Jose Manuel Sanchez-Pena

List of Publications by Year
in descending order

123 papers	2,315 citations	201674 27 h-index	265206 42 g-index
124 all docs	124 docs citations	124 times ranked	2383 citing authors

#	Article	IF	Citations
1	A simplified all-polymer flexible electrochromic device. Electrochimica Acta, 2004, 49, 3555-3559.	5.2	154
2	Photodynamic Therapy: A Compendium of Latest Reviews. Cancers, 2021, 13, 4447.	3.7	134
3	Light Technology for Efficient and Effective Photodynamic Therapy: A Critical Review. Cancers, 2021, 13, 3484.	3.7	86
4	Recent Advances in Adaptive Liquid Crystal Lenses. Crystals, 2019, 9, 272.	2.2	82
5	Ultrahigh-quality factor resonant dielectric metasurfaces based on hollow nanocuboids. Optics Express, 2019, 27, 6320.	3.4	72
6	Roadmap on optical sensors. Journal of Optics (United Kingdom), 2017, 19, 083001.	2.2	70
7	Visible Light Communication System Using an Organic Bulk Heterojunction Photodetector. Sensors, 2013, 13, 12266-12276.	3.8	57
8	Anapole Modes in Hollow Nanocuboid Dielectric Metasurfaces for Refractometric Sensing. Nanomaterials, 2019, 9, 30.	4.1	56
9	Tunable liquid crystal multifocal microlens array. Scientific Reports, 2017, 7, 17318.	3.3	55
10	Fiber Specklegram-Multiplexed Sensor. Journal of Lightwave Technology, 2015, 33, 2591-2597.	4.6	52
11	Infiltrated Photonic Crystal Fibers for Sensing Applications. Sensors, 2018, 18, 4263.	3.8	49
12	Stabilization of Dual-Wavelength Erbium-Doped Fiber Ring Lasers by Single-Mode Operation. IEEE Photonics Technology Letters, 2010, 22, 368-370.	2.5	48
13	Overcoming Nonlocal Effects and Brillouin Threshold Limitations in Brillouin Optical Time-Domain Sensors. IEEE Photonics Journal, 2015, 7, 1-9.	2.0	48
14	Gas Sensor Based on Photonic Crystal Fibres in the 2Î½3 and Î½2 + 2Î½3 Vibrational Bands of Methane. Sensors, 2009, 9, 6261-6272.	3.8	38
15	Simultaneous Temperature and Strain Discrimination in a Conventional BOTDA via Artificial Neural Networks. Journal of Lightwave Technology, 2018, 36, 2114-2121.	4.6	38
16	Curvature Sensor Based on In-Fiber Machâ€“Zehnder Interferometer Inscribed With Femtosecond Laser. Journal of Lightwave Technology, 2017, 35, 4624-4628.	4.6	36
17	A Low-Cost LED-Based Solar Simulator. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 4913-4923.	4.7	35
18	An Autostereoscopic Device for Mobile Applications Based on a Liquid Crystal Microlens Array and an OLED Display. Journal of Display Technology, 2014, 10, 713-720.	1.2	34

