

Ralph P Tatam

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2202676/publications.pdf>

Version: 2024-02-01

335
papers

7,610
citations

76196

40
h-index

62479

80
g-index

336
all docs

336
docs citations

336
times ranked

5546
citing authors

#	ARTICLE	IF	CITATIONS
1	Optical gas sensing: a review. <i>Measurement Science and Technology</i> , 2013, 24, 012004.	1.4	1,159
2	Optical fibre long-period grating sensors: characteristics and application. <i>Measurement Science and Technology</i> , 2003, 14, R49-R61.	1.4	1,106
3	Fiber-optic liquid-level sensor using a long-period grating. <i>Optics Letters</i> , 2001, 26, 1224.	1.7	252
4	Optical fiber long-period gratings with Langmuir-Blodgett thin-film overlays. <i>Optics Letters</i> , 2002, 27, 686.	1.7	251
5	Shearography technology and applications: a review. <i>Measurement Science and Technology</i> , 2010, 21, 102001.	1.4	192
6	A single-headed fibre optic laser Doppler anemometer probe for the measurement of flow angles. <i>Measurement Science and Technology</i> , 2004, 15, 1-8.	1.4	165
7	Non-dispersive infra-red (NDIR) measurement of carbon dioxide at 4.2 μ m in a compact and optically efficient sensor. <i>Sensors and Actuators B: Chemical</i> , 2013, 186, 580-588.	4.0	153
8	Tapered Optical Fibre Sensors: Current Trends and Future Perspectives. <i>Sensors</i> , 2019, 19, 2294.	2.1	121
9	Simultaneous temperature and bend sensing with long-period fiber gratings. <i>Optics Letters</i> , 2000, 25, 1007.	1.7	117
10	Temperature and strain discrimination using a single tilted fibre Bragg grating. <i>Optics Communications</i> , 2007, 275, 344-347.	1.0	115
11	Fibre Bragg gratings fabricated using a wavelength tuneable laser source and a phase mask based interferometer. <i>Measurement Science and Technology</i> , 1996, 7, 445-448.	1.4	110
12	Characterization of the response of fibre Bragg gratings fabricated in stress and geometrically induced high birefringence fibres to temperature and transverse load. <i>Smart Materials and Structures</i> , 2004, 13, 888-895.	1.8	90
13	Modification of the refractive index response of long period gratings using thin film overlays. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 738-741.	4.0	80
14	Optical fibre long period grating with a nanoporous coating formed from silica nanoparticles for ammonia sensing in water. <i>Materials Chemistry and Physics</i> , 2012, 133, 784-792.	2.0	77
15	Fibre optic sensors with nano-structured coatings. <i>Journal of Optics</i> , 2006, 8, S430-S444.	1.5	76
16	Response of fiber-optic long-period gratings operating near the phase-matching turning point to the deposition of nanostructured coatings. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2008, 25, 897.	0.9	75
17	Multi-parameter measurements using optical fibre long period gratings for indoor air quality monitoring. <i>Sensors and Actuators B: Chemical</i> , 2017, 244, 217-225.	4.0	74
18	Enhanced sensitivity fibre optic long period grating temperature sensor. <i>Measurement Science and Technology</i> , 2002, 13, 792-795.	1.4	66

#	ARTICLE	IF	CITATIONS
19	Using integrating spheres as absorption cells: path-length distribution and application of Beer's law. <i>Applied Optics</i> , 2009, 48, 5748.	2.1	64
20	Optical fibre long period grating gas sensor modified with metal organic framework thin films. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 891-899.	4.0	64
21	An ammonia sensor based on Lossy Mode Resonances on a tapered optical fibre coated with porphyrin-incorporated titanium dioxide. <i>Sensors and Actuators B: Chemical</i> , 2017, 242, 645-652.	4.0	63
22	Selective vancomycin detection using optical fibre long period gratings functionalised with molecularly imprinted polymer nanoparticles. <i>Analyst</i> , The, 2014, 139, 2229-2236.	1.7	61
23	Strain response of fibre Bragg grating sensors at cryogenic temperatures. <i>Measurement Science and Technology</i> , 2002, 13, 1535-1539.	1.4	59
24	A long period grating optical fiber sensor with nano-assembled porphyrin layers for detecting ammonia gas. <i>Sensors and Actuators B: Chemical</i> , 2016, 228, 573-580.	4.0	58
25	Fiber optic long period grating sensors with a nanoassembled mesoporous film of SiO ₂ nanoparticles. <i>Optics Express</i> , 2010, 18, 13227.	1.7	55
26	Fabrication and optimisation of a fused filament 3D-printed microfluidic platform. <i>Journal of Micromechanics and Microengineering</i> , 2017, 27, 035018.	1.5	55
27	Relating the state of cure to the real-time internal strain development in a curing composite using in-fibre Bragg gratings and dielectric sensors. <i>Measurement Science and Technology</i> , 1998, 9, 1153-1158.	1.4	54
28	Cryogenic temperature response of fibre optic long period gratings. <i>Measurement Science and Technology</i> , 2003, 14, 1409-1411.	1.4	54
29	pH sensor using Langmuir-Blodgett overlays on polished optical fibers. <i>Optics Letters</i> , 1997, 22, 567.	1.7	52
30	Highly sensitive optical fibre long period grating biosensor anchored with silica core gold shell nanoparticles. <i>Biosensors and Bioelectronics</i> , 2016, 75, 222-231.	5.3	50
31	Instantaneous, three-component planar Doppler velocimetry using imaging fibre bundles. <i>Experiments in Fluids</i> , 2004, 36, 3-10.	1.1	46
32	Fabrication of fiber optic long period gratings operating at the phase matching turning point using an ultraviolet laser. <i>Applied Optics</i> , 2014, 53, 4669.	0.9	46
33	Range-resolved interferometric signal processing using sinusoidal optical frequency modulation. <i>Optics Express</i> , 2015, 23, 9415.	1.7	45
34	Multiplexing of Fiber-Optic Long-Period Grating-Based Interferometric Sensors. <i>Journal of Lightwave Technology</i> , 2007, 25, 825-829.	2.7	44
35	Refractive index sensitivity of fibre-optic long period gratings coated with SiO ₂ nanoparticle mesoporous thin films. <i>Measurement Science and Technology</i> , 2011, 22, 075208.	1.4	44
36	Strain development in curing epoxy resin and glass fibre/epoxy composites monitored by fibre Bragg grating sensors in birefringent optical fibre. <i>Smart Materials and Structures</i> , 2005, 14, 354-362.	1.8	42

