Shahraam Afshar V

List of Publications by Year in Descending Order

94 papers	2,367 citations	26 h-index	47 g-index
128 ext. papers	2,874 ext. citations	3.3 avg, IF	4.96 L-index

#	Paper	IF	Citations
94	Development of an optical fibre based redox monitoring system for tissue metabolism.. *Journal of Biophotonics*, **2022**, e202100304	3.1	0
93	Serial and parallel convolutional neural network schemes for NFDM signals.. *Scientific Reports*, **2022**, 12, 7962	4.9	0
92	Direct decoding of nonlinear OFDM-QAM signals using convolutional neural network. *Optics Express*, **2021**, 29, 11591-11604	3.3	4
91	Preferential coupling of diamond NV centres in step-index fibres. *Optics Express*, **2021**, 29, 14425-14437	3.3	2
90	Realization of a Single-Layer Terahertz Magnetic Mirror. *IEEE Access*, **2020**, 8, 229108-229116	3.5	0
89	A Fibre-Optic Platform for Sensing Nitrate Using Conducting Polymers. *Sensors*, **2020**, 21,	3.8	2
88	Design and verification of an external radiobiological beam port on a 16.5 MeV GE PETtrace proton cyclotron. *Medical Physics*, **2020**, 47, 393-403	4.4	
87	Temporal modelling of beryllium oxide ceramics□real-time OSL for dosimetry with a superficial 140□kVp X-ray beam. *Physica Medica*, **2020**, 80, 17-22	2.7	1
86	Evaluation of silica and PMMA optical fibre response when irradiated with 16.5 MeV protons. *Physica Medica*, **2019**, 65, 15-20	2.7	3
85	Radiated and guided optical waves of a magnetic dipole-nanofiber system. *Scientific Reports*, **2019**, 9, 3568	4.9	2
84	Evaluation of a real-time optically stimulated luminescence beryllium oxide (BeO) fibre-coupled dosimetry system with a superficial 140 kVp X-ray beam. *Physica Medica*, **2019**, 65, 167-171	2.7	3
83	Towards new fiber optic sensors based on the vapor deposited conducting polymer PEDOT:Tos. *Optical Materials Express*, **2019**, 9, 4517	2.6	2
82	Enhanced terahertz magnetic dipole response by subwavelength fiber. *APL Photonics*, **2018**, 3, 051701	5.2	4
81	Magnetically sensitive nanodiamond-doped tellurite glass fibers. *Scientific Reports*, **2018**, 8, 1268	4.9	31
80	Dipole-fiber system: from single photon source to metadevices. *Frontiers of Optoelectronics*, **2018**, 11, 30-36	2.8	
79	A six-strut suspended core fiber for cylindrical vector mode generation and propagation. *Optics Express*, **2018**, 26, 32037-32047	3.3	1
78	Synchronised dual-wavelength mode-locking in waveguide lasers. *Scientific Reports*, **2018**, 8, 7821	4.9	9

77	Unified theory of whispering gallery multilayer microspheres with single dipole or active layer sources. *Optics Express*, **2017**, 25, 6192-6214	3.3	11
76	Determining the geometric parameters of microbubble resonators from their spectra. *Journal of the Optical Society of America B: Optical Physics*, **2017**, 34, 44	1.7	3
75	Determining the geometric parameters of microbubble resonators from their spectra. *Journal of the Optical Society of America B: Optical Physics*, **2017**, 34, 2699	1.7	
74	Ultrafast pulse generation in a mode-locked Erbium chip waveguide laser. *Optics Express*, **2016**, 24, 27177-27183	3.3	19
73	Suspended Core Fibers for the Transmission of Cylindrical Vector Modes. *Journal of Lightwave Technology*, **2016**, 34, 5620-5626	4	3
72	Combining whispering gallery mode lasers and microstructured optical fibers: limitations, applications and perspectives for in-vivo biosensing. *MRS Advances*, **2016**, 1, 2309-2320	0.7	
71	Strong Magnetic Response of Optical Nanofibers. *ACS Photonics*, **2016**, 3, 972-978	6.3	13
70	Steady-state and travelling wave solutions with nonlinear polarization attraction. *Journal of the Optical Society of America B: Optical Physics*, **2016**, 33, 996	1.7	2
69	Polymer based whispering gallery mode laser for biosensing applications. *Applied Physics Letters*, **2015**, 106, 031104	3.4	49
68	Method for predicting whispering gallery mode spectra of spherical microresonators. *Optics Express* , **2015**, 23, 9924-37	3.3	17
67	Material candidates for optical frequency comb generation in microspheres. *Optics Express*, **2015**, 23, 14784-95	3.3	23
66	Optimization of whispering gallery resonator design for biosensing applications. *Optics Express*, **2015**, 23, 17067-76	3.3	22
65	Cross mode and polarization mixing in third and one-third harmonic generation in multi-mode waveguides. *Journal of the Optical Society of America B: Optical Physics*, **2015**, 32, 379	1.7	4
64	Energy dependency of a water-equivalent fibre-coupled beryllium oxide (BeO) dosimetry system. *Radiation Measurements*, **2015**, 73, 1-6	1.5	13
63	Using CFD to derive reduced order models for heat transfer in particle curtains. *Progress in Computational Fluid Dynamics*, **2015**, 15, 71	0.7	1
62	Evaluation of a real-time BeO ceramic fiber-coupled luminescence dosimetry system for dose verification of high dose rate brachytherapy. *Medical Physics*, **2015**, 42, 6349-56	4.4	10
61	Investigation of a fibre-coupled beryllium oxide (BeO) ceramic luminescence dosimetry system. *Radiation Measurements*, **2014**, 70, 52-58	1.5	14
60	Self-formed cavity quantum electrodynamics in coupled dipole cylindrical-waveguide systems. *Optics Express*, **2014**, 22, 11301-11	3.3	9

