 22609-15	3-3	76
480	Spoof four-wave mixing for all-optical wavelength conversion. <i>Optics Express</i> , 2012 , 20, 24030-7	3-3	14
479	Modulational instability in a silicon-on-insulator directional coupler: role of the coupling-induced group velocity dispersion. 2012 , 37, 668-70		9
478	Low-noise chip-based frequency conversion by four-wave-mixing Bragg scattering in SiN(x) waveguides. 2012 , 37, 2997-9		42
477	Chip-scale parametric amplifier with 11 dB gain at 1550 nm based on a slow-light GaInP photonic crystal waveguide. 2012 , 37, 3996-8		15
476	Ultracompact polarization converter with a dual subwavelength trench built in a silicon-on-insulator waveguide. 2012 , 37, 365-7		75

475	Silicon nanowire arrays with enhanced optical properties. 2012 , 37, 4194-6		20
474	Nonlinear optical properties of low temperature annealed silicon-rich oxide and silicon-rich nitride materials for silicon photonics. 2012 , 100, 021109		28
473	Efficient four-wave-mixing-based wavelength conversion in silicon nanowire rings without dispersion engineering. 2012 ,		
472	Extending the phase mismatch formalism for silicon-based wavelength converters. 2012 ,		
471	Identification of localized group-velocity dispersion of nanostructured silicon waveguide devices using white-light interferometry. 2012 ,		
470	Giant Raman gain in silicon nanocrystals. <i>Nature Communications</i> , 2012 , 3, 1220	17.4	62
469	Optical Bistability in a Silicon Waveguide Distributed Bragg Reflector Fabry-Pérot Resonator. <i>Journal of Lightwave Technology</i> , 2012 , 30, 2352-2355	4	28
468	ALD-Assisted Multiorder Dispersion Engineering of Nanophotonic Strip Waveguides. <i>Journal of Lightwave Technology</i> , 2012 , 30, 2488-2493	4	13
467	Efficient terahertz-wave generation via four-wave mixing in silicon membrane waveguides. <i>Optics Express</i> , 2012 , 20, 8920-8	3.3	33
466	Wavelength-converted/selective waveguiding based on composition-graded semiconductor nanowires. 2012 , 12, 5003-7		76
465	Optimizing initial chirp for efficient femtosecond wavelength conversion in silicon waveguide by split-step Fourier method. 2012 , 218, 11970-11975		4
464	Stimulated supercontinuum generation extends broadening limits in silicon. 2012 , 100, 101111		8
463	Four wave mixing in silicon hybrid and silicon heterogeneous micro photonic structures. 2012 ,		3
462	Anisotropic third-order optical nonlinearity of a single ZnO micro/nanowire. 2012 , 12, 833-8		51
461	A wideband, low-noise superconducting amplifier with high dynamic range. 2012 , 8, 623-627		202
460	Quasi-soliton propagation in dispersion-engineered silicon nanowires. 2012 , 285, 3306-3311		5
459	Breakthroughs in Photonics 2011. 2012 , 4, 561-656		1
458	III-V/Silicon Photonics for Short-Wave Infrared Spectroscopy. 2012 , 48, 292-298		5

457	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 629-636	3.8	19
456	Mid-Infrared Wavelength Conversion in Silicon Waveguides Pumped by Silica-Fiber-Based Source. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 612-620	3.8	6
455	Photonic-Chip-Based Ultrafast Waveform Analysis and Optical Performance Monitoring. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 834-846	3.8	2
454	Silicon microring resonators. 2012 , 6, 47-73		1225
453	The first decade of coupled resonator optical waveguides: bringing slow light to applications. 2012 , 6, 74-96		106
452	Nonlinear refractive properties of 1D periodically nanostructured silicon-on-insulator investigated by reflection I-Scan. 2013 ,		1
451	A silicon nanowire factorable photon pair source. 2013 , 45, 357-364		
450	New CMOS-compatible platforms based on silicon nitride and Hydex for nonlinear optics. 2013 , 7, 597-607		634
449	Hydrogenated amorphous silicon nanowires with high nonlinear figure of merit and stable nonlinear optical response. 2013 ,		1
448	All-optical signal-conversion efficiency with a parameter-dependent four-wave-mixing process in a silicon nanowaveguide. 2013 , 62, 428-434		4
447	Tailorable stimulated Brillouin scattering in nanoscale silicon waveguides. <i>Nature Communications</i> , 2013 , 4, 1944	17.4	189
446	All-Optical Regeneration of Phase Encoded Signals: Phase Sensitive Optical Regeneration. 2013 , 589-639		1
445	Ultra-High-Speed Optical Time Division Multiplexing. 2013 , 641-707		0
444	Near-infrared optical parametric oscillator in a III-V semiconductor waveguide. 2013 , 103, 261105		24
443	Advancements in Silicon Photonics. 2013 , 33-52		
442	Optical Signal Processing by Silicon Photonics. 2013 ,		3
441	Engineered transitions in molecule \square photonic system. 2013 ,		
440	Enhanced second harmonic generation from InAs nano-wing structures on silicon. 2013 , 5, 10163-70		13

439	Global optimization of silicon nanowires for efficient parametric processes. 2013,	
438	A comparison of nonlinear media for parametric all-optical signal processing. 2013,	1
437	Use of Amorphous Silicon for Active Photonic Devices. 2013, 60, 1495-1505	28
436	Optical signal processing using four wave mixing in highly nonlinear silicon nano-wire. 2013, 124, 3439-3442	4
435	Technologies and Building Blocks for On-Chip Optical Interconnects. 2013, 27-78	1
434	Measurements of giant second harmonic generation from vertically aligned silicon nanowires. 2013	1
433	Silicon-organic hybrid devices. 2013,	2
432	Generation of second harmonic radiation from sub-stoichiometric silicon nitride thin films. 2013, 102, 141114	19
431	Tailorable stimulated Brillouin scattering in silicon nanophotonics. 2013,	
430	High conversion efficiency femtosecond optical parametric amplifier based on silicon waveguide in mid-infrared. 2013, 50, 87-92	7
429	Unravelling nonlinear spectral evolution using nanoscale photonic near-field point-to-point measurements. 2013, 13, 5858-65	6
428	Wavelength-converted wave-guiding in dye-doped polymer nanofibers. 2013, 3, 1674	30
427	Ultra-compact and fabrication-tolerant polarization rotator based on a bend asymmetric-slab waveguide. 2013, 52, 990-6	18
426	Inducing and harnessing stimulated Brillouin scattering in photonic integrated circuits. 2013, 5, 536	174
425	Broad-bandwidth Near-IR Parametric Amplification in Amorphous Silicon Waveguides. 2013,	1
424	Solitons supported by localized parametric gain. 2013, 38, 480-2	10
423	Influence of three-photon absorption on mid-infrared cross-phase modulation in silicon-on-sapphire waveguides. <i>Optics Express</i> , 2013, 21, 1840-8	3-3 21
422	Theory of nonlinear pulse propagation in silicon-nanocrystal waveguides. <i>Optics Express</i> , 2013, 21, 2832-46	10

