Waleed S Mohammed

List of Publications by Year in descending order

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144 papers 1,735 citations

20 h-index 302126 39 g-index

144 all docs 144 docs citations

times ranked

144

1459 citing authors

#	Article	IF	Citations
1	Demonstration of a Polymer-Based Single Step Waveguide by 3D Printing Digital Light Processing Technology for Isopropanol Alcohol-Concentration Sensor. Photonic Sensors, 2022, 12, 10-22.	5.0	6
2	Demonstration of a simple approach for subâ€microliter fluorescence detection by structured PDMS cuvette with TiO ₂ nanoparticle inclusion using 3D printing technology. Micro and Nano Letters, 2022, 17, 68-75.	1.3	0
3	Effect of solvent absorption on the optical properties of 3D printed methacrylate waveguide. Optics and Laser Technology, 2021, 134, 106573.	4.6	2
4	Numerical Investigation of Localized Surface Plasmon Resonance (LSPR) based Sensor for Glucose Level Monitoring. , $2021, \ldots$		1
5	Numerical investigation of Au-silane functionalised optical fibre sensor for volatile organic compounds biomarker (VOCs) detection. , 2021, , .		4
6	Modeling the dynamic optical gain in a 3D printed waveguide due to polymer swelling., 2021,,.		0
7	3D-printed Guided Mode Resonance Readout System for Biomedical and Environmental Applications. Engineering Journal, 2021, 25, 35-43.	1.0	O
8	Optical Fiber Biosensor toward E-coli Bacterial Detection on the Pollutant Water. Engineering Journal, 2021, 25, 1-8.	1.0	8
9	Study of Utilization of Embedded Metal Nanoparticles in Dielectric Thin Film for Humidity Sensing. Photonic Sensors, 2020, 10, 155-161.	5.0	4
10	Enhanced sensitivity of guided mode resonance sensor through super-mode excitation at near cut-off diffraction. Optics and Laser Technology, 2020, 132, 106517.	4.6	4
11	Utilizing ZnO Nanorods for CO gas detection by SPR technique. Optics Communications, 2020, 463, 125490.	2.1	14
12	Enhancement of sideâ€coupled surface plasmon resonance sensitivity by application of polymethylmethacrylate thin polymer films. Micro and Nano Letters, 2020, 15, 327-332.	1.3	1
13	Single-step 3D-printed integrated optical system and its implementation for a sensing application using digital light processing technology. Applied Optics, 2020, 59, 122.	1.8	10
14	Enhancement of light absorption using Nanoparticles Embedded Double layer Anti-Reflection Coating. Engineering Journal, 2020, 24, 53-63.	1.0	2
15	Multilayer for antireflection coating applications using metal nanoparticles to provide ultraviolet blocking. Journal of Nanophotonics, 2020, 14 , .	1.0	0
16	Low Cost Solar Power System with Open Loop Tracking for Rural and Developing Areas. Engineering Journal, 2020, 24, 65-76.	1.0	1
17	Portable 3-D Printed Plastic Optical Fibre Motion Sensor for Monitoring of Breathing Pattern and Respiratory Rate, 2019, , .		5
18	A Validation Study of a Polymer Optical Fiber Sensor for Monitoring Lumbar Spine Movement. Materials, 2019, 12, 762.	2.9	6

