

Carmen Vazquez

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9524663/publications.pdf>

Version: 2024-02-01

154
papers

1,786
citations

304743

22
h-index

345221

36
g-index

154
all docs

154
docs citations

154
times ranked

1485
citing authors

#	ARTICLE	IF	CITATIONS
1	Modelling and electro-optical testing of suspended particle devices. Solar Energy Materials and Solar Cells, 2008, 92, 1483-1487.	6.2	117
2	Cannabinoid CB2 receptors in the mouse brain: relevance for Alzheimer's disease. Journal of Neuroinflammation, 2018, 15, 158.	7.2	98
3	A Temperature Sensor Based on a Polymer Optical Fiber Macro-Bend. Sensors, 2013, 13, 13076-13089.	3.8	72
4	β -Amyloid exacerbates inflammation in astrocytes lacking fatty acid amide hydrolase through a mechanism involving PPAR α , PPAR β and TRPV1, but not CB ₁ or CB ₂ receptors. British Journal of Pharmacology, 2012, 166, 1474-1489.	5.4	65
5	Multi-sensor system using plastic optical fibers for intrinsically safe level measurements. Sensors and Actuators A: Physical, 2004, 116, 22-32.	4.1	64
6	Optically Powered Radio-Over-Fiber Systems in Support of 5G Cellular Networks and IoT. Journal of Lightwave Technology, 2021, 39, 4262-4269.	4.6	50
7	Two-Color Pyrometer for Process Temperature Measurement During Machining. Journal of Lightwave Technology, 2016, 34, 1380-1386.	4.6	47
8	Remote Optical Powering Using Fiber Optics in Hazardous Environments. Journal of Lightwave Technology, 2018, 36, 748-754.	4.6	46
9	A Self-Referencing Intensity Based Polymer Optical Fiber Sensor for Liquid Detection. Sensors, 2009, 9, 6446-6455.	3.8	44
10	Temperature Measurement and Numerical Prediction in Machining Inconel 718. Sensors, 2017, 17, 1531.	3.8	41
11	Polymer Optical Fiber Temperature Sensor With Dual-Wavelength Compensation of Power Fluctuations. Journal of Lightwave Technology, 2015, 33, 2716-2723.	4.6	40
12	Amplified fiber-optic recirculating delay lines. Journal of Lightwave Technology, 1994, 12, 294-305.	4.6	38
13	Beaming power: Photovoltaic laser power converters for power-by-light. Joule, 2022, 6, 340-368.	24.0	36
14	Multicore Fiber Scenarios Supporting Power Over Fiber in Radio Over Fiber Systems. IEEE Access, 2019, 7, 158409-158418.	4.2	35
15	Endocannabinoids regulate the activity of astrocytic hemichannels and the microglial response against an injury: In vivo studies. Neurobiology of Disease, 2015, 79, 41-50.	4.4	34
16	Use of a Novel Fiber Optical Strain Sensor for Monitoring the Vertical Deflection of an Aircraft Flap. IEEE Sensors Journal, 2009, 9, 1219-1225.	4.7	32
17	Endocannabinoid regulation of amyloid-induced neuroinflammation. Neurobiology of Aging, 2015, 36, 3008-3019.	3.1	29
18	Smart Remote Nodes Fed by Power Over Fiber in Internet of Things Applications. IEEE Sensors Journal, 2019, 19, 7328-7334.	4.7	29