#	ARTICLE	IF	CITATIONS
37	A long period grating-based chemical sensor insensitive to the influence of interfering parameters. <i>Optics Express</i> , 2014, 22, 8012.	1.7	42
38	Optical Fiber Sensing Based on Reflection Laser Spectroscopy. <i>Sensors</i> , 2010, 10, 1823-1845.	2.1	41
39	Optical fiber long period grating sensor with a polyelectrolyte alternate thin film for gas sensing of amine odors. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 117-124.	4.0	41
40	Cascaded long-period gratings with nanostructured coatings. <i>Optics Letters</i> , 2005, 30, 2197.	1.7	40
41	Long period grating based toluene sensor for use with water contamination. <i>Sensors and Actuators B: Chemical</i> , 2014, 203, 621-625.	4.0	40
42	Optical fibre laser velocimetry: a review. <i>Measurement Science and Technology</i> , 2012, 23, 032001.	1.4	39
43	Optical fibre grating refractometers for resin cure monitoring. <i>Journal of Optics</i> , 2007, 9, S60-S65.	1.5	37
44	Railway track component condition monitoring using optical fibre Bragg grating sensors. <i>Measurement Science and Technology</i> , 2016, 27, 055201.	1.4	37
45	Development and application of optical fibre strain and pressure sensors for in-flight measurements. <i>Measurement Science and Technology</i> , 2016, 27, 104001.	1.4	37
46	Passive signal processing for a miniature Fabry-Pérot interferometric sensor with a multimode laser-diode source. <i>Optics Letters</i> , 1995, 20, 1818.	1.7	36
47	Time-division-multiplexed interrogation of fibre Bragg grating sensors using laser diodes. <i>Measurement Science and Technology</i> , 2001, 12, 181-187.	1.4	36
48	Shape and slope measurement by source displacement in shearography. <i>Optics and Lasers in Engineering</i> , 2004, 41, 621-634.	2.0	36
49	Thermal dependence of the strain response of optical fibre Bragg gratings. <i>Measurement Science and Technology</i> , 2004, 15, 1607-1613.	1.4	34
50	Surface strain measurement: a comparison of speckle shearing interferometry and optical fibre Bragg gratings with resistance foil strain gauges. <i>Measurement Science and Technology</i> , 2007, 18, 1175-1184.	1.4	34
51	Application of optical coherence tomography to non-destructively characterise rind breakdown disorder of 'Nules Clementine' mandarins. <i>Postharvest Biology and Technology</i> , 2013, 84, 16-21.	2.9	34
52	Gas cells for tunable diode laser absorption spectroscopy employing optical diffusers. Part 1: single and dual pass cells. <i>Applied Physics B: Lasers and Optics</i> , 2010, 100, 291-302.	1.1	33
53	Fiber-optic chemical sensing with Langmuir-Blodgett overlay waveguides. <i>Applied Optics</i> , 1999, 38, 7370.	2.1	31
54	Fibre imaging bundles for full-field optical coherence tomography. <i>Measurement Science and Technology</i> , 2007, 18, 2949-2957.	1.4	30

#	ARTICLE	IF	CITATIONS
55	Characterization of optical fiber imaging bundles for swept-source optical coherence tomography. <i>Applied Optics</i> , 2011, 50, 627.	2.1	30
56	Automated manufacture of 3D reinforced aerospace composite structures. <i>International Journal of Structural Integrity</i> , 2012, 3, 22-40.	1.8	30
57	Pronounced aromatic carboxylic acid detection using a layer-by-layer mesoporous coating on optical fibre long period grating. <i>Sensors and Actuators B: Chemical</i> , 2012, 173, 300-309.	4.0	29
58	In-line fiber-optic components using Langmuir-Blodgett films. <i>Optics Letters</i> , 1994, 19, 2036.	1.7	27
59	Z-type Langmuir-Blodgett film structures: surface plasmon resonance, second harmonic generation and fibre optic devices. <i>Journal of Materials Chemistry</i> , 1996, 6, 131-136.	6.7	27
60	Two-frequency planar Doppler velocimetry ($2\frac{1}{2}$ -PDV). <i>Review of Scientific Instruments</i> , 2004, 75, 4487-4496.	0.6	27
61	Surface strain measurement using multi-component shearography with coherent fibre-optic imaging bundles. <i>Measurement Science and Technology</i> , 2007, 18, 3583-3591.	1.4	26
62	Gas cells for tunable diode laser absorption spectroscopy employing optical diffusers. Part 2: Integrating spheres. <i>Applied Physics B: Lasers and Optics</i> , 2010, 100, 303-312.	1.1	26
63	Dynamic Fiber-Optic Shape Sensing Using Fiber Segment Interferometry. <i>Journal of Lightwave Technology</i> , 2018, 36, 917-925.	2.7	26
64	Optical polarisation state control schemes using fibre optics or Bragg cells. <i>Journal of Physics E: Scientific Instruments</i> , 1986, 19, 711-717.	0.7	25
65	Heterodyning of fibre optic electronic speckle pattern interferometers using laser diode wavelength modulation. <i>Measurement Science and Technology</i> , 1994, 5, 704-709.	1.4	24
66	Heterodyning of speckle shearing interferometers by laser diode wavelength modulation. <i>Measurement Science and Technology</i> , 1996, 7, 1721-1727.	1.4	24
67	A pressure sensor based upon the transverse loading of a sub-section of an optical fibre Bragg grating. <i>Measurement Science and Technology</i> , 2007, 18, 3103-3110.	1.4	24
68	Fiber Segment Interferometry for Dynamic Strain Measurements. <i>Journal of Lightwave Technology</i> , 2016, 34, 4620-4626.	2.7	24
69	Volatile Organic Compounds Sensing Using Optical Fibre Long Period Grating with Mesoporous Nano-Scale Coating. <i>Sensors</i> , 2017, 17, 205.	2.1	24
70	Low-volume, fast response-time hollow silica waveguide gas cells for mid-IR spectroscopy. <i>Applied Optics</i> , 2016, 55, 6797.	2.1	23
71	Sensitivity Enhancement in Low Cutoff Wavelength Long-Period Fiber Gratings by Cladding Diameter Reduction. <i>Sensors</i> , 2017, 17, 2094.	2.1	23
72	Interrogation of low finesse optical fibre Fabry - PÃ©rot interferometers using a four wavelength technique. <i>Measurement Science and Technology</i> , 1996, 7, 117-120.	1.4	22

