

Elfed Lewis

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9180084/elfed-lewis-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

290
papers

3,245
citations

28
h-index

40
g-index

388
ext. papers

4,073
ext. citations

2.9
avg, IF

5.35
L-index

#	Paper	IF	Citations
290	A Review of Optical Fibre Ethanol Sensors: Current State and Future Prospects.. <i>Sensors</i> , 2022 , 22,	3.8	4
289	All-optical modulator based on a microfibre coil resonator functionalized with MXene. <i>Optical Fiber Technology</i> , 2022 , 68, 102776	2.4	0
288	A Distributed Bonding Interfacial Loss Characterizing Method of Composite Crystal Based on Optical Low-Coherence Domain Reflectometry. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022 , 71, 1-7	5.2	
287	Investigation on the Dependence of Directional Torsion Measurement on Multimode Fiber Geometry. <i>Journal of Lightwave Technology</i> , 2022 , 1-1	4	
286	Correlation between emission and relative intensity noise spectral profiles of an Er-doped fiber superfluorescent source. <i>AIP Advances</i> , 2022 , 12, 055226	1.5	
285	Ultra-compact in-core-parallel-written FBG and Mach-Zehnder interferometer for simultaneous measurement of strain and temperature. <i>Optics Letters</i> , 2021 , 46, 5595-5598	3	1
284	GEANT4 simulation study of over-response phenomenon of fiber x-ray sensor*. <i>Chinese Physics B</i> , 2021 , 30, 048701	1.2	
283	Advanced characterization of an optical fibre sensor system based on an MPPC detector for measurement of X-ray radiation in clinical linacs. <i>Sensors and Actuators A: Physical</i> , 2021 , 318, 112129	3.9	
282	An experimental and theoretical study of the influence of Cerenkov radiation on optical fiber X-ray sensors. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021 , 171, 108863	4.6	0
281	Guest Editorial Special Issue on Advances in Fiber Optic Sensing Technologies. <i>IEEE Sensors Journal</i> , 2021 , 21, 16-16	4	0
280	Influence of probe geometry on the characteristics of optical fiber gas-liquid two-phase flow measurement signals. <i>Applied Optics</i> , 2021 , 60, 1660-1666	1.7	0
279	Color Variation of the Up-Conversion Luminescence in Er ³⁺ -Yb ³⁺ Co-Doped Lead Germanate Glasses and Microsphere Integrated Devices. <i>Journal of Lightwave Technology</i> , 2020 , 38, 4397-4401	4	1
278	Simultaneous measurement of displacement and temperature based on two cascaded balloon-like bent fibre structures. <i>Optical Fiber Technology</i> , 2020 , 58, 102277	2.4	4
277	Investigation on the Polarization Dependence of An Angled Polished Multimode Fibre Structure. <i>Journal of Lightwave Technology</i> , 2020 , 38, 4520-4525	4	5
276	Optical fiber plasmonic sensor for the ultrasensitive detection of copper (II) ion based on trimetallic Au@AgPt core-shell nanospheres. <i>Sensors and Actuators B: Chemical</i> , 2020 , 321, 128480	8.5	4
275	Investigation of the characteristics of a fiber-optic gas-liquid two-phase flow sensor. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2020 , 37, 1687-1694	1.8	1
274	Miniature Fabry-Perot interferometer based on a movable microsphere reflector. <i>Optics Letters</i> , 2020 , 45, 787-790	3	8

273	Novel layered 2D materials for ultrafast photonics. <i>Nanophotonics</i> , 2020 , 9, 1743-1786	6.3	12
272	All-fiber optic displacement sensing system for an Ilizarov transverse tibial bone transport device. <i>Applied Optics</i> , 2020 , 59, 2077-2084	1.7	
271	A multi-wavelength discriminating sensor with a wireless mote interface for aquatic pollution monitoring. <i>International Journal on Smart Sensing and Intelligent Systems</i> , 2020 , 7, 1-4	0.4	2
270	High sensitivity, low temperature-crosstalk strain sensor based on a microsphere embedded Fabry-Pérot interferometer. <i>Sensors and Actuators A: Physical</i> , 2020 , 310, 112048	3.9	6
269	Bismuth-doped compound germanate glass microsphere lasing in the near-infrared region. <i>Microwave and Optical Technology Letters</i> , 2020 , 62, 67-71	1.2	0
268	Triple-wavelength lasing at 1.50 μm , 1.84 μm and 2.08 μm in a Ho ³⁺ /Tm ³⁺ co-doped fluorozirconate glass microsphere. <i>Journal of Luminescence</i> , 2020 , 219, 116889	3.8	6
267	Tellurite Glass and Its Application in Lasers 2020 ,		1
266	NiS ₂ as a broadband saturable absorber for ultrafast pulse lasers. <i>Optics and Laser Technology</i> , 2020 , 132, 106492	4.2	9
265	Observing the Viscous Relaxation Process of Silica Optical Fiber at ~1000 °C Using Regenerated Fiber Bragg Grating. <i>Sensors</i> , 2019 , 19,	3.8	1
264	A Validation Study of a Polymer Optical Fiber Sensor for Monitoring Lumbar Spine Movement. <i>Materials</i> , 2019 , 12,	3.5	4
263	Largest Enhancement of Broadband Near-Infrared Emission of Ni ²⁺ in Transparent Nanoglass Ceramics: Using Nd ³⁺ as a Sensitizer and Yb ³⁺ as an Energy-Transfer Bridge. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 10021-10027	3.8	15
262	Dual-wavelength mode-locked erbium-doped fiber laser based on tin disulfide thin film as saturable absorber. <i>Journal of Applied Physics</i> , 2019 , 125, 243104	2.5	18
261	Investigation of YAG:Ce-Based Optical Fibre Sensor for Use in Ultra-Fast External Beam Radiotherapy Dosimetry. <i>Journal of Lightwave Technology</i> , 2019 , 37, 4741-4747	4	6
260	Portable 3-D Printed Plastic Optical Fibre Motion Sensor for Monitoring of Breathing Pattern and Respiratory Rate. 2019 ,		5
259	An LED PLD based controller for experimental characterization of an optical fibre sensor system for measurement of x-ray radiation in clinical linacs. <i>Sensors and Actuators A: Physical</i> , 2019 , 296, 292-301	3.9	2
258	Directly Pumped Ho ³⁺ -Doped Microspheres Lasing at $2.0\text{-}\mu\text{m}$. <i>IEEE Photonics Technology Letters</i> , 2019 , 31, 1366-1368	2.2	5
257	Graphene/Cold-Au@Ag NPs-PDMS Films Coated Fiber Optic for Refractive Index and Temperature Sensing. <i>IEEE Photonics Technology Letters</i> , 2019 , 31, 1205-1208	2.2	17
256	Dissipative soliton generation in Er-doped fibre laser using SnS ₂ as a saturable absorber. <i>Applied Physics Express</i> , 2019 , 12, 102008	2.4	12

