

# Juerg Leuthold

## List of Publications by Year in Descending Order

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

480  
papers

20,955  
citations

60  
h-index

137  
g-index

686  
ext. papers

26,466  
ext. citations

5.7  
avg, IF

6.64  
L-index

#	Paper	IF	Citations
480	Transparent Optical-THz-Optical Link at 240/192 Gbit/s over 5/115 m Enabled by Plasmonics. <i>Journal of Lightwave Technology</i> , <b>2022</b> , 1-1	4	1
479	Optical Memristive Switches. <i>Kluwer International Series in Electronic Materials: Science and Technology</i> , <b>2022</b> , 355-376		
478	Waveguide coupled III-V photodiodes monolithically integrated on Si.. <i>Nature Communications</i> , <b>2022</b> , 13, 909	17.4	3
477	Atomic scale memristive photon source.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 78	16.7	1
476	Reducing Training Time of Deep Learning Based Digital Backpropagation by Stacking. <i>IEEE Photonics Technology Letters</i> , <b>2022</b> , 34, 387-390	2.2	
475	Ultrahigh-Net-Bitrate 363 Gbit/s PAM-8 and 279 Gbit/s Polybinary Optical Transmission Using Plasmonic Mach-Zehnder Modulator. <i>Journal of Lightwave Technology</i> , <b>2022</b> , 1-1	4	1
474	High-speed CMOS-compatible III-V on Si membrane photodetectors. <i>Optics Express</i> , <b>2021</b> , 29, 509	3.3	12
473	Butt-Coupled III-V Photodetector Monolithically Integrated on SOI with data reception at 50 Gbps OOK <b>2021</b> ,		1
472	Plasmonic-MZM-based Short-Reach Transmission up to 10 km Supporting >304 GBd Polybinary or 432 Gbit/s PAM-8 Signaling <b>2021</b> ,		4
471	Plasmonic Racetrack Modulator Transmitting 220 Gbit/s OOK and 408 Gbit/s 8PAM <b>2021</b> ,		3
470	Photonic response and temperature evolution of SiO/TiO multilayers. <i>Journal of Materials Science</i> , <b>2021</b> , 56, 18440-18452	4.3	
469	On-demand emission from Tamm plasmons. <i>Nature Materials</i> , <b>2021</b> , 20, 1595-1596	27	1
468	Transparent Optical-THz-Optical Link Transmission over 5/115 m at 240/190 Gbit/s Enabled by Plasmonics <b>2021</b> ,		2
467	Plasmonic modulators and photodetectors for communications <b>2021</b> ,		2
466	Plasmonics High-speed photonics for co-integration with electronics. <i>Japanese Journal of Applied Physics</i> , <b>2021</b> , 60, SB0806	1.4	5
465	Broadband Metallic Fiber-to-Chip Couplers and a Low-Complexity Integrated Plasmonic Platform. <i>Nano Letters</i> , <b>2021</b> , 21, 4539-4545	11.5	3
464	Coupled Electromagnetic and Hydrodynamic Modeling for Semiconductors Using DGTD. <i>IEEE Transactions on Magnetics</i> , <b>2021</b> , 57, 1-5	2	2

463	High-Speed Graphene Photodetection: 300 GHz is not the Limit <b>2021</b> ,		2
462	Threshold Switching Enabled Sub-pW-Leakage, Hysteresis-Free Circuits. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 3112-3118	2.9	1
461	Design and synthesis of chromophores with enhanced electro-optic activities in both bulk and plasmonic-organic hybrid devices. <i>Materials Horizons</i> , <b>2021</b> ,	14.4	3
460	100-GBd Waveguide Bragg Grating Modulator in Thin-Film Lithium Niobate. <i>IEEE Photonics Technology Letters</i> , <b>2021</b> , 33, 85-88	2.2	13
459	Analog Nanoscale Electro-Optical Synapses for Neuromorphic Computing Applications. <i>ACS Nano</i> , <b>2021</b> , 15, 14776-14785	16.7	9
458	Broadband, highly reflective thermal protection systems, exploiting photonic additives. <i>International Journal of Thermal Sciences</i> , <b>2021</b> , 170, 107146	4.1	1
457	Opto-electronic memristors: Prospects and challenges in neuromorphic computing. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 230502	3.4	9
456	A monolithic bipolar CMOS electronic-plasmonic high-speed transmitter. <i>Nature Electronics</i> , <b>2020</b> , 3, 338-345	28.4	29
455	Ultra-High-Speed 2:1 Digital Selector and Plasmonic Modulator IM/DD Transmitter Operating at 222 GBaud for Intra-Datacenter Applications. <i>Journal of Lightwave Technology</i> , <b>2020</b> , 38, 2734-2739	4	21
454	Waveguide-integrated van der Waals heterostructure photodetector at telecom wavelengths with high speed and high responsivity. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 118-124	28.7	100
453	Compact Mid-Infrared Gas Sensing Enabled by an All-Metamaterial Design. <i>Nano Letters</i> , <b>2020</b> , 20, 4169-4176	41.76	32
452	100 GBd IM/DD transmission over 14 km SMF in the C-band enabled by a plasmonic SSB MZM. <i>Optics Express</i> , <b>2020</b> , 28, 8601-8608	3.3	6
451	Deep learning based digital backpropagation demonstrating SNR gain at low complexity in a 1200 km transmission link. <i>Optics Express</i> , <b>2020</b> , 28, 29318-29334	3.3	18
450	Coherent few mode demultiplexer realized as a 2D grating coupler array in silicon. <i>Optics Express</i> , <b>2020</b> , 28, 36009-36019	3.3	8
449	High-Speed Plasmonic Modulator for Simultaneous C- and O-Band Modulation with Simplified Fabrication <b>2020</b> ,		1
448	Deep Learning Based Digital Back Propagation with Polarization State Rotation & Phase Noise Invariance <b>2020</b> ,		8
447	Electro-optic interface for ultrasensitive intracavity electric field measurements at microwave and terahertz frequencies. <i>Optica</i> , <b>2020</b> , 7, 498	8.6	9
446	Localization of Micro Unmanned Aerial Vehicles using Digital Audio Broadcast Signals <b>2020</b> ,		1

