

# Jianming M Tang

## List of Publications by Year in descending order

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79  
papers

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394421

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79  
all docs

79  
docs citations

79  
times ranked

631  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rectangular Orthogonal Digital Filter Banks Based on Extended Gaussian Functions. Journal of Lightwave Technology, 2022, 40, 3709-3722.	4.6	3
2	Multi-constraint Gerchberg-Saxton iteration algorithms for linearizing IM/DD transmission systems. Optics Express, 2022, 30, 10019.	3.4	12
3	Microwave Photonic Signal Generation in an Optically Injected Discrete Mode Semiconductor Laser. Photonics, 2022, 9, 171.	2.0	2
4	112-Gb/s PAM-4 IM/DD Optical Transmission over 100-km Single Mode Fiber with Linear Equalizer. , 2022, , .		3
5	Concurrent Inter-ONU Communications for Next Generation Mobile Fronthauls based on IMDD Hybrid SSB OFDM-DFMA PONs. Journal of Lightwave Technology, 2021, , 1-1.	4.6	8
6	Experimental Demonstrations of Matching Filter-Free Digital Filter Multiplexed SSB OFDM IMDD Transmission Systems. IEEE Photonics Journal, 2021, 13, 1-12.	2.0	3
7	Data-Aided Iterative Algorithms for Linearizing IM/DD Optical Transmission Systems. Journal of Lightwave Technology, 2021, 39, 2864-2872.	4.6	17
8	DFT-Spread Spectrally Overlapped Hybrid OFDMâ€“Digital Filter Multiple Access IMDD PONs. Sensors, 2021, 21, 5903.	3.8	0
9	Experimental Demonstrations of Concurrent Adaptive Inter-ONU and Upstream Communications in IMDD Hybrid SSB OFDM-DFMA PONs. , 2021, , .		4
10	DSP-based Reduction of the Impact of White ADC Timing Jitter on Hybrid OFDM-DFMA PONs. , 2021, , .		0
11	Experimental demonstrations of DSP-enabled flexibility, adaptability and elasticity of multi-channel >72Gb/s over 25â€“km IMDD transmission systems. Optics Express, 2021, 29, 41363.	3.4	5
12	Timing Jitter Analysis and Mitigation in Hybrid OFDM-DFMA PONs. IEEE Photonics Journal, 2021, 13, 1-13.	2.0	6
13	Hybrid OFDM-Digital Filter Multiple Access PONs Utilizing Spectrally Overlapped Digital Orthogonal Filtering. IEEE Photonics Journal, 2020, 12, 1-11.	2.0	8
14	Experimental Demonstrations of Hybrid OFDM-Digital Filter Multiple Access PONs. IEEE Photonics Technology Letters, 2020, , 1-1.	2.5	9
15	A Clock-Gating-Based Energy-Efficient Scheme for ONUs in Real-Time IMDD OFDM-PONs. Journal of Lightwave Technology, 2020, 38, 3573-3583.	4.6	3
16	High-Rate Secure Key Distribution Based on Private Chaos Synchronization and Alternating Step Algorithms. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2020, 30, 2050027.	1.7	5
17	Hybrid SSB OFDM-Digital Filter Multiple Access PONs. Journal of Lightwave Technology, 2020, 38, 2095-2105.	4.6	23
18	Linearization of Optical IMDD Transmission Systems Using Accelerated Iterative Algorithms. , 2020, , .		1