255	Multiwavelength Q-switched pulse operation with gold nanoparticles as saturable absorber. <i>Optical Engineering</i> , 2019 , 58, 1	1.1	3
254	Multimode-interference-effect-based all-fiber displacement sensing system for an orthopedic Ilizarov apparatus device. <i>Applied Optics</i> , 2019 , 58, 3209-3213	1.7	2
253	Temperature-insensitive refractometer based on an RI-modulated singlemode-multimode-singlemode fibre structure. <i>Optics Express</i> , 2019 , 27, 13754-13764	3.3	9
252	Nanosecond passively Q-switched fibre laser using a NiS based saturable absorber. <i>Optics Express</i> , 2019 , 27, 19843-19851	3.3	11
251	New model for explaining the over-response phenomenon in percentage of depth dose curve measured using inorganic scintillating materials for optical fiber radiation sensors. <i>Optics Express</i> , 2019 , 27, 23693-23706	3.3	6
250	Tm-Ho codoped tellurite glass microsphere laser in the 1.47 μ m wavelength region. <i>Optics Letters</i> , 2019 , 44, 511-513	3	13
249	Optical interleaver based on nested multiple knot microfiber resonators. <i>Optics Letters</i> , 2019 , 44, 1864-1867	3	10
248	In-fiber temperature sensor based on green up-conversion luminescence in an Er-Ybco-doped tellurite glass microsphere. <i>Optics Letters</i> , 2019 , 44, 3214-3217	3	9
247	Ultra-high-resolution detection of Pb ²⁺ ions using a black phosphorus functionalized microfiber coil resonator. <i>Photonics Research</i> , 2019 , 7, 622	6	14
246	Up-Conversion Luminescence and C-Band Laser in Er ³⁺ -Doped Fluorozirconate Glass Microsphere Resonator. <i>IEEE Photonics Journal</i> , 2019 , 11, 1-7	1.8	4
245	An Analytical Model for Describing the Power Coupling Ratio between Multimode Fibers with Transverse Displacement and Angular Misalignment in an Optical Fiber Bend Sensor. <i>Sensors</i> , 2019 , 19,	3.8	1
244	Distributed Measurement of Regeneration Ratios of an Apodized Type I Fiber Bragg Grating. <i>Journal of Lightwave Technology</i> , 2019 , 37, 6127-6132	4	1
243	A twelve-wavelength Thulium-doped fibre laser based on a microfibre coil resonator incorporating black phosphorus. <i>Optics Communications</i> , 2019 , 437, 342-345	2	13
242	Discriminating Twisting Direction by Polarization Maintaining Fiber Bragg Grating. <i>IEEE Photonics Technology Letters</i> , 2018 , 30, 654-657	2.2	3
241	Comparison of models and visualization of total volatile basic nitrogen content in mutton using hyperspectral imaging and variable selection methods. <i>Spectroscopy Letters</i> , 2018 , 51, 226-235	1.1	6
240	Gold Enhanced Hemoglobin Interaction in a Fabry-Pot Based Optical Fiber Sensor for Measurement of Blood Refractive Index. <i>Journal of Lightwave Technology</i> , 2018 , 36, 1118-1124	4	16
239	Directional Bending Sensor Based on a Dual Side-Hole Fiber Mach-Zehnder Interferometer. <i>IEEE Photonics Technology Letters</i> , 2018 , 30, 375-378	2.2	21
238	Bump in the wire (BITW) security solution for a marine ROV remote control application. <i>Journal of Information Security and Applications</i> , 2018 , 38, 111-121	3.5	2

