

Leslie Ann Rusch

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4257466/publications.pdf>

Version: 2024-02-01

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	Perfect vortex beam: Fourier transformation of a Bessel beam. Optics Letters, 2015, 40, 597.	1.7	354
2	Design, fabrication and validation of an OAM fiber supporting 36 states. Optics Express, 2014, 22, 26117.	1.7	338
3	Passive optical fast frequency-hop CDMA communications system. Journal of Lightwave Technology, 1999, 17, 397-405.	2.7	246
4	Flexible 16 Antenna Array for Microwave Breast Cancer Detection. IEEE Transactions on Biomedical Engineering, 2015, 62, 2516-2525.	2.5	217
5	Few-mode fiber with inverse-parabolic graded-index profile for transmission of OAM-carrying modes. Optics Express, 2014, 22, 18044.	1.7	167
6	Narrowband interference suppression in CDMA spread spectrum communications. IEEE Transactions on Communications, 1994, 42, 1969-1979.	4.9	158
7	Multuser detection for DS-CDMA UWB in the home environment. IEEE Journal on Selected Areas in Communications, 2002, 20, 1701-1711.	9.7	154
8	A Wearable Microwave Antenna Array for Time-Domain Breast Tumor Screening. IEEE Transactions on Medical Imaging, 2016, 35, 1501-1509.	5.4	139
9	Design of a family of ring-core fibers for OAM transmission studies. Optics Express, 2015, 23, 10553.	1.7	135
10	Doped-fiber amplifier dynamics: a system perspective. Journal of Lightwave Technology, 1998, 16, 945-956.	2.7	104
11	Impact of the beat noise on the performance of 2-D optical CDMA systems. IEEE Communications Letters, 2000, 4, 264-266.	2.5	100
12	Flexible, Polarization-Diverse UWB Antennas for Implantable Neural Recording Systems. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 38-48.	2.7	99
13	Multirate optical fast frequency hopping CDMA system using power control. Journal of Lightwave Technology, 2002, 20, 166-177.	2.7	89
14	Vector Mode Analysis of Ring-Core Fibers: Design Tools for Spatial Division Multiplexing. Journal of Lightwave Technology, 2014, 32, 4648-4659.	2.7	85
15	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
16	A promising multiplexing technology for cellular telecommunications: Narrowband Interference Suppression in Spread Spectrum CDMA. IEEE Personal Communications, 1994, 1, 14.	4.5	82
17	Linearly polarized vector modes: enabling MIMO-free mode-division multiplexing. Optics Express, 2017, 25, 11736.	1.7	78
18	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
19	All-Optical 500-Mb/s UWB Transceiver: An Experimental Demonstration. Journal of Lightwave Technology, 2008, 26, 2795-2802.	2.7	76
20	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
21	Generation of Power-Efficient FCC-Compliant UWB Waveforms Using FBGs: Analysis and Experiment. Journal of Lightwave Technology, 2008, 26, 628-635.	2.7	72
22	Passive optical network monitoring: challenges and requirements. , 2011, 49, s45-S52.		67
23	Characterization of OAM fibers using fiber Bragg gratings. Optics Express, 2014, 22, 15653.	1.7	65
24	Biological Channel Modeling and Implantable UWB Antenna Design for Neural Recording Systems. IEEE Transactions on Biomedical Engineering, 2015, 62, 88-98.	2.5	64
25	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
26	Code-division multiplexing for in-service out-of-band monitoring of live FTTH-PONs. Journal of Optical Networking, 2007, 6, 819.	2.5	56
27	Spatial correlation of UWB signals in a home environment. , 0, , .		53
28	Ultra-Wideband Waveform Generator Based on Optical Pulse-Shaping and FBG Tuning. IEEE Photonics Technology Letters, 2008, 20, 135-137.	1.3	52
29	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
30	Fiber fault PON monitoring using optical coding: Effects of customer geographic distribution. IEEE Transactions on Communications, 2010, 58, 1172-1181.	4.9	48
31	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
32	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
33	PON Monitoring: Periodic Encoders With Low Capital and Operational Cost. IEEE Photonics Technology Letters, 2008, 20, 2039-2041.	1.3	46
34	Carrying Data on the Orbital Angular Momentum of Light. , 2018, 56, 219-224.		45
35	Silicon photonic modulators for PAM transmissions. Journal of Optics (United Kingdom), 2018, 20, 083002.	1.0	42
36	Real-time gap-free dynamic waveform spectral analysis with nanosecond resolutions through analog signal processing. Nature Communications, 2020, 11, 3309.	5.8	42

