Tong Sun

List of Publications by Citations

216 papers	5,070 citations	32 h-index	63 g-index
258 ext. papers	6,015 ext. citations	3.1 avg, IF	5.8 L-index

#	Paper	IF	Citations
216	Fiber optic sensor technology: an overview. *Sensors and Actuators A: Physical*, **2000**, 82, 40-61	3.9	544
215	Gold nanorod-based localized surface plasmon resonance biosensors: A review. *Sensors and Actuators B: Chemical*, **2014**, 195, 332-351	8.5	471
214	Fibre-optic sensor technologies for humidity and moisture measurement. *Sensors and Actuators A: Physical*, **2008**, 144, 280-295	3.9	326
213	Comparison of fluorescence-based temperature sensor schemes: Theoretical analysis and experimental validation. *Journal of Applied Physics*, **1998**, 84, 4649-4654	2.5	240
212	Characterisation of a polymer-coated fibre Bragg grating sensor for relative humidity sensing. *Sensors and Actuators B: Chemical*, **2005**, 110, 148-156	8.5	176
211	Wavelength-based localized surface plasmon resonance optical fiber biosensor. *Sensors and Actuators B: Chemical*, **2013**, 181, 611-619	8.5	104
210	Long period grating-based humidity sensor for potential structural health monitoring. *Sensors and Actuators A: Physical*, **2008**, 148, 57-62	3.9	94
209	Fluorescence based fibre optic pH sensor for the pH 10–13 range suitable for corrosion monitoring in concrete structures. *Sensors and Actuators B: Chemical*, **2014**, 191, 498-507	8.5	88
208	Polymer-coated fiber Bragg grating for relative humidity sensing. *IEEE Sensors Journal*, **2005**, 5, 1082-1089	4	78
207	Silver@graphene oxide nanocomposite-based optical sensor platform for biomolecules. *RSC Advances*, **2015**, 5, 17809-17816	3.7	69
206	Optimization of gold-nanoparticle-based optical fibre surface plasmon resonance (SPR)-based sensors. *Sensors and Actuators B: Chemical*, **2012**, 164, 43-53	8.5	65
205	LSPR optical fibre sensors based on hollow gold nanostructures. *Sensors and Actuators B: Chemical*, **2014**, 191, 37-44	8.5	56
204	A gold nanorod-based localized surface plasmon resonance platform for the detection of environmentally toxic metal ions. *Analyst, The*, **2015**, 140, 2540-55	5	54
203	[INVITED] Developments in optical fibre sensors for industrial applications. *Optics and Laser Technology*, **2016**, 78, 62-66	4.2	53
202	LPG-Based PVA Coated Sensor for Relative Humidity Measurement. *IEEE Sensors Journal*, **2008**, 8, 1093-1098	4	53
201	New Test Method to Obtain pH Profiles due to Carbonation of Concretes Containing Supplementary Cementitious Materials. *Journal of Materials in Civil Engineering*, **2007**, 19, 936-946	3	53
200	Fibre optic long period grating-based humidity sensor probe using a Michelson interferometric arrangement. *Sensors and Actuators B: Chemical*, **2013**, 178, 694-699	8.5	52

199	Novel Negative Pressure Wave-Based Pipeline Leak Detection System Using Fiber Bragg Grating-Based Pressure Sensors. *Journal of Lightwave Technology*, **2017**, 35, 3366-3373	4	47
198	Cross-Comparison of Surface Plasmon Resonance-Based Optical Fiber Sensors With Different Coating Structures. *IEEE Sensors Journal*, **2012**, 12, 2355-2361	4	47
197	. *IEEE Sensors Journal*, **2013**, 13, 767-771	4	45
196	Characteristics of potential fibre Bragg grating sensor-based devices at elevated temperatures. *Measurement Science and Technology*, **2003**, 14, 1131-1136	2	44
195	Obtaining progressive chloride profiles in cementitious materials. *Construction and Building Materials*, **2005**, 19, 666-673	6.7	43
