

Wolfgang Freude

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.

333
papers

11,283
citations

49
h-index

101
g-index

452
ext. papers

14,705
ext. citations

6.2
avg, IF

5.92
L-index

#	Paper	IF	Citations
333	Ultra-fast optical ranging using quantum-dash mode-locked laser diodes.. <i>Scientific Reports</i> , 2022 , 12, 1076	4.9	1
332	Colorless Coherent TDM-PON Based on a Frequency-Comb Laser. <i>Journal of Lightwave Technology</i> , 2022 , 1-1	4	1
331	Wireless THz Transmission Using a Kramers-Kronig Receiver. <i>Springer Series in Optical Sciences</i> , 2022 , 481-485	0.5	
330	320 GHz Analog-to-Digital Converter Exploiting Kerr Soliton Combs and Photonic-Electronic Spectral Stitching 2021 ,		1
329	Optical Arbitrary Waveform Measurement Using Silicon Photonic Slicing Filters. <i>Journal of Lightwave Technology</i> , 2021 , 1-1	4	0
328	Hardware Comparison of Feed-Forward Clock Recovery Algorithms for Optical Communications 2021 ,		2
327	Optical Arbitrary Waveform Measurement (OAWM) on the Silicon Photonic Platform 2021 ,		4
326	Biophotonic sensors with integrated SiN-organic hybrid (SiNOH) lasers for point-of-care diagnostics. <i>Light: Science and Applications</i> , 2021 , 10, 64	16.7	5
325	Hybrid electro-optic modulator combining silicon photonic slot waveguides with high-k radio-frequency slotlines. <i>Optica</i> , 2021 , 8, 511	8.6	8
324	Field-effect silicon-plasmonic photodetector for coherent T-wave reception. <i>Optics Express</i> , 2021 , 29, 21586-21602	3.3	
323	Analysis of Kerr comb generation in silicon microresonators under the influence of two-photon absorption and fast free-carrier dynamics. <i>Physical Review A</i> , 2021 , 103,	2.6	2
322	Superconducting nanowire single-photon detector with 3D-printed free-form microlenses. <i>Optics Express</i> , 2021 , 29, 27708-27731	3.3	0
321	Hybrid external-cavity lasers (ECL) using photonic wire bonds as coupling elements. <i>Scientific Reports</i> , 2021 , 11, 16426	4.9	2
320	Integrated phase-sensitive photonic sensors: a system design tutorial. <i>Advances in Optics and Photonics</i> , 2021 , 13, 584	16.7	0
319	Simultaneous correction of a pectus excavatum with tubular breast deformity using a custom-made silicone implant. <i>Archives of Gynecology and Obstetrics</i> , 2021 , 303, 1025-1037	2.5	1
318	Hybrid multi-chip assembly of optical communication engines by in situ 3D nano-lithography. <i>Light: Science and Applications</i> , 2020 , 9, 71	16.7	25
317	Horizontal-Slot Plasmonic-Organic Hybrid (POH) Modulator 2020 ,		1

