M E V Segatto

List of Publications by Year
in descending order

95 papers	844 citations	516215 16 h-index	552369 26 g-index
95 all docs	95 docs citations	95 times ranked	823 citing authors

#	Article	IF	Citations
1	Label-free plasmonic immunosensor for cortisol detection in a D-shaped optical fiber. Biomedical Optics Express, 2022, 13, 3259.	1.5	73
2	Polymer Optical Fiber for Angle and Torque Measurements of a Series Elastic Actuator's Spring. Journal of Lightwave Technology, 2018, 36, 1698-1705.	2.7	62
3	Polymer optical fiber strain gauge for human-robot interaction forces assessment on an active knee orthosis. Optical Fiber Technology, 2018, 41, 205-211.	1.4	58
4	A PAPR Reduction Technique Based on a Constant Envelope OFDM Approach for Fiber Nonlinearity Mitigation in Optical Direct-Detection Systems. Journal of Optical Communications and Networking, 2012, 4, 296.	3.3	51
5	A practical technique for on-line monitoring of a photovoltaic plant connected to a single-phase grid. Energy Conversion and Management, 2017, 132, 198-206.	4.4	41
6	Twin Datacenter Interconnection Topology. IEEE Micro, 2014, 34, 8-17.	1.8	39
7	A Theoretical and Experimental Evaluation on the Performance of LoRa Technology. IEEE Sensors Journal, 2020, 20, 9480-9489.	2.4	34
8	Optimization of Distributed Raman Amplifiers Using a Hybrid Genetic Algorithm With Geometric Compensation Technique. IEEE Photonics Journal, 2011, 3, 390-399.	1.0	30
9	NARX neural network model for strong resolution improvement in a distributed temperature sensor. Applied Optics, 2018, 57, 5859.	0.9	29
10	An Analytical Approximated Solution for the Gain of Broadband Raman Amplifiers With Multiple Counter-Pumps. Journal of Lightwave Technology, 2009, 27, 944-951.	2.7	28
11	Experimental validation of a constant-envelope OFDM system for optical direct-detection. Optical Fiber Technology, 2014, 20, 303-307.	1.4	24
12	Impact of Optical Power in the Guard-Band Reduction of an Optimized DDO-OFDM System. Journal of Lightwave Technology, 2015, 33, 4717-4725.	2.7	20
13	Fiber Bragg grating-based sensor for torque and angle measurement in a series elastic actuatorâ€™s spring. Applied Optics, 2018, 57, 7883.	0.9	19
14	A New Approach for Contingency Analysis Based on Centrality Measures. IEEE Systems Journal, 2019, 13, 1915-1923.	2.9	19
15	A bandwidth scalable OFDM passive optical network for future access network. Photonic Network Communications, 2009, 18, 409-416.	1.4	17
16	Adaptation to the LEDs flicker requirement in visible light communication systems through CE-OFDM signals. Optics Communications, 2019, 441, 14-20.	1.0	17
17	Fast decision-making tool for monitoring recirculation aquaculture systems based on a multivariate statistical analysis. Aquaculture, 2021, 530, 735931.	1.7	17
18	A new acceleration technique for the design of fibre gratings. Optics Express, 2006, 14, 10715.	1.7	13

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19	Transmission of CE-OFDM Signals Over MMF Links Using Directly Modulated 850-nm VCSELs. IEEE Photonics Technology Letters, 2015, 27, 315-318.	1.3	13
20	How Reliable Are the Real-World Optical Transport Networks?. Journal of Optical Communications and Networking, 2015, 7, 578.	3.3	12
21	Optimizing C-RAN Backhaul Topologies: A Resilience-Oriented Approach Using Graph Invariants. Applied Sciences (Switzerland), 2019, 9, 136.	1.3	11
22	Direct Equalization with Convolutional Neural Networks in OFDM based VLC Systems. , 2019, , .		10
23	Design of distributed optical-fiber raman amplifiers using multi-objective particle swarm optimization. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2011, 10, 323-336.	0.4	10
24	Numerical comparison between conventional dispersion compensating fibers and photonic crystal fibers as lumped Raman amplifiers. Optics Express, 2009, 17, 23169.	1.7	9
25	A Manchester-OOK Visible Light Communication System for Patient Monitoring in Intensive Care Units. IEEE Access, 2021, 9, 104217-104226.	2.6	9
26	Power Line Communication based SmartPlug Prototype for Power Consumption Monitoring in Smart Homes. IEEE Latin America Transactions, 2021, 19, 1849-1857.	1.2	9
27	OOTN -an ontology proposal for optical transport networks. , 2009, , .		8
28	Experimental Demonstration of a 33.5-Gb/s OFDM-Based PON With Subcarrier Pre-Emphasis. IEEE Photonics Technology Letters, 2016, 28, 860-863.	1.3	8
29	On the Impact of the Physical Topology on the Optical Network Performance. , 2018, , .		8
30	Increasing the Spectral Efficiency of DDO-CE-OFDM Systems by Multi-Objective Optimization. Journal of Lightwave Technology, 2019, 37, 2155-2162.	2.7	8
31	Detection of Multiple Small Temperature Events Simultaneously on a Distributed Temperature Map. IEEE Sensors Journal, 2021, 21, 4582-4589.	2.4	8
32	Design of a wideband hybrid EDFA with a Fiber Raman Amplifier. , 2011, , .		7
33	The Smart Grid Concept in Oil & Gas Industries by a Field Trial of Data Communication in MV Power Lines. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2016, 15, 81-92.	0.4	6
34	Stable dark pulses produced by a graphite oxide saturable absorber in a fiber laser cavity. Applied Optics, 2019, 58, 9297.	0.9	6
35	Rayleigh assisted Brillouin effects in distributed Raman amplifiers under saturated conditions at 40 Gb/s. Microwave and Optical Technology Letters, 2010, 52, 1331-1335.	0.9	5
36	RWA problem with geodesics in realistic OTN topologies. Optical Switching and Networking, 2015, 15, 18-28.	1.2	5

