

# Jose Miguel Lopez-Higuera

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6518612/publications.pdf>

Version: 2024-02-01

334  
papers

4,250  
citations

136740

32  
h-index

155451

55  
g-index

336  
all docs

336  
docs citations

336  
times ranked

3515  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced refractometer for aqueous solutions based on perfluorinated polymer optical fibres. Optics Express, 2022, 30, 1397.	1.7	3
2	Analogue of electromagnetically induced transparency in square slotted silicon metasurfaces supporting bound states in the continuum. Optics Express, 2022, 30, 4615.	1.7	34
3	All-Dielectric Metasurface Based on Complementary Split-Ring Resonators for Refractive Index Sensing. Photonics, 2022, 9, 130.	0.9	13
4	Aspherical liquid crystal lenses based on a variable transmission electrode. Optics Express, 2022, 30, 12237.	1.7	16
5	Spectroscopic Approach for the On-Line Monitoring of Welding of Tanker Trucks. Applied Sciences (Switzerland), 2022, 12, 5022.	1.3	5
6	Single Longitudinal Mode Lasers by Using Artificially Controlled Backscattering Erbium Doped Fibers. IEEE Access, 2021, 9, 27428-27433.	2.6	13
7	All-Dielectric Toroidal Metasurfaces for Angular-Dependent Resonant Polarization Beam Splitting. Advanced Optical Materials, 2021, 9, 2002143.	3.6	21
8	Strongly resonant silicon slot metasurfaces with symmetry-protected bound states in the continuum. Optics Express, 2021, 29, 10374.	1.7	67
9	Broadband Continuously Tunable All-Fiber Laser Based on OPG for CARS Imaging. Journal of Lightwave Technology, 2021, 39, 2489-2496.	2.7	4
10	Modeling and Synthesis of Breast Cancer Optical Property Signatures With Generative Models. IEEE Transactions on Medical Imaging, 2021, 40, 1687-1701.	5.4	12
11	Recent Advances in Biomedical Photonic Sensors: A Focus on Optical-Fibre-Based Sensing. Sensors, 2021, 21, 6469.	2.1	28
12	Laser Metal Deposition On-Line Monitoring via Plasma Emission Spectroscopy and Spectral Correlation Techniques. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	1.9	2
13	Slit Beam Shaping Technique for Femtosecond Laser Inscription of Symmetric Cladding Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	1.9	1
14	Sensing Using Light: A Key Area of Sensors. Sensors, 2021, 21, 6562.	2.1	2
15	Cylindrical and Powell Liquid Crystal Lenses With Positive-Negative Optical Power. IEEE Photonics Technology Letters, 2020, 32, 1057-1060.	1.3	14
16	Engineering Aspheric Liquid Crystal Lenses by Using the Transmission Electrode Technique. Crystals, 2020, 10, 835.	1.0	10
17	Optical Fiber Sensors by Direct Laser Processing: A Review. Sensors, 2020, 20, 6971.	2.1	20
18	Slit Beam Shaping Technique for Femtosecond Laser Inscription of Enhanced Plane-by-Plane FBGs. Journal of Lightwave Technology, 2020, 38, 4526-4532.	2.7	24

#	ARTICLE	IF	CITATIONS
19	Complementary Use of Active Infrared Thermography and Optical Coherent Tomography in Non-destructive Testing Inspection of Ancient Marquetries. Journal of Nondestructive Evaluation, 2020, 39, 1.	1.1	5
20	Reflection-based lab-in-fiber sensor integrated in a surgical needle for biomedical applications. Optics Letters, 2020, 45, 5242.	1.7	9
21	Context-free hyperspectral image enhancement for wide-field optical biomarker visualization. Biomedical Optics Express, 2020, 11, 133.	1.5	4
22	Affinity-based color enhancement methods for contrast enhancement in hyperspectral and multimodal imaging. , 2020, , .		1
23	Scatter signatures in SFDI data enable breast surgical margin delineation via ensemble learning. , 2020, , .		1
24	Characterization of tilted end-fiber diffraction grating inscribed by femtosecond laser. Optics and Laser Technology, 2019, 119, 105637.	2.2	2
25	Identification of Human Pathological Mitral Chordae Tendineae Using Polarization-sensitive Optical Coherence Tomography. Sensors, 2019, 19, 543.	2.1	2
26	Comparative Experimental Study of a High-Temperature Raman-Based Distributed Optical Fiber Sensor with Different Special Fibers. Sensors, 2019, 19, 574.	2.1	32
27	Estimation of surgeonsâ€™ ergonomic dynamics with a structured light system during endoscopic surgery. International Forum of Allergy and Rhinology, 2019, 9, 857-864.	1.5	24
28	Switchable Dual-Wavelength Mode-Locked Fiber Laser Source for In-PCF Parametric Frequency Conversion Applied to CARS Microscopy. Journal of Lightwave Technology, 2019, 37, 3510-3516.	2.7	7
29	Custom Scanning Hyperspectral Imaging System for Biomedical Applications: Modeling, Benchmarking, and Specifications. Sensors, 2019, 19, 1692.	2.1	17
30	Diffraction Elements Inscribed at End-Fiber Surface by Femtosecond Laser. Journal of Lightwave Technology, 2019, 37, 4523-4530.	2.7	3
31	Micro-drilled optical fiber for enhanced laser strain sensors. , 2019, , .		4
32	Astigmatism compensation for waveguide inscription in optical fiber by femtosecond lasers. , 2019, , .		1
33	Stress-induced optical waveguides written by an ultrafast laser in Nd <sup>3+</sup> , Y <sup>3+</sup> co-doped SrF <sub>2</sub> crystals. Applied Optics, 2019, 58, 984.	0.9	4
34	Ultrahigh temperature and strain hybrid integrated sensor system based on Raman and femtosecond FBG inscription in a multimode gold-coated fiber. Optics Express, 2019, 27, 37122.	1.7	11
35	Optical fiber lasers assisted by microdrilled optical fiber tapers. Optics Letters, 2019, 44, 2669.	1.7	12
36	Simultaneous Temperature and Strain Discrimination in a Conventional BOTDA via Artificial Neural Networks. Journal of Lightwave Technology, 2018, 36, 2114-2121.	2.7	38

