Nunzio Cennamo

List of Publications by Year
in descending order

142	2,714	218677	197818
papers	citations	26 h-index	49 g-index

145	145	145	1874
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Low Cost Sensors Based on SPR in a Plastic Optical Fiber for Biosensor Implementation. Sensors, 2011, 11, 11752-11760.	3.8	261
2	High selectivity and sensitivity sensor based on MIP and SPR in tapered plastic optical fibers for the detection of l-nicotine. Sensors and Actuators B: Chemical, 2014, 191, 529-536.	7.8	168
3	Sensors based on surface plasmon resonance in a plastic optical fiber for the detection of trinitrotoluene. Sensors and Actuators B: Chemical, 2013, 188, 221-226.	7.8	119
4	An easy way to realize SPR aptasensor: A multimode plastic optical fiber platform for cancer biomarkers detection. Talanta, 2015, 140, 88-95.	5.5	102
5	Performance Comparison of Two Sensors Based on Surface Plasmon Resonance in a Plastic Optical Fiber. Sensors, 2013, 13, 721-735.	3.8	98
6	SARS-CoV-2 spike protein detection through a plasmonic D-shaped plastic optical fiber aptasensor. Talanta, 2021, 233, 122532.	5.5	91
7	An innovative plastic optical fiber-based biosensor for new bio/applications. The case of celiac disease. Sensors and Actuators B: Chemical, 2013, 176, 1008-1014.	7.8	85
8	A portable optical-fibre-based surface plasmon resonance biosensor for the detection of therapeutic antibodies in human serum. Scientific Reports, 2020, 10, 11154.	3.3	82
9	SPR-based plastic optical fibre biosensor for the detection of C-reactive protein in serum. Journal of Biophotonics, 2016, 9, 1077-1084.	2.3	73
10	Proof of Concept for a Quick and Highly Sensitive On-Site Detection of SARS-CoV-2 by Plasmonic Optical Fibers and Molecularly Imprinted Polymers. Sensors, 2021, 21, 1681.	3.8	70
11	A Molecularly Imprinted Polymer on a Plasmonic Plastic Optical Fiber to Detect Perfluorinated Compounds in Water. Sensors, 2018, 18, 1836.	3.8	69
12	Monitoring of Low Levels of Furfural in Power Transformer Oil with a Sensor System Based on a POF-MIP Platform. Sensors, 2015, 15, 8499-8511.	3.8	66
13	Sensitive detection of 2,4,6-trinitrotoluene by tridimensional monitoring of molecularly imprinted polymer with optical fiber and five-branched gold nanostars. Sensors and Actuators B: Chemical, 2015, 208, 291-298.	7.8	63
14	Localized Surface Plasmon Resonance with Five-Branched Gold Nanostars in a Plastic Optical Fiber for Bio-Chemical Sensor Implementation. Sensors, 2013, 13, 14676-14686.	3.8	62
15	A review on simple and highly sensitive plastic optical fiber probes for bio-chemical sensing. Sensors and Actuators B: Chemical, 2021, 331, 129393.	7.8	61
16	Refractive Index Sensing with D-Shaped Plastic Optical Fibers for Chemical and Biochemical Applications. Sensors, 2016, 16, 2119.	3.8	59
17	A High Sensitivity Biosensor to detect the presence of perfluorinated compounds in environment. Talanta, 2018, 178, 955-961.	5.5	57
18	Markers Detection in Transformer Oil by Plasmonic Chemical Sensor System Based on POF and MIPs. IEEE Sensors Journal, 2016, 16, 7663-7670.	4.7	56

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19	A Simple Small Size and Low Cost Sensor Based on Surface Plasmon Resonance for Selective Detection of Fe(III). Sensors, 2014, 14, 4657-4671.	3.8	51
20	D-shaped plastic optical fibre aptasensor for fast thrombin detection in nanomolar range. Scientific Reports, 2019, 9, 18740.	3.3	43