#	ARTICLE	IF	CITATIONS
37	Dual phase-shift Bragg grating silicon photonic modulator operating up to 60 Gb/s. Optics Express, 2016, 24, 2413.	1.7	41
38	Optical fibers for the transmission of orbital angular momentum modes. Optical Fiber Technology, 2017, 35, 2-7.	1.4	41
39	Analysis of the spectral efficiency of frequency-encoded OCDMA systems with incoherent sources. Journal of Lightwave Technology, 2005, 23, 1610-1619.	2.7	40
40	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
41	Time-Domain Large-Signal Modeling of Traveling-Wave Modulators on SOI. Journal of Lightwave Technology, 2016, 34, 2812-2823.	2.7	39
42	Fast and Efficient Dynamic WDM Semiconductor Optical Amplifier Model. Journal of Lightwave Technology, 2006, 24, 4353-4365.	2.7	38
43	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
44	Analysis of modal coupling due to birefringence and ellipticity in strongly guiding ring-core OAM fibers. Optics Express, 2019, 27, 8308.	1.7	38
45	Label Stacking in Photonic Packet-Switched Networks With Spectral Amplitude Code Labels. Journal of Lightwave Technology, 2007, 25, 463-471.	2.7	37
46	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
47	Spectral-Amplitude-Coded OCDMA Optimized for a Realistic FBG Frequency Response. Journal of Lightwave Technology, 2007, 25, 1256-1263.	2.7	36
48	Robust optical FFH-CDMA communications: coding in place of frequency and temperature controls. Journal of Lightwave Technology, 1999, 17, 1284-1293.	2.7	32
49	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
50	Orbital-Angular-Momentum Polarization Mode Dispersion in Optical Fibers. Journal of Lightwave Technology, 2016, 34, 1661-1671.	2.7	31
51	Realistic modeling of the biological channel for the design of implantable wireless UWB communication systems. , 2012, 2012, 6015-8.		30
52	Silicon Photonic IQ Modulators for 400 Gb/s and Beyond. Journal of Lightwave Technology, 2019, 37, 3078-3086.	2.7	30
53	Chip-scale, full-Stokes polarimeter. Optics Express, 2019, 27, 4867.	1.7	30
54	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

#	ARTICLE	IF	CITATIONS
55	Experimental comparison of coherent versus incoherent sources in a four-user λ -TDM-SS-OCMA system at 1.25 Gb/s. IEEE Photonics Technology Letters, 2005, 17, 2493-2495.	1.3	28
56	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
57	Frequency Comb Generation Using a CMOS Compatible SiP DD-MZM for Flexible Networks. IEEE Photonics Technology Letters, 2018, 30, 1495-1498.	1.3	27
58	Integrated flexible-grid WDM transmitter using an optical frequency comb in microring modulators. Optics Letters, 2018, 43, 1554.	1.7	26
59	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
60	Gain Optimization by Modulator-Bias Control in Radio-Over-Fiber Links. Journal of Lightwave Technology, 2006, 24, 4974-4982.	2.7	24
61	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
62	Optical Load-Balancing Tradeoffs in Wavelength-Routing Cloud Data Centers. Journal of Optical Communications and Networking, 2015, 7, 286.	3.3	23
63	Design Analysis of OAM Fibers Using Particle Swarm Optimization Algorithm. Journal of Lightwave Technology, 2020, 38, 846-856.	2.7	23
64	Dense SS-WDM Over Legacy PONs: Smooth Upgrade of Existing FTTH Networks. Journal of Lightwave Technology, 2010, 28, 1485-1495.	2.7	22
65	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
66	Multisuser receivers for DS-SS-SSMA UWB. , 0, , .		21
67	On the Efficiency of Digital Back-Propagation for Mitigating SOA-Induced Nonlinear Impairments. Journal of Lightwave Technology, 2011, 29, 3331-3339.	2.7	21
68	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
69	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
70	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
71	Effects of laser phase drift on coherent optical CDMA. IEEE Journal on Selected Areas in Communications, 1995, 13, 577-591.	9.7	20
72	Gain control in EDFA's by pump compensation. IEEE Photonics Technology Letters, 1998, 10, 1313-1315.	1.3	20

#	ARTICLE	IF	CITATIONS
73	Large power swings in doped-fiber amplifiers with highly variable data. IEEE Photonics Technology Letters, 1999, 11, 131-133.	1.3	19
74	Cross-gain modulation in Raman fiber amplifier: experimentation and modeling. IEEE Photonics Technology Letters, 2002, 14, 1261-1263.	1.3	19
75	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
76	SIR performance evaluation of a multirate OFFH-CDMA system. IEEE Communications Letters, 2001, 5, 224-226.	2.5	18
77	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
78	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
79	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
80	Low-Complexity Compensation of SOA Nonlinearity for Single-Channel PSK and OOK. Journal of Lightwave Technology, 2010, 28, 277-288.	2.7	18
81	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
82	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
83	A Fresh Look at Multicanonical Monte Carlo from a Telecom Perspective. , 2009, , .		17
84	Design of Highly Elliptical Core Ten-Mode Fiber for Space Division Multiplexing With 2 × 2 MIMO. IEEE Photonics Journal, 2019, 11, 1-10.	1.0	17
85	A subspace approach to adaptive narrow-band interference suppression in DSSS. IEEE Transactions on Communications, 1997, 45, 1575-1585.	4.9	16
86	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
87	SOA gain recovery wavelength dependence: simulation and measurement using a single-color pump-probe technique. Optics Express, 2008, 16, 20656.	1.7	16
88	Design of a miniaturized UWB antenna optimized for implantable neural recording systems. , 2012, , .		16
89	Spectral efficiency of OCDMA systems with coherent pulsed sources. Journal of Lightwave Technology, 2005, 23, 1033-1038.	2.7	15
90	Filter Design for SOA-Assisted SS-WDM Systems Using Parallel Multicanonical Monte Carlo. Journal of Lightwave Technology, 2010, 28, 79-90.	2.7	15

