Aldo Minardo

List of Publications by Year
in descending order

135	2,381	236612	253896
papers	citations	25 h-index	43 g-index

139	139	139	1488
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quasi-Distributed Refractive Index Sensing by Stimulated Brillouin Scattering in Tapered Optical Fibers. Journal of Lightwave Technology, 2022, 40, 2619-2624.	2.7	13
2	Distributed Liquid Level Sensor Based on Brillouin Optical Frequency-Domain Analysis. IEEE Sensors Journal, 2022, 22, 6601-6605.	2.4	3
3	Two-wavelength phase-sensitive OTDR sensor using perfect periodic correlation codes for measurement range enhancement, noise reduction and fading compensation. Optics Express, 2021, 29, 6021.	1.7	20
4	Automatic traffic monitoring by Ï•-OTDR data and Hough transform in a real-field environment. Applied Optics, 2021, 60, 3579.	0.9	26
5	Biosensors exploiting unconventional platforms: The case of plasmonic light-diffusing fibers. Sensors and Actuators B: Chemical, 2021, 337, 129771.	4.0	16
6	A Nanoplasmonic-Based Biosensing Approach for Wide-Range and Highly Sensitive Detection of Chemicals. Nanomaterials, 2021, 11, 1961.	1.9	8
7	Distributed Static and Dynamic Strain Measurements in Polymer Optical Fibers by Rayleigh Scattering. Sensors, 2021, 21, 5049.	2.1	5
8	Hybrid Brillouin/Rayleigh sensor for multiparameter measurements in optical fibers. Optics Express, 2021, 29, 24025.	1.7	15
9	A Simple and Efficient Plasmonic Sensor in Light Diffusive Polymer Fibers. IEEE Sensors Journal, 2021, 21, 16054-16060.	2.4	11
10	Bovine Serum Albumin Protein Detection by a Removable SPR Chip Combined with a Specific MIP Receptor. Chemosensors, 2021, 9, 218.	1.8	16
11	The Role of Tapered Light-Diffusing Fibers in Plasmonic Sensor Configurations. Sensors, 2021, 21, 6333.	2.1	4
12	Study on slope failure evolution under surcharge loading and toe cutting with BOTDA technology. Optical Fiber Technology, 2021, 66, 102644.	1.4	6
13	Distributed Acoustic Sensor for Liquid Detection Based on Optically Heated CO2+-Doped Fibers. Lecture Notes in Electrical Engineering, 2021, , 101-105.	0.3	0
14	Long-Term Monitoring of a Tunnel in a Landslide Prone Area by Brillouin-Based Distributed Optical Fiber Sensors. Sensors, 2021, 21, 7032.	2.1	6
15	Distributed Optical Fiber Sensor Applications in Geotechnical Monitoring. Sensors, 2021, 21, 7514.	2.1	13
16	High-Resolution Distributed Liquid Level Sensor Based on a Self-Heating Approach. , 2021, 11, .		0
17	Distributed Dynamic Strain Sensing Based on Brillouin Scattering in Optical Fibers. Sensors, 2020, 20, 5629.	2.1	14
18	Experimental Characterization of Plasmonic Sensors Based on Lab-Built Tapered Plastic Optical Fibers. Applied Sciences (Switzerland), 2020, 10, 4389.	1.3	22