421	A silicon-based widely tunable short-wave infrared optical parametric oscillator. <i>Optics Express</i> , 2013 , 21, 5931-40	3-3	23
420	FWM-based wavelength conversion of 40 Gbaud PSK signals in a silicon germanium waveguide. <i>Optics Express</i> , 2013 , 21, 16683-9	3-3	27
419	A chip-scale, telecommunications-band frequency conversion interface for quantum emitters. <i>Optics Express</i> , 2013 , 21, 21628-38	3-3	22
418	All-optical 10 Gb/s AND logic gate in a silicon microring resonator. <i>Optics Express</i> , 2013 , 21, 25772-9	3-3	26
417	Integrated CARS source based on seeded four-wave mixing in silicon nitride. <i>Optics Express</i> , 2013 , 21, 32123-9	3-3	11
416	Quasi-phase-matched second harmonic generation in silicon nitride ring resonators controlled by static electric field. <i>Optics Express</i> , 2013 , 21, 32690-8	3-3	11
415	Engineering of phase matching for mid-infrared coherent anti-Stokes Raman wavelength conversion with orthogonally polarized pump and Stokes waves in silicon-on-sapphire waveguides. 2013 , 52, 8095-101		
414	A new scheme for novel all-optical wavelength conversion with ultrabroad conversion tunability and modulation-transparency. 2013 ,		
413	Nanoscale dynamics by short-wavelength four wave mixing experiments. 2013 , 15, 123023		31
412	Enhanced acousto-optic interaction in two-dimensional phoxonic crystals with a line defect. 2013 , 113, 053508		32
411	Record 11 dB phase sensitive amplification in sub-millimeter silicon waveguides. 2013 ,		3
410	Optical properties of silicon germanium waveguides at telecommunication wavelengths. <i>Optics Express</i> , 2013 , 21, 16690-701	3-3	26
409	Highly linear silicon traveling wave Mach-Zehnder carrier depletion modulator based on differential drive. <i>Optics Express</i> , 2013 , 21, 3818-25	3-3	56
408	Role of Computational Intelligence in Nanophotonics Technology. 2013 , 21-64		
407	Nonlinear Optics in Silicon. 2013 , 197-248		2
406	Highly Efficient Broadly Tunable Four-Wave Mixing in AlGaAs Nanowires. 2013 ,		
405	Photonics Advances in Fundamental Sciences and Engineering Technologies of Light. 2014 , 1, 1-8		2
404	Engineering chromatic dispersion and effective nonlinearity in a dual-slot waveguide. 2014 , 53, 6302-6		4

403	Low-power-penalty wavelength multicasting for 36 Gbit/s 16-QAM coherent optical signals in a silicon waveguide. 2014 , 39, 6907-10			11
402	Integrated Optomechanical Circuits and Nonlinear Dynamics. 2014 , 169-194			
401	Optical Signal Processing with Enhanced Nonlinearity in Photonic Crystals. 2014 , 283-292			
400	Enhanced Broadband Parametric Wavelength Conversion in Silicon Waveguide With the Multi-Period Grating. 2014 , 1-1			3
399	Wavelength conversion of 80 Gb/s RZ-DPSK Pol-MUX signals in a silicon nanowire. 2014 ,			
398	Double-Layer Crystalline Silicon on Insulator Material Platform for Integrated Photonic Applications. 2014 , 6, 1-8			4
397	Analysis of a polarization-independent nonlinear cross-slot waveguide with Fourier Modal Method (FMM). 2014 ,			
396	Silicon Photonic Modulation Circuitry. 2014 , 83-101			
395	Mode and Wavelength Conversion Based on Inter-Modal Four-Wave Mixing in a Highly Nonlinear Few-Mode Fiber. 2014 ,			2
394	Theoretical Description of Pulse Evolution and Phase Sensitive Amplification in Silicon Waveguides. 2014 ,			
393	GHz Near-IR Optical Parametric Amplifier using a Hydrogenated Amorphous Silicon Waveguide. 2014 ,			3
392	Opportunities for Raman wavelength conversion with silicon microdisks. 2014 ,			
391	Bandwidth scaling of a phase-modulated continuous-wave comb through four-wave mixing in a silicon nano-waveguide. 2014 , 39, 6478-81			5
390	Pulse compression in adiabatically tapered silicon photonic wires. <i>Optics Express</i> , 2014 , 22, 6296-312	3.3		19
389	Frequency non-degenerate phase-sensitive optical parametric amplification based on four-wave-mixing in width-modulated silicon waveguides. <i>Optics Express</i> , 2014 , 22, 31486-95	3.3		10
388	Dispersion engineered silicon nitride waveguides by geometrical and refractive-index optimization. 2014 , 31, 2846			34
387	Ultra-large nonlinear parameter in graphene-silicon waveguide structures. <i>Optics Express</i> , 2014 , 22, 22820-30			35
386	Pulse evolution and phase-sensitive amplification in silicon waveguides. 2014 , 39, 5329-32			9

385	Potential for large optical gain improvement of erbium-doped slot waveguide amplifiers in silicon photonics. 2014 , 31, 2021		10
384	Wavelength conversion and parametric amplification of optical pulses via quasi-phase-matched four-wave mixing in long-period Bragg silicon waveguides. 2014 , 39, 4017-20		15
383	Pump-degenerate phase-sensitive amplification in chalcogenide waveguides. 2014 , 31, 780		15
382	In-situ weak-beam and polarization control of multidimensional laser sidebands for ultrafast optical switching. 2014 , 104, 111114		9
381	Integrated nonlinear photonics: emerging applications and ongoing challenges [Invited]. 2014 , 31, 3193		28
380	Free-electron laser design for four-wave mixing experiments with soft-x-ray pulses. <i>Physical Review Letters</i> , 2014 , 113, 024801	7-4	23
379	High-efficiency degenerate four-wave mixing in triply resonant nanobeam cavities. 2014 , 89,		9
378	Observation of Optical Undular Bores in Multiple Four-Wave Mixing. 2014 , 4,		38
377	Controlling free-carrier temporal effects in silicon by dispersion engineering. 2014 , 1, 299		20
376	High-efficiency terahertz-wave generation in silicon membrane waveguides. 2014 ,		
375	Quasi-phase-matched four-wave-mixing of optical pulses in periodically modulated silicon photonic wires. 2014 ,		1
374	Coherent and transient states studied with extreme ultraviolet and X-ray free electron lasers: present and future prospects. 2014 , 63, 327-404		12
373	Low-loss titanium-dioxide strip waveguides by atomic layer deposition. 2014 ,		
372	Temporal spying and concealing process in fibre-optic data transmission systems through polarization bypass. <i>Nature Communications</i> , 2014 , 5, 4678	17-4	27
371	Toward fJ/bit optical communication in a chip. 2014 , 314, 3-17		42
370	Tunable nonlinear optical properties in nanocrystalline Si/SiO ₂ multilayers under femtosecond excitation. 2014 , 9, 28		18
369	Nonlinear oscillations and bifurcations in silicon photonic microresonators. <i>Physical Review Letters</i> , 2014 , 112, 123901	7-4	9
368	Diamond nonlinear photonics. 2014 , 8, 369-374		224

367	Low-Loss Titanium Dioxide Strip Waveguides Fabricated by Atomic Layer Deposition. <i>Journal of Lightwave Technology</i> , 2014 , 32, 208-212	4	38
366	Parametric amplification-assisted cascaded four-wave mixing for ultrabroad laser sideband generation in a thin transparent medium. 2014 , 11, 075301		4
365	Modeling nonlinear optical phenomena in silicon-nanocrystal composites and waveguides. 2014 , 16, 015207		7
364	Integrated optical auto-correlator based on third-harmonic generation in a silicon photonic crystal waveguide. <i>Nature Communications</i> , 2014 , 5, 3246	17.4	51
363	Dispersion engineering of high-Q silicon microresonators via thermal oxidation. 2014 , 105, 031112		9
362	Electrically tunable optical polarization rotation on a silicon chip using Berry's phase. <i>Nature Communications</i> , 2014 , 5, 5337	17.4	29
361	Noiseless intensity amplification of repetitive signals by coherent addition using the temporal Talbot effect. <i>Nature Communications</i> , 2014 , 5, 5163	17.4	47
360	. 2014 , 50, 74-84		3
359	Circuit optomechanics: concepts and materials. 2014 , 61, 1889-98		3
358	Nonmonotonic Wavelength-Dependent Power Scaling in Silicon-on-Insulator Waveguides via Nonlinear Optical Effect Conglomeration. 2014 , 1, 576-581		5
357	Spatial solitons supported by localized gain [Invited]. 2014 , 31, 2460		39
356	Enhanced four-wave mixing in graphene-silicon slow-light photonic crystal waveguides. 2014 , 105, 091111		59
355	Two-photon quantum state engineering in nonlinear photonic nanowires. 2014 , 31, 1581		12
354	Inverse dispersion engineering in silicon waveguides. 2014 , 31, 1829		15
353	Phase-sensitive amplification in silicon photonic crystal waveguides. 2014 , 39, 363-6		27
352	Hybrid 2DBD optical devices for integrated optics by direct laser writing. 2014 , 3, e175-e175		98
351	Raman Stokes/Anti-Stokes Wavelength Conversion in Automatically Quasi-Phase-Matched Silicon Microdisk Resonators. <i>Journal of Lightwave Technology</i> , 2014 , 32, 2939-2950	4	
350	Efficient four-wave mixing by phase-mismatch switching. 2014 ,		

