

Luis Coelho

List of Publications by Year in descending order

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129
papers

3,247
citations

201575

27
h-index

149623

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g-index

133
all docs

133
docs citations

133
times ranked

3951
citing authors

#	ARTICLE	IF	CITATIONS
1	Analysis of the Relative Humidity Response of Hydrophilic Polymers for Optical Fiber Sensing. <i>Polymers</i> , 2022, 14, 439.	2.0	4
2	A Plasmonic Biosensor Based on Light-Diffusing Fibers Functionalized with Molecularly Imprinted Nanoparticles for Ultralow Sensing of Proteins. <i>Nanomaterials</i> , 2022, 12, 1400.	1.9	12
3	Simple Optical Fiber Interferometer for Dynamic Measurement of Refractive Index and Thickness of Polymer Films. <i>IEEE Sensors Journal</i> , 2022, 22, 11732-11739.	2.4	3
4	Long-Period Fiber Gratings Coated with Poly(ethylene glycol) as Relative Humidity Sensors. <i>U Porto Journal of Engineering</i> , 2022, 8, 2-6.	0.2	1
5	Study of LSPR Spectral Analysis Techniques on SPR Optical Fiber Sensors. <i>U Porto Journal of Engineering</i> , 2022, 8, 12-17.	0.2	0
6	Differential Refractometric Biosensor for Reliable Human IgG Detection: Proof of Concept. <i>Biosensors</i> , 2022, 12, 515.	2.3	6
7	Development of a Long Period Fiber Grating Interrogation System Using a Multimode Laser Diode. <i>Sensors</i> , 2021, 21, 749.	2.1	3
8	Effect of Low-Doses of Gamma Radiation on Electric Arc-Induced Long Period Fiber Gratings. <i>Sensors</i> , 2021, 21, 2318.	2.1	3
9	Biosensors for Biogenic Amines: A Review. <i>Biosensors</i> , 2021, 11, 82.	2.3	32
10	Advances in Plasmonic Sensing at the NIR – A Review. <i>Sensors</i> , 2021, 21, 2111.	2.1	23
11	Turn Around Point Long Period Fiber Gratings With Coupling to Asymmetric Cladding Modes Fabricated by a Femtosecond Laser and Coated With Titanium Dioxide. <i>Journal of Lightwave Technology</i> , 2021, 39, 4784-4793.	2.7	9
12	Detection of biogenic amines in several foods with different sample treatments: An overview. <i>Trends in Food Science and Technology</i> , 2021, 113, 86-96.	7.8	48
13	Spectral Reconstruction and Bayesian Model Framework for Characterization of Long Period Fiber Gratings. <i>IEEE Instrumentation and Measurement Magazine</i> , 2021, 24, 56-62.	1.2	1
14	Particle Classification through the Analysis of the Forward Scattered Signal in Optical Tweezers. <i>Sensors</i> , 2021, 21, 6181.	2.1	6
15	Optical fiber sensors based on sol-gel materials: design, fabrication and application in concrete structures. <i>Materials Advances</i> , 2021, 2, 7237-7276.	2.6	14
16	Femtosecond Laser Direct Writing of Turn Around Point Long Period Fiber Gratings Coated with Titanium Dioxide for Improved Sensitivity. , 2021, , .		0
17	Characterization of Femtosecond Laser Direct Written Mach-Zehnder Interferometers Based on Titanium Dioxide Coated Long Period Fiber Gratings. , 2021, , .		0
18	Single Fiber Reflectance Spectroscopy for the Monitoring of Cement Paste. <i>Chemosensors</i> , 2021, 9, 312.	1.8	3

