# Daniel J Bluementhal

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 220 papers | 4,891 citations | 35 h-index | 61 g-index |
| 300 ext. papers | 6,598 ext. citations | 4 avg, IF | 5.5 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 220 | Ultra-low loss visible light waveguides for integrated atomic, molecular, and quantum photonics.. *Optics Express*, **2022**, 30, 6960-6969 | 3.3 | 3 |
| 219 | Ultralow 0.034 dB/m loss wafer-scale integrated photonics realizing 720 million Q and 380 μW threshold Brillouin lasing.. *Optics Letters*, **2022**, 47, 1855-1858 | 3 | 4 |
| 218 | Precision Laser Stabilization using Photonic Integrated Coil Resonator **2021**, | | 1 |
| 217 | Optically synchronized fibre links using spectrally pure chip-scale lasers. *Nature Photonics*, **2021**, 15, 588-593 | 33.9 | 6 |
| 216 | 422 Million intrinsic quality factor planar integrated all-waveguide resonator with sub-MHz linewidth. *Nature Communications*, **2021**, 12, 934 | 17.4 | 35 |
| 215 | Visible light photonic integrated Brillouin laser. *Nature Communications*, **2021**, 12, 4685 | 17.4 | 11 |
| 214 | Low-loss low thermo-optic coefficient Ta2O5 on crystal quartz planar optical waveguides. *APL Photonics*, **2020**, 5, 116103 | 5.2 | 7 |
| 213 | Data Converter Interleaving: Current Trends and Future Perspectives. *IEEE Communications Magazine*, **2020**, 58, 19-25 | 9.1 | 8 |
| 212 | Photonic integration for UV to IR applications. *APL Photonics*, **2020**, 5, 020903 | 5.2 | 31 |
| 211 | . *Journal of Lightwave Technology*, **2020**, 38, 3376-3386 | 4 | 11 |
| 210 | Ultra-Low Loss 698 nm and 450 nm Silicon Nitride Visible Wavelength Waveguides for Strontium Atomic Clock Applications **2020**, | | 1 |
| 209 | Low-loss D-shape Silicon Nitride Waveguides Using a Dielectric Lift-off Fabrication Process **2020**, | | 1 |
| 208 | Ultra-Narrow Linewidth Chip-Scale Heterogeneously Integrated Silicon/III-V Tunable Laser Pumped Si/Si3N4 SBS Laser **2020**, | | 2 |
| 207 | Chip-Scale, Optical-Frequency-Stabilized PLL for DSP-Free, Low-Power Coherent QAM in the DCI **2020**, | | 5 |
| 206 | Kerr Soliton Microcomb Pumped by an Integrated SBS Laser for Ultra-Low Linewidth WDM Sources **2020**, | | 5 |
| 205 | Reducing Noise in a Ring-laser Gyro Based on Stimulated Brillouin Scattering **2019**, | | 2 |
| 204 | Photonic Integrated Si3N4 Ultra-Large-Area Grating Waveguide MOT Interface for 3D Atomic Clock Laser Cooling **2019**, | | 1 |

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| 203 | High index contrast photonic platforms for on-chip Raman spectroscopy. *Optics Express*, **2019**, 27, 23067-23079 | 33 | 24 |
| 202 | Integrated Ultra-Narrow Linewidth Lasers and Their Applications **2019**, | | 1 |
| 201 | Silicon Nitride Ring Resonators with 0.123 dB/m Loss and Q-Factors of 216 Million for Nonlinear Optical Applications **2019**, | | 2 |
| 200 | Sub-hertz fundamental linewidth photonic integrated Brillouin laser. *Nature Photonics*, **2019**, 13, 60-67 | 33.9 | 125 |
| 199 | Integrated Resonators in an Ultralow Loss Si3N4/SiO2 Platform for Multifunction Applications. *IEEE Journal of Selected Topics in Quantum Electronics*, **2018**, 24, 1-9 | 3.8 | 32 |
| 198 | . *Journal of Lightwave Technology*, **2018**, 36, 1185-1191 | 4 | 28 |
| 197 | Fundamental noise dynamics in cascaded-order Brillouin lasers. *Physical Review A*, **2018**, 98, | 2.6 | 26 |
| 196 | Extended Reach 40km Transmission of C-Band Real-Time 53.125 Gbps PAM-4 Enabled with a Photonic Integrated Tunable Lattice Filter Dispersion Compensator **2018**, | | 2 |
| 195 | Narrow Linewidth Stimulated Brillouin Scattering (SBS) Lasers **2018**, | | 1 |
| 194 | . *Proceedings of the IEEE*, **2018**, 106, 2209-2231 | 14.3 | 146 |
| 193 | Integrated Sagnac optical gyroscope sensor using ultra-low loss high aspect ratio silicon nitride waveguide coil **2017**, | | 1 |
| 192 | Effect of direct PRBS modulation on laser driven fiber optic gyroscope **2017**, | | 2 |
| 191 | Ultra-Low Loss Large Area Waveguide Coils for Integrated Optical Gyroscopes. *IEEE Photonics Technology Letters*, **2017**, 29, 185-188 | 2.2 | 11 |