349	Traveling-wave photon-phonon coupling as the basis for new signal processing technologies. 2014,		2
348	Nonlinear Group IV photonics based on silicon and germanium: from near-infrared to mid-infrared. 2014, 3, 247-268		138
347	GHz-rate optical parametric amplifier in hydrogenated amorphous silicon. 2015, 17, 094012		14
346	All-Optical Ultrafast Wavelength and Mode Converter Based on Inter-Modal Nonlinear Wave Mixing in Few-Mode Fibers. 2015,		2
345	Field renormalization in photonic crystal waveguides. 2015, 92,		5
344	Tunable fast and slow light in a hybrid optomechanical system. 2015, 92,		77
343	Squeezing Light in Wires: Fundamental Optical Properties of Si Nanowire Waveguides. <i>Journal of Lightwave Technology</i> , 2015, 33, 3116-3131	4	8
342	High spectral purity silicon ring resonator photon-pair source. 2015,		8
341	Low-Cost Synthesis of Porous Silicon via Ferrite-Assisted Chemical Etching and Their Application as Si-Based Anodes for Li-Ion Batteries. 2015, 1, 1400059		14
340	Phase-sensitive amplifiers for long-haul transmission systems. 2015,		1
339	Surface-normal coupled four-wave mixing in a high contrast gratings resonator. <i>Optics Express</i> , 2015, 23, 29565-72	3-3	14
338	Advanced nonlinear signal processing in silicon-based waveguides. 2015,		
337	Simultaneous Quasi-Phase Matching of Two Arbitrary Four-Wave-Mixing Processes. <i>Journal of Lightwave Technology</i> , 2015, 33, 1726-1736	4	4
336	Compact picosecond nondegenerate four-wave mixing mirrorless optical parametric oscillator in silicon waveguide. 2015, 29, 1550001		
335	. <i>Journal of Lightwave Technology</i> , 2015, 33, 843-848	4	8
334	Enhancing and inhibiting stimulated Brillouin scattering in photonic integrated circuits. <i>Nature Communications</i> , 2015, 6, 6396	17.4	58
333	Strong Modulation Instability in a Silicon/Organic Hybrid Slot Waveguide. 2015, 7, 1-8		1
332	Neurophotonics: optical methods to study and control the brain. 2015, 58, 345-364		26

331	Multi-mode interference revealed by two photon absorption in silicon rich SiO ₂ waveguides. 2015 , 106, 071109		5
330	All-optical ultrafast wavelength and mode converter based on inter-modal four-wave mixing in few-mode fibers. 2015 , 348, 7-12		11
329	Electrospun amplified fiber optics. 2015 , 7, 5213-8		16
328	Four-wave mixing experiments with extreme ultraviolet transient gratings. <i>Nature</i> , 2015 , 520, 205-8	50.4	138
327	Broadband cascaded four-wave mixing and supercontinuum generation in a tellurite microstructured optical fiber pumped at 2 μ m. <i>Optics Express</i> , 2015 , 23, 4125-34	3.3	44
326	Enhanced parametric frequency conversion in a compact silicon-graphene microring resonator. <i>Optics Express</i> , 2015 , 23, 18679-85	3.3	49
325	Fabrication of nanoscale lithium niobate waveguides for second-harmonic generation. 2015 , 40, 2715-8		85
324	Increased bandwidth with flattened and low dispersion in a horizontal double-slot silicon waveguide. 2015 , 32, 26		26
323	Cross-polarized photon-pair generation and bi-chromatically pumped optical parametric oscillation on a chip. <i>Nature Communications</i> , 2015 , 6, 8236	17.4	46
322	Exploring High Refractive Index Silicon-Rich Nitride Films by Low-Temperature Inductively Coupled Plasma Chemical Vapor Deposition and Applications for Integrated Waveguides. 2015 , 7, 21884-9		49
321	High-gain optical waveguide amplifier based on proton beam writing of Nd:YAG crystal. <i>Optics Express</i> , 2015 , 23, 14612-7	3.3	10
320	Non-degenerate two-photon absorption in silicon waveguides: analytical and experimental study. <i>Optics Express</i> , 2015 , 23, 17101-10	3.3	19
319	109 MHz optical tomography using temporal magnification. 2015 , 40, 2965-8		10
318	Terahertz nonlinear conduction and absorption saturation in silicon waveguides. 2015 , 2, 553		10
317	Broadband cascaded four-wave mixing in As ₂ S ₃ chalcogenide waveguide with optical feedback and Mach-Zehnder interferometer. 2015 , 29, 1550115		2
316	Efficient and broadband wavelength conversion in a slot waveguide with the periodic structure altering the phase-mismatch. 2015 , 54, 7753-9		2
315	Broadband and transparent wavelength conversion based on dispersion-flattened double-slot waveguide. 2015 , 54, 7520-4		1
314	Modulated coupled nanowires for ultrashort pulses. 2015 , 40, 4078-81		1

313	Formation of Mach angle profiles during wet etching of silica and silicon nitride materials. 2015 , 359, 679-686		6
312	Fiber optical parametric amplifiers in optical communication systems. 2015 , 9, 50-74		69
311	Integrated nonlinear interferometer with wavelength multicasting functionality. <i>Optics Express</i> , 2016 , 24, 18217-28	3-3	1
310	Self-homodyne 24B2-QAM superchannel receiver enabled by all-optical comb regeneration using brillouin amplification. <i>Optics Express</i> , 2016 , 24, 29714-29723	3-3	22
309	Dispersion-optimized multicladding silicon nitride waveguides for nonlinear frequency generation from ultraviolet to mid-infrared. 2016 , 33, 2402		7
308	Phase-Sensitive Amplification in Silicon and Chalcogenide Waveguides. 2016 ,		
307	Wavelength-Tunable Microlasers Based on the Encapsulation of Organic Dye in Metal-Organic Frameworks. 2016 , 28, 7424-9		86
306	Pulse generation and compression using an asymmetrical porous silicon-based Mach-Zehnder interferometer configuration. 2016 , 87, 1		2
305	On-chip integratable all-optical quantizer using strong cross-phase modulation in a silicon-organic hybrid slot waveguide. 2016 , 6, 19528		11
304	Efficient and low-noise single-photon-level frequency conversion interfaces using silicon nanophotonics. 2016 , 10, 406-414		129
303	Group delay and dispersion tailoring in nonadiabatic tapered fibers. 2016 , 31, 130-133		1
302	Comparison of wavelength conversion efficiency between silicon waveguide and microring resonator. 2016 , 9, 390-394		1
301	Six-wave mixing induced by free-carrier plasma in silicon nanowire waveguides. 2016 , 10, 1054-1061		4
300	Measurement of fiber non-linearity based on four-wave mixing with an ASE source. 2016 , 32, 23-29		2
299	Interplay of phase-sensitive amplification and cascaded four-wave mixing in dispersion-controlled waveguides. 2016 , 94,		4
298	Enabling arbitrary wavelength frequency combs on chip. 2016 , 10, 158-162		18
297	The influence of thermal and free carrier dispersion effects on all-optical wavelength conversion in a silicon racetrack-shaped microring resonator. 2016 , 26, 075403		6
296	Dispersion engineering of a As ₂ Se ₃ -based strip/slot hybrid waveguide for mid-infrared broadband wavelength conversion. 2016 , 30, 1650336		7

