

Stefania Campopiano

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3826320/publications.pdf>

Version: 2024-02-01

138
papers

2,297
citations

201575

27
h-index

265120

42
g-index

139
all docs

139
docs citations

139
times ranked

1594
citing authors

#	ARTICLE	IF	CITATIONS
1	Long period grating in double cladding fiber coated with graphene oxide as high-performance optical platform for biosensing. <i>Biosensors and Bioelectronics</i> , 2021, 172, 112747.	5.3	100
2	Cladding mode reorganization in high-refractive-index-coated long-period gratings: effects on the refractive-index sensitivity. <i>Optics Letters</i> , 2005, 30, 2536.	1.7	98
3	Microfluidic sensor based on integrated optical hollow waveguides. <i>Optics Letters</i> , 2004, 29, 1894.	1.7	97
4	Ultrasensitive biosensor based on long period grating coated with polycarbonate-graphene oxide multilayer. <i>Sensors and Actuators B: Chemical</i> , 2018, 274, 517-526.	4.0	73
5	Multi-parameter sensor based on single Long Period Grating in Panda fiber for the simultaneous measurement of SRI, temperature and strain. <i>Optics and Laser Technology</i> , 2019, 113, 198-203.	2.2	71
6	Carbon nanotubes thin films fiber optic and acoustic VOCs sensors: Performances analysis. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 232-242.	4.0	70
7	Label-Free Biosensors Based on Long Period Fiber Gratings: A Review. <i>IEEE Sensors Journal</i> , 2021, 21, 12692-12705.	2.4	64
8	Underwater Acoustic Sensors Based on Fiber Bragg Gratings. <i>Sensors</i> , 2009, 9, 4446-4454.	2.1	60
9	ARROW optical waveguides based sensors. <i>Sensors and Actuators B: Chemical</i> , 2004, 100, 143-146.	4.0	58
10	Detection of thermal gradients through fiber-optic Chirped Fiber Bragg Grating (CFBG): Medical thermal ablation scenario. <i>Optical Fiber Technology</i> , 2018, 41, 48-55.	1.4	50
11	Sensitivity characteristics in nanosized coated long period gratings. <i>Applied Physics Letters</i> , 2006, 89, 201116.	1.5	48
12	Long-Period Gratings in Hollow Core Fibers by Pressure-Assisted Arc Discharge Technique. <i>IEEE Photonics Technology Letters</i> , 2011, 23, 1567-1569.	1.3	48
13	Label-free detection of vitamin D by optical biosensing based on long period fiber grating. <i>Sensors and Actuators B: Chemical</i> , 2021, 347, 130637.	4.0	48
14	Arc-Induced Long Period Gratings from Standard to Polarization-Maintaining and Photonic Crystal Fibers. <i>Sensors</i> , 2018, 18, 918.	2.1	45
15	Experimental Study of the Refractive Index Sensitivity in Arc-induced Long Period Gratings. <i>IEEE Photonics Journal</i> , 2017, 9, 1-10.	1.0	43
16	Spectral behavior in thinned long period gratings: effects of fiber diameter on refractive index sensitivity. <i>Applied Optics</i> , 2007, 46, 6945.	2.1	42
17	Broadband Mirrors in the Near-Infrared Based on Subwavelength Gratings in SOI. <i>IEEE Photonics Journal</i> , 2010, 2, 696-702.	1.0	40
18	Single-Ended Long Period Fiber Grating Coated With Polystyrene Thin Film for Butane Gas Sensing. <i>Journal of Lightwave Technology</i> , 2018, 36, 825-832.	2.7	40