194	Temperature dependence of the fluorescence lifetime in Pr3+:ZBLAN glass for fiber optic thermometry. *Review of Scientific Instruments*, **1997**, 68, 3447-3451	1.7	42
193	Graphene-Oxide-Coated Long-Period Grating-Based Fiber Optic Sensor for Relative Humidity and External Refractive Index. *Journal of Lightwave Technology*, **2018**, 36, 1145-1151	4	41
192	Effective surface modification of gold nanorods for localized surface plasmon resonance-based biosensors. *Sensors and Actuators B: Chemical*, **2012**, 169, 360-367	8.5	41
191	Intrinsic Fluorescence-Based Optical Fiber Sensor for Cocaine Using a Molecularly Imprinted Polymer as the Recognition Element. *IEEE Sensors Journal*, **2012**, 12, 255-260	4	41
190	Simultaneous Measurement of Strain and Temperature With a Few-Mode Fiber-Based Sensor. *Journal of Lightwave Technology*, **2018**, 36, 2796-2802	4	40
189	Non-linear temperature dependence of Bragg gratings written in different fibres, optimised for sensor applications over a wide range of temperatures. *Sensors and Actuators A: Physical*, **2004**, 112, 211-219	3.9	39
188	Preparation of novel optical fibre-based Cocaine sensors using a molecular imprinted polymer approach. *Sensors and Actuators B: Chemical*, **2014**, 193, 35-41	8.5	38
187	Bragg grating-based fiber-optic laser probe for temperature sensing. *IEEE Photonics Technology Letters*, **2004**, 16, 218-220	2.2	36
186	Demonstration of a fibre-optic sensing technique for the measurement of moisture absorption in concrete. *Smart Materials and Structures*, **2006**, 15, N40-N45	3.4	35
185	Fluorescence decay-time characteristics of erbium-doped optical fiber at elevated temperatures. *Review of Scientific Instruments*, **1997**, 68, 2764-2766	1.7	34
184	Sewerage tunnel leakage detection using a fibre optic moisture-detecting sensor system. *Sensors and Actuators A: Physical*, **2014**, 220, 62-68	3.9	32
183	Strain Measurement on a Rail Bridge Loaded to Failure Using a Fiber Bragg Grating-Based Distributed Sensor System. *IEEE Sensors Journal*, **2008**, 8, 2059-2065	4	32
182	Short cavity single frequency fiber laser for in-situ sensing applications over a wide temperature range. *Optics Express*, **2007**, 15, 363-70	3.3	32

181	Design and in-the-field performance evaluation of compact FBG sensor system for structural health monitoring applications. *Sensors and Actuators A: Physical*, **2009**, 151, 107-112	3.9	30
180	Optical Fiber Refractive Index Sensor for Chloride Ion Monitoring. *IEEE Sensors Journal*, **2009**, 9, 525-532	4	29
179	Intrinsic Fiber Optic pH Sensor for Measurement of pH Values in the Range of 0.5–. *IEEE Sensors Journal*, **2016**, 16, 881-887	4	28
178	Evaluation of the Durability and Performance of FBG-Based Sensors for Monitoring Moisture in an Aggressive Gaseous Waste Sewer Environment. *Journal of Lightwave Technology*, **2017**, 35, 3380-3386	4	28
177	Temperature and nonlinearity corrections for a photodiode array spectrometer used in the field. *Applied Optics*, **2011**, 50, 866-75	0.2	28
176	Erbium/ytterbium fluorescence based fiber optic temperature sensor system. *Review of Scientific Instruments*, **2000**, 71, 4017	1.7	28
175	Study of reliability of fibre Bragg grating fibre optic strain sensors for field-test applications. *Sensors and Actuators A: Physical*, **2012**, 185, 8-16	3.9	27
174	Optimization of a long-period grating-based Mach–Zehnder interferometer for temperature measurement. *Optics Communications*, **2007**, 272, 15-21	2	27
173	Multi-axis force sensors: A state-of-the-art review. *Sensors and Actuators A: Physical*, **2020**, 304, 111772	3.9	26