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19	An Analytical Model for Describing the Power Coupling Ratio between Multimode Fibers with Transverse Displacement and Angular Misalignment in an Optical Fiber Bend Sensor. Sensors, 2019, 19, 4968.	3.8	1
20	Low-Cost Integrated Zinc Oxide Nanorod-Based Humidity Sensors for Arduino Platform. IEEE Sensors Journal, 2019, 19, 2442-2449.	4.7	12
21	Ochratoxin A detection in coffee by competitive inhibition assay using chitosan-based surface plasmon resonance compact system. Colloids and Surfaces B: Biointerfaces, 2019, 174, 569-574.	5.0	30
22	An approach to realisation of a Radial Phase mask using 3-D printing in transparent PLA. ECTI Transactions on Electrical Engineering, Electronics, and Communications, 2019, 16, 22-29.	0.8	0
23	Optical dynamic range maximization for humidity sensing by controlling growth of zinc oxide nanorods. Photonics and Nanostructures - Fundamentals and Applications, 2018, 30, 57-64.	2.0	13
24	Chitosan-based nanomatrix for the immobilization of ochratoxin-A conjugate on surface plasmon resonance chips. Colloid and Polymer Science, 2018, 296, 617-625.	2.1	5
25	Prevention of premature failures of plate bonded flexurally strengthened RC slab using end anchor and connector. AEJ - Alexandria Engineering Journal, 2018, 57, 287-299.	6.4	8
26	Boronic acid Functionalized Guided Mode Resonance Sensor for HbA1c Detection., 2018,,.		1
27	Results Classification in an RGB LED Based Optical Fiber Sensor System using Python. , 2018, , .		O
28	Plastic Optical Fibre Sensor System Design Using the Field Programmable Gate Array., 2018,,.		0
29	Realization of Low-Cost Multichannel Surface Plasmon Resonance Based Optical Transducer. Photonic Sensors, 2018, 8, 289-302.	5.0	4
30	Utilization of data classification in the realization of a surface Plasmon resonance readout system using an FPGA controlled RGB LED light source. IEEE Sensors Journal, 2018, , 1-1.	4.7	1
31	Evaluation of an All Plastic 3-D Printed POF Sensor for Monitoring Spine Bending in Biomedical Applications. , 2018, , .		0
32	Transformation optics based on unitary vectors and Fermat's principle for arbitrary spatial transformation design. Applied Optics, 2018, 57, 8632.	1.8	1
33	Measurement of aluminum oxide film by Fabry–Pérot interferometry and scanning electron microscopy. Journal of Saudi Chemical Society, 2017, 21, 938-942.	5.2	2
34	Fabrication and simulation studies on D-shaped optical fiber sensor via surface plasmon resonance. Journal of Modern Optics, 2017, 64, 1443-1449.	1.3	36
35	TEMPERATURE SENSING BY SIDE COUPLING OF LIGHT THROUGH ZINC OXIDE NANORODS ON OPTICAL FIBERS. Sensors and Actuators A: Physical, 2017, 257, 15-19.	4.1	8
36	Low cost portable sensor for real-time monitoring of lower back bending. Proceedings of SPIE, 2017, , .	0.8	4

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37	Low cost portable 3-D printed optical fiber sensor for real-time monitoring of lower back bending. Sensors and Actuators A: Physical, 2017, 265, 193-201.	4.1	9
38	Demonstration of Polarization-Independent Surface Plasmon Resonance Polymer Waveguide for Refractive Index Sensing. Journal of Lightwave Technology, 2017, 35, 3012-3019.	4.6	3
39	All plastic optical fiber-based respiration monitoring sensor. , 2017, , .		3
40	Programmable logic based current control of light emitting diodes using sigma-delta modulation. , 2017, , .		2
41	Optical beam shaping design through optimization of a radial phase mask. , 2017, , .		0
42	Optical fiber sensor system design utilizing the field programmable gate array., 2017,,.		1
43	Label-free guided mode resonance sensor for detection of glycated hemoglobin. , 2017, , .		1
44	Demonstration of lowâ€cost and compact SPR optical transducer through edge light coupling. Micro and Nano Letters, 2017, 12, 643-646.	1.3	5
45	Compact and Low-Cost Optical Fiber Respiratory Monitoring Sensor Based on Intensity Interrogation. Journal of Lightwave Technology, 2017, 35, 4567-4573.	4.6	25
46	Utilization of ZnO nanorods growth on a tip of plastic optical fiber toward the realization of low-cost CO and CO2 gas sensor. Journal of Nanophotonics, 2017, 11, 1.	1.0	0
47	Fabrication and characterization of high order filter based on resonance in hybrid multi-knots microfiber structure. Optics and Laser Technology, 2016, 78, 120-124.	4.6	9
48	Light backscattering (e.g. reflectance) by ZnO nanorods on tips of plastic optical fibres with application for humidity and alcohol vapour sensing. Micro and Nano Letters, 2016, 11, 832-836.	1.3	10
49	Demonstration of a robust and portable polymer nano-wire based test bench towards sensing applications. , 2016, , .		O
50	Plastic optical fiber for wide field-of-view optical wireless receiver. Optical Engineering, 2016, 55, 106104.	1.0	0
51	Applied light-side coupling with optimized spiral-patterned zinc oxide nanorod coatings for multiple optical channel alcohol vapor sensing. Journal of Nanophotonics, 2016, 10, 036009.	1.0	12
52	Surface plasmon resonance-enhanced light interaction in an integrated ormocomp nanowire. Optical and Quantum Electronics, 2016, 48, 1.	3. 3	1
53	Design and Characterization of Porous Core Polarization Maintaining Photonic Crystal Fiber for THz Guidance. Journal of Lightwave Technology, 2016, 34, 5583-5590.	4.6	21
54	Demonstration of a Periodic Passband Filter Based on Coupled Microfiber Knots. IEEE Photonics Technology Letters, 2016, 28, 1061-1064.	2.5	8

