

# Leslie Ann Rusch

## List of Publications by Year in descending order

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325  
papers

6,108  
citations

94269

37  
h-index

102304

66  
g-index

326  
all docs

326  
docs citations

326  
times ranked

3603  
citing authors

#	ARTICLE	IF	CITATIONS
1	Polarization-Insensitive Silicon Microring Modulator for Single Sideband Modulation. Journal of Lightwave Technology, 2022, 40, 744-750.	2.7	4
2	Modal Loss Characterisation of Thick Ring Core Fiber Using Perfect Vortex Beams. , 2022, , .		5
3	Segmented Silicon Photonic Modulator with a 67-GHz Bandwidth for High-Speed Signaling. , 2022, , .		5
4	Transmission of 120 Gbaud QAM With an All-Silicon Segmented Modulator. Journal of Lightwave Technology, 2022, 40, 5457-5466.	2.7	6
5	Integrated orbital angular momentum mode sorters on vortex fibers. Optics Letters, 2022, 47, 3491.	1.7	7
6	Overlaying 5G radio access networks on wavelength division multiplexed optical access networks with carrier distribution. Optics Express, 2021, 29, 3631.	1.7	5
7	Quantifying the Coupling and Degeneracy of OAM Modes in High-Index-Contrast Ring Core Fiber. Journal of Lightwave Technology, 2021, 39, 600-611.	2.7	21
8	Recurrent neural networks achieving MLSE performance for optical channel equalization. Optics Express, 2021, 29, 13033.	1.7	15
9	Radially anisotropic ring-core optical fiber: towards vector-vortex guided transmission using the full modal space. OSA Continuum, 2021, 4, 1282.	1.8	1
10	Heterogeneous Optical Access Networks: Enabling Low-Latency 5G Services With a Silicon Photonic Smart Edge. Journal of Lightwave Technology, 2021, 39, 2348-2357.	2.7	8
11	Geometric Constellation Shaping Using Initialized Autoencoders. , 2021, , .		5
12	Silicon Photonics in Optical Access Networks for 5G Communications. IEEE Communications Magazine, 2021, 59, 126-131.	4.9	8
13	Silicon Photonics Enabling 5G Optical Networks over PON Infrastructures. , 2021, , .		1
14	Ultra-Dense Wavelength-Division Multiplexing With Microring Modulator. Journal of Lightwave Technology, 2021, 39, 4300-4306.	2.7	11
15	Silicon IQ Modulator for 120 Gbaud QAM. , 2021, , .		7
16	Silicon Microring Modulator with Polarization Insensitivity. , 2021, , .		1
17	Ring-Core Fibers Supporting Propagation of OAM Modes. , 2021, , .		0
18	Design Analysis of OAM Fibers Using Particle Swarm Optimization Algorithm. Journal of Lightwave Technology, 2020, 38, 846-856.	2.7	23

#	ARTICLE	IF	CITATIONS
19	WDM-Compatible Polarization-Diverse OAM Generator and Multiplexer in Silicon Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-7.	1.9	21
20	System Optimization of an All-Silicon IQ Modulator: Achieving 100-Gbaud Dual-Polarization 32QAM. Journal of Lightwave Technology, 2020, 38, 256-264.	2.7	22
21	Integrated Optical SSB Modulation / Frequency Shifting Using Cascaded Silicon MZM. IEEE Photonics Technology Letters, 2020, 32, 1147-1150.	1.3	4
22	Multiplexing of optical vortices in silicon photonic circuits. , 2020, , .		0
23	Performance Comparison of Ring-Core Fibers Support Propagation of OAM Modes. , 2020, , .		0
24	Silicon Photonics for 5G Communications. , 2020, , .		1
25	Recurrent neural nets achieving MLSE performance in bandlimited optical channels. , 2020, , .		1
26	Real-time gap-free dynamic waveform spectral analysis with nanosecond resolutions through analog signal processing. Nature Communications, 2020, 11, 3309.	5.8	42
27	Silicon photonic subsystem for broadband and RoF detection while enabling carrier reuse. Optics Express, 2020, 28, 14897.	1.7	8
28	All Silicon IQ Modulator with 1Tb/s Line Rate. , 2020, , .		7
29	Highly elliptical core fiber with stress-induced birefringence for mode multiplexing. Optics Letters, 2020, 45, 2822.	1.7	14
30	Neural Nets to Approach Optimal Receivers for High Speed Optical Communication. , 2020, , .		1
31	Modeling the Breakdown in Degeneracy for High-Index-Contrast Ring Core Fiber. , 2020, , .		3
32	Ultra-High-Speed Time-Frequency Signal Processing. Optics and Photonics News, 2020, 31, 37.	0.4	0
33	Designing Silicon Photonics Systems for High Speed Networks. , 2020, , .		0
34	Silicon Photonics to Add 5G RoF Services to PONs Employing Carrier Reuse. , 2020, , .		2
35	5G Service Overlay in WDM Optical Access Network with Colorless Smart Edge Based on SiP MRM. , 2020, , .		2
36	Crosstalk Aware OAM Mode Selection for Space Division Multiplexed Optical Networks. , 2020, , .		1