59	Nonlinear self-polarization flipping in silicon sub-wavelength waveguides: distortion, loss, dispersion, and noise effects. *Optics Express*, **2014**, 22, 27643-54	3.3	2
58	Optimal light collection from diffuse sources: application to optical fibre-coupled luminescence dosimetry. *Optics Express*, **2014**, 22, 4559-74	3.3	7
57	Novel polymer functionalization method for exposed-core optical fiber. *Optical Materials Express*, **2014**, 4, 1515	2.6	18
56	Modification of well-aligned carbon nanotubes with dihexadecyl hydrogen phosphate: application to highly sensitive nanomolar detection of simvastatin. *Journal of Applied Electrochemistry*, **2014**, 44, 263-277	2.6	5
55	High stability supercontinuum generation in lead silicate SF57 photonic crystal fibers. *Chinese Physics B*, **2013**, 22, 014215	1.2	6
54	Plasmonic materials for metal□insulator□semiconductor□insulator□metal nanoplasmonic waveguides on silicon-on-insulator platform. *Optical Materials*, **2013**, 36, 294-298	3.3	19
53	A method for refractive index measurement of a liquid in a suspended core fiber using Brillouin dynamic grating. *Journal of Modern Optics*, **2013**, 60, 342-349	1.1	0
52	Characterisation of a real-time fibre-coupled beryllium oxide (BeO) luminescence dosimeter in X-ray beams. *Radiation Measurements*, **2013**, 53-54, 1-7	1.5	21
51	Understanding the contribution of mode area and slow light to the effective Kerr nonlinearity of waveguides. *Optics Express*, **2013**, 21, 18558-71	3.3	22
50	Enhancing the radiation efficiency of dye doped whispering gallery mode microresonators. *Optics Express*, **2013**, 21, 22566-77	3.3	18
49	Lead-germanate glasses and fibers: a practical alternative to tellurite for nonlinear fiber applications. *Optical Materials Express*, **2013**, 3, 1488	2.6	49
48	Efficient third and one-third harmonic generation in nonlinear waveguides. *Optics Letters*, **2013**, 38, 329-31	3.3	18
47	Terahertz dielectric waveguides. *Advances in Optics and Photonics*, **2013**, 5, 169	16.7	193
46	Nonlinear Self-Flipping of Polarization States in Asymmetric Waveguides. *IEEE Photonics Technology Letters*, **2012**, 24, 1453-1456	2.2	2
45	Highly Nonlinear and Dispersion-Flattened Fiber Design for Ultrafast Phase-Sensitive Amplification. *Journal of Lightwave Technology*, **2012**, 30, 3440-3447	4	
44	Full vectorial analysis of polarization effects in optical nanowires. *Optics Express*, **2012**, 20, 14514-33	3.3	10
43	Bragg waveguides with low-index liquid cores. *Optics Express*, **2012**, 20, 48-62	3.3	27
42	Efficient excitation of surface plasmons in metal nanorods using large longitudinal component of high index nano fibers. *Optics Express*, **2011**, 19, 13464-79	3.3	1