445	Low-Power Data Center Transponders Enabled by Micrometer-scale Plasmonic Modulators <b>2020</b> ,		1
444	Broadband, High-Temperature Stable Reflector for Aerospace Thermal Radiation Protection. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 9925-9934	9.5	8
443	High-Resolution On-Demand Nanostructures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900688	1.6	1
442	Design of CMOS-compatible metal-insulator-metal metasurfaces via extended equivalent-circuit analysis. <i>Scientific Reports</i> , <b>2020</b> , 10, 17941	4.9	2
441	Electromagnetic and Semiconductor Modeling of Scanning Microwave Microscopy Setups. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2020</b> , 5, 209-216	1.5	3
440	Advanced Modelling Techniques for Resonator Based Dielectric and Semiconductor Materials Characterization. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 8533	2.6	1
439	Large impact of strain on the electro-optic effect in (Ba, Sr)TiO <sub>3</sub> thin films: Experiment and theoretical comparison. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 092901	3.4	15
438	Radiative transfer in porous carbon-fiber materials for thermal protection systems. <i>International Journal of Heat and Mass Transfer</i> , <b>2019</b> , 144, 118582	4.9	10
437	500 GHz plasmonic Mach-Zehnder modulator enabling sub-THz microwave photonics. <i>APL Photonics</i> , <b>2019</b> , 4, 056106	5.2	71
436	Plasmonic IQ modulators with attojoule per bit electrical energy consumption. <i>Nature Communications</i> , <b>2019</b> , 10, 1694	17.4	53
435	400G Probabilistic Shaped PDM-64QAM Synchronization in the Frequency Domain. <i>IEEE Photonics Technology Letters</i> , <b>2019</b> , 31, 697-700	2.2	2
434	All-Plasmonic IQ Modulator With a 36 $\mu$ m Fiber-to-Fiber Pitch. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 1492-1497	4	5
433	Ultra compact electrochemical metallization cells offering reproducible atomic scale memristive switching. <i>Communications Physics</i> , <b>2019</b> , 2,	5.4	21
432	Reduced Equalization Needs of 100 GHz Bandwidth Plasmonic Modulators. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 2050-2057	4	12
431	. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-9	1.8	20
430	Nano-opto-electro-mechanical switches operated at CMOS-level voltages. <i>Science</i> , <b>2019</b> , 366, 860-864	33.3	38
429	Light Emission from a Waveguide Integrated MOS Tunnel Junction <b>2019</b> ,		2
428	Sub-V Opto-Electro-Mechanical Switch <b>2019</b> ,		3

427	500 GHz Plasmonic Mach-Zehnder Modulator <b>2019</b> ,		2
426	Ultra-Compact All-Metamaterial NDIR CO2 Sensor <b>2019</b> ,		1
425	Low-loss hybrid plasmonic coupler. <i>Optics Express</i> , <b>2019</b> , 27, 11862-11868	3.3	12
424	120 GBd plasmonic Mach-Zehnder modulator with a novel differential electrode design operated at a peak-to-peak drive voltage of 178 mV. <i>Optics Express</i> , <b>2019</b> , 27, 16823-16832	3.3	25
423	Compact, ultra-broadband plasmonic grating couplers. <i>Optics Express</i> , <b>2019</b> , 27, 29719-29729	3.3	6
422	Integrated photonic and plasmonic technologies for microwave signal processing enabling mm-wave and sub-THz wireless communication systems <b>2019</b> ,		1
421	Ultra-Compact Terabit Plasmonic Modulator Array. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 1484-1491		17
420	Monolithic high-speed transmitter enabled by bicmos-plasmonic platform <b>2019</b> ,		2
419	222-GBaud on-off keying transmitter using ultra-high-speed 2:1-selector and plasmonic modulator on silicon photonics <b>2019</b> ,		3
418	Time-domain Coupled Full Maxwell- and Drift-Diffusion-Solver for Simulating Scanning Microwave Microscopy of Semiconductors <b>2019</b> ,		3
417	300 GHz Plasmonic Mixer <b>2019</b> ,		1
416	Flexible Electromagnetic Modeling of SMM Setups with FE and FDTD Methods <b>2019</b> ,		2
415	Compact and ultra-efficient broadband plasmonic terahertz field detector. <i>Nature Communications</i> , <b>2019</b> , 10, 5550	17.4	29
414	Large Pockels effect in micro- and nanostructured barium titanate integrated on silicon. <i>Nature Materials</i> , <b>2019</b> , 18, 42-47	27	155
413	Plasmonic Ferroelectric Modulators. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 281-290	4	24
412	Plasmonically Enhanced Graphene Photodetector Featuring 100 Gbit/s Data Reception, High Responsivity, and Compact Size. <i>ACS Photonics</i> , <b>2019</b> , 6, 154-161	6.3	95
411	Three-Dimensional Phase Modulator at Telecom Wavelength Acting as a Terahertz Detector with an Electro-Optic Bandwidth of 1.25 Terahertz. <i>ACS Photonics</i> , <b>2018</b> , 5, 1398-1403	6.3	21
410	Low-loss plasmon-assisted electro-optic modulator. <i>Nature</i> , <b>2018</b> , 556, 483-486	50.4	186

409	Method for traceable measurement of LTE signals. <i>Metrologia</i> , <b>2018</b> , 55, 284-293	2.1	
408	Fast MoTe2 Waveguide Photodetector with High Sensitivity at Telecommunication Wavelengths. <i>ACS Photonics</i> , <b>2018</b> , 5, 1846-1852	6.3	49
407	MMP Simulation of Plasmonic Particles on Substrate Under E-Beam Illumination. <i>Springer Series on Atomic, Optical, and Plasma Physics</i> , <b>2018</b> , 121-145	0.4	2
406	Correlation between electrical direct current resistivity and plasmonic properties of CMOS compatible titanium nitride thin films. <i>Optics Express</i> , <b>2018</b> , 26, 9813-9821	3.3	4
405	Optimization of Plasmonic-Organic Hybrid Electro-Optics. <i>Journal of Lightwave Technology</i> , <b>2018</b> , 36, 5036-5047	4	28
404	Exposure measurement platform for electromagnetic field monitoring and epidemiological research. <i>TM Technisches Messen</i> , <b>2018</b> , 85, 312-320	0.7	
403	. <i>IEEE Communications Surveys and Tutorials</i> , <b>2018</b> , 20, 2758-2783	37.1	49
402	100 GBd Plasmonic IQ Modulator <b>2018</b> ,		4
401	100 Gbit/s Graphene Photodetector <b>2018</b> ,		1
400	Dielectric Layers in Plasmonic-Organic Hybrid Modulators <b>2018</b> ,		2
399	Driver-Less Sub 1 Vpp Operation of a Plasmonic-Organic Hybrid Modulator at 100 GBd NRZ <b>2018</b> ,		10
398	Plasmonics for Communications <b>2018</b> ,		3
397	Highly Selective All-Metamaterial Optical CO2 Sensor <b>2018</b> ,		1
396	16 Gb/s Microring-to-Microring Photonic Link in 45 nm Monolithic Zero-Change CMOS <b>2018</b> ,		1
395	Multi-scale theory-assisted nano-engineering of plasmonic-organic hybrid electro-optic device performance <b>2018</b> ,		1
394	Optical Transmitters without Driver AmplifiersOptimal Operation Conditions. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 1652	2.6	2
393	Steering and Shaping of Multiple Beams with a Spatial Light Modulator based Beamformer <b>2018</b> ,		1
392	Machine Learning for Analysis of Time-Resolved Luminescence Data. <i>ACS Photonics</i> , <b>2018</b> , 5, 4888-4895	6.3	16