237	Measurement of Ultralow Level Bioethanol Concentration for Production Using Evanescent Wave Based Optical Fiber Sensor. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018 , 67, 780-788	5.2	23
236	A High-Temperature Humidity Sensor Based on a Singlemode-Side Polished Multimode-Singlemode Fiber Structure. <i>Journal of Lightwave Technology</i> , 2018 , 36, 2730-2736	4	18
235	Chalcogenide glasses with embedded ZnS nanocrystals: Potential mid-infrared laser host for divalent transition metal ions. <i>Journal of the American Ceramic Society</i> , 2018 , 101, 666-673	3.8	14
234	Highly sensitive temperature sensor using packaged optical microfiber coupler filled with liquids. <i>Optics Express</i> , 2018 , 26, 356-366	3.3	30
233	Novel optical fiber SPR temperature sensor based on MMF-PCF-MMF structure and gold-PDMS film. <i>Optics Express</i> , 2018 , 26, 1910-1917	3.3	84
232	In-fiber whispering-gallery mode microsphere resonator-based integrated device. <i>Optics Letters</i> , 2018 , 43, 3961-3964	3	19
231	An efficient implementation of FPGA based high speed IPsec (AH/ESP) core. <i>International Journal of Internet Protocol Technology</i> , 2018 , 11, 97	0.3	1
230	Topological Engineering of Photoluminescence Properties of Bismuth- or Erbium-Doped Phosphosilicate Glass of Arbitrary P2O5 to SiO2 Ratio. <i>Advanced Optical Materials</i> , 2018 , 6, 1800024	8.1	14
229	Electric-arc-induced strength-controllable weak polarization mode coupling in polarization maintaining fiber. <i>Applied Optics</i> , 2018 , 57, 6446-6450	1.7	1
228	Investigation of Temperature Dependence of Microfiber Coil Resonators. <i>Journal of Lightwave Technology</i> , 2018 , 36, 4887-4893	4	10
227	YAG:Ce-Phosphor Scintillators for Optical Fiber Radiation Sensors With High Temporal Resolution. <i>IEEE Photonics Technology Letters</i> , 2018 , 30, 1653-1656	2.2	5
226	Utilization of Data Classification in the Realization of a Surface Plasmon Resonance Readout System Using an FPGA Controlled RGB LED Light Source. <i>IEEE Sensors Journal</i> , 2018 , 1-1	4	0
225	Temperature Sensing Performance of Microsphere Resonators. <i>Sensors</i> , 2018 , 18,	3.8	10
224	Simultaneous Measurement of Displacement and Temperature Based on a Balloon-Shaped Bent SMF Structure Incorporating an LPG. <i>Journal of Lightwave Technology</i> , 2018 , 36, 4960-4966	4	33
223	Enhanced sensitivity of heterocore structure surface plasmon resonance sensors based on local microstructures. <i>Optical Engineering</i> , 2018 , 57, 1	1.1	4
222	Highly sensitive displacement sensor based on composite interference established within a balloon-shaped bent multimode fiber structure. <i>Applied Optics</i> , 2018 , 57, 9662-9668	1.7	17
221	Investigation of a novel SMS fiber based planar multimode waveguide and its sensing performance. <i>Optics Express</i> , 2018 , 26, 26534-26543	3.3	12
220	Highly sensitive strain sensor based on composite interference established within S-tapered multimode fiber structure. <i>Optics Express</i> , 2018 , 26, 33982-33992	3.3	25

219	Characterization of fiber radiation dosimeters with different embedded scintillator materials for radiotherapy applications. <i>Sensors and Actuators A: Physical</i> , 2018 , 269, 188-195	3.9	9
218	Motion artefact minimization from photoplethysmography based non-invasive hemoglobin sensor based on an envelope filtering algorithm. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018 , 115, 288-298	4.6	9
217	High-sensitivity salinity sensor based on optical microfiber coil resonator. <i>Optics Express</i> , 2018 , 26, 34633-34640	3.3	10
216	An Optical Fiber Sensor Based on La ³⁺ :Eu Scintillator for Detecting Ultraviolet Radiation in Real-Time. <i>Sensors</i> , 2018 , 18,	3.8	7
215	High sensitivity temperature sensor based on singlemode-no-core-singlemode fibre structure and alcohol. <i>Sensors and Actuators A: Physical</i> , 2018 , 284, 28-34	3.9	18
214	A Microfiber Knot Incorporating a Tungsten Disulfide Saturable Absorber Based Multi-Wavelength Mode-Locked Erbium-Doped Fiber Laser. <i>Journal of Lightwave Technology</i> , 2018 , 36, 5633-5639	4	20
213	Compound Glass Microsphere Resonator Devices. <i>Micromachines</i> , 2018 , 9,	3.3	10
212	An Yb ³⁺ +Ho ³⁺ Codoped Glass Microsphere Laser in the 2.0~ μ m Wavelength Regions. <i>IEEE Photonics Technology Letters</i> , 2018 , 30, 1543-1546	2.2	7
211	Effect of Tm concentration on the emission wavelength shift in Tm-doped silica microsphere lasers. <i>Optics Letters</i> , 2018 , 43, 4325-4328	3	7
210	Topological Engineering of Glass Structures: Topological Engineering of Photoluminescence Properties of Bismuth- or Erbium-Doped Phosphosilicate Glass of Arbitrary P ₂ O ₅ to SiO ₂ Ratio (Advanced Optical Materials 13/2018). <i>Advanced Optical Materials</i> , 2018 , 6, 1870051	8.1	
209	A high sensitivity temperature sensor based on balloon-shaped bent SMF structure with its original polymer coating. <i>Measurement Science and Technology</i> , 2018 , 29, 085104	2	20
208	An Overlap-Splicing-Based Cavity in FBG Sensor for the Measurement of Strain and Temperature. <i>IEEE Photonics Technology Letters</i> , 2017 , 29, 235-238	2.2	12
207	Pressure, temperature and refractive index determination of fluids using a single fibre optic point sensor. <i>Sensors and Actuators A: Physical</i> , 2017 , 256, 84-88	3.9	17
206	A Curvature Sensor Based on Twisted Single-Mode/Multimode/Single-Mode Hybrid Optical Fiber Structure. <i>Journal of Lightwave Technology</i> , 2017 , 35, 1725-1731	4	37
205	U-bend evanescent wave plastic optical fibre sensor for minute level concentration detection of ethanol corresponding to biofuel production rate 2017 ,		4
204	Low cost portable sensor for real-time monitoring of lower back bending 2017 ,		4
203	Selective doping of Ni in highly transparent glass-ceramics containing nano-spinels ZnGaO and Zn Ga Ge O for broadband near-infrared fiber amplifiers. <i>Scientific Reports</i> , 2017 , 7, 1783	4.9	35
202	Investigation of the self-imaging position of a singlemode-multimode-singlemode optical fiber structure. <i>Microwave and Optical Technology Letters</i> , 2017 , 59, 1645-1651	1.2	8

