# **Christian Koos**

#### List of Publications by Citations

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289 96 10,223 47 h-index g-index citations papers 6.6 13,365 386 5.91 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
289	Nonlinear silicon photonics. <i>Nature Photonics</i> , <b>2010</b> , 4, 535-544	33.9	773
288	Wireless sub-THz communication system with high data rate. <i>Nature Photonics</i> , <b>2013</b> , 7, 977-981	33.9	726
287	All-optical high-speed signal processing with silicon@rganic hybrid slot waveguides. <i>Nature Photonics</i> , <b>2009</b> , 3, 216-219	33.9	597
286	Microresonator-based solitons for massively parallel coherent optical communications. <i>Nature</i> , <b>2017</b> , 546, 274-279	50.4	427
285	High-speed plasmonic phase modulators. <i>Nature Photonics</i> , <b>2014</b> , 8, 229-233	33.9	376
284	26 Tbit sll line-rate super-channel transmission utilizing all-optical fast Fourier transform processing. <i>Nature Photonics</i> , <b>2011</b> , 5, 364-371	33.9	364
283	Coherent terabit communications with microresonator Kerr frequency combs. <i>Nature Photonics</i> , <b>2014</b> , 8, 375-380	33.9	358
282	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
281	Nonlinear silicon-on-insulator waveguides for all-optical signal processing. <i>Optics Express</i> , <b>2007</b> , 15, 597	6390	289
280	Ultrafast optical ranging using microresonator soliton frequency combs. <i>Science</i> , <b>2018</b> , 359, 887-891	33.3	274
279	High-speed low-voltage electro-optic modulator with a polymer-infiltrated silicon photonic crystal waveguide. <i>Optics Express</i> , <b>2008</b> , 16, 4177-91	3.3	226
278	100 GHz silicon Brganic hybrid modulator. <i>Light: Science and Applications</i> , <b>2014</b> , 3, e173-e173	16.7	198
277	Photonic wire bonding: a novel concept for chip-scale interconnects. <i>Optics Express</i> , <b>2012</b> , 20, 17667-77	3.3	185
276	Surface plasmon polariton absorption modulator. <i>Optics Express</i> , <b>2011</b> , 19, 8855-69	3.3	176
275	In situ 3D nanoprinting of free-form coupling elements for hybrid photonic integration. <i>Nature Photonics</i> , <b>2018</b> , 12, 241-247	33.9	150
274	Femtojoule electro-optic modulation using a siliconBrganic hybrid device. <i>Light: Science and Applications</i> , <b>2015</b> , 4, e255-e255	16.7	136
273	42.7 Gbit/s electro-optic modulator in silicon technology. <i>Optics Express</i> , <b>2011</b> , 19, 11841-51	3.3	133

### (2014-2012)

272	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
271	Silicon Organic Hybrid Technology Platform for Practical Nonlinear Optics. <i>Proceedings of the IEEE</i> , <b>2009</b> , 97, 1304-1316	14.3	111
270	Single-Laser 325 Tbit/s Nyquist WDM Transmission. <i>Journal of Optical Communications and Networking</i> , <b>2012</b> , 4, 715	4.1	106
269	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
268	Silicon-Organic Hybrid Electro-Optical Devices. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2013</b> , 19, 114-126	3.8	101
267	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
266	Slow and fast dynamics of gain and phase in a quantum dot semiconductor optical amplifier. <i>Optics Express</i> , <b>2008</b> , 16, 170-8	3.3	91
265	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 256-268	4	89
264	Silicon Drganic and Plasmonic Drganic Hybrid Photonics. ACS Photonics, 2017, 4, 1576-1590	6.3	85
263	THz-to-optical conversion in wireless communications using an ultra-broadband plasmonic modulator. <i>Nature Photonics</i> , <b>2019</b> , 13, 519-524	33.9	81
262	Ultra-high electro-optic activity demonstrated in a silicon-organic hybrid modulator. <i>Optica</i> , <b>2018</b> , 5, 73	<b>9</b> 8.6	78
261	Biosensing: Densely Packed Microgoblet Laser Pairs for Cross-Referenced Biomolecular Detection (Adv. Sci. 10/2015). <i>Advanced Science</i> , <b>2015</b> , 2,	13.6	78
260	Optical properties of highly nonlinear silicon-organic hybrid (SOH) waveguide geometries. <i>Optics Express</i> , <b>2009</b> , 17, 17357-68	3.3	77
259	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
258	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
257	Optimally coherent Kerr combs generated with crystalline whispering gallery mode resonators for ultrahigh capacity fiber communications. <i>Physical Review Letters</i> , <b>2015</b> , 114, 093902	7.4	74
256	Hybrid integration of silicon photonics circuits and InP lasers by photonic wire bonding. <i>Optica</i> , <b>2018</b> , 5, 876	8.6	74
255	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