316	Performance of chip-scale optical frequency comb generators in coherent WDM communications. <i>Optics Express</i> , 2020 , 28, 12897-12910	3-3	10
315	Lasing in SiN-organic hybrid (SiNOH) waveguides. <i>Optics Express</i> , 2020 , 28, 5085-5104	3-3	6
314	Verified equivalent-circuit model for slot-waveguide modulators. <i>Optics Express</i> , 2020 , 28, 12951-12976	3-3	5
313	Silicon-organic hybrid (SOH) Mach-Zehnder modulators for 100 GBd PAM4 signaling with sub-1 dB phase-shifter loss. <i>Optics Express</i> , 2020 , 28, 24693-24707	3-3	21
312	32QAM WDM transmission at 12 Tbit/s using a quantum-dash mode-locked laser diode (QD-MLLD) with external-cavity feedback. <i>Optics Express</i> , 2020 , 28, 23594-23608	3-3	7
311	3D-printed optical probes for wafer-level testing of photonic integrated circuits. <i>Optics Express</i> , 2020 , 28, 37996-38007	3-3	5
310	InP/Silicon Hybrid External-Cavity Lasers (ECL) Using Photonic Wirebonds as Coupling Elements 2020 ,		2
309	SOH Mach-Zehnder Modulators for 100 GBd PAM4 Signaling With Sub-1 dB Phase-Shifter Loss 2020 ,		5
308	Chip-based frequency combs for wavelength-division multiplexing applications 2020 , 51-102		
307	3D-Printed Scanning-Probe Microscopes with Integrated Optical Actuation and Read-Out. <i>Small</i> , 2020 , 16, e1904695	11	10
306	Generalized Kramers-Kronig receiver for coherent terahertz communications. <i>Nature Photonics</i> , 2020 , 14, 601-606	33-9	46
305	Complexity Analysis of the Kramers-Kronig Receiver. <i>Journal of Lightwave Technology</i> , 2019 , 37, 4295-4307		23
304	THz-to-optical conversion in wireless communications using an ultra-broadband plasmonic modulator. <i>Nature Photonics</i> , 2019 , 13, 519-524	33-9	81
303	Capacitively Coupled Silicon-Organic Hybrid Modulator for 200 Gbit/s PAM-4 Signaling 2019 ,		5
302	Photonic-integrated circuits with non-planar topologies realized by 3D-printed waveguide overpasses. <i>Optics Express</i> , 2019 , 27, 17402-17425	3-3	13
301	Comb-based WDM transmission at 10 Tbit/s using a DC-driven quantum-dash mode-locked laser diode. <i>Optics Express</i> , 2019 , 27, 31110-31129	3-3	20
300	Coherent WDM transmission using quantum-dash mode-locked laser diodes as multi-wavelength source and local oscillator. <i>Optics Express</i> , 2019 , 27, 31164-31175	3-3	22
299	Wireless THz link with optoelectronic transmitter and receiver. <i>Optica</i> , 2019 , 6, 1063	8.6	31

298	Colorless Coherent Passive Optical Network Using a Frequency Comb Local Oscillator 2019 ,		4
297	Generalized Kramers-Kronig Receiver for 16QAM Wireless THZ Transmission AT 110 Gbit/s 2019 ,		2
296	Ultrafast optical ranging using microresonator soliton frequency combs. <i>Science</i> , 2018 , 359, 887-891	33.3	274
295	Silicon-Organic Hybrid (SOH) Mach-Zehnder Modulators for 100 Gbit/s on-off Keying. <i>Scientific Reports</i> , 2018 , 8, 2598	4.9	50
294	In situ 3D nanoprinting of free-form coupling elements for hybrid photonic integration. <i>Nature Photonics</i> , 2018 , 12, 241-247	33.9	150
293	Surface sensing with integrated optical waveguides: a design guideline. <i>Optics Express</i> , 2018 , 26, 19885-19906	3.9	21
292	Coherent modulation up to 100 GBd 16QAM using silicon-organic hybrid (SOH) devices. <i>Optics Express</i> , 2018 , 26, 220-232	3.3	38
291	Robust label-free biosensing using microdisk laser arrays with on-chip references. <i>Optics Express</i> , 2018 , 26, 3161-3173	3.3	24
290	Ultra-high electro-optic activity demonstrated in a silicon-organic hybrid modulator. <i>Optica</i> , 2018 , 5, 7398.6		78
289	3D-Printed Ultra-Broadband Highly Efficient Out-of-Plane Coupler for Photonic Integrated Circuits 2018 ,		6
288	Hybrid integration of silicon photonics circuits and InP lasers by photonic wire bonding. <i>Optica</i> , 2018 , 5, 876	8.6	74
287	Lasing in Si3N4-Organic Hybrid (SiNOH) Spiral Resonators 2018 ,		1
286	Terahertz-to-Optical Conversion Using a Plasmonic Modulator 2018 ,		7
285	Demonstration of long-term thermally stable silicon-organic hybrid modulators at 85 °C. <i>Optics Express</i> , 2018 , 26, 27955-27964	3.3	14
284	Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. <i>Optics Express</i> , 2018 , 26, 34580-34591	3.3	6
283	Transmission of 80-GBd 16-QAM over 300 km and Kramers-Kronig Reception Using a Low-Complexity FIR Hilbert Filter Approximation 2018 ,		14
282	Fast high-precision distance metrology using a pair of modulator-generated dual-color frequency combs. <i>Optics Express</i> , 2018 , 26, 34305-34335	3.3	6
281	3D-Printed Optics for Wafer-Scale Probing 2018 ,		2