391	Bypassing Loss in Plasmonic Modulators <b>2018</b> ,			1
390	Integrated Ferroelectric BaTiO <sub>3</sub> /Si Plasmonic Modulator for 100 Gbit/s and Beyond <b>2018</b> ,			6
389	Microwave plasmonic mixer in a transparent fibre-wireless link. <i>Nature Photonics</i> , <b>2018</b> , 12, 749-753	33.9		34
388	Low-Complexity Real-Time Receiver for Coherent Nyquist-FDM Signals. <i>Journal of Lightwave Technology</i> , <b>2018</b> , 36, 5728-5737	4		11
387	Digital Post-Distortion for Cost-Efficient Driverless Optical Transmitters <b>2018</b> ,			1
386	Plasmonic Photodetectors. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2018</b> , 24, 1-13	3.8		47
385	Time-to-Space Division Multiplexing for Tb/s Mobile Cells. <i>IEEE Transactions on Wireless Communications</i> , <b>2018</b> , 17, 4806-4818	9.6		3
384	100 GHz Plasmonic Photodetector. <i>ACS Photonics</i> , <b>2018</b> , 5, 3291-3297	6.3		91
383	Atomic Scale Photodetection Enabled by a Memristive Junction. <i>ACS Nano</i> , <b>2018</b> , 12, 6706-6713	16.7		24
382	Reliable and lightning-safe monitoring of wind turbine rotor blades using optically powered sensors. <i>Wind Energy</i> , <b>2017</b> , 20, 345-360	3.4		18
381	On-Chip Narrowband Thermal Emitter for Mid-IR Optical Gas Sensing. <i>ACS Photonics</i> , <b>2017</b> , 4, 1371-1380	6.3		119
380	Optical memristive switches. <i>Journal of Electroceramics</i> , <b>2017</b> , 39, 239-250	1.5		17
379	Silicon/Organic and Plasmonic/Organic Hybrid Photonics. <i>ACS Photonics</i> , <b>2017</b> , 4, 1576-1590	6.3		85
378	Nanophotonic modulators and photodetectors using silicon photonic and plasmonic device concepts <b>2017</b> ,			1
377	High-speed plasmonic modulator in a single metal layer. <i>Science</i> , <b>2017</b> , 358, 630-632	33.3		155
376	. <i>Journal of Lightwave Technology</i> , <b>2017</b> , 35, 4663-4669	4		56
375	Copper atomic-scale transistors. <i>Beilstein Journal of Nanotechnology</i> , <b>2017</b> , 8, 530-538	3		7
374	Optical Interconnect Solution With Plasmonic Modulator and Ge Photodetector Array. <i>IEEE Photonics Technology Letters</i> , <b>2017</b> , 29, 1760-1763	2.2		14

373	Effect of Rigid Bridge-Protection Units, Quadrupolar Interactions, and Blending in Organic Electro-Optic Chromophores. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 6457-6471	9.6	50
372	Ab-initio modeling of CBRAM cells: From ballistic transport properties to electro-thermal effects <b>2017</b> ,		5
371	Self-Seeded RSOA Fiber Cavity Laser and the Role of Rayleigh Backscattering: An Analytical Model. <i>Journal of Lightwave Technology</i> , <b>2017</b> , 35, 4845-4850	4	2
370	Remote in-building motion detection using single frequency technique. <i>Electronics Letters</i> , <b>2017</b> , 53, 997-1001	1.1	
369	Cascaded all-optical sub-channel add/drop multiplexing from a 1-Tb/s MB-OFDM or N-WDM super-channel with ultra-low guard-bands <b>2017</b> ,		1
368	PAM-8 108 Gbit/s transmission using an 850nm multi-mode VCSEL <b>2017</b> ,		2
367	Modified Godard Timing Recovery for Non Integer Oversampling Receivers. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 655	2.6	8
366	Characterization of CMOS metal based dielectric loaded surface plasmon waveguides at telecom wavelengths. <i>Optics Express</i> , <b>2017</b> , 25, 394-408	3.3	14
365	Plasmonic modulator with >170 GHz bandwidth demonstrated at 100 GBd NRZ. <i>Optics Express</i> , <b>2017</b> , 25, 1762-1768	3.3	91
364	Nonlinearities of organic electro-optic materials in nanoscale slots and implications for the optimum modulator design. <i>Optics Express</i> , <b>2017</b> , 25, 2627-2653	3.3	75
363	Constellation modulation - an approach to increase spectral efficiency. <i>Optics Express</i> , <b>2017</b> , 25, 16310-16331	3.3	3
362	Spectral signature of nonlinear effects in semiconductor optical amplifiers. <i>Optics Express</i> , <b>2017</b> , 25, 29536-29559	3.3	59
361	Harnessing nonlinearities near material absorption resonances for reducing losses in plasmonic modulators. <i>Optical Materials Express</i> , <b>2017</b> , 7, 2168	2.6	36
360	FPGA-based Real-Time Receivers for Nyquist-FDM <b>2017</b> ,		2
359	Bit- and Power-Loading: A Comparative Study on Maximizing the Capacity of RSOA Based Colorless DMT Transmitters. <i>Applied Sciences (Switzerland)</i> , <b>2017</b> , 7, 999	2.6	2
358	Perfect Vertical Grating Coupler with Directionality of 97% on a Standard SOI Platform <b>2017</b> ,		1
357	Integrated Ferroelectric Plasmonic Optical Modulator <b>2017</b> ,		11
356	Broadband Plasmonic Modulator Enabling Single Carrier Operation Beyond 100 Gbit/s <b>2017</b> ,		1



355	High Speed Photoconductive Plasmonic Germanium Detector <b>2017</b> ,		3
354	Cascaded All-Optical Sub-Channel Add/Drop Multiplexing from a 1-Tb/s MB-OFDM or N-WDM Super-Channel with Ultra-Low Guard-Bands <b>2017</b> ,		1
353	Plasmonic Modulators for Microwave Photonics Applications <b>2017</b> ,		1
352	Demystification of the Self-Seeded WDM Access. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 776-782	4	13
351	Flexible Optical Cross-Connects for High Bit Rate Elastic Photonic Transport Networks [Invited]. <i>Journal of Optical Communications and Networking</i> , <b>2016</b> , 8, A126	4.1	9
350	Lasing in silicon-organic hybrid waveguides. <i>Nature Communications</i> , <b>2016</b> , 7, 10864	17.4	24
349	. <i>Proceedings of the IEEE</i> , <b>2016</b> , 104, 2362-2379	14.3	49
348	Digital Plasmonic Absorption Modulator Exploiting Epsilon-Near-Zero in Transparent Conducting Oxides. <i>IEEE Photonics Journal</i> , <b>2016</b> , 8, 1-13	1.8	41
347	. <i>IEEE Journal of Quantum Electronics</i> , <b>2016</b> , 52, 1-8	2	17
346	Comparison of steering angle and bandwidth for various phased array antenna concepts. <i>Optics Communications</i> , <b>2016</b> , 373, 35-43	2	6
345	Software-Defined Transceivers in Dynamic Access Networks. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 792-797	4	5
344	Coupled FEM-MMP for Computational Electromagnetics. <i>IEEE Transactions on Magnetics</i> , <b>2016</b> , 52, 1-4	2	7
343	Evidence for faster etching at the mask-substrate interface: atomistic simulation of complex cavities at the micron-/submicron-scale by the continuous cellular automaton. <i>Journal of Micromechanics and Microengineering</i> , <b>2016</b> , 26, 045013	2	7
342	Atomic Scale Plasmonic Switch. <i>Nano Letters</i> , <b>2016</b> , 16, 709-14	11.5	84
341	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 256-268	4	89
340	108 Gbit/s Plasmonic Mach-Zehnder Modulator with > 70-GHz Electrical Bandwidth. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 393-400	4	55
339	Atomic Photodetection <b>2016</b> ,		2
338	Colorless Low-Cost RSOA Based Transmitters Optimized for Highest Capacity Through Bit- and Power-Loaded DMT <b>2016</b> ,		2