#	ARTICLE	IF	CITATIONS
37	On the spectral signature of melanoma: a non-parametric classification framework for cancer detection in hyperspectral imaging of melanocytic lesions. <i>Biomedical Optics Express</i> , 2018, 9, 6283.	1.5	26
38	Virtual FBGs Using Saturable Absorbers for Sensing with Fiber Lasers. <i>Sensors</i> , 2018, 18, 3593.	2.1	9
39	Feasibility Study of a Fiber Ring Laser Working on the SLM Regime in a BOTDA Sensor. <i>IEEE Sensors Journal</i> , 2018, 18, 4947-4953.	2.4	1
40	Mg/Ca profiles within archaeological mollusc ( <i>Patella vulgata</i> ) shells: Laser-Induced Breakdown Spectroscopy compared to Inductively Coupled Plasma-Optical Emission Spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 148, 8-15.	1.5	14
41	Machine Learning for Turning Optical Fiber Specklegram Sensor into a Spatially-Resolved Sensing System. Proof of Concept. <i>Journal of Lightwave Technology</i> , 2018, 36, 3733-3738.	2.7	49
42	Single longitudinal mode fiber ring laser. <i>Optics and Laser Technology</i> , 2018, 107, 361-365.	2.2	0
43	Wavelength converter using a highly Er-doped optical fiber ring laser. <i>Laser Physics</i> , 2018, 28, 075101.	0.6	0
44	Automated Measurement of Magnesium/Calcium Ratios in Gastropod Shells Using Laser-Induced Breakdown Spectroscopy for Paleoclimatic Applications. <i>Applied Spectroscopy</i> , 2017, 71, 591-599.	1.2	16
45	Low-cost fiber specklegram sensor for noncontact continuous patient monitoring. <i>Journal of Biomedical Optics</i> , 2017, 22, 037001.	1.4	29
46	Distributed High-Temperature Optical Fiber Sensor Based on a Brillouin Optical Time Domain Analyzer and Multimode Gold-Coated Fiber. <i>IEEE Sensors Journal</i> , 2017, 17, 2393-2397.	2.4	15
47	In-fiber Mach-Zehnder interferometer inscribed with femtosecond laser for high temperature sensing. <i>Proceedings of SPIE</i> , 2017, , .	0.8	3
48	Feasibility study of strain and temperature discrimination in a BOTDA system via artificial neural networks. , 2017, , .		2
49	Non-contact vibration analysis using speckle-based techniques. <i>Proceedings of SPIE</i> , 2017, , .	0.8	1
50	Safe and private pedestrian detection by a low-cost fiber optic specklegram. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
51	Influence of saturable absorbers on fiber ring laser sensors. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
52	Collagen birefringence assessment in heart chordae tendineae through PS-OCT. , 2017, , .		1
53	Ultrahigh Temperature Raman-Based Distributed Optical Fiber Sensor With Gold-Coated Fiber. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 296-301.	1.9	22
54	Curvature Sensor Based on In-Fiber Mach-Zehnder Interferometer Inscribed With Femtosecond Laser. <i>Journal of Lightwave Technology</i> , 2017, 35, 4624-4628.	2.7	36

#	ARTICLE	IF	CITATIONS
55	Roadmap on optical sensors. Journal of Optics (United Kingdom), 2017, 19, 083001.	1.0	70
56	Experimental demonstration of a Brillouin optical frequency-domain reflectometry (BOFDR) sensor. , 2017, , .		2
57	Automated skin lesion segmentation with kernel density estimation. , 2017, , .		0
58	OCT inspection of degenerative and rheumatic tendinous cords. Proceedings of SPIE, 2017, , .	0.8	0
59	Tunable SESAM-Based Mode-Locked Soliton Fiber Laser in Linear Cavity by Axial-Strain Applied to an FBG. Journal of Lightwave Technology, 2017, 35, 5003-5009.	2.7	43
60	Brillouin optical time-domain analyzer with a fiber ring laser working on the SLM regime. , 2017, , .		0
61	Directional Kernel Density Estimation for Classification of Breast Tissue Spectra. IEEE Transactions on Medical Imaging, 2017, 36, 64-73.	5.4	18
62	Hessian analysis for the delineation of amorphous anomalies in optical coherence tomography images of the aortic wall. Biomedical Optics Express, 2016, 7, 1415.	1.5	3
63	Proposal of Brillouin optical frequency-domain reflectometry (BOFDR). Optics Express, 2016, 24, 29994.	1.7	72
64	Tunable Dual-Wavelength Random Distributed Feedback Fiber Laser With Bidirectional Pumping Source. Journal of Lightwave Technology, 2016, 34, 4148-4153.	2.7	30
65	Reflection-based fiber specklegram sensor. Proceedings of SPIE, 2016, , .	0.8	3
66	High-temperature distributed sensor system via BOTDA and multimode gold-coated fiber. , 2016, , .		1
67	Brillouin frequency shift estimation in BOTDA via subpixel processing. , 2016, , .		2
68	Thermal annealing of tilted fiber Bragg gratings. , 2016, , .		1
69	SLM Fiber Laser Stabilized at High Temperature. IEEE Photonics Technology Letters, 2016, 28, 693-696.	1.3	4
70	Colorimetric Analysis for On-Line Arc-Welding Diagnostics by Means of Plasma Optical Spectroscopy. IEEE Sensors Journal, 2016, 16, 3465-3471.	2.4	12
71	Biomedical Optical Sensors: Currents and Trends (Invited Paper). , 2016, , .		1
72	Single-Longitudinal-Mode Dual Wavelength-Switchable Fiber Laser Based on Superposed Fiber Bragg Gratings. IEEE Photonics Journal, 2015, 7, 1-7.	1.0	18

