

Francesco Chiavaioli

List of Publications by Year in descending order

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67
papers

2,079
citations

257450

24
h-index

330143

37
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72
all docs

72
docs citations

72
times ranked

1437
citing authors

#	ARTICLE	IF	CITATIONS
1	Discriminating Bulk and Surface Refractive Index Changes With Fiber-Tip Leaky Mode Resonance. Journal of Lightwave Technology, 2023, 41, 4341-4351.	4.6	6
2	Spectral Ghost Imaging for Ultrafast Spectroscopy. IEEE Photonics Journal, 2022, 14, 1-4.	2.0	5
3	Ultrahigh Sensitive Detection of Tau Protein as Alzheimer's Biomarker via Microfluidics and Nanofunctionalized Optical Fiber Sensors. Advanced Photonics Research, 2022, 3, .	3.6	28
4	In-fiber comb-like linear polarizer with leaky mode resonances. Optics and Laser Technology, 2021, 133, 106518.	4.6	6
5	Long period grating in double cladding fiber coated with graphene oxide as high-performance optical platform for biosensing. Biosensors and Bioelectronics, 2021, 172, 112747.	10.1	100
6	Plasmonic Fiber Grating Biosensors Demodulated Through Spectral Envelopes Intersection. Journal of Lightwave Technology, 2021, 39, 7288-7295.	4.6	38
7	Fiber Optic Sensing With Lossy Mode Resonances: Applications and Perspectives. Journal of Lightwave Technology, 2021, 39, 3855-3870.	4.6	53
8	Sensing Performance of Fiber-Optic Combs Tuned by Nanometric Films: New Insights and Limits. IEEE Sensors Journal, 2021, 21, 13305-13315.	4.7	19
9	(INVITED)Nanocoated fiber label-free biosensing for perfluorooctanoic acid detection by lossy mode resonance. Results in Optics, 2021, 5, 100123.	2.0	33
10	Fiber Optic Sensing and Biosensing: New Challenges and Perspectives. , 2021, , .		0
11	Long period grating coated with graphene oxide as platform for optical fiber biosensors. , 2021, , .		0
12	Recent Development of Resonance-Based Optical Sensors and Biosensors. Optics, 2020, 1, 255-258.	1.2	13
13	Fiber optic biosensor for inflammatory markers based on long period grating. , 2020, , .		2
14	Lossy Mode Resonance Excitation in Fiber-Optics: Applications in Biosensing. , 2020, , .		0
15	Optimization of optical fiber long period gratings for biosensing applications. , 2020, , .		0
16	Lossy Mode Resonance Sensors based on Tungsten Oxide Thin Films. , 2020, , .		4
17	Plasmonic Fiber-Optic Photothermal Anemometers With Carbon Nanotube Coatings. Journal of Lightwave Technology, 2019, 37, 3373-3380.	4.6	43
18	Fiber-based early diagnosis of venous thromboembolic disease by label-free D-dimer detection. Biosensors and Bioelectronics: X, 2019, 2, 100026.	1.7	37

#	ARTICLE	IF	CITATIONS
19	Lossy Mode Resonance Fiber-Optic Biosensing Allowing Ultra-Low Detection Limit. , 2019, , .		1
20	Passive and active whispering gallery mode microresonators in optical engineering. , 2019, , .		0
21	Photothermal anemometer based on carbon nanotube-coated highly tilted fiber Bragg grating-assisted SPR sensor. , 2019, , .		1
22	Fiber-optics: a new route towards ultra-low detection limit label-free biosensing. , 2019, , .		0
23	Femtomolar Detection by Nanocoated Fiber Label-Free Biosensors. ACS Sensors, 2018, 3, 936-943.	7.8	193
24	Optimized Strain Long-Period Fiber Grating (LPFG) Sensors Operating at the Dispersion Turning Point. Journal of Lightwave Technology, 2018, 36, 2240-2247.	4.6	40
25	Optical coupling of spherical microresonators with tapered fibers for chemical/biomedical applications. , 2018, , .		0
26	Real-Time Study of the Adsorption and Grafting Process of Biomolecules by Means of Bloch Surface Wave Biosensors. ACS Applied Materials & Interfaces, 2018, 10, 33611-33618.	8.0	20
27	Long Period Grating-Based Fiber Coupling to WGM Microresonators. Micromachines, 2018, 9, 366.	2.9	18
28	Ultra-low detection limit lossy mode resonance-based fibre-optic biosensor. , 2018, , .		0
29	Random Long Period Fiber Gratings: Spectral Features and Perspectives. , 2018, , .		0
30	The light at the service of medicine: optical sensing beside the patient's bed (Conference Presentation). , 2017, , .		0
31	Biosensing with optical fiber gratings. Nanophotonics, 2017, 6, 663-679.	6.0	224
32	Optical sensing in POCT: the contribution of the Institute of Applied Physics of the Italian CNR. Laboratoriums Medizin, 2017, 41, .	0.6	4
33	Design, fabrication and characterisation of silica-titania thin film coated over coupled long period fibre gratings: Towards bio-sensing applications. Sensors and Actuators B: Chemical, 2017, 253, 418-427.	7.8	39
34	Design of microspheres and microbubbles for environmental chemical/biological optical sensing. , 2017, , .		0
35	Long-period fiber grating: a specific design for biosensing applications. Applied Optics, 2017, 56, 9846.	1.8	38
36	Towards a Uniform Metrological Assessment of Grating-Based Optical Fiber Sensors: From Refractometers to Biosensors. Biosensors, 2017, 7, 23.	4.7	281

