Paulo Antunes

List of Publications by Year
in descending order

253 papers	5,656 citations	66343 42 h-index	118850 62 g-index
254 all docs	254 docs citations	254 times ranked	3990 citing authors

#	Article	IF	Citations
1	Mechanical properties of adobe bricks in ancient constructions. Construction and Building Materials, 2012, 28, 36-44.	7.2	143
2	Optical Fiber Accelerometer System for Structural Dynamic Monitoring. IEEE Sensors Journal, 2009, 9, 1347-1354.	4.7	126
3	Simplified Macro-Model for Infill Masonry Panels. Journal of Earthquake Engineering, 2010, 14, 390-416.	2.5	126
4	Seismic risk assessment for mainland Portugal. Bulletin of Earthquake Engineering, 2015, 13, 429-457.	4.1	116
5	Optical Fiber Magnetic Field Sensors Based on Magnetic Fluid: A Review. Sensors, 2018, 18, 4325.	3.8	115
6	Internal and External Temperature Monitoring of a Li-Ion Battery with Fiber Bragg Grating Sensors. Sensors, 2016, 16, 1394.	3.8	114
7	Simplified macroâ€model for infill masonry walls considering the outâ€ofâ€plane behaviour. Earthquake Engineering and Structural Dynamics, 2016, 45, 507-524.	4.4	111
8	Liquid Level Measurement Based on FBG-Embedded Diaphragms With Temperature Compensation. IEEE Sensors Journal, 2018, 18, 193-200.	4.7	106
9	Optical Fiber Relative Humidity Sensor Based on a FBG with a Di-Ureasil Coating. Sensors, 2012, 12, 8847-8860.	3.8	105
10	Highly sensitive fiber optic temperature and strain sensor based on an intrinsic Fabryâ€“Perot interferometer fabricated by a femtosecond laser. Optics Letters, 2019, 44, 4833.	3.3	103
11	Experimental evaluation of rectangular reinforced concrete column behaviour under biaxial cyclic loading. Earthquake Engineering and Structural Dynamics, 2013, 42, 239-259.	4.4	93
12	Performance of masonry enclosure walls: lessons learned from recent earthquakes. Earthquake Engineering and Engineering Vibration, 2012, 11, 23-34.	2.3	88
13	Seismic vulnerability of building aggregates through hybrid and indirect assessment techniques. Bulletin of Earthquake Engineering, 2015, 13, 2995-3014.	4.1	83
14	Insole Optical Fiber Sensor Architecture for Remote Gait Analysisâ€”An e-Health Solution. IEEE Internet of Things Journal, 2019, 6, 207-214.	8.7	76
15	Uniaxial fiber Bragg grating accelerometer system with temperature and cross axis insensitivity. Measurement: Journal of the International Measurement Confederation, 2011, 44, 55-59.	5.0	75
16	Optical fiber sensors for static and dynamic health monitoring of civil engineering infrastructures: Abode wall case study. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1695-1705.	5.0	75
17	POFBG-Embedded Cork Insole for Plantar Pressure Monitoring. Sensors, 2017, 17, 2924.	3.8	75
18	Biaxial Optical Accelerometer and High-Angle Inclinometer With Temperature and Cross-Axis Insensitivity. IEEE Sensors Journal, 2012, 12, 2399-2406.	4.7	74

#	Article	IF	Citations
19	Seismic risk assessment and hazard mapping in Nepal. Natural Hazards, 2015, 78, 583-602.	3.4	74
20	Investigation of the characteristics of Portuguese regular moment-frame RC buildings and development of a vulnerability model. Bulletin of Earthquake Engineering, 2015, 13, 1455-1490.	4.1	70
21	Structural Health Monitoring of the Church of Santa Casa da MisericÃ“rdia of Aveiro Using FBG Sensors. IEEE Sensors Journal, 2008, 8, 1236-1242.	4.7	69
22	A cost-effective edge-filter based FBG interrogator using catastrophic fuse effect micro-cavity interferometers. Measurement: Journal of the International Measurement Confederation, 2018, 124, 486-493.	5.0	69
23	Optical Fiber Sensing for Sub-Millimeter Liquid-Level Monitoring: A Review. IEEE Sensors Journal, 2019, 19, 7179-7191.	4.7	67
24	Optical Fiber Microcavity Strain Sensors Produced by the Catastrophic Fuse Effect. IEEE Photonics Technology Letters, 2014, 26, 78-81.	2.5	66
25	Characterization of a new polymer optical fiber with enhanced sensing capabilities using a Bragg grating. Optics Letters, 2018, 43, 4799.	3.3	66
26	Fast and stable gratings inscription in POFs made of different materials with pulsed 248 nm KrF laser. Optics Express, 2018, 26, 2013.	3.4	63
27	Fast Bragg Grating Inscription in PMMA Polymer Optical Fibres: Impact of Thermal Pre-Treatment of Preforms. Sensors, 2017, 17, 891.	3.8	62
28	Low-Cost Interrogation Technique for Dynamic Measurements with FBG-Based Devices. Sensors, 2017, 17, 2414.	3.8	62
29	Seismic performance of the infill masonry walls and ambient vibration tests after the Ghorka 2015, Nepal earthquake. Bulletin of Earthquake Engineering, 2017, 15, 1185-1212.	4.1	61
30	Corrosion Resistant FBG-Based Quasi-Distributed Sensor for Crude Oil Tank Dynamic Temperature Profile Monitoring. Sensors, 2015, 15, 30693-30703.	3.8	60
31	Induction Motors Vibration Monitoring Using a Biaxial Optical Fiber Accelerometer. IEEE Sensors Journal, 2016, 16, 8075-8082.	4.7	60
32	Advances on Polymer Optical Fiber Gratings Using a KrF Pulsed Laser System Operating at 248 nm. Fibers, 2018, 6, 13.	4.0	59
33	Seismic vulnerability assessment and characterisation of the buildings on Faial Island, Azores. Bulletin of Earthquake Engineering, 2012, 10, 27-44.	4.1	58
34	Cost-effective optical fiber pressure sensor based on intrinsic Fabry-Perot interferometric micro-cavities. Optical Fiber Technology, 2018, 42, 56-62.	2.7	58
35	Insole optical fiber Bragg grating sensors network for dynamic vertical force monitoring. Journal of Biomedical Optics, 2017, 22, 091507.	2.6	55
36	Chirped Bragg Gratings in PMMA Step-Index Polymer Optical Fiber. IEEE Photonics Technology Letters, 2017, 29, 500-503.	2.5	55