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37	SiP-Based SSBI Cancellation for OFDM. IEEE Photonics Journal, 2019, 11, 1-13.	1.0	3
38	Optimal ultra-miniature polarimeters in silicon photonic integrated circuits. APL Photonics, 2019, 4, .	3.0	15
39	Silicon Photonic IQ Modulators for 400 Gb/s and Beyond. Journal of Lightwave Technology, 2019, 37, 3078-3086.	2.7	30
40	Design of Highly Elliptical Core Ten-Mode Fiber for Space Division Multiplexing With 2 $\times$ 2 MIMO. IEEE Photonics Journal, 2019, 11, 1-10.	1.0	17
41	Silicon Photonics for Coherent Optical Transmissions (Invited paper). , 2019, , .		1
42	Shaping Optical Fibers to Mode Division Multiplex without MIMO. , 2019, , .		2
43	Silicon Photonics for 5G Passive Optical Networks. , 2019, , .		1
44	Numerical Study of a Hybrid Optical DMT/DFT-S QAM Modulation. Journal of Lightwave Technology, 2019, 37, 815-823.	2.7	2
45	Interplay of Bit Rate, Linewidth, Bandwidth, and Reach on Optical DMT and PAM With IMDD. IEEE Transactions on Communications, 2019, 67, 2908-2913.	4.9	7
46	Single-Sideband OFDM Transmission via a Silicon Microring IQ Modulator. IEEE Photonics Technology Letters, 2019, 31, 145-148.	1.3	8
47	Chip-scale, full-Stokes polarimeter. Optics Express, 2019, 27, 4867.	1.7	30
48	Single-carrier 72 GBaud 32QAM and 84 GBaud 16QAM transmission using a SiP IQ modulator with joint digital-optical pre-compensation. Optics Express, 2019, 27, 5610.	1.7	32
49	Analysis of modal coupling due to birefringence and ellipticity in strongly guiding ring-core OAM fibers. Optics Express, 2019, 27, 8308.	1.7	38
50	Silicon Photonic Modulators for High-Capacity Coherent Transmissions. , 2019, , .		1
51	Experimental demonstration of reduced-size LUT predistortion for 256QAM SiP Transmitter. , 2019, , .		4
52	Silicon Microring IQ Modulator Enabled Single Sideband OFDM Transmission. , 2019, , .		2
53	All-Silicon IQ Modulator for 100 GBaud 32QAM Transmissions. , 2019, , .		15
54	Reduced-size lookup tables enabling higher-order QAM with all-silicon IQ modulators. Optics Express, 2019, 27, 24243.	1.7	14

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55	Mode Loss Measurement in Few-Mode Fibers With a Microwave Interferometric Technique. IEEE Photonics Technology Letters, 2018, 30, 581-584.	1.3	6
56	Integrated Circularly Polarized OAM Generator and Multiplexer for Fiber Transmission. IEEE Journal of Quantum Electronics, 2018, 54, 1-9.	1.0	12
57	Carrying Data on the Orbital Angular Momentum of Light. , 2018, 56, 219-224.		45
58	Corrections to "Mode Loss Measurement in Few-Mode Fibers With a Microwave Interferometric Technique" [Mar 15, 2018 581-584]. IEEE Photonics Technology Letters, 2018, 30, 1491-1491.	1.3	0
59	Flexible Modulation and Frequency Allocations for SNR-Limited Coherent Systems. , 2018, , .		1
60	Joint Digital and Optical Pre-Compensation for 720 Gb/s All-Silicon IQ Modulator Single Carrier Transmission. , 2018, , .		6
61	SiP Alternative to Enhanced KK for OFDM. , 2018, , .		5
62	Design of a Ten-Mode Polarization-Maintaining Few-Mode Fiber for MIMO-Less Data Transmission. , 2018, , .		3
63	Countering Pattern Dependent Effects in SiP Modulators with Iterative Learning Control Predistortion for 64QAM. , 2018, , .		0
64	On-Chip Circular Polarization Splitter Using Silicon Photonic Nanoantenna Array. ACS Photonics, 2018, 5, 4338-4342.	3.2	7
65	Silicon photonic modulators for PAM transmissions. Journal of Optics (United Kingdom), 2018, 20, 083002.	1.0	42
66	Frequency Comb Generation Using a CMOS Compatible SiP DD-MZM for Flexible Networks. IEEE Photonics Technology Letters, 2018, 30, 1495-1498.	1.3	27
67	Assessing Performance of Silicon Photonic Modulators for Pulse Amplitude Modulation. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-10.	1.9	11
68	Integrated flexible-grid WDM transmitter using an optical frequency comb in microring modulators. Optics Letters, 2018, 43, 1554.	1.7	26
69	RoF Data Transmission Using Four Linearly Polarized Vector Modes of a Polarization Maintaining Elliptical Ring Core Fiber. Journal of Lightwave Technology, 2018, 36, 3794-3801.	2.7	8
70	Analytical Study of Optical SSB-DMT With IMDD. Journal of Lightwave Technology, 2018, 36, 666-674.	2.7	14
71	Fiber transmission demonstrations in vector mode space division multiplexing. Frontiers of Optoelectronics, 2018, 11, 155-162.	1.9	4
72	Mitigating pattern dependent nonlinearity in SiP IQ-modulators via iterative learning control predistortion. Optics Express, 2018, 26, 27639.	1.7	9

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73	Bandwidth-Aware Figure of Merit for Silicon-Photonic Depletion Mode Modulators. , 2018, , .		1
74	CMOS-Compatible Silicon Photonic IQ Modulator for 84 Gbaud 16QAM and 70 Gbaud 32QAM. , 2018, , .		10
75	An ISI-aware design process for SiP modulators. , 2018, , .		0
76	Enabling 5G Services in PON with a Novel Smart Edge Based on SiP MRM. , 2018, , .		2
77	Generation of Optical Single Sideband OFDM Using a Silicon Microring IQ modulator. , 2018, , .		1
78	Four-Channel RoF Transmission over Polarization Maintaining Elliptical Ring Core Fiber. , 2018, , .		1
79	A Single-laser Flexible-grid WDM Silicon Photonic Transmitter using Microring Modulators. , 2018, , .		8
80	Nyquist-WDM Super-Channel Using an On-Chip Frequency Comb enabled by a Silicon Dual-drive MZM. , 2018, , .		1
81	The Impact of Modal Interactions on Receiver Complexity in OAM Fibers. Journal of Lightwave Technology, 2017, 35, 4692-4699.	2.7	12
82	Flexible on-chip frequency comb generation using a SOI dual-drive MZM. , 2017, , .		2
83	Optical fibers for the transmission of orbital angular momentum modes. Optical Fiber Technology, 2017, 35, 2-7.	1.4	41
84	Demonstration and Evaluation of an Optimized RFS Comb for Terabit Flexible Optical Networks. Journal of Optical Communications and Networking, 2017, 9, 739.	3.3	5
85	Experimental examination of ssbi suppression using SiP microring resonators. , 2017, , .		1
86	Linearly polarized vector modes: enabling MIMO-free mode-division multiplexing. Optics Express, 2017, 25, 11736.	1.7	78
87	Interplay of Bit Rate, Linewidth, and Reach on DMT vs. PAM Performance. , 2017, , .		1
88	MIMO-Free Transmission over Six Vector Modes in a Polarization Maintaining Elliptical Ring Core Fiber. , 2017, , .		13
89	Silicon photonics enabled SSBI cancellation. , 2017, , .		0
90	SiP IQ modulator Linearization by memory polynomial pre-distortion model. , 2017, , .		2