280	110-m THz Wireless Transmission at 100 Gbit/s Using a Kramers-Kronig Schottky Barrier Diode Receiver 2018,		11
279	Optical Filter Requirements for DWDM Transmission Systems with Kramers-Kronig Receivers 2018,		1
278	Wireless Transmission at 0.3 THz Using Direct THz-to-Optical Conversion at the Receiver 2018,		3
277	Silicon-plasmonic integrated circuits for terahertz signal generation and coherent detection. <i>Nature Photonics</i> , 2018 , 12, 625-633	33-9	38
276	Reliable and lightning-safe monitoring of wind turbine rotor blades using optically powered sensors. <i>Wind Energy</i> , 2017 , 20, 345-360	3-4	18
275	Adaptive wavelet collocation method for simulation of a 2D micro-ring resonator. <i>Optik</i> , 2017 , 131, 655-670		
274	Microresonator-based solitons for massively parallel coherent optical communications. <i>Nature</i> , 2017 , 546, 274-279	50-4	427
273	Silicon-Organic and Plasmonic-Organic Hybrid Photonics. <i>ACS Photonics</i> , 2017 , 4, 1576-1590	6-3	85
272	Nanophotonic modulators and photodetectors using silicon photonic and plasmonic device concepts 2017,		1
271	Integration of digital microfluidics with whispering-gallery mode sensors for label-free detection of biomolecules. <i>Lab on A Chip</i> , 2017 , 17, 1740-1748	7-2	23
270	Wireless multi-subcarrier THz communications using mixing in a photoconductor for coherent reception 2017,		5
269	Four-Channel 784 Gbit/s Transmitter Module Enabled by Photonic Wire Bonding and Silicon-Organic Hybrid Modulators 2017,		1
268	Mach-Zehnder interferometer readout for instantaneous sensor calibration and extraction of endlessly unwrapped phase 2017,		2
267	Printed freeform lens arrays on multi-core fibers for highly efficient coupling in astrophotonic systems. <i>Optics Express</i> , 2017 , 25, 18288-18295	3-3	23
266	Silicon-organic hybrid (SOH) modulators for intensity-modulation / direct-detection links with line rates of up to 120 Gbit/s. <i>Optics Express</i> , 2017 , 25, 23784-23800	3-3	32
265	Spectral signature of nonlinear effects in semiconductor optical amplifiers. <i>Optics Express</i> , 2017 , 25, 29536-29559		
264	Silicon photonic integrated circuit for fast and precise dual-comb distance metrology. <i>Optics Express</i> , 2017 , 25, 30091-30104	3-3	11
263	Record-High In-Device Electro-Optic Coefficient of 359 pm/V in a Silicon-Organic Hybrid (SOH) Modulator 2017,		9