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37	Microspheres and microbubbles for chemical and biomedicine optical sensing. , 2017, , .		0
38	Manufacturing and Spectral Features of Different Types of Long Period Fiber Gratings: Phase-Shifted, Turn-Around Point, Internally Tilted, and Pseudo-Random. <i>Fibers</i> , 2017, 5, 29.	4.0	13
39	A Complete Optical Sensor System Based on a POF-SPR Platform and a Thermo-Stabilized Flow Cell for Biochemical Applications. <i>Sensors</i> , 2016, 16, 196.	3.8	23
40	SPR-based plastic optical fibre biosensor for the detection of C-reactive protein in serum. <i>Journal of Biophotonics</i> , 2016, 9, 1077-1084.	2.3	73
41	A thermo-stabilized flow cell for surface plasmon resonance sensors in D-shaped plastic optical fibers. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
42	Effect of induced inner curvature on refractive index sensitivity in internally tilted long-period gratings. <i>Optics Letters</i> , 2016, 41, 1443.	3.3	34
43	Long period gratings based frequency selective interrogation of micro-resonators along the same fiber. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
44	Comparative assessment of the performance of long period fiber grating-based biosensors. , 2015, , .		0
45	Solâ€“Gel-Based Titaniaâ€“Silica Thin Film Overlay for Long Period Fiber Grating-Based Biosensors. <i>Analytical Chemistry</i> , 2015, 87, 12024-12031.	6.5	102
46	Label-free IgG/anti-IgG biosensing based on long period fiber gratings: a comprehensive feasibility study. , 2015, , .		4
47	Quasi-distributed and wavelength selective addressing of optical micro-resonators based on long period fiber gratings. <i>Optics Express</i> , 2015, 23, 21175.	3.4	37
48	Cladding modes fiber coupling to silica micro-resonators based on long period gratings. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1
49	Optical heterogeneous bioassay for the detection of the inflammatory biomarker suPAR. , 2015, , .		1
50	High-Performance Label-Free Biosensing by Long Period Gratings. , 2015, , .		1
51	Long period grating-based fiber coupler to whispering gallery mode resonators. <i>Optics Letters</i> , 2014, 39, 6525.	3.3	39
52	IgG/anti-IgG immunoassay based on a turn-around point long period grating. , 2014, , .		1
53	Characterisation of a labelâ€“free biosensor based on long period grating. <i>Journal of Biophotonics</i> , 2014, 7, 312-322.	2.3	36
54	Coupling light to whispering gallery mode resonators. <i>Proceedings of SPIE</i> , 2014, , .	0.8	7

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55	Improvement in refractive index sensitivity by means of internally curved long period fiber gratings. Proceedings of SPIE, 2014, , .	0.8	0
56	Towards sensitive label-free immunosensing by means of turn-around point long period fiber gratings. Biosensors and Bioelectronics, 2014, 60, 305-310.	10.1	92
57	Thermostated Flow Cell and Hybrid LPG-FBG Configuration for Accurate Measurement of Refractive Index. Lecture Notes in Electrical Engineering, 2014, , 327-331.	0.4	0
58	Label-Free Biosensor Based on Copolymer-Functionalized Optical Fiber Long-Period Grating. Lecture Notes in Electrical Engineering, 2014, , 199-203.	0.4	0
59	Label-free biosensor based on long period grating. , 2013, , .		0
60	Specially designed long period grating with internal geometric bending for enhanced refractive index sensitivity. Applied Physics Letters, 2013, 102, .	3.3	44
61	Miniaturised optical fiber pH sensor for gastro-esophageal applications. Proceedings of SPIE, 2013, , .	0.8	0
62	Giant sensitivity of long period gratings in transition mode near the dispersion turning point: an integrated design approach. Optics Letters, 2012, 37, 4152.	3.3	126
63	Optical fibre gratings as tools for chemical and biochemical sensing. Analytical and Bioanalytical Chemistry, 2012, 402, 109-116.	3.7	135
64	Flow cell with hybrid LPG and FBG optical fibre sensor for refractometric measurements. , 2011, , .		0
65	Long period and fiber Bragg gratings written within the same fiber for sensing purposes. , 2011, , .		2
66	Flow cell for strain- and temperature-compensated refractive index measurements by means of cascaded optical fibre long period and Bragg gratings. Measurement Science and Technology, 2011, 22, 075204.	2.6	60
67	A Laboratory Impedance Meter For Electrochemical Sensors. , 2009, , .		0