201	Sensitive variables extraction, non-destructive detection and visualization of total viable count (TVC) and pH in vacuum packaged lamb using hyperspectral imaging. <i>Analytical Methods</i> , 2017 , 9, 3172-3183	3.3	10
200	Glass-ceramic optical fiber containing BaTiSiO nanocrystals for frequency conversion of lasers. <i>Scientific Reports</i> , 2017 , 7, 44456	4.9	20
199	Low cost portable 3-D printed optical fiber sensor for real-time monitoring of lower back bending. <i>Sensors and Actuators A: Physical</i> , 2017 , 265, 193-201	3.9	7
198	A Humidity Sensor Based on a Singlemode-Side Polished MultimodeSinglemode Optical Fibre Structure Coated with Gelatin. <i>Journal of Lightwave Technology</i> , 2017 , 35, 4087-4094	4	44
197	A comparison of clinic based dosimeters based on silica optical fibre and plastic optical fibre for in vivo dosimetry 2017 ,		1
196	All plastic optical fiber-based respiration monitoring sensor 2017 ,		1
195	Ultra sensitive high temporal resolution measurement of X-Ray pulses from modern Linac machines 2017 ,		1
194	. <i>Journal of Lightwave Technology</i> , 2017 , 35, 4567-4573	4	19
193	Cloud computing and Internet of Things fusion: Cost issues 2017 ,		6
192	Strain sensor based on gourd-shaped single-mode-multimode-single-mode hybrid optical fibre structure. <i>Optics Express</i> , 2017 , 25, 18885-18896	3.3	43
191	An Optical Fibre Depth (Pressure) Sensor for Remote Operated Vehicles in Underwater Applications. <i>Sensors</i> , 2017 , 17,	3.8	16
190	An Experimental Study of the Effects of External Physiological Parameters on the Photoplethysmography Signals in the Context of Local Blood Pressure (Hydrostatic Pressure Changes). <i>Sensors</i> , 2017 , 17,	3.8	6
189	Underwater Depth and Temperature Sensing Based on Fiber Optic Technology for Marine and Fresh Water Applications. <i>Sensors</i> , 2017 , 17,	3.8	34
188	Femtosecond-Laser-Based Inscription Technique for Post-Fiber-Bragg Grating Inscription in an Extrinsic FabryPerot Interferometer Pressure Sensor. <i>IEEE Sensors Journal</i> , 2016 , 16, 3396-3402	4	22
187	Novel ultrahigh resolution optical fibre temperature sensor 2016 ,		1
186	An Optical Fibre-Based Sensor for Real-Time Monitoring of Clinical Linear Accelerator Radiotherapy Delivery. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2016 , 22, 35-42	3.8	18
185	Intra-Tissue Pressure Measurement in Ex Vivo Liver Undergoing Laser Ablation with Fiber-Optic Fabry-Perot Probe. <i>Sensors</i> , 2016 , 16,	3.8	17
184	Fiber Optic Sensors for Temperature Monitoring during Thermal Treatments: An Overview. <i>Sensors</i> , 2016 , 16,	3.8	103

183	Water-equivalent fiber radiation dosimeter with two scintillating materials. <i>Biomedical Optics Express</i> , 2016 , 7, 4919-4927	3.5	13
182	Modal sensitivity enhancement of few-mode fiber Bragg gratings for refractive index measurement 2016 ,		3
181	A novel structure optical fiber radiation dosimeter for radiotherapy applications 2016 ,		1
180	A review of recent advances in optical fibre sensors for in vivo dosimetry during radiotherapy. <i>British Journal of Radiology</i> , 2015 , 88, 20140702	3.4	52
179	Differential in vivo urodynamic measurement in a single thin catheter based on two optical fiber pressure sensors. <i>Journal of Biomedical Optics</i> , 2015 , 20, 037005	3.5	19
178	Optical Fibre Bending Sensor With Automatic Intensity Compensation. <i>Journal of Lightwave Technology</i> , 2015 , 33, 2492-2498	4	12
177	Effects of autonomic nervous system on the quality of non-invasive blood diagnosis by PPG-based sensor system 2015 ,		1
176	Multi FBG femtosecond laser inscription in FPI based pressure sensors for temperature distribution 2015 ,		1
175	Recent Improvement of Medical Optical Fibre Pressure and Temperature Sensors. <i>Biosensors</i> , 2015 , 5, 432-49	5.9	23
174	Optical Fibre Pressure Sensors in Medical Applications. <i>Sensors</i> , 2015 , 15, 17115-48	3.8	95
173	An Extrinsic Optical Fiber Bending Sensor: A Theoretical Investigation and Validation. <i>IEEE Sensors Journal</i> , 2015 , 15, 5333-5339	4	3
172	2015 ,		5
171	Plastic optical fibre sensor for in-vivo radiation monitoring during brachytherapy 2015 ,		3
170	2015 ,		1
169	Adaptive filter-based interrogation of high-sensitivity fiber optic Fabry-Perot interferometry sensors. <i>Sensors and Actuators A: Physical</i> , 2014 , 206, 144-150	3.9	22
168	Radiation Dosimeter Using an Extrinsic Fiber Optic Sensor. <i>IEEE Sensors Journal</i> , 2014 , 14, 673-685	4	39
167	Multidisciplinary evaluation of X-ray optical fiber sensors. <i>Sensors and Actuators A: Physical</i> , 2014 , 213, 79-88	3.9	8
166	Fiber-optic combined FPI/FBG sensors for monitoring of radiofrequency thermal ablation of liver tumors: ex vivo experiments. <i>Applied Optics</i> , 2014 , 53, 2136-44	1.7	20