337	Direct RF-to-Optical Detection by Plasmonic modulator integrated into a four-leaf-clover antenna <b>2016,</b>		2
336	Optical Interconnect with Densely Integrated Plasmonic Modulator and Germanium Photodetector Arrays <b>2016,</b>		1
335	Effect of Transmitter Impairments on Nyquist-FDM Signals with Increasing Sub-band Granularity <b>2016,</b>		2
334	Plasmonic phased array feeder enabling ultra-fast beam steering at millimeter waves. <i>Optics Express</i> , <b>2016</b> , 24, 25608-25618	3-3	18
333	Multi-format carrier recovery for coherent real-time reception with processing in polar coordinates. <i>Optics Express</i> , <b>2016</b> , 24, 25629-25640	3-3	6
332	Pre-equalization technique enabling 70 Gbit/s photonic-wireless link at 60 GHz. <i>Optics Express</i> , <b>2016</b> , 24, 30350-30359	3-3	3
331	Integrated optical frequency shifter in silicon-organic hybrid (SOH) technology. <i>Optics Express</i> , <b>2016</b> , 24, 11694-707	3-3	21
330	Silicon-plasmonic internal-photoemission detector for 40 Gbit/s data reception. <i>Optica</i> , <b>2016</b> , 3, 741	8.6	54
329	All-plasmonic Mach-Zehnder modulator enabling optical high-speed communication at the microscale. <i>Nature Photonics</i> , <b>2015</b> , 9, 525-528	33-9	327
328	Efficient Multiterminal Spectrum Splitting via a Nanowire Array Solar Cell. <i>ACS Photonics</i> , <b>2015</b> , 2, 1284-1288	12-8	21
327	DAC-Less Amplifier-Less Generation and Transmission of QAM Signals Using Sub-Volt Silicon-Organic Hybrid Modulators. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 1425-1432	4	31
326	Digitally Controlled Phase Shifter Using an SOI Slot Waveguide With Liquid Crystal Infiltration. <i>IEEE Photonics Technology Letters</i> , <b>2015</b> , 27, 1269-1272	2.2	29
325	40 GBd 16QAM Signaling at 160 Gb/s in a Silicon-Organic Hybrid Modulator. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 1210-1216	4	38
324	Plasmonic-organic hybrid (POH) modulators for OOK and BPSK signaling at 40 Gbit/s. <i>Optics Express</i> , <b>2015</b> , 23, 9938-46	3-3	49
323	Continuously tunable true-time delays with ultra-low settling time. <i>Optics Express</i> , <b>2015</b> , 23, 6952-64	3-3	50
322	Stacked modulation formats enabling highest-sensitivity optical free-space links. <i>Optics Express</i> , <b>2015</b> , 23, 21942-57	3-3	7
321	Terabit/s communications using chip-scale frequency comb sources <b>2015,</b>		1
320	Plasmonic Mach-Zehnder Modulator with >70 GHz Electrical Bandwidth Demonstrating 90 Gbit/s 4-ASK <b>2015,</b>		2

319	Dense Plasmonic Mach-Zehnder Modulator Array for High-Speed Optical Interconnects <b>2015</b> ,		2
318	Multiplier-Free Real-Time Timing Recovery Algorithm in the Frequency Domain Based on Modified Godard <b>2015</b> ,		1
317	Plasmonic devices for communications <b>2015</b> ,		5
316	Direct Conversion of Free Space Millimeter Waves to Optical Domain by Plasmonic Modulator Antenna. <i>Nano Letters</i> , <b>2015</b> , 15, 8342-6	11.5	54
315	Optical loss by surface transfer doping in silicon waveguides. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 031107	3.4	6
314	Second-order nonlinear optical metamaterials: ABC-type nanolaminates. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 121903	3.4	33
313	Plasmonic Internal Photoemission Detectors with Responsivities above 0.12 A/W <b>2015</b> ,		3
312	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration <b>2015</b> ,		4
311	Demystification of Self-seeded WDM Access <b>2015</b> ,		3
310	Self-Seeded RSOA-Fiber Cavity Lasers vs. ASE Spectrum-Sliced or Externally Seeded Transmitters: A Comparative Study. <i>Applied Sciences (Switzerland)</i> , <b>2015</b> , 5, 1922-1941	2.6	5
309	Ultra-Dense, Single-Wavelength DFT-Spread OFDMA PON With Laserless 1.2 Gb/s ONU Ready for Silicon Photonics Integration. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 1650-1659	4	5
308	Ultra-compact plasmonic IQ-modulator <b>2015</b> ,		4
307	Femtojoule electro-optic modulation using a silicon-organic hybrid device. <i>Light: Science and Applications</i> , <b>2015</b> , 4, e255-e255	16.7	136
306	Ultra-Fast Tunable True-Time Delay Using Complementary Phase-Shifted Spectra (CPSS) <b>2015</b> ,		5
305	High-speed and low-power silicon-organic hybrid modulators for advanced modulation formats <b>2015</b> ,		3
304	High speed plasmonic modulator array enabling dense optical interconnect solutions. <i>Optics Express</i> , <b>2015</b> , 23, 29746-57	3.3	39
303	Self-Seeded RSOAs WDM PON Field Trial for Business and Mobile Fronthaul Applications <b>2015</b> ,		9
302	High-efficiency spectrum splitting for solar photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 136, 120-126	6.4	16