#	Article	IF	Citations
37	Comparative efficiency analysis of different nonlinear modelling strategies to simulate the biaxial response of RC columns. Earthquake Engineering and Engineering Vibration, 2012, 11, 553-566.	2.3	53
38	Relative humidity sensing using micro-cavities produced by the catastrophic fuse effect. Optical and Quantum Electronics, 2016, 48, 1.	3.3	51
39	Global overview on advances in structural health monitoring platforms. Journal of Civil Structural Health Monitoring, 2016, 6, 461-475.	3.9	49
40	Liquid level gauge based in plastic optical fiber. Measurement: Journal of the International Measurement Confederation, 2015, 66, 238-243.	5.0	48
41	Perrogator: A Portable Energy-Efficient Interrogator for Dynamic Monitoring of Wavelength-Based Sensors in Wearable Applications. Sensors, 2019, 19, 2962.	3.8	47
42	Gait Shear and Plantar Pressure Monitoring: A Non-Invasive OFS Based Solution for e-Health Architectures. Sensors, 2018, 18, 1334.	3.8	45
43	Simultaneous Measurement of Strain and Temperature With a Single Fiber Bragg Grating Written in a Tapered Optical Fiber. IEEE Sensors Journal, 2010, 10, 269-273.	4.7	43
44	Polymer optical fiber for monitoring human physiological and body function: A comprehensive review on mechanisms, materials, and applications. Optics and Laser Technology, 2022, 147, 107626.	4.6	43
45	Elastic constant measurement for standard and photosensitive single mode optical fibres. Microwave and Optical Technology Letters, 2008, 50, 2467-2469.	1.4	41
46	Damage evolution in reinforced concrete columns subjected to biaxial loading. Bulletin of Earthquake Engineering, 2013, 11, 1517-1540.	4.1	40
47	Probabilistic Seismic Performance Analysis of RC Bridges. Journal of Earthquake Engineering, 2020, 24, 1704-1728.	2.5	40
48	Earthquake loss estimation for the Kathmandu Valley. Bulletin of Earthquake Engineering, 2016, 14, 59-88.	4.1	39
49	Empirical Formulation for Estimating the Fundamental Frequency of Slender Masonry Structures. International Journal of Architectural Heritage, 2016, 10, 55-66.	3.1	38
50	Evaluation of Strengthening Techniques of Traditional Masonry Buildings: Case Study of a Four-Building Aggregate. Journal of Performance of Constructed Facilities, 2011, 25, 202-216.	2.0	35
51	Displacement-Based Fragility Curves for Seismic Assessment of Adobe Buildings in Cusco, Peru. Earthquake Spectra, 2012, 28, 759-794.	3.1	35
52	Plastic Optical Fiber Sensor for Noninvasive Arterial Pulse Waveform Monitoring. IEEE Sensors Journal, 2015, 15, 14-18.	4.7	34
53	Non-destructive characterization of ancient clay brick walls by indirect ultrasonic measurements. Journal of Building Engineering, 2018, 19, 172-180.	3.4	34
54	Effect of the Panel Width Support and Columns Axial Load on the Infill Masonry Walls Out-Of-Plane Behavior. Journal of Earthquake Engineering, 2020, 24, 653-681.	2.5	34