| 190 | Integrated optical driver for interferometric optical gyroscopes. *Optics Express*, **2017**, 25, 3826-3840 | 3.3 | 24 |
| 189 | Ultra-low-loss Ta_2O_5-core/SiO_2-clad planar waveguides on Si substrates. *Optica*, **2017**, 4, 532 | 8.6 | 60 |
| 188 | Chip-scale optical resonator enabled synthesizer (CORES) miniature systems for optical frequency synthesis **2016**, | | 8 |
| 187 | Programmable eye-opener lattice filter for multi-channel dispersion compensation using an integrated compact low-loss silicon nitride platform. *Optics Express*, **2016**, 24, 16732-42 | 3.3 | 8 |
| 186 | Integrated Ultra-Low-Loss Silicon Nitride Waveguide Coil for Optical Gyroscopes **2016**, | | 11 |

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| 185 | Frequency Modulate Laser Based Interferometric Optical Gyroscope **2016**, | | 1 |
| 184 | Ultra-low loss stitching for large-area waveguide based delay-line gyroscopes **2016**, | | 2 |
| 183 | Frequency modulated lasers for interferometric optical gyroscopes. *Optics Letters*, **2016**, 41, 1773-6 | 3 | 14 |
| 182 | Monolithically integrated dual-channel coherent receiver with widely tunable local oscillator for 100 Gbps dual-polarization quadrature phase shift keying applications. *Optics Letters*, **2015**, 40, 4313-6 | 3 | 1 |
| 181 | Compact Programmable Monolithically Integrated 10-Stage Multi-Channel WDM Dispersion Equalizer on Low-Loss Silicon Nitride Planar Waveguide Platform **2015**, | | 2 |
| 180 | Frequency modulated laser optical gyroscope **2015**, | | 2 |
| 179 | High Temperature Operation of an Integrated Erbium-Doped DBR Laser on an Ultra-Low-Loss Si3N4 Platform **2015**, | | 3 |
| 178 | Erbium-doped waveguide DBR and DFB laser arrays integrated within an ultra-low-loss Si3N4 platform. *Optics Express*, **2014**, 22, 10655-60 | 3.3 | 48 |
| 177 | Design of integrated hybrid silicon waveguide optical gyroscope. *Optics Express*, **2014**, 22, 24988-93 | 3.3 | 46 |
| 176 | Design and Testing of a Graphite Foam-Based Supercooler for High-Heat-Flux Cooling in Optoelectronic Packages. *Heat Transfer Engineering*, **2014**, 35, 913-923 | 1.7 | 2 |
| 175 | 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 |
| 174 | Ultralow-Loss Planar $hbox{Si}_{3}hbox{N}_{4}$ Waveguide Polarizers. *IEEE Photonics Journal*, **2013**, 5, 6600207-6600207 | 1.8 | 29 |
| 173 | Optical Interconnect for 3D Integration of Ultra-Low Loss Planar Lightwave Circuits **2013**, | | 4 |
| 172 | Arrayed narrow linewidth erbium-doped waveguide-distributed feedback lasers on an ultra-low-loss silicon-nitride platform. *Optics Letters*, **2013**, 38, 4825-8 | 3 | 48 |
| 171 | Sidewall gratings in ultra-low-loss Si3N4 planar waveguides. *Optics Express*, **2013**, 21, 1181-8 | 3.3 | 20 |
| 170 | Integrated hybrid Si/InGaAs 50 Gb/s DQPSK receiver. *Optics Express*, **2012**, 20, 19726-34 | 3.3 | 18 |
| 169 | Multilayer Platform for Ultra-Low-Loss Waveguide Applications. *IEEE Photonics Technology Letters*, **2012**, 24, 876-878 | 2.2 | 27 |
| 168 | Introduction to the special issue on the U.S. Response to the Fukushima accident. Introduction. *Health Physics*, **2012**, 102, 482-4 | 2.3 | 9 |

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| 167 | A Comparison of Approaches for Ultra-Low-Loss Waveguides **2012**, | | 2 |
| 166 | Ultra-low-loss high-aspect-ratio Si3N4 waveguides. *Optics Express*, **2011**, 19, 3163-74 | 3.3 | 273 |
| 165 | Cascadability properties of MZI-SOA-based all-optical 3R regenerators for RZ-DPSK signals. *Optics Express*, **2011**, 19, 9330-5 | 3.3 | 11 |
| 164 | Ultra-high quality factor planar Si3N4 ring resonators on Si substrates. *Optics Express*, **2011**, 19, 13551-6 | 3.3 | 96 |
| 163 | Low-loss Si3N4 arrayed-waveguide grating (de)multiplexer using nano-core optical waveguides. *Optics Express*, **2011**, 19, 14130-6 | 3.3 | 104 |
| 162 | Planar waveguides with less than 0.1 dB/m propagation loss fabricated with wafer bonding. *Optics Express*, **2011**, 19, 24090-101 | 3.3 | 247 |
| 161 | Monolithically integrated dual-quadrature receiver on InP with 30 nm tunable local oscillator. *Optics Express*, **2011**, 19, B716-21 | 3.3 | 9 |