#	ARTICLE	IF	CITATIONS
73	Self-mixing interference effects in tunable diode laser absorption spectroscopy. Applied Physics B: Lasers and Optics, 2009, 96, 863-874.	1.1	22
74	Polarization-multiplexed and phase-stepped fibre optic shearography using laser wavelength modulation. Measurement Science and Technology, 2000, 11, 1389-1395.	1.4	21
75	Comparative signal-to-noise analysis of fibre-optic based optical coherence tomography systems. Journal of Modern Optics, 2005, 52, 1965-1979.	0.6	21
76	Experimental observations on the response of 1 st and 2 nd order fibre optic long period grating coupling bands to the deposition of nanostructured coatings. Optics Express, 2007, 15, 13096.	1.7	21
77	Surface strain measurement of rotating objects using pulsed laser shearography with coherent fibre-optic imaging bundles. Measurement Science and Technology, 2008, 19, 105301.	1.4	21
78	Noise analysis for CCD-based ultraviolet and visible spectrophotometry. Applied Optics, 2015, 54, 8135.	2.1	21
79	<title>Time-division-multiplexed 3D shearography</title>. , 1999, , .		20
80	Single camera three component planar velocity measurements using two-frequency planar Doppler velocimetry (2 $\frac{1}{2}$ -PDV). Measurement Science and Technology, 2006, 17, 1194-1206.	1.4	20
81	Investigation into the selection of viewing configurations for three-component planar Doppler velocimetry measurements. Applied Optics, 2007, 46, 4102.	2.1	20
82	Phase-stepped speckle shearing interferometer by source wavelength modulation. Optics Letters, 1996, 21, 1421.	1.7	19
83	Monitoring cure in epoxies containing carbon nanotubes with an optical fiber Fresnel refractometer. Journal of Applied Polymer Science, 2009, 113, 730-735.	1.3	19
84	Optical Gas Sensor Fabrication Based on Porphyrin-Anchored Electrostatic Self-Assembly onto Tapered Optical Fibers. Analytical Letters, 2012, 45, 1297-1309.	1.0	19
85	Response of the transmission spectrum of tapered optical fibres to the deposition of a nanostructured coating. Measurement Science and Technology, 2009, 20, 034001.	1.4	18
86	A non-contact laser speckle sensor for the measurement of robotic tool speed. Robotics and Computer-Integrated Manufacturing, 2018, 53, 187-196.	6.1	18
87	Fibre Bragg grating based effective soil pressure sensor for geotechnical applications. Proceedings of SPIE, 2009, , .	0.8	17
88	A low cost, optically efficient carbon dioxide sensor based on nondispersive infra-red (NDIR) measurement at 4.2 $\frac{1}{4}$ m. Proceedings of SPIE, 2012, , .	0.8	17
89	Fibre optic based reference beam laser Doppler velocimetry. Optics Communications, 1995, 119, 460-464.	1.0	16
90	Design considerations for a three dimensional fiber optic laser Doppler velocimeter for turbomachinery applications. Review of Scientific Instruments, 1997, 68, 3241-3246.	0.6	16

#	ARTICLE	IF	CITATIONS
91	Objective speckle velocimetry for autonomous vehicle odometry. Applied Optics, 2012, 51, 3478.	0.9	16
92	Multi-component strain development in superconducting magnet coils monitored using fibre Bragg grating sensors fabricated in highly linearly birefringent fibre. Smart Materials and Structures, 2011, 20, 125004.	1.8	15
93	Two-dimensional fibre-optic laser velocimetry using polarisation state control. Journal of Physics E: Scientific Instruments, 1988, 21, 103-107.	0.7	14
94	Full surface strain measurement using shearography. , 2001, 4448, 142.		14
95	Low-coherence optical fibre speckle interferometry. Measurement Science and Technology, 2006, 17, 605-616.	1.4	14
96	High sensitivity pressure measurement using optical fibre sensors mounted on a composite diaphragm. Optics Express, 2021, 29, 4105.	1.7	14
97	Monitoring transient strains on a gun barrel using fibre Bragg-grating sensors. Measurement Science and Technology, 1999, 10, 63-67.	1.4	13
98	In-line laser Doppler velocimeter using fibre-optic Bragg grating interferometric filters. Measurement Science and Technology, 2003, 14, 724-735.	1.4	13
99	Speckle velocimetry for high accuracy odometry for a Mars exploration rover. Measurement Science and Technology, 2010, 21, 025301.	1.4	13
100	A simple and wavelength-flexible procedure for fabricating phase-shifted fibre Bragg gratings. Measurement Science and Technology, 2010, 21, 094001.	1.4	13
101	Fibre segment interferometry using code-division multiplexed optical signal processing for strain sensing applications. Measurement Science and Technology, 2013, 24, 094011.	1.4	13
102	Novel Highly Sensitive Protein Sensors Based on Tapered Optical Fibres Modified with Au-Based Nanocoatings. Journal of Sensors, 2016, 2016, 1-11.	0.6	13
103	Dissolved Oxygen Sensing Using an Optical Fiber Long Period Grating Coated With Hemoglobin. Journal of Lightwave Technology, 2016, 34, 4506-4510.	2.7	13
104	Application of fibre optic sensing systems to measure rotor blade structural dynamics. Mechanical Systems and Signal Processing, 2021, 158, 107758.	4.4	13
105	Faraday-effect magnetometry: compensation for the temperature-dependent Verdet constant. Measurement Science and Technology, 1994, 5, 1471-1479.	1.4	12
106	Optical low-coherence tomography of bronchial tissue. , 1999, , .		12
107	Submicrometer fiber-optic Fabry-Pérot interferometer formed by use of the Langmuir-Blodgett technique. Optics Letters, 2001, 26, 1840.	1.7	12
108	Ultrasonic sensing using Yb ³⁺ /Er ³⁺ -codoped distributed feedback fibre grating lasers. Smart Materials and Structures, 2005, 14, 170-176.	1.8	12