#	ARTICLE	IF	CITATIONS
73	Ultra-long and high-stability random laser based on EDF gain-media and Rayleigh scattering distributed mirror. Proceedings of SPIE, 2015, , .	0.8	1
74	Enhanced delineation of degradation in aortic walls through OCT. , 2015, , .		1
75	Iterative Otsu's method for OCT improved delineation in the aorta wall. , 2015, , .		0
76	Common frequency suppression method for fiber specklegram perimeter sensors. , 2015, , .		3
77	Overcoming Nonlocal Effects and Brillouin Threshold Limitations in Brillouin Optical Time-Domain Sensors. IEEE Photonics Journal, 2015, 7, 1-9.	1.0	48
78	Fiber specklegram sensors sensitivities at high temperatures. Proceedings of SPIE, 2015, , .	0.8	3
79	Fiber Bragg grating regeneration temperature in standard fibers. , 2015, , .		0
80	A thermographic step-heating technique for metallic pollutant detection in soils. Infrared Physics and Technology, 2015, 69, 191-197.	1.3	1
81	Embedded compaction pressure sensor based on Fiber Bragg Gratings. Measurement: Journal of the International Measurement Confederation, 2015, 68, 257-261.	2.5	11
82	Automated Laser-induced Breakdown Spectroscopy setup for chemical mapping of archaeological shells. , 2015, , .		0
83	Multispectral reflectance enhancement for breast cancer visualization in the operating room. , 2015, , .		2
84	Overcoming non-local effects and Brillouin threshold limitations in Brillouin distributed sensors. , 2015, , .		0
85	Optical Sensors: a comprehensive approach. , 2015, , .		0
86	Principal Component Analysis applied to the identification of spectral variations in depressed mouse brain. , 2015, , .		0
87	Interference of speckle patterns projected by multimode fibers. , 2015, , .		2
88	Fiber-optic technologies for tissue diagnosis in cardiovascular and oncology applications. , 2015, , .		0
89	Structural Damage Identification in an Aluminum Composite Plate by Brillouin Sensing. IEEE Sensors Journal, 2015, 15, 659-660.	2.4	11
90	Fiber Specklegram-Multiplexed Sensor. Journal of Lightwave Technology, 2015, 33, 2591-2597.	2.7	52

#	ARTICLE	IF	CITATIONS
91	Comparison of hierarchical temporal memories and artificial neural networks under noisy data. Journal of Intelligent Material Systems and Structures, 2015, 26, 1243-1250.	1.4	1
92	Iterative Otsu's method for OCT enhanced delineation in the aorta wall. , 2015, , .		0
93	Automatic strain detection in a Brillouin Optical Time Domain sensor using Principal Component Analysis and Artificial Neural Networks. , 2014, , .		6
94	Optical strain gauge with high spatial resolution. Journal of Strain Analysis for Engineering Design, 2014, 49, 404-409.	1.0	1
95	OCT for anomaly detection in aortic aneurysm resection. , 2014, , .		0
96	Identification of vessel wall anomalies in thoracic aortic aneurysms through optical coherence tomography and gradient-based strategies. Proceedings of SPIE, 2014, , .	0.8	0
97	Temperature and pressure transducer based on FBG for large diameter water pipes. Proceedings of SPIE, 2014, , .	0.8	0
98	Identification of vessel wall degradation in ascending thoracic aortic aneurysms with OCT. Biomedical Optics Express, 2014, 5, 4089.	1.5	7
99	OCT assessment of aortic wall degradation for surgical guidance. , 2014, , .		0
100	Speckle POF sensor for detecting vital signs of patients. Proceedings of SPIE, 2014, , .	0.8	5
101	Polarimetric DBR fiber laser sensor for strain-temperature discrimination. Proceedings of SPIE, 2014, , .	0.8	0
102	Wavelength domain multiplexed fiber specklegram sensor. , 2014, , .		0
103	Species discrimination in plasma welding spectra by means of principal and independent component analysis. , 2014, , .		0
104	Study of Fiber Bragg Grating Spectral Overlapping for Laser Structures. IEEE Photonics Technology Letters, 2014, 26, 1108-1111.	1.3	2
105	Dual-Wavelength Single-Longitudinal Mode Fiber Laser Using Phase-Shift Bragg Gratings. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 161-165.	1.9	36
106	DBR Fiber Laser Sensor With Polarization Mode Suppression. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 551-554.	1.9	2
107	Fiber Bragg grating sensors for on-line welding diagnostics. Journal of Materials Processing Technology, 2014, 214, 839-843.	3.1	8
108	Experimental demonstration of a leakage monitoring system for large diameter water pipes using a fiber optic distributed sensor system. , 2014, , .		4