| 160 | Integrated Photonics for Low-Power Packet Networking. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 458-471 | 3.8 | 31 |
| 159 | 25 Gbaud DQPSK receiver integrated on the hybrid silicon platform **2011**, | | 1 |
| 158 | Ultra-low-loss Single-mode Si3N4 Waveguides with 0.7 dB/m Propagation Loss **2011**, | | 8 |
| 157 | **2011**, | | 1 |
| 156 | All-optical regeneration of 25-Gb/s BPSK/DPSK signals with integrated MZI-SOA wavelength converter **2011**, | | 2 |
| 155 | Integrated recirculating optical hybrid silicon buffers **2011**, | | 5 |
| 154 | Monolithically Integrated Dual-Quadrature Coherent Receiver on InP with 30 nm Tunable SG-DBR Local Oscillator **2011**, | | 3 |
| 153 | Ultra-low loss silica-based waveguides with millimeter bend radius **2010**, | | 6 |
| 152 | Ultra-low loss Si3N4 waveguides with low nonlinearity and high power handling capability. *Optics Express*, **2010**, 18, 23562-8 | 3.3 | 43 |
| 151 | An 8$,times,$8 InP Monolithic Tunable Optical Router (MOTOR) Packet Forwarding Chip. *Journal of Lightwave Technology*, **2010**, 28, 641-650 | 4 | 76 |
| 150 | . *IEEE/ACM Transactions on Networking*, **2010**, 18, 1599-1609 | 3.8 | 33 |

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|---|---|---|---|
| 149 | Polarization characteristics of low-loss nano-core buried optical waveguides and directional couplers **2010**, | | 4 |
| 148 | Integrated recirculating optical buffers **2010**, | | 1 |
| 147 | Ultra-Long Cavity Hybrid Silicon Mode-locked Laser Diode Operating at 930 MHz **2010**, | | 5 |
| 146 | Synchronous Optical Packet Buffers. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 1413-1421 | 3.8 | 2 |
| 145 | Large-Scale Photonic Integration for Advanced All-Optical Routing Functions **2010**, | | 1 |
| 144 | Asynchronous 2□ Optical Packet Synchronization, Buffering, and Forwarding **2010**, | | 1 |
| 143 | Mode locked and distributed feedback silicon evanescent lasers. *Laser and Photonics Reviews*, **2009**, 3, 355-369 | 8.3 | 14 |
| 142 | Photonic integrated circuit optical buffer for packet-switched networks. *Optics Express*, **2009**, 17, 6629-35 | 3.3 | 37 |
| 141 | Novel application of quantum well intermixing implant buffer layer to enable high-density photonic integrated circuits in InP **2009**, | | 1 |
| 140 | Demonstration of Contention Resolution for Labeled Packets at 40 Gb/s Using Autonomous Optical Buffers **2009**, | | 4 |
| 139 | Synchronously Loaded Optical Packet Buffer. *IEEE Photonics Technology Letters*, **2008**, 20, 1757-1759 | 2.2 | 5 |
| 138 | Variable Length Optical Packet Synchronizer. *IEEE Photonics Technology Letters*, **2008**, 20, 1252-1254 | 2.2 | 11 |
| 137 | A racetrack mode-locked silicon evanescent laser. *Optics Express*, **2008**, 16, 1393-8 | 3.3 | 44 |
| 136 | SOA gate array recirculating buffer with fiber delay loop. *Optics Express*, **2008**, 16, 8451-6 | 3.3 | 34 |
| 135 | An integrated recirculating optical buffer. *Optics Express*, **2008**, 16, 11124-31 | 3.3 | 26 |
| 134 | Demonstration of contention resolution between two 40 Gb/s packet streams using multiple photonic chip optical buffers **2008**, | | 1 |
| 133 | Recent progress on LASOR optical router and related integrated technologies **2008**, | | 5 |
| 132 | Photonic integrated circuit switch matrix and waveguide delay lines for optical packet synchronization **2008**, | | 3 |

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| 131 | Multiple wavelength generation from a mode locked silicon evanescent laser **2008**, | | 3 |
| 130 | SOA Gate Array Recirculating Buffer for Optical Packet Switching **2008**, | | 11 |
| 129 | All-Optical Clock Recovery with Retiming and Reshaping Using a Silicon Evanescent Mode Locked Ring Laser **2008**, | | 4 |
| 128 | 40 Gb/s Autonomous Optical Packet Synchronizer **2008**, | | 5 |
| 127 | A comparison of optical buffering technologies. *Optical Switching and Networking*, **2008**, 5, 10-18 | 1.6 | 72 |
| 126 | Photonic Chip Recirculating Buffer for Optical Packet Switching **2008**, | | 2 |
| 125 | Analysis of Digital System Performance in EAM-Based Photocurrent Driven Wavelength Converter. *IEEE Photonics Technology Letters*, **2007**, 19, 215-217 | 2.2 | 1 |