#	ARTICLE	IF	CITATIONS
19	Maximum entropy estimation of the bubble size distribution in fluidized beds. <i>Chemical Engineering Science</i> , 2009, 64, 2307-2319.	3.8	27
20	SI-POF Supporting Power-Over-Fiber in Multi-Gbit/s Transmission for In-Home Networks. <i>Journal of Lightwave Technology</i> , 2021, 39, 112-121.	4.6	26
21	CWDM self-referencing sensor network based on ring resonators in reflective configuration. <i>Optics Express</i> , 2006, 14, 4601.	3.4	24
22	Tunable optical filters using compound ring resonators for DWDM. <i>IEEE Photonics Technology Letters</i> , 2003, 15, 1085-1087.	2.5	23
23	Radio-over-fibre technologies arising from the Building the future Optical Network in Europe (BONE) project. <i>IET Optoelectronics</i> , 2010, 4, 247-259.	3.3	23
24	Coarse WDM networking of self-referenced fiber-optic intensity sensors with reconfigurable characteristics. <i>Optics Express</i> , 2010, 18, 4396.	3.4	22
25	Photonics in switching: enabling technologies and subsystem design. <i>Journal of Optical Networking</i> , 2009, 8, 404.	2.5	21
26	Radio-Frequency Self-Referencing Technique With Enhanced Sensitivity for Coarse WDM Fiber Optic Intensity Sensors. <i>Journal of Lightwave Technology</i> , 2009, 27, 475-482.	4.6	21
27	Broadband 1 λ -2 polymer optical fiber switches using nematic liquid crystals. <i>Optics Communications</i> , 2003, 224, 57-62.	2.1	20
28	Sagnac loop in ring resonators for tunable optical filters. <i>Journal of Lightwave Technology</i> , 2005, 23, 2555-2567.	4.6	20
29	Different Configurations of a Reflective Intensity-Modulated Optical Sensor to Avoid Modal Noise in Tip-Clearance Measurements. <i>Journal of Lightwave Technology</i> , 2015, 33, 2663-2669.	4.6	19
30	Power-over-fiber in a 10 μ m long multicore fiber link within a 5G fronthaul scenario. <i>Optics Letters</i> , 2021, 46, 5348.	3.3	19
31	Design and tolerance analysis of a router with an amplified resonator and Bragg gratings. <i>Applied Optics</i> , 2000, 39, 1934.	2.1	18
32	Dual-core photonic crystal fibers for tunable polarization mode dispersion compensation. <i>Optics Express</i> , 2011, 19, 21680.	3.4	18
33	Efficient Multiplexer/Demultiplexer for Visible WDM Transmission over SI-POF Technology. <i>Journal of Lightwave Technology</i> , 2015, 33, 3711-3718.	4.6	18
34	Fiber-Optic Pyrometer for Very Localized Temperature Measurements in a Turning Process. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 278-283.	2.9	18
35	Fiber-Optic Pyrometer with Optically Powered Switch for Temperature Measurements. <i>Sensors</i> , 2018, 18, 483.	3.8	18
36	Power Over Fiber in C-RAN With Low Power Sleep Mode Remote Nodes Using SMF. <i>Journal of Lightwave Technology</i> , 2021, 39, 4951-4957.	4.6	18