#	ARTICLE	IF	CITATIONS
19	Characterization and Comparison of the Relative Humidity Response of Hydromorphic Polymers in Long-Period Fiber Grating Structures. Chemistry Proceedings, 2021, 5, 42.	0.1	1
20	Optical Biosensor for the Detection of Hydrogen Peroxide in Milk. , 2021, 5, .		2
21	Label-Free Anti-Human IgG Biosensor Based on Chemical Modification of a Long Period Fiber Grating Surface. , 2021, 5, .		0
22	Hydroponics Monitoring through UV-Vis Spectroscopy and Artificial Intelligence: Quantification of Nitrogen, Phosphorous and Potassium. Chemistry Proceedings, 2021, 5, .	0.1	5
23	MMI Sensor for Diameter Measurement. , 2021, 10, .		0
24	Temperature Stability and Spectral Tuning of Long Period Fiber Gratings Fabricated by Femtosecond Laser Direct Writing. Sensors, 2020, 20, 3898.	2.1	6
25	Preliminary assessment on the detection of putrescine using long period fiber gratings coated with titanium dioxide and poly(ethylene-co-vinyl acetate). , 2020, , .		0
26	Femtosecond laser-written long period fibre gratings coated with titanium dioxide for improved sensitivity. , 2020, , .		1
27	Femtosecond laser micromachining of Fabry-Perot interferometers in SMF-28 fiber for pressure sensing (Conference Presentation). , 2020, , .		0
28	Colorimetry-based System for Gaseous Carbon Dioxide Detection. U Porto Journal of Engineering, 2020, 6, 59-69.	0.2	0
29	Alkali-silica reaction in concrete: Mechanisms, mitigation and test methods. Construction and Building Materials, 2019, 222, 903-931.	3.2	121
30	Spectral Tuning of Long Period Fiber Gratings Fabricated by Femtosecond Laser Micromachining through Thermal Annealing. Proceedings (mdpi), 2019, 15, .	0.2	1
31	Colorimetric Fiber Optic Based Probe for Real-Time Monitoring of Dissolved CO2 in Aquaculture Systems. Proceedings (mdpi), 2019, 15, .	0.2	0
32	A Simple Spectral Interrogation System for Optical Fiber Sensors. Proceedings (mdpi), 2019, 15, .	0.2	0
33	Preliminary Study for Detection of Hydrogen Peroxide Using a Hydroxyethyl Cellulose Membrane. Proceedings (mdpi), 2019, 15, .	0.2	4
34	Low-Cost Interrogation System for Long-Period Fiber Gratings Applied to Remote Sensing. Sensors, 2019, 19, 1500.	2.1	19
35	Mach-Zehnder Interferometers Based on Long Period Fiber Grating Coated With Titanium Dioxide for Refractive Index Sensing. Journal of Lightwave Technology, 2019, 37, 4584-4589.	2.7	24
36	Dissolved Carbon Dioxide Sensing Platform for Freshwater and Saline Water Applications: Characterization and Validation in Aquaculture Environments. Sensors, 2019, 19, 5513.	2.1	7

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37	Optimization of interrogation methods for sensors based on optical microbubble resonators. , 2019, , .		0
38	Quantification of Ethanol Concentration in Gasoline Using Cuprous Oxide Coated Long Period Fiber Gratings. IEEE Sensors Journal, 2018, 18, 1493-1500.	2.4	15
39	Temperature Compensated Strain Sensor Based on Long-Period Gratings and Microspheres. IEEE Photonics Technology Letters, 2018, 30, 67-70.	1.3	22
40	Real-Time Early Warning Strategies for Corrosion Mitigation in Harsh Environments. Journal of Lightwave Technology, 2018, 36, 1152-1158.	2.7	4
41	Photoelectron extraction efficiency into Ar-CF ₄ and Xe-CF ₄ gas mixtures. Journal of Instrumentation, 2018, 13, P09001-P09001.	0.5	0
42	Plasmonic Optical Fiber Sensor Based on Double Step Growth of Gold Nano-Islands. Sensors, 2018, 18, 1267.	2.1	8
43	Development of a New System for Real-Time Detection of Radon Using Scintillating Optical Fibers. , 2018, , .		1
44	Low-Cost Interrogation System for Long Period Fiber Gratings as Sensing Devices. , 2018, , .		0
45	Optical Fiber Sensor Mach-Zehnder Interferometer Based on TiO ₂ Coated Long Period Fiber Grating. , 2018, , .		0
46	Plasmonic Optical Fiber Sensor Based on Double Step Growth of Gold Nano-Islands. , 2018, , .		0
47	Study of corrosion using long period fiber gratings coated with iron exposed to salty water. , 2017, , .		1
48	LPFG based fiber optic sensor for magnetic field measurement. Proceedings of SPIE, 2017, , .	0.8	1
49	Low temperature oxidation in air of iron thin films monitored with long period fiber gratings. Proceedings of SPIE, 2017, , .	0.8	1
50	Phase-interrogated SPR sensing structures based on tapered and tip optrode optical fiber configurations with bimetallic layers. Measurement Science and Technology, 2017, 28, 095203.	1.4	3
51	Monitoring of oxidation phases of copper thin films using long period fiber gratings. Sensors and Actuators A: Physical, 2017, 253, 69-74.	2.0	6
52	New developments on fibre optic colorimetric sensors for dissolved CO ₂ in aquatic environments. , 2017, , .		2
53	Optical fiber sensor for early warning of corrosion of metal structures. , 2017, , .		2
54	ECOAL Project – Delivering Solutions for Integrated Monitoring of Coal-Related Fires Supported on Optical Fiber Sensing Technology. Applied Sciences (Switzerland), 2017, 7, 956.	1.3	13