172	"All-fiber" tunable laser in the 2 -m region, designed for CO2 detection. *Applied Optics*, **2012**, 51, 7011-5	1.7	26
171	Wavelength dependent pH optical sensor using the layer-by-layer technique. *Sensors and Actuators B: Chemical*, **2012**, 169, 374-381	8.5	26
170	Field tests of fibre Bragg grating sensors incorporated into CFRP for railway bridge strengthening condition monitoring. *Sensors and Actuators A: Physical*, **2008**, 148, 68-74	3.9	26
169	Ytterbium-based fluorescence decay time fiber optic temperature sensor systems. *Review of Scientific Instruments*, **1998**, 69, 4179-4185	1.7	26
168	Characterization of erbium-doped intrinsic optical fiber sensor probes at high temperatures. *Review of Scientific Instruments*, **1998**, 69, 2924-2929	1.7	26
167	Ytterbium-sensitized Thulium-doped fiber laser in the near-IR with 980 nm pumping. *Optics Express*, **2010**, 18, 5068-74	3.3	25
166	Analysis of thermal decay and prediction of operational lifetime for a type I boron-germanium codoped fiber Bragg grating. *Applied Optics*, **2003**, 42, 2188-97	1.7	25
165	SPR-Based Optical Fiber Sensors Using Gold–Silver Alloy Particles as the Active Sensing Material. *IEEE Sensors Journal*, **2013**, 13, 2192-2199	4	24
164	Monitoring of Corrosion in Structural Reinforcing Bars: Performance Comparison Using In Situ Fiber-Optic and Electric Wire Strain Gauge Systems. *IEEE Sensors Journal*, **2009**, 9, 1494-1502	4	24

163	Morphology and Thermal Stability of Fiber Bragg Gratings for Sensor Applications Written in ${rm H}_{2}$-Free and ${rm H}_{2}$-Loaded Fibers by Femtosecond Laser. *IEEE Sensors Journal*, **2010**, 10, 1675-1681	4	23
162	Strain Measurement Using Embedded Fiber Bragg Grating Sensors Inside an Anchored Carbon Fiber Polymer Reinforcement Prestressing Rod for Structural Monitoring. *IEEE Sensors Journal*, **2009**, 9, 1456-1461	4	23
161	Simultaneous measurement of temperature and strain with long period grating pairs using low resolution detection. *Sensors and Actuators A: Physical*, **2008**, 144, 83-89	3.9	23
160	Strain and temperature effects on erbium-doped fiber for decay-time based sensing. *Review of Scientific Instruments*, **2000**, 71, 104-108	1.7	23
159	Thermal decay characteristics of strong fiber Bragg gratings showing high-temperature sustainability. *Journal of the Optical Society of America B: Optical Physics*, **2007**, 24, 430	1.7	22
158	. *IEEE Sensors Journal*, **2019**, 19, 8720-8726	4	21
157	Building Stone Condition Monitoring Using Specially Designed Compensated Optical Fiber Humidity Sensors. *IEEE Sensors Journal*, **2012**, 12, 1011-1017	4	21
156	Commissioning and Evaluation of a Fiber-Optic Sensor System for Bridge Monitoring. *IEEE Sensors Journal*, **2013**, 13, 2555-2562	4	21
155	Characteristics of Er and Er□Yb□Cr doped phosphate microsphere fibre lasers. *Optics Communications*, **2009**, 282, 3765-3769	2	20
154	Investigations on exponential lifetime measurements for fluorescence thermometry. *Review of Scientific Instruments*, **2000**, 71, 2938-2943	1.7	20
153	Underwater Free-Vibration Analysis of Full-Scale Marine Propeller Using a Fiber Bragg Grating-Based Sensor System. *IEEE Sensors Journal*, **2016**, 16, 946-953	4	19
152	A high-Qlow threshold thulium-doped silica microsphere laser in the 2 □m wavelength region designed for gas sensing applications. *Laser Physics Letters*, **2013**, 10, 085101	1.5	19
151	Stray light correction for diode-array-based spectrometers using a monochromator. *Applied Optics*, **2011**, 50, 5130-8	0.2	19