#	ARTICLE	IF	CITATIONS
109	Mach-Zehnder interferometric filter based planar Doppler velocimetry (MZI-PDV). Journal of Optics, 2007, 9, 1002-1013.	1.5	12
110	Pressure measurements on aircraft wing using phase-shifted fibre Bragg grating sensors. , 2009, , .		12
111	Enhanced sensitivity fibre Bragg grating (FBG) load sensor. Measurement Science and Technology, 2010, 21, 094006.	1.4	12
112	Monitoring techniques for the manufacture of tapered optical fibers. Applied Optics, 2015, 54, 8531.	2.1	12
113	Optical fibre technique for the measurement of small frequency separations: application to surface profile measurement using electronic speckle pattern interferometry. Measurement Science and Technology, 1993, 4, 601-607.	1.4	11
114	Objective speckle displacement: an extended theory for the small deformation of shaped objects. Optics Express, 2014, 22, 25466.	1.7	11
115	A mechanically stable laser diode speckle interferometer for surface contouring and displacement measurement. Measurement Science and Technology, 2015, 26, 055402.	1.4	11
116	Overwrite fabrication and tuning of long period gratings. Optics Express, 2016, 24, 22345.	1.7	11
117	Faraday effect magnetometry utilizing high Verdet constant glass. Applied Physics Letters, 1987, 51, 864-866.	1.5	10
118	Second-harmonic generation in Langmuir-Blodgett waveguide overlays on single-mode optical fiber. Optics Letters, 1999, 24, 1194.	1.7	10
119	Pipe Weld Investigation using Shearography. Strain, 2003, 39, 101-105.	1.4	10
120	Optical fibre Fizeau-based OCT. , 2004, , .		10
121	Three-component planar velocity measurements using Mach-Zehnder interferometric filter-based planar Doppler velocimetry (MZI-PDV). Measurement Science and Technology, 2009, 20, 034019.	1.4	10
122	Properties of Length-Apodized Phase-Shifted LPGs Operating at the Phase Matching Turning Point. Journal of Lightwave Technology, 2012, 30, 2203-2209.	2.7	10
123	Production process monitoring and post-production strain measurement on a full-size carbon-fibre composite aircraft tail cone assembly using embedded optical fibre sensors. Measurement Science and Technology, 2020, 31, 105204.	1.4	10
124	<title>Surface contouring using TV holography</title>. , 1991, 1504, 221.		9
125	Optical frequency shifter based on stimulated Brillouin scattering in a birefringent optical fibre ring resonator. Optics Communications, 1993, 103, 161-168.	1.0	9
126	Optical frequency shifter technique based on stimulated Brillouin scattering in birefringent optical fiber. Applied Optics, 1993, 32, 5966.	2.1	9

#	ARTICLE	IF	CITATIONS
127	A polarization-based optical fibre vibrometer. Measurement Science and Technology, 1997, 8, 343-347.	1.4	9
128	Multicomponent shearography employing four measurements channels. , 2003, 4933, 135.		9
129	Using integrating spheres with wavelength modulation spectroscopy: effect of pathlength distribution on 2nd harmonic signals. Applied Physics B: Lasers and Optics, 2013, 110, 223-231.	1.1	9
130	On-line monitoring of multi-component strain development in a tufting needle using optical fibre Bragg grating sensors. Smart Materials and Structures, 2014, 23, 075001.	1.8	9
131	Non-Dispersive Ultra-Violet Spectroscopic Detection of Formaldehyde Gas for Indoor Environments. IEEE Sensors Journal, 2018, 18, 2218-2228.	2.4	9
132	Spectrometer-based refractive index and dispersion measurement using low-coherence interferometry with confocal scanning. Optics Express, 2018, 26, 3604.	1.7	9
133	An Optical Fiber Hydrogen Sensor Using a Palladium-Coated Ball Lens. Journal of Lightwave Technology, 2015, 33, 2535-2542.	2.7	8
134	Workpiece positioning sensor (wPOS): A three-degree-of-freedom relative end-effector positioning sensor for robotic manufacturing. Procedia CIRP, 2019, 79, 620-625.	1.0	8
135	Transmission line method for the simulation of fiber Bragg gratings. Applied Optics, 2019, 58, 353.	0.9	8
136	In-process range-resolved interferometric (RRI) 3D layer height measurements for wire-arc additive manufacturing (WAAM). Measurement Science and Technology, 2022, 33, 044002.	1.4	8
137	Evidence for a thermotropic phase transition in oleic acid. Journal of the Chemical Society Faraday Transactions I, 1986, 82, 439.	1.0	7
138	<title>Influence of process route on mechanical and sensing performance of fiber Bragg grating optical sensors</title>. , 1999, , .		7
139	Quantitative shearography: error reduction by using more than three measurement channels. Applied Optics, 2011, 50, 134.	2.1	7
140	Fibre-Optic Chemical Sensor Approaches Based on Nanoassembled Thin Films: A Challenge to Future Sensor Technology. , 2013, , .		7
141	Identification and quality assessment of beverages using a long period grating fibre-optic sensor modified with a mesoporous thin film. Sensing and Bio-Sensing Research, 2014, 1, 26-33.	2.2	7
142	Integrating cavity based gas cells: a multibeam compensation scheme for pathlength variation. Optics Express, 2016, 24, 13647.	1.7	7
143	All-electronic frequency stabilization of a DFB laser diode. Optics Express, 2017, 25, 11679.	1.7	7
144	The calibration of the path-length imbalance in optical fibre ESPI systems employing source-wavelength modulation. Measurement Science and Technology, 1997, 8, 759-763.	1.4	6