| 124 | Monolithic Mode-Locked Laser and Optical Amplifier for Regenerative Pulsed Optical Clock Recovery. *IEEE Photonics Technology Letters*, **2007**, 19, 641-643 | 2.2 | 10 |
| 123 | Design and Operation of a Monolithically Integrated Two-Stage Tunable All-Optical Wavelength Converter. *IEEE Photonics Technology Letters*, **2007**, 19, 1248-1250 | 2.2 | 3 |
| 122 | A Monolithic All-Optical Push–Pull Wavelength Converter. *IEEE Photonics Technology Letters*, **2007**, 19, 1768-1770 | 2.2 | 3 |
| 121 | Monolithic Wavelength Converters for High-Speed Packet-Switched Optical Networks. *IEEE Journal of Selected Topics in Quantum Electronics*, **2007**, 13, 49-57 | 3.8 | 34 |
| 120 | Introduction to the Issue on High-Speed Photonic Integrated Circuits. *IEEE Journal of Selected Topics in Quantum Electronics*, **2007**, 13, 1-2 | 3.8 | 1 |
| 119 | 35 Gb/s Monolithic All-Optical Clock Recovery Pulse Source **2007**, | | 2 |
| 118 | 40-Gb/s Polarization Multiplexed RZ-ASK-DPSK Signal Wavelength Conversion using a 32-cm Bismuth-Oxide Highly Nonlinear Fiber **2007**, | | 4 |
| 117 | Tunable DPSK Wavelength Converter Using an SOA-MZI Monolithically Integrated with a Sampled-Grating Distributed Bragg Reflector **2007**, | | 1 |
| 116 | Dispersive phase response in optical waveguide-resonator system. *Applied Physics Letters*, **2007**, 90, 191108 | 3.8 | 8 |
| 115 | A 40 Gb/s Asynchronous Optical Packet Buffer Based on an SOA Gate Matrix for Contention Resolution **2007**, | | 4 |
| 114 | Monolithically integrated widely tunable 40Gbits/s wavelength converter with optical label modulation function. *Journal of Optical Networking*, **2007**, 6, 1014 | | 1 |

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| 113 | . *Journal of Lightwave Technology*, **2007**, 25, 3748-3759 | 4 | 0 |
| 112 | Dual-Pump Four-Wave Mixing in Bismuth-Oxide Highly Nonlinear Fiber for Wide-Band DPSK Wavelength Conversion **2007**, | | 5 |
| 111 | . *Computer*, **2006**, 39, 102-105 | 1.6 | 54 |
| 110 | Single-chip, widely-tunable 10 Gbit/s photocurrent-driven wavelength converter incorporating a monolithically integrated laser transmitter and optical receiver. *Electronics Letters*, **2006**, 42, 657 | 1.1 | 9 |
| 109 | Broadband return-to-zero wavelength conversion and signal regeneration using a monolithically integrated, photocurrent-driven wavelength converter. *Electronics Letters*, **2006**, 42, 1479 | 1.1 | 1 |
| 108 | Widely tunable monolithically integrated 40 Gbit/s wavelength converter with label modulation function. *Electronics Letters*, **2006**, 42, 1241 | 1.1 | 2 |
| 107 | Demonstration of 40 Gbit□ optical packet synchronisation using fibre Bragg gratings and fast-tunable wavelength converters. *Electronics Letters*, **2006**, 42, 367 | 1.1 | 1 |
| 106 | Optical Buffering and Switching for Optical Packet Switching **2006**, | | 6 |
| 105 | Optical 2R and 3R Signal Regeneration in Combination with Dynamic Wavelength Switching Using a Monolithically Integrated, Widely Tunable Photocurrent Driven Wavelength Converter **2006**, | | 4 |
| 104 | All-optical packet compression of variable length packets from 40 to 1500 B using a gated fiber loop. *IEEE Photonics Technology Letters*, **2006**, 18, 322-324 | 2.2 | 4 |
| 103 | Performance optimization of an InP-based widely tunable all-optical wavelength converter operating at 40 Gb/s. *IEEE Photonics Technology Letters*, **2006**, 18, 577-579 | 2.2 | 12 |
| 102 | Compact broadband photonic crystal filters with reduced back-reflections for monolithic InP-based photonic integrated circuits. *IEEE Photonics Technology Letters*, **2006**, 18, 1155-1157 | 2.2 | 5 |
| 101 | A single regrowth integration platform for photonic circuits incorporating tunable SGDBR lasers and quantum-well EAMs. *IEEE Photonics Technology Letters*, **2006**, 18, 1630-1632 | 2.2 | 16 |
| 100 | All-optical payload envelope detection for variable length 40-gb/s optically labeled packets. *IEEE Photonics Technology Letters*, **2006**, 18, 1846-1848 | 2.2 | 6 |