#	ARTICLE	IF	CITATIONS
19	Photonic band-gap engineering in UV fiber gratings by the arc discharge technique. Optics Express, 2008, 16, 15332.	1.7	38
20	Temperature profile of <i>ex-vivo</i> organs during radio frequency thermal ablation by fiber Bragg gratings. Journal of Biomedical Optics, 2016, 21, 117003.	1.4	37
21	Sensitivity Enhancement in Long Period Gratings by Mode Transition in Uncoated Double Cladding Fibers. IEEE Sensors Journal, 2020, 20, 234-241.	2.4	37
22	Fabrication and Characterization of Long-Period Gratings in Hollow Core Fibers by Electric Arc Discharge. IEEE Sensors Journal, 2015, 15, 3014-3020.	2.4	36
23	Real-time analysis of arc-induced Long Period Gratings under gamma irradiation. Scientific Reports, 2017, 7, 43389.	1.6	35
24	Analysis and Design of Chirped Fiber Bragg Grating for Temperature Sensing for Possible Biomedical Applications. IEEE Photonics Journal, 2018, 10, 1-15.	1.0	35
25	Radiation Effects on Long Period Fiber Gratings: A Review. Sensors, 2020, 20, 2729.	2.1	35
26	A Novel Optochemical Sensor Based on SnO_2 Sensitive Thin Film for ppm Ammonia Detection in Liquid Environment. Journal of Lightwave Technology, 2006, 24, 5000-5007.	2.7	31
27	External Refractive Index Sensitivity of Weakly Tilted Fiber Bragg Gratings With Different Coating Thicknesses. IEEE Sensors Journal, 2008, 8, 1330-1336.	2.4	28
28	Arc-induced Long Period Gratings in standard and speciality optical fibers under mixed neutron-gamma irradiation. Scientific Reports, 2017, 7, 15845.	1.6	28
29	Arc-Induced Long Period Gratings in Erbium-Doped Fiber. IEEE Photonics Journal, 2019, 11, 1-8.	1.0	28
30	Sensing Characteristics of Arc-Induced Long Period Gratings in Polarization-Maintaining Panda Fiber. IEEE Sensors Journal, 2017, 17, 6953-6959.	2.4	27
31	Characterization of Early Age Curing and Shrinkage of Metakaolin-Based Inorganic Binders with Different Rheological Behavior by Fiber Bragg Grating Sensors. Materials, 2018, 11, 10.	1.3	27
32	Arc-Induced Long Period Gratings in Phosphorus-Doped Fiber. IEEE Photonics Technology Letters, 2017, 29, 611-614.	1.3	26
33	Comparative Investigation of Gamma Radiation Effects on Long Period Gratings and Optical Power in Different Optical Fibers. Journal of Lightwave Technology, 2019, 37, 4560-4566.	2.7	26
34	Long Period Gratings in unconventional fibers for possible use as radiation dosimeter in high-dose applications. Sensors and Actuators A: Physical, 2018, 271, 223-229.	2.0	25
35	Multipoint Temperature Monitoring of Microwave Thermal Ablation in Bones through Fiber Bragg Grating Sensor Arrays. Sensors, 2020, 20, 3200.	2.1	25
36	Comparative Study of Long-Period Gratings Written in Standard and Fluorine-Doped Fibers by Electric Arc Discharge. IEEE Sensors Journal, 2016, 16, 4265-4273.	2.4	24

#	ARTICLE	IF	CITATIONS
37	Thinned and micro-structured fibre Bragg gratings: towards new all-fibre high-sensitivity chemical sensors. <i>Journal of Optics</i> , 2005, 7, 734-741.	1.5	22
38	Continuously Variable Optical Delay Line Based on a Chirped Fiber Bragg Grating. <i>IEEE Photonics Technology Letters</i> , 2006, 18, 2551-2553.	1.3	22
39	Structured Chirped Fiber Bragg Gratings. <i>Journal of Lightwave Technology</i> , 2008, 26, 1613-1625.	2.7	22
40	Not-lithographic fabrication of micro-structured fiber Bragg gratings evanescent wave sensors. <i>Optics Express</i> , 2009, 17, 1042.	1.7	22
41	Chemical Detection in Water by Single-Walled Carbon Nanotubes-Based Optical Fiber Sensors. <i>IEEE Sensors Journal</i> , 2007, 7, 1004-1005.	2.4	21
42	Sensing Features of Long Period Gratings in Hollow Core Fibers. <i>Sensors</i> , 2015, 15, 8009-8019.	2.1	21
43	Fiber Optic Sensors-Based Thermal Analysis of Perfusion-Mediated Tissue Cooling in Liver Undergoing Laser Ablation. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1066-1073.	2.5	21
44	Fiber Bragg Grating Sensors for Temperature Monitoring During Thermal Ablation Procedure: Experimental Assessment of Artefact Caused by Respiratory Movements. <i>IEEE Sensors Journal</i> , 2021, 21, 13342-13349.	2.4	21
45	Tuning efficiency and sensitivity of guided resonances in photonic crystals and quasi-crystals: a comparative study. <i>Optics Express</i> , 2010, 18, 17280.	1.7	20
46	Self-Assembled Colloidal Photonic Crystal on the Fiber Optic Tip as a Sensing Probe. <i>IEEE Photonics Journal</i> , 2017, 9, 1-11.	1.0	20
47	Fiber Optic Probe Based on Self-Assembled Photonic Crystal for Relative Humidity Sensing. <i>Journal of Lightwave Technology</i> , 2019, 37, 4610-4618.	2.7	20
48	Experimental evidence of guided-resonances in photonic crystals with aperiodically ordered supercells. <i>Optics Letters</i> , 2010, 35, 3946.	1.7	17
49	Strain Monitoring of a Composite Drag Strut in Aircraft Landing Gear by Fiber Bragg Grating Sensors. <i>Sensors</i> , 2019, 19, 2239.	2.1	17
50	Study of Fiber Bragg Gratings Embedded in 3D-Printed Patches for Deformation Monitoring. <i>IEEE Sensors Journal</i> , 2020, 20, 13379-13386.	2.4	17
51	Photonic bandgap influence on the SERS effect in metal-dielectric colloidal crystals optical fiber probe. <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130149.	4.0	17
52	Novel Optochemical Sensors Based on Hollow Fibers and Single Walled Carbon Nanotubes. <i>IEEE Photonics Technology Letters</i> , 2006, 18, 2431-2433.	1.3	16
53	Deflection Monitoring of Bi-Dimensional Structures by Fiber Bragg Gratings Strain Sensors. <i>IEEE Sensors Journal</i> , 2019, 19, 4084-4092.	2.4	15
54	Investigation of the Heat Sink Effect During Microwave Ablation in Hepatic Tissue: Experimental and Numerical Analysis. <i>IEEE Sensors Journal</i> , 2021, 21, 22743-22751.	2.4	15