#	ARTICLE	IF	CITATIONS
145	<title>Polarization-maintaining fiber Bragg grating interrogation system for multi-axis strain sensing</title>. , 2002, , .		6
146	Optical coherence tomography with a Fizeau interferometer configuration. , 2005, 5858, 139.		6
147	Full-field optical coherence tomography. , 2005, , .		6
148	Finding minimum spanning trees more efficiently for tile-based phase unwrapping. Measurement Science and Technology, 2006, 17, 1428-1435.	1.4	6
149	A simple method for fabricating phase-shifted fibre Bragg gratings with flexible choice of centre wavelength. , 2009, , .		6
150	A fibre Bragg grating-based inclinometer system for ground movement measurement. Proceedings of SPIE, 2010, , .	0.8	6
151	Detection of volatile organic compounds (VOCs) using an optical fibre long period grating with a calixarene anchored mesoporous thin film. Proceedings of SPIE, 2013, , .	0.8	6
152	Resin Directional Flow and Degree of Cure Sensing Using Chirped Optical Fiber Long Period Gratings. IEEE Sensors Journal, 2017, 17, 6605-6614.	2.4	6
153	Three-dimensional interferometric stage encoder using a single access port. Optics and Lasers in Engineering, 2021, 137, 106342.	2.0	6
154	Correction of periodic displacement non-linearities by two-wavelength interferometry. Measurement Science and Technology, 2021, 32, 125202.	1.4	6
155	Polarization-sensitive transfer matrix modeling for displacement measuring interferometry. Applied Optics, 2020, 59, 7694.	0.9	6
156	Applications of Faraday rotation using monomode optical fibre. , 1987, , .		5
157	A novel interferometric liquid refractometer. Review of Scientific Instruments, 1989, 60, 3347-3348.	0.6	5
158	Optoelectronic developments in speckle interferometry. , 1996, , .		5
159	<title>3D shearography for surface strain analysis</title>. , 1999, 3783, 247.		5
160	Acousto-optic frequency switching for single-camera planar Doppler velocimetry. , 2001, 4448, 272.		5
161	Rouard's method as a modelling tool for the sensing characteristics of complex fibre Fabry-Perot interferometers formed between chirped fibre Bragg gratings. , 2005, 5855, 338.		5
162	Full-field optical coherence tomography using a fibre imaging bundle. , 2006, , .		5

#	ARTICLE	IF	CITATIONS
163	Ammonia sensing using a fibre optic long period grating with a porous nanostructured coating formed from silica nanospheres. , 2010, , .		5
164	A VCSEL based system for on-site monitoring of low level methane emission. Proceedings of SPIE, 2011, , .	0.8	5
165	Multiplexing a serial array of tapered optical fibre sensors using coherent optical frequency domain reflectometry. Measurement Science and Technology, 2012, 23, 105203.	1.4	5
166	Multiplexed fibre optic sensors for monitoring resin infusion, flow, and cure in composite material processing. , 2013, , .		5
167	Simultaneous laser vibrometry on multiple surfaces with a single beam system using range-resolved interferometry. , 2015, , .		5
168	A measurement strategy for non-dispersive ultra-violet detection of formaldehyde in indoor air: spectral analysis and interferent gases. Measurement Science and Technology, 2016, 27, 015802.	1.4	5
169	Monomode fiber modulators: Frequency and polarization state control. Fiber and Integrated Optics, 1988, 7, 299-315.	1.7	4
170	Optical fiber modulation techniques for single mode fiber sensors. Optoelectronics, Imaging and Sensing Series, 1995, , 223-267.	0.4	4
171	A technique for depositing non-centrosymmetric Langmuir-Blodgett films onto optical fibres. Measurement Science and Technology, 1999, 10, N60-N62.	1.4	4
172	<title>Strain measurement in curved industrial components using multicomponent shearography</title>. , 2001, 4398, 216.		4
173	Planar Doppler velocimetry measurements of flows using imaging fiber bundles. , 2003, 5191, 122.		4
174	Simultaneous independent measurement of temperature and strain using a tilted fibre Bragg grating. Proceedings of SPIE, 2007, , .	0.8	4
175	Passive OCT probe head for 3D duct inspection. Measurement Science and Technology, 2013, 24, 094001.	1.4	4
176	Wavelength stabilisation of a DFB laser diode using measurement of junction voltage. Proceedings of SPIE, 2014, , .	0.8	4
177	Frequency division multiplexing for interferometric planar Doppler velocimetry. Applied Optics, 2014, 53, 4363.	0.9	4
178	Bragg-grating-stabilized external cavity lasers for gas sensing using tunable diode laser spectroscopy. , 2014, , .		4
179	Modifying monolayer behaviour by incorporating subphase additives and improving Langmuir-Blodgett thin film deposition on optical fibres. Materials Chemistry and Physics, 2014, 144, 179-185.	2.0	4
180	Optimized Process for Fabricating Ultrashort Tapered Long-Period Gratings. Journal of Lightwave Technology, 2018, 36, 1091-1096.	2.7	4

#	ARTICLE	IF	CITATIONS
181	Fibre-optic measurement of strain and shape on a helicopter rotor blade during a ground run: 1. Measurement of strain. Smart Materials and Structures, 2022, 31, 075014.	1.8	4
182	Application Of An Optical Fibre Current Sensor To Electricity Supply Protection. , 1989, 1120, 324.		3
183	Use of laser diodes and monomode optical fiber in electronic speckle pattern interferometry. , 1991, , .		3
184	Imaging system considerations in Doppler global velocimetry. , 1995, , .		3
185	<title>Speckle interferometry: optoelectronic developments and applications</title>. , 1999, , .		3
186	<title>Surface strain characterization using time-division-multiplexed 3D shearography</title>. , 2000, , .		3
187	Instantaneous two-camera three-dimensional planar Doppler velocimetry using imaging fiber bundles. , 2001, , .		3
188	Coherent fibre bundles in full-field swept-source OCT. , 2009, , .		3
189	Field monitoring of static, dynamic, and statnamic pile loading tests using fibre Bragg grating strain sensors. Proceedings of SPIE, 2009, , .	0.8	3
190	Refractive index sensitivity of fibre optic long period gratings with SiO ₂ nanoparticle based mesoporous coatings. Proceedings of SPIE, 2011, , .	0.8	3
191	Toward track component condition monitoring using optical fibre Bragg grating sensors. , 2012, , .		3
192	Optical Fibre Long-Period Gratings Functionalised with Nano-Assembled Thin Films: Approaches to Chemical Sensing. , 2013, , .		3
193	Sensitive protein detection using an optical fibre long period grating sensor anchored with silica core gold shell nanoparticles. Proceedings of SPIE, 2014, , .	0.8	3
194	Quantum cascade laser light propagation through hollow silica waveguides. Applied Physics B: Lasers and Optics, 2015, 119, 75-86.	1.1	3
195	Editorial for the special feature on Advanced In-flight Measurement Techniques AIM2. Measurement Science and Technology, 2017, 28, 040101.	1.4	3
196	Speckle tracking approaches in speckle sensing. Proceedings of SPIE, 2017, , .	0.8	3
197	Performance and Analysis of Feature Tracking Approaches in Laser Speckle Instrumentation. Sensors, 2019, 19, 2389.	2.1	3
198	Optical Fiber Bragg Grating Based Pressure Sensor Using a Composite Diaphragm For Pressure Measurements. , 2019, , .		3