150	Highly photosensitive Sb/Er/Ge-codoped silica fiber for writing fiber Bragg gratings with strong high-temperature sustainability. *Optics Letters*, **2003**, 28, 2025-7	3	19
149	Fluorescence decay characteristic of Tm-doped YAG crystal fiber for sensor applications, investigated from room temperature to 1400□C. *IEEE Sensors Journal*, **2003**, 3, 507-512	4	19
148	Laser Cladding-Based Metallic Embedding Technique for Fiber Optic Sensors. *Journal of Lightwave Technology*, **2018**, 36, 1018-1025	4	18
147	. *Journal of Lightwave Technology*, **2016**, 34, 4473-4478	4	18
146	Temporal thermal response of Type II-IR fiber Bragg gratings. *Applied Optics*, **2009**, 48, 3001-7	0.2	18

145	Chloride ion optical sensing using a long period grating pair. *Sensors and Actuators A: Physical*, **2008**, 141, 390-395	3.9	18
144	Strain-independent temperature measurement using a type-I and type-IIA optical fiber Bragg grating combination. *Review of Scientific Instruments*, **2004**, 75, 1327-1331	1.7	18
143	Bragg grating tuned fiber laser system for measurement of wider range temperature and strain. *Optics Communications*, **2005**, 244, 111-121	2	18
142	Development and Longer Term In Situ Evaluation of Fiber-Optic Sensors for Monitoring of Structural Concrete. *IEEE Sensors Journal*, **2009**, 9, 1537-1545	4	17
141	High-temperature sustainability of strong fiber Bragg gratings written into Sb-Ge-codoped photosensitive fiber: decay mechanisms involved during annealing. *Optics Letters*, **2004**, 29, 554-6	3	17
140	Novel Sensor Design Using Photonic Crystal Fibres for Monitoring the Onset of Corrosion in Reinforced Concrete Structures. *Journal of Lightwave Technology*, **2014**, 32, 891-896	4	16
139	Design Evaluation of a High Birefringence Single Mode Optical Fiber-Based Sensor for Lateral Pressure Monitoring Applications. *IEEE Sensors Journal*, **2013**, 13, 4459-4464	4	16
138	Simultaneous measurement of strain (to 2000 /spl mu//spl epsiv/) and temperature (to 600/spl deg/C) using a combined Sb-Er-Ge-codoped fiber-fluorescence and grating-based technique. *IEEE Sensors Journal*, **2005**, 5, 1462-1468	4	16
137	Simultaneous strain□emperature measurement using fluorescence from Yb-doped silica fiber. *Review of Scientific Instruments*, **2000**, 71, 2267-2269	1.7	16
136	Intrinsic strain and temperature characteristics of Yb-doped silica-based optical fibers. *Review of Scientific Instruments*, **1999**, 70, 1447-1451	1.7	16
135	A Turn-On Fluorescence-Based Fibre Optic Sensor for the Detection of Mercury. *Sensors*, **2019**, 19,	3.8	15
134	LPG-based optical fibre sensor for acoustic wave detection. *Sensors and Actuators A: Physical*, **2012**, 173, 97-101	3.9	15
133	Development of low cost packaged fibre optic sensors for use in reinforced concrete structures. *Measurement: Journal of the International Measurement Confederation*, **2019**, 135, 617-624	4.6	15
132	TDLAS Detection of Propane/Butane Gas Mixture by Using Reference Gas Absorption Cells and Partial Least Square Approach. *IEEE Sensors Journal*, **2018**, 18, 8587-8596	4	15
131	Compact Tm-doped fibre laser pumped by a 1600 nm Er-doped fibre laser designed for environmental gas sensing. *Sensors and Actuators A: Physical*, **2015**, 226, 11-20	3.9	14
130	In Situ Cross-Calibration of In-Fiber Bragg Grating and Electrical Resistance Strain Gauges for Structural Monitoring Using an Extensometer. *IEEE Sensors Journal*, **2009**, 9, 1355-1360	4	14
129	Analysis of double exponential fluorescence decay behavior for optical temperature sensing. *Review of Scientific Instruments*, **1997**, 68, 58-63	1.7	14
