

Xianbin Yu

List of Publications by Year in descending order

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112
papers

1,857
citations

279798

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289244

40
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114
all docs

114
docs citations

114
times ranked

1093
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental Study of Plane Spiral OAM Mode-Group Based MIMO Communications. IEEE Transactions on Antennas and Propagation, 2022, 70, 641-653.	5.1	6
2	Direct Modulation and Free-Space Transmissions of up to 6 Gbps Multilevel Signals With a 4.65- μm Quantum Cascade Laser at Room Temperature. Journal of Lightwave Technology, 2022, 40, 2370-2377.	4.6	16
3	Mode Conversion and Transfer of Orbital Angular Momentum Between Hermite-Gaussian and Laguerre-Gaussian Beams. IEEE Photonics Journal, 2022, 14, 1-6.	2.0	5
4	Robust Photonic Terahertz Vector Imaging Scheme Using an Optical Frequency Comb. Journal of Lightwave Technology, 2022, 40, 2717-2723.	4.6	6
5	Bridging the Terahertz Gap: Photonics-Assisted Free-Space Communications From the Submillimeter-Wave to the Mid-Infrared. Journal of Lightwave Technology, 2022, 40, 3149-3162.	4.6	33
6	A W-Band Communication and Sensing Convergence System Enabled by Single OFDM Waveform. Micromachines, 2022, 13, 312.	2.9	2
7	A Non-Uniform Travelling-Wave Current Source Model for Designing OAM Antenna: Theory, Analysis and Application. IEEE Access, 2022, 10, 47499-47508.	4.2	3
8	Feedforward Neural Network-Based EVM Estimation: Impairment Tolerance in Coherent Optical Systems. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-10.	2.9	8
9	Human recognition with the optoelectronic reservoir-computing-based micro-Doppler radar signal processing. Applied Optics, 2022, 61, 5782.	1.8	1
10	Plane Spiral OAM Mode-Group Orthogonal Multiplexing Communication Using Partial Arc Sampling Receiving Scheme. IEEE Transactions on Antennas and Propagation, 2022, 70, 10998-11008.	5.1	3
11	Improvement in Sensing Accuracy of an OFDM-Based W-Band System. Journal of Communications and Information Networks, 2022, 7, 37-47.	5.2	3
12	A Compact Pattern Reconfiguration Antenna Based on Multimode Plane Spiral OA. IEEE Transactions on Antennas and Propagation, 2021, 69, 1168-1172.	5.1	16
13	Free-Space Communications Enabled by Quantum Cascade Lasers. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2000407.	1.8	48
14	Channel modeling and performance analysis of fixed terahertz Earth-satellite links in the low- and mid-latitude regions. Optical Engineering, 2021, 60, .	1.0	4
15	Erratum to "A Compact Pattern Reconfiguration Antenna Based on Multimode Plane Spiral OAM" [Feb 21 1168-1172]. IEEE Transactions on Antennas and Propagation, 2021, 69, 3628-3628.	5.1	0
16	Photonic generation of terahertz dual-chirp waveforms ranging from 364 to 392 GHz. Optics Express, 2021, 29, 19240.	3.4	6
17	60 Gbit/s PAM-4 wireless transmission in the 310 GHz band with nonlinearity tolerant signal processing. Optics Communications, 2021, 492, 126988.	2.1	5
18	Tbit/s Multi-Dimensional Multiplexing THz-Over-Fiber for 6G Wireless Communication. Journal of Lightwave Technology, 2021, 39, 5783-5790.	4.6	31