254	Plasmonic Communications: Light on a Wire. Optics and Photonics News, 2013, 24, 28	1.9	62
253	Connecting Silicon Photonic Circuits to Multicore Fibers by Photonic Wire Bonding. <i>Journal of Lightwave Technology</i> , <b>2015</b> , 33, 755-760	4	60
252	Low-Loss Silicon Strip-to-Slot Mode Converters. <i>IEEE Photonics Journal</i> , <b>2013</b> , 5, 2200409-2200409	1.8	60
251	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
250	Quality metrics for optical signals: Eye diagram, Q-factor, OSNR, EVM and BER 2012,		59
249	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
248	100 GBd Intensity Modulation and Direct Detection With an InP-Based Monolithic DFB Laser Mach Zehnder Modulator. <i>Journal of Lightwave Technology</i> , <b>2018</b> , 36, 97-102	4	56
247	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
246	Silicon-plasmonic internal-photoemission detector for 40 Gbit/s data reception. <i>Optica</i> , <b>2016</b> , 3, 741	8.6	54
245	Silicon-Organic Hybrid (SOH) Mach-Zehnder Modulators for 100 Gbit/s on-off Keying. <i>Scientific Reports</i> , <b>2018</b> , 8, 2598	4.9	50
244	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
243	Low-power silicon-organic hybrid (SOH) modulators for advanced modulation formats. <i>Optics Express</i> , <b>2014</b> , 22, 29927-36	3.3	49
242	All-polymer photonic sensing platform based on whispering-gallery mode microgoblet lasers. <i>Lab on A Chip</i> , <b>2015</b> , 15, 3800-6	7.2	46
241	Generalized Kramers Ironig receiver for coherent terahertz communications. <i>Nature Photonics</i> , <b>2020</b> , 14, 601-606	33.9	46
240	. IEEE Photonics Technology Letters, <b>2013</b> , 25, 701-704	2.2	44
239	Pulse-Shaping With Digital, Electrical, and Optical Filters Comparison. <i>Journal of Lightwave Technology</i> , <b>2013</b> , 31, 2570-2577	4	39
238	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
237	Flexible terabit/s Nyquist-WDM super-channels using a gain-switched comb source. <i>Optics Express</i> , <b>2015</b> , 23, 724-38	3.3	38

### (2010-2018)

236	Coherent modulation up to 100 GBd 16QAM using silicon-organic hybrid (SOH) devices. <i>Optics Express</i> , <b>2018</b> , 26, 220-232	3.3	38
235	Siliconplasmonic integrated circuits for terahertz signal generation and coherent detection.  Nature Photonics, 2018, 12, 625-633	33.9	38
234	Real-time OFDM transmitter beyond 100 Gbit/s. Optics Express, 2011, 19, 12740-9	3.3	37
233	Optical coherence tomography system mass-producible on a silicon photonic chip. <i>Optics Express</i> , <b>2016</b> , 24, 1573-86	3.3	33
232	Second-order nonlinear optical metamaterials: ABC-type nanolaminates. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 121903	3.4	33
231	The Input Power Dynamic Range of a Semiconductor Optical Amplifier and Its Relevance for Access Network Applications. <i>IEEE Photonics Journal</i> , <b>2011</b> , 3, 1039-1053	1.8	33
230	Silicon-organic hybrid (SOH) modulators for intensity-modulation / direct-detection links with line rates of up to 120 Gbit/s. <i>Optics Express</i> , <b>2017</b> , 25, 23784-23800	3.3	32
229	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
228	Large-scale parallel surface functionalization of goblet-type whispering gallery mode microcavity arrays for biosensing applications. <i>Small</i> , <b>2014</b> , 10, 3863-8	11	31
227	Silicon-Organic Hybrid MZI Modulator Generating OOK, BPSK and 8-ASK Signals for Up to 84 Gbit/s. <i>IEEE Photonics Journal</i> , <b>2013</b> , 5, 6600907-6600907	1.8	31
226	Second-order nonlinear silicon-organic hybrid waveguides. <i>Optics Express</i> , <b>2012</b> , 20, 20506-15	3.3	31
225	Wireless THz link with optoelectronic transmitter and receiver. <i>Optica</i> , <b>2019</b> , 6, 1063	8.6	31
224	Photonic molecules with a tunable inter-cavity gap. Light: Science and Applications, 2017, 6, e16224	16.7	30
223	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
222	Real-time OFDM or Nyquist pulse generationwhich performs better with limited resources?. <i>Optics Express</i> , <b>2012</b> , 20, B543-51	3.3	29
221	Multi-wavelength coherent transmission using an optical frequency comb as a local oscillator. <i>Optics Express</i> , <b>2016</b> , 24, 25432-25445	3.3	27
220	Efficient modulation cancellation using reflective SOAs. Optics Express, 2012, 20, B587-94	3.3	26
219	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