262	WDM Transmission Using Quantum-Dash Mode-Locked Laser Diodes as Multi-Wavelength Source and Local Oscillator 2017 ,		11
261	32QAM WDM Transmission Using a Quantum-Dash Passively Mode-Locked Laser with Resonant Feedback 2017 ,		15
260	8-channel 448 Gbit/s Silicon Photonic Transmitter Enabled by Photonic Wire Bonding 2017 ,		7
259	Silicon-Organic Hybrid (SOH) IQ Modulator for 100 GBd 16QAM Operation 2017 ,		6
258	Ultrafast Dual-Comb Distance Metrology Using Dissipative Kerr Solitons 2017 ,		1
257	Wireless THz Communications Using Optoelectronic Techniques for Signal Generation and Coherent Reception 2017 ,		2
256	100 Gbit/s Serial Transmission Using a Silicon-Organic Hybrid (SOH) Modulator and a Duobinary Driver IC 2017 ,		5
255	Multiscale dispersion-state characterization of nanocomposites using optical coherence tomography. <i>Scientific Reports</i> , 2016 , 6, 31733	4-9	9
254	Lasing in silicon-organic hybrid waveguides. <i>Nature Communications</i> , 2016 , 7, 10864	17-4	24
253	Optical coherence tomography system mass-producible on a silicon photonic chip. <i>Optics Express</i> , 2016 , 24, 1573-86	3-3	33
252	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration. <i>Journal of Lightwave Technology</i> , 2016 , 34, 256-268	4	89
251	Lenses for Low-Loss Chip-to-Fiber and Fiber-to-Fiber Coupling Fabricated by 3D Direct-Write Lithography 2016 ,		4
250	Silicon-Plasmonic Photomixer for Generation and Homodyne Reception of Continuous-Wave THz Radiation 2016 ,		2
249	8.32 Tbit/s Coherent Transmission Using a Quantum-Dash Mode-Locked Laser Diode 2016 ,		5
248	50 Tbit/s Massively Parallel WDM Transmission in C and L Band Using Interleaved Cavity-Soliton Kerr Combs 2016 ,		2
247	Multi-Chip Integration by Photonic Wire Bonding: Connecting Surface and Edge Emitting Lasers to Silicon Chips 2016 ,		3
246	An Energy-Efficient 252 Gbit/s Silicon-Based IQ-Modulator 2016 ,		2
245	Multi-wavelength coherent transmission using an optical frequency comb as a local oscillator. <i>Optics Express</i> , 2016 , 24, 25432-25445	3-3	27

244	Generation of 64 GBd 4ASK signals using a silicon-organic hybrid modulator at 80°C. <i>Optics Express</i> , 2016 , 24, 9389-96	3.3	18
243	Integrated optical frequency shifter in silicon-organic hybrid (SOH) technology. <i>Optics Express</i> , 2016 , 24, 11694-707	3.3	21
242	Silicon-plasmonic internal-photoemission detector for 40 Gbit/s data reception. <i>Optica</i> , 2016 , 3, 741	8.6	54
241	Connecting Silicon Photonic Circuits to Multicore Fibers by Photonic Wire Bonding. <i>Journal of Lightwave Technology</i> , 2015 , 33, 755-760	4	60
240	Optimally coherent Kerr combs generated with crystalline whispering gallery mode resonators for ultrahigh capacity fiber communications. <i>Physical Review Letters</i> , 2015 , 114, 093902	7.4	74
239	DAC-Less Amplifier-Less Generation and Transmission of QAM Signals Using Sub-Volt Silicon-Organic Hybrid Modulators. <i>Journal of Lightwave Technology</i> , 2015 , 33, 1425-1432	4	31
238	40 GBd 16QAM Signaling at 160 Gb/s in a Silicon-Organic Hybrid Modulator. <i>Journal of Lightwave Technology</i> , 2015 , 33, 1210-1216	4	38
237	Plasmonic-organic hybrid (POH) modulators for OOK and BPSK signaling at 40 Gbit/s. <i>Optics Express</i> , 2015 , 23, 9938-46	3.3	49
236	Flexible terabit/s Nyquist-WDM super-channels using a gain-switched comb source. <i>Optics Express</i> , 2015 , 23, 724-38	3.3	38
235	Synthetic-wavelength interferometry improved with frequency calibration and unambiguity range extension. <i>Applied Optics</i> , 2015 , 54, 6334-43	0.2	5
234	Stacked modulation formats enabling highest-sensitivity optical free-space links. <i>Optics Express</i> , 2015 , 23, 21942-57	3.3	7
233	Measurement of Length and Position with Frequency Combs. <i>Journal of Physics: Conference Series</i> , 2015 , 605, 012030	0.3	6
232	Phase-noise compensated carriers from an optical frequency comb allowing terabit transmission 2015 ,		4
231	Terabit/s communications using chip-scale frequency comb sources 2015 ,		1
230	Full C and L-Band Transmission at 20 Tbit/s Using Cavity-Soliton Kerr Frequency Combs 2015 ,		6
229	64 GBd Operation of a Silicon-Organic Hybrid Modulator at Elevated Temperature 2015 ,		1
228	Simultaneous Phase Noise Reduction of 30 Comb Lines from a Quantum-Dash Mode-Locked Laser Diode Enabling Coherent Tbit/s Data Transmission 2015 ,		7
227	Second-order nonlinear optical metamaterials: ABC-type nanolaminates. <i>Applied Physics Letters</i> , 2015 , 107, 121903	3.4	33