21	A Simple and Low-Cost Optical Fiber Intensity-Based Configuration for Perfluorinated Compounds in Water Solution. Sensors, 2018, 18, 3009.	3.8	38
22	Planar Waveguides for Fluorescence-Based Biosensing: Optimization and Analysis. IEEE Sensors Journal, 2006, 6, 1218-1226.	4.7	37
23	SPR-Optical Fiber-Molecularly Imprinted Polymer Sensor for the Detection of Furfural in Wine. Biosensors, 2021, 11, 72.	4.7	37
24	An Optical Fiber Chemical Sensor for the Detection of Copper(II) in Drinking Water. Sensors, 2019, 19, 5246.	3.8	34
25	SPR Sensor Platform Based on a Novel Metal Bilayer Applied on Dâ€“Shaped Plastic Optical Fibers for Refractive Index Measurements in the Range 1.38â€“1.42. IEEE Sensors Journal, 2016, 16, 4822-4827.	4.7	31
26	D-Shaped POF Sensors for Refractive Index Sensingâ€”The Importance of Surface Roughness. Sensors, 2019, 19, 2476.	3.8	30
27	Automatic traffic monitoring by Ï•-OTDR data and Hough transform in a real-field environment. Applied Optics, 2021, 60, 3579.	1.8	26
28	Slab Waveguide and Optical Fibers for Novel Plasmonic Sensor Configurations. Sensors, 2017, 17, 1488.	3.8	25
29	Detection of naphthalene in sea-water by a label-free plasmonic optical fiber biosensor. Talanta, 2019, 194, 289-297.	5.5	25
30	Easy to Use Plastic Optical Fiber-Based Biosensor for Detection of Butanal. PLoS ONE, 2015, 10, e0116770.	2.5	23
31	A Complete Optical Sensor System Based on a POF-SPR Platform and a Thermo-Stabilized Flow Cell for Biochemical Applications. Sensors, 2016, 16, 196.	3.8	23
32	Intensity-based plastic optical fiber sensor with molecularly imprinted polymer sensitive layer. Sensors and Actuators B: Chemical, 2017, 241, 534-540.	7.8	23
33	Refractive Index Sensing through Surface Plasmon Resonance in Light-Diffusing Fibers. Applied Sciences (Switzerland), 2018, 8, 1172.	2.5	23
34	Experimental Characterization of Plasmonic Sensors Based on Lab-Built Tapered Plastic Optical Fibers. Applied Sciences (Switzerland), 2020, 10, 4389.	2.5	22
35	D-galactose/D-glucose-binding Protein from Escherichia coli as Probe for a Non-consuming Glucose Implantable Fluorescence Biosensor. Sensors, 2007, 7, 2484-2491.	3.8	21
36	High quality factor HTS Josephson junctions on low loss substrates. Superconductor Science and Technology, 2011, 24, 045008.	3.5	21

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37	[INVITED] Slab plasmonic platforms combined with Plastic Optical Fibers and Molecularly Imprinted Polymers for chemical sensing. Optics and Laser Technology, 2018, 107, 484-490.	4.6	21
38	A Novel Sensing Methodology to Detect Furfural in Water, Exploiting MIPs, and Inkjet-Printed Optical Waveguides. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 1582-1589.	4.7	21
39	Deformable molecularly imprinted nanogels permit sensitivity-gain in plasmonic sensing. Biosensors and Bioelectronics, 2020, 156, 112126.	10.1	21
40	A Magnetic Field Sensor Based on SPR-POF Platforms and Ferrofluids. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	21
41	Modal Filtering for Optimized Surface Plasmon Resonance Sensing in Multimode Plastic Optical Fibers. IEEE Sensors Journal, 2015, 15, 6306-6312.	4.7	19
42	Plasmonic Sensing in D-Shaped POFs With Fluorescent Optical Fibers as Light Sources. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 754-759.	4.7	19
43	Microstructured Surface Plasmon Resonance Sensor Based on Inkjet 3D Printing Using Photocurable Resins with Tailored Refractive Index. Polymers, 2021, 13, 2518.	4.5	19
