Alberto Gatto

List of Publications by Year
in descending order

73 papers	3,807 citations	516710 16 h-index	414414 32 g-index
73 all docs	73 docs citations	73 times ranked	4202 citing authors

#	Article	IF	Citations
1	Advanced Virgo: a second-generation interferometric gravitational wave detector. Classical and Quantum Gravity, 2015, 32, 024001.	4.0	2,530
2	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	26.7	427
3	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	4.0	225
4	Free-space optical transmission with orbital angular momentum division multiplexing. Electronics Letters, 2011, 47, 972.	1.0	51
5	Gouy phase shiftâ€¨in nondiffracting Bessel beams. Optics Express, 2010, 18, 7108.	3.4	39
6	Free-space orbital angular momentum division multiplexing with Bessel beams. Journal of Optics (United Kingdom), 2011, 13, 064018.	2.2	39
7	Mode-division multiplexing in fibre-optic communications based on orbital angular momentum. Journal of Optics (United Kingdom), 2013, 15, 075403.	2.2	37
8	Up to 10.7-Gb/s High-PDG RSOA-Based Colorless Transmitter for WDM Networks. IEEE Photonics Technology Letters, 2013, 25, 637-640.	2.5	34
9	1.3-mum VCSEL Transmission Performance up to 12.5 Gb/s for Metro Access Networks. IEEE Photonics Technology Letters, 2009, 21, 778-780.	2.5	32
10	The Advanced Virgo detector. Journal of Physics: Conference Series, 2015, 610, 012014.	0.4	27
11	Adjustable-chirp VCSEL-to-VCSEL injection locking for 10-Gb/s transmission at 155 Î¼m. Optics Express, 2009, 17, 21748.	3.4	23
12	High speed 1.3â€…[micro sign]m VCSELs for 12.5â€…Gbit/s optical interconnects. Electronics Letters, 2008, 44, 974.	1.0	20
13	Impact of Chirp in High-Capacity Optical Metro Networks Employing Directly-Modulated VCSELs. Photonics, 2018, 5, 51.	2.0	19
14	Flexible transmitters based on directly modulated VCSELs for next-generation 50G passive optical networks. Journal of Optical Communications and Networking, 2020, 12, D78.	4.8	18
15	Programmable VCSEL-based photonic system architecture for future agile Tb/s metro networks. Journal of Optical Communications and Networking, 2021, 13, A187.	4.8	18
16	Higher-order Laguerre-Gauss interferometry for gravitational-wave detectors withinÂsitumirror defects compensation. Physical Review D, 2015, 92, .	4.7	17
17	Discrete Multitone Modulation for Short-Reach Mode Division Multiplexing Transmission. Journal of Lightwave Technology, 2019, 37, 5185-5192.	4.6	16
18	Self-tuning transmitter for fibre-to-the-antenna PON networks. Optical Switching and Networking, 2014, 14, 25-31.	2.0	15

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19	Very high-capacity short-reach VCSEL systems exploiting multicarrier intensity modulation and direct detection. Optics Express, 2016, 24, 12769.	3.4	15
20	Beyond 25 Gb/s Directly-Modulated Widely Tunable VCSEL for Next Generation Access Network. , 2018, , .		15
21	12.5â€...Gbit/s VCSEL-based transmission over legacy MMFs by centre-launching technique. Electronics Letters, 2012, 48, 1289.	1.0	14
22	Fabry-PÃ©rot-Michelson interferometer using higher-order Laguerre-Gauss modes. Physical Review D, 2014, 90, .	4.7	14
23	Pulse-Width Optical Modulation for CRAN Front-Hauling. , 2015, , .		13
24	Relative intensity noise suppression in reflective SOAs. Optics Communications, 2014, 318, 186-188.	2.1	12
25	Multi-Tb/s sustainable MAN scenario enabled by VCSEL-based innovative technological solutions. , 2020, , .		10
26	Mode-Group Division Multiplexing: Transmission, Node Architecture, and Provisioning. Journal of Lightwave Technology, 2022, 40, 2378-2389.	4.6	10
27	Optical vortices: an innovative approach to increase spectral efficiency by fiber mode-division multiplexing. Proceedings of SPIE, 2013, , .	0.8	8
28	Phase noise impact on directly detected optical OFDM transmission in uncompensated links. , 2016, , .		8
29	VCSEL-based sliceable bandwidth/bitrate variable transceivers. , 2019, , .		8
30	10-Gb/s amplified self-seeding WDM PON transmission exploiting RSOAs. , 2014, , .		7
31	Pulse Width Modulation for Fronthaul in a Broadband-Seeded RSOA WDM PON. IEEE Photonics Technology Letters, 2016, 28, 1625-1628.	2.5	6
32	RSOA-Based FDM PON Upstream With Flexible Multiple Access Capabilities in an NG-PON2 Compliant Architecture. Journal of Optical Communications and Networking, 2016, 8, 302.	4.8	6
33	VCSEL-based communications for metro and access networks. , 2018, , .		6
34	Analog nonlinear MIMO receiver for optical mode division multiplexing transmission. Optics Express, 2013, 21, 25174.	3.4	5
35	Radio-over-modes for C-RAN architecture with smart optical resources assignment. , 2017, , .		5
36	Effect of Filtering in Dense WDM Metro Networks Adopting VCSEL-Based Multi-Tb/s Transmitters. , 2019, , .		5