165	Underwater pressure measurement using fibre optic extrinsic Fabry-Perot interferometric (EFPI) sensors 2014 ,		1
164	Novel FBG femtosecond laser inscription method for improved FPI sensors for medical applications 2014 ,		4
163	Novel miniature pressure and temperature optical fibre sensor based on an extrinsic Fabry-Perot Interferometer (EFPI) and Fibre Bragg Gratings (FBG) for the Ocean environment 2014 ,		4
162	Monitoring of radiofrequency thermal ablation in liver tissue through fibre Bragg grating sensors array. <i>Electronics Letters</i> , 2014 , 50, 981-983	1.1	38
161	Characterization of scintillating X-ray optical fiber sensors. <i>Sensors</i> , 2014 , 14, 3445-57	3.8	10
160	The Interference Study of Green-House Gases for an Ammonia Sensor. <i>Applied Mechanics and Materials</i> , 2014 , 704, 244-247	0.3	
159	A Lightweight Classification Algorithm for External Sources of Interference in IEEE 802.15.4-Based Wireless Sensor Networks Operating at the 2.4 GHz. <i>International Journal of Distributed Sensor Networks</i> , 2014 , 10, 265286	1.7	8
158	Distributed fiber-optic sensors for thermal monitoring in radiofrequency thermal ablation in porcine phantom 2014 ,		2
157	Compensated intensity-modulated optical fibre bending sensor based on tilt angle loss measurement 2014 ,		1
156	Fiber-optic chirped FBG for distributed thermal monitoring of ex-vivo radiofrequency ablation of liver. <i>Biomedical Optics Express</i> , 2014 , 5, 1799-811	3.5	54
155	. <i>IEEE Sensors Journal</i> , 2014 , 14, 2335-2340	4	22
154	Optical fiber sensors-based temperature distribution measurement in ex vivo radiofrequency ablation with submillimeter resolution. <i>Journal of Biomedical Optics</i> , 2014 , 19, 117004	3.5	30
153	Miniature low-cost extrinsic Fabry-Perot interferometer for low-pressure detection 2013 ,		2
152	Low-cost miniature fiber-optic extrinsic Fabry-Perot interferometric pressure sensor for biomedical applications 2013 ,		3
151	2013 ,		4
150	A Mote Interface for Fiber Optic Spectral Sensing With Real-Time Monitoring of the Marine Environment. <i>IEEE Sensors Journal</i> , 2013 , 13, 2619-2625	4	4
149	Characterisation of radioluminescence based optical fibre dosimeter in radiotherapy beam applications 2013 ,		1
148	Intensity-modulated fiber optic sensor for health monitoring applications: a comparative review. <i>Sensor Review</i> , 2013 , 33, 57-67	1.4	44

147	Sensitive detection of CO ₂ implementing tunable thulium-doped all-fiber laser. <i>Applied Optics</i> , 2013 , 52, 3957-63	1.7	34
146	Spectral eigendecomposition-based algorithm for cavity estimation in fibre-optic Fabry-Pérot pressure sensors. <i>Electronics Letters</i> , 2013 , 49, 1555-1556	1.1	
145	Plastic optical fibre sensor for spine bending monitoring with power fluctuation compensation. <i>Sensors</i> , 2013 , 13, 14466-83	3.8	31
144	2013 ,		1
143	Guest Editorial Special Issue on Selected Papers From the IEEE Sensors 2011 Conference. <i>IEEE Sensors Journal</i> , 2013 , 13, 889-889	4	
142	Radiotherapy dosimetry based on plastic optical fibre sensors 2013 ,		9
141	Plastic optical fibre sensor for spine bending monitoring. <i>Journal of Physics: Conference Series</i> , 2013 , 450, 012004	0.3	1
140	A fibre optic sensor for the in situ determination of rock physical properties. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2012 , 55, 55-62	6	11
139	"All-fiber" tunable laser in the 2 μ m region, designed for CO ₂ detection. <i>Applied Optics</i> , 2012 , 51, 7011-5	1.7	26
138	Miniature Optical fiber combined pressure- and temperature sensor for medical applications 2012 ,		4
137	Feedback Stabilized Interrogation Technique for EFPI/FBG Hybrid Fiber-Optic Pressure and Temperature Sensors. <i>IEEE Sensors Journal</i> , 2012 , 12, 133-138	4	48
136	2.4 GHz IEEE 802.15.4 channel interference classification algorithm running live on a sensor node 2012 ,		10
135	Optical Fibers and Optical Fiber Sensors Used in Radiation Monitoring 2012 ,		10
134	Mid-infrared point sensor for in situ monitoring of CO ₂ emissions from large-scale engines. <i>Applied Optics</i> , 2012 , 51, 7636-42	1.7	5
133	Optical fibre radiation dosimeter for radiotherapy applications 2012 ,		1
132	Coexistence measurements and analysis of IEEE 802.15.4 with Wi-Fi and bluetooth for vehicle networks 2012 ,		10
131	Fabrication of a miniature all-glass fibre optic pressure and temperature sensor. <i>Procedia Engineering</i> , 2011 , 25, 503-506		8
130	Highly Selective Optical Fibre Ammonia Sensor for use in Agriculture. <i>Procedia Engineering</i> , 2011 , 25, 1113-1116		7

129	Fibre optic pressure sensor system for high temperature exhaust gas flows 2011 ,		2
128	LED based spectroscopy - A low cost solution for high resolution concentration measurements e.g. for gas monitoring applications 2011 ,		2
127	In-situ monitoring of ammonia gas using an optical fibre based approach. <i>Journal of Physics: Conference Series</i> , 2011 , 307, 012058	0.3	
126	Temperature compensated miniature all-glass fibre optic pressure sensor 2011 ,		4
125	Optical fibre X-ray radiation dosimeter sensor for low dose applications 2011 ,		4
124	Non-invasive measurement of blood components 2011 ,		3
123	Non-invasive sensor for an in vivo hemoglobin measurement 2011 ,		8
122	Cross-sensitivity evaluation for ammonia sensing using absorption spectroscopy in the UV region. <i>Sensors and Actuators B: Chemical</i> , 2011 , 154, 226-231	8.5	8
121	Optical sensor system for continuous non-invasive hemodynamic monitoring in real-time 2011 ,		5
120	Low cost hydrocarbon spillage sensor for the marine environment with interfacing to a mote platform 2011 ,		1
119	Optical fibre cavity for ring-down experiments with low coupling losses. <i>Measurement Science and Technology</i> , 2010 , 21, 094034	2	18
118	Optical sensor technology for a noninvasive continuous monitoring of blood components 2010 ,		4
117	Fibre optic pressure and temperature sensor for geothermal wells 2010 ,		15
116	Non-invasive continuous online hemoglobin monitoring system 2010 ,		7
115	High resolution led-spectroscopy for sensor application in harsh environment 2010 ,		4
114	Real-time monitoring of agricultural ammonia emissions based on optical fibre sensing technology 2010 ,		3
113	Optical fibre radiation dosimetry for low dose applications 2010 ,		4
112	Non-invasive optical real-time measurement of total hemoglobin content. <i>Procedia Engineering</i> , 2010 , 5, 488-491		15