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91	Parasitic Effect of TE and TM modes in OAM-MDM Transmission Systems. , 2017, , .		3
92	3.36-Tbit/s OAM and Wavelength Multiplexed Transmission over an Inverse-Parabolic Graded Index Fiber. , 2017, , .		6
93	Phase Drift in Depletion-Mode Silicon Photonics Modulators. , 2017, , .		0
94	Dual phase-shift Bragg grating silicon photonic modulator operating up to 60 Gb/s. Optics Express, 2016, 24, 2413.	1.7	41
95	Theoretical analysis of chromatic dispersion, phase noise, and SSBI in direct-detection single-side-band optical OFDM transmission. , 2016, , .		0
96	Multi-stage 20 Gbaud driver in 130 nm CMOS for segmented Mach-Zehnder optical modulators. , 2016, , .		1
97	PAM vs. DMT: A performance comparison of modulation formats for IMDD. , 2016, , .		0
98	Constellation-induced SNR gain in short-reach optical OFDM. , 2016, , .		0
99	Experimental study of receiver complexity in OAM-MDM transmission systems. , 2016, , .		3
100	Investigation of orbital angular momentum mode purity in air-core optical fibers. , 2016, , .		5
101	Single-Fiber Lightwave Centralized WDM-OFDMA-PON With Colorless Optical Network Units. Journal of Optical Communications and Networking, 2016, 8, 196.	3.3	11
102	Semiconductor Optical Amplifier-Based Wavelength Conversion of Nyquist-16QAM for Flex-Grid Optical Networks. Journal of Lightwave Technology, 2016, 34, 2724-2729.	2.7	15
103	Time-Domain Large-Signal Modeling of Traveling-Wave Modulators on SOI. Journal of Lightwave Technology, 2016, 34, 2812-2823.	2.7	39
104	Exact Expressions for Vector Mode Cutoff in Three-Layer Step-Index Fibers. Journal of Lightwave Technology, 2016, 34, 3094-3102.	2.7	6
105	System-Level Design of a Full-Duplex Wireless Transceiver for Brain-Machine Interfaces. IEEE Transactions on Microwave Theory and Techniques, 2016, 64, 3332-3341.	2.9	10
106	Mode Division Multiplexing Using Orbital Angular Momentum Modes Over 1.4-km Ring Core Fiber. Journal of Lightwave Technology, 2016, 34, 4252-4258.	2.7	62
107	CMOS-Photonics Codesign of an Integrated DAC-Less PAM-4 Silicon Photonic Transmitter. IEEE Transactions on Circuits and Systems I: Regular Papers, 2016, 63, 2158-2168.	3.5	25
108	Design of an integrated circular-polarized OAM generator/multiplexer. , 2016, , .		2

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109	A short-impulse UWB BPSK transmitter for large-scale neural recording implants. , 2016, 2016, 6315-6318.		4
110	Discrete Multi-Tone Transmission With Optimized QAM Constellations for Short-Reach Optical Communications. Journal of Lightwave Technology, 2016, 34, 3515-3522.	2.7	10
111	Two-Stage Code Acquisition in Wireless Optical CDMA Communications Using Optical Orthogonal Codes. IEEE Transactions on Communications, 2016, 64, 3480-3491.	4.9	5
112	A Wearable Microwave Antenna Array for Time-Domain Breast Tumor Screening. IEEE Transactions on Medical Imaging, 2016, 35, 1501-1509.	5.4	139
113	Orbital-Angular-Momentum Polarization Mode Dispersion in Optical Fibers. Journal of Lightwave Technology, 2016, 34, 1661-1671.	2.7	31
114	Postcompensation of Nonlinear Distortions of 64-QAM Signals in a Semiconductor-Based Wavelength Converter. Journal of Lightwave Technology, 2016, 34, 2127-2138.	2.7	5
115	A Single-Chip Full-Duplex High Speed Transceiver for Multi-Site Stimulating and Recording Neural Implants. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 643-653.	2.7	73
116	Flexible, Polarization-Diverse UWB Antennas for Implantable Neural Recording Systems. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 38-48.	2.7	99
117	Orbital Angular Momentum Mode Division Multiplexing over 1.4 km RCF Fiber. , 2016, , .		8
118	Comparison of 100 Gb/s O-band PAM-4 vs. C-band DMT for Different Laser Linewidths and Fiber Lengths. , 2016, , .		4
119	Orbital-angular-momentum polarization mode dispersion in optical fibers and its measurement technique. , 2015, , .		3
120	Multi-Format Wavelength Conversion Using Quantum Dash Mode-Locked Laser Pumps. Photonics, 2015, 2, 527-539.	0.9	5
121	Modeling and compensation of transmitter nonlinearity in coherent optical OFDM. Optics Express, 2015, 23, 26192.	1.7	12
122	Flexible 16 Antenna Array for Microwave Breast Cancer Detection. IEEE Transactions on Biomedical Engineering, 2015, 62, 2516-2525.	2.5	217
123	Digital Post-Compensation of Nonlinear Distortions in Wavelength Conversion Based on Four-Wave Mixing in a Semiconductor Optical Amplifier. Journal of Lightwave Technology, 2015, 33, 3254-3264.	2.7	4
124	Experimental study of M-QAM constellation options for short-reach dual-polarization optical OFDM with direct detection. , 2015, , .		2
125	Integrated UWB Transmitter and Antenna Design for Interfacing High-Density Brain Microprobes. , 2015, , .		8
126	A full-duplex wireless integrated transceiver for implant-to-air data communications. , 2015, , .		5