#	Article	IF	Citations
19	A C-OTDR Sensor for Liquid Detection Based on Optically Heated Co²⁺-Doped Fibers. IEEE Sensors Journal, 2020, 20, 10154-10158.	2.4	4
20	A Dual-Wavelength Scheme for Brillouin Temperature Sensing in Optically Heated Co²⁺-Doped Fibers. IEEE Sensors Journal, 2020, 20, 1349-1354.	2.4	4
21	Theoretical and experimental comparison of a distributed acoustic sensor at 850- and 1550-nm wavelengths. Applied Optics, 2020, 59, 2219.	0.9	4
22	High-Pass Filtering for Accuracy Enhancement in Dark-Pulse Brillouin Optical Time Domain Analysis. IEEE Photonics Technology Letters, 2019, 31, 1213-1216.	1.3	3
23	Non-invasive water content estimation in a tuff wall by DTS. Construction and Building Materials, 2019, 197, 821-829.	3.2	14
24	A Novel Approach to Realizing Low-Cost Plasmonic Optical Fiber Sensors: Light-Diffusing Fibers Covered by Thin Metal Films. Fibers, 2019, 7, 34.	1.8	13
25	An Fiber Bragg Grating-Based Monitoring System for Slope Deformation Studies in Geotechnical Centrifuges. Sensors, 2019, 19, 1591.	2.1	11
26	Long-Term Monitoring with Fiber Optics Distributed Temperature Sensing at Campi Flegrei: The Campi Flegrei Deep Drilling Project. Sensors, 2019, 19, 1009.	2.1	11
27	An Experimental Investigation on the Progressive Failure of Unsaturated Granular Slopes. Geosciences (Switzerland), 2019, 9, 63.	1.0	17
28	Brillouin sensing in optically heated Co2+-doped fibers. , 2019, , .		1
29	High-Pass Filtering for Accurate Reconstruction of the Brillouin Frequency Shift Profile From Brillouin Optical Frequency Domain Analysis Data. IEEE Sensors Journal, 2018, 18, 185-192.	2.4	9
30	Analysis of the energy extracted by a harvester based on a piezoelectric tile. Current Applied Physics, 2018, 18, 905-911.	1.1	13
31	Distributed Fiber Optic Sensors for the Monitoring of a Tunnel Crossing a Landslide. Remote Sensing, 2018, 10, 1291.	1.8	42
32	Refractive index sensing by Brillouin scattering in side-polished optical fibers. Optics Letters, 2018, 43, 2280.	1.7	21
33	Refractive Index Sensing through Surface Plasmon Resonance in Light-Diffusing Fibers. Applied Sciences (Switzerland), 2018, 8, 1172.	1.3	23
34	Dual Wavelength Botda for Strain/Temperature Discrimination. Lecture Notes in Electrical Engineering, 2018, , 25-28.	0.3	1
35	Simultaneous Strain and Temperature Measurements by Dual Wavelength Brillouin Sensors. IEEE Sensors Journal, 2017, 17, 3714-3719.	2.4	11
36	Simultaneous strain and temperature measurements using dual-wavelength BOTDA. Proceedings of SPIE, 2017, , .	0.8	1

#	Article	IF	Citations
37	Sweep BOTDA for fast distributed sensing. , 2017, , .		1
38	Experimental demonstration of a Brillouin optical frequency-domain reflectometry (BOFDR) sensor. , 2017, , .		2
39	Exploiting Brillouin Sensors for Refractive Index Measurements. Proceedings (mdpi), 2017, 1, 818.	0.2	0
40	Wind Turbine Blade Monitoring with Brillouin-Based Fiber-Optic Sensors. Journal of Sensors, 2017, 2017, 1-5.	0.6	17
41	A Laboratory Study on the Use of Optical Fibers for Early Detection of Pre-Failure Slope Movements in Shallow Granular Soil Deposits. Geotechnical Testing Journal, 2017, 40, 20160107.	0.5	36
42	Brillouin Optical Time Domain Analysis Sensor for Active Vibration Control of a Cantilever Beam. Journal of Sensors, 2016, 2016, 1-6.	0.6	0
43	Distributed-Temperature-Sensing Using Optical Methods: A First Application in the Offshore Area of Campi Flegrei Caldera (Southern Italy) for Volcano Monitoring. Remote Sensing, 2016, 8, 674.	1.8	15
44	Cost-effective method for fast Brillouin optical time-domain analysis. Optics Express, 2016, 24, 25424.	1.7	11
45	Proposal of Brillouin optical frequency-domain reflectometry (BOFDR). Optics Express, 2016, 24, 29994.	1.7	72
46	Measurement of Moisture Content in Masonry Materials by Active Distributed Optical Fiber Sensors. , 2016, , .		5
47	Brillouin Optical Time Domain Analysis in Silica Fibers at 850-nm Wavelength. IEEE Photonics Technology Letters, 2016, 28, 2577-2580.	1.3	6
48	Performance of Ground Anchors Built in a Flysch Deposit. Procedia Earth and Planetary Science, 2016, 16, 71-80.	0.6	0
49	Influence of laser phase noise on Brillouin optical time-domain analysis sensors. , 2016, , .		1
50	Practical limitations of the slope assisted BOTDA method in dynamic strain sensing. Proceedings of SPIE, 2016, , .	0.8	1
51	Heterodyne slope-assisted Brillouin optical time-domain analysis for dynamic strain measurements. Journal of Optics (United Kingdom), 2016, 18, 025606.	1.0	16
52	Analysis of SNR penalty in Brillouin optical time-domain analysis sensors induced by laser source phase noise. Journal of Optics (United Kingdom), 2016, 18, 025601.	1.0	11
53	Soil slope monitoring by use of a Brillouin distributed sensor. , 2015, , .		5
54	Brillouin optical time-domain analysis for geotechnical monitoring. Journal of Rock Mechanics and Geotechnical Engineering, 2015, 7, 458-462.	3.7	73