#	Article	IF	Citations
55	Experimental study of bondâ€“slip in RC structural elements with plain bars. Materials and Structures/Materiaux Et Constructions, 2015, 48, 2367-2381.	3.1	32
56	Polymer optical fiber Bragg grating inscription with a single Nd:YAG laser pulse. Optics Express, 2018, 26, 18096.	3.4	32
57	Respiratory and heart rate monitoring using an FBG 3D-printed wearable system. Biomedical Optics Express, 2022, 13, 2299.	2.9	32
58	Monitoring of the concrete curing process using plastic optical fibers. Measurement: Journal of the International Measurement Confederation, 2012, 45, 556-560.	5.0	31
59	Feasibility studies of Bragg probe for noninvasive carotid pulse waveform assessment. Journal of Biomedical Optics, 2013, 18, 017006.	2.6	31
60	Liquid Hydrostatic Pressure Optical Sensor Based on Micro-Cavity Produced by the Catastrophic Fuse Effect. IEEE Sensors Journal, 2015, 15, 5654-5658.	4.7	31
61	Seismic fragility analysis of typical pre-1990 bridges due to near- and far-field ground motions. International Journal of Advanced Structural Engineering, 2016, 8, 1-9.	1.3	31
62	Intensity-Encoded Polymer Optical Fiber Accelerometer. IEEE Sensors Journal, 2013, 13, 1716-1720.	4.7	30
63	Structural Behaviour and Retrofitting of Adobe Masonry Buildings. Building Pathology and Rehabilitation, 2014, , 37-75.	0.2	30
64	Cyclic behaviour of interior beamâ€“column joints reinforced with plain bars. Earthquake Engineering and Structural Dynamics, 2015, 44, 1351-1371.	4.4	30
65	Evaluation of different strengthening techniquesâ€™ efficiency for a soft storey building. European Journal of Environmental and Civil Engineering, 2017, 21, 371-388.	2.1	30
66	Phase-Shifted Bragg Grating Inscription in PMMA Microstructured POF Using 248-nm UV Radiation. Journal of Lightwave Technology, 2017, 35, 5176-5184.	4.6	30
67	Mechanical Properties of Optical Fibers. , 0, , .		29
68	Groundwater level monitoring using a plastic optical fiber. Sensors and Actuators A: Physical, 2016, 240, 138-144.	4.1	29
69	Inscription of Bragg gratings in undoped PMMA mPOF with Nd:YAG laser at 266â€…nm wavelength. Optics Express, 2019, 27, 38039.	3.4	29
70	Detection of Fiber Fuse Effect Using FBG Sensors. IEEE Sensors Journal, 2011, 11, 1390-1394.	4.7	28
71	Observation of fuse effect discharge zone nonlinear velocity regime in erbium-doped fibres. Electronics Letters, 2012, 48, 1295.	1.0	28
72	A case study of the use of GPR for rehabilitation of a classified Art Deco building: The InovaDomus house. Journal of Applied Geophysics, 2016, 127, 1-13.	2.1	28

#	Article	IF	Citations
73	Microstructured PMMA POF chirped Bragg gratings for strain sensing. Optical Fiber Technology, 2018, 45, 330-335.	2.7	28
74	Experimental Comparison of Novel CFRP Retrofit Schemes for Realistic Full-Scale RC Beamâ€“Column Joints. Journal of Composites for Construction, 2018, 22, .	3.2	28
75	Seismic sensitivity analysis of the common structural components of Nepalese Pagoda temples. Bulletin of Earthquake Engineering, 2014, 12, 1679-1703.	4.1	27
76	Long-term monitoring of a damaged historic structure using a wireless sensor network. Engineering Structures, 2018, 161, 108-117.	5.3	27
77	Largely tunable dispersion chirped polymer FBG. Optics Letters, 2018, 43, 5106.	3.3	27
78	Response reduction factor of irregular RC buildings in Kathmandu valley. Earthquake Engineering and Engineering Vibration, 2014, 13, 455-470.	2.3	26
79	Strain, temperature, moisture, and transverse force sensing using fused polymer optical fibers. Optics Express, 2018, 26, 12939.	3.4	26
80	Wheelchair Pressure Ulcer Prevention Using FBG Based Sensing Devices. Sensors, 2020, 20, 212.	3.8	26
81	Wearable Devices for Remote Physical Rehabilitation Using a Fabry-Perot Optical Fiber Sensor: Ankle Joint Kinematic. IEEE Access, 2020, 8, 109866-109875.	4.2	26
82	Nonlinear Dynamic Analysis of a Full-Scale Unreinforced Adobe Model. Earthquake Spectra, 2014, 30, 1643-1661.	3.1	25
83	Structural Health Monitoring Suitable for Airborne Components Using the Speckle Pattern in Plastic Optical Fibers. IEEE Sensors Journal, 2017, 17, 4791-4796.	4.7	24
84	Optical sensors for bond-slip characterization and monitoring of RC structures. Sensors and Actuators A: Physical, 2018, 280, 332-339.	4.1	23
85	Dynamic Structural Health Monitoring of Slender Structures Using Optical Sensors. Sensors, 2012, 12, 6629-6644.	3.8	22
86	Dynamic monitoring and numerical modelling of communication towers with FBG based accelerometers. Journal of Constructional Steel Research, 2012, 74, 58-62.	3.9	22
87	Cost effective refractive index sensor based on optical fiber micro cavities produced by the catastrophic fuse effect. Measurement: Journal of the International Measurement Confederation, 2016, 77, 265-268.	5.0	22
88	Design and characterization of a curvature sensor using fused polymer optical fibers. Optics Letters, 2018, 43, 2539.	3.3	22
89	Structural Degradation Assessment of RC Buildings: Calibration and Comparison of Semeiotic-Based Methodology for Decision Support System. Journal of Performance of Constructed Facilities, 2019, 33, 04018109.	2.0	22
90	Optical fiber sensors for central arterial pressure monitoring. Optical and Quantum Electronics, 2016, 48, 1.	3.3	21