44	Sensing by Molecularly Imprinted Polymer: Evaluation of the Binding Properties with Different Techniques. Sensors, 2019, 19, 1344.	3.8	17
45	An Eco-Friendly Disposable Plasmonic Sensor Based on Bacterial Cellulose and Gold. Sensors, 2019, 19, 4894.	3.8	16
46	Biosensors exploiting unconventional platforms: The case of plasmonic light-diffusing fibers. Sensors and Actuators B: Chemical, 2021, 337, 129771.	7.8	16
47	Biochemical sensing exploiting plasmonic sensors based on gold nanogratings and polymer optical fibers. Photonics Research, 2021, 9, 1397.	7.0	16
48	Bovine Serum Albumin Protein Detection by a Removable SPR Chip Combined with a Specific MIP Receptor. Chemosensors, 2021, 9, 218.	3.6	16
49	Hybrid Brillouin/Rayleigh sensor for multiparameter measurements in optical fibers. Optics Express, 2021, 29, 24025.	3.4	15
50	The Odorant-Binding Protein from Canis familiaris: Purification, Characterization and New Perspectives in Biohazard Assessment. Protein and Peptide Letters, 2006, 13, 349-352.	0.9	14
51	A Surface Plasmon Resonance Plastic Optical Fiber Biosensor for the Detection of Pancreatic Amylase in Surgically-Placed Drain Effluent. Sensors, 2021, 21, 3443.	3.8	14
52	A Novel Approach to Realizing Low-Cost Plasmonic Optical Fiber Sensors: Light-Diffusing Fibers Covered by Thin Metal Films. Fibers, 2019, 7, 34.	4.0	13
53	Exploiting Plasmonic Phenomena in Polymer Optical Fibers to Realize a Force Sensor. Sensors, 2022, 22, 2391.	3.8	13
54	A Plasmonic Biosensor Based on Light-Diffusing Fibers Functionalized with Molecularly Imprinted Nanoparticles for Ultralow Sensing of Proteins. Nanomaterials, 2022, 12, 1400.	4.1	12

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55	Towards the development of cascaded surface plasmon resonance POF sensors exploiting gold films and synthetic recognition elements for detection of contaminants in transformer oil. Sensing and Bio-Sensing Research, 2017, 13, 128-135.	4.2	11
56	Polymer Optical Fibers for Sensing. Macromolecular Symposia, 2020, 389, 1900074.	0.7	11
57	A Simple and Efficient Plasmonic Sensor in Light Diffusive Polymer Fibers. IEEE Sensors Journal, 2021, 21, 16054-16060.	4.7	11
58	On the Effect of Soft Molecularly Imprinted Nanoparticles Receptors Combined to Nanoplasmonic Probes for Biomedical Applications. Frontiers in Bioengineering and Biotechnology, 2021, 9, 801489.	4.1	11
59	Flexible and Ultrathin Metal-Oxide Films for Multiresonance-Based Sensors in Plastic Optical Fibers. ACS Applied Nano Materials, 2021, 4, 10902-10910.	5.0	10
60	Toward Smart Selective Sensors Exploiting a Novel Approach to Connect Optical Fiber Biosensors in Internet. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8009-8019.	4.7	9
61	Measurement of MIPs Responses Deposited on Two SPR-POF Sensors Realized by Different Photoresist Buffer Layers. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1464-1473.	4.7	9
62	(INVITED)Quantitative detection of SARS-CoV-2 virions in aqueous mediums by IoT optical fiber sensors. Results in Optics, 2021, 5, 100177.	2.0	9
63	A Nanoplasmonic-Based Biosensing Approach for Wide-Range and Highly Sensitive Detection of Chemicals. Nanomaterials, 2021, 11, 1961.	4.1	8
64	Water monitoring in smart cities exploiting plastic optical fibers and molecularly imprinted polymers. The case of PFBS detection. , 2019, , .		7
65	Effects of Magnetic Stimulation on Dental Implant Osseointegration: A Scoping Review. Applied Sciences (Switzerland), 2022, 12, 4496.	2.5	7