#	ARTICLE	IF	CITATIONS
37	A Self-Referenced Optical Intensity Sensor Network Using POFBGs for Biomedical Applications. <i>Sensors</i> , 2014, 14, 24029-24045.	3.8	15
38	Optically Feeding 1.75 W With 100 m MMF in Efficient C-RAN Front-Hauls With Sleep Modes. <i>Journal of Lightwave Technology</i> , 2021, 39, 7948-7955.	4.6	15
39	Self-Referencing Fiber-Optic Intensity Sensors Using Ring Resonators and Fiber Bragg Gratings. <i>IEEE Photonics Technology Letters</i> , 2006, 18, 2374-2376.	2.5	14
40	Multiplexer and Variable Optical Attenuator Based on PDLC for Polymer Optical Fiber Networks. <i>Molecular Crystals and Liquid Crystals</i> , 2009, 502, 130-142.	0.9	14
41	Remote Interrogation of WDM Fiber-Optic Intensity Sensors Deploying Delay Lines in the Virtual Domain. <i>Sensors</i> , 2013, 13, 5870-5880.	3.8	14
42	Dual-Wavelength Speckle-Based SI-POF Sensor for Cost-Effective Detection of Microvibrations. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 217-222.	2.9	14
43	SDN-Based Multi-Core Power-Over-Fiber (PoF) System for 5G Fronthaul: Towards PoF Pooling. , 2018, , .		14
44	Fast and Localized Temperature Measurements During Simulated Earthquakes in Carbonate Rocks. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091856.	4.0	14
45	Reconfigurable optical multiplexer based on liquid crystals for polymer optical fiber networks. <i>Opto-electronics Review</i> , 2006, 14, .	2.4	13
46	Synthesis of Asymmetric Flat-Top Birefringent Interleaver Based on Digital Filter Design and Genetic Algorithm. <i>IEEE Photonics Journal</i> , 2013, 5, 7100113-7100113.	2.0	13
47	Three-dimensional method for simulation of multimode interference couplers. <i>Journal of Lightwave Technology</i> , 1995, 13, 2296-2299.	4.6	12
48	Optical router for optical fiber sensor networks based on a liquid crystal cell. <i>IEEE Sensors Journal</i> , 2003, 3, 513-518.	4.7	12
49	Electrical FIR Filter With Optical Coefficients for Self-Referencing WDM Intensity Sensors. <i>IEEE Photonics Technology Letters</i> , 2008, 20, 45-47.	2.5	12
50	Experiments on Shared- and Dedicated- Power over Fiber Scenarios in Multi-core Fibers. , 2019, , .		12
51	Analysis of double-parallel amplified recirculating optical-delay lines. <i>Applied Optics</i> , 1994, 33, 1015.	2.1	11
52	Role of interleukin 1-beta in the inflammatory response in a fatty acid amide hydrolase-knockout mouse model of Alzheimer's disease. <i>Biochemical Pharmacology</i> , 2018, 157, 202-209.	4.4	11
53	An integrated view on monitoring and compensation for dynamic optical networks: from management to physical layer. <i>Photonic Network Communications</i> , 2009, 18, 191-210.	2.7	9
54	Analysis of the electric field propagation method: theoretical model applied to perfluorinated graded-index polymer optical fiber links. <i>Optics Letters</i> , 2011, 36, 4116.	3.3	9

#	ARTICLE	IF	CITATIONS
55	A Polymer Optical Fiber Fuel Level Sensor: Application to Paramotoring and Powered Paragliding. <i>Sensors</i> , 2012, 12, 6186-6197.	3.8	9
56	Electrical Model for Thresholdless Antiferroelectric Liquid Crystal Cells. <i>Ferroelectrics</i> , 2002, 271, 149-154.	0.6	8
57	Radio-frequency self-referencing system for monitoring drop fibres in wavelength division multiplexing passive optical networks. <i>IET Optoelectronics</i> , 2010, 4, 226-234.	3.3	8
58	Visible WDM System for Real-Time Multi-Gb/s Bidirectional Transmission Over 50-m SI-POF. <i>IEEE Photonics Technology Letters</i> , 2016, 28, 1696-1699.	2.5	8
59	Optical Fiber Pyrometer Designs for Temperature Measurements Depending on Object Size. <i>Sensors</i> , 2021, 21, 646.	3.8	8
60	Tunable ring resonator filter for OFDM transmission systems. <i>Microwave and Optical Technology Letters</i> , 1995, 8, 321-323.	1.4	7
61	Synthesis of Optical Filters Using Sagnac Interferometer in Ring Resonator. <i>IEEE Photonics Technology Letters</i> , 2007, 19, 1877-1879.	2.5	7
62	Tunable, narrow-band, grating-assisted microring reflectors. <i>Optics Communications</i> , 2008, 281, 4910-4916.	2.1	7
63	Reconfigurable 1Å–2 wavelength selective switch using high birefringence nematic liquid crystals. <i>Applied Optics</i> , 2012, 51, 5960.	1.8	7
64	Optical reconfigurable demultiplexer based on Bragg grating assisted ring resonators. <i>Optics Express</i> , 2014, 22, 19156.	3.4	7
65	Integration of power over fiber on RoF systems in different scenarios. <i>Proceedings of SPIE</i> , 2017, , .	0.8	7
66	Self-referenced optical networks for remote interrogation of quasi-distributed fiber-optic intensity sensors. <i>Optical Fiber Technology</i> , 2020, 58, 102291.	2.7	7
67	High Spatial Resolution Optical Fiber Two Color Pyrometer With Fast Response. <i>IEEE Sensors Journal</i> , 2021, 21, 2942-2950.	4.7	7
68	Tap-and-2-Split Switch Design Based on Integrated Optics for Light-Tree Routing in WDM Networks. <i>Journal of Lightwave Technology</i> , 2009, 27, 2506-2517.	4.6	6
69	Synthesis of optical filters using microring resonators with ultra-large FSR. <i>Optics Express</i> , 2010, 18, 25936.	3.4	6
70	Advanced multifunctional optical switch for multimode optical fiber networks. <i>Optics Communications</i> , 2012, 285, 2802-2808.	2.1	6
71	Spectral and spatial characterization of perfluorinated graded-index polymer optical fibers for the distribution of optical wireless communication cells. <i>Applied Optics</i> , 2015, 54, 1138.	1.8	6
72	WDM-PON Preventive Optical Monitoring System with Colourless Reflectors. , 2016, , .		6