#	ARTICLE	IF	CITATIONS
91	Simple analytical model for low-frequency frequency-modulation noise of monolithic tunable lasers. Applied Optics, 2014, 53, 830.	0.9	15
92	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
93	Optimal ultra-miniature polarimeters in silicon photonic integrated circuits. APL Photonics, 2019, 4, .	3.0	15
94	Recurrent neural networks achieving MLSE performance for optical channel equalization. Optics Express, 2021, 29, 13033.	1.7	15
95	All-Silicon IQ Modulator for 100 GBaud 32QAM Transmissions. , 2019, , .		15
96	All-Optical Swapping of Spectral Amplitude Code Labels for Packet Switching. , 2007, , .		14
97	Performance of carrier phase recovery for electronically dispersion compensated coherent systems. Optics Express, 2012, 20, 26568.	1.7	14
98	Analysis of Large-Scale Multi-Stage All-Optical Packet Switching Routers. Journal of Optical Communications and Networking, 2012, 4, 412.	3.3	14
99	Analytical Study of Optical SSB-DMT With IMDD. Journal of Lightwave Technology, 2018, 36, 666-674.	2.7	14
100	Highly elliptical core fiber with stress-induced birefringence for mode multiplexing. Optics Letters, 2020, 45, 2822.	1.7	14
101	Reduced-size lookup tables enabling higher-order QAM with all-silicon IQ modulators. Optics Express, 2019, 27, 24243.	1.7	14
102	Coherent optical CDMA with limited phase excursion. IEEE Communications Letters, 1997, 1, 28-30.	2.5	13
103	Hybrid RAKE / multiuser receivers for UWB. , 0, , .		13
104	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
105	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
106	Probing the Limits of PON Monitoring Using Periodic Coding Technology. Journal of Lightwave Technology, 2011, 29, 1375-1382.	2.7	13
107	Computationally Efficient Monitoring of PON Fiber Link Quality Using Periodic Coding. Journal of Optical Communications and Networking, 2011, 3, 77.	3.3	13
108	MIMO-Free Transmission over Six Vector Modes in a Polarization Maintaining Elliptical Ring Core Fiber. , 2017, , .		13

#	ARTICLE	IF	CITATIONS
109	Design of an Optical Fiber Supporting 16 OAM Modes. , 2014, , .		12
110	Modeling and compensation of transmitter nonlinearity in coherent optical OFDM. Optics Express, 2015, 23, 26192.	1.7	12
111	The Impact of Modal Interactions on Receiver Complexity in OAM Fibers. Journal of Lightwave Technology, 2017, 35, 4692-4699.	2.7	12
112	Integrated Circularly Polarized OAM Generator and Multiplexer for Fiber Transmission. IEEE Journal of Quantum Electronics, 2018, 54, 1-9.	1.0	12
113	Pulse Shapes That Outperform Traditional UWB Antenna/Waveform Combinations. , 2010, , .		11
114	Single-Fiber Lightwave Centralized WDM-OFDMA-PON With Colorless Optical Network Units. Journal of Optical Communications and Networking, 2016, 8, 196.	3.3	11
115	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
116	Ultra-Dense Wavelength-Division Multiplexing With Microring Modulator. Journal of Lightwave Technology, 2021, 39, 4300-4306.	2.7	11
117	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
118	A Standalone Receiver With Multiple Access Interference Rejection, Clock and Data Recovery, and FEC for 2-D λ -tSOCDMA. IEEE Photonics Technology Letters, 2006, 18, 2123-2125.	1.3	10
119	Experimental Validation of Periodic Codes for PON Monitoring. , 2009, , .		10
120	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
121	Discrete Multi-Tone Transmission With Optimized QAM Constellations for Short-Reach Optical Communications. Journal of Lightwave Technology, 2016, 34, 3515-3522.	2.7	10
122	CMOS-Compatible Silicon Photonic IQ Modulator for 84 Gbaud 16QAM and 70 Gbaud 32QAM. , 2018, , .		10
123	Mitigating of Scintillation Noise in FSO Communication Links using Saturated Optical Amplifiers. , 2006, , .		9
124	A Standalone Burst-Mode Receiver With Clock and Data Recovery, Clock Phase Alignment, and RS(255,) Tj ETQq0 Q0 rgBT /Qverlock 10	1.3	9
125	Capacity of SOA-Assisted SAC-OCDMA. IEEE Photonics Technology Letters, 2010, 22, 441-443.	1.3	9
126	Mitigating pattern dependent nonlinearity in SiP IQ-modulators via iterative learning control predistortion. Optics Express, 2018, 26, 27639.	1.7	9