#	ARTICLE	IF	CITATIONS
55	3D Shape Sensing With FBG-Based Patch: From the Idea to the Device. IEEE Sensors Journal, 2022, 22, 1338-1345.	2.4	15
56	Guided resonances in photonic quasicrystals. Optics Express, 2009, 17, 6335-46.	1.7	15
57	The Odorant-Binding Protein from Canis familiaris: Purification, Characterization and New Perspectives in Biohazard Assessment. Protein and Peptide Letters, 2006, 13, 349-352.	0.4	14
58	Fast and slow light in optical fibers through tilted fiber Bragg gratings. Optics Express, 2009, 17, 23502.	1.7	14
59	Deflection Monitoring Method Using Fiber Bragg Gratings Applied to Tracking Particle Detectors. IEEE Photonics Journal, 2014, 6, 1-10.	1.0	14
60	Liquefied Petroleum Gas Monitoring System Based on Polystyrene Coated Long Period Grating. Sensors, 2018, 18, 1435.	2.1	14
61	Curvature Sensor Based on FBGs Embedded in 3D Printed Patches. IEEE Sensors Journal, 2021, 21, 17868-17874.	2.4	14
62	Multidimensional thermal mapping during radiofrequency ablation treatments with minimally invasive fiber optic sensors. Biomedical Optics Express, 2018, 9, 5891.	1.5	14
63	Design and analysis of an integrated antiresonant reflecting optical waveguide refractive-index sensor. Applied Optics, 2002, 41, 70.	2.1	13
64	Fiber Bragg Grating and Magnetic Shape Memory Alloy: Novel High-Sensitivity Magnetic Sensor. IEEE Sensors Journal, 2007, 7, 228-229.	2.4	13
65	Arc-Induced Long Period Gratings in Polarization-Maintaining Panda Fiber. IEEE Photonics Technology Letters, 2017, , 1-1.	1.3	13
66	The Impact of Gamma Irradiation on Optical Fibers Identified Using Long Period Gratings. Journal of Lightwave Technology, 2023, 41, 4389-4396.	2.7	13
67	Guided resonances in photonic crystals with point-defected aperiodically-ordered supercells. Optics Express, 2009, 17, 19586.	1.7	11
68	Time Delay Measurements as Promising Technique for Tilted Fiber Bragg Grating Sensors Interrogation. IEEE Photonics Technology Letters, 2009, 21, 1752-1754.	1.3	8
69	Fiber Bragg Grating Sensors for Real Time Monitoring of Early Age Curing and Shrinkage of Different Metakaolin-Based Inorganic Binders. IEEE Sensors Journal, 2019, 19, 6173-6180.	2.4	8
70	Self Assembling and Coordination of Water Nano-Layers On Polymer Coated Long Period Gratings: Toward New Perspectives for Cation Detection. Soft Materials, 2011, 9, 238-263.	0.8	7
71	Fiber Bragg Grating for Temperature Monitoring During Medical Radiofrequency Treatments. Procedia Engineering, 2016, 168, 1308-1311.	1.2	7
72	Power semiconductor laser diode arrays characterization. Optics and Lasers in Engineering, 2003, 39, 203-217.	2.0	5