#	ARTICLE	IF	CITATIONS
109	Colorimetric analysis for on-line arc-welding diagnostics by means of plasma optical spectroscopy. , 2014, , .		1
110	Optical coherence tomography assessment of vessel wall degradation in aneurysmatic thoracic aortas. Proceedings of SPIE, 2013, , .	0.8	0
111	Feasibility study of Hierarchical Temporal Memories applied to welding diagnostics. Sensors and Actuators A: Physical, 2013, 204, 58-66.	2.0	7
112	New design for temperatureâ€“strain discrimination using fiber Bragg gratings embedded in laminated composites. Smart Materials and Structures, 2013, 22, 105011.	1.8	4
113	Optical spectroscopic sensors: From the control of industrial processes to tumor delineation. , 2013, , .		1
114	A Switchable Erbium Doped Fiber Ring Laser System for Temperature Sensors Multiplexing. IEEE Sensors Journal, 2013, 13, 2279-2283.	2.4	9
115	Bonding sensor based on simplified Fiber Bragg Grating spectral evolution. Composites Part B: Engineering, 2013, 53, 284-289.	5.9	3
116	Optical fiber strain sensor with extended dynamic range based on specklegrams. Sensors and Actuators A: Physical, 2013, 203, 341-345.	2.0	49
117	Linear classifier and textural analysis of optical scattering images for tumor classification during breast cancer extraction. , 2013, , .		0
118	Switchable fiber optic laser system for high and low-strain fiber optic sensors remote multiplexing. Proceedings of SPIE, 2013, , .	0.8	1
119	Recovering a fiber Bragg grating axial strain distribution from its reflection spectrum. Optics Letters, 2013, 38, 2327.	1.7	5
120	Direct identification of breast cancer pathologies using blind separation of label-free localized reflectance measurements. Biomedical Optics Express, 2013, 4, 1104.	1.5	12
121	Single-longitudinal mode laser structure based on a very narrow filtering technique. Optics Express, 2013, 21, 10289.	1.7	19
122	Optical coherence tomography assessment of vessel wall degradation in thoracic aortic aneurysms. Journal of Biomedical Optics, 2013, 18, 126003.	1.4	15
123	Application of Remote Power-by-Light Switching in a Simplified BOTDA Sensor Network. Sensors, 2013, 13, 17434-17444.	2.1	4
124	Pulsed Wavelength-Tunable Brillouin Fiber Laser Based on a Fourier-Domain Mode-Locking Source. IEEE Photonics Journal, 2013, 5, 1500907-1500907.	1.0	2
125	Fiber Bragg grating sensors for on-line welding diagnostics. Proceedings of SPIE, 2013, , .	0.8	2
126	Simplified sensor design for temperature-strain discrimination using fiber Bragg gratings embedded in laminated composites. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
127	Measurement of displacement in the micrometer range using speckle pattern correlation in multimode fibers. , 2013, , .		6
128	Fractal analysis of scatter imaging signatures to distinguish breast pathologies. , 2013, , .		2
129	STRUCTURAL HEALTH MONITORING IN BUILDINGS, BRIDGES AND CIVIL ENGINEERING. , 2013, , 21-45.		1
130	Speckle characterization in multimode fibers for sensing applications. , 2012, , .		10
131	Normalization of laser-induced breakdown spectroscopy spectra using a plastic optical fiber light collector and acoustic sensor device. Applied Optics, 2012, 51, 8306.	0.9	13
132	Sampled Fiber Bragg Grating spectral synthesis. Optics Express, 2012, 20, 22429.	1.7	5
133	Textural analysis of optical scattering for identification of cancer in breast surgical specimens. , 2012, , .		0
134	Pre-processing techniques of thermal sequences applied to online welding monitoring. Quantitative InfraRed Thermography Journal, 2012, 9, 69-78.	2.1	4
135	ICA-guided delineation of breast cancer pathology. , 2012, , .		0
136	Quasi distributed hybrid Brillouin fiber laser sensor system. Measurement Science and Technology, 2012, 23, 085202.	1.4	2
137	Editorial Third Special Issue on Optical Fiber Sensors. IEEE Sensors Journal, 2012, 12, 5-7.	2.4	6
138	Enhanced tumor contrast during breast lumpectomy provided by independent component analysis of localized reflectance measures. , 2012, , .		1
139	Smart material using fiber Bragg grating transducers and shape memory alloy actuators. , 2012, , .		0
140	Temperature level optical fiber sensor using shape memory alloy wires. Proceedings of SPIE, 2012, , .	0.8	0
141	Influence of the refractive index of liquids in the speckle pattern of multimode fibers. , 2012, , .		2
142	BOTDA sensor network with power by light remote switching. Proceedings of SPIE, 2012, , .	0.8	1
143	Pipe flow speed sensor based on fiber Bragg gratings. , 2012, , .		3
144	Integral temperature hybrid laser sensor. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
145	Blind breast tissue diagnosis using independent component analysis of localized backscattering response. , 2012, , .		0
146	Quasidistributed fiber sensor for precast concrete structures monitoring. , 2012, , .		1
147	Sensor System Based on a Brillouin Fiber Laser for Remote in Series Fiber Bragg Gratings Interrogation. IEEE Sensors Journal, 2012, 12, 3480-3482.	2.4	1
148	Spectral and Optimized Marks for Qualitative Material Discrimination. IEEE Sensors Journal, 2012, 12, 230-236.	2.4	3
149	Sensor for the Detection of Protective Coating Traces on Boron Steel With Aluminiumâ€“Silicon Covering by Means of Laser-Induced Breakdown Spectroscopy and Support Vector Machines. IEEE Sensors Journal, 2012, 12, 64-70.	2.4	21
150	Raw Material Classification by Means of Hyperspectral Imaging and Hierarchical Temporal Memories. IEEE Sensors Journal, 2012, 12, 2767-2775.	2.4	7
151	POF vibration sensor based on speckle pattern changes. Proceedings of SPIE, 2012, , .	0.8	8
152	Brillouin Distributed Fiber Sensors: An Overview and Applications. Journal of Sensors, 2012, 2012, 1-17.	0.6	135
153	Welding Diagnostics by Means of Particle Swarm Optimization and Feature Selection. Journal of Sensors, 2012, 2012, 1-11.	0.6	7
154	L-Band Multiwavelength Single-Longitudinal Mode Fiber Laser for Sensing Applications. Journal of Lightwave Technology, 2012, 30, 1173-1177.	2.7	53
155	Optimized image calibration for spectroscopic systems. , 2011, , .		1
156	Remote (155 km) Fiber Bragg Grating Interrogation Technique Combining Raman, Brillouin, and Erbium Gain in a Fiber Laser. IEEE Photonics Technology Letters, 2011, 23, 621-623.	1.3	23
157	L-band multiwavelength erbium-doped fiber ring laser for sensing applications. Proceedings of SPIE, 2011, , .	0.8	2
158	Fiber Optic Sensors in Structural Health Monitoring. Journal of Lightwave Technology, 2011, 29, 587-608.	2.7	636
159	Efficient dynamic events discrimination technique for fiber distributed Brillouin sensors. Optics Express, 2011, 19, 18917.	1.7	2
160	30cm of spatial resolution using pre-excitation pulse BOTDA technique. Proceedings of SPIE, 2011, , .	0.8	4
161	Long integral temperature Brillouin sensor for off- shore wind energy power supply lines. , 2011, , .		0
162	Optimal design and implementation of a temperature and strain optical transducer using FBGs and fiber taper hybrid structure. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
163	Decimeter Spatial Resolution by Using Differential Preexcitation BOTDA Pulse Technique. IEEE Sensors Journal, 2011, 11, 2344-2348.	2.4	8
164	Multiplexing Techniques for FBG Sensors. , 2011, , 99-115.		9
165	Low cost plastic optical fiber sensor based on surface plasmon resonance. , 2010, , .		8
166	Spectral marks for qualitative discriminant analysis. Proceedings of SPIE, 2010, , .	0.8	1
167	Fiber optics in structural health monitoring. , 2010, , .		4
168	High resolution method for measuring Brillouin spectrum scattering in special optical fibers. Proceedings of SPIE, 2010, , .	0.8	0
169	Angle transducer based on fiber Bragg gratings able for tunnel auscultation. Proceedings of SPIE, 2010, , .	0.8	3
170	Unsupervised grouping of industrial textile dyes using K-means algorithm and optical fibre spectroscopy. , 2010, , .		0
171	Brillouin gain spectrum tailoring technique by using fiber concatenation and strain for fiber devices. Microwave and Optical Technology Letters, 2010, 52, 787-790.	0.9	0
172	Methodology for all-fiber optical active devices by composing the stimulated Brillouin scattering spectra. Microwave and Optical Technology Letters, 2010, 52, 1316-1318.	0.9	0
173	Infrared thermography processing based on higher-order statistics. NDT and E International, 2010, 43, 661-666.	1.7	99
174	Stability comparison of two quadruple-wavelength switchable erbium-doped fiber lasers. Optical Fiber Technology, 2010, 16, 205-211.	1.4	13
175	Resilient long-distance sensor system using a multiwavelength Raman laser. Measurement Science and Technology, 2010, 21, 094017.	1.4	25
176	Optimized marks for qualitative material discrimination. , 2010, , .		1
177	Welding diagnostics based on feature selection and optimization algorithms. Proceedings of SPIE, 2010, , .	0.8	2
178	Automated ensemble segmentation of epithelial proliferation, necrosis, and fibrosis using scatter tumor imaging. , 2010, , .		1
179	Use of the plasma RMS signal for on-line welding quality monitoring. Proceedings of SPIE, 2010, , .	0.8	2
180	Hyperspectral imaging for diagnosis and quality control in agri-food and industrial sectors. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
181	Experimental characterization of the spectral effective index dependence of index-guided photonic crystal fibers. Measurement Science and Technology, 2010, 21, 055111.	1.4	3
182	Stabilization of Dual-Wavelength Erbium-Doped Fiber Ring Lasers by Single-Mode Operation. IEEE Photonics Technology Letters, 2010, 22, 368-370.	1.3	48
183	Brillouin frequency shift of standard optical fibers set in water vapor medium. Optics Letters, 2010, 35, 28.	1.7	8
184	Bragg Gratings Written in Tapered Solid-Core Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2010, 22, 1048-1050.	1.3	6
185	Fiber-optic spectroscopic sensor for reactive dye mixture spectrum synthesis in textile industry. , 2009, , .		2
186	Enhanced contrast detection of subsurface defects by pulsed infrared thermography based on the fourth order statistic moment, kurtosis. , 2009, , .		21
187	Multi-zone temperature sensor using a multi-wavelength Brillouin fiber ring laser. , 2009, , .		1
188	Use of the Plasma Spectrum RMS Signal for Arc-Welding Diagnostics. Sensors, 2009, 9, 5263-5276.	2.1	21
189	Technique to develop active devices by modifying Brillouin gain spectrum. Electronics Letters, 2009, 45, 637.	0.5	2
190	High Temperature Long Period Grating Thermo-Mechanically Written. Sensors, 2009, 9, 5649-5654.	2.1	3
191	Gas Sensor Based on Photonic Crystal Fibres in the $2\hat{1}/23$ and $\hat{1}/22 + 2\hat{1}/23$ Vibrational Bands of Methane. Sensors, 2009, 9, 6261-6272.	2.1	38
192	Multi-Line Fit Model for the Detection of Methane at $\hat{1}/22 + 2\hat{1}/23$ Band using Hollow-Core Photonic Bandgap Fibres. Sensors, 2009, 9, 490-502.	2.1	15
193	Defect Detection in Arc-Welding Processes by Means of the Line-to-Continuum Method and Feature Selection. Sensors, 2009, 9, 7753-7770.	2.1	19
194	Spectral processing technique based on feature selection and artificial neural networks for arc-welding quality monitoring. NDT and E International, 2009, 42, 56-63.	1.7	45
195	Ultrasensitive UV-tunable grating in all-solid photonic bandgap fibers. Optics Communications, 2009, 282, 2358-2361.	1.0	15
196	Feasibility study of imaging spectroscopy to monitor the quality of online welding. Applied Optics, 2009, 48, 4735.	2.1	3
197	Stability Comparison of Two Ring Resonator Structures for Multiwavelength Fiber Lasers Using Highly Doped Er-Fibers. Journal of Lightwave Technology, 2009, 27, 2563-2569.	2.7	30
198	Multi-coupling gap system modeling for methane detection using hollow-core photonic bandgap fibers. , 2009, , .		0