#	ARTICLE	IF	CITATIONS
19	Experimental Demonstration of Hybrid OFDM-Digital Filter Multiple Access PONs for 5G and Beyond Networks. , 2020, , .		1
20	Hybrid DFT-Spread OFDM-Digital Filter Multiple Access PONs for Converged 5G Networks. Journal of Optical Communications and Networking, 2019, 11, 347.	4.8	13
21	Experimental Demonstration of a Real-Time Digital Filter Multiple Access PON With Low Complexity DSP-Based Interference Cancellation. Journal of Lightwave Technology, 2019, 37, 4315-4329.	4.6	20
22	DFT-Spread Hybrid OFDM-DFMA PONs Incorporating Directly Modulated DFB Laser-Based ONUs. , 2019, , .		0
23	Real-time experimental demonstration of DSP-enabled soft-ROADMs with multi-level flexible add/drop functions for cloud access networks. Optics Express, 2019, 27, 16.	3.4	11
24	Colorless WRC-FPLDs Subject to Gain-Saturated RSOA Feedback for WDM-PONs. IEEE Photonics Technology Letters, 2018, 30, 43-46.	2.5	7
25	DSP-Based 40 GB/s Lane Rate Next-Generation Access Networks. Future Internet, 2018, 10, 118.	3.8	4
26	Adaptively Modulated Optical OFDM System Using Triple-Band Subcarrier Modulation Over MMF IMDD Links. , 2018, , .		1
27	Hybrid OFDM-Digital Filter Multiple Access PONs. Journal of Lightwave Technology, 2018, 36, 5640-5649.	4.6	23
28	Subcarrier Index-Power Modulated-Optical OFDM With Dual Superposition Multiplexing for Directly Modulated DFB-Based IMDD PON Systems. IEEE Photonics Journal, 2018, 10, 1-13.	2.0	2
29	Analytical Solution of Stage-Dependent Bit Resolution of Full Parallel Variable Point FFTs for Real-Time DSP Implementation. Journal of Lightwave Technology, 2018, 36, 5177-5187.	4.6	2
30	Subcarrier Grouping-Enabled Improvement in Transmission Performance of Subcarrier Index-Power Modulated Optical OFDM for IM/DD PON Systems. Journal of Lightwave Technology, 2018, 36, 4792-4798.	4.6	4
31	Adaptively Modulated Optical OFDM System Using Triple-Band Subcarrier Modulation over MMF IMDD Links. , 2018, , .		0
32	Experimental Demonstration of Upstream Transmission in Digital Filter Multiple Access PONs With Real-Time Reconfigurable Optical Network Units. Journal of Optical Communications and Networking, 2017, 9, 45.	4.8	24
33	Multiple Channel Interference Cancellation of Digital Filter Multiple Access PONs. Journal of Lightwave Technology, 2017, 35, 34-44.	4.6	22
34	Performance Tolerance of IMDD DFMA PONs to Channel Frequency Response Roll-Off. IEEE Photonics Technology Letters, 2017, 29, 1655-1658.	2.5	4
35	DSP-enabled reconfigurable and transparent spectral converters for converging optical and mobile fronthaul/backhaul networks. Optics Express, 2017, 25, 13836.	3.4	8
36	Experimental demonstrations of 30Gb/s/λ digital orthogonal filtering-multiplexed multiple channel transmissions over IMDD PON systems utilizing 10G-class optical devices. Optics Express, 2017, 25, 24251.	3.4	17