218	Hybrid multi-chip assembly of optical communication engines by in situ 3D nano-lithography. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 71	16.7	25
217	Lasing in silicon-organic hybrid waveguides. <i>Nature Communications</i> , <b>2016</b> , 7, 10864	17.4	24
216	Robust label-free biosensing using microdisk laser arrays with on-chip references. <i>Optics Express</i> , <b>2018</b> , 26, 3161-3173	3.3	24
215	Integration of digital microfluidics with whispering-gallery mode sensors for label-free detection of biomolecules. <i>Lab on A Chip</i> , <b>2017</b> , 17, 1740-1748	7.2	23
214	Complexity Analysis of the Kramers Kronig Receiver. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 4295-43	3047	23
213	Printed freeform lens arrays on multi-core fibers for highly efficient coupling in astrophotonic systems. <i>Optics Express</i> , <b>2017</b> , 25, 18288-18295	3.3	23
212	Custom-Designed Glassy Carbon Tips for Atomic Force Microscopy. <i>Micromachines</i> , <b>2017</b> , 8,	3.3	23
211	Tailored probes for atomic force microscopy fabricated by two-photon polymerization. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 063101	3.4	23
210	Coherent WDM transmission using quantum-dash mode-locked laser diodes as multi-wavelength source and local oscillator. <i>Optics Express</i> , <b>2019</b> , 27, 31164-31175	3.3	22
209	Surface sensing with integrated optical waveguides: a design guideline. <i>Optics Express</i> , <b>2018</b> , 26, 19885	-1,9,906	21
208	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
207	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
206	Linear semiconductor optical amplifiers for amplification of advanced modulation formats. <i>Optics Express</i> , <b>2012</b> , 20, 9657-72	3.3	21
205	Silicon-organic hybrid (SOH) Mach-Zehnder modulators for 100 GBd PAM4 signaling with sub-1 dB phase-shifter loss. <i>Optics Express</i> , <b>2020</b> , 28, 24693-24707	3.3	21
204	Integrated optical frequency shifter in silicon-organic hybrid (SOH) technology. <i>Optics Express</i> , <b>2016</b> , 24, 11694-707	3.3	21
203	Heterogeneous Integration on Silicon Photonics. <i>Proceedings of the IEEE</i> , <b>2018</b> , 106, 2258-2269	14.3	21
202	Corrections to Error Vector Magnitude as a Performance Measure for Advanced Modulation	2.2	20
	Formats[[Jan 1, 2012 61-63]. <i>IEEE Photonics Technology Letters</i> , <b>2012</b> , 24, 2198-2198		

### (2006-2015)

200	Densely Packed Microgoblet Laser Pairs for Cross-Referenced Biomolecular Detection. <i>Advanced Science</i> , <b>2015</b> , 2, 1500066	13.6	19
199	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
198	Photonic-to-plasmonic mode converter. <i>Optics Letters</i> , <b>2014</b> , 39, 3488-91	3	18
197	100 Gbit/s Wireless Link with mm-Wave Photonics <b>2013</b> ,		18
196	Second-Harmonic Generation from ZnO/Al2O3 Nanolaminate Optical Metamaterials Grown by Atomic-Layer Deposition. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 1203-1208	8.1	18
195	Generation of 64 GBd 4ASK signals using a silicon-organic hybrid modulator at 80°C. <i>Optics Express</i> , <b>2016</b> , 24, 9389-96	3.3	18
194	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
193	Coherent ePIC Receiver for 64 GBaud QPSK in 0.25 th Photonic BiCMOS Technology. <i>Journal of Lightwave Technology</i> , <b>2019</b> , 37, 103-109	4	17
192	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
191	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
190	Size-optimized polymeric whispering gallery mode lasers with enhanced sensing performance. <i>Optics Express</i> , <b>2017</b> , 25, 7884-7894	3.3	16
189	Amplification of advanced modulation formats with a semiconductor optical amplifier cascade. <i>Optics Express</i> , <b>2014</b> , 22, 17854-71	3.3	16
188	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
187	On the determination of In thin films: a comparison of one-beam second-harmonic generation measurement methodologies. <i>Scientific Reports</i> , <b>2017</b> , 7, 44581	4.9	15
186	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
185	. IEEE Photonics Journal, <b>2014</b> , 6, 1-9	1.8	15
184	Colorless FDMA-PON With Flexible Bandwidth Allocation and Colorless, Low-Speed ONUs [Invited]. Journal of Optical Communications and Networking, <b>2013</b> , 5, A204	4.1	15
183	. IEEE Photonics Technology Letters, <b>2006</b> , 18, 361-363	2.2	15