#	ARTICLE	IF	CITATIONS
199	Automated interpretation of scatter signatures aimed at tissue morphology identification. Proceedings of SPIE, 2009, , .	0.8	1
200	Comparison of the Stability of Ring Resonator Structures for Multiwavelength Fiber Lasers Using Raman or Er-Doped Fiber Amplification. IEEE Journal of Quantum Electronics, 2009, 45, 1551-1557.	1.0	17
201	Automated segmentation based upon remitted scatter spectra from pathologically distinct tumor regions. Proceedings of SPIE, 2009, , .	0.8	1
202	Temperature sensing in multiple zones based on Brillouin fiber ring laser. Journal of Physics: Conference Series, 2009, 178, 012017.	0.3	3
203	Optical fibre spectroscopy sensor for the quantitative determination of industrial textile dyes. Proceedings of SPIE, 2009, , .	0.8	3
204	Effective Index and Mode Width Sensitivities to Opto-Geometrical Parameters on Index-Guided Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2008, 20, 205-207.	1.3	4
205	Influence of Humidity on the Measurement of Brillouin Frequency Shift. IEEE Photonics Technology Letters, 2008, 20, 1959-1961.	1.3	12
206	Spectroscopic analysis of the plasma continuum radiation for on-line arc-welding defect detection. Journal Physics D: Applied Physics, 2008, 41, 135202.	1.3	36
207	Quality control of industrial processes by combining a hyperspectral sensor and Fisher's linear discriminant analysis. Sensors and Actuators B: Chemical, 2008, 129, 977-984.	4.0	36
208	Adaptive illumination source for multispectral vision system applied to material discrimination. Proceedings of SPIE, 2008, , .	0.8	7
209	Successful Fiber Sensing Technologies and Hot Topics for the Near Future. AIP Conference Proceedings, 2008, , .	0.3	0
210	Methane sensing at 1300nm band with hollow-core photonic bandgap fibre as gas cell. Electronics Letters, 2008, 44, 403.	0.5	27
211	Support vector machines in hyperspectral imaging spectroscopy with application to material identification. , 2008, , .		6
212	Effect of humidity on optical fiber distributed sensor based on Brillouin scattering. Proceedings of SPIE, 2008, , .	0.8	3
213	Data Processing Method Applying Principal Component Analysis and Spectral Angle Mapper for Imaging Spectroscopic Sensors. IEEE Sensors Journal, 2008, 8, 1310-1316.	2.4	29
214	Fabrication of FBGs With an Arbitrary Spectrum. IEEE Sensors Journal, 2008, 8, 1287-1291.	2.4	9
215	Efficient processing technique based on plasma optical spectroscopy for on-line welding quality monitoring. , 2008, , .		0
216	In-process automatic wavelength calibration for CCD-spectrometers. Proceedings of SPIE, 2008, , .	0.8	2