#	ARTICLE	IF	CITATIONS
127	Optical frequency-hop multiple access communications system. , 0, , .		8
128	Bit Patterning in SOAs: Statistical Characterization Through Multicanonical Monte Carlo Simulations. IEEE Journal of Quantum Electronics, 2010, 46, 570-578.	1.0	8
129	Experimental Study of Burst-Mode Reception in a 1300-µm Deployed Fiber Link. Journal of Optical Communications and Networking, 2010, 2, 1.	3.3	8
130	A Novel Pulse-Positioned Coding Scheme for Fiber Fault Monitoring of a PON. IEEE Communications Letters, 2011, 15, 1007-1009.	2.5	8
131	Optical UWB Waveform Generation Using a Micro-Ring Resonator. IEEE Photonics Technology Letters, 2012, 24, 1316-1318.	1.3	8
132	Integrated UWB Transmitter and Antenna Design for Interfacing High-Density Brain Microprobes. , 2015, , .		8
133	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
134	Single-Sideband OFDM Transmission via a Silicon Microring IQ Modulator. IEEE Photonics Technology Letters, 2019, 31, 145-148.	1.3	8
135	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
136	Silicon Photonics in Optical Access Networks for 5G Communications. IEEE Communications Magazine, 2021, 59, 126-131.	4.9	8
137	Orbital Angular Momentum Mode Division Multiplexing over 1.4 km RCF Fiber. , 2016, , .		8
138	Silicon photonic subsystem for broadband and RoF detection while enabling carrier reuse. Optics Express, 2020, 28, 14897.	1.7	8
139	A Single-laser Flexible-grid WDM Silicon Photonic Transmitter using Microring Modulators. , 2018, , .		8
140	Beat noise effects on spectrum-sliced WDM. , 2003, 5260, 44.		7
141	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
142	Quantum-Dash Mode-Locked Lasers for Tunable Wavelength Conversion on a 100-ÅGHz Frequency Grid. Journal of Optical Communications and Networking, 2012, 4, A69.	3.3	7
143	On-Chip Circular Polarization Splitter Using Silicon Photonic Nanoantenna Array. ACS Photonics, 2018, 5, 4338-4342.	3.2	7
144	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

#	ARTICLE	IF	CITATIONS
145	All Silicon IQ Modulator with 1Tb/s Line Rate. , 2020, , .		7
146	Silicon IQ Modulator for 120 Gbaud QAM. , 2021, , .		7
147	Integrated orbital angular momentum mode sorters on vortex fibers. Optics Letters, 2022, 47, 3491.	1.7	7
148	Simple dynamic model of fibre amplifiers and equivalent electrical circuit. Electronics Letters, 1997, 33, 1887.	0.5	6
149	Experimental demonstration and simulation results of frequency encoded optical CDMA. , 2004, , .		6
150	A Single All-Optical Processor for Multiple Spectral Amplitude Code Label Recognition Using Four Wave Mixing. , 2006, , .		6
151	Label stacking using spectral amplitude code labels for optical packet switching. , 2006, , .		6
152	Low-cost, Scalable Optical Packet Switching Networks with Multi-Wavelength Labels. , 2007, , .		6
153	Optical Packet Switching via FWM Processing of Time-Stacked Weight-2 Codes. IEEE Photonics Technology Letters, 2008, 20, 1712-1714.	1.3	6
154	Wideband antenna EIRP measurements for various UWB waveforms. , 2008, , .		6
155	Exciting OAM modes in annular-core fibers via perfect OAM beams. , 2014, , .		6
156	Exact Expressions for Vector Mode Cutoff in Three-Layer Step-Index Fibers. Journal of Lightwave Technology, 2016, 34, 3094-3102.	2.7	6
157	Mode Loss Measurement in Few-Mode Fibers With a Microwave Interferometric Technique. IEEE Photonics Technology Letters, 2018, 30, 581-584.	1.3	6
158	Joint Digital and Optical Pre-Compensation for 720 Gb/s All-Silicon IQ Modulator Single Carrier Transmission. , 2018, , .		6
159	3.36-Tbit/s OAM and Wavelength Multiplexed Transmission over an Inverse-Parabolic Graded Index Fiber. , 2017, , .		6
160	Transmission of 120 Gbaud QAM With an All-Silicon Segmented Modulator. Journal of Lightwave Technology, 2022, 40, 5457-5466.	2.7	6
161	Optimal SOA-based Noise Reduction Schemes for Incoherent Spectrum-Sliced PONs. , 2006, , .		5
162	A Comparison of Optical Sources for Spectral Amplitude Coding OCDMA. , 2006, , .		5