128	Dual temperature and strain measurement with the combined fluorescence lifetime and Bragg wavelength shift approach in doped optical fiber. *Applied Optics*, **2002**, 41, 6585-92	1.7	14

127	Enhanced FBG sensor-based system performance assessment for monitoring strain along a prestressed CFRP rod in structural monitoring. *Sensors and Actuators A: Physical*, **2009**, 151, 127-132	3.9	13
126	Bragg grating performance in Er3n-doped germanosilicate fiber for simultaneous measurement of wide range temperature (to 500 C) and strain. *Review of Scientific Instruments*, **2003**, 74, 4858-4862	1.7	13
125	Characterization of an optical fiber thermometer using Tm3+:YAG crystal, based on the fluorescence lifetime approach. *Sensors and Actuators A: Physical*, **2003**, 109, 53-59	3.9	13
124	Wireless Sensor Network Platform for Intrinsic Optical Fiber pH Sensors. *IEEE Sensors Journal*, **2014**, 14, 1313-1320	4	12
123	Fibre optic chemical sensor systems for internal concrete condition monitoring **2004**, 5502, 334		12
122	Quasidistributed fluorescence-based optical fiber temperature sensor system. *Review of Scientific Instruments*, **1998**, 69, 146-151	1.7	12
121	Tunable Diode Laser Absorption Spectroscopy- Based Detection of Propane for Explosion Early Warning by Using a Vertical Cavity Surface Enhanced Laser Source and Principle Component Analysis Approach. *IEEE Sensors Journal*, **2017**, 17, 4975-4982	4	11
120	Fiber Optic pH Sensor Using Optimized Layer-by-Layer Coating Approach. *IEEE Sensors Journal*, **2014**, 14, 47-54	4	11
119	Fiber Optic Strain Monitoring for Long-Term Evaluation of a Concrete Footbridge Under Extended Test Conditionss. *IEEE Sensors Journal*, **2013**, 13, 1036-1043	4	11
118	Preliminary Development and Evaluation of Fiber-Optic Chemical Sensors. *Journal of Materials in Civil Engineering*, **2011**, 23, 1200-1210	3	11
117	Sensitivity enhancement of long period gratings for temperature measurement using the long period grating pair technique. *Sensors and Actuators A: Physical*, **2008**, 141, 314-320	3.9	11
116	Lithium-Ion Battery State-of-Charge Estimator Based on FBG-Based Strain Sensor and Employing Machine Learning. *IEEE Sensors Journal*, **2021**, 21, 1453-1460	4	11
115	Encapsulation of Fiber Optic Sensors in 3D Printed Packages for Use in Civil Engineering Applications: A Preliminary Study. *Sensors*, **2019**, 19,	3.8	10
114	Comprehensive Monitoring of Electrical Machine Parameters Using an Integrated Fiber Bragg Grating-Based Sensor System. *Journal of Lightwave Technology*, **2018**, 36, 1046-1051	4	10
113	Computational Design and Fabrication of Optical Fibre Fluorescent Chemical Probes for the Detection of Cocaine. *Journal of Lightwave Technology*, **2015**, 33, 2572-2579	4	10
112	Lateral force sensing system based on different photonic crystal fibres. *Sensors and Actuators A: Physical*, **2014**, 205, 86-91	3.9	10
111	Optical fibre sensors for the measurement of concrete sample properties following exposure to freeze/thaw tests. *Sensors and Actuators A: Physical*, **2009**, 153, 166-170	3.9	10
110	The microbial habitability of weathered volcanic glass inferred from continuous sensing techniques. *Astrobiology*, **2011**, 11, 651-64	3.7	10

109	Stability performance of short cavity Er-doped fiber lasers. *Optics Communications*, **2010**, 283, 1067-1070	2	10
108	Analysis of the double exponential behavior in alexandrite for optical temperature sensing applications. *Review of Scientific Instruments*, **1997**, 68, 3442-3446	1.7	10