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55	Improved long period fibre gratings sensing devices coated with thin films. , 2017, , .		0
56	Fabrication and Characterization of Metal Oxide-Coated Long-Period Fiber Gratings. Journal of Lightwave Technology, 2016, 34, 2533-2539.	2.7	23
57	Zinc oxide coated optical fiber long period gratings for sensing of volatile organic compounds. Proceedings of SPIE, 2016, , .	0.8	3
58	Aptamer-based fiber sensor for thrombin detection. Journal of Biomedical Optics, 2016, 21, 087005.	1.4	35
59	Analysis of a plasmonic based optical fiber optrode with phase interrogation. Photonic Sensors, 2016, 6, 221-233.	2.5	9
60	Optical sensor based on hybrid FBC/titanium dioxide coated LPFG for monitoring organic solvents in edible oils. Talanta, 2016, 148, 170-176.	2.9	16
61	Characterization of zinc oxide coated optical fiber long period gratings with improved refractive index sensing properties. Sensors and Actuators B: Chemical, 2016, 223, 45-51.	4.0	81
62	Fiber optic hydrogen sensor based on an etched Bragg grating coated with palladium. Applied Optics, 2015, 54, 10342.	2.1	36
63	Wine fingerprinting using a bio-geochemical approach. BIO Web of Conferences, 2015, 5, 02021.	0.1	9
64	Study of adulteration of extra virgin olive oil with peanut oil using FTIR spectroscopy and chemometrics. Cogent Food and Agriculture, 2015, 1, 1018695.	0.6	37
65	Real time monitoring oxidation of transition metals with long period fiber gratings. , 2015, , .		0
66	Phase interrogated plasmonic optical fiber optrode with bimetallic layers. , 2015, , .		0
67	Investigation of adulteration of sunflower oil with thermally deteriorated oil using Fourier transform mid-infrared spectroscopy and chemometrics. Cogent Food and Agriculture, 2015, 1, 1020254.	0.6	7
68	Multiplexing of Surface Plasmon Resonance Sensing Devices on Etched Single-Mode Fiber. Journal of Lightwave Technology, 2015, 33, 432-438.	2.7	29
69	Theoretical Study of Phase-Interrogated Surface Plasmon Resonance Based on Optical Fiber Sensors with Metallic and Oxide Layers. Plasmonics, 2015, 10, 979-987.	1.8	11
70	Monitoring of high refractive index edible oils using coated long period fiber grating sensors. , 2015, , .		0
71	Detection of Extra Virgin Olive Oil Thermal Deterioration Using a Long Period Fibre Grating Sensor Coated with Titanium Dioxide. Food and Bioprocess Technology, 2015, 8, 1211-1217.	2.6	19
72	Modal Filtering for Optimized Surface Plasmon Resonance Sensing in Multimode Plastic Optical Fibers. IEEE Sensors Journal, 2015, 15, 6306-6312.	2.4	19