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127	Perfect vortex beam: Fourier transformation of a Bessel beam. Optics Letters, 2015, 40, 597.	1.7	354
128	Optical Load-Balancing Tradeoffs in Wavelength-Routing Cloud Data Centers. Journal of Optical Communications and Networking, 2015, 7, 286.	3.3	23
129	Full-duplex analog WiFi transport over RSOA-based wavelength-reused digital passive optical networks. , 2015, , .		0
130	Design of a family of ring-core fibers for OAM transmission studies. Optics Express, 2015, 23, 10553.	1.7	135
131	Biological Channel Modeling and Implantable UWB Antenna Design for Neural Recording Systems. IEEE Transactions on Biomedical Engineering, 2015, 62, 88-98.	2.5	64
132	Full-duplex WiFi analog signal transmission with digital downlink in a radio-over-fiber system employing RSOA-based WDM-PON architecture. , 2014, , .		2
133	Design, fabrication and validation of an OAM fiber supporting 36 states. Optics Express, 2014, 22, 26117.	1.7	338
134	Design of an Optical Fiber Supporting 16 OAM Modes. , 2014, , .		12
135	Simple analytical model for low-frequency frequency-modulation noise of monolithic tunable lasers. Applied Optics, 2014, 53, 830.	0.9	15
136	Transmitter Sensitivity to High PAPR in Coherent Optical OFDM Systems. , 2014, , .		4
137	Vector Mode Analysis of Ring-Core Fibers: Design Tools for Spatial Division Multiplexing. Journal of Lightwave Technology, 2014, 32, 4648-4659.	2.7	85
138	Characterization of OAM fibers using fiber Bragg gratings. Optics Express, 2014, 22, 15653.	1.7	65
139	Few-mode fiber with inverse-parabolic graded-index profile for transmission of OAM-carrying modes. Optics Express, 2014, 22, 18044.	1.7	167
140	Capacity of UWB wireless channel for neural recording systems. , 2014, 2014, 3965-8.		0
141	Enabling In-Band Bidirectional OFDM-Uplink and OOK-Downlink Transmission in Long-Reach RSOA-Based WDM-PON Systems. Journal of Lightwave Technology, 2014, 32, 3854-3860.	2.7	5
142	Full-duplex WiFi analog transmission in RSOA-based radio-over-fiber system with wavelength-reuse. , 2014, , .		1
143	Exciting OAM modes in annular-core fibers via perfect OAM beams. , 2014, , .		6
144	Multi-Level Coded Modulation for 16-ary Constellations in Presence of Phase Noise. Journal of Lightwave Technology, 2014, 32, 1159-1167.	2.7	5

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145	Overcoming Phase Sensitivity in Real-Time Parallel DSP for Optical Coherent Communications: Optically Filtered Lasers. Journal of Lightwave Technology, 2014, 32, 411-420.	2.7	5
146	BER Performance of Coherent Optical Communications Systems Employing Monolithic Tunable Lasers With Excess Phase Noise. Journal of Lightwave Technology, 2014, 32, 1973-1980.	2.7	21
147	Impact of Sinusoidal Tones on Parallel Decision-Directed Phase Recovery for 64-QAM. IEEE Photonics Technology Letters, 2014, 26, 486-489.	1.3	4
148	WDM Recirculation Buffer-Based Optical Fabric for Scalable Cloud Computing. Journal of Lightwave Technology, 2014, 32, 4053-4067.	2.7	4
149	Experimental Verification of Multilevel Coded Modulation for 16-Ary Constellations. IEEE Photonics Technology Letters, 2014, 26, 1774-1777.	1.3	0
150	Multi-service OFDM Uplink Transmission in Full-Duplex FTTx Systems Using RSOA-based WDM-PON Architecture. , 2014, , .		5
151	An optimized 16-QAM constellation for mitigating impairments of phase noise and limited transmitter ENOB in optical coherent detection systems. , 2014, , .		3
152	Full-duplex in-band OOK-Downlink/OFDM-Uplink transmitted over 40km of SSMF in RSOA-based radio-over-fiber system. , 2013, , .		2
153	Downstream modulation index tuning to enable full-duplex OOK-DL/OFDM-UL transmission in RSOA-based Radio-over-Fiber system. , 2013, , .		4
154	Wideband wavelength conversion of 16 Gbaud 16-QAM and 5 Gbaud 64-QAM signals in a semiconductor optical amplifier. Optics Express, 2013, 21, 19825.	1.7	47
155	Error vector magnitude based parameter estimation for digital filter back-propagation mitigating SOA distortions in 16-QAM. Optics Express, 2013, 21, 20376.	1.7	5
156	Load balancing in wavelength-routing cloud data centers. , 2013, , .		2
157	Efficient, Widely-Tunable Wavelength Conversion for Packets With In-Band Labels. IEEE Photonics Technology Letters, 2013, 25, 2470-2473.	1.3	1
158	The practical limit to impairment-aware scheduling in all-optical routers. , 2013, , .		0
159	Multi-Level Coded Modulation for Phase Noise Optimized Constellations. , 2013, , .		0
160	Experimental Validation of Digital Filter Back-propagation to Suppress SOA-induced Nonlinearities in 16-QAM. , 2013, , .		4
161	Tracking Excess Noise from a Monolithic Tunable Laser in Coherent Communication Systems. , 2013, , .		2
162	Wideband Wavelength Conversion of 16 Gbaud 16-QAM Signals in a Semiconductor Optical Amplifier. , 2013, , .		5

