Cyril C Renaud

List of Publications by Year
in descending order

99 papers	4,624 citations	218677 26 h-index	168389 53 g-index
100 all docs	100 docs citations	100 times ranked	4031 citing authors

#	Article	IF	Citations
1	Advances in terahertz communications accelerated by photonics. Nature Photonics, 2016, 10, 371-379.	31.4	1,284
2	The 2017 terahertz science and technology roadmap. Journal Physics D: Applied Physics, 2017, 50, 043001.	2.8	1,160
3	TeraHertz Photonics for Wireless Communications. Journal of Lightwave Technology, 2015, 33, 579-587.	4.6	278
4	Traveling-wave Uni-Traveling Carrier Photodiodes for continuous wave THz generation. Optics Express, 2010, 18, 11105.	3.4	154
5	Microwave Photonic Integrated Circuits for Millimeter-Wave Wireless Communications. Journal of Lightwave Technology, 2014, 32, 3495-3501.	4.6	141
6	Continuous Wave Terahertz Generation From Ultra-Fast InP-Based Photodiodes. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 509-517.	4.6	125
7	Millimeter-Wave Photonic Components for Broadband Wireless Systems. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 3071-3082.	4.6	119
8	95ÂGHz millimeter wave signal generation using an arrayed waveguide grating dual wavelength semiconductor laser. Optics Letters, 2012, 37, 3657.	3.3	85
9	100 Gb/s Multicarrier THz Wireless Transmission System With High Frequency Stability Based on A Gain-Switched Laser Comb Source. IEEE Photonics Journal, 2015, 7, 1-11.	2.0	85
10	Monolithically Integrated Photonic Heterodyne System. Journal of Lightwave Technology, 2011, 29, 2229-2234.	4.6	71
11	Photonic generation for multichannel THz wireless communication. Optics Express, 2014, 22, 23465.	3.4	65
12	Coherent terahertz photonics. Optics Express, 2013, 21, 22988.	3.4	61
13	Integrated InP Heterodyne Millimeter Wave Transmitter. IEEE Photonics Technology Letters, 2014, 26, 965-968.	2.5	56
14	Integrated Semiconductor Laser Optical Phase Lock Loops. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-12.	2.9	53
15	Antenna Integrated THz Uni-Traveling Carrier Photodiodes. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-11.	2.9	52
16	Hybrid Integrated Optical Phase-Lock Loops for Photonic Terahertz Sources. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 210-217.	2.9	51
17	Optical injection locking of monolithically integrated photonic source for generation of high purity signals above 100 GHz. Optics Express, 2014, 22, 29404.	3.4	50
18	Monolithically Integrated Optical Phase Lock Loop for Microwave Photonics. Journal of Lightwave Technology, 2014, 32, 3893-3900.	4.6	44

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19	Sub-THz Wireless Over Fiber for Frequency Band 220â€“280 GHz. Journal of Lightwave Technology, 2016, 34, 4786-4793.	4.6	40
20	Millimeter-Wave Optoelectronic Mixers Based on Uni-Traveling Carrier Photodiodes. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 686-691.	4.6	38
21	Optoelectronic detection of millimetre-wave signals with travelling-wave uni-travelling carrier photodiodes. Optics Express, 2011, 19, 2079.	3.4	35
22	Phase Noise Investigation of Multicarrier Sub-THz Wireless Transmission System Based on an Injection-Locked Gain-Switched Laser. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 590-597.	3.1	35
23	Imaging and Analysis of THz Surface Plasmon Polariton Waves with the Integrated Sub-wavelength Aperture Probe. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 1031-1042.	2.2	33
24	Monolithically integrated heterodyne optical phase-lock loop with RF XOR phase detector. Optics Express, 2011, 19, 20048.	3.4	31
25	Accurate equivalent circuit model for millimetre-wave UTC photodiodes. Optics Express, 2016, 24, 4698.	3.4	30
26	Modelling of surface waves on a THz antenna detected by a near-field probe. Optics Express, 2012, 20, 16023.	3.4	28
27	Injection locking of a terahertz quantum cascade laser to a telecommunications wavelength frequency comb. Optica, 2017, 4, 1059.	9.3	28
28	Fast Tuneable InGaAsP DBR Laser Using Quantum-Confined Stark-Effect-Induced Refractive Index Change. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1112-1121.	2.9	23
29	Modelling and measurement of the absolute level of power radiated by antenna integrated THz UTC photodiodes. Optics Express, 2016, 24, 11793.	3.4	21
30	A Monolithic MQW InPâ€“InGaAsP-Based Optical Comb Generator. IEEE Journal of Quantum Electronics, 2007, 43, 998-1005.	1.9	20
31	Optical comb for generation of a continuously tunable coherent THz signal from 1225â€‰â€‰GHz to >27ÂTHz. Optics Letters, 2018, 43, 2507.	3.3	18
32	Tunable THz Signal Generation and Radio-Over-Fiber Link Based on an Optoelectronic Oscillator-Driven Optical Frequency Comb. Journal of Lightwave Technology, 2020, 38, 5240-5247.	4.6	18
33	Terahertz probe for spectroscopy of sub-wavelength objects. Optics Express, 2012, 20, 6197.	3.4	17
34	60-GHz Transmission Link Using Uni-Traveling Carrier Photodiodes at the Transmitter and the Receiver. Journal of Lightwave Technology, 2018, 36, 4507-4513.	4.6	17
35	5 Gbps wireless transmission link with an optically pumped uni-traveling carrier photodiode mixer at the receiver. Optics Express, 2018, 26, 2884.	3.4	17
36	Photodiodes for Terahertz Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-12.	2.9	17