107	Erbium-doped intrinsic fiber sensor for cryogenic temperature measurement. *Sensors and Actuators A: Physical*, **1998**, 71, 183-186	3.9	10
106	Investigation of the photosensitivity, temperature sustainability and fluorescence characteristics of several Er-doped photosensitive fibers. *Optics Communications*, **2004**, 237, 301-308	2	10
105	Analysis of the Characteristics of PVA-Coated LPG-Based Sensors to Coating Thickness and Changes in the External Refractive Index. *IEEE Sensors Journal*, **2013**, 13, 1117-1124	4	9
104	. *Journal of Lightwave Technology*, **2017**, 35, 3393-3398	4	9
103	Fiber Bragg Grating-Based System for 2-D Analysis of Vibrational Modes of a Steel Propeller Blade. *Journal of Lightwave Technology*, **2014**, 32, 4593-4599	4	9
102	Directional Force Measurement Using Specialized Single-Mode Polarization-Maintaining Fibers. *Journal of Lightwave Technology*, **2011**, 29, 3611-3615	4	9
101	Energy-transfer parameters in a Tm/Yb doped single mode silica fiber. *Journal of the Optical Society of America B: Optical Physics*, **2010**, 27, 2714	1.7	9
100	High sensitivity long-period grating-based temperature monitoring using a wide wavelength range to 2.2 μm. *Optics Communications*, **2006**, 268, 42-45	2	9
99	Fiber optic chemical sensor systems for monitoring pH changes in concrete **2004**,		9
98	Characteristics of doped optical fiber for fluorescence-based fiber optic temperature systems. *Review of Scientific Instruments*, **2003**, 74, 5212-5218	1.7	9
97	Intrinsic doped fluorescence decay-time based measurements of strain and temperature characteristics for sensor purposes. *Review of Scientific Instruments*, **1998**, 69, 4186-4190	1.7	9
96	Design and Modeling of a High Sensitivity Fiber Bragg Grating-Based Accelerometer. *IEEE Sensors Journal*, **2019**, 19, 5439-5445	4	8
95	Novel coumarin-based pH sensitive fluorescent probes for the highly alkaline pH region. *Dyes and Pigments*, **2020**, 177, 108312	4.6	8
94	Analysis of Fiber Optic Sensor Embedded in Metals by Automatic and Manual TIG Welding. *IEEE Sensors Journal*, **2019**, 19, 7425-7433	4	8
93	Optical sensor for pH monitoring using a layer-by-layer deposition technique emphasizing enhanced stability and re-usability. *Sensors and Actuators B: Chemical*, **2014**, 195, 692-701	8.5	8
92	A Novel Wireless Mobile Platform to Locate and Gather Data From Optical Fiber SensorsIntegrated Into a WSN. *IEEE Sensors Journal*, **2015**, 15, 3615-3621	4	8

91	Temperature characterization of Long Period Gratings written in three different types of optical fibre for potential high temperature measurements. *Sensors and Actuators A: Physical*, **2010**, 160, 29-34	3.9	8
90	Photosensitive indium-doped germano-silica fiber for strong FBGs with high temperature sustainability. *IEEE Photonics Technology Letters*, **2004**, 16, 1319-1321	2.2	8
89	Bragg gratings written in Sn-Er-Ge-codoped silica fiber: investigation of photosensitivity, thermal stability, and sensing potential. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2004**, 21, 1503-11	1.8	8
88	Analysis of dopant concentration effects in praseodymium-based fluorescent fiber optic temperature sensors. *Review of Scientific Instruments*, **2000**, 71, 100-103	1.7	8
87	Underwater Pressure and Temperature Sensor Based on a Special Dual-Mode Optical Fiber. *IEEE Access*, **2020**, 8, 146463-146471	3.5	8
86	Fibre Grating-based Sensor Design for Humidity Measurement in Chemically Harsh Environment. *Procedia Engineering*, **2016**, 168, 1317-1320		8