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163	Performance of carrier phase recovery for electronically dispersion compensated coherent systems. Optics Express, 2012, 20, 26568.	1.7	14
164	Quantum-Dash Mode-Locked Lasers for Tunable Wavelength Conversion on a 100ÅGHz Frequency Grid. Journal of Optical Communications and Networking, 2012, 4, A69.	3.3	7
165	FBG-Based Matched Filters for Optical Processing of RF Signals. IEEE Photonics Journal, 2012, 4, 832-843.	1.0	3
166	Analysis of Large-Scale Multi-Stage All-Optical Packet Switching Routers. Journal of Optical Communications and Networking, 2012, 4, 412.	3.3	14
167	Optical UWB Waveform Generation Using a Micro-Ring Resonator. IEEE Photonics Technology Letters, 2012, 24, 1316-1318.	1.3	8
168	Design of a miniaturized UWB antenna optimized for implantable neural recording systems. , 2012, , .		16
169	Realistic modeling of the biological channel for the design of implantable wireless UWB communication systems. , 2012, 2012, 6015-8.		30
170	Low-Complexity Optical Distribution of Gb/s BPSK UWB Signals. IEEE Photonics Technology Letters, 2012, 24, 803-805.	1.3	0
171	Upconversion of Gain-Switched Laser Pulses for Optical Generation of UWB Signals. Journal of Lightwave Technology, 2012, 30, 207-214.	2.7	2
172	Analytical PDF of Decision Statistic for Coherent MPSK with Electronic Dispersion Equalization. , 2012, , .		2
173	UWB matched filter reception using an electromagnetic bandgap structure. , 2011, , .		1
174	A high-performance network architecture for scalable optical datacenters. , 2011, , .		1
175	OOK Q-factor degradation in scalable optical switches. , 2011, , .		4
176	Quantum-Dash Mode-Locked Laser as a Source for 56-Gb/s DQPSK Modulation in WDM Multicast Applications. IEEE Photonics Technology Letters, 2011, 23, 453-455.	1.3	39
177	Characterization of a Linearly Chirped FBG Under Local Temperature Variations for Spectral Shaping Applications. Journal of Lightwave Technology, 2011, 29, 750-755.	2.7	7
178	Probing the Limits of PON Monitoring Using Periodic Coding Technology. Journal of Lightwave Technology, 2011, 29, 1375-1382.	2.7	13
179	On the Efficiency of Digital Back-Propagation for Mitigating SOA-Induced Nonlinear Impairments. Journal of Lightwave Technology, 2011, 29, 3331-3339.	2.7	21
180	Computationally Efficient Monitoring of PON Fiber Link Quality Using Periodic Coding. Journal of Optical Communications and Networking, 2011, 3, 77.	3.3	13

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181	Equalizer complexity/performance trade-offs for high data-rate IR-UWB linear receivers in multipath channels. , 2011, , .		3
182	A Novel Pulse-Positioned Coding Scheme for Fiber Fault Monitoring of a PON. IEEE Communications Letters, 2011, 15, 1007-1009.	2.5	8
183	RoF Delivery over PONs of Optically Shaped UWB Signals for Gigabit/s Wireless Distribution in the Home. IEEE Journal on Selected Areas in Communications, 2011, 29, 1304-1310.	9.7	3
184	Passive optical network monitoring: challenges and requirements. , 2011, 49, s45-S52.		67
185	Low complexity digital backpropagation for SOA. , 2011, , .		0
186	Multicanonical Monte Carlo for Simulation of Optical Links. , 2011, , 373-413.		2
187	Fiber fault PON monitoring using optical coding: Effects of customer geographic distribution. IEEE Transactions on Communications, 2010, 58, 1172-1181.	4.9	48
188	Performance analysis of fiber fault PON monitoring using optical coding: SNR, SNIR, and false-alarm probability. IEEE Transactions on Communications, 2010, 58, 1182-1192.	4.9	28
189	Bit Patterning in SOAs: Statistical Characterization Through Multicanonical Monte Carlo Simulations. IEEE Journal of Quantum Electronics, 2010, 46, 570-578.	1.0	8
190	A Silicon Modulator Enabling RF Over Fiber for 802.11 OFDM Signals. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 141-148.	1.9	37
191	Pulse Shapes That Outperform Traditional UWB Antenna/Waveform Combinations. , 2010, , .		11
192	Optical generation of UWB waveform via upconversion of gain-switched laser pulses. , 2010, , .		1
193	Optical Phase and Amplitude Control for Beamforming with Cascades of Gires-Tournois Bragg Grating Filters. , 2010, , .		3
194	Capacity of SOA-Assisted SAC-OCDMA. IEEE Photonics Technology Letters, 2010, 22, 441-443.	1.3	9
195	Quantum-dash mode-locked laser source for wavelength-tunable 56 Gbit/s DQPSK. , 2010, , .		0
196	Filter Design for SOA-Assisted SS-WDM Systems Using Parallel Multicanonical Monte Carlo. Journal of Lightwave Technology, 2010, 28, 79-90.	2.7	15
197	Low-Complexity Compensation of SOA Nonlinearity for Single-Channel PSK and OOK. Journal of Lightwave Technology, 2010, 28, 277-288.	2.7	18
198	Dense SS-WDM Over Legacy PONs: Smooth Upgrade of Existing FTTH Networks. Journal of Lightwave Technology, 2010, 28, 1485-1495.	2.7	22