#	ARTICLE	IF	CITATIONS
73	Long Period Gratings in New Generation Optical Fibers. , 2012, , .		5
74	Fiber Bragg grating sensors as a tool to evaluate the influence of filler on shrinkage of geopolymer matrices. Proceedings of SPIE, 2015, , .	0.8	4
75	<title>ARROW waveguides-based refractometer for chemical and biochemical sensing application</title>. , 2002, 4578, 454.		3
76	Odor binding protein as probe for a refractive index-based biosensor: new perspectives in biohazard assessment. , 2004, 5321, 258.		3
77	Single and Multiple Phase Shifts Tilted Fiber Bragg Gratings. Research Letters in Optics, 2009, 2009, 1-4.	0.5	3
78	Parametric study of guided resonances in octagonal photonic quasicrystals. Microwave and Optical Technology Letters, 2009, 51, 2737-2740.	0.9	3
79	Design and analysis of photonic quasi-crystal hollow core fibers. Proceedings of SPIE, 2013, , .	0.8	3
80	Strain measurements of a multilayer panel via Fiber Bragg gratings as novel approach for deflection monitoring of tracking particle detectors. Proceedings of SPIE, 2015, , .	0.8	3
81	Influence of Period on Surrounding Refractive Index Sensitivity of Arc-induced Long Period Gratings. Procedia Engineering, 2016, 168, 999-1002.	1.2	3
82	Temperature monitoring during thermal ablation on ex-vivo organs by Fiber Bragg gratings. , 2016, , .		3
83	Long period gratings written in fluorine-doped fibers by electric arc discharge technique. , 2016, , .		3
84	Measurements of temperature during thermal ablation treatments on ex vivo liver tissue using fiber Bragg grating sensors. , 2017, , .		3
85	A New Setup for Real-Time Investigations of Optical Fiber Sensors Subjected to Gamma-Rays: Case Study on Long Period Gratings. Sensors, 2020, 20, 4129.	2.1	3
86	Fiber Bragg Gratings strain sensors for deflection estimation of a two-dimensional structure. , 2019, , .		3
87	Miniaturized fiber optic probe based on colloid crystals of hydrogel coated nanoparticles for relative humidity measurements. , 2018, , .		3
88	Fiber Bragg Grating Evanescent Wave Sensors for Chemical and Biological Applications. , 2011, , 238-269.		3
89	Gamma radiation effects on Long Period Gratings and transmitted power in different optical fibers: towards dosimetry applications. , 2018, , .		3
90	Temperature and strain characterization of long period gratings in air guiding fiber. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
91	Measurement of temperature and early age shrinkage of alkali activated metakaolin using fiber Bragg grating sensors. , 2014, , .		2
92	FBG sensors for deformation monitoring of a tracking particle detector: preliminary results. Proceedings of SPIE, 2014, , .	0.8	2
93	Fiber Bragg Grating strain sensors for tracking particle detector. , 2014, , .		2
94	Characterization of Long Period Gratings in hollow core fiber fabricated via Electrode Arc Discharge. , 2014, , .		2
95	Fabrication of arc-induced long-period gratings in different silica fibers. Proceedings of SPIE, 2017, , .	0.8	2
96	Real-time temperature monitoring during radiofrequency treatments on ex-vivo animal model by fiber Bragg grating sensors. Proceedings of SPIE, 2017, , .	0.8	2
97	Temperature Monitoring during Radio Frequency Thermal Ablation Treatment on Ex Vivo perfused organ by Fiber Bragg Grating Sensors. , 2018, , .		2
98	Temperature Monitoring During Microwave Thermal Ablation of Ex Vivo Bovine Bone: a Pilot Test. , 2020, , .		2
99	Fiber optic biosensor for inflammatory markers based on long period grating. , 2020, , .		2
100	Temperature Monitoring by Fiber Bragg Gratings during Microwave Ablation of Ex Vivo Organs for Heat Sink Effect Assessment. , 2021, , .		2
101	Fabrication and characterization of long period gratings in pure-silica fibers. , 2019, , .		2
102	A New Orbiting Deployable System for Small Satellite Observations for Ecology and Earth Observation. Remote Sensing, 2022, 14, 2066.	1.8	2
103	High sensitivity magnetic sensor by using fiber Bragg grating bonded to magnetic shape memory alloys. , 2005, , .		1
104	Ammonia detection in water with a tin dioxide based optical sensor. , 2005, , .		1
105	Permanently bent single mode optical fiber as novel evanescent wave sensor. , 2010, , .		1
106	Long Period Grating in hollow core fibers: Fabrication and characterization. , 2011, , .		1
107	Sensing characteristics of long period gratings in hollow core fiber fabricated via electrode arc discharge. Proceedings of SPIE, 2014, , .	0.8	1
108	A simple Fabry-Perot pressure sensor fabricated on fiber optic tip. Proceedings of SPIE, 2016, , .	0.8	1