295	On-Chip Strong Coupling and Efficient Frequency Conversion between Telecom and Visible Optical Modes. <i>Physical Review Letters</i> , 2016 , 117, 123902	7.4	100
294	Foundry-compatible SOI waveguides with a graphene top layer for wideband wavelength conversion. 2016 ,		3
293	Theory of pulsed four-wave mixing in one-dimensional silicon photonic crystal slab waveguides. 2016 , 93,		12
292	Size-, electric-field-, and frequency-dependent third-order nonlinear optical properties of hydrogenated silicon nanoclusters. 2016 , 6, 28067		17
291	Super-continuum generation of an optical pulse in a silicon micro-ring resonator. 2016 , 48, 1		1
290	Giant Kerr response of ultrathin gold films from quantum size effect. <i>Nature Communications</i> , 2016 , 7, 13153	17.4	64
289	Exploiting metamaterials, plasmonics and nanoantennas concepts in silicon photonics. 2016 , 18, 123001		23
288	Nonlinear optics with coherent free electron lasers. 2016 , T169, 014003		2
287	On-chip realization of quantum circuits by using waveguides on Si ₃ N ₄ . 2016 , 741, 012104		
286	Silicon nanophotonics for scalable quantum coherent feedback networks. 2016 , 3,		6
285	Excimer Emission in Self-Assembled Organic Spherical Microstructures: An Effective Approach to Wavelength Switchable Microlasers. 2016 , 4, 1009-1014		31
284	Silicon-Modified Rare-Earth Transitions A New Route to Near- and Mid-IR Photonics. 2016 , 26, 1986-1994		8
283	Time-frequency representation measurement based on temporal Fourier transformation. 2016 , 376, 86-91		4
282	Large Brillouin amplification in silicon. 2016 , 10, 463-467		136
281	Ultraflat and low dispersion in a horizontal silicon nitride slot waveguide at near-infrared wavelengths. 2016 , 55, 037109		6
280	Silicon Quantum Photonics. 2016 , 41-82		9
279	Polarization Insensitive Wavelength Conversion in a Low-Birefringence SiGe Waveguide. 2016 , 28, 1221-1224		7
278	Opportunities for Wideband Wavelength Conversion in Foundry-Compatible Silicon Waveguides Covered With Graphene. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016 , 22, 347-359	3.8	16

277	Nonlinear optical interactions in silicon waveguides. 2017 , 6, 377-392	10
276	Pushing the limits of CMOS optical parametric amplifiers with USRN:SiN above the two-photon absorption edge. <i>Nature Communications</i> , 2017 , 8, 13878	17.4 92
275	Demonstration of a Silicon Photonic Circuit for Half-Add Operations Using Cascaded Microring Resonators. 2017 , 9, 1-9	1
274	Feasibility study of optical parametric amplification using CMOS compatible ring resonators. 2017 ,	
273	High-brightness lasers on silicon by beam combining. 2017 ,	2
272	Semiconductor optical amplifiers at 2.0- μm wavelength on silicon. 2017 , 11, 1600165	22
271	Controllable optical response by modifying the gain and loss of a mechanical resonator and cavity mode in an optomechanical system. 2017 , 95,	49
270	All-Optical Wavelength Conversion Based on Four-Wave Mixing in Dispersion-Engineered Silicon Nanowaveguides. 2017 , 38, 204-210	0
269	Integrated nanoplasmonic waveguides for magnetic, nonlinear, and strong-field devices. 2017 , 6, 235-257	14
268	Extracting loss from asymmetric resonances in micro-ring resonators. 2017 , 19, 065804	3
267	Nonlinear silicon photonics. 2017 , 19, 093002	53
266	Nonclassical light sources for silicon photonics. 2017 , 26, 24-34	1
265	Photonic crystal waveguides based on wide-gap semiconductor alloys. 2017 , 19, 033002	1
264	Free Carrier Front Induced Indirect Photonic Transitions: A New Paradigm for Frequency Manipulation on Chip. 2017 , 4, 2751-2758	10
263	Toward an ideal nanomaterial for on-chip Raman laser. 2017 , 26, 1750039	4
262	Broadband reconfigurable logic gates in phonon waveguides. 2017 , 7, 12745	12
261	Electrically Tunable Optical Nonlinearities in Graphene-Covered SiN Waveguides Characterized by Four-Wave Mixing. 2017 , 4, 3039-3044	54
260	Tailoring the Structure of Multilayered Hybrid Silicon Vertical Waveguide to Achieve Anomalous Dispersion. 2017 , 9, 1-8	

259	Integrated all-optical wavelength multicasting for 40 Gbit/s PDM-QPSK signals using a single silicon waveguide. 2017 , 94, 261-266		1
258	Si-rich Silicon Nitride for Nonlinear Signal Processing Applications. 2017 , 7, 22		75
257	Expanding the Silicon Photonics Portfolio With Silicon Nitride Photonic Integrated Circuits. <i>Journal of Lightwave Technology</i> , 2017 , 35, 639-649	4	149
256	The theoretical investigation of the impact of two-photon absorption and free-carrier absorption on phase-sensitive amplification in silicon waveguides. 2017 , 64, 93-99		0
255	Frequency-degenerate parametric generation through IFWM effect in nanowaveguides. 2017 , 31, 1750266		1
254	Optimum silicon taper structures with minimum temporal walk-off for nonlinear optical signal processing applications. 2017 ,		
253	Dispersion tailoring of a silicon strip waveguide employing Titania-Alumina thin-film coating. 2017 ,		
252	Dispersion control of silicon nanophotonic waveguides using sub-wavelength grating metamaterials in near- and mid-IR wavelengths. <i>Optics Express</i> , 2017 , 25, 19468-19478	3-3	28
251	Advances in stimulated Raman scattering in nanostructures. 2017 , 9, 169		24
250	Ultra-broadband two-pump optical parametric amplifier in tellurite waveguides with engineered dispersion. <i>Optics Express</i> , 2017 , 25, 4268-4283	3-3	7
249	Exploiting high-order phase-shift keying modulation and direct-detection in silicon photonic systems. <i>Optics Express</i> , 2017 , 25, 8611-8624	3-3	3
248	Full-vectorial propagation model and modified effective mode area of four-wave mixing in straight waveguides. 2017 , 42, 3670-3673		10
247	Towards on-chip net-gain in CMOS-compatible waveguides. 2017 ,		
246	All-Polymer Integrated Optical Resonators by Roll-to-Roll Nanoimprint Lithography. 2018 , 5, 1839-1845		29
245	Center-of-Mass Acceleration in Coupled Nanowaveguides Due to Transverse Optical Beating Force. <i>Journal of Lightwave Technology</i> , 2018 , 36, 1608-1614	4	2
244	Characterization of ultrafast free-electron laser pulses using extreme-ultraviolet transient gratings. 2018 , 25, 32-38		8
243	Low-threshold parametric oscillation in organically modified microcavities. 2018 , 4, eaao4507		26
242	Frequency-degenerate phase-sensitive optical parametric amplification based on four-wave mixing in graphene-silicon slot waveguide. 2018 , 11, 062201		1