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37	Performance evaluation of CO-OFDM systems based on electrical constant-envelope signals. Optical Fiber Technology, 2017, 37, 30-34.	1.4	5
38	Feature selection for optical network design via a new mutual information estimator. Expert Systems With Applications, 2018, 107, 72-88.	4.4	5
39	Optical spectral intensity-based interrogation technique for liquid-level interferometric fiber sensors. Applied Optics, 2019, 58, 9712.	0.9	5
40	A feasibility study of powerline communication technology for digital inclusion in Brazilian Amazon. , 2006, 6390, 148.		4
41	Numerical simulations and experimental results of a hybrid EDFA-Raman amplifier. , 2009, , .		4
42	Closed-Form Expression for BER of CE-OFDM in Optical Intensity-Modulated Direct-Detection Systems. IEEE Communications Letters, 2019, 23, 1796-1800.	2.5	4
43	Study and Optimization of Raman Amplifiers in Tellurite-Based Optical Fibers for Wide-Band Telecommunication Systems. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2019, 18, 219-226.	0.4	4
44	Analytical investigation of the receiver for Raman-based distributed temperature sensors. Optical Fiber Technology, 2021, 63, 102484.	1.4	4
45	An Optimized Self-Compensated Solution for Temperature and Strain Cross-Sensitivity in FBG Interrogators Based on Edge Filter. Sensors, 2021, 21, 5828.	2.1	4
46	Increasing the LED Bias Point of an OFDM-based VLC System through Multi-objective Optimization. , 2021, , .		4
47	Towards AI-enhanced VLC Systems. , 2022, , .		4
48	A feasibility study of PLC technology for digital inclusion. , 2006, , .		3
49	Brillouin effects in distributed Raman amplifiers under saturated conditions. , 2009, , .		3
50	A complex network analysis of the Brazilian Power Test System. , 2015, , .		3
51	All-fibre transmission liquid level sensor based on core-cladding propagation modes interference. , 2015, , .		3
52	Performance analysis and comparison of multipump Raman and hybrid erbium-doped fiber amplifier + Raman amplifiers using nondominated sorting genetic algorithm optimization. Optical Engineering, 2016, 55, 086103.	0.5	3
53	A MAC layer protocol for a bandwidth scalable OFDMA PON architecture. Computer Communications, 2017, 105, 145-156.	3.1	3
54	Electrical constant envelope signals for nonlinearity mitigation in coherent-detection orthogonal frequency-division multiplexing systems. Optical Engineering, 2017, 56, 066101.	0.5	3