| 99 | Broadband Notch Filters Based on Quasi-2-D Photonic Crystal Waveguides for InP-Based Monolithic Photonic-Integrated Circuits. *IEEE Journal of Selected Topics in Quantum Electronics*, **2006**, 12, 1164-1174 | 3.8 | 8 |
| 98 | Integrated optical payload envelope detection and label recovery device for optical packet switching networks. *Optics Express*, **2006**, 14, 5073-8 | 3.3 | 2 |
| 97 | Extinction ratio regeneration, signal re-amplification (2R), and broadband wavelength switching using a monolithically integrated photocurrent driven wavelength converter. *Optics Express*, **2006**, 14, 11348-53 | 3.3 | 2 |
| 96 | Payload-envelope detection and label-detection integrated photonic circuit for asynchronous variable-length optical-packet switching with 40-gb/s RZ payloads and 10-gb/s NRZ labels. *Journal of Lightwave Technology*, **2006**, 24, 3409-3417 | 4 | 8 |

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| 95 | Field modulated wavelength converters **2006**, 6124, 364 | | 1 |
| 94 | 160 Gb/s variable length packet/10 Gb/s-label all-optical label switching with wavelength conversion and unicast/multicast operation. *Journal of Lightwave Technology*, **2005**, 23, 211-218 | 4 | 23 |
| 93 | Raman-enhanced regenerative ultrafast all-optical fiber XPM wavelength converter. *Journal of Lightwave Technology*, **2005**, 23, 1105-1115 | 4 | 28 |
| 92 | Widely tunable monolithically integrated all-optical wavelength converters in InP. *Journal of Lightwave Technology*, **2005**, 23, 1350-1362 | 4 | 45 |
| 91 | Detailed characterization of slow and dispersive propagation near a mini-stop-band of an InP photonic crystal waveguide. *Optics Express*, **2005**, 13, 4931-8 | 3.3 | 12 |
| 90 | Compact optical 3R regeneration using a traveling-wave electroabsorption modulator. *IEEE Photonics Technology Letters*, **2005**, 17, 486-488 | 2.2 | 7 |
| 89 | 40-GHz dual-mode-locked widely tunable sampled-grating DBR laser. *IEEE Photonics Technology Letters*, **2005**, 17, 285-287 | 2.2 | 12 |
| 88 | Optical label swapping using payload envelope detection circuits. *IEEE Photonics Technology Letters* , **2005**, 17, 1537-1539 | 2.2 | 8 |
| 87 | Quantum-well-intermixed monolithically integrated widely tunable all-optical wavelength converter operating at 10 Gb/s. *IEEE Photonics Technology Letters*, **2005**, 17, 1689-1691 | 2.2 | 4 |
| 86 | Accurate measurement of high extinction ratios of ultrafast pulsed sources. *IEEE Photonics Technology Letters*, **2005**, 17, 1917-1919 | 2.2 | 1 |
| 85 | Transmission measurement of tapered single-line defect photonic crystal waveguides. *IEEE Photonics Technology Letters*, **2005**, 17, 2092-2094 | 2.2 | 3 |
| 84 | Cross-phase modulation efficiency in offset quantum-well and centered quantum-well semiconductor optical amplifiers. *IEEE Photonics Technology Letters*, **2005**, 17, 2364-2366 | 2.2 | 3 |
| 83 | Optical clock recovery circuits using traveling-wave electroabsorption modulator-based ring oscillators for 3R regeneration. *IEEE Journal of Selected Topics in Quantum Electronics*, **2005**, 11, 329-337 | 3.8 | 10 |
| 82 | Tunable Laser Diodes and Related Optical Sources **2005**, | | 90 |
| 81 | Fabrication of InP-based two-dimensional photonic crystal membrane. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2004**, 22, 70 | | 16 |
| 80 | InP photonic crystal membrane structures: Fabrication accuracy and optical performance. *Applied Physics Letters*, **2004**, 85, 522-524 | 3.4 | |
| 79 | All-optical contention resolution with wavelength conversion for asynchronous variable-length 40 Gb/s optical packets. *IEEE Photonics Technology Letters*, **2004**, 16, 689-691 | 2.2 | 19 |
| 78 | Photocurrent-assisted wavelength (PAW) conversion with electrical monitoring capability using a traveling-wave electroabsorption modulator. *IEEE Photonics Technology Letters*, **2004**, 16, 530-532 | 2.2 | 6 |

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| 77 | Simultaneous 160-Gb/s demultiplexing and clock recovery by utilizing microwave harmonic frequencies in a traveling-wave electroabsorption modulator. *IEEE Photonics Technology Letters*, **2004**, 16, 608-610 | 2.2 | 10 |