241	Experimentally Validated Dispersion Tailoring in a Silicon Strip Waveguide With Alumina Thin-Film Coating. 2018 , 10, 1-8		1
240	Advances in instrumentation for FEL-based four-wave-mixing experiments. 2018 , 907, 132-148		9
239	Micro-combs: A novel generation of optical sources. 2018 , 729, 1-81		205
238	Ultralow-power chip-based soliton microcombs for photonic integration. 2018 , 5, 1347		83
237	Inter-Modal Wavelength Conversion in Silicon Waveguide. 2018 ,		0
236	High Resolution Brillouin Sensing of Micro-Scale Structures. 2018 , 8, 2572		5
235	An All-Optical Buffer Based on Non-Degenerate Phase-Sensitive Parametric Amplification. <i>Journal of Lightwave Technology</i> , 2018 , 36, 5949-5955	4	1
234	Gate-Tunable Nonlinear Refraction and Absorption in Graphene-Covered Silicon Nitride Waveguides. 2018 , 5, 4944-4950		19
233	Parametric Nonlinear Silicon-Based Photonics. 2018 , 106, 2196-2208		7
232	. <i>Journal of Lightwave Technology</i> , 2018 , 36, 4671-4677	4	9
231	Experimentally validated full-vectorial model of wavelength multicasting via four-wave mixing in straight waveguides. 2018 , 8, 13030		
230	Adiabatic four-wave mixing frequency conversion. <i>Optics Express</i> , 2018 , 26, 25582-25601	3.3	9
229	Self-phase modulation and spectral broadening in millimeter long self-written polymer waveguide integrated with single mode fibers. 2018 , 86, 172-177		6
228	Four wave mixing in 3C SiC ring resonators. 2018 , 112, 251110		21
227	Surface plasmon polariton waveguides with subwavelength confinement. 2018 , 27, 094216		6
226	Low-threshold optical bistability in field-enhanced nonlinear guided-mode resonance grating nanostructure. 2018 , 43, 4156-4159		8
225	Nonlinear Optics in Hydrogenated Amorphous Silicon. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018 , 24, 1-12	3.8	5
224	Optical free-carrier generation in silicon nano-waveguides at 1550 nm. 2018 , 112, 251104		6

223	Intermodal four-wave mixing in silicon waveguides. 2018 , 6, 805		21
222	Spatial-mode-coupling-based dispersion engineering for integrated optical waveguide. <i>Optics Express</i> , 2018 , 26, 2807-2816	3-3	7
221	Four-wave mixing and nonlinear parameter measurement in a gallium-nitride ridge waveguide. 2018 , 8, 66		12
220	Impacts of doping on epitaxial germanium thin film quality and Si-Ge interdiffusion. 2018 , 8, 1117		9
219	Hybrid silicon nonlinear photonics [Invited]. 2018 , 6, B13		18
218	Nonlinear optics on silicon-rich nitride—high nonlinear figure of merit CMOS platform [Invited]. 2018 , 6, B50		45
217	Double inverse nanotapers for efficient light coupling to integrated photonic devices. 2018 , 43, 3200-3203		31
216	Electric field effects on nonlinear optical rectification in symmetric coupled Al _x Ga _{1-x} As/GaAs quantum wells. 2018 , 662, 27-32		10
215	Parametric amplification of Rydberg six- and eight-wave mixing processes. 2018 , 6, 713		6
214	Analytic description of four-wave mixing in silicon-on-insulator waveguides. 2018 , 35, 702		1
213	Low-power broadband all-optical switching via intermodal cross-phase modulation in integrated optical waveguides. 2018 , 43, 1631-1634		6
212	Impact of two-photon absorption and free-carrier effects on time lens based on four-wave mixing in silicon waveguides. 2018 , 11, 082204		3
211	3-D Multilayer S-Bend Silicon Waveguide Optical Interconnect. 2018 , 30, 1040-1043		3
210	Effect of coherence on all-optical signal amplification by supercontinuum generation. 2018 , 35, 140		1
209	Dissipative Kerr solitons in optical microresonators. 2018 , 361,		455
208	Seven-Photon-Excited Upconversion Lasing at Room Temperature. 2018 , 6, 1800518		9
207	Towards integrated tunable all-silicon free-electron light sources. <i>Nature Communications</i> , 2019 , 10, 3176	17.4	30
206	Nanowires for Photonics. 2019 , 119, 9153-9169		95

205	Generation and dynamics of solitonic pulses due to pump amplitude modulation at normal group-velocity dispersion. 2019 , 100,			12
204	Characterize and optimize the four-wave mixing in dual-interferometer coupled silicon microrings. 2019 , 28, 104211			5
203	Net optical parametric gain in a submicron silicon core fiber pumped in the telecom band. <i>APL Photonics</i> , 2019 , 4, 086102	5.2		4
202	Fiber Integrated Wavelength Converter Based on a Silicon Core Fiber With a Nano-Spike Coupler. 2019 , 31, 1561-1564			5
201	Four Wave Mixing control in a photonic molecule made by silicon microring resonators. 2019 , 9, 408			5
200	Temperature Dependence of the Kerr Nonlinearity and Two-Photon Absorption in a Silicon Waveguide at 1.55 μm . 2019 , 11,			8
199	Localized Faraday patterns under heterogeneous parametric excitation. 2019 , 99, 033115			7
198	Enhanced optical Kerr nonlinearity of graphene/Si hybrid waveguide. 2019 , 114, 071104			33
197	Phase-matched nonlinear second-harmonic generation in plasmonic metasurfaces. 2019 , 8, 607-612			6
196	Photonic-chip-based frequency combs. 2019 , 13, 158-169			303
195	Broad-Band Optical Parametric Amplification in a Tapered Silicon Core Fiber Pumped in the Telecom Band. 2019 ,			
194	Slow-Light Frequency Combs and Dissipative Kerr Solitons in Coupled-Cavity Waveguides. 2019 , 12,			3
193	A multi-layer platform for low-loss nonlinear silicon photonics. <i>APL Photonics</i> , 2019 , 4, 110809	5.2		5
192	Astrocombs: Recent Advances. 2019 , 31, 1890-1893			1
191	Experimental Demonstration of Dynamical Input Isolation in Nonadiabatically Modulated Photonic Cavities. 2019 , 6, 162-169			10
190	Temporal analog optical computing using an on-chip fully reconfigurable photonic signal processor. 2019 , 111, 66-74			8
189	Self-Adaptive Waveguide Boundary for Inter-Mode Four-Wave Mixing. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020 , 26, 1-8	3.8		1
188	Chip-based frequency combs for wavelength-division multiplexing applications. 2020 , 51-102			