#	Article	IF	Citations
55	Performance of slope behavior indicators in unsaturated pyroclastic soils. Journal of Mountain Science, 2015, 12, 1434-1447.	0.8	24
56	Structural Damage Identification in an Aluminum Composite Plate by Brillouin Sensing. IEEE Sensors Journal, 2015, 15, 659-660.	2.4	11
57	Fiber optic based inclinometer for remote monitoring of landslides: On site comparison with traditional inclinometers. , 2014, , .		5
58	Distributed Fibre Optic Sensing Techniques for Soil Slope Monitoring. , 2014, , .		1
59	Experimental and numerical study on stimulated Brillouin scattering in a graded-index multimode fiber. Optics Express, 2014, 22, 17480.	1.7	37
60	Novel Approaches for CM-Scale Resolution and Long-Range Sensing by Stimulated Brillouin Scattering in Optical Fibers. Lecture Notes in Electrical Engineering, 2014, , 333-336.	0.3	0
61	Distributed optical fiber sensors for integrated monitoring of railway infrastructures. , 2014, , .		4
62	Brillouin optical frequency domain analysis in polymer optical fiber. , 2014, , .		0
63	Distributed Temperature Sensing in Polymer Optical Fiber by BOFDA. IEEE Photonics Technology Letters, 2014, 26, 387-390.	1.3	89
64	Modal analysis of an aluminum rectangular plate by use of the balanced-detection DPP-BOTDA method. , 2014, , .		0
65	Analysis of the Brillouin gain spectrum in a graded-index multimode fiber. , 2014, , .		2
66	High-Spatial Resolution DPP-BOTDA by Real-Time Balanced Detection. IEEE Photonics Technology Letters, 2014, 26, 1251-1254.	1.3	12
67	Numerical and Experimental Characterization of a Ferrule-Top Cantilever Optical Fiber Sensor for Flow Velocity Measurements. Lecture Notes in Electrical Engineering, 2014, , 337-341.	0.3	0
68	Bend-Induced Brillouin Frequency Shift Variation in a Single-Mode Fiber. IEEE Photonics Technology Letters, 2013, 25, 2362-2364.	1.3	22
69	Railway traffic monitoring using Brillouin distributed sensors. , 2013, , .		3
70	Real-time monitoring of railway traffic using slope-assisted Brillouin distributed sensors. Applied Optics, 2013, 52, 3770.	0.9	58
71	Experimental modal analysis of an aluminum rectangular plate by use of the slope-assisted BOTDA method. Smart Materials and Structures, 2013, 22, 125035.	1.8	9
72	Limitations and strategies to improve measurement accuracy in differential pulse-width pair Brillouin optical time-domain analysis sensing. Applied Optics, 2013, 52, 3020.	0.9	3