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19	Numerical Study of Parallel Optoelectronic Reservoir Computing to Enhance Nonlinear Channel Equalization. <i>Photonics</i> , 2021, 8, 406.	2.0	6
20	Photonic heterodyne generation of phase-coded terahertz signals. <i>Optics Communications</i> , 2021, 499, 127253.	2.1	2
21	A terahertz photonic imaging radar system based on inverse synthetic aperture technique. , 2021, , .		2
22	Photonic Generation of Barker-code Phase-Coded Terahertz Signals. , 2021, , .		2
23	Sensing Accuracy Improvement of an OFDM W-band System. , 2021, , .		0
24	Up to 6 Gbps Mid-Infrared Free-Space Transmission with a Directly Modulated Quantum Cascade Laser. , 2021, , .		3
25	Long Distance Broadband Fiber Optical Beamforming Over 120 km. <i>IEEE Access</i> , 2021, 9, 152182-152187.	4.2	2
26	Aggregated 1.059 Tbit/s photonic-wireless transmission at 350 GHz over 10 meters. , 2021, , .		1
27	Analysis of THz Earth-Satellite Link Capacity in the Mid-Latitude Regions. , 2021, , .		0
28	Direct Generation of OAM Mode-Group and Its Application in LoS-MIMO System. <i>IEEE Communications Letters</i> , 2020, 24, 2628-2631.	4.1	13
29	Beyond 100 Gb/s Optoelectronic Terahertz Communications: Key Technologies and Directions. <i>IEEE Communications Magazine</i> , 2020, 58, 34-40.	6.1	49
30	2 Å— 300 Gbit/s Line Rate PS-64QAM-OFDM THz Photonic-Wireless Transmission. <i>Journal of Lightwave Technology</i> , 2020, 38, 4715-4721.	4.6	61
31	Performance Analysis of Plane Spiral OAM Mode-Group Based MIMO System. <i>IEEE Communications Letters</i> , 2020, 24, 1414-1418.	4.1	24
32	26.8-m THz wireless transmission of probabilistic shaping 16-QAM-OFDM signals. <i>APL Photonics</i> , 2020, 5, .	5.7	58
33	Improved Doubly-Selective Radio Channel Tracking for Modern Wireless Systems. , 2020, , .		0
34	Structure Radio Beam Construction in Azimuthal Domain. <i>IEEE Access</i> , 2020, 8, 9395-9402.	4.2	12
35	Nonlinearity-aware optoelectronic terahertz discrete multitone signal transmission with a zero-bias diode. <i>Optics Letters</i> , 2020, 45, 5045.	3.3	10
36	300ÅGHz vector imaging system based on self-mixing detection. , 2020, , .		1

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37	Chip Based THz Emitter for Ultra-high Speed THz Wireless Communication. , 2019, , .		1
38	Photonic radiofrequency receiver utilizing a phase modulator and a tunable single sideband optoelectronic oscillator. Microwave and Optical Technology Letters, 2019, 61, 2196-2201.	1.4	0
39	A Novel Demodulation Scheme of Fiber-Optic Interferometric Sensor Based on FM SSB Signal. IEEE Photonics Technology Letters, 2019, 31, 607-610.	2.5	4
40	Photonic Generation and De-Chirping of Broadband THz Linear-Frequency-Modulated Signals. IEEE Photonics Technology Letters, 2019, 31, 881-884.	2.5	13
41	Signal Frequency Chirp of Photonic Time-Stretch System Due to Nonlinear Dispersion. IEEE Photonics Technology Letters, 2019, 31, 443-446.	2.5	1
42	Experimental Generation and De-chirping of Photonic THz Linearly Chirped Signals with Large Time-bandwidth Product. , 2019, , .		0
43	Low Probability of Intercept Communication Based on Structured Radio Beams Using Machine Learning. IEEE Access, 2019, 7, 169946-169952.	4.2	9
44	Coherently demodulated orbital angular momentum shift keying system using a CNN-based image identifier as demodulator. Optics Communications, 2019, 435, 367-373.	2.1	14
45	Integrated Dual-DFB Laser for 408 GHz Carrier Generation Enabling 131 Gbit/s Wireless Transmission over 10.7 Meters. , 2019, , .		22
46	Local property study for arbitrary polarised OAM beam. IET Microwaves, Antennas and Propagation, 2019, 13, 1846-1853.	1.4	0
47	0.4 THz Photonic-Wireless Link With 106 Gb/s Single Channel Bitrate. Journal of Lightwave Technology, 2018, 36, 610-616.	4.6	113
48	100 Gbit/s THz Photonic Wireless Transmission in the 350-GHz Band With Extended Reach. IEEE Photonics Technology Letters, 2018, 30, 1064-1067.	2.5	72
49	Transformation of OAM Waves to Plane Spiral OAM Waves Based on Gradient-Index Meta-Surface. , 2018, , .		3
50	Dual-Band THz Photonic Pulses Enabling Synthetic mm-Scale Range Resolution. IEEE Photonics Technology Letters, 2018, 30, 1760-1763.	2.5	16
51	Ultra-broadband THz photonic wireless transmission. , 2018, , .		0
52	Corrections to "Modulation Fading in Temporal Talbot Effect"[Aug 1, 2018 1376-1379]. IEEE Photonics Technology Letters, 2018, 30, 1994-1994.	2.5	1
53	Photonic Vector Signal Generation Based on OEO and Optical Coherent QPSK Modulation. IEEE Photonics Technology Letters, 2018, 30, 1711-1714.	2.5	6
54	Experimental Demonstration of 3.9 mm Range Resolution Enabled by Synthetic Linearly Chirped THz Photonic Pulses. , 2018, , .		0