#	ARTICLE	IF	CITATIONS
163	Erbium Amplifier Dynamics in Wireless Analog Optical Links With Modulator Bias Optimization. IEEE Photonics Technology Letters, 2007, 19, 408-410.	1.3	5
164	A Semi-Analytic Method for BER Performance of Rake-Based UWB Receivers. , 2008, , .		5
165	Optical Packet Switching Networks With Binary Multiwavelength Labels. Journal of Lightwave Technology, 2009, 27, 2246-2256.	2.7	5
166	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
167	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
168	Multi-Level Coded Modulation for 16-ary Constellations in Presence of Phase Noise. Journal of Lightwave Technology, 2014, 32, 1159-1167.	2.7	5
169	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
170	Multi-service OFDM Uplink Transmission in Full-Duplex FTTx Systems Using RSOA-based WDM-PON Architecture. , 2014, , .		5
171	Multi-Format Wavelength Conversion Using Quantum Dash Mode-Locked Laser Pumps. Photonics, 2015, 2, 527-539.	0.9	5
172	A full-duplex wireless integrated transceiver for implant-to-air data communications. , 2015, , .		5
173	Investigation of orbital angular momentum mode purity in air-core optical fibers. , 2016, , .		5
174	Two-Stage Code Acquisition in Wireless Optical CDMA Communications Using Optical Orthogonal Codes. IEEE Transactions on Communications, 2016, 64, 3480-3491.	4.9	5
175	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
176	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
177	SiP Alternative to Enhanced KK for OFDM. , 2018, , .		5
178	Overlaying 5G radio access networks on wavelength division multiplexed optical access networks with carrier distribution. Optics Express, 2021, 29, 3631.	1.7	5
179	Geometric Constellation Shaping Using Initialized Autoencoders. , 2021, , .		5
180	Wideband Wavelength Conversion of 16 Gbaud 16-QAM Signals in a Semiconductor Optical Amplifier. , 2013, , .		5

#	ARTICLE	IF	CITATIONS
181	Modal Loss Characterisation of Thick Ring Core Fiber Using Perfect Vortex Beams. , 2022, , .		5
182	Segmented Silicon Photonic Modulator with a 67-GHz Bandwidth for High-Speed Signaling. , 2022, , .		5
183	New cross-correlation results for multi-rate CDMA. , 0, , .		4
184	Fast dynamics and power swings in doped-fiber amplifiers fed by highly variable multimedia traffic. , 0, , .		4
185	New architecture and codes for optical frequency-hopping multiple access. , 1998, 3491, 501.		4
186	Writing and applications of fiber Bragg grating arrays. , 2000, 4087, 140.		4
187	Modeling Gain Dynamics in EDFAs: Space-Resolved Versus Lumped Models. Fiber and Integrated Optics, 2001, 20, 601-615.	1.7	4
188	Packet switched networks with photonic code processing. , 2006, , .		4
189	Incoherent SAC OCDMA system at 7×622Mbps. , 2006, , .		4
190	Electrical-to-optical conversion of OFDM 802.11g/a signals by direct current modulation of semiconductor optical amplifiers. , 2006, , .		4
191	Network Management Solution for PS/PON, WDM/PON and Hybrid PS/WDM/PON using DS-OCDM. , 2007, , .		4
192	Beat Noise Mitigation via Hybrid 1D/2D-OCDM: Application to Monitoring of High Capacity PONs. , 2008, , .		4
193	Time-Stacked Optical Labels: An Alternative to Label-Swapping. , 2008, , .		4
194	Statistical Characterization of Bit Patterning in SOAs: BER Prediction and Experimental Validation. , 2009, , .		4
195	OOK Q-factor degradation in scalable optical switches. , 2011, , .		4
196	Downstream modulation index tuning to enable full-duplex OOK-DL/OFDM-UL transmission in RSOA-based Radio-over-Fiber system. , 2013, , .		4
197	Transmitter Sensitivity to High PAPR in Coherent Optical OFDM Systems. , 2014, , .		4
198	Impact of Sinusoidal Tones on Parallel Decision-Directed Phase Recovery for 64-QAM. IEEE Photonics Technology Letters, 2014, 26, 486-489.	1.3	4