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37	Single Sideband Signals for Phase Noise Mitigation in Wireless THz-Over-Fibre Systems. Journal of Lightwave Technology, 2018, 36, 4527-4534.	4.6	16
38	InGaAsP-based uni-travelling carrier photodiode structure grown by solid source molecular beam epitaxy. Optics Express, 2012, 20, 19279.	3.4	14
39	Optical Frequency Tuning for Coherent THz Wireless Signals. Journal of Lightwave Technology, 2018, 36, 4664-4670.	4.6	13
40	Near-Field Analysis of Terahertz Pulse Generation From Photo-Excited Charge Density Gradients. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 260-267.	3.1	12
41	High performance waveguide uni-travelling carrier photodiode grown by solid source molecular beam epitaxy. Optics Express, 2019, 27, 37065.	3.4	12
42	Building an end user focused THz based ultra high bandwidth wireless access network: The TERAPOD approach. , 2017, , .		11
43	Foundry fabricated photonic integrated circuit optical phase lock loop. Optics Express, 2017, 25, 16888.	3.4	11
44	Pilot-Tone Assisted 16-QAM Photonic Wireless Bridge Operating At 250 GHz. Journal of Lightwave Technology, 2021, 39, 2725-2736.	4.6	10
45	DWDM-PON/mm-Wave wireless converged Next Generation Access Topology using coherent heterodyne detection. , 2014, , .		9
46	Optical Phase Lock Loop as High-Quality Tuneable Filter for Optical Frequency Comb Line Selection. Journal of Lightwave Technology, 2018, 36, 4646-4654.	4.6	9
47	170 GHz Photodiodes for InP-based photonic integrated circuits. , 2012, , .		8
48	Efficient compact modelling of UTC-photodiode towards terahertz communication system design. Solid-State Electronics, 2020, 170, 107836.	1.4	8
49	Spectrally Efficient SSB signals for W-band Links Enabled by Kramers-Kronig Receiver. , 2018, , .		8
50	Comparison of Optical Single Sideband Techniques for THz-Over-Fiber Systems. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 98-105.	3.1	7
51	High temperature operation of athermal widely tuneable laser with simplified wavelength control for WDM-PON systems. Optics Express, 2014, 22, 24405.	3.4	5
52	Integrating THz Wireless Communication Links in a Data Centre Network. , 2019, , .		5
53	InP-based ultra-fast photodetectors for millimeter-wave sub-harmonic mixers. , 2011, , .		4
54	Multichannel 200GHz 40Gb/s wireless communication system using photonic signal generation. , 2014, , .		4