66	Design of Surface Plasmon Resonance Sensor in Plastic Optical Fibers Based on Nano-antenna Arrays. Procedia Engineering, 2016, 168, 880-883.	1.2	6
67	Detection of trinitrotoluene based on SPR in molecularly imprinted polymer on plastic optical fiber. Proceedings of SPIE, 2013, , .	0.8	5
68	Bio and Chemical Sensors Based on Surface Plasmon Resonance in a Plastic Optical Fiber. , 2014, , .		5
69	A simple Arduino-based configuration for SPR sensors in plastic optical fibers. , 2015, , .		5
70	Comparison of different photoresist buffer layers in SPR sensors based on D-shaped POF and gold film. , 2017, , .		5
71	Frequency dielectric spectroscopy and an innovative optical sensor to assess oil-paper degradation. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 1728-1735.	2.9	5
72	Distributed Static and Dynamic Strain Measurements in Polymer Optical Fibers by Rayleigh Scattering. Sensors, 2021, 21, 5049.	3.8	5

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73	Chemical and Biological Applications Based on Plasmonic Optical Fiber Sensors. IEEE Instrumentation and Measurement Magazine, 2021, 24, 50-55.	1.6	5
74	Molecularly Imprinted Polymers and Optical Fiber Sensors for Security Applications. Springer Proceedings in Materials, 2020, , 17-24.	0.3	5
75	Combined Molecularly Imprinted Polymer and Surface Plasmon Resonance Transduction in Plastic Optical Fiber for Monitoring Oil-filled Power Transformers. Procedia Engineering, 2014, 87, 532-535.	1.2	4
76	Optimization of an Evanescent Field Sensor based on D-Shaped Plastic Optical Fiber for Chemical and Biochemical Sensing. Procedia Engineering, 2016, 168, 810-813.	1.2	4
77	An optical temperature sensor based on silicone and plastic optical fibers for biomedical applications. , 2017, , .		4
78	A C-OTDR Sensor for Liquid Detection Based on Optically Heated Co²⁺-Doped Fibers. IEEE Sensors Journal, 2020, 20, 10154-10158.	4.7	4
79	Green LSPR Sensors Based on Thin Bacterial Cellulose Waveguides for Disposable Biosensor Implementation. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	4
80	The Role of Tapered Light-Diffusing Fibers in Plasmonic Sensor Configurations. Sensors, 2021, 21, 6333.	3.8	4
81	A Review of Apta-POF-Sensors: The Successful Coupling between Aptamers and Plastic Optical Fibers for Biosensing Applications. Applied Sciences (Switzerland), 2022, 12, 4584.	2.5	4
82	A Temperature Sensor Exploiting Plasmonic Phenomena Changes in Multimode POFs. IEEE Sensors Journal, 2022, 22, 12900-12905.	4.7	4
83	Odor binding protein as probe for a refractive index-based biosensor: new perspectives in biohazard assessment. , 2004, 5321, 258.		3
84	Surface plasmon resonance in a D-shaped plastic optical fibre: Influence of gold layer thickness in monitoring molecularly imprinted polymers. , 2016, , .		3
85	SPR based hybrid electro-optic biosensor platform: SPR-cell with side emitting plastic optical fiber. , 2017, , .		3
86	Towards Plastic Optical Fiber Magnetic Field Sensors exploiting Magnetic Fluids and Multimode SPR-POF platforms. , 2020, , .		3
87	SPR based hybrid electro-optic biosensor for Î²-lactam antibiotics determination in water. , 2017, , .		3
88	A Molecularly Imprinted Polymer Based SPR Sensor for 2-Furaldehyde Determination in Oil Matrices. Applied Sciences (Switzerland), 2021, 11, 10390.	2.5	3
89	Optical chemical sensor for oil-filled power transformer. , 2014, , .		2
90	Experimental results for characterization of a tapered plastic optical fiber sensor based on SPR. Proceedings of SPIE, 2015, , .	0.8	2