187	Enhanced four-wave mixing with MoS ₂ on a silicon waveguide. 2020 , 22, 025503		14
186	Observation of Stimulated Brillouin Scattering in Silicon Nitride Integrated Waveguides. <i>Physical Review Letters</i> , 2020 , 124, 013902	7-4	33
185	Bi ³⁺ -Sensitized La ₂ Zr ₂ O ₇ :Er ³⁺ Transparent Ceramics with Efficient Up/Down-Conversion Luminescence Properties for Photonic Applications. 2020 , 124, 913-920		9
184	Enhanced Four-Wave Mixing in Silicon Nitride Waveguides Integrated with 2D Layered Graphene Oxide Films. 2020 , 8, 2001048		20
183	Theoretical investigation of nano-photonic graphene-based waveguide. 2020 , 34, 2050350		
182	. 2020 , 68, 4479-4490		3
181	Tunable microwave-photonic filtering with high out-of-band rejection in silicon. <i>APL Photonics</i> , 2020 , 5, 096103	5-2	18
180	Sub-milliwatt optical frequency combs in dual-pumped high-Q multimode silicon resonators. 2020 , 117, 221103		4
179	Three-dimensional polymer wire bonds on a chip: morphology and functionality. 2020 , 53, 355102		3
178	3D Hybrid Plasmonic Framework with Au Nanopillars Embedded in Nitride Multilayers Integrated on Si. 2020 , 7, 2000493		11
177	Silicon Photonics Optical Frequency Synthesizer. 2020 , 14, 1900449		10
176	On-Chip Fabry-Pérot Bragg Grating Cavity Enhanced Four-Wave Mixing. 2020 , 7, 1009-1015		5
175	Microwave Filtering Using Forward Brillouin Scattering in Photonic-Phononic Emit-Receive Devices. <i>Journal of Lightwave Technology</i> , 2020 , 38, 5248-5261	4	12
174	Integrated Raman Laser: A Review of the Last Two Decades. <i>Micromachines</i> , 2020 , 11,	3-3	9
173	Characterization of Four-Wave Mixing in Specialty Silica Fibers at 2 μ m Using Continuous-Wave Pumps. 2020 , 32, 542-545		
172	2D Layered Graphene Oxide Films Integrated with Micro-Ring Resonators for Enhanced Nonlinear Optics. 2020 , 16, e1906563		33
171	Tunable wavelength conversion based on a nanoscale slot waveguide in communication bands. 2020 , 34, 2050260		0
170	Nanowaveguide Designs in 220-nm SOI for Ultra-Broadband FWM at Telecom Wavelengths. 2020 , 56, 1-8		1

169	A review of nonlinear applications in silicon optical fibers from telecom wavelengths into the mid-infrared spectral region. 2020 , 463, 125437		4
168	Gain characteristics of the hybrid slot waveguide amplifiers integrated with NaYF:Er NPs-PMMA covalently linked nanocomposites.. 2020 , 10, 11148-11155		3
167	Tunable four-wave mixing in AlGaAs waveguides of three different geometries. 2021 , 479, 126450		2
166	Four-Wave Mixing-Based Wavelength Conversion and Parametric Amplification in Submicron Silicon Core Fibers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021 , 27, 1-11	3.8	8
165	Graphene Oxide for Integrated Photonics and Flat Optics. 2021 , 33, e2006415		24
164	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2021 , 27, 1-9	3.8	5
163	Design and Optimization of Four-Wave Mixing in Microring Resonators Integrated With 2D Graphene Oxide Films. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	6
162	Low-Loss Integrated Nanophotonic Circuits with Layered Semiconductor Materials. 2021 , 21, 2709-2718		10
161	Frequency-Upconverted Stimulated Emission by Up to Six-Photon Excitation from Highly Extended Spiro-Fused Ladder-Type Oligo(p-phenylene)s. 2021 , 133, 10095-10103		0
160	Frequency-Upconverted Stimulated Emission by Up to Six-Photon Excitation from Highly Extended Spiro-Fused Ladder-Type Oligo(p-phenylene)s. 2021 , 60, 10007-10015		21
159	High-yield, wafer-scale fabrication of ultralow-loss, dispersion-engineered silicon nitride photonic circuits. <i>Nature Communications</i> , 2021 , 12, 2236	17.4	38
158	Robust frequency-upconversion lasing operated at 400 K from inorganic perovskites microcavity. 1		3
157	Analysis of Four-Wave Mixing in Silicon Nitride Waveguides Integrated With 2D Layered Graphene Oxide Films. <i>Journal of Lightwave Technology</i> , 2021 , 39, 2902-2910	4	8
156	Far-detuned mid-IR wavelength conversion at 4.05 μm in a tellurium oxide rib waveguide pumped at 1550 nm: Design and analysis. 2021 , 11, 055110		
155	On-chip non-Hermitian optical parametric amplifiers with a large bandwidth. 2021 , 38, 2160		1
154	Microresonators in Lithium Niobate Thin Films. 2021 , 9, 2100539		4
153	Reconfigurable Parametric Amplifications of Spoof Surface Plasmons. 2021 , 8, e2100795		5
152	An approach for realizing four-wave-mixing experiments stimulated by two-color extreme ultraviolet pulses. 2021 ,		

151	Observation of Ultrashort Laser Pulse Evolution in a Silicon Photonic Crystal Waveguide. <i>Micromachines</i> , 2021 , 12,	3.3	0
150	Pedestal waveguides based on GeO ₂ -Bi ₂ O ₃ , GeO ₂ -PbO, Ta ₂ O ₅ and SiO _x N _y cores as platforms for optical amplifiers and nonlinear optics applications: Review of recent advances. 2021 , 236, 118113		1
149	Controllable Photonic Structures on Silicon-on-Insulator Devices Fabricated Using Femtosecond Laser Lithography. 2021 , 13, 43622-43631		2
148	An optical parametric Bragg amplifier on a CMOS chip. 2021 ,		2
147	Enhancing the Refractive Index of Polymers with a Plant-Based Pigment. 2021 , 17, e2103061		1
146	Near-infrared frequency comb generation from a silicon microresonator. 2021 , 23, 10LT02		0
145	In-Volume Laser Direct Writing of Silicon—challenges and Opportunities. 2100140		7
144	Investigation of low-power comb generation in silicon microresonators from dual pumps. 2021 , 23, 10LT03		
143	Overcoming the quantum limit of optical amplification in monolithic waveguides. 2021 , 7, eabi8150		12
142	Telecom-Band Wavelength Conversion in Air-Clad Silicon Waveguides. 2021 , 267-270		
141	Nonlinear optics in ultra-silicon-rich nitride devices: recent developments and future outlook. 2021 , 6, 1905544		4
140	Silicon Photonic Integrated Circuits. 2017 , 673-737		1
139	Experimental Realization of 1400–100 nm Broadband Emission for Wide-Bandwidth Optical Communication in Er ³⁺ /M Codoped ZnO Films and Devices. 2020 , 124, 3747-3755		1
138	Electrically pumped efficient broadband CW frequency conversion in diode lasers using bulk $\chi^{(2)}$. <i>APL Photonics</i> , 2020 , 5, 011301	5.2	6
137	Linear optics control of sideband instability for improved free-electron laser spectral brightness. 2020 , 23,		2
136	Stretching the spectra of Kerr frequency combs with self-adaptive boundary silicon waveguides. 2020 , 2, 1		2
135	Rectangular-cladding silicon slot waveguide with improved nonlinear performance. 2018 , 57, 1		1
134	Reduction of phase noise to amplitude noise conversion in silicon waveguide-based phase-sensitive amplification. 2016 , 55, 3140-4		2