#	Article	IF	Citations
73	Modal analysis of a cantilever beam by use of the slope-assisted BOTDA method for damage identification. Proceedings of SPIE, 2013, , .	0.8	1
74	High-Spatial- and Spectral-Resolution Time-Domain Brillouin Distributed Sensing by Use of Two Frequency-Shifted Optical Beam Pairs. IEEE Photonics Journal, 2012, 4, 1900-1908.	1.0	4
75	Development of fiber optic ferrule-top cantilevers for sensing and beam-steering applications. Proceedings of SPIE, 2012, , .	0.8	1
76	Long term structural health monitoring by Brillouin fibre-optic sensing: a real case. Journal of Geophysics and Engineering, 2012, 9, S64-S69.	0.7	31
77	Spatial Resolution Enhancement in Preactivated BOTDA Schemes by Numerical Processing. IEEE Photonics Technology Letters, 2012, 24, 1003-1005.	1.3	5
78	Bridge Monitoring Using Brillouin Fiber-Optic Sensors. IEEE Sensors Journal, 2012, 12, 145-150.	2.4	61
79	Automated and Cost Effective Maintenance for Railway (ACEMâ€“Rail). Procedia, Social and Behavioral Sciences, 2012, 48, 1058-1067.	0.5	15
80	Differential Techniques for High-Resolution BOTDA: An Analytical Approach. IEEE Photonics Technology Letters, 2012, 24, 1295-1297.	1.3	7
81	Distributed Strain and Temperature Sensing at CM-Scale Spatial Resolution by BOFDA. Lecture Notes in Electrical Engineering, 2012, , 235-239.	0.3	1
82	Modal analysis of a cantilever beam by use of Brillouin based distributed dynamic strain measurements. Smart Materials and Structures, 2012, 21, 125022.	1.8	19
83	Numerical study of a ferrule-top cantilever optical fiber sensor for wind-tunnel applications and comparison with experimental results. Sensors and Actuators A: Physical, 2012, 178, 17-25.	2.0	18
84	Distributed Sensing at Centimeter-Scale Spatial Resolution by BOFDA: Measurements and Signal Processing. IEEE Photonics Journal, 2012, 4, 48-56.	1.0	110
85	Differential pulse-width pair BOTDA with fast fall-time pulses. , 2011, , .		0
86	Pulsing the Probe Wave to Reduce Nonlocal Effects in Brillouin Optical Time-Domain Analysis (BOTDA) Sensors. IEEE Sensors Journal, 2011, 11, 1067-1068.	2.4	13
87	Numerical analysis of single pulse and differential pulse-width pair BOTDA systems in the high spatial resolution regime. Optics Express, 2011, 19, 19233.	1.7	25
88	Long-range distributed Brillouin fiber sensors by use of an unbalanced double sideband probe. Optics Express, 2011, 19, 23845.	1.7	34
89	Centimeter-range spatial resolution distributed sensing by BOFDA. Proceedings of SPIE, 2011, , .	0.8	1
90	Distributed Strain Measurement along a Concrete Beam via Stimulated Brillouin Scattering in Optical Fibers. International Journal of Geophysics, 2011, 2011, 1-5.	0.4	10

#	Article	IF	Citations
91	Bridge monitoring by Brillouin-based distributed strain measurements. Proceedings of SPIE, 2010, , .	0.8	0
92	Dynamic strain measurements on a cantilever beam using stimulated Brillouin scattering. Smart Materials and Structures, 2010, 19, 045024.	1.8	5
93	Theoretical and Experimental Analysis of Brillouin Scattering in Single-Mode Optical Fiber Excited by an Intensity- and Phase-Modulated Pump. Journal of Lightwave Technology, 2010, 28, 193-200.	2.7	14
94	Comment on: â€œSlow Lightâ€•in stimulated Brillouin scattering: on the influence of the spectral width of pump radiation on the group index. Optics Express, 2010, 18, 1788.	1.7	0
95	Extension of the maximum measuring range in distributed Brillouin fiber sensors by tuning the Stokes/anti-Stokes power ratio. , 2010, , .		2
96	Active vibration control by a smart auxiliary mass damper equipped with a fiber Bragg grating sensor. Sensors and Actuators A: Physical, 2009, 153, 180-186.	2.0	12
97	Dynamic strain measurement in optical fibers by stimulated Brillouin scattering. Optics Letters, 2009, 34, 2613.	1.7	229
98	A Simple Technique for Reducing Pump Depletion in Long-Range Distributed Brillouin Fiber Sensors. IEEE Sensors Journal, 2009, 9, 633-634.	2.4	81
99	Brillouin Optical Frequency-Domain Single-Ended Distributed Fiber Sensor. IEEE Sensors Journal, 2009, 9, 221-222.	2.4	6
100	Dynamic strain measurement at randomly addressed optical fiber positions using a time-domain Brillouin sensing system. Proceedings of SPIE, 2009, , .	0.8	0
101	Pump depletion reduction technique for extended-range distributed Brillouin fiber sensors. , 2009, , .		3
102	An Instrumented Flume to Investigate the Mechanics of Rainfall-Induced Landslides in Unsaturated Granular Soils. Geotechnical Testing Journal, 2009, 32, 101366.	0.5	20
103	Liquid-core/liquid-cladding integrated silicon ARROW waveguides. Optics Communications, 2008, 281, 2062-2066.	1.0	21
104	Stimulated Brillouin scattering in highly birefringent microstructure fiber: experimental analysis. Optics Letters, 2008, 33, 2329.	1.7	9
105	Vectorial dislocation monitoring of pipelines by use of Brillouin-based fiber-optics sensors. Smart Materials and Structures, 2008, 17, 015006.	1.8	25
106	Integrated silicon optical sensors based on hollow core waveguide. , 2007, , .		12
107	Stimulated Brillouin scattering modeling for high-resolution, time-domain distributed sensing. Optics Express, 2007, 15, 10397.	1.7	29
108	Dynamic loading of overhead lines by adaptive learning techniques and distributed temperature sensing. IET Generation, Transmission and Distribution, 2007, 1, 912.	1.4	23