226	Plasmonic Internal Photoemission Detectors with Responsivities above 0.12 A/W 2015,		3
225	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration 2015,		4
224	Coherent Terabit Communications Using a Quantum-Dash Mode-Locked Laser and Self-Homodyne Detection 2015,		5
223	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> , 2015 , 33, 1650-1659	4	5
222	Multi-Chip Integration of Lasers and Silicon Photonics by Photonic Wire Bonding 2015,		3
221	Femtojoule electro-optic modulation using a silicon-organic hybrid device. <i>Light: Science and Applications</i> , 2015 , 4, e255-e255	16.7	136
220	100 Gbit/s OOK using a silicon-organic hybrid (SOH) modulator 2015,		8
219	High-speed and low-power silicon-organic hybrid modulators for advanced modulation formats 2015,		3
218	An ultra-high speed OFDMA system for optical access networks 2014,		1
217	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> , 2014 , 6, 225	4.1	16
216	Monolithic GaAs Electro-Optic IQ Modulator Demonstrated at 150 Gbit/s With 64QAM. <i>Journal of Lightwave Technology</i> , 2014 , 32, 760-765	4	21
215	20 Gbit/s Wireless Bridge at 220 GHz Connecting Two Fiber-Optic Links. <i>Journal of Optical Communications and Networking</i> , 2014 , 6, 54	4.1	15
214	High-speed plasmonic phase modulators. <i>Nature Photonics</i> , 2014 , 8, 229-233	33.9	376
213	Connecting silicon photonic circuits to multi-core fibers by photonic wire bonding 2014,		3
212	. <i>IEEE Photonics Journal</i> , 2014 , 6, 1-9	1.8	15
211	Femtojoule modulation and frequency comb generation in silicon-organic hybrid (SOH) devices 2014,		2
210	Coherent terabit communications with microresonator Kerr frequency combs. <i>Nature Photonics</i> , 2014 , 8, 375-380	33.9	358
209	Photonic-to-plasmonic mode converter. <i>Optics Letters</i> , 2014 , 39, 3488-91	3	18

208	High-Speed, Low Drive-Voltage Silicon-Organic Hybrid Modulator Based on a Binary-Chromophore Electro-Optic Material. <i>Journal of Lightwave Technology</i> , 2014 , 32, 2726-2734	4	101
207	Silicon Photonic Optical Coherence Tomography System 2014 ,		1
206	Integrated Silicon-Organic Hybrid (SOH) Frequency Shifter 2014 ,		4
205	Ultra-dense, single-wavelength DFT-spread OFDM PON with laserless 1 Gb/s ONU at only 300 MBd per spectral group 2014 ,		2
204	100 GHz silicon-organic hybrid modulator. <i>Light: Science and Applications</i> , 2014 , 3, e173-e173	16.7	198
203	Ultra-short silicon-organic hybrid (SOH) modulator for bidirectional polarization-independent operation 2014 ,		2
202	10 GBd SOH modulator directly driven by an FPGA without electrical amplification 2014 ,		2
201	Terabit/s optical transmission using chip-scale frequency comb sources 2014 ,		2
200	High-Speed Silicon-Organic Hybrid (SOH) Modulators with 230 pm/V Electro-Optic Coefficient Using Advanced Materials 2014 ,		4
199	Flexible real-time transmitter at 10 Gbit/s for SCFDMA PONs focusing on low-cost ONUs 2014 ,		2
198	Demonstration of an SOA-assisted open metro-access infrastructure for heterogeneous services. <i>Optics Express</i> , 2014 , 22, 737-48	3.3	10
197	Silicon-organic hybrid (SOH) frequency comb sources for terabit/s data transmission. <i>Optics Express</i> , 2014 , 22, 3629-37	3.3	72
196	Timing, carrier frequency and phase recovery for OFDM and Nyquist signals using a mean modulus algorithm. <i>Optics Express</i> , 2014 , 22, 9344-59	3.3	
195	Full flex-grid asynchronous multiplexing demonstrated with Nyquist pulse-shaping. <i>Optics Express</i> , 2014 , 22, 10923-37	3.3	10
194	Amplification of advanced modulation formats with a semiconductor optical amplifier cascade. <i>Optics Express</i> , 2014 , 22, 17854-71	3.3	16
193	Low-power silicon-organic hybrid (SOH) modulators for advanced modulation formats. <i>Optics Express</i> , 2014 , 22, 29927-36	3.3	49
192	Real-time Nyquist signaling with dynamic precision and flexible non-integer oversampling. <i>Optics Express</i> , 2014 , 22, 193-209	3.3	7
191	In-Service Monitoring of PON Access Networks With Powerline Independent Devices. <i>Journal of Optical Communications and Networking</i> , 2014 , 6, 1018	4.1	6