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37	Experimental demonstration of a DSP-based cross-channel interference cancellation technique for application in digital filter multiple access PONs. <i>Optics Express</i> , 2017, 25, 3850.	3.4	14
38	SPM-Improved Transmission Performance of Software-Reconfigurable IMDD PONs Based on Digital Orthogonal Filtering. <i>Journal of Lightwave Technology</i> , 2017, 35, 4488-4496.	4.6	5
39	Subcarrier Index-Power Modulated Optical OFDM With Superposition Multiplexing for IMDD Transmission Systems. <i>Journal of Lightwave Technology</i> , 2016, 34, 5284-5292.	4.6	10
40	Multilevel Subcarrier Index-Power Modulated Optical OFDM With Adaptive Bit Loading for IMDD PON Systems. <i>IEEE Photonics Journal</i> , 2016, 8, 1-14.	2.0	8
41	Subcarrier Index-Power Modulated Optical OFDM and Its Performance in IMDD PON Systems. <i>Journal of Lightwave Technology</i> , 2016, 34, 2228-2234.	4.6	17
42	Software reconfigurable PONs utilizing digital filter multiple access. , 2015, , .		2
43	RSOA Intensity Modulator Frequency Chirp-Enhanced Optical OFDM PON Performance. <i>IEEE Photonics Journal</i> , 2015, 7, 1-11.	2.0	4
44	Intra-Cavity Chromatic Dispersion Impacts on 10-Gb/s Optical OFDM Transmissions Over 25-km Dual-RSOA-Based Self-Seeded PON Systems. <i>IEEE Photonics Journal</i> , 2015, 7, 1-12.	2.0	7
45	Digital Filter Multiple Access PONs With DSP-Enabled Software Reconfigurability. <i>Journal of Optical Communications and Networking</i> , 2015, 7, 215.	4.8	54
46	DSP-Enabled Flexible ROADMs Without Optical Filters and O-E-O Conversions. <i>Journal of Lightwave Technology</i> , 2015, 33, 4124-4131.	4.6	22
47	Stage-dependent minimum bit resolution maps of full-parallel pipelined FFT/IFFT architectures incorporated in real-time optical orthogonal frequency division multiplexing transceivers. <i>Journal of Engineering</i> , 2014, 2014, 469-476.	1.1	1
48	13.625-Gb/s real-time dual-band adaptive optical orthogonal frequency division multiplexing transmissions over 25-km standard single-mode fibre intensity modulation and direct detection systems utilizing strongly saturated reflective semiconductor optical amplifier intensity modulators. <i>IET Optoelectronics</i> , 2014, 8, 175-180.	3.3	0
49	Self-seeding-based 10Gb/s over 25km optical OFDM transmissions utilizing face-to-face dual-RSOAs at gain saturation. <i>Optics Express</i> , 2014, 22, 11954.	3.4	13
50	Real-time experimental demonstrations of software reconfigurable optical OFDM transceivers utilizing DSP-based digital orthogonal filters for SDN PONs. <i>Optics Express</i> , 2014, 22, 19674.	3.4	32
51	Digital Orthogonal Filter-Enabled Optical OFDM Channel Multiplexing for Software-Reconfigurable Elastic PONs. <i>Journal of Lightwave Technology</i> , 2014, 32, 1200-1206.	4.6	33
52	Upstream Power Budgets of IMDD Optical OFDMA PONs Incorporating RSOA Intensity Modulator-Based Colorless ONUs. <i>Journal of Lightwave Technology</i> , 2013, 31, 1914-1920.	4.6	12
53	Improved optical orthogonal frequency division multiplexing performance using non-linear signal compression in intensity modulation and direct detection transmission systems incorporating parameter-relaxed digital-to-analogue converters/analogue-to-digital converters. <i>IET Optoelectronics</i> , 2013, 7, 51-56.	3.3	1
54	25.25-Gb/s Real-Time Multi-Band Optical OFDM Transmission Over 300-m MMFs With IQ Modulated Passband. <i>IEEE Photonics Technology Letters</i> , 2013, 25, 2123-2125.	2.5	5