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199	Experimental Study of Burst-Mode Reception in a 1300km Deployed Fiber Link. Journal of Optical Communications and Networking, 2010, 2, 1.	3.3	8
200	Arbitrary UWB waveform generator supporting OOK, PPM and PSK modulation formats. , 2010, , .		1
201	A novel FBG-based self-seeded RSOA transmitter with noise mitigation for dense SS-WDM PONs. , 2010, , .		2
202	Optical distribution of UWB: Low complexity pulse generation supporting OOK and PSK. , 2010, , .		2
203	Experimental Validation of Periodic Codes for PON Monitoring. , 2009, , .		10
204	Evaluation of the Impact of Filter Shape on the Performance of SOA-Assisted SS-WDM Systems Using Parallelized Multicanonical Monte Carlo. , 2009, , .		2
205	Performance degradation of source matching in optical CDMA due to source coherence effects. IEEE Transactions on Communications, 2009, 57, 1776-1783.	4.9	2
206	On the capacity of SOA-assisted SAC-OCDMA systems: A numerical approach using Multicanonical Monte Carlo. , 2009, , .		0
207	High-Bit-Rate Dense SS-WDM PON Using SOA-Based Noise Reduction With a Novel Balanced Detection. Journal of Lightwave Technology, 2009, 27, 5045-5055.	2.7	13
208	DQPSK: When Is a Narrow Filter Receiver Good Enough?. Journal of Lightwave Technology, 2009, 27, 5106-5114.	2.7	3
209	Low-Distortion Optical Null-Steering Beamformer for Radio-Over-Fiber OFDM Systems. Journal of Lightwave Technology, 2009, 27, 5173-5182.	2.7	3
210	Generation of Arbitrary UWB Waveforms by Spectral Pulse Shaping and Thermally-Controlled Apodized FBGs. Journal of Lightwave Technology, 2009, 27, 5276-5283.	2.7	38
211	An Innovative Receiver for Incoherent SAC-OCDMA Enabling SOA-Based Noise Cleaning: Experimental Validation. Journal of Lightwave Technology, 2009, 27, 108-116.	2.7	18
212	Optical Packet Switching Networks With Binary Multiwavelength Labels. Journal of Lightwave Technology, 2009, 27, 2246-2256.	2.7	5
213	SOA Intensity Noise Suppression in Spectrum Sliced Systems: A Multicanonical Monte Carlo Simulator of Extremely Low BER. Journal of Lightwave Technology, 2009, 27, 2667-2677.	2.7	18
214	A Fresh Look at Multicanonical Monte Carlo from a Telecom Perspective. , 2009, , .		17
215	Generation of arbitrary UWB waveforms: A low complexity optical approach. , 2009, , .		0
216	Programmable UWB Waveform Generation using FBGs with Temperature-Controlled Apodization. , 2009, , .		3

#	ARTICLE	IF	CITATIONS
217	Statistical Characterization of Bit Patterning in SOAs: BER Prediction and Experimental Validation. , 2009, , .		4
218	Optical Processing to Enhance UWB Transmission and Reception. , 2009, , .		0
219	Novel Optically Generated Ultra Wideband (UWB) Signals. , 2009, , .		0
220	Ultrafast Forwarding Architecture Using a Single Optical Processor for Multiple SAC-Label Recognition Based on FWM. IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 868-878.	1.9	19
221	Ultra-Wideband Waveform Generator Based on Optical Pulse-Shaping and FBG Tuning. IEEE Photonics Technology Letters, 2008, 20, 135-137.	1.3	52
222	Optical Packet Switching via FWM Processing of Time-Stacked Weight-2 Codes. IEEE Photonics Technology Letters, 2008, 20, 1712-1714.	1.3	6
223	PON Monitoring: Periodic Encoders With Low Capital and Operational Cost. IEEE Photonics Technology Letters, 2008, 20, 2039-2041.	1.3	46
224	Fiber Fault Monitoring for Passive Optical Networks Using Hybrid 1-D/2-D Coding. IEEE Photonics Technology Letters, 2008, 20, 2054-2056.	1.3	17
225	Generation of Power-Efficient FCC-Compliant UWB Waveforms Using FBGs: Analysis and Experiment. Journal of Lightwave Technology, 2008, 26, 628-635.	2.7	72
226	Experimental Demonstration of a SAC-OCDMA PON With Burst-Mode Reception: Local Versus Centralized Sources. Journal of Lightwave Technology, 2008, 26, 1192-1203.	2.7	29
227	Balanced Detection of Correlated Incoherent Signals: A Statistical Analysis of Intensity Noise With Experimental Validation. Journal of Lightwave Technology, 2008, 26, 1330-1338.	2.7	17
228	All-Optical 500-Mb/s UWB Transceiver: An Experimental Demonstration. Journal of Lightwave Technology, 2008, 26, 2795-2802.	2.7	76
229	SOA gain recovery wavelength dependence: simulation and measurement using a single-color pump-probe technique. Optics Express, 2008, 16, 20656.	1.7	16
230	A Standalone Burst-Mode Receiver With Clock and Data Recovery, Clock Phase Alignment, and RS(255, 133) Turbo Coding for Overclocked 10	1.3	9
231	Beat Noise Mitigation via Hybrid 1D/2D-OCDM: Application to Monitoring of High Capacity PONs. , 2008, , .		4
232	A Semi-Analytic Method for BER Performance of Rake-Based UWB Receivers. , 2008, , .		5
233	Time-Stacked Optical Labels: An Alternative to Label-Swapping. , 2008, , .		4
234	An optical realization of a 500 Mb/s UWB transceiver. , 2008, , .		0