133	Performance evaluation of continuous-wave mid-infrared wavelength conversion in silicon waveguides. 2019 , 58, 2584-2588		3
132	Emerging material systems for integrated optical Kerr frequency combs. 2020 , 12, 135		37
131	Mid-Infrared Four-Wave Mixing in Silicon Waveguides Using Telecom-Compatible Light Sources. 2009 ,		2
130	Parity-Time (PT) symmetric photonic system based on Parametric Gain. 2018 ,		0
129	High-gain, low-threshold and small-footprint optical parametric amplifier for photonic integrated circuits. 2018 , 35, 362		11
128	Design of mid-infrared nonlinear silicon-germanium waveguides for broadband/discrete-band wavelength conversion. 2018 , 35, 741		4
127	Tailoring mode splitting and degeneracy in silicon triply resonant nanobeam cavities. 2019 , 36, 1267		2
126	Efficient, broadband third-harmonic generation in silicon nanophotonic waveguides spectrally shaped by nonlinear propagation. <i>Optics Express</i> , 2019 , 27, 4990-5004	3-3	5
125	Evanescent-wave coupling phase-matching for ultrawidely tunable frequency conversion in silicon-waveguide chips. <i>Optics Express</i> , 2019 , 27, 28866-28878	3-3	2
124	Time-division-multiplexed observation bandwidth for ultrafast parametric spectro-temporal analyzer. <i>Optics Express</i> , 2019 , 27, 30441-30448	3-3	2
123	Waveguide tapering for improved parametric amplification in integrated nonlinear SiN waveguides. <i>Optics Express</i> , 2020 , 28, 23467-23477	3-3	7
122	High-Q titanium dioxide micro-ring resonators for integrated nonlinear photonics. <i>Optics Express</i> , 2020 , 28, 39084-39092	3-3	8
121	Frequency conversion of mid-infrared optical signals into the telecom band using nonlinear silicon nanophotonic wires. 2011 ,		5
120	Ultrafast Nonlinear Signal Processing in Silicon Waveguides. 2012 ,		1
119	Second- and third-order nonlinear wavelength conversion in an all-optically poled SiN waveguide. 2019 , 44, 106-109		13
118	Visible blue-to-red 10 GHz frequency comb via on-chip triple-sum-frequency generation. 2019 , 44, 5290-5293		10
117	Resonantly enhanced nonreciprocal silicon Brillouin amplifier. 2019 , 6, 1117		32
116	Inverse photonic-crystal-fiber design through geometrical and material scalings. 2021 , 4, 55		1

115	Nonlinear silicon photonics on CMOS-compatible tellurium oxide. 2020 , 8, 1904		6
114	High-efficiency and broadband four-wave mixing in a silicon-graphene strip waveguide with a windowed silica top layer. 2018 , 6, 965		14
113	Intermodal frequency generation in silicon-rich silicon nitride waveguides. 2019 , 7, 615		7
112	Third-order nonlinear optical susceptibility of crystalline oxide yttria-stabilized zirconia. 2020 , 8, 110		10
111	Neurophotonics: optical methods to study and control the brain. 2015 , 185, 371-392		9
110	Phase-Matching and Parametric Conversion for the Mid-Infrared in As ₂ S ₃ Waveguides. 2012 , 02, 260-264		4
109	Analysis of the Nonlinear Optical Parameter of ZnO Channel Waveguides. 2011 , 50, 04DG01		1
108	Optical Frequency Comb Generation in Normal Dispersion Microresonators with Coupled-ring Structure. 2021 ,		
107	Low Noise Integrated Phase-Sensitive Waveguide Parametric Amplifiers. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	2
106	Low-noise Phase-sensitive Parametric Amplifiers Based on Integrated Silicon-Nitride-Waveguides for Optical Signal Processing. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	2
105	Raman scattering noise in phase-insensitive and phase-sensitive parametric processes in fibers. 2006 ,		
104	Broad-band continuous-wave four-wave mixing in silicon wire waveguides. 2007 ,		1
103	Optical Regeneration in a Silicon Waveguide. 2007 ,		
102	All Optical Wavelength Conversion and Nonlinear Functions Enhanced in Ultra-small Silicon Waveguides. 2007 ,		
101	Efficient four-wave mixing in dispersion engineered As ₂ S ₃ highly nonlinear waveguides. 2008 ,		
100	Optimal Design of Silicon-on-Insulator Nano-Wire Waveguides for Broadband Wavelength Conversion. 2008 ,		1
99	Noise figure of high-repetition-rate optical parametric amplifiers in silicon. 2008 ,		
98	Ultra-low-power parametric frequency conversion of high data rates on-chip. 2008 ,		

- 97 Dispersion engineering of silicon nanophotonic wires using a thin film cladding. **2008**, 1
- 96 Two-Pump Four-Wave Mixing in Silicon Waveguides. **2009**, 1
- 95 Ultra-Low Power Frequency Conversion in High-Index Doped Silica Glass Micro-Ring Resonators. **2009**,
- 94 High efficiency harmonic generation in LiNbO₃ membranes. **2010**,
- 93 Silicon nanophotonic mid-infrared optical parametric amplifier with 25 dB gain. **2010**,
- 92 Optical Signal Processing. 511-577
- 91 Stress and Piezoelectric Tuning of Silicon's Optical Properties. **2011**, 77-106
- 90 Engineered Transitions in Photonic Cavities. **2012**, 02, 255-259
- 89 Energy efficient nonlinear optics in silicon: are slow-light structures more efficient than nanowires?. **2012**, 0
- 88 Phase-Sensitive Fiber-Optic Parametric Amplifiers and their Applications. **2012**,
- 87 Applications of Phase-Sensitive Parametric Amplification. **2012**, 1
- 86 Polarization Insensitive Wavelength Conversion Based on Four-Wave Mixing in a Silicon Nanowire. **2012**, 1
- 85 Four Wave Mixing in Silicon Photonics. **2013**, 101-115
- 84 Systematic Comparison of FWM Conversion Efficiency in Silicon Waveguides and MRRs. **2013**,
- 83 Bandwidth Scaling of Phase-modulated CW Comb through Four-Wave Mixing on Silicon Nano-waveguide. **2013**,
- 82 Phase-Sensitive Fiber-Optic Parametric Amplifiers and their Applications. **2013**,
- 81 Experimental Demonstration of Phase Sensitive Parametric Processes in a Nano-Engineered Silicon Waveguide. **2013**, 1
- 80 105 nm Wavelength Conversion of 40-Gb/s DPSK in a Dispersion-Engineered Silicon Waveguide. **2013**,

- 79 Silicon Photonics. **2013**, 41, 768
- 78 Evaluation of Chromatic-Dispersion-Dependent Four-Wave-Mixing Efficiency in Hydrogenated Amorphous Silicon Waveguides. **2013**, 17, 433-440 1
- 77 All-optical regeneration experiment based on data-pump four-wave mixing in silicon waveguide. **2015**,
- 76 Large Amplification in Silicon via Stimulated Brillouin Scattering. **2016**,
- 75 Optical Fiber-based Phase Sensitive Amplifiers and their Application in Optical Communication Systems. **2016**,
- 74 Free Carrier induced Nonlinear Six-wave Mixing in Silicon. **2016**,
- 73 Nanophotonic Approach to Energy-Efficient Ultra-Fast All-Optical Gates. **2017**, 107-137
- 72 Chapter 13: Integrated nonlinear photonics. **2017**, 275-304
- 71 Midinfrared wavelength conversion in hydrogenated amorphous silicon waveguides. **2017**, 56, 1 0
- 70 Silicon-Graphene Hybrid Slot Waveguide with Enhanced Four-Wave Mixing Efficiency. **2018**,
- 69 Brillouin lasers and amplifiers in silicon photonics. **2018**,
- 68 Enhanced third-harmonic generation in silicon metasurface. **2019**, 68, 214207 2
- 67 Extended L-band observation of the ultrafast parametric spectro-temporal analyzer. **2019**,
- 66 Brillouin-Based Nonreciprocity and Laser Cooling in Silicon Photonics. **2019**,
- 65 Enhanced four-wave mixing in hybrid integrated waveguides with graphene oxide. **2019**,
- 64 Optical frequency comb with ultra-stable repetition rate generated in a micro-ring resonator. **2019**,
- 63 GHz-rate positive conversion efficiency via FWM in multi-layer SiNx/a-Si:H waveguides. **2020**, 2
- 62 Enhanced optical nonlinearity in a silicon-organic hybrid slot waveguide for all-optical signal processing. 1

