

# Aldu00e1rio C Bordonalli

## List of Publications by Year in descending order

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87  
papers

648  
citations

840776

11  
h-index

642732

23  
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87  
all docs

87  
docs citations

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times ranked

498  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance phase locking of wide linewidth semiconductor lasers by combined use of optical injection locking and optical phase-lock loop. <i>Journal of Lightwave Technology</i> , 1999, 17, 328-342.	4.6	168
2	Optical injection locking to optical frequency combs for superchannel coherent detection. <i>Optics Express</i> , 2015, 23, 1547.	3.4	78
3	Optical injection locking and phase-lock loop combined systems. <i>Optics Letters</i> , 1994, 19, 4.	3.3	55
4	High-performance heterodyne optical injection phase-lock loop using wide linewidth semiconductor lasers. <i>IEEE Photonics Technology Letters</i> , 1998, 10, 427-429.	2.5	39
5	Carrier reuse with gain compression and feed-forward semiconductor optical amplifiers. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2002, 50, 77-81.	4.6	35
6	Generation of microwave signals by active mode locking in a gain bandwidth restricted laser structure. <i>IEEE Photonics Technology Letters</i> , 1996, 8, 151-153.	2.5	34
7	High-performance homodyne optical injection phase-lock loop using wide-linewidth semiconductor lasers. <i>IEEE Photonics Technology Letters</i> , 1996, 8, 1217-1219.	2.5	16
8	Simple feed-forward wide-range frequency offset estimator for optical coherent receivers. <i>Optics Express</i> , 2011, 19, B323.	3.4	16
9	Single-Carrier 400G Unrepeated WDM Transmission over 443.1 km. , 2017, , .		15
10	System Design for High-Capacity Unrepeated Optical Transmission. <i>Journal of Lightwave Technology</i> , 2019, 37, 1246-1253.	4.6	14
11	Unrepeated WDM Transmission of Single-Carrier 400G (66-GBd PDM-16QAM) over 403 km. , 2017, , .		14
12	Optical regeneration using a feedforward semiconductor optical amplifier with chirp-controlled filtering. <i>Microwave and Optical Technology Letters</i> , 2001, 30, 438-442.	1.4	11
13	Time-domain full-band method using orthogonal edge basis functions. <i>IEEE Photonics Technology Letters</i> , 2006, 18, 52-54.	2.5	11
14	Global WSS-based equalization strategies for SDN metropolitan mesh optical networks. , 2014, , .		11
15	Unrepeated Transmission of $10 \times 400 \text{ G}$ Over 370 km via Amplification Map Optimization. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 2289-2292.	2.5	11
16	Multidimensional optimization of optical spectral shaping for fiber nonlinearities mitigation in high baud-rate systems. , 2014, , .		9
17	Optical 2R remodulator using feedforward control of semiconductor optical amplifier gain. <i>Microwave and Optical Technology Letters</i> , 1999, 21, 39-42.	1.4	7
18	An EDFA theoretical analysis considering different configurations and pumping wavelengths. , 0, , .		7