#	ARTICLE	IF	CITATIONS
217	Industrial defect discrimination applying infrared imaging spectroscopy and artificial neural networks. Proceedings of SPIE, 2008, , .	0.8	1
218	Tunable fiber laser using concatenated non-adiabatic single-mode fiber tapers. Proceedings of SPIE, 2008, , .	0.8	1
219	Detection of methane at 1670-nm band with a hollow-core photonic bandgap fiber. , 2008, , .		6
220	Arc welding quality monitoring by means of near infrared imaging spectroscopy. , 2008, , .		2
221	Methane sensing using multiple-coupling gaps in hollow-core photonic bandgap fibers. Proceedings of SPIE, 2008, , .	0.8	5
222	Editorial Optical Fiber Sensor Technology and Applications. IEEE Sensors Journal, 2008, 8, 1052-1054.	2.4	32
223	Infrared imaging spectroscopic system based on a PGP spectrograph and a monochrome infrared camera. Proceedings of SPIE, 2008, , .	0.8	1
224	Hyperspectral data processing algorithm combining principal component analysis and K nearest neighbours. Proceedings of SPIE, 2008, , .	0.8	2
225	Refractometric sensor based on induced losses in the region of transition from a curved side-polished POF fiber. Proceedings of SPIE, 2008, , .	0.8	1
226	Arc-Welding Spectroscopic Monitoring based on Feature Selection and Neural Networks. Sensors, 2008, 8, 6496-6506.	2.1	19
227	A quasi-distributed level sensor based on a bent side-polished plastic optical fibre cable. Measurement Science and Technology, 2007, 18, 2261-2267.	1.4	59
228	Arc-welding defect detection by means of principal component analysis and artificial neural networks. , 2007, 6541, 296.		2
229	Arc-welding quality assurance by means of embedded fiber sensor and spectral processing combining feature selection and neural networks. Proceedings of SPIE, 2007, , .	0.8	1
230	Evaluation of PCA dimensionality reduction techniques in imaging spectroscopy for foreign object detection. , 2007, , .		6
231	Quasi-distributed liquid level measurement with adaptable optical fiber transducers. Proceedings of SPIE, 2007, , .	0.8	1
232	Field test of infrared thermography applied to biogas controlling in landfill sites. , 2007, , .		2
233	Arc-welding process control based on back face thermography: application to the manufacturing of nuclear steam generators. , 2007, , .		3
234	Pulse shapes effects on backscattering Brillouin gain for distributed fiber sensing. Proceedings of SPIE, 2007, , .	0.8	0

#	ARTICLE	IF	CITATIONS
235	Technique of FBG fabrication with an arbitrary spectrum. Proceedings of SPIE, 2007, , .	0.8	0
236	Data processing method applying principal component analysis and spectral angle mapper for imaging spectroscopic sensors. Proceedings of SPIE, 2007, , .	0.8	2
237	Effects of temperature on high concentration erbium-doped fiber intrinsic parameters. Proceedings of SPIE, 2007, , .	0.8	3
238	Comparison between a symmetric bidirectional-pumping and a unidirectional-pumping configurations in an erbium fiber ring laser. Proceedings of SPIE, 2007, , .	0.8	2
239	Pulse shape effects on the measurement of temperature using a Brillouin-based optical fiber sensor. , 2007, , .		2
240	Plasma spectroscopy analysis technique based on optimization algorithms and spectral synthesis for arc-welding quality assurance. Optics Express, 2007, 15, 1884.	1.7	22
241	Methane detection at 1670-nm band using a hollow-core photonic bandgap fiber and a multiline algorithm. Optics Express, 2007, 15, 17570.	1.7	98
242	Embedded spectroscopic fiber sensor for on-line arc-welding analysis. Applied Optics, 2007, 46, 3215.	2.1	8
243	Optical properties of photonic crystal fibers with the strain. , 2007, , .		0
244	Spectroscopic Sensor System for Quality Assurance of the Tube-To-Tubesheet Welding Process in Nuclear Steam Generators. IEEE Sensors Journal, 2007, 7, 1219-1224.	2.4	24
245	Optically Tunable Long-Period Fiber Grating on an Er <sup>3+</sup> Fiber. IEEE Photonics Technology Letters, 2007, 19, 732-734.	1.3	6
246	Real-time arc-welding defect detection and classification with principal component analysis and artificial neural networks. NDT and E International, 2007, 40, 315-323.	1.7	121
247	New raw material discrimination system based on a spatial optical spectroscopy technique. Sensors and Actuators A: Physical, 2007, 135, 605-612.	2.0	24
248	Lateral polishing of bends in plastic optical fibres applied to a multipoint liquid-level measurement sensor. Sensors and Actuators A: Physical, 2007, 137, 68-73.	2.0	93
249	Adaptive filters applied to the interrogation of photonic sensors. IEEE Sensors Journal, 2006, 6, 748-754.	2.4	4
250	New algorithm based on the Hough transform for the analysis of pulsed thermographic sequences. NDT and E International, 2006, 39, 617-621.	1.7	7
251	Multiparameter sensor based on a chaotic fiber-ring resonator. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 2024.	0.9	10
252	Quality control on radiant heaters manufacture. , 2006, , .		0