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19	An All-Organic Flexible Visible Light Communication System. Sensors, 2018, 18, 3045.	3.8	32
20	Allâ€Dielectric Silicon Metasurface with Strong Subterahertz Toroidal Dipole Resonance. Advanced Optical Materials, 2019, 7, 1900777.	7.3	32
21	Comparative Experimental Study of a High-Temperature Raman-Based Distributed Optical Fiber Sensor with Different Special Fibers. Sensors, 2019, 19, 574.	3.8	32
22	Stability Comparison of Two Ring Resonator Structures for Multiwavelength Fiber Lasers Using Highly Doped Er-Fibers. Journal of Lightwave Technology, 2009, 27, 2563-2569.	4.6	30
23	Generation of Optical Vortices by an Ideal Liquid Crystal Spiral Phase Plate. IEEE Electron Device Letters, 2014, 35, 856-858.	3.9	30
24	Integral Imaging Capture System With Tunable Field of View Based on Liquid Crystal Microlenses. IEEE Photonics Technology Letters, 2016, 28, 1854-1857.	2.5	30
25	Liquid crystal spherical microlens array with high fill factor and optical power. Optics Express, 2017, 25, 605.	3.4	29
26	Toroidal metasurface resonances in microwave waveguides. Scientific Reports, 2019, 9, 7544.	3.3	29
27	A Novel High-Sensitivity, Low-Power, Liquid Crystal Temperature Sensor. Sensors, 2014, 14, 6571-6583.	3.8	28
28	All-Optical Nanometric Switch Based on the Directional Scattering of Semiconductor Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 19558-19564.	3.1	28
29	Low aberration and fast switching microlenses based on a novel liquid crystal mixture. Optics Express, 2017, 25, 14795.	3.4	28
30	Recent Advances in Biomedical Photonic Sensors: A Focus on Optical-Fibre-Based Sensing. Sensors, 2021, 21, 6469.	3.8	28
31	Visible Light Communication system using an organic emitter and a perovskite photodetector. Organic Electronics, 2019, 73, 292-298.	2.6	26
32	Liquid Crystal Microlenses for Autostereoscopic Displays. Materials, 2016, 9, 36.	2.9	25
33	Cylindrical Liquid Crystal Microlens Array With Rotary Optical Power and Tunable Focal Length. IEEE Electron Device Letters, 2015, 36, 582-584.	3.9	24
34	Slit Beam Shaping Technique for Femtosecond Laser Inscription of Enhanced Plane-by-Plane FBGs. Journal of Lightwave Technology, 2020, 38, 4526-4532.	4.6	24
35	Remote (155 km) Fiber Bragg Grating Interrogation Technique Combining Raman, Brillouin, and Erbium Gain in a Fiber Laser. IEEE Photonics Technology Letters, 2011, 23, 621-623.	2.5	23
36	Frequency and Temperature Dependence of Fabrication Parameters in Polymer Dispersed Liquid Crystal Devices. Materials, 2014, 7, 3512-3521.	2.9	23

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37	Selective Dielectric Metasurfaces Based on Directional Conditions of Silicon Nanopillars. Nanomaterials, 2017, 7, 177.	4.1	23
38	Fiber Optic Temperature Sensor Based on Amplitude Modulation of Metallic and Semiconductor Nanoparticles in a Liquid Crystal Mixture. Journal of Lightwave Technology, 2015, 33, 2451-2455.	4.6	22
39	Ultrahigh Temperature Raman-Based Distributed Optical Fiber Sensor With Gold-Coated Fiber. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 296-301.	2.9	22
40	Use of the Plasma Spectrum RMS Signal for Arc-Welding Diagnostics. Sensors, 2009, 9, 5263-5276.	3.8	21
41	Allâ€Dielectric Toroidal Metasurfaces for Angularâ€Dependent Resonant Polarization Beam Splitting. Advanced Optical Materials, 2021, 9, 2002143.	7.3	21
42	Optical Fiber Sensors by Direct Laser Processing: A Review. Sensors, 2020, 20, 6971.	3.8	20
43	Arc-Welding Spectroscopic Monitoring based on Feature Selection and Neural Networks. Sensors, 2008, 8, 6496-6506.	3.8	19
44	Defect Detection in Arc-Welding Processes by Means of the Line-to-Continuum Method and Feature Selection. Sensors, 2009, 9, 7753-7770.	3.8	19
45	Boosting ultrathin aSi-H solar cells absorption through a nanoparticle cross-packed metasurface. Solar Energy, 2020, 202, 10-16.	6.1	19
46	Temperature-Frequency Converter Using a Liquid Crystal Cell as a Sensing Element. Sensors, 2012, 12, 3204-3214.	3.8	18
47	A Low-Cost Visible Light Positioning System for Indoor Positioning. Sensors, 2020, 20, 5145.	3.8	18
48	Measuring the Water Content in Wood Using Step-Heating Thermography and Speckle Patterns-Preliminary Results. Sensors, 2020, 20, 316.	3.8	18
49	Comparison of the Stability of Ring Resonator Structures for Multiwavelength Fiber Lasers Using Raman or Er-Doped Fiber Amplification. IEEE Journal of Quantum Electronics, 2009, 45, 1551-1557.	1.9	17
50	Modal liquid crystal microaxicon array. Optics Letters, 2014, 39, 3476.	3.3	17
51	Custom Scanning Hyperspectral Imaging System for Biomedical Applications: Modeling, Benchmarking, and Specifications. Sensors, 2019, 19, 1692.	3.8	17
52	Limitations of Standard Accessible Captioning of Sounds and Music for Deaf and Hard of Hearing People: An EEG Study. Frontiers in Integrative Neuroscience, 2020, 14, 1.	2.1	17
53	Multi-Line Fit Model for the Detection of Methane at Î½2 + 2Î½3 Band using Hollow-Core Photonic Bandgap Fibres. Sensors, 2009, 9, 490-502.	3.8	15
54	Liquid Crystal Lensacons, Logarithmic and Linear Axicons. Materials, 2014, 7, 2593-2604.	2.9	15