182	32QAM WDM Transmission Using a Quantum-Dash Passively Mode-Locked Laser with Resonant Feedback <b>2017</b> ,		15
181	Demonstration of long-term thermally stable silicon-organic hybrid modulators at 85 °C. <i>Optics Express</i> , <b>2018</b> , 26, 27955-27964	3.3	14
180	Transmission of 80-GBd 16-QAM over 300 km and Kramers-Kronig Reception Using a Low-Complexity FIR Hilbert Filter Approximation <b>2018</b> ,		14
179	Efficient free-space read-out of WGM lasers using circular micromirrors. <i>Optics Express</i> , <b>2015</b> , 23, 1025	-3 <b>4</b> .3	13
178	Photonic-integrated circuits with non-planar topologies realized by 3D-printed waveguide overpasses. <i>Optics Express</i> , <b>2019</b> , 27, 17402-17425	3.3	13
177	Why and How Civil Defense Militias Emerge: The Case of the Arrow Boys in South Sudan. <i>Studies in Conflict and Terrorism</i> , <b>2014</b> , 37, 1039-1057	0.9	12
176	Silicon photonic integrated circuit for fast and precise dual-comb distance metrology. <i>Optics Express</i> , <b>2017</b> , 25, 30091-30104	3.3	11
175	Organic semiconductor distributed feedback laser pixels for lab-on-a-chip applications fabricated by laser-assisted replication. <i>Faraday Discussions</i> , <b>2014</b> , 174, 153-64	3.6	11
174	Wireless sub-THz communication system with high data rate enabled by RF photonics and active MMIC technology <b>2014</b> ,		11
173	WDM Transmission Using Quantum-Dash Mode-Locked Laser Diodes as Multi-Wavelength Source and Local Oscillator <b>2017</b> ,		11
172	110-m THz Wireless Transmission at 100 Gbit/s Using a Kramers-Kronig Schottky Barrier Diode Receiver <b>2018</b> ,		11
171	Blind Polarization Demultiplexing With Low Computational Complexity. <i>IEEE Photonics Technology Letters</i> , <b>2013</b> , 25, 1230-1233	2.2	10
170	Full flex-grid asynchronous multiplexing demonstrated with Nyquist pulse-shaping. <i>Optics Express</i> , <b>2014</b> , 22, 10923-37	3.3	10
169	High-Speed Silicon-Organic Hybrid (SOH) Modulator with 1.6 fJ/bit and 180 pm/V In-Device Nonlinearity <b>2013</b> ,		10
168	FDTD-Modelling of Dispersive Nonlinear Ring Resonators: Accuracy Studies and Experiments. <i>IEEE Journal of Quantum Electronics</i> , <b>2006</b> , 42, 1215-1223	2	10
167	Performance of chip-scale optical frequency comb generators in coherent WDM communications. <i>Optics Express</i> , <b>2020</b> , 28, 12897-12910	3.3	10
166	100 GBd Intensity Modulation and Direct Detection with an InP-based Monolithic DFB Laser Mach-Zehnder Modulator <b>2017</b> ,		10
165	3D-Printed Scanning-Probe Microscopes with Integrated Optical Actuation and Read-Out. <i>Small</i> , <b>2020</b> , 16, e1904695	11	10

## (2018-2016)

164	Multiscale dispersion-state characterization of nanocomposites using optical coherence tomography. <i>Scientific Reports</i> , <b>2016</b> , 6, 31733	4.9	9	
163	The Effects of Oil Production and Ethnic Representation on Violent Conflict in Nigeria: A Mixed-Methods Approach. <i>Terrorism and Political Violence</i> , <b>2016</b> , 28, 888-911	1.2	9	
162	When Do Religious Leaders Support Faith-Based Violence? Evidence from a Survey Poll in South Sudan. <i>Political Research Quarterly</i> , <b>2015</b> , 68, 760-772	1.5	9	
161	A Surface Plasmon Polariton Absorption Modulator <b>2010</b> ,		9	
160	Silicon-on-insulator modulators for next-generation 100 Gbit/s-Ethernet 2007, 056		9	
159	Record-High In-Device Electro-Optic Coefficient of 359 pm/V in a Silicon-Organic Hybrid (SOH) Modulator <b>2017</b> ,		9	
158	252 Gbit/s Real-Time Nyquist Pulse Generation by Reducing the Oversampling Factor to 1.33 <b>2013</b> ,		9	
157	100 Gbit/s OOK using a silicon-organic hybrid (SOH) modulator <b>2015</b> ,		8	
156	A self-coherent receiver for detection of PolMUX coherent signals. <i>Optics Express</i> , <b>2012</b> , 20, 21413-33	3.3	8	
155	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	
154	Impact of alfa-factor on SOA Dynamic Range for 20 GBd BPSK, QPSK and 16-QAM Signals <b>2011</b> ,		8	
153	101.5 Gbit/s Real-Time OFDM Transmitter with 16QAM Modulated Subcarriers <b>2011</b> ,		8	
152	Hybrid electro-optic modulator combining silicon photonic slot waveguides with high-k radio-frequency slotlines. <i>Optica</i> , <b>2021</b> , 8, 511	8.6	8	
151	Stacked modulation formats enabling highest-sensitivity optical free-space links. <i>Optics Express</i> , <b>2015</b> , 23, 21942-57	3.3	7	
150	Simultaneous Phase Noise Reduction of 30 Comb Lines from a Quantum-Dash Mode-Locked Laser Diode Enabling Coherent Tbit/s Data Transmission <b>2015</b> ,		7	
149	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	
148	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> , <b>2012</b> , 20, 21612-7	3.3	7	
147	Terahertz-to-Optical Conversion Using a Plasmonic Modulator <b>2018</b> ,		7	