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73	Sensing Structure Based on Surface Plasmon Resonance in Chemically Etched Single Mode Optical Fibres. Plasmonics, 2015, 10, 319-327.	1.8	56
74	Optical Sensing Based in Plasmonics and the Metamaterials Enhancement Factor. , 2014, , .		0
75	SPR sensors in POF: a new experimental configuration for extended refractive index range and better SNR. , 2014, , .		1
76	DNA-Aptamer optical biosensors based on a LPG-SPR optical fiber platform for point-of-care diagnostic. Proceedings of SPIE, 2014, , .	0.8	1
77	Analysis of phase interrogation of SPR fiber optic sensors with characteristics tailored by the application of different metal-dielectric overlays. , 2014, , .		0
78	Analysis of phase interrogated SPR fiber optic sensors with different bimetallic combinations. Proceedings of SPIE, 2014, , .	0.8	0
79	An all-fiber Fabry-Pérot interferometer for pressure sensing in different gaseous environments. Measurement: Journal of the International Measurement Confederation, 2014, 47, 418-421.	2.5	16
80	Enhanced refractive index sensing characteristics of optical fibre long period grating coated with titanium dioxide thin films. Sensors and Actuators B: Chemical, 2014, 202, 929-934.	4.0	91
81	Optical Inclinator Based on a Phase-Shifted Bragg Grating in a Taper Configuration. IEEE Photonics Technology Letters, 2014, 26, 405-407.	1.3	15
82	Analysis of Phase Interrogated SPR Fiber Optic Sensors With Bimetallic Layers. IEEE Sensors Journal, 2014, 14, 3662-3668.	2.4	38
83	Pressure sensor based on an all-fiber Fabry-Pérot interferometer for different gaseous environments. , 2013, , .		0
84	Post-Processing of Fabry-Pérot Microcavity Tip Sensor. IEEE Photonics Technology Letters, 2013, 25, 1593-1596.	1.3	14
85	Interrogation Sensing Scheme Based on a Figure-of-Eight Fiber Loop Mirror. IEEE Photonics Technology Letters, 2013, 25, 745-748.	1.3	2
86	H ₂ Sensing Based on a Pd-Coated Tapered-FBG Fabricated by DUV Femtosecond Laser Technique. IEEE Photonics Technology Letters, 2013, 25, 401-403.	1.3	60
87	Sensing structure based on surface plasmonic resonance in single mode optical fibers chemically etched. , 2013, , .		2
88	Analysis of phase interrogation in SPR-based sensing supported by tapered optical fibres. Proceedings of SPIE, 2013, , .	0.8	2
89	SPR sensing with bimetallic layers in optical fibers and phase interrogation. , 2013, , .		1
90	Simultaneous measurement of partial pressure of O ₂ and CO ₂ using hybrid interferometer. , 2012, , .		0

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91	Hydrogen pressure sensor based on a tapered-FBG written by DUV femtosecond laser technique. , 2012, , .		0
92	Gas refractometry based on an all-fiber spatial optical filter. Optics Letters, 2012, 37, 3450.	1.7	10
93	Simultaneous measurement of partial pressure of O ₂ and CO ₂ with a hybrid interferometer. Optics Letters, 2012, 37, 3063.	1.7	18
94	Interferometer based on a D-shape chaotic optical fiber for measurement of multiparameters. Photonic Sensors, 2012, 2, 381-384.	2.5	0
95	Long-Period Gratings Dynamic Interrogation With Modulated Fiber Bragg Gratings and Optical Amplification. IEEE Sensors Journal, 2012, 12, 179-183.	2.4	10
96	A Review of Palladium-Based Fiber-Optic Sensors for Molecular Hydrogen Detection. IEEE Sensors Journal, 2012, 12, 93-102.	2.4	114
97	Intrinsic Fabry-Pérot Cavity Sensor Based on Etched Multimode Graded Index Fiber for Strain and Temperature Measurement. IEEE Sensors Journal, 2012, 12, 8-12.	2.4	63
98	Fiber Optic-Based Refractive Index Sensing at INESC Porto. Sensors, 2012, 12, 8371-8389.	2.1	29
99	Multimode interference in outer cladding large-core, air-clad photonic crystal fiber. Microwave and Optical Technology Letters, 2012, 54, 1009-1011.	0.9	5
100	New spatial optical filters for gas refractometry. , 2012, , .		0
101	Fabry-Pérot cavity based on a diaphragm-free hollow-core silica tube. Optics Letters, 2011, 36, 4029.	1.7	90
102	Design and performance of the XENON10 dark matter experiment. Astroparticle Physics, 2011, 34, 679-698.	1.9	95
103	Search for Light Dark Matter in XENON10 Data. Physical Review Letters, 2011, 107, 051301.	2.9	386
104	Optical fibre pressure sensors for small scale studies of groundwater flow. , 2011, , .		0
105	Dynamic interrogation for optical fibre sensors based on long-period gratings. Measurement Science and Technology, 2011, 22, 065201.	1.4	5
106	Optical fibre hydrogen sensors based on palladium coatings. Proceedings of SPIE, 2011, , .	0.8	0
107	Optical refractometer based on multimode interference in a pure silica tube. Optical Engineering, 2011, 50, 100504.	0.5	4
108	Dynamic interrogation of long period gratings with modulated fibre Bragg gratings. , 2010, , .		1