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19	Luminescence of PbS quantum dots spread on the core surface of a silica microstructured optical fiber. <i>Journal of Non-Crystalline Solids</i> , 2010, 356, 2397-2401.	3.1	7
20	Global ROADM-Based Spectrum Equalizer in SDN Architecture for QoT Optimization at DWDM Networks. , 2014, , .		7
21	Spectrally-Efficient 448-Gb/s dual-carrier PDM-16QAM channel in a 75-GHz grid. , 2013, , .		7
22	A multilevel gain all-optical gain-controlled EDFA with suppressed relaxation oscillations. <i>Microwave and Optical Technology Letters</i> , 2006, 48, 1222-1225.	1.4	6
23	Guest editors' overview. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2002, 50, 1-3.	4.6	5
24	All-Optical Gain Controlled EDFA: Design and System Impact. <i>Lecture Notes in Computer Science</i> , 2004, , 727-734.	1.3	4
25	Enhanced Digital Polarization Demultiplexation via CMA Step Size Adaptation for PM-QPSK Coherent Receivers. , 2012, , .		4
26	Computational Model and Parameter Extraction of High Speed Semiconductor Optical Amplifier Space Switches. <i>Journal of Microwaves, Optoelectronics and Electromagnetic Applications</i> , 2018, 17, 646-660.	0.7	4
27	Influence of exterior acoustic noise on narrow linewidth laser measurements using self-homodyne optical fiber interferometer. <i>Optik</i> , 2020, 204, 164101.	2.9	4
28	Simulation and measurements of current-injected gain control in semiconductor optical amplifiers. <i>Microwave and Optical Technology Letters</i> , 2004, 41, 477-481.	1.4	3
29	An EDFA hybrid gain control technique for extended input power and dynamic gain ranges with suppressed transients. , 2007, , .		3
30	New set of 3D orthogonal edge basis functions for the vector wave equation solution. <i>Microwave and Optical Technology Letters</i> , 2007, 49, 2224-2228.	1.4	3
31	Dynamic gain equalization for erbium doped fiber amplifiers based on optoceramic sinusoidal filter cascade. <i>Microwave and Optical Technology Letters</i> , 2011, 53, 623-626.	1.4	3
32	Transmission of a DAC-Free 1.12-Tb/s Superchannel with 6-b/s/Hz over 1000 km with Hybrid Raman-EDFA Amplification and 10 Cascaded 175-GHz Flexible ROADMs. , 2013, , .		3
33	SDN Dual-optimization Application for EDFAs and WSS-based ROADMs. , 2015, , .		3
34	WSS/EDFA-based optimization strategies for software defined optical networks. , 2015, , .		3
35	Flattened Optical Frequency Combs Generated by Algorithm-assisted Parallel Electro-optical Phase Modulators. , 2018, , .		3
36	High Performance Heterodyne Optical Injection Phase-lock Loop Using Wide Linewidth Semiconductor Lasers. , 0, , .		2

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37	Optical carrier reuse with gain compression and feed-forward semiconductor optical amplifiers. , 0, , .		2
38	Microwave signal generation by mixing of modulated optical carriers in saturated semiconductor optical amplifiers. , 0, , .		2
39	A novel and efficient time domain full-band method for photonics applications. , 0, , .		2
40	Parallel three-dimensional full-time domain applied to photonic structures. IET Optoelectronics, 2011, 5, 40-45.	3.3	2
41	Digital signal processing for spectrally-sliced coherent optical receivers. , 2015, , .		2
42	Picosecond electro-optic switching time based on pre-pulse induced chirp filtering in semiconductor optical amplifiers. , 2003, , .		2
43	Design Requirements of All-Optical Gain Controlled EDFAs for WDM Network Applications. , 2004, , .		2
44	SOASim: a simulator for semiconductor optical amplifier with feed gain control. , 0, , .		1
45	Remodulation and filtering of WDM channels using the optical injection locking technique. , 0, , .		1
46	2.5 Gbits/s burst mode receiver for NG-PON. , 2011, , .		1
47	Wide-range frequency offset estimator for DSP-based optical coherent receivers. , 2011, , .		1
48	AGC EDFA transient suppression algorithm assisted by cognitive neural network. , 2014, , .		1
49	Empirical Characterization of Wavelength Conversion for Phase Modulated Channels Based on SOA-FWM Properties. , 2010, , .		1
50	RF Power and DC Biasing Analyses to Generate Flat Optical Frequency Combs in Dual-drive Mach-Zehnder Modulators. , 2019, , .		1
51	SOA-based Optical Fiber Loop for Optical Frequency Comb Generation Using Different Modulation Approaches. , 2019, , .		1
52	Flatness Improved Comb Generation by Electro-optic Phase and Mach-Zehnder Modulators Cascade. , 2019, , .		1
53	A theoretical analysis of optical phase-lock loop acquisition and tracking for WDM receiver applications. , 0, , .		0
54	Investigation of FEC improvement in a dispersion limited direct modulated 2.5 Gb/s transmission experiment. , 0, , .		0