146	Fundamental limitations of spectrally-sliced optically enabled data converters arising from MLL timing jitter. <i>Optics Express</i> , <b>2020</b> , 28, 18790-18813	3.3	7
145	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> , <b>2020</b> , 28, 23594-23608	3.3	7
144	8-channel 448 Gbit/s Silicon Photonic Transmitter Enabled by Photonic Wire Bonding <b>2017</b> ,		7
143	Measurement of Length and Position with Frequency Combs. <i>Journal of Physics: Conference Series</i> , <b>2015</b> , 605, 012030	0.3	6
142	Full C and L-Band Transmission at 20 Tbit/s Using Cavity-Soliton Kerr Frequency Combs <b>2015</b> ,		6
141	3D-Printed Ultra-Broadband Highly Efficient Out-of-Plane Coupler for Photonic Integrated Circuits <b>2018</b> ,		6
140	Optical loss by surface transfer doping in silicon waveguides. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 031107	3.4	6
139	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
138	Silicon high-speed electro-optic modulator <b>2010</b> ,		6
137	Micro-lens arrays as tip-tilt sensor for single mode fiber coupling 2018,		6
137	Micro-lens arrays as tip-tilt sensor for single mode fiber coupling 2018,  100 Gbit/s Wireless Link with mm-Wave Photonics 2013,		6
		3.3	
136	100 Gbit/s Wireless Link with mm-Wave Photonics <b>2013</b> ,  Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. <i>Optics</i>	3.3	6
136 135	100 Gbit/s Wireless Link with mm-Wave Photonics <b>2013</b> ,  Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. <i>Optics Express</i> , <b>2018</b> , 26, 34580-34591		6
136 135 134	100 Gbit/s Wireless Link with mm-Wave Photonics <b>2013</b> ,  Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. <i>Optics Express</i> , <b>2018</b> , 26, 34580-34591  Lasing in SiN-organic hybrid (SiNOH) waveguides. <i>Optics Express</i> , <b>2020</b> , 28, 5085-5104		6 6
136 135 134	100 Gbit/s Wireless Link with mm-Wave Photonics 2013,  Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. <i>Optics Express</i> , 2018, 26, 34580-34591  Lasing in SiN-organic hybrid (SiNOH) waveguides. <i>Optics Express</i> , 2020, 28, 5085-5104  Silicon-Organic Hybrid (SOH) IQ Modulator for 100 GBd 16QAM Operation 2017,  Fast high-precision distance metrology using a pair of modulator-generated dual-color frequency	3.3	6 6 6
136 135 134 133	100 Gbit/s Wireless Link with mm-Wave Photonics 2013,  Electrically packaged silicon-organic hybrid (SOH) I/Q-modulator for 64 GBd operation. <i>Optics Express</i> , 2018, 26, 34580-34591  Lasing in SiN-organic hybrid (SiNOH) waveguides. <i>Optics Express</i> , 2020, 28, 5085-5104  Silicon-Organic Hybrid (SOH) IQ Modulator for 100 GBd 16QAM Operation 2017,  Fast high-precision distance metrology using a pair of modulator-generated dual-color frequency combs. <i>Optics Express</i> , 2018, 26, 34305-34335  Synthetic-wavelength interferometry improved with frequency calibration and unambiguity range	3-3	<ul><li>6</li><li>6</li><li>6</li><li>6</li><li>6</li></ul>

128	Coherent Terabit Communications Using a Quantum-Dash Mode-Locked Laser and Self-Homodyne Detection <b>2015</b> ,		5
127	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
126	Ultra-Broadband Bidirectional Dual-Band Quantum-Dot Semiconductor Optical Amplifier 2015,		5
125	Real-Time Nyquist Pulse Modulation Transmitter Generating Rectangular Shaped Spectra of 112 Gbit/s 16QAM Signals <b>2011</b> ,		5
124	Nyquist Frequency Division Multiplexing for Optical Communications 2012,		5
123	Fascism, Fatherhood, and the Family in Interwar France: The Case of Antoine Rdier and the Ldion. <i>Journal of Family History</i> , <b>1999</b> , 24, 317-329	0.4	5
122	Capacitively Coupled Silicon-Organic Hybrid Modulator for 200 Gbit/s PAM-4 Signaling <b>2019</b> ,		5
121	8.32 Tbit/s Coherent Transmission Using a Quantum-Dash Mode-Locked Laser Diode <b>2016</b> ,		5
120	Verified equivalent-circuit model for slot-waveguide modulators. <i>Optics Express</i> , <b>2020</b> , 28, 12951-12976	3.3	5
119	3D-printed optical probes for wafer-level testing of photonic integrated circuits. <i>Optics Express</i> , <b>2020</b> , 28, 37996-38007	3.3	5
118	SOH Mach-Zehnder Modulators for 100 GBd PAM4 Signaling With Sub-1 dB Phase-Shifter Loss <b>2020</b> ,		5
117	100 Gbit/s Serial Transmission Using a Silicon-Organic Hybrid (SOH) Modulator and a Duobinary Driver IC <b>2017</b> ,		5
116	Biophotonic sensors with integrated SiN-organic hybrid (SiNOH) lasers for point-of-care diagnostics. <i>Light: Science and Applications</i> , <b>2021</b> , 10, 64	16.7	5
115	Bandwidth and conversion efficiency analysis of dissipative Kerr soliton frequency combs based on bifurcation theory. <i>Physical Review A</i> , <b>2019</b> , 100,	2.6	4
114	Phase-noise compensated carriers from an optical frequency comb allowing terabit transmission <b>2015</b> ,		4
113	Integrated Silicon-Organic Hybrid (SOH) Frequency Shifter <b>2014</b> ,		4
112	Silicon-Organic Hybrid (SOH) and Plasmonic-Organic Hybrid (POH) Integration 2015,		4
111	High-Speed Silicon-Organic Hybrid (SOH) Modulators with 230 pm/V Electro-Optic Coefficient Using Advanced Materials <b>2014</b> ,		4