190	From silicon-organic hybrid to plasmonic modulation 2014 ,		1
189	Wireless sub-THz communication system with high data rate enabled by RF photonics and active MMIC technology 2014 ,		11
188	Digital Pulse-Shaping for Spectrally Efficient and Flexible Coherent Optical Networks 2014 ,		1
187	Transmission of a 1.44 Tbit/s Data Stream using a Feedback-Stabilized SiN Kerr Frequency Comb Source 2014 ,		1
186	Blind Polarization Demultiplexing With Low Computational Complexity. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 1230-1233	2.2	10
185	Pulse-Shaping With Digital, Electrical, and Optical Filters—A Comparison. <i>Journal of Lightwave Technology</i> , 2013 , 31, 2570-2577	4	39
184	High-Quality Optical Frequency Comb by Spectral Slicing of Spectra Broadened by SPM. <i>IEEE Photonics Journal</i> , 2013 , 5, 7201011-7201011	1.8	16
183	. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 701-704	2.2	44
182	Wireless sub-THz communication system with high data rate. <i>Nature Photonics</i> , 2013 , 7, 977-981	33.9	726
181	EVM as new quality metric for optical modulation analysis 2013 ,		2
180	High-speed, low-power optical modulators in silicon 2013 ,		3
179	Silicon-organic hybrid devices 2013 ,		2
178	Optical OFDM and Nyquist Multiplexing 2013 , 381-432		4
177	Plasmonic Communications: Light on a Wire. <i>Optics and Photonics News</i> , 2013 , 24, 28	1.9	62
176	Low-Loss Silicon Strip-to-Slot Mode Converters. <i>IEEE Photonics Journal</i> , 2013 , 5, 2200409-2200409	1.8	60
175	Silicon-Organic Hybrid MZI Modulator Generating OOK, BPSK and 8-ASK Signals for Up to 84 Gbit/s. <i>IEEE Photonics Journal</i> , 2013 , 5, 6600907-6600907	1.8	31
174	Terabit/s data transmission using optical frequency combs 2013 ,		3
173	Photonic wire bonding: connecting nanophotonic circuits across chip boundaries 2013 ,		2

172	Silicon-Organic Hybrid (SOH) Modulator Generating up to 84 Gbit/s BPSK and M-ASK Signals 2013 ,		2
171	100 Gbit/s Wireless Link with mm-Wave Photonics 2013 ,		18
170	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM 2013 ,		3
169	Colorless FDMA-PON With Flexible Bandwidth Allocation and Colorless, Low-Speed ONUs [Invited]. <i>Journal of Optical Communications and Networking</i> , 2013 , 5, A204	4.1	15
168	Silicon-organic hybrid (SOH) IQ modulator using the linear electro-optic effect for transmitting 16QAM at 112 Gbit/s. <i>Optics Express</i> , 2013 , 21, 13219-27	3.3	75
167	Four-in-one interferometer for coherent and self-coherent detection. <i>Optics Express</i> , 2013 , 21, 13293-3043		3
166	Silicon-Organic Hybrid Electro-Optical Devices. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2013 , 19, 114-126	3.8	101
165	A novel system on chip for software-defined, high-speed OFDM signal processing 2013 ,		4
164	Optical absorption in silicon layers in the presence of charge inversion/accumulation or ion implantation. <i>Applied Physics Letters</i> , 2013 , 103, 051104	3.4	21
163	Low Power Mach-Zehnder Modulator in Silicon-Organic Hybrid Technology. <i>IEEE Photonics Technology Letters</i> , 2013 , 25, 1226-1229	2.2	58
162	High-Speed Silicon-Organic Hybrid (SOH) Modulator with 1.6 fJ/bit and 180 pm/V In-Device Nonlinearity 2013 ,		10
161	Silicon-organic hybrid (SOH) IQ modulator for 16QAM at 112 Gbit/s 2013 ,		1
160	Polarization-Sensitive Optical Coherence Tomography for Characterization of Size and Shape of Nano-Particles 2013 ,		1
159	100 Gbit/s Wireless Link with mm-Wave Photonics 2013 ,		6
158	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM 2013 ,		1
157	Bi-directional Ultra-dense Polarization-diverse OFDM/WDM PON with Laserless Colorless 1Gb/s ONUs Based on Si PICs and 2013 ,		3
156	252 Gbit/s Real-Time Nyquist Pulse Generation by Reducing the Oversampling Factor to 1.33 2013 ,		9
155	Flexible WDM-PON with Nyquist-FDM and 31.25 Gbit/s per Wavelength Channel Using Colorless, Low-Speed ONUs 2013 ,		3