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37	Frequency division multiplexing for very high capacity transmission in bandwidth-limited systems. , 2017, , .		5
38	LTE-A Mobile Fronthaul Exploiting Pulse-Width Modulation in a RSOA-based WDM PON. , 2016, , .		5
39	FDM and DMT performance comparison in high capacity point-to-point fibre links for intra/inter-datacentre connections. Optical Fiber Technology, 2018, 42, 92-96.	2.7	4
40	Spectrum/Space Switching and Multi-Terabit Transmission in Agile Optical Metro Networks. , 2019, , .		4
41	Preliminary Assessment of Photonic Solutions Based on C-Band VCSELs for Multi-Tb/s Metro Networks. , 2020, , .		4
42	All-optical aggregation and distribution of traffic in large metropolitan area networks using multi-Tb/s S-BVTs. Journal of Optical Communications and Networking, 2022, 14, 316.	4.8	4
43	Multi-Tb/s photonic transceivers for metro optical network connectivity evolution. , 2021, , .		3
44	Impact of OPC insertion in a WDM link. , 2007, , .		2
45	Robustness to mechanical perturbations of center-launching technique for transparent board-to-board and data server interconnects. Optics Express, 2013, 21, 12410.	3.4	2
46	Fronthaul Based on Pulse-Width Modulation in RSOA WDM PONs With Broadband and Coherent Seeds. Journal of Optical Communications and Networking, 2016, 8, B55.	4.8	2
47	Experimented Phase Noise Limitations in Directly-Detected Single Side-Band Optical OFDM Systems. , 2017, , .		2
48	Long Wavelength VCSELs Exploitation for Low-Cost and Low-Power Consumption Metro and Access Networks. , 2018, , .		2
49	Intra-datacenter links exploiting PCI Express Generation 4 interconnections. , 2017, , .		2
50	Mode-group division multiplexing for provisioning in SDM networks. , 2020, , .		2
51	Impact of SOA-Based Add-Drop Switch Nodes on High-Capacity Multicarrier Transmission for Metro-Access Networks. Journal of Lightwave Technology, 2022, 40, 4492-4501.	4.6	2
52	1.3 µm VCSEL transmission performance over 20 km at 12.5 Gb/s. , 2009, , .		1
53	Off-set filtering for enhanced transmission in RSOA based WDM-PON. , 2013, , .		1
54	High-capacity optical backplane based on automated assembled standard fiber ribbons. , 2015, , .		1

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55	O-band 12-Gb/s FDM-WDM PON transmission exploiting self-seeding in reflective semiconductor optical amplifiers. , 2015, , .		1
56	RSOA-based self-seeded transmitters: The ERMES project results and offsprings. , 2017, , .		1
57	Demonstration of an SDN-enabled VCSEL-based Photonic System for Spectral/Spatial Connectivity in Disaggregated Optical Metro Networks. , 2021, , .		1
58	Add-Drop Lossless Switch Node in Multi-Hop Multi-Tb/s Metropolitan Area Networks. , 2021, , .		1
59	Tb/s Transmission in Sustainable and Flexible Metro Networks using Long-Wavelength VCSELs. , 2021, , .		1
60	Mode Division Multiplexing for limiting the power dissipation in high spectral efficiency systems. , 2011, , .		0
61	Orbital angular momentum division multiplexing in optical fibre. , 2013, , .		0
62	Robustness to mechanical perturbations of centre-launching technique in multi-mode fibres for transparent optical interconnects. , 2013, , .		0
63	Mechanical robustness of MMF datacom interconnections using center-launching technique. , 2013, , .		0
64	Highly-nonlinear RSOA RIN compression. , 2014, , .		0
65	PWM fronthauling in reflective PON. , 2016, , .		0
66	Externally-seeded WDM PON for next generation mobile access based on pulse-width modulation. , 2016, , .		0
67	LTE transmission exploiting pulse width modulation in fibre optic links. , 2017, , .		0
68	FDM exploitation for next access and data networks. , 2017, , .		0
69	Optical Multilevel Pulse Width Modulation for Analog Mobile Fronthaul. Photonics, 2018, 5, 49.	2.0	0
70	Enabling dynamic all optical IP off-loading at Tb/s rates in large Metro Networks. , 2021, , .		0
71	SOA Impact on High-Capacity DMT Signals in Switching/Aggregation Node for Future MAN. , 2020, , .		0
72	SOA-based loss-less switch nodes for Tb/s multicarrier transmission. , 2021, , .		0

#	Article	IF	Citations
73	Experimental Demonstration of a Metro Area Network with Terabit-capable Sliceable Bitrate Variable Transceiver using Direct Modulated VCSELs and Coherent Detection. , 2022, , .		0