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55	Side coupling of multiple optical channels by spiral patterned zinc oxide coatings on large core plastic optical fibers. Micro and Nano Letters, 2016, 11, 122-126.	1.3	14
56	Fano Resonance in Plasmonic Optical Antennas. International Journal of Behavioral and Consultation Therapy, 2016, , 191-224.	0.4	2
57	Realization of spectral tunable filter based on thermal effect in microfiber structure. Optical Fiber Technology, 2016, 28, 38-41.	2.7	1
58	Investigation of thermal effects in a resonance condition of microfibre doubleâ€knot resonators as highâ€order filter. Micro and Nano Letters, 2015, 10, 580-582.	1.3	1
59	Design of electric-field assisted surface plasmon resonance system for the detection of heavy metal ions in water. AIP Advances, 2015, 5, .	1.3	18
60	Low-Cost Transducer Based On Surface Scattering Using Side-Polished D-Shaped Optical Fibers. IEEE Photonics Journal, 2015, 7, 1-10.	2.0	11
61	Multiwavelength guided mode resonance sensor array. Applied Physics Express, 2015, 8, 092004.	2.4	23
62	Application of Fano resonance effects in optical antennas formed by regular clusters of nanospheres. Applied Physics A: Materials Science and Processing, 2015, 118, 139-150.	2.3	6
63	Optimization of a horizontal slot waveguide biosensor to detect DNA hybridization. Applied Optics, 2015, 54, 4881.	2.1	45
64	Synthesis and characterization of hydrothermally grown zinc oxide (ZnO) nanorods for optical waveguide application. , $2015, .$		0
65	Theoretical modeling of index contrast towards all-optical switching in fiber Bragg grating. Proceedings of SPIE, 2015, , .	0.8	0
66	The Influence of Current Density for Zinc Electrodeposition on Color Appearance of Black Trivalent Chromate Conversion Coatings. Key Engineering Materials, 2015, 658, 161-166.	0.4	1
67	Characterization of polymer nanowires fabricated using the nanoimprint method. Proceedings of SPIE, 2014, , .	0.8	2
68	Study of Localized Surface Plasmon properties on metallic nano-rods towards optical antennas. , 2014, , .		1
69	Realization of a polymer nanowire optical transducer by using the nanoimprint technique. Applied Optics, 2014, 53, 7487.	2.1	8
70	Excitation of core modes through side coupling to multimode optical fiber by hydrothermal growth of ZnO nanorods for wide angle optical reception. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2232.	2.1	9
71	Simultaneous dispersion measurements of multiple fiber modes using virtual reference interferometry. Optics Express, 2014, 22, 6391.	3.4	3
72	Characterizing short dispersion-length fiber via dispersive virtual reference interferometry. Optics Express, 2014, 22, 14275.	3.4	5