| 76 | 40-Gb/s optical clock recovery using a compact traveling-wave electroabsorption modulator-based ring oscillator. *IEEE Photonics Technology Letters*, **2004**, 16, 1376-1378 | 2.2 | 20 |
| 75 | 2.5-Gb/s error-free wavelength conversion using a monolithically integrated widely tunable SGDBR-SOA-MZ transmitter and integrated photodetector. *IEEE Photonics Technology Letters*, **2004** , 16, 1531-1533 | 2.2 | 7 |
| 74 | Compact 160-Gb/s add-drop multiplexer with a 40-Gb/s base rate using electroabsorption modulators. *IEEE Photonics Technology Letters*, **2004**, 16, 1564-1566 | 2.2 | 23 |
| 73 | Single-chip wavelength conversion using a photocurrent-driven EAM integrated with a widely tunable sampled-grating DBR laser. *IEEE Photonics Technology Letters*, **2004**, 16, 2093-2095 | 2.2 | 11 |
| 72 | Design and performance of a monolithically integrated widely tunable all-optical wavelength converter with independent phase control. *IEEE Photonics Technology Letters*, **2004**, 16, 2299-2301 | 2.2 | 14 |
| 71 | All-optical 160-Gb/s phase reconstructing wavelength conversion using cross-phase modulation (XPM) in dispersion-shifted fiber. *IEEE Photonics Technology Letters*, **2004**, 16, 2520-2522 | 2.2 | 16 |
| 70 | 40-Gb/s optical packet clock recovery with simultaneous reshaping using a traveling-wave electroabsorption modulator-based ring oscillator. *IEEE Photonics Technology Letters*, **2004**, 16, 2640-2642 | 2.2 | 11 |
| 69 | High-speed optical time-division-multiplexed/WDM networks and their network elements based on regenerative all-optical ultrafast wavelength converters. *Journal of Optical Networking*, **2004**, 3, 100 | | 12 |
| 68 | . *Journal of Lightwave Technology*, **2004**, 22, 294-304 | 4 | 246 |
| 67 | Analysis of an edge router for span-constrained optical burst switched (OBS) networks. *Journal of Lightwave Technology*, **2004**, 22, 2693-2705 | 4 | 21 |
| 66 | Monolithically integrated InP-based tunable wavelength conversion **2004**, 5349, 176 | | 2 |
| 65 | Low power penalty 80 to 10 Gbit/s OTDM demultiplexer using standing-wave enhanced electroabsorption modulator with reduced driving voltage. *Electronics Letters*, **2003**, 39, 94 | 1.1 | 4 |
| 64 | Three-dimensional MEMS photonic cross-connect switch design and performance. *IEEE Journal of Selected Topics in Quantum Electronics*, **2003**, 9, 571-578 | 3.8 | 54 |
| 63 | Guest editorial high-performance electronic switches/routers for high-speed internet. *IEEE Journal on Selected Areas in Communications*, **2003**, 21, 481-485 | 14.2 | 1 |
| 62 | Guest editorial high-performance optical switches/routers for high-speed internet. *IEEE Journal on Selected Areas in Communications*, **2003**, 21, 1013-1017 | 14.2 | 1 |
| 61 | Analog performance of an ultrafast sampled-time all-optical fiber XPM wavelength converter. *IEEE Photonics Technology Letters*, **2003**, 15, 560-562 | 2.2 | 3 |
| 60 | Multimode interference-based two-stage 1 /spl times/ 2 light splitter for compact photonic integrated circuits. *IEEE Photonics Technology Letters*, **2003**, 15, 706-708 | 2.2 | 11 |

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| 59 | Monolithically integrated Mach-Zehnder interferometer wavelength converter and widely tunable laser in InP. *IEEE Photonics Technology Letters*, **2003**, 15, 1117-1119 | 2.2 | 44 |
| 58 | Regenerative 80-Gb/s fiber XPM wavelength converter using a hybrid Raman/EDFA gain-enhanced configuration. *IEEE Photonics Technology Letters*, **2003**, 15, 1416-1418 | 2.2 | 13 |
| 57 | Compact 160-Gb/s demultiplexer using a single-stage electrically gated electroabsorption modulator. *IEEE Photonics Technology Letters*, **2003**, 15, 1458-1460 | 2.2 | 8 |
| 56 | Extinction ratio improvement by strong external light injection and SPM in an SOA for OTDM pulse source using a DBR laser diode. *IEEE Photonics Technology Letters*, **2003**, 15, 1419-1421 | 2.2 | 7 |
| 55 | 40-GHz optical pulse generation using strong external light injection of a gain-switched high-speed DBR laser diode. *IEEE Photonics Technology Letters*, **2003**, 15, 1767-1769 | 2.2 | 1 |