#	ARTICLE	IF	CITATIONS
199	WDM Recirculation Buffer-Based Optical Fabric for Scalable Cloud Computing. Journal of Lightwave Technology, 2014, 32, 4053-4067.	2.7	4
200	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
201	A short-impulse UWB BPSK transmitter for large-scale neural recording implants. , 2016, 2016, 6315-6318.		4
202	Fiber transmission demonstrations in vector mode space division multiplexing. Frontiers of Optoelectronics, 2018, 11, 155-162.	1.9	4
203	Integrated Optical SSB Modulation / Frequency Shifting Using Cascaded Silicon MZM. IEEE Photonics Technology Letters, 2020, 32, 1147-1150.	1.3	4
204	Experimental Validation of Digital Filter Back-propagation to Suppress SOA-induced Nonlinearities in 16-QAM. , 2013, , .		4
205	Comparison of 100 Gb/s O-band PAM-4 vs. C-band DMT for Different Laser Linewidths and Fiber Lengths. , 2016, , .		4
206	Experimental demonstration of reduced-size LUT predistortion for 256QAM SiP Transmitter. , 2019, , .		4
207	Polarization-Insensitive Silicon Microring Modulator for Single Sideband Modulation. Journal of Lightwave Technology, 2022, 40, 744-750.	2.7	4
208	Writing of Bragg gratings with wavelength flexibility using a Sagnac type interferometer and application to FH-CDMA. , 0, , .		3
209	Cross-gain modulation effect on the behaviour of packetized cascaded EDFAs. Journal of Optics, 2001, 3, 210-217.	1.5	3
210	Incoherent-to-coherent wavelength conversion using semiconductor optical amplifier. , 2004, , .		3
211	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
212	DQPSK: When Is a Narrow Filter Receiver Good Enough?. Journal of Lightwave Technology, 2009, 27, 5106-5114.	2.7	3
213	Low-Distortion Optical Null-Steering Beamformer for Radio-Over-Fiber OFDM Systems. Journal of Lightwave Technology, 2009, 27, 5173-5182.	2.7	3
214	Programmable UWB Waveform Generation using FBGs with Temperature-Controlled Apodization. , 2009, , .		3
215	Optical Phase and Amplitude Control for Beamforming with Cascades of Gires-Tournois Bragg Grating Filters. , 2010, , .		3
216	Equalizer complexity/performance trade-offs for high data-rate IR-UWB linear receivers in multipath channels. , 2011, , .		3

#	ARTICLE	IF	CITATIONS
217	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
218	FBG-Based Matched Filters for Optical Processing of RF Signals. IEEE Photonics Journal, 2012, 4, 832-843.	1.0	3
219	An optimized 16-QAM constellation for mitigating impairments of phase noise and limited transmitter ENOB in optical coherent detection systems. , 2014, , .		3
220	Orbital-angular-momentum polarization mode dispersion in optical fibers and its measurement technique. , 2015, , .		3
221	Experimental study of receiver complexity in OAM-MDM transmission systems. , 2016, , .		3
222	Design of a Ten-Mode Polarization-Maintaining Few-Mode Fiber for MIMO-Less Data Transmission. , 2018, , .		3
223	SiP-Based SSBI Cancellation for OFDM. IEEE Photonics Journal, 2019, 11, 1-13.	1.0	3
224	Parasitic Effect of TE and TM modes in OAM-MDM Transmission Systems. , 2017, , .		3
225	Modeling the Breakdown in Degeneracy for High-Index-Contrast Ring Core Fiber. , 2020, , .		3
226	New method to equalize static and dynamic OSNR in cascades of EDFAs without in-line optical filters. , 2000, 4087, 335.		2
227	Self-Routed Packets with Encoded Payload and Stacked Optical Code Labels. , 2006, , .		2
228	Evaluation of the Impact of Filter Shape on the Performance of SOA-Assisted SS-WDM Systems Using Parallelized Multicanonical Monte Carlo. , 2009, , .		2
229	Performance degradation of source matching in optical CDMA due to source coherence effects. IEEE Transactions on Communications, 2009, 57, 1776-1783.	4.9	2
230	A novel FBG-based self-seeded RSOA transmitter with noise mitigation for dense SS-WDM PONs. , 2010, , .		2
231	Optical distribution of UWB: Low complexity pulse generation supporting OOK and PSK. , 2010, , .		2
232	Upconversion of Gain-Switched Laser Pulses for Optical Generation of UWB Signals. Journal of Lightwave Technology, 2012, 30, 207-214.	2.7	2
233	Full-duplex in-band OOK-Downlink/OFDM-Uplink transmitted over 40km of SSMF in RSOA-based radio-over-fiber system. , 2013, , .		2
234	Load balancing in wavelength-routing cloud data centers. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
235	Full-duplex WiFi analog signal transmission with digital downlink in a radio-over-fiber system employing RSOA-based WDM-PON architecture. , 2014, , .		2
236	Biological channel modeling and implantable UWB antenna design for neural recording systems. , 0, , 379-388.		2
237	Experimental study of M-QAM constellation options for short-reach dual-polarization optical OFDM with direct detection. , 2015, , .		2
238	Design of an integrated circular-polarized OAM generator/multiplexer. , 2016, , .		2
239	Flexible on-chip frequency comb generation using a SOI dual-drive MZM. , 2017, , .		2
240	SiP IQ modulator Linearization by memory polynomial pre-distortion model. , 2017, , .		2
241	Shaping Optical Fibers to Mode Division Multiplex without MIMO. , 2019, , .		2
242	Numerical Study of a Hybrid Optical DMT/DFT-S QAM Modulation. Journal of Lightwave Technology, 2019, 37, 815-823.	2.7	2
243	Multicanonical Monte Carlo for Simulation of Optical Links. , 2011, , 373-413.		2
244	Analytical PDF of Decision Statistic for Coherent MPSK with Electronic Dispersion Equalization. , 2012, , .		2
245	Tracking Excess Noise from a Monolithic Tunable Laser in Coherent Communication Systems. , 2013, , .		2
246	Enabling 5G Services in PON with a Novel Smart Edge Based on SiP MRM. , 2018, , .		2
247	Silicon Microring IQ Modulator Enabled Single Sideband OFDM Transmission. , 2019, , .		2
248	Silicon Photonics to Add 5G RoF Services to PONs Employing Carrier Reuse. , 2020, , .		2
249	5G Service Overlay in WDM Optical Access Network with Colorless Smart Edge Based on SiP MRM. , 2020, , .		2
250	Network architecture for a high bandwidth WDMA/CDMA local area network. , 0, , .		1
251	Injection-locking for coherent detection of multi-wavelength systems. , 0, , .		1
252	Gain dynamics of doped-fiber amplifiers for added and dropped signals. , 0, , .		1