#	Article	IF	Citations
91	High Rate Dynamic Monitoring with Fabryâ€“Perot Interferometric Sensors: An Alternative Interrogation Technique Targeting Biomedical Applications. Sensors, 2019, 19, 4744.	3.8	21
92	Mechanical properties characterization of different types of masonry infill walls. Frontiers of Structural and Civil Engineering, 2020, 14, 411-434.	2.9	20
93	Central arterial pulse waveform acquisition with a portable pen-like optical fiber sensor. Blood Pressure Monitoring, 2015, 20, 43-46.	0.8	19
94	Energy-Aware Wearable E-Health Architecture Using Optical FBG Sensors for Knee Kinematic Monitoring. , 2018, , .		19
95	Direct measurement of residual strains in CFRP-tungsten hybrids using embedded strain gauges. Materials and Design, 2017, 127, 352-363.	7.0	18
96	Optical Sensors Based on Fiber Bragg Gratings for Structural Health Monitoring. Lecture Notes in Electrical Engineering, 2011, , 253-295.	0.4	18
97	Monitoring of sea bed level changes in nearshore regions using fiber optic sensors. Measurement: Journal of the International Measurement Confederation, 2012, 45, 1527-1533.	5.0	17
98	The past 20years of telecommunication structures in Portugal. Engineering Structures, 2013, 48, 472-485.	5.3	17
99	Dynamic structural health monitoring of a civil engineering structure with a POF accelerometer. Sensor Review, 2014, 34, 36-41.	1.8	17
100	Seismic safety assessment of existing masonry infill structures in Nepal. Earthquake Engineering and Engineering Vibration, 2016, 15, 251-268.	2.3	17
101	Seismic vulnerability assessment methodology for slender masonry structures. International Journal of Architectural Heritage, 2018, 12, 1297-1326.	3.1	17
102	Performance Analysis of Scattering-Level Multiplexing (SLMux) in Distributed Fiber-Optic Backscatter Reflectometry Physical Sensors. Sensors, 2020, 20, 2595.	3.8	17
103	A Review of the Performance of Infilled RC Structures in Recent Earthquakes. Applied Sciences (Switzerland), 2021, 11, 5889.	2.5	17
104	Chirped POF Bragg grating production utilizing UV cure adhesive coating for multiparameter sensing. Optical Fiber Technology, 2021, 65, 102593.	2.7	17
105	Optical FBG Sensors for Static Structural Health Monitoring. Procedia Engineering, 2011, 14, 1564-1571.	1.2	16
106	In situOut-of-Plane Cyclic Testing of Original and Strengthened Traditional Stone Masonry Walls Using Airbags. Journal of Earthquake Engineering, 2016, 20, 749-772.	2.5	16
107	Fiber Bragg Grating (FBG) Sensors in a High-Scattering Optical Fiber Doped with MgO Nanoparticles for Polarization-Dependent Temperature Sensing. Applied Sciences (Switzerland), 2019, 9, 3107.	2.5	16
108	Compact Dual-Strain Sensitivity Polymer Optical Fiber Grating for Multi-Parameter Sensing. Journal of Lightwave Technology, 2021, 39, 2230-2240.	4.6	16