| 54 | Directional coupler wavelength filters based on waveguides exhibiting electromagnetically induced transparency. *IEEE Journal of Quantum Electronics*, **2003**, 39, 608-613 | 2 | 24 |
| 53 | Optical signal processing for optical packet switching networks **2003**, 41, S23-S29 | | 60 |
| 52 | Single-MMIC four-channel transmitter module for multichannel RF/optical subcarrier multiplexed communications applications. *IEEE Transactions on Microwave Theory and Techniques*, **2002**, 50, 1173-1179 | 4.1 | 1 |
| 51 | All-Optical Label Swapping for the Future Internet. *Optics and Photonics News*, **2002**, 13, 22 | 1.9 | 1 |
| 50 | 10-Gb/s agile wavelength conversion with nanosecond tuning times using a multisection widely tunable laser. *Journal of Lightwave Technology*, **2002**, 20, 712-717 | 4 | 16 |
| 49 | Pulse restoration by filtering of self-phase modulation broadened optical spectrum. *Journal of Lightwave Technology*, **2002**, 20, 1113-1117 | 4 | 20 |
| 48 | Pulsewidth distortion monitoring in a 40-Gb/s optical system affected by PMD. *IEEE Photonics Technology Letters*, **2002**, 14, 307-309 | 2.2 | 15 |
| 47 | Optical mode converter integration with InP-InGaAsP active and passive waveguides using a single regrowth process. *IEEE Photonics Technology Letters*, **2002**, 14, 1249-1251 | 2.2 | 11 |
| 46 | Simultaneous all-optical demultiplexing of a 40-Gb/s signal to 4 x 10 Gb/s WDM channels using an ultrafast fiber wavelength converter. *IEEE Photonics Technology Letters*, **2002**, 14, 1725-1727 | 2.2 | 7 |
| 45 | Pulse extinction ratio improvement using SPM in an SOA for OTDM systems applications. *IEEE Photonics Technology Letters*, **2002**, 14, 245-247 | 2.2 | 21 |
| 44 | Routing packets with light. *Scientific American*, **2001**, 284, 96-9 | 0.5 | 15 |
| 43 | All-optical demultiplexing using fiber cross-phase modulation (XPM) and optical filtering. *IEEE Photonics Technology Letters*, **2001**, 13, 875-877 | 2.2 | 35 |
| 42 | WDM to OTDM multiplexing using an ultrafast all-optical wavelength converter. *IEEE Photonics Technology Letters*, **2001**, 13, 1005-1007 | 2.2 | 25 |

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|---|---|---|---|
| 41 | Wavelength Multicasting Using an Ultra High-Speed All-Optical Wavelength Converter **2001**, | | 3 |
| 40 | Fully monolithic four channel transmitter IC for RF/optical subcarrier multiplexed communications **2000**, 10, 282-284 | | |
| 39 | Optical dispersion monitoring technique using double sideband subcarriers. *IEEE Photonics Technology Letters*, **2000**, 12, 900-902 | 2.2 | 52 |
| 38 | Wavelength routing of 40 Gbit/s packets with 2.5 Gbit/s header erasure/rewriting using all-fibre wavelength converter. *Electronics Letters*, **2000**, 36, 345 | 1.1 | 27 |
| 37 | The /spl lambda/-scheduler: A multiwavelength scheduling switch. *Journal of Lightwave Technology*, **2000**, 18, 1049-1063 | 4 | 7 |
| 36 | Detailed transfer matrix method-based dynamic model for multisection widely tunable GCSR lasers. *Journal of Lightwave Technology*, **2000**, 18, 1274-1283 | 4 | 35 |
| 35 | Optical performance monitoring in reconfigurable WDM optical networks using subcarrier multiplexing. *Journal of Lightwave Technology*, **2000**, 18, 1639-1648 | 4 | 61 |
| 34 | All-optical label swapping networks and technologies. *Journal of Lightwave Technology*, **2000**, 18, 2058-2075 | 4 | 252 |
| 33 | A transfer function approach to the small-signal response of saturated semiconductor optical amplifiers. *Journal of Lightwave Technology*, **2000**, 18, 2151-2157 | 4 | 8 |
| 32 | Accelerated aging studies of multi-section tunable GCSR lasers for dense WDM applications. *Journal of Lightwave Technology*, **2000**, 18, 2196-2199 | 4 | 5 |
| 31 | Wavelength dependence and power requirements of a wavelength converter based on XPM in a dispersion-shifted optical fiber. *IEEE Photonics Technology Letters*, **2000**, 12, 522-524 | 2.2 | 27 |
| 30 | All-optical header erasure and penalty-free rewriting in a fiber-based high-speed wavelength converter. *IEEE Photonics Technology Letters*, **2000**, 12, 663-665 | 2.2 | 11 |