#	ARTICLE	IF	CITATIONS
253	Equalization advantages of OFFH-CDMA over WDM in EDFAs. , 2000, , .		1
254	Measurement of power spread histograms in chains of erbium-doped fiber amplifiers (EDFAs) fed by live local-area network traffic. , 2000, , .		1
255	A Reservoir Dynamic Model for Linear Optical Amplifiers. , 2006, , .		1
256	New gain parameterization for fast semiconductor optical amplifier model. , 2006, , .		1
257	All-optical Label Stacking Capacity for Packet Switching Using Spectral Amplitude Code Labels. , 2006, , .		1
258	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
259	Optical generation of UWB waveform via upconversion of gain-switched laser pulses. , 2010, , .		1
260	Arbitrary UWB waveform generator supporting OOK, PPM and PSK modulation formats. , 2010, , .		1
261	UWB matched filter reception using an electromagnetic bandgap structure. , 2011, , .		1
262	A high-performance network architecture for scalable optical datacenters. , 2011, , .		1
263	Efficient, Widely-Tunable Wavelength Conversion for Packets With In-Band Labels. IEEE Photonics Technology Letters, 2013, 25, 2470-2473.	1.3	1
264	Full-duplex WiFi analog transmission in RSOA-based radio-over-fiber system with wavelength-reuse. , 2014, , .		1
265	Multi-stage 20 Gbaud driver in 130 nm CMOS for segmented Mach-Zehnder optical modulators. , 2016, , .		1
266	Experimental examination of ssbi suppression using SiP microring resonators. , 2017, , .		1
267	Interplay of Bit Rate, Linewidth, and Reach on DMT vs. PAM Performance. , 2017, , .		1
268	Flexible Modulation and Frequency Allocations for SNR-Limited Coherent Systems. , 2018, , .		1
269	Silicon Photonics for Coherent Optical Transmissions (Invited paper). , 2019, , .		1
270	Silicon Photonics for 5G Passive Optical Networks. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
271	Silicon Photonics for 5G Communications. , 2020, , .		1
272	Recurrent neural nets achieving MLSE performance in bandlimited optical channels. , 2020, , .		1
273	Radially anisotropic ring-core optical fiber: towards vector-vortex guided transmission using the full modal space. OSA Continuum, 2021, 4, 1282.	1.8	1
274	Silicon Photonics Enabling 5G Optical Networks over PON Infrastructures. , 2021, , .		1
275	Bandwidth-Aware Figure of Merit for Silicon-Photonic Depletion Mode Modulators. , 2018, , .		1
276	Generation of Optical Single Sideband OFDM Using a Silicon Microring IQ modulator. , 2018, , .		1
277	Four-Channel RoF Transmission over Polarization Maintaining Elliptical Ring Core Fiber. , 2018, , .		1
278	Nyquist-WDM Super-Channel Using an On-Chip Frequency Comb enabled by a Silicon Dual-drive MZM. , 2018, , .		1
279	Silicon Photonic Modulators for High-Capacity Coherent Transmissions. , 2019, , .		1
280	Neural Nets to Approach Optimal Receivers for High Speed Optical Communication. , 2020, , .		1
281	Silicon Microring Modulator with Polarization Insensitivity. , 2021, , .		1
282	Crosstalk Aware OAM Mode Selection for Space Division Multiplexed Optical Networks. , 2020, , .		1
283	Improved algorithms for narrowband interference suppression in direct sequence spread spectrum. , 0, , .		0
284	Phase drift effects in optical CDMA. , 0, , .		0
285	<title>Research activities in optical communications at Universite Laval</title>. , 1998, 3414, 114.		0
286	<title>Two-dimensional CDMA systems for optical networks with increased security demands</title>. , 1998, , .		0
287	Large power and SNR swings in cascaded EDFAs carrying highly variable traffic. , 0, , .		0
288	Submicrosecond transient time responses in cascades of EDFAs. , 1998, 3491, 553.		0