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55	Photonic THz Generation using Optoelectronic Oscillator-driven Optical Frequency Comb Generator. , 2018, , .		4
56	Cascaded Microwave Photonic Filters for Side Mode Suppression in a Tunable Optoelectronic Oscillator applied to THz Signal Generation & Transmission. IEEE Photonics Journal, 2021, 13, 1-11.	2.0	4
57	Monolithically integrated tuneable photonic source for the generation and modulation of millimetre-wave. , 2014, , .		3
58	Wireless data transmission and frequency stabilization with a millimeter-wave photonic integrated circuit. , 2015, , .		3
59	Coherent frequency tuneable thz wireless signal generation using an optical phase lock loop system. , 2017, , .		3
60	Optically Pumped Mixing at 100 GHz with Travelling-Wave Uni-Travelling Carrier Photodiodes. , 2011, , .		3
61	Heterodyne millimeter wave source with monolithically integrated UTC photodiodes. , 2013, , .		2
62	Optical demodulation of THz signals. , 2013, , .		2
63	Mapping the distribution of photo-currents responsible for generation of terahertz pulses at semiconductor surfaces. , 2014, , .		2
64	Microwave Photonics: Present Status and Future Outlook (Plenary Paper). , 2015, , .		2
65	Uni-travelling carrier photodetectors as THz detectors and emitters. , 2015, , .		2
66	Distribution of multiband THz wireless signals over fiber. , 2017, , .		2
67	Photonic generation and distribution of coherent multiband THz wireless signals. , 2017, , .		2
68	60 GHz Wireless Link Implementing an Electronic Mixer Driven by a Photonically Integrated Uni-Traveling Carrier Photodiode at the Receiver. , 2018, , .		2
69	Integrated Wireless-Optical Backhaul and Fronthaul Provision Through Multicore Fiber. IEEE Access, 2020, 8, 146915-146922.	4.2	2
70	Remote Photonic THZ Generation Using an Optical Frequency Comb and Multicore Fiber. Journal of Lightwave Technology, 2021, 39, 7621-7627.	4.6	2
71	Ultra-high-speed uni-traveling carrier photodiodes and their applications. , 2013, , .		2
72	Demonstration of photonic integrated RAU for millimetre-wave gigabit wireless transmissio. , 2016, , .		2

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73	1 Gb/s wireless link at 200 GHz using heterodyne detection. , 2012, , .		1
74	Millimeter-wave signal generation by optical heterodyne of two channels from an arrayed waveguide grating-based multi-wavelength laser. , 2012, , .		1
75	Photonic integrated circuit on InP for millimeter wave generation. Proceedings of SPIE, 2014, , .	0.8	1
76	Comparison of photonic integrated circuits for millimeter-wave signal generation between dual-wavelength sources for optical heterodyning and pulsed mode-locked lasers. Proceedings of SPIE, 2015, , .	0.8	1
77	Prospects for millimetre-wave-over-fibre and THz-over-fibre systems. Proceedings of SPIE, 2015, , .	0.8	1
78	Experimental investigation of phase noise tolerance of SSB THz signals. , 2017, , .		1
79	1 Gbaud QPSK wireless receiver using an opto-electronic mixer. , 2017, , .		1
80	Opto-electronic cross-phase tuneable system based on cascaded intensity modulators. , 2017, , .		1
81	Design and Fabrication of sub-THz Steerable Photonic Transmitter 1Ã—4 Array for Short-Distance Wireless Links. , 2021, , .		1
82	Near-Field Probe Mapping of the THz Electric Field Distribution on Metallic Surfaces. , 2013, , .		1
83	Integrated Photonics for Wireless and Satellite Applications. , 2020, , .		1
84	Linewidth tolerance for THz communication systems using phase estimation algorithm. , 2016, , .		1
85	Photonically Generated Millimetre-Wave and THz Links for Wireless Fronthaul and Backhaul. , 2021, , .		1
86	Surface plasmon waves for broadband THz spectroscopy. Proceedings of SPIE, 2013, , .	0.8	0
87	Tunable InP photonic integrated circuit for millimeter wave generation. , 2013, , .		0
88	Photonic integration for millimetre-wave and THz systems. , 2014, , .		0
89	Zenneck THz Surface Waves-assisted Imaging of Subwavelength Dielectric Particles. , 2014, , .		0
90	Multiband transmission for sub-THz wireless over fibre communication system. , 2015, , .		0

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91	Monolithically integrated optical phase lock loop with 1 THz tuneability. , 2017, , .		0
92	THz Over Fibre for High Capacity Wireless Transmission: Tutorial Paper. , 2018, , .		0
93	Optically Pumped Mixing in Photonically Integrated Uni- Travelling Carrier Photodiode. , 2018, , .		0
94	Microwave Oscillator Ultrasound Receivers. , 2018, , .		0
95	Tuneable Optical Frequency Comb Generator for THz Spectroscopy. , 2018, , .		0
96	Continuously Tunable Coherent THz Synthesizer, Referenced to Primary Frequency Standards. , 2019, , .		0
97	Spatial confinement of broadband THz pulses with a twin-needle probe for THz spectroscopy. , 2013, , .		0
98	A 1 Gbps 105.4 GHz Link with a Directly Modulated Photonic Integrated Dual Laser Source. , 2014, , .		0
99	Photonic systems for tunable mm-wave and THz wireless communications. , 2019, , .		0