301	125-km Long Cavity Based on Self-Seeded RSOAs Colorless Sources for 2.5-Gb/s DWDM Networks. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 1602-1607	4	5
300	Experimental Demonstration of a Statistical OFDM-PON With Multiband ONUs and Elastic Bandwidth Allocation [Invited]. <i>Journal of Optical Communications and Networking</i> , <b>2015</b> , 7, A73	4.1	22
299	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2015</b> , 21, 276-283	3.8	57
298	Antenna Coupled Plasmonic Modulator <b>2015</b> ,		3
297	Software-Defined Transceivers for Dynamic Access Networks <b>2015</b> ,		8
296	All-Optical Pulse Shaping for Highest Spectral Efficiency. <i>Springer Series in Optical Sciences</i> , <b>2015</b> , 217-260.5		4
295	Traceable Power Measurement of LTE Signals <b>2015</b> ,		2
294	An ultra-high speed OFDMA system for optical access networks <b>2014</b> ,		1
293	OFDM/WDM PON With Laserless, Colorless 1 Gb/s ONUs Based on Si-PIC and Slow IC. <i>Journal of Optical Communications and Networking</i> , <b>2014</b> , 6, 225	4.1	16
292	Monolithic GaAs Electro-Optic IQ Modulator Demonstrated at 150 Gbit/s With 64QAM. <i>Journal of Lightwave Technology</i> , <b>2014</b> , 32, 760-765	4	21
291	20 Gbit/s Wireless Bridge at 220 GHz Connecting Two Fiber-Optic Links. <i>Journal of Optical Communications and Networking</i> , <b>2014</b> , 6, 54	4.1	15
290	High-speed plasmonic phase modulators. <i>Nature Photonics</i> , <b>2014</b> , 8, 229-233	33.9	376
289	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2014</b> , 20, 503-511	3.8	27
288	. <i>IEEE Photonics Journal</i> , <b>2014</b> , 6, 1-9	1.8	15
287	Femtojoule modulation and frequency comb generation in silicon-organic hybrid (SOH) devices <b>2014</b> ,		2
286	Enabling transparent technologies for the development of highly granular flexible optical cross-connects <b>2014</b> ,		9
285	Coherent terabit communications with microresonator Kerr frequency combs. <i>Nature Photonics</i> , <b>2014</b> , 8, 375-380	33.9	358
284	Photonic-to-plasmonic mode converter. <i>Optics Letters</i> , <b>2014</b> , 39, 3488-91	3	18

283	High-Speed, Low Drive-Voltage Silicon-Organic Hybrid Modulator Based on a Binary-Chromophore Electro-Optic Material. <i>Journal of Lightwave Technology</i> , <b>2014</b> , 32, 2726-2734	4	101
282	Colorless Self-Seeded Fiber Cavity Laser Transmitter for WDM-PON <b>2014</b> ,		2
281	Integrated Silicon-Organic Hybrid (SOH) Frequency Shifter <b>2014</b> ,		4
280	Wireless control and selection of forces and torques--towards wireless engines. <i>Scientific Reports</i> , <b>2014</b> , 4, 5681	4.9	9
279	Ultra-dense, single-wavelength DFT-spread OFDM PON with laserless 1 Gb/s ONU at only 300 MBd per spectral group <b>2014</b> ,		2
278	Spectrum splitting double-cell scheme for solar photovoltaics <b>2014</b> ,		1
277	100 GHz siliconorganic hybrid modulator. <i>Light: Science and Applications</i> , <b>2014</b> , 3, e173-e173	16.7	198
276	Direct digital control of an efficient silicon+liquid crystal phase shifter <b>2014</b> ,		2
275	Ultra-short silicon-organic hybrid (SOH) modulator for bidirectional polarization-independent operation <b>2014</b> ,		2
274	10 GBd SOH modulator directly driven by an FPGA without electrical amplification <b>2014</b> ,		2
273	Terabit/s optical transmission using chip-scale frequency comb sources <b>2014</b> ,		2
272	High-Speed Silicon-Organic Hybrid (SOH) Modulators with 230 pm/V Electro-Optic Coefficient Using Advanced Materials <b>2014</b> ,		4
271	Latching Plasmonic Switch with High Extinction Ratio <b>2014</b> ,		2
270	Flexible real-time transmitter at 10 Gbit/s for SCFDMA PONs focusing on low-cost ONUs <b>2014</b> ,		2
269	Experimental Demonstration of Multi-band Upstream in Statistical OFDM-PONs and Comparison with Digital Subcarrier Assignment <b>2014</b> ,		1
268	The plasmonic memristor: a latching optical switch. <i>Optica</i> , <b>2014</b> , 1, 198	8.6	69
267	Nanothermoforming of hierarchical optical components utilizing shape memory polymers as active molds. <i>Optical Materials Express</i> , <b>2014</b> , 4, 1895	2.6	12
266	Silicon-organic hybrid (SOH) frequency comb sources for terabit/s data transmission. <i>Optics Express</i> , <b>2014</b> , 22, 3629-37	3.3	72

265	Timing, carrier frequency and phase recovery for OFDM and Nyquist signals using a mean modulus algorithm. <i>Optics Express</i> , <b>2014</b> , 22, 9344-59	3.3	
264	Full flex-grid asynchronous multiplexing demonstrated with Nyquist pulse-shaping. <i>Optics Express</i> , <b>2014</b> , 22, 10923-37	3.3	10
263	Amplification of advanced modulation formats with a semiconductor optical amplifier cascade. <i>Optics Express</i> , <b>2014</b> , 22, 17854-71	3.3	16
262	Low-power silicon-organic hybrid (SOH) modulators for advanced modulation formats. <i>Optics Express</i> , <b>2014</b> , 22, 29927-36	3.3	49
261	Real-time Nyquist signaling with dynamic precision and flexible non-integer oversampling. <i>Optics Express</i> , <b>2014</b> , 22, 193-209	3.3	7
260	High-speed plasmonic Mach-Zehnder modulator in a waveguide <b>2014</b> ,		8
259	In-Service Monitoring of PON Access Networks With Powerline Independent Devices. <i>Journal of Optical Communications and Networking</i> , <b>2014</b> , 6, 1018	4.1	6
258	From silicon-organic hybrid to plasmonic modulation <b>2014</b> ,		1
257	O-Band 10-Gb/s Operation of a Reflective Semiconductor Optical Amplifier Based Self-Seeded Transmitter for Optical Access Applications. <i>Fiber and Integrated Optics</i> , <b>2014</b> , 33, 173-183	0.8	3
256	Wireless sub-THz communication system with high data rate enabled by RF photonics and active MMIC technology <b>2014</b> ,		11
255	Self-tuning transmitter for fibre-to-the-antenna PON networks. <i>Optical Switching and Networking</i> , <b>2014</b> , 14, 25-31	1.6	9
254	Digital Pulse-Shaping for Spectrally Efficient and Flexible Coherent Optical Networks <b>2014</b> ,		1
253	Stacking Modulation Formats for Highest-Sensitivity <b>2014</b> ,		2
252	Hot embossing and thermoforming of biodegradable three-dimensional wood structures. <i>RSC Advances</i> , <b>2013</b> , 3, 20060	3.7	19
251	Blind Polarization Demultiplexing With Low Computational Complexity. <i>IEEE Photonics Technology Letters</i> , <b>2013</b> , 25, 1230-1233	2.2	10
250	Pulse-Shaping With Digital, Electrical, and Optical Filters—A Comparison. <i>Journal of Lightwave Technology</i> , <b>2013</b> , 31, 2570-2577	4	39
249	High-Quality Optical Frequency Comb by Spectral Slicing of Spectra Broadened by SPM. <i>IEEE Photonics Journal</i> , <b>2013</b> , 5, 7201011-7201011	1.8	16
248	. <i>IEEE Photonics Technology Letters</i> , <b>2013</b> , 25, 701-704	2.2	44