110	Doping Geometries for 40G Carrier-Depletion-Based Silicon Optical Modulators 2012,		4
109	Software-defined optical transmission <b>2011</b> ,		4
108	Silicon-Organic Hybrid (SOH) Devices for Nonlinear Optical Signal Processing 2008,		4
107	"On les aura!": the gendered politics of abortion and the Alliance Nationale contre la Dβopulation, 1938-1944. <i>Modern and Contemporary France</i> , <b>1999</b> , 7, 21-34	0.2	4
106	Diffraction-limited integral-field spectroscopy for extreme adaptive optics systems with the multicore fiber-fed integral-field unit. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , <b>2020</b> , 6,	1.1	4
105	Lenses for Low-Loss Chip-to-Fiber and Fiber-to-Fiber Coupling Fabricated by 3D Direct-Write Lithography <b>2016</b> ,		4
104	Microresonator-Based Optical Frequency Combs for High-Bitrate WDM Data Transmission 2012,		4
103	Colorless Coherent Passive Optical Network Using a Frequency Comb Local Oscillator <b>2019</b> ,		4
102	Optical Arbitrary Waveform Measurement (OAWM) on the Silicon Photonic Platform 2021,		4
101	Connecting silicon photonic circuits to multi-core fibers by photonic wire bonding 2014,		3
100	High-speed, low-power optical modulators in silicon 2013,		3
99	Spectral signature of nonlinear effects in semiconductor optical amplifiers. <i>Optics Express</i> , <b>2017</b> , 25, 2	95 <u>36</u> -29	95\$9
98	Plasmonic Internal Photoemission Detectors with Responsivities above 0.12 A/W <b>2015</b> ,		3
97	Multi-Chip Integration of Lasers and Silicon Photonics by Photonic Wire Bonding <b>2015</b> ,		3
96	High-speed and low-power silicon-organic hybrid modulators for advanced modulation formats <b>2015</b> ,		3
95	Terabit/s data transmission using optical frequency combs 2013,		3
94	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM <b>2013</b> ,		3
93	40 Gbit/s silicon-organic hybrid (SOH) phase modulator <b>2010</b> ,		3

92	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
91	Photonic Waveguide Bonds 🖪 Novel Concept for Chip-to-Chip Interconnects <b>2011</b> ,	3
90	New Approaches to Perform All-Optical Signal Regeneration 2007,	3
89	All-Optical Wavelength Conversion at 42.7 Gbit/s in a 4 mm Long Silicon-Organic Hybrid Waveguide <b>2009</b> ,	3
88	150 Gbit/s Real-Time Nyquist Pulse Transmission Over 150 km SSMF Enhanced by DSP with Dynamic Precision <b>2012</b> ,	3
87	Multi-Chip Integration by Photonic Wire Bonding: Connecting Surface and Edge Emitting Lasers to Silicon Chips <b>2016</b> ,	3
86	Optically Enabled ADCs and Application to Optical Communications. <i>IEEE Open Journal of the Solid-State Circuits Society</i> , <b>2021</b> , 1-1	3
85	Remote Heterodyne Reception of OFDM-QPSK as Downlink-Solution for Future Access Networks <b>2012</b> ,	3
84	First Silicon-Organic Hybrid Laser at Telecommunication Wavelengths 2012,	3
83	Flexible WDM-PON with Nyquist-FDM and 31.25 Gbit/s per Wavelength Channel Using Colorless, Low-Speed ONUs <b>2013</b> ,	3
82	Wireless Transmission at 0.3 THz Using Direct THz-to-Optical Conversion at the Receiver 2018,	3
81	Fast and reliable method to estimate losses of single-mode waveguides with an arbitrary 2D trajectory. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2018</b> , 35, 1063-90	)73 <sup>2</sup>
80	Femtojoule modulation and frequency comb generation in silicon-organic hybrid (SOH) devices <b>2014</b> ,	2
79	EVM as new quality metric for optical modulation analysis 2013,	2
78	Mach-Zehnder interferometer readout for instantaneous sensor calibration and extraction of endlessly unwrapped phase <b>2017</b> ,	2
77	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
76	Organic semiconductor distributed feedback laser as excitation source in Raman spectroscopy using free-beam and fibre coupling <b>2014</b> ,	2
75	Direct digital control of an efficient silicon+liquid crystal phase shifter <b>2014</b> ,	2