85	Long Period Grating-based optical fibre sensor for the underwater detection of acoustic waves. *Sensors and Actuators A: Physical*, **2013**, 201, 289-293	3.9	7
84	Furnace uniformity effects on Re□ fixed-point melting plateaux. *Metrologia*, **2009**, 46, 33-42	2.1	7
83	Frequency-domain fluorescence based fiber optic fire alarm system. *Review of Scientific Instruments* , **2001**, 72, 2191-2196	1.7	7
82	In-Sewer Field-Evaluation of an Optical Fibre-Based Condition Monitoring System. *IEEE Sensors Journal*, **2020**, 20, 2976-2981	4	7
81	Fiber optic sensor designs and luminescence-based methods for the detection of oxygen and pH measurement. *Measurement: Journal of the International Measurement Confederation*, **2021**, 178, 109323	4.6	7
80	Determination of the Aspect-ratio Distribution of Gold Nanorods in a Colloidal Solution using UV-visible absorption spectroscopy. *Scientific Reports*, **2019**, 9, 17469	4.9	7
79	Fibre Bragg Grating-Based Acoustic Sensor Array for Improved Condition Monitoring of Marine Lifting Surfaces. *Journal of Lightwave Technology*, **2016**, 34, 4336-4342	4	6
78	Theoretical Analysis of a Non-Symmetric Polarization-Maintaining Single-Mode Fiber for Sensor Applications. *Journal of Lightwave Technology*, **2012**, 30, 362-367	4	6
77	Generation of periodic surface structures on silica fibre surfaces using 405 nm CW diode lasers. *Journal of Non-Crystalline Solids*, **2013**, 361, 106-110	3.9	6
76	Tm:Ho co-doped single mode optical fibre laser pumped by a 1600nm Er fibre laser. *Optics Communications*, **2008**, 281, 2567-2571	2	6
75	A Parallel Multiplexed Temperature Sensor System Using Bragg-Grating-Based Fiber Lasers. *IEEE Sensors Journal*, **2006**, 6, 986-995	4	6
74	A wide temperature tunable fibre laser using a chirped grating and a type IIA fibre Bragg grating. *Measurement Science and Technology*, **2004**, 15, 1113-1119	2	6

73	. *IEEE Sensors Journal*, **2019**, 19, 1794-1801	4	6
72	Optical fibre thermometry using ratiometric green emission of an upconverting nanoparticle-polydimethylsiloxane composite. *Sensors and Actuators A: Physical*, **2020**, 312, 112083	3.9	5
71	Simultaneous Measurement of Strain and Temperature Using a Single Emission Line. *Journal of Lightwave Technology*, **2015**, 33, 2426-2431	4	5
70	Experimental Optimization in Terms of Power Stability and Output Power of Highly Erbium-Doped Fiber Lasers with Single and Hybrid Cavities. *Fiber and Integrated Optics*, **2010**, 29, 106-120	0.8	5
69	Development of multi-wavelength microsphere fibre laser system for potential sensor applications. *Optics Communications*, **2009**, 282, 401-405	2	5
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67	Measurement of decay time based on FFT. *Optics and Laser Technology*, **2004**, 36, 323-326	4.2	5
66	Extended Study of Fiber Optic-Based Humidity Sensing System Performance for Sewer Network Condition Monitoring. *IEEE Sensors Journal*, **2021**, 21, 7665-7671	4	5
65	A Fiber Bragg Grating (FBG)-Based Sensor System for Anaerobic Biodigester Humidity Monitoring. *IEEE Sensors Journal*, **2021**, 21, 1540-1547	4	5
64	Quasi-Distributed Fiber Optic Temperature and Humidity Sensor System for Monitoring of Grain Storage in Granaries. *IEEE Sensors Journal*, **2020**, 20, 9226-9233	4	4
63	Structural monitoring for asset management of railway bridges. *Proceedings of the Institution of Civil Engineers: Bridge Engineering*, **2014**, 167, 157-169	0.5	4
62	Optimization of a Long Period Grating Distal Probe for Temperature and Refractive Index Measurement. *Procedia Engineering*, **2012**, 47, 718-721		4