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246	EVM as new quality metric for optical modulation analysis <b>2013</b> ,		2
245	High-speed, low-power optical modulators in silicon <b>2013</b> ,		3
244	Silicon-organic hybrid devices <b>2013</b> ,		2
243	Optical OFDM and Nyquist Multiplexing <b>2013</b> , 381-432		4
242	Plasmonic Communications: Light on a Wire. <i>Optics and Photonics News</i> , <b>2013</b> , 24, 28	1.9	62
241	Low-Loss Silicon Strip-to-Slot Mode Converters. <i>IEEE Photonics Journal</i> , <b>2013</b> , 5, 2200409-2200409	1.8	60
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239	Terabit/s data transmission using optical frequency combs <b>2013</b> ,		3
238	Photonic wire bonding: connecting nanophotonic circuits across chip boundaries <b>2013</b> ,		2
237	Silicon-Organic Hybrid (SOH) Modulator Generating up to 84 Gbit/s BPSK and M-ASK Signals <b>2013</b> ,		2
236	100 Gbit/s Wireless Link with mm-Wave Photonics <b>2013</b> ,		18
235	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM <b>2013</b> ,		3
234	Colorless FDMA-PON With Flexible Bandwidth Allocation and Colorless, Low-Speed ONUs [Invited]. <i>Journal of Optical Communications and Networking</i> , <b>2013</b> , 5, A204	4.1	15
233	Stacking PS-QPSK and 64PPM for Long-Range Free-Space Transmission <b>2013</b> ,		2
232	Theoretical and experimental analysis of the structural pattern responsible for the iridescence of Morpho butterflies. <i>Optics Express</i> , <b>2013</b> , 21, 14351-61	3.3	64
231	Silicon-organic hybrid (SOH) IQ modulator using the linear electro-optic effect for transmitting 16QAM at 112 Gbit/s. <i>Optics Express</i> , <b>2013</b> , 21, 13219-27	3.3	75
230	Four-in-one interferometer for coherent and self-coherent detection. <i>Optics Express</i> , <b>2013</b> , 21, 13293-304	3.3	3

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228	A novel system on chip for software-defined, high-speed OFDM signal processing <b>2013</b> ,		4
227	Optical absorption in silicon layers in the presence of charge inversion/accumulation or ion implantation. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 051104	3.4	21
226	Low Power Mach-Zehnder Modulator in Silicon-Organic Hybrid Technology. <i>IEEE Photonics Technology Letters</i> , <b>2013</b> , 25, 1226-1229	2.2	58
225	High-Speed Silicon-Organic Hybrid (SOH) Modulator with 1.6 fJ/bit and 180 pm/V In-Device Nonlinearity <b>2013</b> ,		10
224	Silicon-organic hybrid (SOH) IQ modulator for 16QAM at 112 Gbit/s <b>2013</b> ,		1
223	Polarization-Sensitive Optical Coherence Tomography for Characterization of Size and Shape of Nano-Particles <b>2013</b> ,		1
222	100 Gbit/s Wireless Link with mm-Wave Photonics <b>2013</b> ,		6
221	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM <b>2013</b> ,		1
220	Bi-directional Ultra-dense Polarization-diverse OFDM/WDM PON with Laserless Colorless 1Gb/s ONUs Based on Si PICs and <b>2013</b> ,		3
219	252 Gbit/s Real-Time Nyquist Pulse Generation by Reducing the Oversampling Factor to 1.33 <b>2013</b> ,		9
218	Flexible WDM-PON with Nyquist-FDM and 31.25 Gbit/s per Wavelength Channel Using Colorless, Low-Speed ONUs <b>2013</b> ,		3
217	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2012</b> , 18, 689-700	3.8	33
216	An OFDMA-based optical access network architecture exhibiting ultra-high capacity and wireline-wireless convergence <b>2012</b> , 50, 71-78		42
215	Time and frequency synchronization for ultra-high speed OFDM systems <b>2012</b> ,		1
214	Quality metrics for optical signals: Eye diagram, Q-factor, OSNR, EVM and BER <b>2012</b> ,		59
213	Performance analysis of an OFDM transmission system with directly modulated lasers for wireless backhauling <b>2012</b> ,		1
212	Silicon carrier-depletion-based Mach-Zehnder and ring modulators with different doping patterns for telecommunication and optical interconnect <b>2012</b> ,		1