#	Article	IF	Citations
109	Modelling and control of a smart auxiliary mass damper equipped with a bragg grating. , 2007, , .		4
110	Self-Demodulated Heterodyne Frequency Domain Distributed Brillouin Fiber Sensor. IEEE Photonics Technology Letters, 2007, 19, 447-449.	1.3	6
111	Accurate high-resolution fiber-optic distributed strain measurements for structural health monitoring. Sensors and Actuators A: Physical, 2007, 134, 389-395.	2.0	26
112	2-D MMI Devices Based on Integrated Hollow ARROW Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 194-201.	1.9	9
113	Planar Waveguides for Fluorescence-Based Biosensing: Optimization and Analysis. IEEE Sensors Journal, 2006, 6, 1218-1226.	2.4	37
114	Optimization of metal-clad waveguides for sensitive fluorescence detection. Optics Express, 2006, 14, 3512.	1.7	5
115	Low distortion Brillouin slow light in optical fibers using AM modulation. Optics Express, 2006, 14, 5866.	1.7	52
116	An accurate high-resolution technique for distributed sensing based on frequency-domain Brillouin scattering. IEEE Photonics Technology Letters, 2006, 18, 280-282.	1.3	18
117	Development and characterization of an integrated silicon micro flow cytometer. Analytical and Bioanalytical Chemistry, 2006, 386, 1267-1272.	1.9	34
118	Identification of defects and strain error estimation for bending steel beams using time domain Brillouin distributed optical fiber sensors. Smart Materials and Structures, 2006, 15, 612-622.	1.8	30
119	Polymer-on-glass waveguide structure for efficient fluorescence-based optical biosensors. , 2005, , .		0
120	High-resolution distributed fiber-optic frequency-domain Brillouin sensing. , 2005, , .		0
121	Distributed fiber-optic frequency-domain Brillouin sensing. Sensors and Actuators A: Physical, 2005, 123-124, 337-342.	2.0	10
122	Damage detection in bending beams through Brillouin distributed optic-fibre sensor. Bridge Structures, 2005, 1, 355-363.	0.2	13
123	Response of fiber Bragg gratings to longitudinal ultrasonic waves. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 304-312.	1.7	114
124	A reconstruction technique for long-range stimulated Brillouin scattering distributed fibre-optic sensors: experimental results. Measurement Science and Technology, 2005, 16, 900-908.	1.4	66
125	Fiber Bragg grating as ultrasonic wave sensors. , 2004, 5502, 84.		5
126	Distributed fiber optic Brillouin sensing in the frequency domain. , 2004, 5502, 500.		0

#	Article	IF	Citations
127	Accuracy Enhancement in Brillouin Distributed Fiber-Optic Temperature Sensors Using Signal Processing Techniques. IEEE Photonics Technology Letters, 2004, 16, 1143-1145.	1.3	27
128	Stimulated Brillouin scattering frequency-domain analysis in a single-mode optical fiber for distributed sensing. Optics Letters, 2004, 29, 1977.	1.7	29
129	All frequency domain distributed fiber-optic brillouin sensing. IEEE Sensors Journal, 2003, 3, 36-43.	2.4	23
130	<title>Novel data analysis approach for temperature and strain profile reconstruction in distributed fiber optics sensors based on stimulated Brillouin scattering</title>. , 2002, 4576, 108.		2
131	Reconstruction technique for stimulated Brillouin scattering distributed fiber-optic sensors. Optical Engineering, 2002, 41, 2186.	0.5	25
132	Frequency-domain approach to distributed fiber-optic Brillouin sensing. Optics Letters, 2002, 27, 288.	1.7	13
133	Analysis of feasibility on the use of fiber Bragg grating sensors as ultrasound detectors. , 2001, , .		22
134	Design, fabrication and characterization of integrated antiresonant hollow core waveguides for photonics integrated circuits. , 0, , .		2
135	Frequency-domain analysis of stimulated brillouin scattering in single-mode optical fibers. , 0, , .		0