

Balaji Srinivasan

List of Publications by Year in descending order

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111
papers

792
citations

516710

16
h-index

580821

25
g-index

111
all docs

111
docs citations

111
times ranked

614
citing authors

#	ARTICLE	IF	CITATIONS
1	Orbital angular momentum beam excitation using an all-fiber weakly fused mode selective coupler. <i>Optics Letters</i> , 2017, 42, 4347.	3.3	84
2	Outlier analysis for defect detection using sparse sampling in guided wave structural health monitoring. <i>Structural Control and Health Monitoring</i> , 2021, 28, e2690.	4.0	68
3	Statistics-based baseline-free approach for rapid inspection of delamination in composite structures using ultrasonic guided waves. <i>Structural Health Monitoring</i> , 2022, 21, 2719-2731.	7.5	44
4	Performance analysis of frequency shift estimation techniques in Brillouin distributed fiber sensors. <i>Optics Express</i> , 2018, 26, 14661.	3.4	39
5	Identification and localization of partial discharge in transformer insulation adopting cross recurrence plot analysis of acoustic signals detected using fiber Bragg gratings. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017, 24, 1773-1780.	2.9	35
6	All-Fiber Fused Coupler for Stable Generation of Radially and Azimuthally Polarized Beams. <i>IEEE Photonics Technology Letters</i> , 2017, 29, 31-34.	2.5	31
7	Robust Classification of Partial Discharges in Transformer Insulation Based on Acoustic Emissions Detected Using Fiber Bragg Gratings. <i>IEEE Sensors Journal</i> , 2018, 18, 10018-10027.	4.7	31
8	Reference-Free Real-Time Power Line Monitoring Using Distributed Anti-Stokes Raman Thermometry for Smart Power Grids. <i>IEEE Sensors Journal</i> , 2020, 20, 7044-7052.	4.7	30
9	Generation and decomposition of scalar and vector modes carrying orbital angular momentum: a review. <i>Optical Engineering</i> , 2019, 59, 1.	1.0	29
10	Strain-Temperature Discrimination Using a Single Fiber Bragg Grating. <i>IEEE Photonics Technology Letters</i> , 2010, 22, 778-780.	2.5	28
11	First demonstration of thermally poled electrooptically tunable fiber Bragg gratings. <i>IEEE Photonics Technology Letters</i> , 2000, 12, 170-172.	2.5	21
12	Dynamic interrogator for elastic wave sensing using Fabry Perot filters based on fiber Bragg gratings. <i>Ultrasonics</i> , 2015, 60, 103-108.	3.9	21
13	Modal decomposition of Laguerre Gaussian beams with different radial orders using optical correlation technique. <i>Optics Express</i> , 2019, 27, 13182.	3.4	21
14	Detection of fundamental shear horizontal mode in plates using fibre Bragg gratings. <i>Journal of Intelligent Material Systems and Structures</i> , 2016, 27, 2229-2236.	2.5	19
15	Measurement accuracy enhancement with multi-event detection using the deep learning approach in Raman distributed temperature sensors. <i>Optics Express</i> , 2021, 29, 26745.	3.4	18
16	Feature-guided wave-based health monitoring of bent plates using fiber Bragg gratings. <i>Journal of Intelligent Material Systems and Structures</i> , 2017, 28, 1211-1220.	2.5	17
17	Monitoring pipe wall integrity using fiber Bragg grating-based sensing of low-frequency guided ultrasonic waves. <i>Ultrasonics</i> , 2018, 90, 120-124.	3.9	15
18	Fluorescence Fiber Based Identification of Partial Discharges in Liquid Nitrogen for High-Temperature Superconducting Power Apparatus. , 2020, 4, 1-4.		15