#	ARTICLE	IF	CITATIONS
199	Instrumentation for quantitative analysis of volatile compounds emission at elevated temperatures. Part 1: Design and implementation. Scientific Reports, 2020, 10, 8700.	1.6	3
200	Metre-per-second microfluidic flow velocimetry with dual beam optical coherence tomography. Optics Express, 2019, 27, 23849.	1.7	3
201	Wavelength-locking of a semiconductor laser using an electronic technique. , 2019, , .		3
202	Fibre-optic measurement of strain and shape on a helicopter rotor blade during a ground run: 2. Measurement of shape. Smart Materials and Structures, 2022, 31, 075015.	1.8	3
203	High resolution optical fibre thermometer: Applications to biotechnology. Biotechnology Letters, 1987, 1, 11-14.	0.5	2
204	<title>High-frequency pulsed-diode laser anemometry</title>. , 1994, , .		2
205	<title>Three wavelength passive homodyne signal processing technique for miniature interferometric sensors</title>. Proceedings of SPIE, 1995, 2544, 177.	0.8	2
206	<title>On-axis laser doppler velocimetry for turbomachinery applications using optical fiber techniques</title>. , 1997, 3172, 17.		2
207	<title>Source considerations for low-coherence speckle interferometry</title>. , 1997, 3098, 316.		2
208	Transient strain monitoring on a gun barrel using optical fiber Bragg grating sensors. , 1998, , .		2
209	Multicomponent shearography using optical fiber imaging-bundles. , 2003, , .		2
210	Multi-component pulsed-laser shearography using optical fiber imaging-bundles. , 2003, , .		2
211	Multicomponent laser shearography for the investigation of defects in rotating machinery. , 2004, 5457, 546.		2
212	Cascaded long period gratings with nano-structured coatings. , 2005, , .		2
213	Single Camera 3D Planar Doppler Velocimetry Using Two Frequency Planar Doppler Velocimetry (2v-PVD) and Imaging fibre bundles. , 2006, , .		2
214	Cure monitoring of a UV cured epoxy resin using a long period grating Mach-Zehnder interferometer. Proceedings of SPIE, 2007, , .	0.8	2
215	Fabrication of highly efficient fibre-optic gas sensors using SiO²/polymer nanoporous thin films. , 2008, , .		2
216	Fabrication of sensitive fibre-optic gas sensors based on nano-assembled thin films. , 2008, , .		2

#	ARTICLE	IF	CITATIONS
217	Imaging fibre bundles for Fizeau-based optical coherence tomography. , 2008, , .		2
218	Swept-source OCT with coherent imaging fibre bundles. , 2009, , .		2
219	Numerical modelling of imaging fibre bundles and their application in optical coherence tomography. , 2011, , .		2
220	A chirped long period grating sensor for monitoring flow direction and cure of a resin. Proceedings of SPIE, 2013, , .	0.8	2
221	Wind tunnel unsteady pressure measurements using a differential optical fiber Fabry-Perot pressure sensor. , 2014, , .		2
222	Detection of the volatile organic compounds emitted from paints using optical fibre long period grating modified with the mesoporous nano-scale coating. Proceedings of SPIE, 2015, , .	0.8	2
223	Ammonia sensing using lossy mode resonances in a tapered optical fibre coated with porphyrin-incorporated titanium dioxide. Proceedings of SPIE, 2016, , .	0.8	2
224	Soil moisture content measurement using optical fiber long period gratings. , 2017, , .		2
225	Multi-parameter measurements using optical fibre long period gratings for indoor air quality monitoring. Proceedings of SPIE, 2017, , .	0.8	2
226	Passively-coupled, low-coherence interferometric duct profiling with an astigmatism-corrected conical mirror. Optics Express, 2017, 25, 8896.	1.7	2
227	Spectroscopic gas detection using a Bragg grating - stabilized external cavity laser, custom written in planar integrated silica-on-silicon. Optics Express, 2019, 27, 29034.	1.7	2
228	Absolute angle measurement using dual-wavelength laser speckle for robotic manufacturing. , 2019, , .		2
229	Ground vibration testing of a helicopter rotor blade using optical fibre sensors. , 2019, , .		2
230	Optical Fibre Polarimetry. Proceedings of SPIE, 1986, , .	0.8	1
231	Monomode Fibre Modulators: Frequency And Polarisation State Control. , 1987, , .		1
232	Passive and active in-line fiber components using Langmuir-Blodgett films on monomode optical fiber. , 1994, 2290, 304.		1
233	<title>Chemical sensing using Langmuir-Blodgett waveguide overlays on single-mode optical fibers</title>. , 1997, , .		1
234	<title>Optical condensation measurement in gas turbine engine inlets</title>. , 1997, , .		1