#	ARTICLE	IF	CITATIONS
73	Switches and tunable filters based on ring resonators and liquid crystals. , 2007, , .		5
74	New Fiber Supervision Technique for Passive Optical Networks Supporting Mobile Services. IEEE Photonics Technology Letters, 2016, 28, 501-504.	2.5	5
75	Sensing Applications in Aircrafts Using Polymer Optical Fibres. Sensors, 2021, 21, 3605.	3.8	5
76	Polymer Optical Fiber Intensity-Based Sensor for Liquid-Level Measurements in Volumetric Flasks for Industrial Application. , 2012, 2012, 1-7.		5
77	Power-over-Fiber Impact on 5G NR Transmission in Standard Single Mode Fibers. , 2021, , .		5
78	Multimode interference filter to solve degradation on coupler common-mode rejection. , 0, , .		4
79	Performance parameters and applications of a modified amplified recirculating delay line. Fiber and Integrated Optics, 1995, 14, 347-358.	2.5	4
80	Mode filter using multimode interference principles: Design and tolerance analysis for accessing waveguides supporting two guided modes. Microwave and Optical Technology Letters, 2000, 26, 140-142.	1.4	4
81	Optoelectronic multiplexer for digital data processing based on lipid crystal pixels and optical fiber elements. Opto-electronics Review, 2007, 15, .	2.4	4
82	Photoâ€Thermoâ€Mechanical Behaviour Under Quasiâ€Static Tensile Conditions of a PMMAâ€Core Optical Fibre. Strain, 2016, 52, 3-13.	2.4	4
83	Power over Fiber in Radio over Fiber Systems in 5G Scenarios. , 2019, , .		4
84	The Role of Power-over-Fiber in C-RAN Fronthauling Towards 5G. , 2020, , .		4
85	Optimized Power-over-Fiber System to Remotely Feed Smart Nodes for Low-Power Consumption Applications. , 2021, , .		4
86	Polymer Optical Fiber Plantar Pressure Sensors: Design and Validation. Sensors, 2022, 22, 3883.	3.8	4
87	Fabryâ€Perot method for the characterization of integrated optical directional couplers. Applied Optics, 1995, 34, 6874.	2.1	3
88	Accessing guide first-order mode influence and optimize tolerances in multimode interference couplers. , 1998, 3491, 386.		3
89	Novel tunable optical filter employing a fiber loop mirror for synthesis applications in WDM. , 0, , .		3
90	Multi-sensor system for level measurements with optical fibres. , 0, , .		3