#	ARTICLE	IF	CITATIONS
289	Suppression of Output Power and NF Excursions in Cascades of Highly Inverted EDFAs with Packet-Switched Traffic. <i>Fiber and Integrated Optics</i> , 2001, 20, 269-277.	1.7	0
290	Intensity noise in incoherent-to-coherent wavelength conversion in SOAs. , 0, , .		0
291	Scintillation suppression in a laboratory-simulated free-space optical link with a saturated SOA. , 0, , .		0
292	Equalization advantages of OFFH-CDMA over WDM in EDFAs. <i>IEEE Photonics Technology Letters</i> , 2005, 17, 507-509.	1.3	0
293	A Novel Model for SOAs in WDM Networks. , 2006, , .		0
294	Simulation of Real SAC-OCDMA under Both S-ALOHA and R3T Random Access Protocols. , 2006, , .		0
295	Receiver for 2D $\hat{\lambda}_j$ -t OCDMA with Quantizer, CDR and FEC. , 2006, , .		0
296	Analysis of Randomized Scheduling Algorithm for a Practical Bufferless Optical Network. <i>IEEE Communications Letters</i> , 2007, 11, 537-539.	2.5	0
297	Performance of Incoherent SAC-OCDMA Using a Burst-Mode Receiver with CDR and FEC. <i>Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS</i> , 2007, , .	0.0	0
298	Source Matching in Optical CDMA in the Presence of Multiple Access Interference and Phase-Induced Intensity Noise. , 2007, , .		0
299	An optical realization of a 500 Mb/s UWB transceiver. , 2008, , .		0
300	On the capacity of SOA-assisted SAC-OCDMA systems: A numerical approach using Multicanonical Monte Carlo. , 2009, , .		0
301	Generation of arbitrary UWB waveforms: A low complexity optical approach. , 2009, , .		0
302	Quantum-dash mode-locked laser source for wavelength-tunable 56 Gbit/s DQPSK. , 2010, , .		0
303	Low complexity digital backpropagation for SOA. , 2011, , .		0
304	Low-Complexity Optical Distribution of Gb/s BPSK UWB Signals. <i>IEEE Photonics Technology Letters</i> , 2012, 24, 803-805.	1.3	0
305	The practical limit to impairment-aware scheduling in all-optical routers. , 2013, , .		0
306	Capacity of UWB wireless channel for neural recording systems. , 2014, 2014, 3965-8.		0

#	ARTICLE	IF	CITATIONS
307	Experimental Verification of Multilevel Coded Modulation for 16-Ary Constellations. IEEE Photonics Technology Letters, 2014, 26, 1774-1777.	1.3	0
308	Full-duplex analog WiFi transport over RSOA-based wavelength-reused digital passive optical networks. , 2015, , .		0
309	Theoretical analysis of chromatic dispersion, phase noise, and SSBI in direct-detection single-side-band optical OFDM transmission. , 2016, , .		0
310	PAM vs. DMT: A performance comparison of modulation formats for IMDD. , 2016, , .		0
311	Constellation-induced SNR gain in short-reach optical OFDM. , 2016, , .		0
312	Silicon photonics enabled SSBI cancellation. , 2017, , .		0
313	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
314	Countering Pattern Dependent Effects in SiP Modulators with Iterative Learning Control Predistortion for 64QAM. , 2018, , .		0
315	Multiplexing of optical vortices in silicon photonic circuits. , 2020, , .		0
316	Performance Comparison of Ring-Core Fibers Support Propagation of OAM Modes. , 2020, , .		0
317	Optical Processing to Enhance UWB Transmission and Reception. , 2009, , .		0
318	Novel Optically Generated Ultra Wideband (UWB) Signals. , 2009, , .		0
319	Multi-Level Coded Modulation for Phase Noise Optimized Constellations. , 2013, , .		0
320	Robust Optical FFH-CDMA Communications: Coding Avoids Frequency/Temperature Controls. , 1999, , 312-323.		0
321	Phase Drift in Depletion-Mode Silicon Photonics Modulators. , 2017, , .		0
322	An ISI-aware design process for SiP modulators. , 2018, , .		0
323	Ultra-High-Speed Time-Frequency Signal Processing. Optics and Photonics News, 2020, 31, 37.	0.4	0
324	Designing Silicon Photonics Systems for High Speed Networks. , 2020, , .		0

#	ARTICLE	IF	CITATIONS
325	Ring-Core Fibers Supporting Propagation of OAM Modes. , 2021, , .		0