211	Real-time Nyquist pulse generation beyond 100 Gbit/s and its relation to OFDM. <i>Optics Express</i> , <b>2012</b> , 20, 317-37	3.3	117
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209	Linear Semiconductor Optical Amplifiers. <i>Springer Series in Optical Sciences</i> , <b>2012</b> , 511-571	0.5	2
208	Error Vector Magnitude as a Performance Measure for Advanced Modulation Formats. <i>IEEE Photonics Technology Letters</i> , <b>2012</b> , 24, 61-63	2.2	312
207	Doping Geometries for 40G Carrier-Depletion-Based Silicon Optical Modulators <b>2012</b> ,		4
206	4 Gbit/s Real-Time OFDM Signal Generation with Transmission over 400 km and Preamble-less Reception <b>2012</b> ,		2
205	High-Speed Wireless Bridge at 220 GHz Connecting Two Fiber-Optic Links Each Spanning up to 20 km <b>2012</b> ,		6
204	Quality Metrics in Optical Modulation Analysis: EVM and its relation to Q-factor, OSNR, and BER <b>2012</b> ,		2
203	High aspect ratio gratings for X-ray phase contrast imaging <b>2012</b> ,		49
202	512QAM Nyquist sinc-pulse transmission at 54 Gbit/s in an optical bandwidth of 3 GHz. <i>Optics Express</i> , <b>2012</b> , 20, 6439-47	3.3	60
201	Linear semiconductor optical amplifiers for amplification of advanced modulation formats. <i>Optics Express</i> , <b>2012</b> , 20, 9657-72	3.3	21
200	Real-time OFDM or Nyquist pulse generation--which performs better with limited resources?. <i>Optics Express</i> , <b>2012</b> , 20, B543-51	3.3	29
199	Silicon-organic hybrid phase shifter based on a slot waveguide with a liquid-crystal cladding. <i>Optics Express</i> , <b>2012</b> , 20, 15359-76	3.3	54
198	Photonic wire bonding: a novel concept for chip-scale interconnects. <i>Optics Express</i> , <b>2012</b> , 20, 17667-77	3.3	185
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190	220 GHz wireless data transmission experiments up to 30 Gbit/s <b>2012</b> ,		8
189	Corrections to Error Vector Magnitude as a Performance Measure for Advanced Modulation Formats [Jan 1, 2012 61-63]. <i>IEEE Photonics Technology Letters</i> , <b>2012</b> , 24, 2198-2198	2.2	20
188	Nyquist Frequency Division Multiplexing for Optical Communications <b>2012</b> ,		5
187	Modulation Cancellation Properties of Reflective SOAs <b>2012</b> ,		1
186	Real-Time Digital Nyquist-WDM and OFDM Signal Generation: Spectral Efficiency Versus DSP Complexity <b>2012</b> ,		5
185	Quality Metrics in Optical Modulation Analysis: EVM and its relation to Q-factor, OSNR, and BER <b>2012</b> ,		2
184	150 Gbit/s Real-Time Nyquist Pulse Transmission Over 150 km SSMF Enhanced by DSP with Dynamic Precision <b>2012</b> ,		3
183	Microresonator-Based Optical Frequency Combs for High-Bitrate WDM Data Transmission <b>2012</b> ,		4
182	Low-Loss Photonic Wire Bond Interconnects Enabling 5 TBit/s Data Transmission <b>2012</b> ,		2
181	Raised-Cosine OFDM for Enhanced Out-of-Band Suppression at Low Subcarrier Counts <b>2012</b> ,		1
180	Uplink Solutions for Future Access Networks <b>2012</b> ,		1
179	Remote Heterodyne Reception of OFDM-QPSK as Downlink-Solution for Future Access Networks <b>2012</b> ,		3
178	First Silicon-Organic Hybrid Laser at Telecommunication Wavelengths <b>2012</b> ,		3
177	Implementation of an ultra-high speed 256-point FFT for Xilinx Virtex-6 devices <b>2011</b> ,		4
176	An All-Optical Grooming Switch for Interconnecting Access and Metro Ring Networks [Invited]. <i>Journal of Optical Communications and Networking</i> , <b>2011</b> , 3, 206	4.1	5

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174	Surface plasmon polariton absorption modulator. <i>Optics Express</i> , <b>2011</b> , 19, 8855-69	3.3	176
173	Reduced propagation loss in silicon strip and slot waveguides coated by atomic layer deposition. <i>Optics Express</i> , <b>2011</b> , 19, 11529-38	3.3	100
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171	42.7 Gbit/s electro-optic modulator in silicon technology. <i>Optics Express</i> , <b>2011</b> , 19, 11841-51	3.3	133
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169	A surface plasmon polariton absorption modulator <b>2011</b> ,		2
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166	Software-defined optical transmission <b>2011</b> ,		4
165	Smooth and ultra-precise silicon nanowires fabricated by conventional optical lithography <b>2011</b> ,		1
164	Rival Signals in SOA Reach-Extended WDM-TDM-GPON Converged with RoF <b>2011</b> ,		1
163	Silicon-Organic Hybrid (SOH) Electro-Optical Devices <b>2011</b> ,		1
162	Photonic Waveguide Bonds [A Novel Concept for Chip-to-Chip Interconnects <b>2011</b> ,		3
161	Real-Time Nyquist Pulse Modulation Transmitter Generating Rectangular Shaped Spectra of 112 Gbit/s 16QAM Signals <b>2011</b> ,		5
160	Quantum-dot semiconductor optical amplifier for filter-assisted 80-Gb/s wavelength conversion <b>2011</b> ,		1
159	Impact of alpha-factor on SOA Dynamic Range for 20 GBd BPSK, QPSK and 16-QAM Signals <b>2011</b> ,		8
158	101.5 Gbit/s Real-Time OFDM Transmitter with 16QAM Modulated Subcarriers <b>2011</b> ,		8

157	Alamouti Code against PDL in Polarization Multiplexed Systems <b>2011</b> ,			2
156	Experimental Demonstration of PDL Mitigation using Polarization-Time Coding in PDM-OFDM Systems <b>2011</b> ,			2
155	Nonlinear silicon photonics. <i>Nature Photonics</i> , <b>2010</b> , 4, 535-544	33.9		773
154	A Surface Plasmon Polariton Absorption Modulator <b>2010</b> ,			9
153	Optical and electrical power dynamic range of semiconductor optical amplifiers in radio-over-fiber networks <b>2010</b> ,			1
152	40 Gbit/s silicon-organic hybrid (SOH) phase modulator <b>2010</b> ,			3
151	Linear and Nonlinear Semiconductor Optical Amplifiers <b>2010</b> ,			5
150	Saturation characteristics of InGaAsP-InP bulk SOA <b>2010</b> ,			3
149	Silicon high-speed electro-optic modulator <b>2010</b> ,			6
148	100 Gbit/s electro-optic modulator and 56 Gbit/s wavelength converter for DQPSK data in silicon-organic hybrid (SOH) technology <b>2010</b> ,			3
147	Reconfigurable Hardware for Power-over-Fiber Applications <b>2010</b> ,			2
146	Real-Time Software-Defined Multiformat Transmitter Generating 64QAM at 28 GBd. <i>IEEE Photonics Technology Letters</i> , <b>2010</b> , 22, 1601-1603	2.2		92
145	Linear and nonlinear semiconductor optical amplifiers <b>2010</b> ,			2
144	Terabit/s FFT processing [Optics can do it on-the-fly] <b>2010</b> ,			1
143	Quantum dot SOA input power dynamic range improvement for differential-phase encoded signals. <i>Optics Express</i> , <b>2010</b> , 18, 6270-6	3.3		17
142	Self-phase-modulation based all-optical regeneration of PDM signals using a single section of highly-nonlinear fiber. <i>Optics Express</i> , <b>2010</b> , 18, 7150-6	3.3		13
141	Simple all-optical FFT scheme enabling Tbit/s real-time signal processing. <i>Optics Express</i> , <b>2010</b> , 18, 9324-30			129
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139	Filter Assisted Wavelength Conversion With Quantum-Dot SOAs. <i>Journal of Lightwave Technology</i> , <b>2010</b> , 28, 882-897	4	12
138	Single- and multi-carrier techniques to build up Tb/s per channel transmission systems <b>2010</b> ,		7
137	Quantum Dot SOA Dynamic Range Improvement for Phase Modulated Signals <b>2010</b> ,		1
136	Single Source Optical OFDM Transmitter and Optical FFT Receiver Demonstrated at Line Rates of 5.4 and 10.8 Tbit/s <b>2010</b> ,		8
135	All-Optical Wavelength Conversion of 56 Gbit/s NRZ-DQPSK Signals in Silicon-Organic Hybrid Strip Waveguides <b>2010</b> ,		2
134	Novel Optical Fast Fourier Transform Scheme Enabling Real-Time OFDM Processing at 392 Gbit/s and Beyond <b>2010</b> ,		3
133	Optimizing SOA for Large Input Power Dynamic Range With Respect to Applications in Extended GPON <b>2010</b> ,		1
132	Single Source Optical OFDM Transmitter and Optical FFT Receiver Demonstrated at Line Rates of 5.4 and 10.8 Tbit/s <b>2010</b> ,		26
131	Software-Defined Multi-Format Transmitter with Real-Time Signal Processing for up to 160 Gbit/s <b>2010</b> ,		3
130	Silicon Organic Hybrid Technology A Platform for Practical Nonlinear Optics. <i>Proceedings of the IEEE</i> , <b>2009</b> , 97, 1304-1316	14.3	111
129	All-optical high-speed signal processing with silicon-organic hybrid slot waveguides. <i>Nature Photonics</i> , <b>2009</b> , 3, 216-219	33.9	597
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125	Regenerative properties of interferometricall-optical DPSK wavelength converters. <i>Optics Express</i> , <b>2009</b> , 17, 22639-58	3.3	10
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123	Search-Based Testing of Ajax Web Applications <b>2009</b> ,		22
122	All-optical wavelength conversion using cross-phase modulation at 42.7 Gbit/s in silicon-organic hybrid (SOH) waveguides <b>2009</b> ,		2