#	ARTICLE	IF	CITATIONS
235	Impact detection in carbon fiber reinforced polymer composites using in-fiber Bragg gratings. , 1998, 3479, 192.		1
236	<title>Pseudoheterodyne signal processing scheme for interrogation of fiber Bragg grating sensor arrays</title>. , 1998, 3478, 266.		1
237	In-line fiber optic laser Doppler velocimetry. , 2001, , .		1
238	Fibre optic sensing using Langmuir-Blodgett thin film overlays. , 2004, , .		1
239	<title>Optical fiber coherence tomography based on Fizeau interferometer configurations</title>. , 2004, , .		1
240	Comparison of shearography and optical fibre Bragg grating strain sensors with resistance foil strain gauge measurements. , 2005, , .		1
241	Planar Doppler velocimetry using a Mach-Zehnder interferometric filter. Journal of Physics: Conference Series, 2007, 85, 012011.	0.3	1
242	Methodology for investigation of diffuse reflections in tunable diode laser absorption spectroscopy. Journal of Physics: Conference Series, 2007, 76, 012052.	0.3	1
243	Deposition of SiO ₂ /polymer nanoporous thin films on long-period grating (LPG) optical fibres and dramatic enhancement of the resonance bands. , 2008, , .		1
244	Response of the transmission spectrum of tapered optical fibres to the deposition of a nanostructured coating. , 2008, , .		1
245	A long period grating based directional flow sensor. Proceedings of SPIE, 2008, , .	0.8	1
246	Multicomponent strain development in superconducting magnet coils using optical fibre grating sensors fabricated in highly linearly birefringent fibre. Proceedings of SPIE, 2009, , .	0.8	1
247	The 20th International Conference on Optical Fibre Sensors, OFS-20. Measurement Science and Technology, 2010, 21, 090101.	1.4	1
248	Applied optics to engineering photonics: a retrospective. Photonic Sensors, 2011, 1, 295-322.	2.5	1
249	Noise analysis of a CCD based ultra-violet spectrometry system. Proceedings of SPIE, 2012, , .	0.8	1
250	Monolayer behavior of calix-4-resorcinarenes and their surfactant complexes. Thin Solid Films, 2012, 520, 6989-6993.	0.8	1
251	Frequency-division multiplexing for multicomponent shearography. Applied Optics, 2013, 52, 350.	0.9	1
252	Evaluation of the optical switching characteristics of erbium-doped fibres for the development of a fibre Bragg grating sensor interrogator. Proceedings of SPIE, 2014, , .	0.8	1

#	ARTICLE	IF	CITATIONS
253	Formaldehyde sensor using non-dispersive UV spectroscopy at 340nm. , 2014, , .		1
254	Transverse strain response of in-fibre Fabry-Perot microcavities. Proceedings of SPIE, 2014, , .	0.8	1
255	Palladium coated ball lens for optical fibre refractometry based hydrogen sensing. , 2014, , .		1
256	A low-cost, high-magnification imaging system for particle sizing applications. Measurement Science and Technology, 2014, 25, 027002.	1.4	1
257	Long period grating sensors response to photosensitive bacteriorhodopsin coating. Proceedings of SPIE, 2015, , .	0.8	1
258	Photodecomposition of a target compound detected using an optical fibre long period grating coated with a molecularly imprinted titania thin film. , 2015, , .		1
259	A method for continuous in-situ pathlength calibration of integrating sphere based gas cells. , 2015, , .		1
260	Sensitive detection of methane at 3.3 μ m using an integrating sphere and interband cascade laser. Proceedings of SPIE, 2016, , .	0.8	1
261	Monitoring the fabrication of tapered optical fibres. Proceedings of SPIE, 2017, , .	0.8	1
262	Fibre Bragg grating sensors for the analysis of pressure distribution at a disc brake/pad interface. Proceedings of SPIE, 2017, , .	0.8	1
263	Instrumentation for quantitative analysis of volatile compounds emission at elevated temperatures. Part 2: Analysis of carbon fibre reinforced epoxy composite. Scientific Reports, 2020, 10, 8702.	1.6	1
264	On-line load monitoring of a tufting needle using optical fibre Bragg grating sensors. , 2012, , .		1
265	Ratiometric pathlength calibration of integrating sphere-based absorption cells. Optics Express, 2020, 28, 19574.	1.7	1
266	In-situ pathlength calibration of integrating spheres used in measurement of absorbance. , 2018, , .		1
267	Differential displacement measurements along a single beam using range-resolved interferometry. , 2019, , .		1
268	The use of parabolic mirrors in combined low-coherence and confocal refractive index measurement. , 2019, , .		1
269	Influence of aberrations on confocal-based remote refractive index measurements. Applied Optics, 2019, 58, 6474.	0.9	1
270	Multiple intensity reference interferometry for the correction of sub-fringe displacement non-linearities. Measurement Science and Technology, 2022, 33, 025201.	1.4	1

#	ARTICLE	IF	CITATIONS
271	Optical Fibre Polarisation State Controller. , 1987, , .		0
272	A Low Power Birefringent Fibre Frequency Shifter. Proceedings of SPIE, 1987, , .	0.8	0
273	An interferometric technique for measuring the frequency response of optical detector-amplifier combinations. Measurement Science and Technology, 1993, 4, 1232-1237.	1.4	0
274	<title>Multiple-wavelength signal processing technique for short gauge length interferometric fiber sensors</title>. , 1996, , .		0
275	Fiber optic pH sensors using thin-film Langmuir-Blodgett overlay waveguides on single-mode optical fibers. , 1997, 3133, 264.		0
276	Optical fiber speckle interferometry. , 1998, , 207-236.		0
277	Fiber optic laser anemometry. , 1998, , 261-301.		0
278	In-situ internal strain development and cure monitoring in a curing composite using in-fiber Bragg gratings and dielectric sensors. , 1998, 3479, 200.		0
279	Optical Fiber Modulation Techniques for Single Mode Fiber Sensors. , 2000, , 115-166.		0
280	Combined shearography and speckle pattern photography for single-access multi-component surface. , 2003, , .		0
281	Dual-illumination planar Doppler velocimetry using a single camera. , 2003, , .		0
282	Planar Doppler velocimetry using optical fibers. , 2004, 5532, 50.		0
283	Multidimensional strain and temperature measurements using a novel high-birefringent fiber Bragg grating interrogation system. , 2004, , .		0
284	Single camera three component planar velocity measurements, using two frequency Planar Doppler Velocimetry (2½-PDV). , 2005, , .		0
285	Engineering photonics: from nanoscale sensing to full-field interferometry. , 2005, , .		0
286	Comparison of optical fibre Bragg grating strain sensors with shearography and resistance foil strain gauge measurements. , 2005, , .		0
287	Single camera 3D planar velocity measurements using imaging fibre bundles and two frequency Planar Doppler Velocimetry (2nu-PDV). , 2005, , .		0
288	Optical Fibre Sensors 17 (OFS-17). Measurement Science and Technology, 2006, 17, .	1.4	0