74	Ultra-short silicon-organic hybrid (SOH) modulator for bidirectional polarization-independent operation <b>2014</b> ,	2
73	10 GBd SOH modulator directly driven by an FPGA without electrical amplification 2014,	2
72	Terabit/s optical transmission using chip-scale frequency comb sources 2014,	2
71	Flexible real-time transmitter at 10 Gbit/s for SCFDMA PONs focusing on low-cost ONUs <b>2014</b> ,	2
7º	4 Gbit/s Real-Time OFDM Signal Generation with Transmission over 400 km and Preamble-less Reception <b>2012</b> ,	2
69	Silicon-organic hybrid devices <b>2013</b> ,	2
68	Photonic wire bonding: connecting nanophotonic circuits across chip boundaries 2013,	2
67	Silicon-Organic Hybrid (SOH) Modulator Generating up to 84 Gbit/s BPSK and M-ASK Signals <b>2013</b> ,	2
66	A surface plasmon polariton absorption modulator <b>2011</b> ,	2
65	Linear and nonlinear semiconductor optical amplifiers 2010,	2
64	Quality Metrics in Optical Modulation Analysis: EVM and its relation to Q-factor, OSNR, and BER <b>2012</b> ,	2
63	All-optical wavelength conversion using cross-phase modulation at 42.7 Gbit/s in silicon-organic hybrid (SOH) waveguides <b>2009</b> ,	2
62	All-Optical Wavelength Conversion of 56 Gbit/s NRZ-DQPSK Signals in Silicon-Organic Hybrid Strip Wavequides <b>2010</b> ,	2
	waveguides 2010,	_
61	Highly nonlinear silicon photonics slot waveguides without free carrier absorption related speed-limitations 2008,	2
61 60	Highly nonlinear silicon photonics slot waveguides without free carrier absorption related	
	Highly nonlinear silicon photonics slot waveguides without free carrier absorption related speed-limitations <b>2008</b> ,	2
60	Highly nonlinear silicon photonics slot waveguides without free carrier absorption related speed-limitations 2008,  An innovative integral field unit upgrade with 3D-printed micro-lenses for the RHEA at Subaru 2020,  Silicon-Plasmonic Photomixer for Generation and Homodyne Reception of Continuous-Wave THz	2

56	An Energy-Efficient 252 Gbit/s Silicon-Based IQ-Modulator <b>2016</b> ,		2
55	InP/Silicon Hybrid External-Cavity Lasers (ECL) Using Photonic Wirebonds as Coupling Elements <b>2020</b> ,		2
54	Multi-core fibre-fed integral-field unit (MCIFU): overview and first-light 2020,		2
53	Wireless THz Communications Using Optoelectronic Techniques for Signal Generation and Coherent Reception <b>2017</b> ,		2
52	3D-M3: high-spatial-resolution spectroscopy with extreme AO and 3D-printed micro-lenslets. <i>Applied Optics</i> , <b>2021</b> , 60, D108-D121	1.7	2
51	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> , <b>2021</b> , 103,	2.6	2
50	Generalized Kramers-Kronig Receiver for 16QAM Wireless THZ Transmission AT 110 Gbit/s <b>2019</b> ,		2
49	3D-Printed Optics for Wafer-Scale Probing <b>2018</b> ,		2
48	Hybrid external-cavity lasers (ECL) using photonic wire bonds as coupling elements. <i>Scientific Reports</i> , <b>2021</b> , 11, 16426	4.9	2
47	Nanophotonic modulators and photodetectors using silicon photonic and plasmonic device concepts <b>2017</b> ,		1
46	Terabit/s communications using chip-scale frequency comb sources 2015,		1
45	64 GBd Operation of a Silicon-Organic Hybrid Modulator at Elevated Temperature <b>2015</b> ,		1
44	Silicon Photonic Optical Coherence Tomography System <b>2014</b> ,		1
43	Four-Channel 784 Gbit/s Transmitter Module Enabled by Photonic Wire Bonding and Silicon-Organic Hybrid Modulators <b>2017</b> ,		1
42	Absolutely referenced distance measurement by combination of time-of-flight and digital holographic methods <b>2014</b> ,		1
41	From silicon-organic hybrid to plasmonic modulation <b>2014</b> ,		1
40	Performance analysis of an OFDM transmission system with directly modulated lasers for wireless backhauling <b>2012</b> ,		1
39	Silicon-organic hybrid (SOH) IQ modulator for 16QAM at 112 Gbit/s <b>2013</b> ,		1