#	Article	IF	Citations
109	Seismic vulnerability and loss assessment of the Nepalese Pagoda temples. Bulletin of Earthquake Engineering, 2015, 13, 2197-2223.	4.1	15
110	Development and application of a real-time loss estimation framework for Portugal. Bulletin of Earthquake Engineering, 2015, 13, 2493-2516.	4.1	15
111	Dynamic mechanical analysis on fused polymer optical fibers: towards sensor applications. Optics Letters, 2018, 43, 1754.	3.3	15
112	Low-Cost and High-Performance Optical Fiber-Based Sensor for Liquid Level Monitoring. IEEE Sensors Journal, 2019, 19, 4882-4888.	4.7	15
113	Structural health monitoring of the retrofitting process, characterization and reliability analysis of a masonry heritage construction. Journal of Civil Structural Health Monitoring, 2017, 7, 405-428.	3.9	14
114	Seismic Assessment of a School Building in Nepal and Analysis of Retrofitting Solutions. International Journal of Civil Engineering, 2018, 16, 1573-1589.	2.0	14
115	Characterization of different water/powder ratios of dental gypsum using fiber Bragg grating sensors. Dental Materials Journal, 2011, 30, 700-706.	1.8	13
116	IoToF: A Long-Reach Fully Passive Low-Rate Upstream PHY for IoT over Fiber. Electronics (Switzerland), 2019, 8, 359.	3.1	13
117	Hybrid intrinsic optical fiber sensor fabricated by femtosecond laser with enhanced sensitivity by Vernier effect. Optics and Laser Technology, 2021, 133, 106520.	4.6	13
118	Vernier Effect-Based Optical Fiber Sensor for Humidity and Temperature Monitoring. IEEE Photonics Technology Letters, 2021, 33, 1061-1064.	2.5	13
119	Common Pathologies in Composite Adobe and Reinforced Concrete Constructions. Journal of Performance of Constructed Facilities, 2012, 26, 389-401.	2.0	12
120	Optical Fiber Technology for eHealthcare. , 2013, , 180-200.		12
121	Stochastic collocation-based nonlinear analysis of concrete bridges with uncertain parameters. Structure and Infrastructure Engineering, 2018, 14, 1324-1338.	3.7	12
122	Biaxial Optical Accelerometer Based on Ultra-High Numerical Aperture Fiber. IEEE Sensors Journal, 2019, 19, 3690-3697.	4.7	12
123	3D interfacial debonding during microbond testing: Advantages of local strain recording. Composites Science and Technology, 2020, 195, 108163.	7.8	12
124	Evaluation of the Fuse Effect Propagation in Networks Infrastructures with Different Types of Fibers. , 2010, , .		11
125	Comparative structural response of two steel bridges constructed 100 years apart. Structure and Infrastructure Engineering, 2011, 7, 843-855.	3.7	11
126	Thin bonding wires temperature measurement using optical fiber sensors. Measurement: Journal of the International Measurement Confederation, 2011, 44, 554-558.	5.0	11

#	Article	IF	Citations
127	Enhanced sensitivity high temperature optical fiber FPI sensor created with the catastrophic fuse effect. Microwave and Optical Technology Letters, 2015, 57, 972-974.	1.4	11
128	Carotid distension waves acquired with a fiber sensor as an alternative to tonometry for central arterial systolic pressure assessment in young subjects. Measurement: Journal of the International Measurement Confederation, 2017, 95, 45-49.	5.0	11
129	Seismic behavior of two Portuguese adobe buildings: part II â€"numerical modeling and fragility assessment. International Journal of Architectural Heritage, 2018, 12, 936-950.	3.1	11
130	Clinical evaluation of an optical fiber-based probe for the assessment of central arterial pulse waves. Hypertension Research, 2018, 41, 904-912.	2.7	11
131	Combined Bending and Torsion Sensing by Induced Birefringence in Distributed Bragg Reflector Laser. Journal of Lightwave Technology, 2019, 37, 861-867.	4.6	11
132	Design Procedures of Reinforced Concrete Framed Buildings in Nepal and its Impact on Seismic Safety. Advances in Structural Engineering, 2014, 17, 1419-1442.	2.4	10
133	Bragg Gratings Inscription in TS-Doped PMMA POF by Using 248-nm KrF Pulses. IEEE Photonics Technology Letters, 2018, 30, 1609-1612.	2.5	10
134	Experimental Investigation on the Possible Effect of Previous Damage, Workmanship and Test Setup on the Out-of-plane Behaviour of Masonry Infill Walls. Journal of Earthquake Engineering, 2022, 26, 5647-5678.	2.5	10
135	Non-Invasive Wearable Optical Sensors for Full Gait Analysis in E-Health Architecture. IEEE Wireless Communications, 2021, 28, 28-35.	9.0	10
136	Seismic performance of adobe construction. Sustainable and Resilient Infrastructure, 2017, 2, 8-21.	2.8	9
137	Seismic behavior of two Portuguese adobe buildings: Part I - in-plane cyclic testing of a full-scale adobe wall. International Journal of Architectural Heritage, 2018, 12, 922-935.	3.1	9
138	Heterogeneity detection of Portugueseâ€"Brazilian masonries through ultrasonic velocities measurements. Journal of Civil Structural Health Monitoring, 2018, 8, 847-856.	3.9	9
139	Wearable eHealth System for Physical Rehabilitation: Ankle Plantar-Dorsi-Flexion Monitoring. , 2019, , .		9
140	Hot water-assisted fabrication of chirped polymer optical fiber Bragg gratings. Optics Express, 2018, 26, 34655.	3.4	9
141	Effect of bidirectional excitation on seismic performance of regular RC frame buildings designed for modern codes. Earthquake Spectra, 2022, 38, 950-980.	3.1	9
142	Adobe and Modernism in Ãlhavo, Portugal. International Journal of Architectural Heritage, 2012, 6, 525-541.	3.1	8
143	Structural health monitoring of different geometry structures with optical fiber sensors. Photonic Sensors, 2012, 2, 357-365.	5.0	8
144	Survey of the Facade Walls of Existing Adobe Buildings. International Journal of Architectural Heritage, 2016, 10, 867-886.	3.1	8