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55	Distributed High-Temperature Optical Fiber Sensor Based on a Brillouin Optical Time Domain Analyzer and Multimode Gold-Coated Fiber. IEEE Sensors Journal, 2017, 17, 2393-2397.	4.7	15
56	Microwave Tunable Notch Filter Based on Liquid Crystal Using Spiral Spurline Technology. Microwave and Optical Technology Letters, 2013, 55, 2420-2423.	1.4	14
57	Cylindrical and Powell Liquid Crystal Lenses With Positive-Negative Optical Power. IEEE Photonics Technology Letters, 2020, 32, 1057-1060.	2.5	14
58	Liquid Crystal Temperature Sensor Based on a Micrometric Structure and a Metallic Nanometric Layer. IEEE Electron Device Letters, 2014, 35, 666-668.	3.9	13
59	Wireless Temperature Sensor Based on a Nematic Liquid Crystal Cell as Variable Capacitance. Sensors, 2018, 18, 3436.	3.8	13
60	All-Dielectric Metasurface Based on Complementary Split-Ring Resonators for Refractive Index Sensing. Photonics, 2022, 9, 130.	2.0	13
61	Influence of Humidity on the Measurement of Brillouin Frequency Shift. IEEE Photonics Technology Letters, 2008, 20, 1959-1961.	2.5	12
62	Early diagnosis of frailty: Technological and non-intrusive devices for clinical detection. Ageing Research Reviews, 2021, 70, 101399.	10.9	12
63	Engineering Aspheric Liquid Crystal Lenses by Using the Transmission Electrode Technique. Crystals, 2020, 10, 835.	2.2	10
64	Impedance analysis and equivalent circuit of an all-plastic viologen based electrochromic device. Displays, 2008, 29, 401-407.	3.7	9
65	A Switchable Erbium Doped Fiber Ring Laser System for Temperature Sensors Multiplexing. IEEE Sensors Journal, 2013, 13, 2279-2283.	4.7	9
66	High-Sensitivity Fabry-PÃ©rot Temperature Sensor Based on Liquid Crystal Doped With Nanoparticles. IEEE Photonics Technology Letters, 2015, 27, 292-295.	2.5	9
67	Virtual FBGs Using Saturable Absorbers for Sensing with Fiber Lasers. Sensors, 2018, 18, 3593.	3.8	9
68	A novel aerosolisation mitigation device for endoscopic sinus and skull base surgery in the COVID-19 era. European Archives of Oto-Rhino-Laryngology, 2021, 278, 1869-1877.	1.6	8
69	Liquid level sensor based on dynamic Fabryâ€“Perot interferometers in processed capillary fiber. Scientific Reports, 2021, 11, 3039.	3.3	8
70	Reconfigurable 1Ã—2 wavelength selective switch using high birefringence nematic liquid crystals. Applied Optics, 2012, 51, 5960.	1.8	7
71	Raw Material Classification by Means of Hyperspectral Imaging and Hierarchical Temporal Memories. IEEE Sensors Journal, 2012, 12, 2767-2775.	4.7	7
72	Improving the Pass-Band Return Loss in Liquid Crystal Dual-Mode Bandpass Filters by Microstrip Patch Reshaping. Materials, 2014, 7, 4524-4535.	2.9	7