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55	Enhanced Accessibility of 350 GHz 100 Gbit/s 16-QAM Photonic Wireless Link. , 2018, , .		0
56	Modulation Fading in Temporal Talbot Effect. IEEE Photonics Technology Letters, 2018, 30, 1376-1379.	2.5	5
57	A Unified System With Integrated Generation of High-Speed Communication and High-Resolution Sensing Signals Based on THz Photonics. Journal of Lightwave Technology, 2018, 36, 4549-4556.	4.6	35
58	A Two-Dimensional LiNbO3 Photonic E-Field Sensor Using Inclined Dipole Antennas. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 2203-2206.	4.0	5
59	120 Gb/s Multi-Channel THz Wireless Transmission and THz Receiver Performance Analysis. IEEE Photonics Technology Letters, 2017, 29, 310-313.	2.5	53
60	Frequency stability optimization of an OEO using phase-locked-loop and self-injection-locking. Optics Communications, 2017, 386, 27-30.	2.1	17
61	Beyond 100 Gbit/s wireless connectivity enabled by THz photonics. , 2017, , .		3
62	Non-Line-of-Sight Channel Performance of Plane Spiral Orbital Angular Momentum MIMO Systems. IEEE Access, 2017, 5, 25377-25384.	4.2	20
63	Photonic generation of linear frequency modulated terahertz pulses in the 350 GHz band with beyond 40 GHz bandwidth. , 2017, , .		1
64	Generation of plane spiral orbital angular momentum microwave with ring dielectric resonator antenna. , 2017, , .		9
65	Generating wideband orbital angular momentum beams using helical antenna. , 2017, , .		5
66	Experimental generation of linearly chirped 350 GHz band pulses with a bandwidth beyond 60 GHz. Optics Letters, 2017, 42, 5242.	3.3	21
67	Impact of finite extinction ratio of modulator on photonic time-stretch system. , 2017, , .		0
68	Single Channel 106 Gbit/s 16QAM Wireless Transmission in the 0.4 THz Band. , 2017, , .		18
69	THz photonic wireless links with 16-QAM modulation in the 375-450 GHz band. Optics Express, 2016, 24, 23777.	3.4	44
70	Experimental analysis of THz receiver performance in 80 Gbit/s communication system. , 2016, , .		3
71	A Novel Scheme of Microwave Generation Based on Heterodyne Phase Locking of an OEO. IEEE Photonics Technology Letters, 2016, 28, 2637-2640.	2.5	3
72	THz Wireless Transmission Systems Based on Photonic Generation of Highly Pure Beat-Notes. IEEE Photonics Journal, 2016, 8, 1-8.	2.0	20

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73	400-GHz Wireless Transmission of 60-Gb/s Nyquist-QPSK Signals Using UTC-PD and Heterodyne Mixer. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 765-770.	3.1	49
74	60 Gbit/s 400 GHz wireless transmission. , 2015, , .		26
75	Experimental characterization of extremely broadband THz impulse radio communication systems. , 2015, , .		0
76	The prospects of ultra-broadband THz wireless communications. , 2014, , .		12
77	System Wide Implementation of Photonically Generated Impulse Radio Ultra-Wideband for Gigabit Fiber-Wireless Access. Journal of Lightwave Technology, 2013, 31, 264-275.	4.6	16
78	Uplink transmission in the W-band (75-110 GHz) for hybrid optical fiber-wireless access networks. Microwave and Optical Technology Letters, 2013, 55, 1033-1036.	1.4	4
79	Simplified fiber-wireless distribution of HD video in passive and active W-band close proximity terminals. , 2012, , .		1
80	Ultra-Broadband Photonic Harmonic Mixer Based on Optical Comb Generation. IEEE Photonics Technology Letters, 2012, 24, 16-18.	2.5	16
81	Erratum to "Ultra-Broadband Photonic Harmonic Mixer Based on Optical Comb Generation" [Jan 1 2012 16-18]. IEEE Photonics Technology Letters, 2012, 24, 620-620.	2.5	4
82	Fiber Wireless Transmission of 8.3-Gb/s/ch QPSK-OFDM Signals in 75-110-GHz Band. IEEE Photonics Technology Letters, 2012, 24, 383-385.	2.5	41
83	25 Gbit/s QPSK Hybrid Fiber-Wireless Transmission in the W-Band (75-110 GHz) With Remote Antenna Unit for In-Building Wireless Networks. IEEE Photonics Journal, 2012, 4, 691-698.	2.0	67
84	A spectral efficient PolMux-QPSK-RoF system with CMA-based blind estimation of a 2 × 2 MIMO wireless channel. , 2011, , .		0
85	Integration of Optically Generated Impulse Radio UWB Signals Into Baseband WDM-PON. IEEE Photonics Technology Letters, 2011, 23, 474-476.	2.5	13
86	Generalized Tensor Analysis Model for Multi-Subcarrier Analog Optical Systems. Journal of Lightwave Technology, 2011, 29, 3144-3155.	4.6	1
87	Hybrid optical fibre-wireless links at the 75-110 GHz band supporting 100 Gbps transmission capacities. , 2011, , .		6
88	100 Gbit/s hybrid optical fiber-wireless link in the W-band (75-110 GHz). Optics Express, 2011, 19, 24944.	3.4	260
89	Distribution of photonically generated 5-Gb/s impulse radio ultrawideband signals over fiber. Optics Letters, 2011, 36, 810.	3.3	68
90	A WDM-PON-Compatible System for Simultaneous Distribution of Gigabit Baseband and Wireless Ultrawideband Services With Flexible Bandwidth Allocation. IEEE Photonics Journal, 2011, 3, 13-19.	2.0	25