#	ARTICLE	IF	CITATIONS
235	Wideband antenna EIRP measurements for various UWB waveforms. , 2008, , .		6
236	Network Management Solution for PS/PON, WDM/PON and Hybrid PS/WDM/PON using DS-OCDM. , 2007, , .		4
237	Low Distortion Null-Steering Beamforming with a Cascade of Fiber Bragg Grating Gires-Tournois. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	1
238	Low-cost, Scalable Optical Packet Switching Networks with Multi-Wavelength Labels. , 2007, , .		6
239	Code-division multiplexing for in-service out-of-band monitoring of live FTTH-PONs. Journal of Optical Networking, 2007, 6, 819.	2.5	56
240	Label Stacking in Photonic Packet-Switched Networks With Spectral Amplitude Code Labels. Journal of Lightwave Technology, 2007, 25, 463-471.	2.7	37
241	Spectral-Amplitude-Coded OCDMA Optimized for a Realistic FBG Frequency Response. Journal of Lightwave Technology, 2007, 25, 1256-1263.	2.7	36
242	Analysis of Randomized Scheduling Algorithm for a Practical Bufferless Optical Network. IEEE Communications Letters, 2007, 11, 537-539.	2.5	0
243	Performance of Incoherent SAC-OCDMA Using a Burst-Mode Receiver with CDR and FEC. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	0
244	All-Optical Swapping of Spectral Amplitude Code Labels for Packet Switching. , 2007, , .		14
245	Source Matching in Optical CDMA in the Presence of Multiple Access Interference and Phase-Induced Intensity Noise. , 2007, , .		0
246	A radio-over-fiber link for OFDM transmission without RF amplification. Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS, 2007, , .	0.0	3
247	Increasing the Capacity of SAC-OCDMA: Forward Error Correction or Coherent Sources?. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1422-1428.	1.9	16
248	Erbium Amplifier Dynamics in Wireless Analog Optical Links With Modulator Bias Optimization. IEEE Photonics Technology Letters, 2007, 19, 408-410.	1.3	5
249	Mitigating of Scintillation Noise in FSO Communication Links using Saturated Optical Amplifiers. , 2006, , .		9
250	A Single All-Optical Processor for Multiple Spectral Amplitude Code Label Recognition Using Four Wave Mixing. , 2006, , .		6
251	A Novel Model for SOAs in WDM Networks. , 2006, , .		0
252	A Reservoir Dynamic Model for Linear Optical Amplifiers. , 2006, , .		1

#	ARTICLE	IF	CITATIONS
253	Optimal SOA-based Noise Reduction Schemes for Incoherent Spectrum-Sliced PONs. , 2006, , .		5
254	Carrier-to-noise ratio optimization by modulator bias control in radio-over-fiber links. IEEE Photonics Technology Letters, 2006, 18, 1840-1842.	1.3	18
255	A Standalone Receiver With Multiple Access Interference Rejection, Clock and Data Recovery, and FEC for 2-D $\lambda$ -t OCDMA. IEEE Photonics Technology Letters, 2006, 18, 2123-2125.	1.3	10
256	Fast and Efficient Dynamic WDM Semiconductor Optical Amplifier Model. Journal of Lightwave Technology, 2006, 24, 4353-4365.	2.7	38
257	Suppression of Turbulence-Induced Scintillation in Free-Space Optical Communication Systems Using Saturated Optical Amplifiers. Journal of Lightwave Technology, 2006, 24, 4966-4973.	2.7	83
258	Gain Optimization by Modulator-Bias Control in Radio-Over-Fiber Links. Journal of Lightwave Technology, 2006, 24, 4974-4982.	2.7	24
259	Packet switched networks with photonic code processing. , 2006, , .		4
260	New gain parameterization for fast semiconductor optical amplifier model. , 2006, , .		1
261	Incoherent SAC OCDMA system at 7&#x00D7;622Mbps. , 2006, , .		4
262	Self-Routed Packets with Encoded Payload and Stacked Optical Code Labels. , 2006, , .		2
263	Simulation of Real SAC-OCDMA under Both S-ALOHA and R3T Random Access Protocols. , 2006, , .		0
264	A Comparison of Optical Sources for Spectral Amplitude Coding OCDMA. , 2006, , .		5
265	All-optical Label Stacking Capacity for Packet Switching Using Spectral Amplitude Code Labels. , 2006, , .		1
266	Receiver for 2D $\hat{\lambda}$ -t OCDMA with Quantizer, CDR and FEC. , 2006, , .		0
267	Electrical-to-optical conversion of OFDM 802.11g/a signals by direct current modulation of semiconductor optical amplifiers. , 2006, , .		4
268	Label stacking using spectral amplitude code labels for optical packet switching. , 2006, , .		6
269	Error-free transmission for incoherent broad-band optical communications systems using incoherent-to-coherent wavelength conversion. Journal of Lightwave Technology, 2005, 23, 287-294.	2.7	13
270	Experimental verification and capacity prediction of FE-OCDMA using superimposed FBG. Journal of Lightwave Technology, 2005, 23, 724-731.	2.7	76

#	ARTICLE	IF	CITATIONS
271	Spectral efficiency of OCDMA systems with coherent pulsed sources. Journal of Lightwave Technology, 2005, 23, 1033-1038.	2.7	15
272	Analysis of the spectral efficiency of frequency-encoded OCDMA systems with incoherent sources. Journal of Lightwave Technology, 2005, 23, 1610-1619.	2.7	40
273	Equalization advantages of OFFH-CDMA over WDM in EDFAs. IEEE Photonics Technology Letters, 2005, 17, 507-509.	1.3	0
274	Experimental comparison of coherent versus incoherent sources in a four-user $\lambda$ -t OCDMA system at 1.25 Gb/s. IEEE Photonics Technology Letters, 2005, 17, 2493-2495.	1.3	28
275	Experimental demonstration and simulation results of frequency encoded optical CDMA. , 2004, , .		6
276	Incoherent-to-coherent wavelength conversion using semiconductor optical amplifier. , 2004, , .		3
277	Beat noise effects on spectrum-sliced WDM. , 2003, 5260, 44.		7
278	Multirate optical fast frequency hopping CDMA system using power control. Journal of Lightwave Technology, 2002, 20, 166-177.	2.7	89
279	Cross-gain modulation in Raman fiber amplifier: experimentation and modeling. IEEE Photonics Technology Letters, 2002, 14, 1261-1263.	1.3	19
280	Multuser detection for DS-CDMA UWB in the home environment. IEEE Journal on Selected Areas in Communications, 2002, 20, 1701-1711.	9.7	154
281	Cross-gain modulation effect on the behaviour of packetized cascaded EDFAs. Journal of Optics, 2001, 3, 210-217.	1.5	3
282	Output power excursions in a cascade of EDFAs fed by multichannel burst-mode packet traffic: experimentation and modeling. Journal of Lightwave Technology, 2001, 19, 933-940.	2.7	23
283	Application of preemphasis to achieve flat output OSNR in time-varying channels in cascaded EDFAs without equalization. Journal of Lightwave Technology, 2001, 19, 1440-1452.	2.7	10
284	SIR performance evaluation of a multirate OFFH-CDMA system. IEEE Communications Letters, 2001, 5, 224-226.	2.5	18
285	Modeling Gain Dynamics in EDFAs: Space-Resolved Versus Lumped Models. Fiber and Integrated Optics, 2001, 20, 601-615.	1.7	4
286	Suppression of Output Power and NF Excursions in Cascades of Highly Inverted EDFAs with Packet-Switched Traffic. Fiber and Integrated Optics, 2001, 20, 269-277.	1.7	0
287	New method to equalize static and dynamic OSNR in cascades of EDFAs without in-line optical filters. , 2000, 4087, 335.		2
288	Equalization advantages of OFFH-CDMA over WDM in EDFAs. , 2000, , .		1