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109	Fibre optic remote sensing based on long period gratings with in situ optical source. Proceedings of SPIE, 2010, , .	0.8	0
110	Refractive index sensing of aqueous media based on plasmonic resonance in tapered optical fibres operating in the 1.5 μ m region. Sensors and Actuators B: Chemical, 2010, 146, 195-198.	4.0	60
111	A Monte Carlo study of photoelectron extraction efficiency from CsI photocathodes into Xe ^{19F} and Ne ^{19F} mixtures. Journal Physics D: Applied Physics, 2010, 43, 065502.	1.3	20
112	Long-Period Grating Fiber Sensor With In Situ Optical Source for Remote Sensing. IEEE Photonics Technology Letters, 2010, 22, 1533-1535.	1.3	16
113	Photoelectron transmission efficiency in Ar ^{19F} and Xe ^{19F} mixtures: Experimental results. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 607, 587-590.	0.7	7
114	The scintillation and ionization yield of liquid xenon for nuclear recoils. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 601, 339-346.	0.7	60
115	Constraints on inelastic dark matter from XENON10. Physical Review D, 2009, 80, .	1.6	93
116	Measurements of photoelectron extraction efficiency from CsI into mixtures of Ne with CH ₄ , CF ₄ , CO ₂ and N ₂ . Journal of Instrumentation, 2009, 4, P11025-P11025.	0.5	17
117	Limits on Spin-Dependent WIMP-Nucleon Cross Sections from the XENON10 Experiment. Physical Review Letters, 2008, 101, 091301.	2.9	164
118	First Results from the XENON10 Dark Matter Experiment at the Gran Sasso National Laboratory. Physical Review Letters, 2008, 100, 021303.	2.9	540
119	GEM scintillation readout with avalanche photodiodes. Journal of Instrumentation, 2007, 2, P09010-P09010.	0.5	13
120	Secondary scintillation yield in pure xenon. Journal of Instrumentation, 2007, 2, P05001-P05001.	0.5	53
121	Operation of a single-GEM in noble gases at high pressures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 62-66.	0.7	12
122	Measurement of the photoelectron-collection efficiency in noble gases and methane. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 581, 190-193.	0.7	27
123	3D Position Sensitive XeTPC for Dark Matter Search. Nuclear Physics, Section B, Proceedings Supplements, 2007, 173, 117-120.	0.5	7
124	XENON. Nuclear Physics, Section B, Proceedings Supplements, 2007, 173, 113-116.	0.5	2
125	Xenon GPSC high-pressure operation with large-area avalanche photodiode readout. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 575, 444-448.	0.7	14
126	Refractometric sensor based on a phase-shifted long-period fiber grating. Applied Optics, 2006, 45, 5066.	2.1	57

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127	High-pressure operation of a xenon-GPSC/MSGC hybrid detector for hard X-ray spectrometry. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 796-802.	0.7	6
128	Effect of ionizing radiation on the properties of arc-induced long-period fiber gratings. Applied Optics, 2005, 44, 6258.	2.1	50
129	Demodulation of fiber Bragg grating sensors based on dynamic tuning of a multimode laser diode. Applied Optics, 1999, 38, 4751.	2.1	21