#	Article	IF	Citations
145	Optically Instrumented Insole for Gait Plantar and Shear Force Monitoring. IEEE Access, 2021, 9, 132480-132490.	4.2	8
146	Datacenter Thermal Monitoring Without Blind Spots: FBG-Based Quasi-Distributed Sensing. IEEE Sensors Journal, 2021, 21, 9869-9876.	4.7	8
147	FBGs Based System for Muscle Effort Monitoring in Wheelchair Users. IEEE Sensors Journal, 2022, 22, 12886-12893.	4.7	8
148	Monitorization of sea sand transport in coastal areas using optical fiber sensors. , 2009, , .		7
149	Hazard Disaggregation and Record Selection for Fragility Analysis and Earthquake Loss Estimation. Earthquake Spectra, 2017, 33, 529-549.	3.1	7
150	AMBIENT VIBRATIONAL CHARACTERIZATION OF THE NOSSA SENHORA DAS DORES CHURCH. Engineering Structures and Technologies, 2017, 9, 170-182.	0.1	7
151	Comparative study on the seismic performance assessment of existing buildings with and without retrofit strategies. International Journal of Advanced Structural Engineering, 2018, 10, 439-464.	1.3	7
152	Foot Plantar Pressure Monitoring with CYTOP Bragg Gratings Sensing System. , 2018, , .		7
153	Simplified heat exchange model for semiconductor laser diodes thermal parameters extraction. Laser Physics Letters, 2005, 2, 525-528.	1.4	6
154	BEHAVIOR OF RC BUILDING COLUMNS UNDER CYCLIC LOADING: EXPERIMENTAL STUDY. Journal of Earthquake and Tsunami, 2012, 06, 1250026.	1.3	6
155	Nijenhuis and compatible tensors on Lie and Courant algebroids. Journal of Geometry and Physics, 2013, 65, 66-79.	1.4	6
156	Seismic Analysis of a Portuguese Vernacular Building. Journal of Architectural Engineering, 2018, 24, 05017010.	1.6	6
157	Bragg gratings and Fabry-Perot interferometers on an Er-MgO-doped optical fiber. Optics and Laser Technology, 2020, 123, 105946.	4.6	6
158	Single-Photon Source by Means of Four-Wave Mixing Inside a Dispersion-Shifted Optical Fiber. , 2006, , .		6
159	Static and dynamic structural monitoring based on optical fiber sensors. , 2010, , .		5
160	Lithium batteries temperature and strain fiber monitoring. , 2015, , .		5
161	Impact of the Textile Mesh on the Efficiency of TRM Strengthening Solutions to Improve the Infill Walls Out-of-Plane Behaviour. Applied Sciences (Switzerland), 2020, 10, 8745.	2.5	5
162	Microscale sensor solution for data collection from fibre-matrix interfaces. Scientific Reports, 2021, 11, 8346.	3.3	5

#	Article	IF	Citations
163	Noninvasive Optical Instrumentation for Bone Healing Process Analysis. IEEE Sensors Journal, 2021, 21, 14060-14068.	4.7	5
164	Optical Fiber Fabryâ€“Perot Interferometer Based Spirometer: Design and Performance Evaluation. Photonics, 2021, 8, 336.	2.0	5
165	Interactions between Seismic Safety and Energy Efficiency for Masonry Infill Walls: A Shift of the Paradigm. Energies, 2022, 15, 3269.	3.1	5
166	Instrumented Office Chair With Low-Cost Plastic Optical Fiber Sensors for Posture Control and Work Conditions Optimization. IEEE Access, 2022, 10, 69063-69071.	4.2	5
167	Development of a FBG probe for non-invasive carotid pulse waveform assessment. Proceedings of SPIE, 2012, , .	0.8	4
168	ELEVATED WATER RESERVOIR MONITORING USING OPTICAL FIBER ACCELEROMETER. Instrumentation Science and Technology, 2013, 41, 125-134.	1.8	4
169	Analysis of vibrations in electrical machines with an optical fiber accelerometer. , 2015, , .		4
170	A contribution for the improvement in thermal insulation of tabique walls coated with metal corrugated sheets. Building Services Engineering Research and Technology, 2015, 36, 439-454.	1.8	4
171	Dynamic characterization of a heritage construction from 19th century. Revista IBRACON De Estruturas E Materiais, 2018, 11, 52-75.	0.6	4
172	Seismic fragility assessment of revised MRT buildings considering typical construction changes. Frontiers of Structural and Civil Engineering, 2020, 14, 241-266.	2.9	4
173	Fiber Bragg Gratings Solution for Gait Assessement. , 2020, , .		4
174	3D Printed Spirometer for Pulmonary Health Assessment Based on Fiber Bragg Gratings. IEEE Sensors Journal, 2021, 21, 4590-4598.	4.7	4
175	An Optimized Self-Compensated Solution for Temperature and Strain Cross-Sensitivity in FBG Interrogators Based on Edge Filter. Sensors, 2021, 21, 5828.	3.8	4
176	Polymer optical fibers for mechanical wave monitoring. Optics Letters, 2020, 45, 5057.	3.3	4
177	Arterial pulses assessed with FBG based films: a smart skin approach. , 2018, , .		4
178	Numerical modelling of RC strengthened columns under biaxial loading. Innovative Infrastructure Solutions, 2016, 1, 1.	2.2	3
179	Non-Invasive Insole Optical Fiber Sensor Architecture for Monitoring Foot Anomalies. , 2017, , .		3
180	Fiber Bragg Gratings as e-Health Enablers: An Overview for Gait Analysis Applications. , 2019, , .		3