#	ARTICLE	IF	CITATIONS
253	Real-time arc welding defect detection technique by means of plasma spectrum optical analysis. NDT and E International, 2006, 39, 356-360.	1.7	51
254	Fast algorithm for spectral processing with application to on-line welding quality assurance. Measurement Science and Technology, 2006, 17, 2623-2629.	1.4	31
255	Robust technique for spectroscopic plasma analysis with application in real-time arc welding quality monitoring. Optical Engineering, 2006, 45, 083002.	0.5	11
256	Methane detection using Wavelength Modulation Spectroscopy and a multiline quantitation method. , 2005, 5948, 759.		1
257	Quality control of radiant heaters. , 2005, , .		2
258	Digital adaptative filters for interrogating fiber optic sensors. , 2005, 5855, 900.		0
259	Modification of the refractive index response of long period gratings using thin film overlays. Sensors and Actuators B: Chemical, 2005, 107, 738-741.	4.0	80
260	Defect assessment on radiant heaters using infrared thermography. NDT and E International, 2005, 38, 428-432.	1.7	12
261	Application of infrared thermography to the fabrication process of nuclear fuel containers. NDT and E International, 2005, 38, 397-401.	1.7	11
262	S-EDFA and R-EDFA polarization properties comparison. Optics Communications, 2005, 255, 72-80.	1.0	1
263	Temperature dependence of light polarization in active erbium-doped fiber. Microwave and Optical Technology Letters, 2005, 45, 246-249.	0.9	1
264	Optoelectronic device for non-invasive focal point measurement and control of the laser welding process. Measurement Science and Technology, 2005, 16, N1-N6.	1.4	11
265	Fiber optic civil structure monitoring system. Optical Engineering, 2005, 44, 044401.	0.5	8
266	Closed-loop power and focus control of laser welding for full-penetration monitoring. Applied Optics, 2005, 44, 13.	2.1	29
267	Optical techniques for real-time penetration monitoring for laser welding. Applied Optics, 2005, 44, 3869.	2.1	46
268	Polarization characteristics of a reflective erbium doped fiber amplifier with temperature changes at the Faraday rotator mirror. Optics Express, 2005, 13, 1368.	1.7	5
269	Virtual long-period gratings. Optics Letters, 2005, 30, 14.	1.7	22
270	Wavelength-division-multiplexed distributed fiber Raman amplifier bus network for sensors. , 2005, 5855, 242.		10

#	ARTICLE	IF	CITATIONS
271	Angular and displacement sensor based on POF and moire patterns. , 2005, 5855, 936.		1
272	Principle of functioning of a self-compensated fibre-optical displacement sensor based on diffraction-grating-ended POF. Measurement Science and Technology, 2004, 15, 1474-1478.	1.4	11
273	Interrogation of fibre Bragg gratings with a tilted fibre Bragg grating. Measurement Science and Technology, 2004, 15, 1596-1600.	1.4	4
274	Torsion-induced effects on UV long-period fiber gratings. , 2004, , .		12
275	Experimental characterization of light polarization in active erbium-doped fiber. Microwave and Optical Technology Letters, 2004, 42, 395-397.	0.9	4
276	Error Estimation in a Fiber-Optic Dual Waveband Ratio Pyrometer. IEEE Sensors Journal, 2004, 4, 288-293.	2.4	5
277	Photonic Engineering Group of the University of Cantabria: Recent R&D Contributions in Photonic Sensing Technology. Fiber and Integrated Optics, 2004, 23, 207-229.	1.7	0
278	Interrogation of interferometric sensors with a tilted fiber Bragg grating. Optics Express, 2004, 12, 5646.	1.7	6
279	Interrogation unit for fiber Bragg grating sensors that uses a slanted fiber grating. Optics Letters, 2004, 29, 676.	1.7	25
280	Analysis and design tool for optical multipass systems modeled with parametric surfaces. , 2004, 5249, 695.		0
281	Civil engineering transducer's interrogation unit. , 2004, 5272, 332.		0
282	In situ refraction index of liquid measurement using polymer optical fibers. , 2004, , .		1
283	Real-time focus controller for laser welding with fibre optic noninvasive capture of light. , 2004, , .		0
284	Application of the fast Fourier transform and parametric frequency estimation for the measurement of the Bragg wavelength of interferometrically interrogated fiber Bragg grating sensors. , 2004, 5502, 492.		1
285	Pump tuning of an erbium-doped-fiber LPG. , 2004, , .		1
286	Virtual long-period fiber gratings. , 2004, , .		1
287	Strain and temperature remote sensing of concrete structures using photonic sensors. , 2004, , .		0
288	Interrogation of interferometric sensors with a tilted fiber Bragg grating. , 2004, 5502, 60.		1