154	. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2012 , 18, 689-700	3.8	33
153	Time and frequency synchronization for ultra-high speed OFDM systems 2012 ,		1
152	Quality metrics for optical signals: Eye diagram, Q-factor, OSNR, EVM and BER 2012 ,		59
151	Performance analysis of an OFDM transmission system with directly modulated lasers for wireless backhauling 2012 ,		1
150	Real-time Nyquist pulse generation beyond 100 Gbit/s and its relation to OFDM. <i>Optics Express</i> , 2012 , 20, 317-37	3.3	117
149	Single-Laser 325Tbit/s Nyquist WDM Transmission. <i>Journal of Optical Communications and Networking</i> , 2012 , 4, 715	4.1	106
148	Comment on "Nonreciprocal light propagation in a silicon photonic circuit". <i>Science</i> , 2012 , 335, 38; author reply 38	33.3	93
147	Linear Semiconductor Optical Amplifiers. <i>Springer Series in Optical Sciences</i> , 2012 , 511-571	0.5	2
146	Error Vector Magnitude as a Performance Measure for Advanced Modulation Formats. <i>IEEE Photonics Technology Letters</i> , 2012 , 24, 61-63	2.2	312
145	Doping Geometries for 40G Carrier-Depletion-Based Silicon Optical Modulators 2012 ,		4
144	4 Gbit/s Real-Time OFDM Signal Generation with Transmission over 400 km and Preamble-less Reception 2012 ,		2
143	Quality Metrics in Optical Modulation Analysis: EVM and its relation to Q-factor, OSNR, and BER 2012 ,		2
142	512QAM Nyquist sinc-pulse transmission at 54 Gbit/s in an optical bandwidth of 3 GHz. <i>Optics Express</i> , 2012 , 20, 6439-47	3.3	60
141	Linear semiconductor optical amplifiers for amplification of advanced modulation formats. <i>Optics Express</i> , 2012 , 20, 9657-72	3.3	21
140	Real-time OFDM or Nyquist pulse generation--which performs better with limited resources?. <i>Optics Express</i> , 2012 , 20, B543-51	3.3	29
139	Silicon-organic hybrid phase shifter based on a slot waveguide with a liquid-crystal cladding. <i>Optics Express</i> , 2012 , 20, 15359-76	3.3	54
138	Photonic wire bonding: a novel concept for chip-scale interconnects. <i>Optics Express</i> , 2012 , 20, 17667-77	3.3	185
137	Second-order nonlinear silicon-organic hybrid waveguides. <i>Optics Express</i> , 2012 , 20, 20506-15	3.3	31

136	A self-coherent receiver for detection of PolMUX coherent signals. <i>Optics Express</i> , 2012 , 20, 21413-33	3.3	8
135	Efficient modulation cancellation using reflective SOAs. <i>Optics Express</i> , 2012 , 20, B587-94	3.3	26
134	Generation and transmission of 85.4 Gb/s real-time 16QAM coherent optical OFDM signals over 400 km SSMF with preamble-less reception. <i>Optics Express</i> , 2012 , 20, 21612-7	3.3	7
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