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91	An optical platform for furfural detection in trasformer oil. , 2015, , .		2
92	Augmented workplace for SPR sensor application. , 2016, , .		2
93	A novel chemical optical sensor based on molecularly imprinted polymer, optical fibers and inkjet printing technology. , 2018, , .		2
94	Optical chemical fiber sensor for the detection of perfluorinated compounds in water. , 2018, , .		2
95	A Green Slab Waveguide for Plasmonic Sensors Based on Bacterial Cellulose. Proceedings (mdpi), 2019, 15, 36.	0.2	2
96	Molecularly Imprinted Polymers and Inkjet-Printer technology to develop Optical-Chemical Sensors. , 2022, , .		2
97	Optimal Design of D-Type Plastic Fibers for Best Sensitivity of SPR Sensors. Advanced Engineering Forum, 2013, 8-9, 563-573.	0.3	1
98	SPR sensors in POF: a new experimental configuration for extended refractive index range and better SNR. , 2014, , .		1
99	Chemical sensors based on SPR in a Plastic Optical Fiber: Simultaneous detection of Fe(III) and Cu(II). , 2014, , .		1
100	Environmental characterization of an optical trigger for MV electric board. , 2014, , .		1
101	Novel Optical Chemical Sensor Based on Molecularly Imprinted Polymer Inside a Trench Micro-machined in Double Plastic Optical Fiber. Procedia Engineering, 2016, 168, 363-366.	1.2	1
102	Refractometers for different refractive index range by surface plasmon resonance sensors in multimode optical fibers with different metals. Proceedings of SPIE, 2016, , .	0.8	1
103	Chemical Sensors Based on Surface Plasmon Resonance in a Plastic Optical Fiber for Multianalyte Detection in Oil-Filled Power Transformer. Lecture Notes in Electrical Engineering, 2018, , 128-134.	0.4	1
104	Plasmonic Chemical and Biological Sensors based on plastic optical fibers. , 2018, , .		1
105	Sensing of Copper(II) by Immobilized Ligands: Comparison of Electrochemical and Surface Plasmon Resonance Transduction. Proceedings (mdpi), 2019, 15, .	0.2	1
106	Toward an optical monitoring of chemical markers in transformers insulating oil. , 2019, , .		1
107	Effect of the photoresist aging in D-shaped POF SPR Sensors for biochemical applications. , 2019, , .		1
108	Novel Approaches to Realize Plasmonic Intrinsic and Extrinsic Optical Fiber Sensors with High Sensitivity. , 2019, , .		1

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109	Sensing of Furfural by Molecularly Imprinted Polymers on Plasmonic and Electrochemical Platforms. Proceedings (mdpi), 2019, 15, 48.	0.2	1
110	An LSPR Sensor based on a thin slab waveguide of bacterial cellulose. , 2020, , .		1
111	Optical Measurements. IEEE Instrumentation and Measurement Magazine, 2021, 24, 3-4.	1.6	1
112	Extrinsic plasmonic optical fiber sensors based on POFs and bacterial cellulose slab waveguides. , 2019, , .		1
113	Sensing platforms exploiting surface plasmon resonance in polymeric optical fibers for chemical and biochemical applications. , 2015, , .		1
114	Environmental Monitoring Exploiting Optical Fiber Biosensors. The Case of Naphthalene Detection in Water. Lecture Notes in Electrical Engineering, 2020, , 65-69.	0.4	1
115	An Optical Fiber Sensor System for Uranium Detection in Water. , 2022, 16, .		1
116	Optical Coatings: Applications and Metrology. , 0, , .		1
117	Polymer-on-glass waveguide structure for efficient fluorescence-based optical biosensors. , 2005, , .		0