| 29 | A simple and robust 40-Gb/s wavelength converter using fiber cross-phase modulation and optical filtering. *IEEE Photonics Technology Letters*, **2000**, 12, 846-848 | 2.2 | 108 |
| 28 | Optical SCM data extraction using a fiber-loop mirror for WDM network systems. *IEEE Photonics Technology Letters*, **2000**, 12, 897-899 | 2.2 | 39 |
| 27 | An optical communication design laboratory. *IEEE Transactions on Education*, **1999**, 42, 138-143 | 2.1 | 4 |
| 26 | Remote provisioning of a reconfigurable WDM multichannel add/drop multiplexer. *IEEE Photonics Technology Letters*, **1999**, 11, 1060-1062 | 2.2 | 3 |
| 25 | All-optical label swapping with wavelength conversion for WDM-IP networks with subcarrier multiplexed addressing. *IEEE Photonics Technology Letters*, **1999**, 11, 1497-1499 | 2.2 | 71 |
| 24 | OPERA: an optical packet experimental routing architecture with label swapping capability. *Journal of Lightwave Technology*, **1998**, 16, 2135-2145 | 4 | 78 |

| | | | |
|---|---|---|---|
| 23 | MOSAIC: a multiwavelength optical subcarrier multiplexed controlled network. *IEEE Journal on Selected Areas in Communications*, **1998**, 16, 1270-1285 | 14.2 | 10 |
| 22 | State of the art: widely tunable lasers **1997**, 3001, 382 | | 4 |
| 21 | Fiber-optic links supporting baseband data and subcarrier-multiplexed control channels and the impact of MMIC photonic/microwave interfaces. *IEEE Transactions on Microwave Theory and Techniques*, **1997**, 45, 1443-1452 | 4.1 | 27 |
| 20 | All-optical updating of subcarrier encoded packet headers with simultaneous wavelength conversion of baseband payload in semiconductor optical amplifiers. *IEEE Photonics Technology Letters*, **1997**, 9, 827-829 | 2.2 | 23 |
| 19 | A novel transmitter architecture for combined baseband data and subcarrier-multiplexed control links using differential Mach-Zehnder external modulators. *IEEE Photonics Technology Letters*, **1997**, 9, 1397-1399 | 2.2 | 14 |
| 18 | Physical Limitations to Scalability of WDM All-Optical Networks. *Optics and Photonics News*, **1997**, 8, 16 | 1.9 | 1 |
| 17 | Coherent crosstalk in multichannel FSK/DD lightwave systems due to four-wave mixing in semiconductor optical amplifiers. *IEEE Photonics Technology Letters*, **1996**, 8, 133-135 | 2.2 | 4 |
| 16 | BER floors due to heterodyne coherent crosstalk in space photonic switches for WDM networks. *IEEE Photonics Technology Letters*, **1996**, 8, 284-286 | 2.2 | 22 |
| 15 | Experimental demonstration of an all-optical routing node for multihop wavelength routed networks. *IEEE Photonics Technology Letters*, **1996**, 8, 1391-1393 | 2.2 | 14 |
| 14 | Influence of gain saturation, gain asymmetry, and pump/probe depletion on wavelength conversion efficiency of FWM in semiconductor optical amplifiers. *IEEE Journal of Quantum Electronics*, **1996**, 32, 1810-1816 | 2 | 25 |
| 13 | . *Proceedings of the IEEE*, **1994**, 82, 1650-1667 | 14.3 | 130 |
| 12 | . *IEEE Photonics Technology Letters*, **1994**, 6, 457-460 | 2.2 | 21 |
| 11 | Multiwavelength information processing in gigabit photonic switching networks **1992**, 1787, 43 | | 2 |
| 10 | . *IEEE Photonics Technology Letters*, **1992**, 4, 169-173 | 2.2 | 28 |
| 9 | . *Ieee Lts*, **1992**, 3, 12-19 | | 4 |
| 8 | Laser fabricated GaAs waveguiding structures. *Applied Physics Letters*, **1989**, 54, 1839-1841 | 3.4 | 25 |
| 7 | Self-Routing Photonic Switching Demonstration With Optical Control. *Optical Engineering*, **1987**, 26, 265473 | 1.1 | 19 |
| 6 | 12.5 Gbit/s fibre-optic network using all-optical processing. *Electronics Letters*, **1987**, 23, 629 | 1.1 | 29 |

| | | | |
|---|---|---|---|
| 5 | Performance of an 8⊟ LiNbO3switch matrix as a gigahertz self-routing switching node. *Electronics Letters*, **1987**, 23, 1359 | 1.1 | 13 |
| 4 | Photonic switch with optically self-routed bit switching **1987**, 25, 50-55 | | 25 |
| 3 | Picosecond microwave pulse generation. *Applied Physics Letters*, **1981**, 38, 470-472 | 3.4 | 78 |
| 2 | WDM optical IP tag switching with packet-rate wavelength conversion and subcarrier multiplexed addressing | | 10 |
| 1 | Roadmap on integrated quantum photonics. *JPhys Photonics*, | 2.5 | 22 |