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55	Analytical Analysis and Experimental Validation of a Multi-parameter Mach-Zehnder Fiber Optic Interferometric Sensor. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2018, 17, 528-538.	0.4	3
56	Increasing VLC Nonlinearity Tolerance by CE-OFDM. , 2018, , .		3
57	Ensemble of classifier chains and decision templates for multi-label classification. Knowledge and Information Systems, 0, , 1.	2.1	3
58	Numerical Routines for the Optimization of Pump Power and Wavelength in Distributed Raman Amplifiers. Fiber and Integrated Optics, 2006, 25, 347-361.	1.7	2
59	A passive optical network based on centralized wavelength and bandwidth scalable OFDM signals. , 2009, , .		2
60	Fast optimization of multipump Raman amplifiers based on a simplified wavelength and power budget heuristic. Optical Engineering, 2015, 54, 015105.	0.5	2
61	A Multilayer Approach for Optical Network Planning. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2016, 15, 49-64.	0.4	2
62	All optical bit parallel transmission systems. , 0, , .		1
63	Broadband raman amplifier analytical model under experimental validation. , 2007, , .		1
64	Software frameworks for information systems integration based on web services. , 2008, , .		1
65	Performance of a free space optics subsystem boosted by SCM implementation. Proceedings of SPIE, 2008, , .	0.8	1
66	Simple design of Raman fiber amplifiers using a multi-objective optimizer. , 2011, , .		1
67	Reducing the guard-band of a DDO-OFDM system by Multi-objective optimization. , 2015, , .		1
68	Evaluation of selective control information detection scheme in orthogonal frequency division multiplexing-based radio-over-fiber and visible light communication links. Optical Engineering, 2017, 56, 056108.	0.5	1
69	Expected distance based on random walks. Journal of Mathematical Chemistry, 2018, 56, 618-629.	0.7	1
70	Frequency Domain Interleaving for Dense WDM Passive Optical Network. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2019, 18, 196-207.	0.4	1
71	Evolving optical interconnection topology: from survivable rings to resilient meshes. Photonic Network Communications, 2020, 40, 149-159.	1.4	1
72	Long-haul propagation analysis of dark pulses employing an optical recirculating fiber loop technique. Optics Communications, 2021, 495, 127070.	1.0	1

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73	High accuracy hot spot size estimation technique for Raman Distributed Temperature Sensors. , 2019, , .		1
74	Reducing the time of C+L band Raman amplifiers design with an algorithm based on artificial intelligence. Optical Engineering, 2020, 59, 1.	0.5	1
75	Topological multi-contingency screening based on current flow betweenness. Electric Power Systems Research, 2022, 203, 107609.	2.1	1
76	Dealing With Challenges Developing a Gateway to the â€œEnd of the Worldâ€â€”The Brazilian Antarctic Station Case Study. IEEE Internet of Things Journal, 2022, 9, 15161-15168.	5.5	1
77	Experimental Demonstration of Constant-Envelope OFDM to Reduce Intermodulation Impairments and Increase Robustness Against Fiber Nonlinearities. Journal of Lightwave Technology, 2022, 40, 4983-4989.	2.7	1
78	Hybrid approaches for the design of mesh and hierarchical ring optical networks. , 2006, , .		0
79	Influence of fiber parameters on the performance of a SCM_QPSK transmission system. , 2006, , .		0
80	Optimization of bragg grating in optical fiber using modified fitness function and an accelerated genetic algorithm. , 2006, , .		0
81	Studies of different modulation techniques in the integration of SCM optical communication system. , 2008, , .		0
82	An unified approach for designing Optical Transport Networks. , 2011, , .		0
83	Brillouin effect characterization in allâ€Raman amplified 4 Ã— 40 Gb/s WDM system. Microwave and Optical Technology Letters, 2012, 54, 1403-1407.	0.9	0
84	Performance Optimization of DDO-OFDM Systems through Genetic Algorithms. , 2013, , .		0
85	Experimental Transmission of CE-OFDM Signals over 300 m of MMF Using an 850 nm VCSEL. , 2014, , .		0
86	Signal-flow graph analysis in PLC multipath model. , 2015, , .		0
87	Impact of the phase modulation index in the performance of CO-OFDM systems based on electrical domain constant-envelope signals. , 2017, , .		0
88	Time-domain uplink synchronization method for a spectral efficient OFDMA-based PON. Journal of Optical Communications and Networking, 2021, 13, 266.	3.3	0
89	A New All-Optical OFDM Architecture for NG-PON2. , 2018, , .		0
90	Distributed Sensor Calibration by Gaussian Approximation. , 2019, , .		0

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91	Experimental Analysis of Mach-Zehnder Modulatorâ€™s Bias Point Enabling Long Distance Transmission Using a Recirculating Fiber Loop. , 2019, , .		0
92	Intrinsically Resilient Optical Backbones: An Efficient Ring-Based Interconnection Paradigm. Lecture Notes in Computer Science, 2020, , 248-260.	1.0	0
93	MIMO-PLC Communications in an Experimental Medium Voltage Network: Measurement and Analysis. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2022, 21, 102-113.	0.4	0
94	A Low-Cost Smart Surveillance System Applied to Vehicle License Plate Tracking. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2022, 21, 141-156.	0.4	0
95	Remote Control in Smartphone-based Visible Light Communications. , 2021, , .		0