41	Dipole emitters in fiber: interface effects, collection efficiency and optimization. *Optics Express*, **2011**, 19, 16182-94	3.3	14
40	Fabrication and supercontinuum generation in dispersion flattened bismuth microstructured optical fiber. *Optics Express*, **2011**, 19, 21135-44	3.3	29
39	Nonlinear polarization bistability in optical nanowires. *Optics Letters*, **2011**, 36, 588-90	3	5
38	Light Enhancement Within Nanoholes in High Index Contrast Nanowires. *IEEE Photonics Journal*, **2011**, 3, 130-139	1.8	13
37	Diamond in tellurite glass: a new medium for quantum information. *Advanced Materials*, **2011**, 23, 2806-10	14	59
36	Direct probing of evanescent field for characterization of porous terahertz fibers. *Applied Physics Letters*, **2011**, 98, 121104	3.4	36
35	Fluorescence-based sensing with optical nanowires: a generalized model and experimental validation. *Optics Express*, **2010**, 18, 9474-85	3.3	27
34	Design and optimization of fiber optical parametric oscillators for femtosecond pulse generation. *Optics Express*, **2010**, 18, 17294-305	3.3	8
33	Light confinement within nanoholes in nanostructured optical fibers. *Optics Express*, **2010**, 18, 26018-26	3.3	37
32	Sensing with suspended-core optical fibers. *Optical Fiber Technology*, **2010**, 16, 343-356	2.4	129
31	Experimental investigation of dispersion properties of THz porous fibers **2009**,		3
30	Low loss, low dispersion and highly birefringent terahertz porous fibers. *Optics Communications*, **2009**, 282, 36-38	2	77
29	Small core optical waveguides are more nonlinear than expected: experimental confirmation. *Optics Letters*, **2009**, 34, 3577-9	3	53
28	A full vectorial model for pulse propagation in emerging waveguides with subwavelength structures part I: Kerr nonlinearity. *Optics Express*, **2009**, 17, 2298-318	3.3	247
27	A full vectorial model for pulse propagation in emerging waveguides with subwavelength structures part II: Stimulated Raman Scattering. *Optics Express*, **2009**, 17, 11565-81	3.3	27
26	THz porous fibers: design, fabrication and experimental characterization. *Optics Express*, **2009**, 17, 14053-62	3.3	170
25	A genetic algorithm based approach to fiber design for high coherence and large bandwidth supercontinuum generation. *Optics Express*, **2009**, 17, 19311-27	3.3	38
24	Cleaving of Extremely Porous Polymer Fibers. *IEEE Photonics Journal*, **2009**, 1, 286-292	1.8	29

23	Emerging Nonlinear Optical Fibers: Revised Fundamentals, Fabrication and Access to Extreme Nonlinearity. *IEEE Journal of Quantum Electronics*, **2009**, 45, 1357-1364	2	7
22	Experimental confirmation of a generalized definition of the effective nonlinear coefficient in emerging waveguides with subwavelength structures **2009**,		1
21	Enhanced fluorescence sensing using microstructured optical fibers: a comparison of forward and backward collection modes. *Optics Letters*, **2008**, 33, 1473-5	3	49
20	Novel Low-Loss Bandgaps in All-Silica Bragg Fibers. *Journal of Lightwave Technology*, **2008**, 26, 43-51	4	22
19	Porous fibers: a novel approach to low loss THz waveguides. *Optics Express*, **2008**, 16, 8845-54	3.3	149
18	Theoretical study of liquid-immersed exposed-core microstructured optical fibers for sensing. *Optics Express*, **2008**, 16, 9034-45	3.3	53
17	Bandgaps and antiresonances in integrated-ARROWs and Bragg fibers; a simple model. *Optics Express*, **2008**, 16, 17935-51	3.3	33
16	Record nonlinearity in optical fibre. *Electronics Letters*, **2008**, 44, 1453	1.1	12
15	Enhancement of fluorescence-based sensing using microstructured optical fibres. *Optics Express*, **2007**, 15, 17891-901	3.3	82
14	Nonlinearity enhancement of filled microstructured fibers operating in the nanowire regime **2006**,		2
13	Terahertz Waveguides and Materials **2006**,		2
12	Microwire fibers for low-loss THz transmission **2006**,		5
11	Brillouin spectral deconvolution method for centimeter spatial resolution and high-accuracy strain measurement in Brillouin sensors. *Optics Letters*, **2005**, 30, 705-7	3	7
10	Subpeaks in the Brillouin loss spectra of distributed fiber-optic sensors. *Optics Letters*, **2005**, 30, 1099-101	3	10
9	Enhancement of stimulated Brillouin scattering of higher-order acoustic modes in single-mode optical fiber. *Optics Letters*, **2005**, 30, 2685-7	3	15
8	Distributed brillouin scattering sensor for discrimination of wall-thinning defects in steel pipe under internal pressure. *Applied Optics*, **2004**, 43, 1583-8	1.7	40
7	Dependence of the brillouin frequency shift on strain and temperature in a photonic crystal fiber. *Optics Letters*, **2004**, 29, 1485-7	3	102
6	High accuracy temperature and strain measurement with cm spatial resolution for distributed Brillouin-based fiber optic sensors **2004**, 5579, 22		1

5	A new fitting method for spectral characterization of Brillouin-based distributed sensors **2003**,		9
4	Impact of EOM extinction ratio on the Brillouin frequency measurement of distributed fiber optic sensors **2003**, 5260, 519		1
3	Effect of the finite extinction ratio of an electro-optic modulator on the performance of distributed probe-pump Brillouin sensor systems. *Optics Letters*, **2003**, 28, 1418-20	3	41
2	A TRANSIENT, THREE-DIMENSIONAL MODEL OF STIMULATED BRILLOUIN SCATTERING. *Journal of Nonlinear Optical Physics and Materials*, **2001**, 10, 1-27	0.8	7
1	Nature of intensity and phase modulations in stimulated Brillouin scattering. *Physical Review A*, **1998**, 57, 3961-3971	2.6	21