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91	Performance of a 60-GHz DCM-OFDM and BPSK-Impulse Ultra-Wideband System with Radio-Over-Fiber and Wireless Transmission Employing a Directly-Modulated VCSEL. IEEE Journal on Selected Areas in Communications, 2011, 29, 1295-1303.	14.0	20
92	Channel measurements for a optical fiber-wireless transmission system in the 75–110 GHz band. , 2011, , .		3
93	A novel reconfigurable ultra-broadband millimeter-wave photonic harmonic down-converter. , 2011, , .		0
94	Range extension and channel capacity increase in impulse-radio ultra-wideband communications. Tsinghua Science and Technology, 2010, 15, 169-173.	6.1	7
95	Bit-Error-Rate Performance Analysis of Self-Heterodyne Detected Radio-Over-Fiber Links Using Phase and Intensity Modulation. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 3229-3236.	4.6	7
96	A robust optical phase modulated 60 GHz RoF WDM system. , 2010, , .		0
97	A Comparison of Electrical and Photonic Pulse Generation for IR-UWB on Fiber Links. IEEE Photonics Technology Letters, 2010, 22, 263-265.	2.5	11
98	3.125 Gb/s Impulse Radio Ultra-Wideband Photonic Generation and Distribution Over a 50 km Fiber With Wireless Transmission. IEEE Microwave and Wireless Components Letters, 2010, 20, 127-129.	3.2	27
99	Experimental evaluation of high speed impulse radio UWB interference on WiMAX narrowband systems. , 2010, , .		0
100	Optically envelope detected QAM and QPSK RF modulated signals in hybrid wireless-fiber systems. Microwave and Optical Technology Letters, 2009, 51, 864-866.	1.4	2
101	A photonic ultra-wideband pulse generator based on relaxation oscillations of a semiconductor laser. Optics Express, 2009, 17, 9680.	3.4	35
102	Photonic Ultra-Wideband 781.25-Mb/s Signal Generation and Transmission Incorporating Digital Signal Processing Detection. IEEE Photonics Technology Letters, 2009, 21, 1060-1062.	2.5	18
103	Experimental Demonstration of All-Optical 781.25-Mb/s Binary Phase-Coded UWB Signal Generation and Transmission. IEEE Photonics Technology Letters, 2009, 21, 1235-1237.	2.5	35
104	Converged Wireline and Wireless Access Over a 78-km Deployed Fiber Long-Reach WDM PON. IEEE Photonics Technology Letters, 2009, 21, 1274-1276.	2.5	45
105	1Gbps impulse radio ultrawideband multi-hop system employing a single mode fiber repeater. , 2009, , .		1
106	Converged Wireless and Wireline Access System Based on Optical Phase Modulation for Both Radio-Over-Fiber and Baseband Signals. IEEE Photonics Technology Letters, 2008, 20, 1814-1816.	2.5	16
107	Bidirectional Radio-Over-Fiber System With Phase-Modulation Downlink and RF Oscillator-Free Uplink Using a Reflective SOA. IEEE Photonics Technology Letters, 2008, 20, 2180-2182.	2.5	32
108	Combined transmission of baseband NRZ-DQPSK and phase modulated radio-over-fibre. , 2008, , .		0

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109	Photonic implementation of 4-QAM/QPSK electrical modulation at millimeter-wave frequency. , 2008, , .		0
110	Photonic microwave transversal filter employing a fiber-Bragg-grating-based multiple resonator. Microwave and Optical Technology Letters, 2005, 44, 369-371.	1.4	9
111	A flexible and incoherent microwave photonic filter with a flat-top passband. Microwave and Optical Technology Letters, 2005, 46, 132-134.	1.4	0
112	Experimental Investigation on the Effect of Optical Source on Photonic Microwave Filter Performance. Journal of Infrared, Millimeter and Terahertz Waves, 2005, 26, 763-770.	0.6	1