#	ARTICLE	IF	CITATIONS
91	An Analogueâ€“Digital Instrumentation System for Characterizing Electrical Behavior of Antiferroelectric Liquid Crystal Display Pixels. Japanese Journal of Applied Physics, 2004, 43, 4376-4378.	1.5	3
92	Applications of recirculating optical configurations on filters and lasers. , 2005, , .		3
93	Ring resonator with an internal Sagnac loop for dispersion compensation in DWDM backbone networks. , 2007, , .		3
94	1 Å– 2 Optical Router With Control of Output Power Level Using Twisted Nematic Liquid Crystal Cells. Molecular Crystals and Liquid Crystals, 2012, 553, 36-43.	0.9	3
95	Monitoring systems and remote powering for next generation broadband Access Networks. , 2017, , .		3
96	SDN/NFV 5G Fronthaul Networks Integrating Analog/Digital RoF, Optical Beamforming, Power over Fiber and Optical SDM Technologies. , 2019, , .		3
97	Electrical Model for Thresholdless Antiferroelectric Liquid Crystal Cells. Ferroelectrics, 2002, 271, 149-154.	0.6	3
98	Friction during earthquakes: 25 years of experimental studies. IOP Conference Series: Earth and Environmental Science, 2021, 861, 052032.	0.3	3
99	<title>Stabilization in an optical fiber interferometer using a semiconductor laser</title>. , 1997, 3099, 354.		2
100	New optical filter employing multireflection mirror to provide design flexibility for WDMA. , 0, , .		2
101	Spatial distribution of the electric field in liquid crystal dispersions devices by using a finite-element method. Journal of Molecular Liquids, 2003, 108, 107-117.	4.9	2
102	A plastic fiber optic liquid level sensor. , 2004, , .		2
103	Self-referencing fibre-optic intensity strain sensors. , 2005, 5855, 767.		2
104	Power-Cost-Effective Node Architecture for Light-Tree Routing in WDM Networks. , 2008, , .		2
105	Experimental analysis of temperature dependence in multimode optical fiber links for radio-over-fiber applications. , 2009, , .		2
106	Self-referenced temperature sensor based on a polymer optical fiber macro-bend. , 2014, , .		2
107	Multimode fibers in millimeter-wave evolution for 5G cellular networks. Proceedings of SPIE, 2016, , .	0.8	2
108	Power, sensitivity, and response time optimization in TDM self-reference intensity sensor networks with ring resonators. Optics Express, 2018, 26, 31264.	3.4	2