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73	Multilayered gold/silica nanoparticulate bilayer devices using layer-by-layer self organisation for flexible bending and pressure sensing applications. Applied Physics Letters, 2014, 104, 073106.	3.3	O
74	Controlled side coupling of light to cladding mode of ZnO nanorod coated optical fibers and its implications for chemical vapor sensing. Sensors and Actuators B: Chemical, 2014, 202, 543-550.	7.8	31
75	Optical fiber-based sensor for in situ monitoring of cadmium sulfide thin-film growth. Optics Letters, 2013, 38, 5385.	3.3	9
76	Demonstration of side coupling to cladding modes through zinc oxide nanorods grown on multimode optical fiber. Optics Letters, 2013, 38, 3620.	3.3	20
77	DEVELOPMENT OF INTEGRATED MICROFLUIDIC DEVICE FOR OPTICAL FLOW RATE SENSING. Journal of Circuits, Systems and Computers, 2013, 22, 1340016.	1.5	1
78	Visibleâ€Lightâ€Induced Directed Gold Microwires by Selfâ€Organization of Nanoparticles on <i>Aspergillus Niger</i> . Particle and Particle Systems Characterization, 2013, 30, 473-480.	2.3	9
79	Virtual reference interferometry: theory and experiment. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 3201.	2.1	9
80	Optical datalink between display monitor and web camera. , 2012, , .		0
81	Development of integrated optical characterization bench for sensing microfluidic channel., 2012,,.		0
82	Design and fabrication of diffractive phase element for minimizing the focusing spot size beyond diffraction limit. , 2012, , .		1
83	Chromatic dispersion measurements using a virtually referenced interferometer. Optics Letters, 2012, 37, 1598.	3.3	7
84	A fingerprintingâ€based indoor localization system using intensity modulation of light emitting diodes. Microwave and Optical Technology Letters, 2012, 54, 1218-1227.	1.4	53
85	Chromatic tuning of plasmon resonance of tri-layered composites: silver, gold and copper nanoparticles for optical thin film colour filter. Micro and Nano Letters, 2012, 7, 146.	1.3	4
86	Optical Behavior ofÂPeriodic NanostructuredÂMedia. The Electrical Engineering Handbook, 2012, , 193-238.	0.2	0
87	Image-based 3D laser scanner. , 2011, , .		8
88	Fiber optics devices based on selective modal excitation. , 2011, , .		1
89	Effect of the cladding layer on resonance response in guided mode resonance structures and its sensing applications. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 671.	2.1	10
90	Polarization-independent on-axis light coupler for surface plasmon resonance using a concentric chirped grating. Optics Letters, 2011, 36, 3524.	3.3	2

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91	Plasmon resonance tuning of gold and silver nanoparticle-insulator multilayered composite structures for optical filters. Micro and Nano Letters, 2011, 6, 342.	1.3	15
92	Optical thin film filters of colloidal gold and silica nanoparticles prepared by a layer-by-layer self-assembly method. Journal of Materials Science, 2011, 46, 6877-6882.	3.7	11
93	Integrated diffractive optical elements for optical sensors applications. , 2011, , .		1
94	Integrated on-axis light coupler for surface plasmon resonance using a concentric chirp grating. , 2011, , .		0
95	Effects of fluorescent lighting on in vitro micropropagation of Lemna minor. Proceedings of SPIE, 2010, , .	0.8	1
96	Numerical modeling of scanning near-field optical microscopy for fluorescence-less DNA detection. Proceedings of SPIE, 2010, , .	0.8	0
97	Creating a smart environment using optical wireless. Proceedings of SPIE, 2010, , .	0.8	0
98	Pupil masks for 2-D intensity synthesis in a high numerical aperture focusing system. , 2010, , .		0
99	Monte Carlo modeling (MCML) of light propagation in skin layers for detection of fat thickness. , 2010, , .		3
100	Fiber Bragg grating in large-mode-area fiber for high power fiber laser applications. Applied Optics, 2010, 49, 5297.	2.1	26
101	Dispersion compensation for optical coherence tomography. , 2010, , .		0
102	Long-period grating and its application in laser beam shaping in the 10 \hat{l}^{1} 4m wavelength region. Applied Optics, 2009, 48, 2249.	2.1	11
103	Measuring chromatic dispersion using single-arm interferometers: from millimeters to kilometers. Proceedings of SPIE, 2008, , .	0.8	1
104	Multimode Fiber Bragg Grating Wavelength Filter in a 10-Gb/s System. IEEE Photonics Technology Letters, 2008, 20, 584-586.	2.5	6
105	All-Fiber Laser Beam Shaping Using a Long-Period Grating. IEEE Photonics Technology Letters, 2008, 20, 1130-1132.	2.5	24
106	Multi-fibre-channel wavelength converter based on passive ultrafast switch. Electronics Letters, 2008, 44, 1152.	1.0	1
107	Analysis of Tunable Ridge Bragg Grating by Fluid Flow. , 2008, , .		0
108	All fiber on-axis coupling scheme between single mode fiber and GRIN fiber. Journal of Modern Optics, 2008, 55, 1033-1049.	1.3	5