61	Development of intrinsic optical fiber pH sensors for industrial applications **2009**,		4
60	Analysis of the optical power loss arising from a fibre coupled integrating sphere used as a compact gas sensor. *Sensors and Actuators A: Physical*, **2010**, 162, 20-23	3.9	4
59	Fiber laser-based temperature sensor systems using uniform wavelength-matched Bragg grating reflectors. *Sensors and Actuators A: Physical*, **2005**, 120, 451-461	3.9	4
58	Determination of local high temperature excursion in an intrinsic doped fiber fluorescence-based sensor. *Review of Scientific Instruments*, **1998**, 69, 2930-2934	1.7	4
57	. *IEEE Sensors Journal*, **2020**, 20, 171-177	4	4
56	High-Sensitivity Hot-Wire-Based Gas Velocity Sensor for Safe Monitoring in Mining Applications. *IEEE Sensors Journal*, **2018**, 18, 10192-10198	4	4

55	Use of optical fibres for multi-parameter monitoring in electrical AC machines **2017**,		3
54	A Novel Optical Sensor Platform Designed for Wireless Sensor Networks. *Journal of Physics: Conference Series*, **2013**, 450, 012007	0.3	3
53	A fibre optic chemical sensor for the detection of cocaine **2010**,		3
52	Development of gold nanorod-based localized surface plasmon resonance optical fiber biosensor **2012**,		3
51	Vibration-insensitive temperature sensing system based on fluorescence decay and using a digital processing approach. *Measurement Science and Technology*, **2006**, 17, 2010-2014	2	3
50	Fiber-optic sensor system for heat-flux measurement. *Review of Scientific Instruments*, **2004**, 75, 1006-1012	1.7	3
49	Fiber thermometer based on the cross detection of the fluorescence decay of Tm:YAG crystal fiber and background radiation **2002**, 4920, 16		3
48	Intrinsic doped fibre fluorescence-lifetime based high temperature alarm sensor. *Sensors and Actuators A: Physical*, **1999**, 76, 67-71	3.9	3
47	A pilot study: Evaluation of sensor system design for optical fibre humidity sensors subjected to aggressive air sewer environment **2016**,		3
46	Acoustic Standing Wave Field Measurement Using a Laser Doppler Vibrometer Based on the Hankel Fourier Algorithm. *IEEE Access*, **2019**, 7, 139013-139020	3.5	3
45	Structural parameter study of dual transducers-type ultrasonic levitation-based transportation system. *Smart Materials and Structures*, **2021**, 30, 045009	3.4	3
44	High Sensitivity Hot-wire based Wind Velocity Sensor using Co-doped Fiber and Fiber Bragg Grating for use in mining applications. *Journal of Physics: Conference Series*, **2018**, 1065, 252023	0.3	3
43	Ultrasensitive Refractive Index Sensor Based on Mach□Zehnder Interferometer and a 40□m Fiber. *Journal of Lightwave Technology*, **2021**, 39, 5625-5633	4	3
42	Monitoring of the Critical Meniscus of Very Low Liquid Volumes Using an Optical Fiber Sensor. *IEEE Sensors Journal*, **2020**, 20, 12232-12240	4	2
41	Optical Fibre Refractive Index Sensor in a Hybrid Fibre Grating Configuration. *Procedia Engineering*, **2015**, 120, 11-14		2
40	Transverse force sensitivity of joint photonic crystal fibres **2012**,		2
39	Deconvolution of fluorescence decays and estimation errors **1997**, 2980, 90		2
38	Fibre length-dependent fluorescence spectral characteristics in high erbium concentration fibres for the optimization of FBG-based fibre sensor systems. *Sensors and Actuators A: Physical*, **2007**, 135, 156-161	3.9	2

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36	Optical-Fiber Sensors: Temperature and Pressure Sensors. *MRS Bulletin*, **2002**, 27, 389-395	3.2	2
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