38	Optical and electrical power dynamic range of semiconductor optical amplifiers in radio-over-fiber networks <b>2010</b> ,		1
37	Terabit/s FFT processing lbptics can do it on-the-fly <b>2010</b> ,		1
36	Smooth and ultra-precise silicon nanowires fabricated by conventional optical lithography 2011,		1
35	Rival Signals in SOA Reach-Extended WDM-TDM-GPON Converged with RoF <b>2011</b> ,		1
34	Silicon-Organic Hybrid (SOH) Electro-Optical Devices <b>2011</b> ,		1
33	Modulation Cancellation Properties of Reflective SOAs 2012,		1
32	All-Optical Signal Processing WITH Nonlinear Resonant Devices 2006,		1
31	Microwave Modelling of Photonic Crystals <b>2006</b> , 198-214		1
30	Design and fabrication of nanophotonic devices		1
29	Ultra-fast optical ranging using quantum-dash mode-locked laser diodes <i>Scientific Reports</i> , <b>2022</b> , 12, 1076	4.9	1
28	Second-harmonic generation from ZnO/Al2O3 laminate optical metamaterials grown by atomic-layer deposition <b>2016</b> ,		1
27	Polarization-Sensitive Optical Coherence Tomography for Characterization of Size and Shape of Nano-Particles <b>2013</b> ,		1
26	Lasing in Si3N4-Organic Hybrid (SiNOH) Spiral Resonators <b>2018</b> ,		1
25	Horizontal-Slot Plasmonic-Organic Hybrid (POH) Modulator <b>2020</b> ,		1
24	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM <b>2013</b> ,		1
24			1
	First Monolithic GaAs IQ Electro-optic Modulator, Demonstrated at 150 Gbit/s with 64-QAM <b>2013</b> ,  Transmission of a 1.44 Tbit/s Data Stream using a Feedback-Stabilized SiN Kerr Frequency Comb		

#### (2021-2008)

20	100 Gbit/s / 1 V Optical Modulator With Slotted Slow-Light Polymer-Infiltrated Silicon Photonic Crystal <b>2008</b> ,		1
19	CMOS-Compatible ALD Zinc Oxide Coating for On-Chip Second-Order Nonlinear Optical Functionalities <b>2017</b> ,		1
18	Ultrafast Dual-Comb Distance Metrology Using Dissipative Kerr Solitons 2017,		1
17	Uplink Solutions for Future Access Networks <b>2012</b> ,		1
16	NLO: ELECTRO-OPTIC APPLICATIONS. Materials and Energy, <b>2016</b> , 369-396		1
15	Optical Filter Requirements for DWDM Transmission Systems with Kramers-Kronig Receivers 2018,		1
14	PIXAPP Photonics Packaging Pilot Line development of a silicon photonic optical transceiver with pluggable fiber connectivity. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2022</b> , 1-1	3.8	1
13	Colorless Coherent TDM-PON Based on a Frequency-Comb Laser. <i>Journal of Lightwave Technology</i> , <b>2022</b> , 1-1	4	1
12	Guided Light in Silicon-Based Materials. Series in Optics and Optoelectronics, 2013, 55-96		О
11	Optical Arbitrary Waveform Measurement Using Silicon Photonic Slicing Filters. <i>Journal of Lightwave Technology</i> , <b>2021</b> , 1-1	4	O
10	Superconducting nanowire single-photon detector with 3D-printed free-form microlenses. <i>Optics Express</i> , <b>2021</b> , 29, 27708-27731	3.3	О
9	Integrated phase-sensitive photonic sensors: a system design tutorial. <i>Advances in Optics and Photonics</i> , <b>2021</b> , 13, 584	16.7	O
8	100 Millionen Telefongespr⊡he Ber einen Frequenzkamm. <i>Physik in Unserer Zeit</i> , <b>2014</b> , 45, 163-165	0.1	
7	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	
6	Biosensors: Large-Scale Parallel Surface Functionalization of Goblet-type Whispering Gallery Mode Microcavity Arrays for Biosensing Applications (Small 19/2014). <i>Small</i> , <b>2014</b> , 10, 4032-4032	11	
5	Four-in-one interferometer for coherent and self-coherent detection. <i>Optics Express</i> , <b>2013</b> , 21, 13293-	30 <del>4</del> .3	
4	Chip-based frequency combs for wavelength-division multiplexing applications <b>2020</b> , 51-102		
3	Field-effect silicon-plasmonic photodetector for coherent T-wave reception. <i>Optics Express</i> , <b>2021</b> , 29, 21586-21602	3.3	

2	America B: Optical Physics, <b>2021</b> , 38, 2517	1.7
1	Wireless THz Transmission Using a Kramers-Kronig Receiver. <i>Springer Series in Optical Sciences</i> , 2022, 481-485	0.5