61	Overcoming the Quantum Noise Limit with Continuous-wave Phase-Sensitive Parametric Amplification Based on a Single Integrated Silicon-Nitride Waveguide. 2021 ,		2
60	Impact of third-order dispersion and three-photon absorption on mid-infrared time magnification via four-wave mixing in SiGe waveguides. 2020 , 59, 1187-1192		0
59	Single-mode, single-polarization and dispersion-flattened waveguides based on silicon carbide and diamond. 2022 , 148, 107692		
58	Raman Enhanced Four-Wave Mixing in Silicon Core Fibers. 2021 ,		
57	Advances in Chip-Scale Quantum Photonic Technologies. 2100068		3
56	Fingerprint of the Interbond Electron Hopping in Second-Order Harmonic Generation.. <i>Physical Review Letters</i> , 2022 , 128, 027401	7.4	1
55	Polarization selective ultra-broadband wavelength conversion in silicon nitride waveguides.. <i>Optics Express</i> , 2022 , 30, 4342-4350	3.3	2
54	Silicon-integrated nonlinear III-V photonics. 2022 , 10, 535		3
53	Impact of nonlocal response in plasmonic metasurfaces on four-wave mixing. 2021 , 23, 125005		0
52	Enhanced four-wave mixing from multi-resonant silicon dimer-hole membrane metasurfaces. 2022 , 24, 035002		1
51	Optimization of quantum light sources and four-wave mixing based on a reconfigurable silicon ring resonator.. <i>Optics Express</i> , 2022 , 30, 9992-10010	3.3	0
50	Enhanced nonlinear optics in nanowires, waveguides, and ring resonators integrated with graphene oxide films. 2022 ,		
49	Raman enhanced four-wave mixing in silicon core fibers.. 2022 , 47, 1626-1629		1
48	High-efficiency four-wave mixing in low-loss silicon photonic spiral waveguides beyond the singlemode regime. <i>Optics Express</i> ,	3.3	1
47	Third harmonic generation from the gold/amorphous silicon hybrid metasurface. 2022 ,		1
46	Ultralow-loss Silicon Nitride Waveguides for Parametric Amplification. 2022 ,		
45	Ultralow-threshold six-photon-excited upconversion lasing in a plasmonic microcavity.. 2022 ,		
44	Enhanced Spectral Broadening of Femtosecond Optical Pulses in Silicon Nanowires Integrated with 2D Graphene Oxide Films. <i>Micromachines</i> , 2022 , 13, 756	3.3	3

43	Enhanced self-phase modulation in silicon nitride waveguides integrated with 2D graphene oxide films. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2022 , 1-1	3.8	2
42	A Theoretical Study of Tunable Brillouin Lasers Based on a Diamond Suspended Waveguide. <i>Frontiers in Physics</i> , 2022 , 10,	3.9	
41	Relaxed Phase-Matching Constraints in Zero-Index Waveguides. <i>Physical Review Letters</i> , 2022 , 128,	7.4	1
40	Optical parametric wideband frequency modulation. <i>APL Photonics</i> ,	5.2	0
39	Recent Progresses in Dispersion Engineering for Broadband Nonlinear Applications. 2022 ,		
38	Broadband high-Q multimode silicon concentric racetrack resonators for widely tunable Raman lasers. <i>Nature Communications</i> , 2022 , 13,	17.4	3
37	Spectrally-Pure Integrated Telecom-Band Photon Sources in Silicon. <i>Journal of Lightwave Technology</i> , 2022 , 1-10	4	0
36	An Optical Parametric Amplifier via $\chi^{(2)}$ in AlGaAs Waveguides. <i>Journal of Lightwave Technology</i> , 2022 , 1-9	4	0
35	Correlations between Incident and Emission Polarization in Nanowire-particle Coupled Junctions. <i>Optics Express</i> ,	3.3	
34	Regulation of soliton inside microresonators with multiphoton absorption and free-carrier effects. <i>Optics Express</i> ,	3.3	
33	56 dB Parametric Gain in AlGaAs-on-insulator Nanowaveguides. 2022 ,		
32	Quasi-Phase-Matched Four-Wave Mixing Enabled by Grating-Assisted Coupling in a Hybrid Silicon Waveguide. 2022 , 10, 83440-83451		
31	Phase regeneration of 8PSK signal using phase-sensitive amplification based on an organicDie hybrid waveguide. 2022 , 61, 7095		
30	Normal mode splitting and four-wave mixing in Kerr-nonlinear optical system containing coupled double quantum dot. 2022 , 24, 095501		
29	Broadband EO-Comb Generation Based on Two-Stage Nonlinear System. 2022 , 14, 1-5		0
28	Dispersion management in integrated lithium niobate photonics enabling on-chip femtosecond pulse generation. 2022 ,		0
27	Enhanced Spectral Broadening Through Self-phase Modulation of Femtosecond Optical Pulses in Silicon-on-Insulator Nanowires Integrated With Graphene Oxide Films.		0
26	Role of Phase-matching on Raman-enhanced FWM in Silicon Core Fibers. 2022 ,		0

25	Continous-wave travelling wave optical parametric amplification on a photonic chip. 2022 ,	0
24	Dissipative Solitons in Microresonators. 2022 , 249-272	0
23	Room-Temperature Generation of Heralded Single Photons on Silicon Chip with Switchable Orbital Angular Momentum. 2200388	0
22	Low-power, high-performance, and small-footprint, single-pump optical parametric amplifier for photonic integrated circuits. 2022 , 132, 123106	0
21	Niobium-tantalum oxide as a material platform for linear and nonlinear integrated photonics. 2022 , 30, 42155	0
20	Phase-sensitive amplification in integrated waveguides. 2022 ,	0
19	CMOS-compatible direct laser writing of sulfur-ultrahyperdoped silicon: Breakthrough pre-requisite for UV-THz optoelectronic nano/microintegration. 2023 , 158, 108873	1
18	Applications of Optical Microcombs.	0
17	Efficient four-wave mixing wavelength conversion in hybrid silicon and polymer microring resonator.	0
16	A photonic integrated continuous-travelling-wave parametric amplifier. 2022 , 612, 56-61	1
15	Recent Progress of Supercontinuum Generation in Nanophotonic Waveguides. 2200205	1
14	POViT: Vision Transformer for Multi-Objective Design and Characterization of Photonic Crystal Nanocavities. 2022 , 12, 4401	1
13	Photon-pair generation in a lossy waveguide. 2023 ,	1
12	Recent Progress in Short and Mid-Infrared Single-Photon Generation: A Review. 2023 , 4, 13-38	0
11	Graphene Oxide for Nonlinear Integrated Photonics. 2200512	3
10	An on-chip atomic layer deposited waveguide amplifier with broadband net gain. 2022 ,	0
9	Third-Order Optical Nonlinearities of 2D Materials at Telecommunications Wavelengths. 2023 , 14, 307	0
8	Internal Structuring of Semiconductors with Ultrafast Lasers: Opening a Route to Three-Dimensional Silicon Photonics. 2023 , 979-1018	0

- 7 Optical bistability and four-wave mixing response of a quantum dot coupled to an optomechanical photonic crystal nanocavity. **2023**, 54, 101129 ○
- 6 Waveguide Channel Splitting Induced by Artificial Gauge Fields. **2023**, 10, 632-638 ○
- 5 Degenerate optical parametric amplification in CMOS silicon. **2023**, 10, 430 ○
- 4 An Introduction to Nonlinear Integrated Photonics: Structures and Devices. **2023**, 14, 614 1
- 3 Dispersion engineered SiON ring resonators for integrated photon sources. **2023**, ○
- 2 Ultralinear 140-GHz FMCW signal generation with optical parametric wideband frequency modulation enabling 1-mm range resolution. **2023**, 31, 13384 ○
- 1 All-Optical Parametric-Assisted Oversampling and Decimation for Signal Denoising Amplification. ○