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55	Experimental Investigations of Wavelength Spacing and Colorlessness of RSOA-Based ONUs in Real-Time Optical OFDMA PONs. <i>Journal of Lightwave Technology</i> , 2012, 30, 2603-2609.	4.6	27
56	Simplified adaptively modulated optical OFDM modems using subcarrier modulation with added input/output reconfigurability. <i>Frontiers of Optoelectronics</i> , 2012, 5, 187-194.	3.7	1
57	Directly Modulated VCSEL-Based Real-Time 11.25-Gb/s Optical OFDM Transmission Over 2000-m Legacy MMFs. <i>IEEE Photonics Journal</i> , 2012, 4, 143-154.	2.0	18
58	Experimental Demonstration of Real-Time Optical OFDM Transmission at 11.25 Gb/s Over 500-m MMFs Employing Directly Modulated DFB Lasers. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 51-53.	2.5	19
59	Experimental and Theoretical Investigations of Intensity-Modulation and Direct-Detection Optical Fast-OFDM over MMF-links. <i>IEEE Photonics Technology Letters</i> , 2011, , .	2.5	18
60	Wavelength-Offset Filtering in Optical OFDM IMDD Systems Using Directly Modulated DFB Lasers. <i>Journal of Lightwave Technology</i> , 2011, 29, 2861-2870.	4.6	19
61	Experimental Demonstrations and Extensive Comparisons of End-to-End Real-Time Optical OFDM Transceivers With Adaptive Bit and/or Power Loading. <i>IEEE Photonics Journal</i> , 2011, 3, 500-511.	2.0	57
62	First experimental demonstration of end-to-end real-time optical OFDM symbol synchronization using subtraction and Gaussian windowing in 25km SMF IMDD systems. , 2010, , .		3
63	Phase modulation enabled relaxation of DAC/ADC requirements and optical OFDM performance improvement over SMF-based IMDD systems. , 2010, , .		2
64	Experimental Demonstration of Real-Time Optical OFDM Transmission at 7.5 Gb/s Over 25-km SSMF Using a 1-GHz RSOA. <i>IEEE Photonics Technology Letters</i> , 2010, 22, 745-747.	2.5	49
65	Experimental demonstration of a record high 1125Gb/s real-time optical OFDM transceiver supporting 25km SMF end-to-end transmission in simple IMDD systems. <i>Optics Express</i> , 2010, 18, 5541.	3.4	171
66	Real-time experimental demonstration of optical OFDM symbol synchronization in directly modulated DFB laser-based 25km SMF IMDD systems. <i>Optics Express</i> , 2010, 18, 21100.	3.4	34
67	Negative Power Penalties of Optical OFDM Signal Transmissions in Directly Modulated DFB Laser-Based IMDD Systems Incorporating Negative Dispersion Fibers. <i>IEEE Photonics Journal</i> , 2010, 2, 532-542.	2.0	25
68	Adaptive-Modulation-Enabled WDM Impairment Reduction in Multichannel Optical OFDM Transmission Systems for Next-Generation PONs. <i>IEEE Photonics Journal</i> , 2010, 2, 130-140.	2.0	58
69	Statistical Performance Comparisons of Optical OFDM Adaptive Loading Algorithms in Multimode Fiber-Based Transmission Systems. <i>IEEE Photonics Journal</i> , 2010, 2, 1051-1059.	2.0	18
70	Wavelength reused bidirectional adaptively modulated optical OFDM transmission in colourless WDM-PONs. , 2010, , .		0
71	Statistical Investigations of the Effectiveness of Using 3-dB Bandwidths of Multimode Fibres to Quantify the Transmission Performance of AMOOFDM Signals. , 2009, , .		0
72	SOA intensity modulator-enabled colourless transmission of adaptively modulated optical OFDM signals for WDM-PONs. , 2009, , .		0

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73	Real-Time 3Gb/s 16QAM-encoded optical OFDM transmission over 75km metroCor SMFs with negative power penalties. , 2009, , .		2
74	Semiconductor Optical Amplifier-Enabled Intensity Modulation of Adaptively Modulated Optical OFDM Signals in SMF-Based IMDD Systems. Journal of Lightwave Technology, 2009, 27, 3678-3688.	4.6	33
75	Effectiveness of the Use of 3-dB Bandwidths of Multimode Fibres for Estimating the Transmission Performance of Adaptively Modulated Optical OFDM Signals Over IMDD Links. Journal of Lightwave Technology, 2009, 27, 3992-3998.	4.6	19
76	Real-time transmission of 3Gb/s 16-QAM encoded optical OFDM signals over 75km SMFs with negative power penalties. Optics Express, 2009, 17, 14574.	3.4	30
77	The Influence of Directly Modulated DFB Lasers on the Transmission Performance of Carrier-Suppressed Single-Sideband Optical OFDM Signals Over IMDD SMF Systems. Journal of Lightwave Technology, 2009, 27, 2412-2419.	4.6	21
78	Input/output reconfigurable adaptively modulated optical OFDM modems using subcarrier modulation. , 2009, , .		1
79	Transmission Performance of Adaptively Modulated Optical OFDM Modems Using Subcarrier Modulation over Worst-Case Multimode Fibre Links. IEEE Communications Letters, 2008, 12, 788-790.	4.1	13