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73	Directional Scattering of Semiconductor Nanoparticles Embedded in a Liquid Crystal. Materials, 2014, 7, 2784-2794.	2.9	7
74	Using an Analytical Model to Design Liquid Crystal Microlenses. IEEE Photonics Technology Letters, 2014, 26, 793-796.	2.5	7
75	Thermally tunable polarization by nanoparticle plasmonic resonance in photonic crystal fibers. Optics Express, 2015, 23, 28935.	3.4	7
76	Size Dependence of the Directional Scattering Conditions on Semiconductor Nanoparticles. IEEE Photonics Technology Letters, 2015, 27, 2059-2062.	2.5	7
77	Sinusoidal Voltage-Controlled Oscillator Based on a Liquid Crystal Cell as Variable Capacitance. Japanese Journal of Applied Physics, 2007, 46, L221-L223.	1.5	6
78	Bragg Gratings Written in Tapered Solid-Core Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2010, 22, 1048-1050.	2.5	6
79	Note: Phase-locked loop with a voltage controlled oscillator based on a liquid crystal cell as variable capacitance. Review of Scientific Instruments, 2011, 82, 126101.	1.3	6
80	Editorial Third Special Issue on Optical Fiber Sensors. IEEE Sensors Journal, 2012, 12, 5-7.	4.7	6
81	Thickness-Dependent Coloration Properties of Glass-Substrate Viologen-Based Electrochromic Devices. IEEE Photonics Journal, 2012, 4, 2105-2115.	2.0	6
82	Automatic strain detection in a Brillouin Optical Time Domain sensor using Principal Component Analysis and Artificial Neural Networks. , 2014, , .		6
83	Liquid Crystal Temperature Sensor Based on Three Electrodes and a High-Resistivity Layer. IEEE Sensors Journal, 2015, 15, 5222-5227.	4.7	6
84	2D tunable beam steering - lens device based on high birefringence liquid crystals. , 2011, , .		5
85	Complementary Use of Active Infrared Thermography and Optical Coherent Tomography in Non-destructive Testing Inspection of Ancient Marquetries. Journal of Nondestructive Evaluation, 2020, 39, 1.	2.4	5
86	Automatic Ankle Angle Detection by Integrated RGB and Depth Camera System. Sensors, 2021, 21, 1909.	3.8	5
87	Pre-processing techniques of thermal sequences applied to online welding monitoring. Quantitative InfraRed Thermography Journal, 2012, 9, 69-78.	4.2	4
88	Experimental demonstration of a leakage monitoring system for large diameter water pipes using a fiber optic distributed sensor system. , 2014, , .		4
89	Optimized Minimum-Forward Light Scattering by Dielectric Nanopillars. IEEE Photonics Technology Letters, 2016, 28, 2160-2163.	2.5	4
90	SLM Fiber Laser Stabilized at High Temperature. IEEE Photonics Technology Letters, 2016, 28, 693-696.	2.5	4