#	Article	IF	Citations
181	Fiber-Optic Bragg Grating Sensors for Biomechanical Analysis of Fracture Healing. IEEE Sensors Journal, 2021, 21, 24177-24184.	4.7	3
182	Influence of Beam-to-Column Connections in the Seismic Performance of Precast Concrete Industrial Facilities. Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE), 2022, 32, 507-519.	0.8	3
183	Optical fibre fuse effect based sensor for magnetic field monitoring. , 2019, , .		3
184	Dynamic monitoring of an elevated water reservoir with a biaxial optical accelerometer. , 2012, , .		3
185	Structural reliability assessment based on optical monitoring system: case study. Revista IBRACON De Estruturas E Materiais, 2016, 9, 297-305.	0.6	3
186	eHealth Solution for Cancer Patients Rehabilitation enabled by Optical Fiber Sensors. , 2020, , .		3
187	Fiber Optic Load Cells with Enhanced Sensitivity by Optical Vernier Effect. Sensors, 2021, 21, 7737.	3.8	3
188	Cyclic behaviour of precast beamâ€toâ€column connections with low seismic detailing. Earthquake Engineering and Structural Dynamics, 2022, 51, 1096-1114.	4.4	3
189	Sensor Cell Network for Pressure, Temperature and Position Detection on Wheelchair Users. International Journal of Environmental Research and Public Health, 2022, 19, 2195.	2.6	3
190	Self-Compacting Earth-Based Composites: Mixture Design and Multi-Performance Characterisation. Buildings, 2022, 12, 612.	3.1	3
191	Configuration for detecting the fiber fuse propagation using a FBG sensor. , 2010, , .		2
192	Central arterial pressure assessment with intensity POF sensor. Proceedings of SPIE, 2015, , .	0.8	2
193	Recycling optical fibers for sensing. , 2016, , .		2
194	High-quality phase-shifted Bragg grating sensor inscribed with only one laser pulse in a polymer optical fiber. , 2017, , .		2
195	Fiber Bragg Based Sensors for Foot Plantar Pressure Analysis. Communications in Computer and Information Science, 2019, , 3-25.	0.5	2
196	Experimental and numerical dataset of Microbond test using optical fibres for strain. Data in Brief, 2020, 31, 106017.	1.0	2
197	Full-scale cyclic testing of realistic reinforced-concrete beam-column joints. MethodsX, 2021, 8, 101409.	1.6	2
198	Effect of Proportioning of Lateral Stiffness in Orthogonal Directions on Seismic Performance of RC Buildings. Journal of Earthquake Engineering, 2022, 26, 7568-7586.	2.5	2

#	Article	IF	Citations
199	Biaxial optical fiber sensor based in two multiplexed Bragg gratings for simultaneous shear stress and vertical pressure monitoring. , 2018, , .		2
200	Thermodynamic model for low cost uncooled semiconductor laser. , 0, , .		1
201	Tolerance of optical filters detuning in CWDM networks. Photonic Network Communications, 2007, 13, 323-328.	2.7	1
202	Temperature and strain discrimination using a single fibre Bragg grating written in a tapered optical fibre. Proceedings of SPIE, 2009, , .	0.8	1
203	Three parameters simultaneous measurement with a single TFBG. Proceedings of SPIE, 2011, , .	0.8	1
204	Dynamic characterization of a radio communication tower with a FBG based accelerometer. , 2011, , .		1
205	Evaluation of the fuse effect propagation velocity in bend loss insensitive fibers. , 2012, , .		1
206	Development and characterization of new sensors for hemodynamic evaluation: Fibre Bragg sensor for arterial pulse waveform acquisition. , 2012, , .		1
207	In the trail of a fiber Bragg grating sensor to assess the central arterial pressure wave profile. Proceedings of SPIE, 2013, , .	0.8	1
208	Hydrostatic pressure sensor based on micro-cavities developed by the catastrophic fuse effect. , 2015, , .		1
209	Acoustic waves in tilted fiber Bragg gratings for sensing applications. , 2017, , .		1
210	Chirped polymer optical fiber Bragg grating sensors. Proceedings of SPIE, 2017, , .	0.8	1
211	Refractive index sensor based on tilted fiber Bragg gratings driven by acoustic waves. , 2017, , .		1
212	Employment of optical fibers for RC bond-slip characterization. Procedia Structural Integrity, 2018, 11, 138-144.	0.8	1
213	Resonant Wavelength Thermal Stability of Fiber Bragg Gratings Produced by Femtosecond Laser. Journal of Lightwave Technology, 2020, 38, 1529-1535.	4.6	1
214	Modelling, fabrication and characterization of long period gratings inscribed by femtosecond laser. Optik, 2021, 229, 166283.	2.9	1
215	Improvement of sonic tests methodology for the characterization of stone masonry. First Break, 2018, 36, 59-63.	0.4	1
216	Optical Fiber Technology for eHealthcare. , 2018, , 1503-1526.		1