118	A multimode plastic optical fiber platform coupled with aptamer layer for cancer biomarkers detection. , 2015, , .		0
119	Thin metal bilayer for surface plasmon resonance sensors in a multimode plastic optical fiber: the case of palladium and gold metal films. , 2016, , .		0
120	A thermo-stabilized flow cell for surface plasmon resonance sensors in D-shaped plastic optical fibers. Proceedings of SPIE, 2016, , .	0.8	0
121	Analysis of SPR Sensors in d-Shaped POF Realized by Hand and Mechanical Polishing. Proceedings (mdpi), 2017, 1, 767.	0.2	0
122	Exploiting Optical Fibers and Slab Waveguides for a New Intensity-Based Refractometer. Proceedings (mdpi), 2017, 1, .	0.2	0
123	A novel configuration for bio-chemical sensors based on surface plasmon resonance. , 2017, , .		0
124	SPR Chemosensors Based on D-Shaped POFs and MIPs: Investigation on Optimal Thickness of the Buffer Layer. Proceedings (mdpi), 2017, 1, .	0.2	0
125	Numerical Results on the Exploitation of Gold Nanostructures in Plastic Optical Fibers Based Plasmonic Sensors. Lecture Notes in Electrical Engineering, 2018, , 127-134.	0.4	0
126	Optical chemosensors for transformersâ€™oil degradation monitoring:case studies. , 2018, , .		0

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127	Exploiting Several Buffer Layers in SPR D-Shaped POF Sensors Based on Gold Film for Different Applications. Proceedings (mdpi), 2019, 15, 47.	0.2	0
128	Low-Cost Medical Diagnostics Exploiting Different Kinds of Receptors on Plasmonic Plastic Optical Fiber Sensors. , 2019, , .		0
129	Single drop detection of furfural in wine by an SPR sensor based on molecularly imprinted polymer as biomimetic receptor. , 2020, , .		0
130	Plastic Optical Fiber Sensors and Magnetic Fluids: Plasmonic Tunability and Sensing properties for Measurements. , 2020, , .		0
131	Magnetic Field Detection by an SPR Plastic Optical Fiber Sensor and Ferrofluids. Lecture Notes in Electrical Engineering, 2021, , 63-68.	0.4	0
132	Universal tool for surface plasmon resonance sensors realized in waveguides. , 2021, , .		0
133	Distributed Acoustic Sensor for Liquid Detection Based on Optically Heated CO2+-Doped Fibers. Lecture Notes in Electrical Engineering, 2021, , 101-105.	0.4	0
134	Surface Plasmon Resonance Sensor in Plastic Optical Fibers. Influence of the Mechanical Support Geometry on the Performances. Lecture Notes in Electrical Engineering, 2018, , 135-141.	0.4	0
135	An optical fiber intensity-based sensor configuration for the detection of PFOA in water. , 2018, , .		0
136	A Novel Intensity-Based Sensor Platform for Refractive Index Sensing. Lecture Notes in Electrical Engineering, 2019, , 269-273.	0.4	0
137	A Molecularly Imprinted Polymer on a Novel Surface Plasmon Resonance Sensor. Lecture Notes in Electrical Engineering, 2019, , 259-262.	0.4	0
138	Optical Chemical Sensing Exploiting Inkjet Printing Technology and Molecularly Imprinted Polymers. Lecture Notes in Electrical Engineering, 2020, , 71-74.	0.4	0
139	Optical Chemo-Sensors for Specific Markers in Transformer Insulating Oil Exploiting Molecularly Imprinted Polymers and Plasmonic Optical Fibers. Engineering Proceedings, 2021, 11, .	0.4	0
140	Aptamer-Based Plasmonic Plastic Optical Fiber Biosensors: A Focus on Relevant Applications. Engineering Proceedings, 2021, 11, .	0.4	0
141	A Wearable Temperature Sensor Network to Address the COVID-19 Pandemic Emergency. , 2021, 11, .		0
142	Surface Plasmon Resonance Sensor Based on Inkjet 3D Printing. , 2021, 11, .		0