#	ARTICLE	IF	CITATIONS
109	Arc-Induced Long Period Gratings: Analysis of the Fabrication Parameters on the Surrounding Refractive Index Sensitivity. Springer Proceedings in Physics, 2017, , 355-360.	0.1	1
110	Sensing Features of Arc-induced Long Period Gratings. Proceedings (mdpi), 2019, 15, .	0.2	1
111	Evaluation of the Thermal Response of Liver Tissue Undergoing Microwave Treatment by Means of Fiber Bragg Grating Sensors. , 2020, , .		1
112	Long Period Fiber Grating Sensors Fabricated by Electric Arc Discharge Technique. Lecture Notes in Electrical Engineering, 2020, , 395-402.	0.3	1
113	FBGs in 3D printed objects monitoring. , 2021, , .		1
114	Metallic-Dielectric colloidal photonic crystal on the multimode optical fiber tip: preliminary results as optical fiber SERS probe. , 2019, , .		1
115	Response of long period gratings to gamma and neutron-gamma radiations. , 2019, , .		1
116	Optical fiber SERS probe achieved by colloidal photonic crystal and gold nano-particles. , 2019, , .		1
117	Fabrication and characterization of arc-induced long period gratings in optical fibers with micro-channels. , 2020, , .		1
118	Fiber optic biosensor based on long period grating for the detection of vitamin D. , 2021, , .		1
119	Electrically tunable true time delay line based on a chirped fiber Bragg grating. Proceedings of SPIE, 2006, , .	0.8	0
120	Hollow-core optical fiber functionalized with single walled carbon nanotubes for VOC detection. Proceedings of SPIE, 2007, , .	0.8	0
121	Development of a platform for biochemical sensing based on overlaid Long Period Gratings working in transition. , 2009, , .		0
122	OUT-OF-PLANE PROPAGATION IN PHOTONIC QUASI-CRYSTALS: GUIDED RESONANCES. , 2011, , 75-111.		0
123	Strain and bending monitoring of a particle detector using Fiber Bragg Grating sensors. , 2014, , .		0
124	Sensing characteristics of Long Period Gratings in air-core photonic bandgap fibers. , 2014, , .		0
125	Modified electric arc discharge technique for fabrication of long period gratings in air-core fibers: Effect of air pressure inside fiber holes. , 2015, , .		0
126	Multi-parameter Sensor Based on Long Period Grating in Polarization-maintaining Panda Fiber. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
127	Relative Humidity Sensor Based on Tip of Multimode Optical Fiber Integrated with Photonic Crystal of Hydrogel Coated Polystyrene Nanoparticles. Lecture Notes in Electrical Engineering, 2020, , 403-408.	0.3	0
128	Two-Dimensional Deflection Maps by Using Fiber Bragg Grating Sensors. Lecture Notes in Civil Engineering, 2021, , 507-514.	0.3	0
129	Photonic Bandgap Engineering in FBCs by Post Processing Fabrication Technique. , 2011, , 53-77.		0
130	High Spatial Resolution Fiber Optic Sensors and Their Impact in Biomedical Measurements and Diagnostic. , 2018, , .		0
131	Long Period Grating in Panda fiber fabricated by Electric Arc Discharge technique as multi-parametric sensing device. , 2018, , .		0
132	Deflection monitoring method for two-dimensional structure based on fiber Bragg grating sensors measurements. , 2019, , .		0
133	Mode transition in uncoated long period gratings. , 2019, , .		0
134	Graphene oxide-functionalized long period grating for biosensing applications. , 2019, , .		0
135	Optical Fiber Tip Functionalized by Colloidal Photonic Crystal and Gold Nano-Particles for SERS Sensing. , 2020, , .		0
136	Long period grating coated with graphene oxide as platform for optical fiber biosensors. , 2021, , .		0
137	Fiber Bragg gratings embedded in 3D-printed patches for sensitivity enhancement of deformation monitoring. , 2020, , .		0
138	Novel Long Period Gratings in Channeled Optical Fibers. , 2020, , .		0