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109	All-fiber laser beam shaping at $1.0\hat{l}$ ¼m wavelength region in a single-mode fiber. , 2008 , , .		O
110	Dual Core Fiber for Strain Sensing Applications. , 2008, , .		0
111	Multi-Fiber-Channel, Ultrafast, All-Optical Switch Utilizing a 2D Fresnel Lens Array. , 2007, , .		0
112	Fiber-optic beam shaper based on multimode interference. Optics Letters, 2007, 32, 3170.	3.3	28
113	Linear and quadratic dispersion characterization of millimeter-length fibers and waveguides using common-path interferometry. Optics Letters, 2007, 32, 3312.	3.3	6
114	Group velocity inversion in AlGaAs nanowires. Optics Express, 2007, 15, 12755.	3.4	30
115	Single-arm three-wave interferometer for measuring dispersion of short lengths of fiber. Optics Express, 2007, 15, 16896.	3.4	31
116	Full dispersion characterization using single-arm interferometry on a mm-length fiber. , 2007, , .		0
117	Demonstration of all-fiber WDM for multimode fiber local area networks. IEEE Photonics Technology Letters, 2006, 18, 244-246.	2.5	23
118	All-fiber multimode interference bandpass filter. Optics Letters, 2006, 31, 2547.	3.3	274
119	Full vectorial modal analysis of specialty fibers and their Bragg grating characterization. Applied Optics, 2006, 45, 3307.	2.1	4
120	Selective excitation of the <inline-formula><math altimg="none" display="inline" overflow="scroll"><msub><mi>LP</mi><mn>11</mn></msub></math></inline-formula> mode in step index fiber using a phase mask. Optical Engineering, 2006, 45, 074602.	1.0	37
121	Maximizing on-axis coupling efficiency between single mode fiber and multimode specialty fibers using multi-mode interference. , 2006, , .		1
122	Bifocal Right Ventricular Cardiac Resynchronization Therapies in Patients with Unsuccessful Percutaneous Lateral Left Ventricular Venous Access. PACE - Pacing and Clinical Electrophysiology, 2005, 28, S27-S30.	1.2	32
123	Polarization converting element for minimizing the losses in cylindrical hollow waveguides. , 2005, , .		1
124	Selective excitation of the TE/sub 01/ mode in hollow-glass waveguide using a subwavelength grating. IEEE Photonics Technology Letters, 2005, 17, 1441-1443.	2.5	12
125	Selective coupling to higher order modes dual mode step index fiber. , 2004, , DSuA5.		0
126	Micro-optic fabrication with subdomain masking. Applied Optics, 2004, 43, 1676.	2.1	2

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127	Wavelength Tunable Fiber Lens Based on Multimode Interference. Journal of Lightwave Technology, 2004, 22, 469-477.	4.6	269
128	Hollow waveguide delivery of ultrashort pulses for tissue ablation. , 2004, 5317, 22.		3
129	Presculpting of photoresists using additive lithography. , 2004, , .		0
130	Fabrication of passively aligned micro-optics using focused ion beam. , 2004, , .		0
131	Multimode interference-based fiber-optic displacement sensor. IEEE Photonics Technology Letters, 2003, 15, 1129-1131.	2.5	213
132	Monolithic integration of dual-layer optics into broad-area semiconductor laser diodes. Optics Letters, 2003, 28, 651.	3.3	10
133	Monolithic integration of dual-layer optics into broad-area semiconductor laser diodes: erratum. Optics Letters, 2003, 28, 1280.	3.3	0
134	Hybrid mode calculations for novel photonic crystal fibers. Optical Engineering, 2003, 42, 2311.	1.0	6
135	Additive lithography for refractive micro-optics. , 2003, 4984, 1.		2
136	Nanofabrication of integrated diffractive optical elements., 2003, 4984, 79.		0
137	Integrated fiber optic displacement sensor based on multimode interference. , 2003, , .		O
138	Additive lithography for fabrication of diffractive optics. Applied Optics, 2002, 41, 6176.	2.1	26
139	Additive Lithography for Micro-optics Fabrication. , 2002, , .		0
140	<title>Incorporation of diffractive structures on side-polished fiber arrays</title> ., 2001,,.		0
141	<title>Optimization of two-dimensional photonic bandgap structures</title> .,2001,,.		1
142	<title>Micro-optics design, fabrication, and integration for fiber optic devices</title> ., 2001, , .		0
143	Rigorous modal solution of a multi mode PCF using scattering matrix method. , 0, , .		0
144	Additive lithography for micro and nano-photonic applications. , 0, , .		0