#	ARTICLE	IF	CITATIONS
289	Single camera 3D planar Doppler velocity measurements using imaging fibre bundles. Journal of Physics: Conference Series, 2006, 45, 193-200.	0.3	0
290	Measurement of surface strain using multi-component pulsed laser shearography with coherent fibre-optic bundles. , 2007, , .		0
291	Nested long period grating interferometers. , 2007, , .		0
292	Fibre grating refractometer sensors for composite process monitoring. , 2007, , .		0
293	Transversely loaded fibre Bragg grating for pressure measurements. Proceedings of SPIE, 2007, , .	0.8	0
294	Optical Fibre Sensors 18 (OFS-18). Measurement Science and Technology, 2007, 18, .	1.4	0
295	Development of a multi-component shearography instrument for surface strain measurement on dynamic objects. , 2008, , .		0
296	A transverse loading technique to enhance the pressure measurement capability of fibre Bragg gratings. Proceedings of SPIE, 2008, , .	0.8	0
297	Surface strain measurement of rotating objects using shearography instrumentation based on fibre-optic imaging bundles. , 2008, , .		0
298	3D planar velocity measurements using Mach-Zehnder interferometric-filter-based planar Doppler velocimetry (MZI-PDV) and imaging fibre bundles. , 2008, , .		0
299	Optical sensing with coherent imaging fibre bundles. , 2009, , .		0
300	The 19th International Conference on Optical Fibre Sensors, OFS-19. Measurement Science and Technology, 2009, 20, 030101.	1.4	0
301	Response of a fibre optic long period grating operating at the phase matching turning point to the deposition of a nanostructured coating. Proceedings of SPIE, 2009, , .	0.8	0
302	Species selective vapour sensing of organic compounds using dual resonant long period fibre gratings with a calixarene coating. , 2009, , .		0
303	Curved tapered optical fibre surface pressure sensor. , 2011, , .		0
304	Optical coherence tomography for endoscopes, using imaging fibre bundles and a conical mirror. Proceedings of SPIE, 2012, , .	0.8	0
305	Range-resolved single-sideband optical fibre interferometry for quasi-distributed dynamic strain sensing. , 2012, , .		0
306	Multiplexing tapered optical fibres using coherent optical frequency domain reflectometry. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
307	The 22nd International Conference on Optical Fibre Sensors, OFS-22. Measurement Science and Technology, 2013, 24, 090301.	1.4	0
308	Temperature and surrounding refractive index insensitive cascaded long period grating chemical sensor. Proceedings of SPIE, 2014, , .	0.8	0
309	The effect of surface pressure modification on the speed of vortex rings. Fluid Dynamics Research, 2014, 46, 055503.	0.6	0
310	Range-resolved signal processing for fibre segment interferometry applied to dynamic long-gauge length strain sensing. Proceedings of SPIE, 2015, , .	0.8	0
311	Dissolved oxygen sensing using an optical fibre long period grating coated with hemoglobin. Proceedings of SPIE, 2015, , .	0.8	0
312	Objective speckle displacement resulting from the deformation of shaped objects. , 2015, , .		0
313	A high-sensitivity chemical sensor based on titania coated optical-fiber long period grating for ammonia sensing in water. , 2015, , .		0
314	Chirality measurements using optical fibre long period gratings fabricated in high birefringent fibre. , 2015, , .		0
315	Detection of volatile organic compounds using optical fibre long period grating modified with metal organic framework thin films. Proceedings of SPIE, 2015, , .	0.8	0
316	Experimental determination of 2nd order phase matching turning points in long period gratings. , 2016, , .		0
317	Characterisation of a cryostat using simultaneous, single-beam multiple-surface laser vibrometry. AIP Conference Proceedings, 2016, , .	0.3	0
318	Full-field interferometry using infinity corrected optics. Measurement Science and Technology, 2016, 27, 015402.	1.4	0
319	Optimised process for fabricating tapered long period gratings. Proceedings of SPIE, 2017, , .	0.8	0
320	Multiplexing curvature sensors using fibre segment interferometry for lateral vibration measurements. Proceedings of SPIE, 2017, , .	0.8	0
321	Laser speckle velocimetry for robot manufacturing. , 2017, , .		0
322	Simultaneous optical interrogation of multiple tuning fork resonators using range-resolved interferometry. , 2017, , .		0
323	Live demonstration: Simultaneous optical interrogation of multiple tuning fork resonators using range-resolved interferometry. , 2017, , .		0
324	Dual-channel OCT for Velocity Measurement in Microfluidic Channels. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
325	2D Spatially-Resolved Depth-Section Microfluidic Flow Velocimetry Using Dual Beam OCT. Micromachines, 2020, 11, 351.	1.4	0
326	Fibre-coupled, multiplexed methane detection using range-resolved interferometry. JPhys Photonics, 2021, 3, 02LT01.	2.2	0
327	Application Of An Optical Fibre Current Sensor To Electricity Supply Protection. , 1990, , .		0
328	<title>Three-dimensional shape measurement using fiber optic low-coherence speckle interferometry</title>. , 1998, , .		0
329	Mid-IR spectroscopic instrumentation for point-of-care diagnosis using a hollow silica waveguide gas cell. , 2017, , .		0
330	Interferometric fibre-optic curvature sensing for structural, directional vibration measurements. Proceedings of SPIE, 2017, , .	0.8	0
331	A Fibre Optic Long Period Grating Immunosensor for Campylobacter jejuni with Enhanced Sensitivity by Bacterial Staining. , 2018, , .		0
332	Refractive index and dispersion measurement using low-coherence interferometry with broadband confocal scanning. , 2018, , .		0
333	Multi degree-of-freedom position sensing by combination of laser speckle correlation and range-resolved interferometry. , 2019, , .		0
334	Two-dimensional remote interferometric stage encoder through a single access port using range-resolved interferometry. , 2019, , .		0
335	Comparison of FBG and Interferometric Surface Mounted Optical Fibre Pressure Sensor. , 2021, , .		0