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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	High Temperature Long Period Grating Thermo-Mechanically Written. Sensors, 2009, 9, 5649-5654.	3.8	3
93	Hessian analysis for the delineation of amorphous anomalies in optical coherence tomography images of the aortic wall. Biomedical Optics Express, 2016, 7, 1415.	2.9	3
94	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
95	In-axis reception by polarization discrimination in a modulating-retroreflector-based free-space optical communication link. Microwave and Optical Technology Letters, 2012, 54, 2520-2522.	1.4	2
96	Study of Fiber Bragg Grating Spectral Overlapping for Laser Structures. IEEE Photonics Technology Letters, 2014, 26, 1108-1111.	2.5	2
97	DBR Fiber Laser Sensor With Polarization Mode Suppression. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 551-554.	2.9	2
98	Temperature-Phase Converter Based on a LC Cell as a Variable Capacitance. Sensors, 2015, 15, 5594-5608.	3.8	2
99	Control of disability glare by means of electrochromic filtering glasses: A pilot study. Journal of Innovative Optical Health Sciences, 2017, 10, 1650028.	1.0	2
100	Driving Signals Optimization for Viologen-Based Electrochromic Vision Devices. IEEE Sensors Journal, 2019, 19, 1740-1747.	4.7	2
101	Laser Metal Deposition On-Line Monitoring via Plasma Emission Spectroscopy and Spectral Correlation Techniques. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	2.9	2
102	Sensing Using Light: A Key Area of Sensors. Sensors, 2021, 21, 6562.	3.8	2
103	An Enhanced Method for Dynamic Characterization of High-Power LEDs for Visible Light Communication Applications. Electronics (Switzerland), 2022, 11, 292.	3.1	2
104	Emotion Elicitation through Vibrotactile Stimulation as an Alternative for Deaf and Hard of Hearing People: An EEG Study. Electronics (Switzerland), 2022, 11, 2196.	3.1	2
105	Optimized image calibration for spectroscopic systems. , 2011, , .		1
106	Sensor System Based on a Brillouin Fiber Laser for Remote in Series Fiber Bragg Gratings Interrogation. IEEE Sensors Journal, 2012, 12, 3480-3482.	4.7	1
107	Note: Series and parallel tunable resonators based on a nematic liquid crystal cell as variable capacitance. Review of Scientific Instruments, 2012, 83, 086104.	1.3	1
108	Optical spectroscopic sensors: From the control of industrial processes to tumor delineation. , 2013, , .		1

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109	Broadband 1Ã—2 liquid crystal router with low thermal dependence for polymer optical fiber networks. Optics Communications, 2014, 333, 281-287.	2.1	1
110	Colorimetric analysis for on-line arc-welding diagnostics by means of plasma optical spectroscopy. , 2014, , .		1
111	Induced Magnetic Anisotropy in Liquid Crystals Doped with Resonant Semiconductor Nanoparticles. Journal of Nanomaterials, 2016, 2016, 1-9.	2.7	1
112	Feasibility Study of a Fiber Ring Laser Working on the SLM Regime in a BOTDA Sensor. IEEE Sensors Journal, 2018, 18, 4947-4953.	4.7	1
113	An inertial sensorâ€based system designed to measure and prevent undesired camera rotation during endoscopic sinus surgery. International Forum of Allergy and Rhinology, 2020, 10, 689-691.	2.8	1
114	Guest Editorial Introduction to the JSTQE Special Issue on Photonics for Industry 4.0. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-4.	2.9	1
115	Slit Beam Shaping Technique for Femtosecond Laser Inscription of Symmetric Cladding Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	2.9	1
116	A new design technique for optical multipass cells modelled with arbitrary surfaces. Microwave and Optical Technology Letters, 2003, 37, 383-387.	1.4	0
117	Fiber-optic technologies for tissue diagnosis in cardiovascular and oncology applications. , 2015, , .		0
118	Design and Experimental Implementation of a Multi-Cloak Paraxial Optical System. Photonics, 2021, 8, 358.	2.0	0
119	ATAD: Una Ayuda TÃ©cnica para la AutonomÃa en el Desplazamiento. Revista EspaÃ±ola De Discapacidad, 2013, 1, 143-154.	0.2	0
120	Theoretical approach of a polymer stabilized blue phase beam steering. Photonics Letters of Poland, 2017, 9, 14.	0.4	0
121	Exploring the scattering directionality and light interaction in nanoparticle dimers of different semiconductors. Photonics Letters of Poland, 2017, 9, 42.	0.4	0
122	Novel microstructures on indium tin oxide for liquid crystal adaptive lenses. , 2019, , .		0
123	Ultra-high-Q dielectric metasurface for polarization conversion. , 2019, , .		0