#	ARTICLE	IF	CITATIONS
289	Writing and applications of fiber Bragg grating arrays. , 2000, 4087, 140.		4
290	Measurement of power spread histograms in chains of erbium-doped fiber amplifiers (EDFAs) fed by live local-area network traffic. , 2000, , .		1
291	Gain stabilization in gain clamped EDFA cascades fed by WDM burst-mode packet traffic. Journal of Lightwave Technology, 2000, 18, 308-313.	2.7	50
292	Impact of the beat noise on the performance of 2-D optical CDMA systems. IEEE Communications Letters, 2000, 4, 264-266.	2.5	100
293	Large power swings in doped-fiber amplifiers with highly variable data. IEEE Photonics Technology Letters, 1999, 11, 131-133.	1.3	19
294	Passive optical fast frequency-hop CDMA communications system. Journal of Lightwave Technology, 1999, 17, 397-405.	2.7	246
295	Output power and SNR swings in cascades of EDFAs for circuit- and packet-switched optical networks. Journal of Lightwave Technology, 1999, 17, 733-742.	2.7	46
296	Robust optical FFH-CDMA communications: coding in place of frequency and temperature controls. Journal of Lightwave Technology, 1999, 17, 1284-1293.	2.7	32
297	Robust Optical FFH-CDMA Communications: Coding Avoids Frequency/Temperature Controls. , 1999, , 312-323.		0
298	Doped-fiber amplifier dynamics: a system perspective. Journal of Lightwave Technology, 1998, 16, 945-956.	2.7	104
299	Gain control in EDFA's by pump compensation. IEEE Photonics Technology Letters, 1998, 10, 1313-1315.	1.3	20
300	<title>Research activities in optical communications at Universite Laval</title>. , 1998, 3414, 114.		0
301	New architecture and codes for optical frequency-hopping multiple access. , 1998, 3491, 501.		4
302	<title>Two-dimensional CDMA systems for optical networks with increased security demands</title>. , 1998, , .		0
303	Submicrosecond transient time responses in cascades of EDFAs. , 1998, 3491, 553.		0
304	Simple dynamic model of fibre amplifiers and equivalent electrical circuit. Electronics Letters, 1997, 33, 1887.	0.5	6
305	Coherent optical CDMA with limited phase excursion. IEEE Communications Letters, 1997, 1, 28-30.	2.5	13
306	A subspace approach to adaptive narrow-band interference suppression in DSSS. IEEE Transactions on Communications, 1997, 45, 1575-1585.	4.9	16

#	ARTICLE	IF	CITATIONS
307	Effects of laser phase drift on coherent optical CDMA. IEEE Journal on Selected Areas in Communications, 1995, 13, 577-591.	9.7	20
308	A promising multiplexing technology for cellular telecommunications: Narrowband Interference Suppression in Spread Spectrum CDMA. IEEE Personal Communications, 1994, 1, 14.	4.5	82
309	Narrowband interference suppression in CDMA spread spectrum communications. IEEE Transactions on Communications, 1994, 42, 1969-1979.	4.9	158
310	New cross-correlation results for multi-rate CDMA. , 0, , .		4
311	Improved algorithms for narrowband interference suppression in direct sequence spread spectrum. , 0, , .		0
312	Phase drift effects in optical CDMA. , 0, , .		0
313	Network architecture for a high bandwidth WDMA/CDMA local area network. , 0, , .		1
314	Injection-locking for coherent detection of multi-wavelength systems. , 0, , .		1
315	Fast dynamics and power swings in doped-fiber amplifiers fed by highly variable multimedia traffic. , 0, , .		4
316	Optical frequency-hop multiple access communications system. , 0, , .		8
317	Gain dynamics of doped-fiber amplifiers for added and dropped signals. , 0, , .		1
318	Writing of Bragg gratings with wavelength flexibility using a Sagnac type interferometer and application to FH-CDMA. , 0, , .		3
319	Large power and SNR swings in cascaded EDFAs carrying highly variable traffic. , 0, , .		0
320	Spatial correlation of UWB signals in a home environment. , 0, , .		53
321	Multuser receivers for DS-CDMA UWB. , 0, , .		21
322	Hybrid RAKE / multuser receivers for UWB. , 0, , .		13
323	Intensity noise in incoherent-to-coherent wavelength conversion in SOAs. , 0, , .		0
324	Scintillation suppression in a laboratory-simulated free-space optical link with a saturated SOA. , 0, , .		0

#	ARTICLE	IF	CITATIONS
325	Biological channel modeling and implantable UWB antenna design for neural recording systems. , 0, , 379-388.		2