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55	All-Optical Gain Controlled EDFAs with Fast Variable Optical Attenuators for WDM Network Applications. , 2005, , FWH5.		0
56	An all-optical gain controlled EDFA using a fast variable optical attenuator. , 0, , .		0
57	A New 3D Time Domain Full-Band Method Using Orthogonal Edge Basis Functions for Photonics Applications. , 2006, , JWD85.		0
58	Gain Controlled EDFA with Extended Dynamic Gain Range. , 2006, , FWA2.		0
59	Evaluation of transient dynamic impact in gain controlled EDFAs. , 2006, , .		0
60	Novel 3D orthogonal basis functions for the vector wave equation solution. , 2006, , .		0
61	A comparative analysis of doubled-pass erbium doped fiber amplifiers considering different signal-return schemes. , 2007, , .		0
62	Cost-effective double pass erbium doped fiber amplifier with an embedded dispersion compensation module and all-optical gain control for wavelength-division multiplexing applications. Optical Engineering, 2007, 46, 105002.	1.0	0
63	Analysis of electromagnetic structures using vectorial and orthogonal finite elements method. , 2007, , .		0
64	Minimization of gain error due to Spectral Hole Burning using HGC-EDFA with generalized dynamic gain range. , 2009, , .		0
65	Improvement in dynamic equalization performance of a coherent receiver by CMA gain adaptation. , 2011, , .		0
66	A WDM transmission in a 62.5-GHz grid over 452 km using 3&#x00D7;400-Gb/s Superchannels at 6.4 b/s/Hz. , 2013, , .		0
67	Optical Injection Locking of a DFB laser to a 10-GHz Spaced Frequency Comb Signal. , 2013, , .		0
68	Performance comparison of RZ pulse formats in PDM-16QAM high rates transmissions with optical pre-filtering. Proceedings of SPIE, 2013, , .	0.8	0
69	Generation and Coherent Detection of a 400-Gb/s CO-OFDM Superchannel with 6.4-b/s/Hz. , 2013, , .		0
70	High Capacity Unrepeated Optical Transmission over Hybrid Fibers. , 2019, , .		0
71	A New Time Domain Full-Band Method Using Orthogonal Edge Basis Functions for Photonics Applications. , 2005, , .		0
72	Cost-Effective Multi-Functional EDFA for Metropolitan Area Networks. , 2006, , .		0

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73	New Set of 3D Orthogonal Edge Basis Functions for Simulation of Waveguide Structures. , 2007, , .		0
74	ASE Characterization of an Er <sup>3+</sup> -doped Microstructured Tellurite Fiber for Broadband Amplification at 1550 nm. , 2007, , .		0
75	Noise Figure of Gain Controlled EDFAs with Extended Dynamic Gain Range. , 2007, , .		0
76	Characterization of Er <sup>3+</sup> -Doped Tellurite Fiber Samples for Broadband Amplification at 1550 nm. , 2008, , .		0
77	Improved Receiver Sensitivity by Using an Injection-Locked Laser and Double-Pass EDFA Scheme. , 2008, , .		0
78	Luminescence of PbS Quantum Dots Entrained in Silica Microstructured Fiber Samples. , 2009, , .		0
79	Minimization of Gain Error due to Spectral Hole Burning using HGC-EDFA with Generalized Dynamic Gain Range. , 2009, , .		0
80	Potential for 1550-nm Broadband Amplification by Using Different Er <sup>3+</sup> - Doped Tellurite Fiber Structures. , 2009, , .		0
81	Dynamic Gain Spectrum Equalizer for EDFAs in Reconfigurable Optical Networks. , 2010, , .		0
82	Digital Filtering Algorithms for 112Gb/s Dual Polarization QPSK Optical Systems with Coherent Detection. , 2010, , .		0
83	Enhanced Dynamic Equalization Performance of a 112 Gb/s PM-QPSK Coherent Receiver by Gain Adaptation in CMA. , 2011, , .		0
84	Experimental-based subsystem models for simulation of heterogeneous optical networks. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2014, 13, 197-213.	0.7	0
85	Amplitude Equalization Analysis of Optical Frequency Combs Generated by Dual Drive Mach-Zehnder Modulator for High Capacity Optical Transmissions. , 2017, , .		0
86	Optical Frequency Comb Generation by Dual Drive Mach-Zehnder Modulator with Algorithm-assisted Efficient Amplitude Equalization. , 2019, , .		0
87	Optical Frequency Comb Generation Using Ultralong SOA and Different Amplification Methods in MZM-based Optical Fiber Loops. , 2019, , .		0