111	UV LED-based fiber coupled optical sensor for detection of ozone in the ppm and ppb range 2009 ,		6
110	Ammonia detection in the UV region using an optical fiber sensor 2009 ,		6
109	Low dose plastic optical fibre radiation dosimeter for clinical dosimetry applications 2009 ,		3
108	Development of a prototyping platform for the integration of multiple fiber optic sensing devices to a SHIMMER System for in-situ maritime monitoring. 2009 ,		1
107	Simulation and measurement of carbon dioxide exhaust emissions using an optical-fibre-based mid-infrared point sensor. <i>Journal of Optics</i> , 2009 , 11, 054013		4
106	U-bend fibre optic pH sensors using layer-by-layer electrostatic self-assembly technique. <i>Journal of Physics: Conference Series</i> , 2009 , 178, 012046	0.3	11
105	A neural network based approach for determination of optical scattering and absorption coefficients of biological tissue. <i>Journal of Physics: Conference Series</i> , 2009 , 178, 012047	0.3	7
104	Sensor System Concept for Non-Invasive Blood Diagnosis. <i>Procedia Chemistry</i> , 2009 , 1, 493-496		4
103	A Compact Optical Fibre Based Mid- Infrared Sensor System for Detection of High Level Carbon Dioxide Emissions in Exhaust Automotive Applications. <i>Procedia Chemistry</i> , 2009 , 1, 593-596		3
102	Ammonia Sensing and a Cross Sensitivity Evaluation with Atmosphere Gases using Optical Fiber Sensor. <i>Procedia Chemistry</i> , 2009 , 1, 959-962		11
101	A comparative review of wireless sensor network mote technologies 2009 ,		59
100	Fibre-optic evanescent-wave field fluid concentration sensor 2009 ,		4
99	Sensor system for non-invasive optical hemoglobin determination 2009 ,		3
98	Temperature measurement of gases using acoustic means 2009 ,		2
97	Fabrication of a high temperature-resistance optical fibre micro pressure sensor 2009 ,		4
96	Conception and preliminary evaluation of an optical fibre sensor for simultaneous measurement of pressure and temperature. <i>Journal of Physics: Conference Series</i> , 2009 , 178, 012016	0.3	14
95	Security for wireless sensor networks: A review 2009 ,		25
94	Detection of high level carbon dioxide emissions using a compact optical fibre based mid-infrared sensor system for applications in environmental pollution monitoring. <i>Journal of Physics: Conference Series</i> , 2009 , 178, 012008	0.3	4

93	Conception and preliminary evaluation of an optical fibre sensor for simultaneous measurement of pressure and temperature 2009 ,		6
92	LED Based Sensor System for Non-Invasive Measurement of the Hemoglobin Concentration in Human Blood. <i>IFMBE Proceedings</i> , 2009 , 825-828	0.2	11
91	Overview of the OPTO-EMI-SENSE Project: Optical Fibre Sensor Network for Automotive Emission Monitoring. <i>Lecture Notes in Electrical Engineering</i> , 2008 , 179-196	0.2	
90	Monitoring of Environmentally Hazardous Exhaust Emissions from Cars Using Optical Fibre Sensors. <i>Lecture Notes in Computer Science</i> , 2008 , 238-247	0.9	0
89	Wireless Sensor Node hardware: A review 2008 ,		41
88	A review of optical fibre radiation dosimeters. <i>Sensor Review</i> , 2008 , 28, 136-142	1.4	48
87	Comparison of palladium thin films used in a transmission based optical fibre hydrogen sensor 2008 ,		1
86	Real time exhaust gas sensor with high resolution for onboard sensing of harmful components 2008 ,		3
85	Investigation of binary liquid aqueous methanol and ethanol mixtures using meander-shaped fibre-optic evanescent-wave absorption sensors 2008 ,		3
84	Development of an optical fibre sensor system for online monitoring of microwave plasma UV and ozone generation system 2008 ,		1
83	Optical fibre sensors for assessing food quality in full scale production ovens: a principal component analysis and artificial neural network based approach. <i>Nonlinear Analysis: Hybrid Systems</i> , 2008 , 2, 51-57	4.5	5
82	Hazardous gas detection using an integrating sphere as a multipass gas absorption cell. <i>Sensors and Actuators A: Physical</i> , 2008 , 141, 414-421	3.9	28
81	Deep UV based DOAS system for the monitoring of nitric oxide using ratiometric separation techniques. <i>Sensors and Actuators B: Chemical</i> , 2008 , 134, 317-323	8.5	14
80	A mid-infrared optical fibre sensor for the detection of carbon monoxide exhaust emissions. <i>Sensors and Actuators A: Physical</i> , 2008 , 144, 13-17	3.9	15
79	Real-time fibre optic radiation dosimeters for nuclear environment monitoring around thermonuclear reactors. <i>Fusion Engineering and Design</i> , 2008 , 83, 50-59	1.7	40
78	Analysis of Hardware Encryption Versus Software Encryption on Wireless Sensor Network Motes. <i>Lecture Notes in Electrical Engineering</i> , 2008 , 3-14	0.2	15
77	Power Management in Operating Systems for Wireless Sensor Nodes 2007 ,		9
76	Monitoring of carbon dioxide exhaust emissions using mid-infrared spectroscopy. <i>Journal of Optics</i> , 2007 , 9, S87-S91		10