#	ARTICLE	IF	CITATIONS
289	Optical signal polarization state instability on erbium-doped fibers. , 2004, , .		2
290	Near-field theoretical model of radiation from a uniform-tilted fiber-Bragg grating. Microwave and Optical Technology Letters, 2003, 37, 124-127.	0.9	9
291	A new design technique for optical multipass cells modelled with arbitrary surfaces. Microwave and Optical Technology Letters, 2003, 37, 383-387.	0.9	0
292	3D near-field model for uniform slanted fiber gratings. Microwave and Optical Technology Letters, 2003, 38, 428-432.	0.9	3
293	New method to calculate mode conversion coefficients in si multimode optical fibers. Journal of Lightwave Technology, 2003, 21, 776-781.	2.7	34
294	<title>Embedded fiber Bragg grating transducer for concrete structures</title>. , 2003, , .		0
295	<title>Bridge sensing using a fiber Bragg grating quasi-distributed transducer: in-field results</title>. , 2003, , .		0
296	Embedded temperature&Astrain fibre Bragg grating sensor system validation for concrete structures. Journal of Optics, 2002, 4, S387-S390.	1.5	12
297	<title>Novel multipass absorption cell for carbon dioxide detection</title>. , 2002, , .		2
298	<title>New optical cell design for pollutant detection</title>. , 2002, , .		1
299	<title>Optical fiber transducer for monitoring the cooling profile of iron-steel bars</title>. , 2002, , .		0
300	<title>Experimental validation of fiber Bragg grating sensors for steel girder strain characterization</title>. , 2002, , .		0
301	<title>Fiber Bragg grating first- and second-order diffraction-wavelength-based transducer-optimized design</title>. , 2002, , .		0
302	<title>Concrete beam curing process and flexural test with fiber-Bragg-grating based transducers</title>. , 2002, 4694, 271.		2
303	An accurate photonic capacitance model for GaAs MESFETs. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 1193-1197.	2.9	5
304	Uniform fiber Bragg grating first- and second-order diffraction wavelength experimental characterization for strain-temperature discrimination. IEEE Photonics Technology Letters, 2001, 13, 696-698.	1.3	39
305	Interrogation of low-finesse Fabry-Perot cavities based on modulation of the transfer function of a wavelength division multiplexer. Journal of Lightwave Technology, 2001, 19, 673-681.	2.7	8
306	Temperature, displacement, and acceleration fiber optic sensor for large machinery monitoring. , 2001, , .		1

#	ARTICLE	IF	CITATIONS
307	Strain and temperature transducer on one fiber Bragg grating. , 2001, 4328, 192.		1
308	High-temperature optical fiber transducer for a smart structure on iron-steel production industry. , 2001, , .		4
309	Spectral modelling of curved long-period fibre gratings. Measurement Science and Technology, 2001, 12, 786-792.	1.4	16
310	Fiber Bragg sensors interrogation based on carrier generation by modulating the coupling length of a wavelength-division multiplexer. IEEE Journal of Selected Topics in Quantum Electronics, 2000, 6, 750-755.	1.9	9
311	Single and double distributed optical amplifier fiber bus networks with wavelength-division multiplexing for photonic sensors. Optics Letters, 1999, 24, 805.	1.7	28
312	Spectral effects in a fiber optic Sagnac interferometer due to undesired perturbations. , 1999, 4016, 124.		0
313	Phenomenological approach to the analysis of the polarization effects in fiber optic interferometers. , 1999, , .		0
314	Optical Sensors and Their Fusion in a Quasi-Smart Structure for Real-Time Vibration Monitoring and Predictive Maintenance of Large Power Electric Power Generators. Journal of Intelligent Material Systems and Structures, 1998, 9, 938-946.	1.4	0
315	<title>Analog optical U-shaped fibre transducer based on index modulation for quasi-distributed sensing</title>. , 1998, , .		0
316	<title>Optical fiber and integrated optics accelerometers for real-time vibration monitoring in harsh environments: in-lab and in-field characterization</title>. , 1998, 3483, 223.		4
317	<title>Accuracy-enhanced compensated optical fibre two-dimension microdisplacement transducer based on direct intensity modulation</title>. , 1998, 3483, 35.		0
318	A simple and efficient model for indoor path-loss prediction. Measurement Science and Technology, 1997, 8, 1166-1173.	1.4	13
319	New micro-optic cell for optical fibre gas sensors with interferometric noise reduction. Electronics Letters, 1997, 33, 1407.	0.5	10
320	Simple low-frequency optical fiber accelerometer with large rotating machine monitoring applications. Journal of Lightwave Technology, 1997, 15, 1120-1130.	2.7	59
321	Model of an openable Faraday-effect hybrid-current optical transducer based on a square-shaped structure with internal mirror. Applied Optics, 1997, 36, 6242.	2.1	4
322	Fiber Bragg grating as an optical filter tuned by a magnetic field. Optics Letters, 1997, 22, 603.	1.7	44
323	Experimental Demonstration of the Temperature Influence on an Optical Universal Compensator for Polarization Changes Induced by Birefringence on a Retracing Beam. Optical Fiber Technology, 1997, 3, 347-355.	1.4	2
324	<title>New low-cost fiber optic accelerometer system for stator winding monitoring of hydroelectric generating machines</title>. , 1996, 2868, 510.		4

#	ARTICLE	IF	CITATIONS
325	New approach using a bare fiber optic cantilever beam as a low-frequency acceleration measuring element. <i>Optical Engineering</i> , 1996, 35, 1700.	0.5	20
326	Design and application of double amplified recirculating ring structure for hybrid fibre buses. <i>Optical and Quantum Electronics</i> , 1995, 27, 847-857.	1.5	6
327	Amplified Recirculating Delay Lines as Fiber-optic Decoders in TV Systems. <i>Optical Fiber Technology</i> , 1995, 1, 369-372.	1.4	1
328	Design of a lossy tunable wavelength demultiplexer utilizing MgO:Ti:LiNbO <sub>3</sub> /depressed index waveguides. <i>Journal of Lightwave Technology</i> , 1993, 11, 2080-2086.	2.7	0
329	Electro-optically tunable wavelength demultiplexer using depressed index waveguides. <i>Electronics Letters</i> , 1991, 27, 195.	0.5	1
330	Experimental characterization of tilted fiber Bragg gratings. , 0, , .		3
331	Experimental feasibility demonstration of steel structures monitoring using Fiber Bragg Grating technology. , 0, , .		1
332	Optoelectronic unit for a laser welding monitoring system. , 0, , .		0
333	Optical fiber sensor based on a chaotic fiber ring resonator. , 0, , .		2
334	Arbitrary chirped fiber bragg grating fabrication technique. , 0, , .		0