#	Article	IF	Citations
217	Temperature cross-sensitivity compensation in liquid level sensor using Mach-Zehnder interferometers. , 2019, , .		1
218	Low-cost intrinsic optical fiber FPI sensor for knee kinematic gait analysis and e-Health architecture. , 2019, , .		1
219	Bioinspired optical fiber sensor for simultaneous shear and vertical forces monitoring. , 2019, , .		1
220	High-resolution strain and temperature Fabry-PÃ©rot interferometer sensor based on Vernier effect and produced by a femtosecond laser. , 2019, , .		1
221	Towards a Complete Gait Analysis using Optical Fiber Bragg Gratings. , 2019, , .		1
222	Adhesive assisted fabrication of chirped POF Bragg grating. , 2020, , .		1
223	Magnetoresponsive Optical Fiber with Fuseâ€Effectâ€Induced Fluorinated Graphene Oxide Core. Advanced Photonics Research, 0, , 2100209.	3.6	1
224	Preface to special issue on numerical modelling ofÂURM buildings: benchmark project. Bulletin of Earthquake Engineering, 2022, 20, 1897-1900.	4.1	1
225	Photonic sensors for non-invasive home monitoring of elders. , 2021, , .		1
226	Dynamic monitoring of a mobile telecommunications tower with a bi-axial optical FBG accelerometer. , 2011, , .		0
227	Optical monitoring of curing process of concrete with plastic optical fibers. , 2012, , .		0
228	CONJUGATION OF OPTICAL AND MICROWAVE TECHNIQUES TO MONITOR THE EARLY AGE CONCRETE CURE. Instrumentation Science and Technology, 2013, 41, 117-124.	1.8	0
229	Madeira wine online quality control. , 2013, , .		0
230	Optical fibre monitoring of Madeira wine estufagem process. , 2013, , .		0
231	Plastic optical fibre sensor for quality control in food industry. , 2013, , .		0
232	Sensors based on recycled optical fibers destroyed by the catastrophic fuse effect. Proceedings of SPIE, 2014, , .	0.8	0
233	Optical strain sensor based on FPI micro-cavities produced by the fiber fuse effect. Proceedings of SPIE, 2014, , .	0.8	0
234	Optical fiber sensors in arterial pulse waveform acquisition. , 2014, , .		0

#	Article	IF	Citations
235	Plastic optical fibre sensor for Madeira wine monitoring. Proceedings of SPIE, 2014, , .	0.8	0
236	[OP.8D.04] COMPARISON STUDY OF CAROTID DISTENSION WAVES MEASURED WITH A NON-INVASIVE OPTICAL FIBRE SENSOR AND AORTIC INVASIVE PRESSURE WAVES. Journal of Hypertension, 2016, 34, e106.	0.5	0
237	Resonant wavelength thermal stability of femtosecond FBGs. Proceedings of SPIE, 2017, , .	0.8	0
238	On-site full-scale tests of a timber queen-post truss. International Journal of Architectural Heritage, 2018, 12, 545-554.	3.1	0
239	Biaxial Optical Accelerometer Based on Ultra-High Numerical Aperture Fiber for Structural and Electrical Machines Vibrations Analysis. , 2018, , .		0
240	Refractive Index Sensor Based on Optical Fiber Void Cavities Produced by the Catastrophic Fuse Effect. , 2013, , .		0
241	Multiparameter Optical Monitoring of Madeira Wine. International Journal of Online and Biomedical Engineering, 2013, 9, 62.	1.4	0
242	Cost-effective in-line optical fiber Fabry-Perot interferometric pressure sensor. , 2017, , .		0
243	Thermal stability of fiber Bragg gratings inscribed in microstructured polymer optical fibers with a single UV laser pulse. , 2018, , .		0
244	Chirped mPOF Bragg grating for strain sensing. , 2018, , .		0
245	A cost-effective edge-filter-based FBG strain interrogator using catastrophic fuse effect microcavity interferometers. , 2018, , .		0
246	Nonlinear Static Analysis by Finite Elements of a Fujian Hakka Tulou. IABSE Symposium Report, 2019, , .	0.0	0
247	Cost-effective high rate interrogation architecture for Fabry-Perot interferometric sensors. , 2019, , .		0
248	Inscription of a fiber Bragg grating and a Fabry-PÃ©rot interferometer on a MgO-doped optical fiber. , 2019, , .		0
249	Graphene oxide filled optical fiber micro-cavity based temperature sensor. , 2019, , .		0
250	Bragg grating device fabrication in undoped PMMA mPOF at 266 nm UV waveleng. , 2019, , .		0
251	Optical fiber FPI based sensor for arterial pulse waves assessment. , 2021, , .		0
252	Hybrid sensor based on a fiber Bragg grating and cascaded Fabry-Perot interferometers inscribed by a femtosecond laser. , 2021, , .		0

#	Article	IF	Citations
253	Pulmonary Health Assessment using Fiber Bragg Gratings in a 3D Printed Spirometer. , 2021, , .		0