75	A comparison of CIE L*a*b* and spectral methods for the analysis of fading in sliced cured ham. <i>Journal of Optics</i> , 2007 , 9, S32-S39		12
74	Utilisation of pattern recognition techniques to interpret complex data from a multipoint optical fibre ethanol concentration sensor system. <i>Sensors and Actuators A: Physical</i> , 2007 , 136, 144-153	3.9	2
73	Detection of carbon dioxide emissions from a diesel engine using a mid-infrared optical fibre based sensor. <i>Sensors and Actuators A: Physical</i> , 2007 , 136, 104-110	3.9	43
72	Principal component analysis and artificial neural network based approach to analysing optical fibre sensors signals. <i>Sensors and Actuators A: Physical</i> , 2007 , 136, 28-38	3.9	31
71	An optical fibre based ultra violet and visible absorption spectroscopy system for ozone concentration monitoring. <i>Sensors and Actuators B: Chemical</i> , 2007 , 125, 372-378	8.5	28
70	Development of a Fibre-Optic DOAS Sensor for the Detection of Exhaust Gases Using Ratiometric Separation Techniques 2007 ,		2
69	. <i>IEEE Sensors Journal</i> , 2007 , 7, 1685-1692	4	7
68	Development of a fibre optic sensor for the detection of harmful algae bloom and in particular domoic acid. <i>Conference Record - IEEE Instrumentation and Measurement Technology Conference</i> , 2007 ,		1
67	Low Concentration Monitoring of Exhaust Gases Using a UV-Based Optical Sensor. <i>IEEE Sensors Journal</i> , 2007 , 7, 685-691	4	14
66	An investigation into the use of an integrating sphere as a gas absorption cell. <i>Journal of Optics</i> , 2007 , 9, S12-S18		5
65	CO2 monitoring and detection using an integrating sphere as a multipass absorption cell. <i>Measurement Science and Technology</i> , 2007 , 18, 3187-3194	2	25
64	Real-time gamma dosimetry using PMMA optical fibres for applications in the sterilization industry. <i>Measurement Science and Technology</i> , 2007 , 18, 3171-3176	2	48
63	Measuring of exhaust gas emissions using absorption spectroscopy. <i>International Journal of Intelligent Systems Technologies and Applications</i> , 2007 , 3, 33	0.5	5
62	The potential for development of an NH3 optical fibre gas sensor. <i>Journal of Physics: Conference Series</i> , 2007 , 85, 012015	0.3	1
61	Development of an inexpensive optical fiber based harmful algae bloom sensor 2007 ,		3
60	Efficiently securing data on a wireless sensor network. <i>Journal of Physics: Conference Series</i> , 2007 , 76, 012063	0.3	19
59	Ozone detection using an integrating sphere as an optical absorption cell. <i>Journal of Physics: Conference Series</i> , 2007 , 76, 012041	0.3	1
58	Hazardous exhaust gas monitoring using a deep UV based differential optical absorption spectroscopy (DOAS) system. <i>Journal of Physics: Conference Series</i> , 2007 , 76, 012021	0.3	4

57	Optical fibre sensor for the online monitoring of gamma radiation doses. <i>Journal of Physics: Conference Series</i> , 2007 , 76, 012015	0.3	
56	Response changes of thin film palladium based optical fibre hydrogen sensors over time. <i>Journal of Physics: Conference Series</i> , 2007 , 76, 012004	0.3	5
55	Detection of premature browning in ground beef with an integrated optical-fibre based sensor using reflection spectroscopy and fibre Bragg grating technology. <i>Journal of Physics: Conference Series</i> , 2007 , 76, 012026	0.3	
54	On-board monitoring of vehicle exhaust emissions using an ultraviolet optical fibre based sensor. <i>Journal of Optics</i> , 2007 , 9, S24-S31		21
53	2007 ,		2
52	Vibration-insensitive temperature sensing system based on fluorescence decay and using a digital processing approach. <i>Measurement Science and Technology</i> , 2006 , 17, 2010-2014	2	3
51	On-board monitoring of hazardous exhaust emissions in passenger cars (category M1) 2006 , 6379, 162		1
50	Monitoring food quality using an optical fibre based sensor system— comparison of Kohonen and back-propagation neural network classification techniques. <i>Measurement Science and Technology</i> , 2006 , 17, 229-234	2	7
49	An examination of ham color fading using optical fiber methods 2006 ,		1
48	Gas detection using an integrating sphere as a multipass absorption cell 2006 ,		4
47	UV-based pollutant quantification in automotive exhausts 2006 , 6198, 52		3
46	Design of a system that uses optical-fiber sensors and neural networks to control a large-scale industrial oven by monitoring the food quality online. <i>IEEE Sensors Journal</i> , 2005 , 5, 1407-1420	4	13
45	Review of luminescent based fibre optic temperature sensors. <i>Sensor Review</i> , 2005 , 25, 56-62	1.4	21
44	Reproducible coating and testing techniques for large core luminescent clad optical fibre probes for UV detection. <i>Sensors and Actuators A: Physical</i> , 2005 , 118, 57-62	3.9	0
43	Optical fibre sensor for the measurement of ozone. <i>Journal of Physics: Conference Series</i> , 2005 , 15, 213-218		7
42	Gamma dosimetry using commercial PMMA optical fibres for nuclear environments 2005 , 5855, 499		5
41	Toward a multipoint optical fibre sensor system for use in process water systems based on artificial neural network pattern recognition. <i>Journal of Physics: Conference Series</i> , 2005 , 15, 237-243	0.3	
40	Hazardous gas detection with an integrating sphere in the near-infrared. <i>Journal of Physics: Conference Series</i> , 2005 , 15, 250-255	0.3	9