#	ARTICLE	IF	CITATIONS
109	Self-Referencing Technique in Reflection Mode for Fibre-Optic Intensity Sensors Using Ring Resonators. , 2006, , .		2
110	Optical power delivery for feeding remote sensors in health and safety applications. , 2018, , .		2
111	Amplified Recirculating Delay Lines as Fiber-optic Decoders in TV Systems. Optical Fiber Technology, 1995, 1, 369-372.	2.7	1
112	Cost-effective microcontrolled optoelectronic portable color identifier for visual impaired persons. Microwave and Optical Technology Letters, 2002, 35, 309-310.	1.4	1
113	Self-referencing intensity-encoded fibre optic sensors using radio-frequency ring resonators. , 2005, , .		1
114	Development of a 2x2 optical switch for plastic optical fiber using liquid crystal cells. , 2005, , .		1
115	Self-referencing techniques in photonics sensors and multiplexing. , 2007, , .		1
116	Interrogation of remote intensity-based fiber-optic sensors deploying delay lines in the virtual domain. Proceedings of SPIE, 2012, , .	0.8	1
117	Temperature sensor based on fiber optic pyrometer in material removal processes. , 2012, , .		1
118	Comparison of three different configurations of an optical sensor for tip-clearance measurements in turbines. Proceedings of SPIE, 2014, , .	0.8	1
119	Effects of elongation on polymer optical fiber power losses for sensing purposes. Proceedings of SPIE, 2014, , .	0.8	1
120	Tolerance analysis for efficient MMI devices in silicon photonics. , 2014, , .		1
121	Broadband 1 λ –2 liquid crystal router with low thermal dependence for polymer optical fiber networks. Optics Communications, 2014, 333, 281-287.	2.1	1
122	Recent Advances in Wavelength-Division-Multiplexing Plastic Optical Fiber Technologies. , 2015, , .		1
123	Visible CWDM system design for Multi-Gbit/s transmission over SI-POF. Proceedings of SPIE, 2015, , .	0.8	1
124	Optical tip clearance measurements for rotating disk characterization. , 2015, , .		1
125	Optical-fiber pyrometer positioning accuracy analysis. , 2016, , .		1
126	Temperature sensing using optical fibers in harsh environments. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
127	Very Localized Temperature Measurements and Applications Using Optical Fiber Pyrometers. , 2019, , .		1
128	Unobtrusive monitoring of heart rate using a cost-effective speckle-based SI-POF remote sensor. Proceedings of SPIE, 2017, , .	0.8	1
129	Wearable POF-based heart-rate monitor. , 2019, , .		1
130	High spatial resolution optical fiber thermometers for applications in harsh environments. , 2020, , .		1
131	Optical Amplified Recirculating Delay Lines Transient Response Effect on Hybrid Fiber Buses. Optical Fiber Technology, 1997, 3, 65-71.	2.7	0
132	Electro-optical simulation of a-Si thin-film-transistor liquid-crystal display pixels. Microwave and Optical Technology Letters, 2001, 29, 198-199.	1.4	0
133	Measurements on passive tunable optical filters for DWDM. , 0, , .		0
134	Displays and Photonics Application Group Activities. Fiber and Integrated Optics, 2004, 23, 231-247.	2.5	0
135	Characterization protocol to evaluate chiral smectic liquid crystals for high-end display applications. Optics Express, 2004, 12, 1205.	3.4	0
136	Variable optical attenuator made by using new electrochromic devices. , 2005, , .		0
137	Variable optical attenuator for perfluorinated gradual index polymer optical fiber using a polymer dispersed liquid crystal cell. , 2005, , .		0
138	Enhanced instrumentation system to characterize the electric behavior of AFLC displays. , 2007, , .		0
139	Tunable feedback resonator based on a nematic liquid crystal cell as variable capacitance. Proceedings of SPIE, 2007, , .	0.8	0
140	Ring Resonators with Sagnac Loops for Photonic Processing in DWDM Backbone Networks. , 2007, , .		0
141	Optical Switch for Instrumentation Based on Liquid Crystals. , 2007, , .		0
142	Tunable, grating-assisted single-ring laser mirrors. , 2007, , .		0
143	Self-referencing model for electro-optical WDM fiber-optic intensity-based sensor network. , 2009, , .		0
144	Temperature impairment characterization in radio-over-multimode fiber systems. Proceedings of SPIE, 2012, , .	0.8	0

#	ARTICLE	IF	CITATIONS
145	Low power consumption silicon photonics tuning filters based on compound microring resonators. Proceedings of SPIE, 2013, , .	0.8	0
146	WDM sensor network approach: Bridging the gap towards POF-based photonic sensing. , 2014, , .		0
147	Spectral method for fast measurement of twisted nematic liquid crystal cell parameters. Applied Optics, 2014, 53, 5230.	1.8	0
148	Tip timing measurements for structural health monitoring in the first stage of the compressor of an aircraft engine. , 2016, , .		0
149	Dual-wavelength speckle-based SI-POF sensor for frequency detection and localization of remote vibrations. , 2016, , .		0
150	Effect of the Fiber's Core Size on a Two Color Pyrometer. , 2020, , .		0
151	Cleaving of PMMA Microstructured Polymer Optical Fibers with 3- and 4-Ring Hexagonal Cladding Structures. Polymers, 2021, 13, 1366.	4.5	0
152	Signal Processing, Management and Monitoring in Transmission Networks. Signals and Communication Technology, 2011, , 53-122.	0.5	0
153	Experimental demonstration of advanced service management in SDN/NFV fronthaul. , 2019, , .		0
154	Response time and sensitivity in TDM fiber optic sensor network. , 2019, , .		0