121	RZ to CSRZ Format and Wavelength Conversion with Regenerative Properties <b>2009</b> ,		1
120	1.3 / 1.5 $\mu\text{m}$ QD-SOAs for WDM/TDM GPON with Extended Reach and Large Upstream / Downstream Dynamic Range <b>2009</b> ,		4
119	All-Optical Wavelength Conversion at 42.7 Gbit/s in a 4 mm Long Silicon-Organic Hybrid Waveguide <b>2009</b> ,		3
118	Optimum Filter for Wavelength Conversion with QD-SOA <b>2009</b> ,		2
117	Field Trial of WDM-OTDM Transmultiplexing employing Photonic Switch Fabric-based Buffer-less Bit-interleaved Data Grooming and All-Optical Regeneration <b>2009</b> ,		3
116	40 GHz small-signal cross-gain modulation in 1.3 $\mu\text{m}$ quantum dot semiconductor optical amplifiers. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 051110	3-4	11
115	An Optically Powered Video Camera Link. <i>IEEE Photonics Technology Letters</i> , <b>2008</b> , 20, 39-41	2.2	35
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108	Numerical prediction of minimum sub-diffraction-limit image generated by silver surface plasmon lenses. <i>Optics Express</i> , <b>2008</b> , 16, 21039-52	3-3	7
107	Optically powered fiber networks. <i>Optics Express</i> , <b>2008</b> , 16, 21821-34	3-3	40
106	Single and multiple channel operation dynamics of linear quantum-dot semiconductor optical amplifier <b>2008</b> ,		6
105	Multi-wavelength all-optical regeneration <b>2008</b> ,		2
104	Silicon-Organic Hybrid (SOH) Devices for Nonlinear Optical Signal Processing <b>2008</b> ,		4

103	An Interferometric Configuration for Performing Cross-Gain Modulation with Improved Signal Quality <b>2008</b> ,		2
102	A wavelength conversion scheme based on a quantum-dot semiconductor optical amplifier and a delay interferometer <b>2008</b> ,		1
101	Highly nonlinear silicon photonics slot waveguides without free carrier absorption related speed-limitations <b>2008</b> ,		2
100	TDM-to-WDM conversion from 130 Gbit/s to 3 43 Gbit/s using XPM in a NOLM switch <b>2008</b> ,		1
99	An all-optical grooming switch to interconnect access and metro ring networks <b>2008</b> ,		1
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95	Performance Evaluation of Wavelength Conversion at 160 Gbit/s using XGM in Quantum-Dot Semiconductor Optical Amplifiers in MZI configuration <b>2007</b> ,		3
94	Systematic investigation into the influence of growth conditions on InAs/GaAs quantum dot properties. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 073511	2.5	31
93	Ideal Bend Contour Trajectories for Single-Mode Operation of Low-Loss Overmoded Waveguides. <i>IEEE Photonics Technology Letters</i> , <b>2007</b> , 19, 819-821	2.2	17
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91	Cross-Gain Modulation-based 2R Regenerator Using Quantum-Dot Semiconductor Optical Amplifiers at 160 Gbit/s <b>2007</b> ,		1
90	Silicon-on-insulator modulators for next-generation 100 Gbit/s-Ethernet <b>2007</b> , 056		9
89	New Approaches to Perform All-Optical Signal Regeneration <b>2007</b> ,		3
88	Multi-Wavelength Regenerative Amplification Based on Quantum-Dot Semiconductor Optical Amplifiers <b>2007</b> ,		2
87	Nonlinear silicon-on-insulator waveguides for all-optical signal processing. <i>Optics Express</i> , <b>2007</b> , 15, 5976-5990	3.9	289
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85	Microwave-Frequency Experiments Validate Optical Simulation Tools and Demonstrate Novel Dispersion-Tailored Photonic Crystal Waveguides. <i>Journal of Lightwave Technology</i> , <b>2007</b> , 25, 2502-2510 <sup>4</sup>		8
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83	A simple and rigorous verification technique for nonlinear fdtd algorithms by optical parametric four-wave mixing. <i>Microwave and Optical Technology Letters</i> , <b>2006</b> , 48, 88-91	1.2	16
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81	All-Optical Signal Processing WITH Nonlinear Resonant Devices <b>2006</b> ,		1
80	Broadband Slow Light in a Photonic Crystal Line Defect Waveguide <b>2006</b> , MD6		0
79	All-optical DPSK wavelength converter based on MZI with integrated SOAs and phase shifters <b>2006</b> ,		8
78	Optically Powered Platform with Mb/s Transmission over a Single Fiber <b>2006</b> ,		3
77	Radiation Modes and Roughness Loss in High Index-Contrast Waveguides. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2006</b> , 12, 1306-1321	3.8	77
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10	Linear all-optical wavelength conversion based on linear optical amplifier		6
9	2.5 Tb/s (64/spl times/42.7 Gb/s) transmission over 40/spl times/100 km NZDSF using RZ-DPSK format and all-Raman-amplified spans		33
8	40 Gbit/s pseudo-linear transmission over one million kilometers		32
7	Novel higher order PMD distortion mitigation technique for RZ signals		1
6	Signal regeneration and all-optical wavelength conversion		7
5	All-optical wavelength conversion and broadcasting to eight separate channels by a single semiconductor optical amplifier delay interferometer		28
4	Compact and fully packaged wavelength converter with integrated delay loop for 40 Gbit/s RZ signals		3
3	All-optical nonblocking terabit/s crossconnect based on low power all-optical wavelength converter and MEMS switch fabric		5
2	Cascadable MZI all-optical switch with separate ports for data- and control-signals		2
1	Dual-order mode (DOMO) all-optical space switch for bidirectional operation		6