39	Online monitoring of exhaust emissions using mid-infrared spectroscopy. <i>Journal of Physics: Conference Series</i> , 2005 , 15, 33-38	0.3	2
38	Low pressure gas discharges for electric field intensity monitoring in microwave resonant cavities 2005 , 5826, 460		
37	Blood detection in the spinal column of whole cooked chicken using an optical fibre based sensor system. <i>Journal of Physics: Conference Series</i> , 2005 , 15, 189-193	0.3	
36	Vibration-insensitive temperature sensing system based on fluorescence decay and using a digital processing approach. <i>Journal of Physics: Conference Series</i> , 2005 , 15, 315-322	0.3	2
35	Proximal object and hazard detection for autonomous underwater vehicle with optical fibre sensors. <i>Robotics and Autonomous Systems</i> , 2005 , 53, 214-229	3.5	13
34	Development of temperature sensitive glassware for monitoring temperatures in harsh industrial environments. <i>Sensors and Actuators A: Physical</i> , 2005 , 123-124, 408-417	3.9	2
33	Combining principal component analysis with an artificial neural network to perform online quality assessment of food as it cooks in a large-scale industrial oven. <i>Sensors and Actuators B: Chemical</i> , 2005 , 107, 104-112	8.5	33
32	Comparison of k-NN and neural network methods in the classification of spectral data from an optical fibre-based sensor system used for quality control in the food industry. <i>Sensors and Actuators B: Chemical</i> , 2005 , 111-112, 354-362	8.5	24
31	Ozone measurement in visible region: an optical fibre sensor system. <i>Electronics Letters</i> , 2005 , 41, 1317	1.1	3
30	Development of an extrinsic optical fibre temperature sensor for monitoring liquid temperature in harsh industrial environments. <i>Journal of Optics</i> , 2005 , 7, S331-S339		5
29	A large core polymer optical fibre sensor for x-ray dosimetry based on luminescence occurring in the cladding. <i>Measurement Science and Technology</i> , 2004 , 15, 1586-1590	2	10
28	Interpreting complex data from a three-sensor multipoint optical fibre ethanol concentration sensor system using artificial neural network pattern recognition. <i>Measurement Science and Technology</i> , 2004 , 15, 1560-1567	2	14
27	Interrogation of multipoint optical fibre sensor signals based on artificial neural network pattern recognition techniques. <i>Sensors and Actuators A: Physical</i> , 2004 , 114, 7-12	3.9	8
26	A novel multipoint luminescent coated ultra violet fibre sensor utilising artificial neural network pattern recognition techniques. <i>Sensors and Actuators A: Physical</i> , 2004 , 115, 267-272	3.9	18
25	A multipoint optical fibre sensor system for use in process water systems based on artificial neural network pattern recognition techniques. <i>Sensors and Actuators A: Physical</i> , 2004 , 115, 293-302	3.9	9
24	Using a reflection-based optical fibre system and Neural Networks to evaluate the quality of food in a large-scale industrial oven. <i>Sensors and Actuators A: Physical</i> , 2004 , 115, 424-433	3.9	9
23	An optical-fiber sensor for use in water systems utilizing digital signal processing techniques and artificial neural network pattern recognition. <i>IEEE Sensors Journal</i> , 2004 , 4, 21-27	4	9
22	An optical fiber sensor for the detection of germicidal UV irradiation using narrowband luminescent coatings. <i>IEEE Sensors Journal</i> , 2004 , 4, 619-626	4	6

21	Employing spectroscopic and pattern recognition techniques to examine food quality both internally and externally as it cooks in an industrial oven 2004 ,		2
20	Radioluminescent clad optical fibre X-ray sensor. <i>Electronics Letters</i> , 2003 , 39, 1575	1.1	
19	A narrow-band photoluminescent optical fibre sensor for the detection of high-intensity germicidal ultraviolet radiation (254 nm) from a microwave plasma ultraviolet lamp. <i>Journal of Optics</i> , 2003 , 5, S63-S68		2
18	A novel multi-point ultraviolet optical fibre sensor based on cladding luminescence. <i>Measurement Science and Technology</i> , 2003 , 14, 1477-1483	2	18
17	An optical fibre ethanol concentration sensor utilizing Fourier transform signal processing analysis and artificial neural network pattern recognition. <i>Journal of Optics</i> , 2003 , 5, S69-S75		11
16	Intelligent Processing of Spectroscopic Signals Obtained Using an Optical Fibre Based System for Food Quality Control. <i>International Journal of Smart Engineering System Design</i> , 2003 , 5, 409-416		6
15	Experimental investigation into low pressure gas discharges in microwave electric field optical sensor probes. <i>Sensor Review</i> , 2003 , 23, 44-47	1.4	2
14	A Coating Process For Multi-Point Luminescent Clad Fibre Optic Sensors. <i>Optical Review</i> , 2003 , 10, 330-334		3
13	An optical fibre sensor for on-line temperature control of germicidal microwave plasma powered UV lamps. <i>Measurement: Journal of the International Measurement Confederation</i> , 2003 , 33, 341-346	4.6	4
12	A multi-point optical fibre sensor for condition monitoring in process water systems based on pattern recognition. <i>Measurement: Journal of the International Measurement Confederation</i> , 2003 , 34, 301-312	4.6	9
11	An optical fibre distributed sensor based on pattern recognition. <i>Journal of Materials Processing Technology</i> , 2002 , 127, 23-30	5.3	10
10	Optical fiber sensor for germicidal microwave plasma UV lamps for water and wastewater treatment 2001 , 4416, 90		
9	An optical fiber sensor based on cladding photoluminescence for high power microwave plasma ultraviolet lamps used in water treatment. <i>Optical Review</i> , 2001 , 8, 459-462	0.9	6
8	An optical fibre sensor for in situ measurement of external species in fluids based on artificial neural network pattern recognition. <i>Physiological Measurement</i> , 2001 , 22, 635-46	2.9	3
7	An optical fibre sensor for particle concentration measurement in water systems based on inter-fibre light coupling between polymer optical fibres. <i>Transactions of the Institute of Measurement and Control</i> , 2000 , 22, 413-430	1.8	12
6	Neural networks and pattern recognition techniques applied to optical fibre sensors. <i>Transactions of the Institute of Measurement and Control</i> , 2000 , 22, 385-404	1.8	7
5	. <i>Journal of Lightwave Technology</i> , 1995 , 13, 1407-1414	4	69
4	Optical fibre based sensing using chromatic modulation. <i>Optics and Laser Technology</i> , 1987 , 19, 297-303	4.2	17

3	Ozone Measurement Using Optical Fibre Sensors in the Visible Region	2
2	A 3 sensor multipoint optical fibre water sensor utilising artificial neural network pattern recognition	1
1	An optical fibre sensor for germicidal microwave plasma powered UV lamps output with potential for on-line temperature control	2