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19	Investigation on Impact of Magnetic Field on the Corona Discharge Activity in Punga Oil Using Fluorescent Fiber and UHF Sensor Techniques. IEEE Access, 2021, 9, 129218-129228.	4.2	14
20	Investigation of temporal dynamics due to stimulated Brillouin scattering using statistical correlation in a narrow-linewidth cw high power fiber amplifier. Optics Express, 2018, 26, 33409.	3.4	14
21	Stimulated Brillouin scattering mitigation using optimized phase modulation waveforms in high power narrow linewidth Yb-doped fiber amplifiers. Optics Express, 2021, 29, 17183.	3.4	13
22	Multimode-pumped Raman amplification of a higher order mode in a large mode area fiber. Optics Express, 2018, 26, 23295.	3.4	12
23	Investigation on Surface Condition of the Corona-Aged Silicone Rubber Nanocomposite Adopting Wavelet and LIBS Technique. IEEE Transactions on Plasma Science, 2021, 49, 2294-2304.	1.3	12
24	OAM Beam Generation using All-fiber Fused Couplers. , 2016, , .		12
25	Characterization of atmospheric turbulence effects and their mitigation using wavelet-based signal processing. IEEE Transactions on Communications, 2010, 58, 1795-1802.	7.8	11
26	Investigation of propagation dynamics of truncated vector vortex beams. Optics Letters, 2018, 43, 2579.	3.3	11
27	Impact of Surfactants on the Electrical and Rheological Aspects of Silica Based Synthetic Ester Nanofluids. IEEE Access, 2022, 10, 18192-18200.	4.2	11
28	Effects of wavelength filtering on pulse dynamics in a tunable, actively Q-switched fiber laser. Optics and Laser Technology, 2018, 98, 190-197.	4.6	8
29	Fiber bragg grating based detection of part-thickness cracks in bent composite laminates using feature-guided waves. Smart Materials and Structures, 2019, 28, 085026.	3.5	8
30	Challenges in coherent beam combining of high power fiber amplifiers: a review. ISSS Journal of Micro and Smart Systems, 2022, 11, 277-293.	2.0	6
31	<title>Compact LED-based phase fluorimeter detection system for chemical and biosensor arrays</title>. , 1998, , .		5
32	Predicting thermal stability of fibre Bragg gratings " isothermal annealing within isochronal annealing. Electronics Letters, 2007, 43, 1341.	1.0	5
33	Distributed High Temperature Sensing Using Fiber Bragg Gratings. International Journal of Optomechatronics, 2008, 2, 4-15.	6.6	5
34	Study on water droplet initiated discharges and charge trap characteristics of laser textured silicone rubber nanocomposites. SPE Polymers, 2020, 1, 139-148.	3.3	5
35	Theoretical and experimental investigation of the sources of error in stochastic parallel gradient descent based digital modal decomposition technique. OSA Continuum, 0, , .	1.8	5
36	Multi-point dynamic strain sensing using external modulation-based Brillouin optical correlation domain analysis. Optics Express, 2019, 27, 19486.	3.4	5

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37	Investigation of the Directional Response of Fibre Bragg Grating-Based Acoustic Emission Sensor. , 2012, , .		5
38	ENHANCED DETECTION OF VIBRATIONS USING FIBER FABRY PEROT FILTERS AND SPECTRAL ESTIMATION TECHNIQUES. , 2011, , .		4
39	Raman amplification of optical beam carrying orbital angular momentum in a multimode step-index fiber. Optics Letters, 2019, 44, 1658.	3.3	4
40	Challenges and opportunities in distributed anti-Stokes Raman thermometry. ISSS Journal of Micro and Smart Systems, 2022, 11, 179-206.	2.0	4
41	Simulation and experimental validation of fiber Fabry-Perot filters for optical clock recovery. Journal of Optics (India), 2015, 44, 178-181.	1.7	3
42	Accurate Estimation of Brillouin Frequency Shift in Brillouin Optical Correlation Domain Analysis. Journal of Lightwave Technology, 2019, 37, 5875-5884.	4.6	3
43	Numerical studies of the operating regimes of a passively mode-locked Thulium doped fiber laser. OSA Continuum, 2021, 4, 2193.	1.8	3
44	Generation of Radially and Azimuthally Polarized Beams using All-fiber Fused Couplers. , 2016, , .		3
45	Performance enhancement of Raman optical time domain reflectometer using Golay codes. Proceedings of SPIE, 2010, , .	0.8	2
46	Characterization of regenerative stabilized actively mode-locked fiber laser incorporating a saturated amplifier in feed-back chain. Optics and Laser Technology, 2015, 67, 98-106.	4.6	2
47	Spatial mapping of correlation profile in Brillouin optical correlation domain analysis. Measurement Science and Technology, 2017, 28, 045202.	2.6	2
48	Fluorescent fiber-based identification of incipient discharges in liquid nitrogen. Cryogenics, 2021, 120, 103376.	1.7	2
49	Amplification of Orbital Angular Momentum Beam in a Fiber Raman Amplifier. , 2017, , .		2
50	Demonstration of all-optical clock recovery from NRZ-PM-QPSK and PM-16QAM signals. , 2019, , .		2
51	A low-cost rugged solution for solar lighting. Proceedings of SPIE, 2009, , .	0.8	1
52	Experimental investigation of link between growth and decay of fiber Bragg gratings. Applied Optics, 2011, 50, 4042.	2.1	1
53	An adaptive line enhancement technique for Fiber Bragg grating-based acoustic emission sensor. , 2012, , .		1
54	Numerical simulation of a dispersion-managed active harmonically mode-locked fiber laser using a spectral double-grid technique. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 1373.	2.1	1

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55	Design and demonstration of tunable q-switched fiber laser. , 2013, , .		1
56	Measurement of Amplitude Response of a Fabry-Perot Tunable Optical Filter for Fourier Domain Mode-Locking. , 2014, , .		1
57	Enhanced sensitivity etched fiber Bragg gratings for precise measurement of refractive index. , 2015, , .		1
58	OAM generation in optical fibre and free space devices. , 2016, , .		1
59	Accurate determination of Brillouin frequency based on cross recurrence plot analysis in Brillouin distributed fiber sensor. Proceedings of SPIE, 2017, , .	0.8	1
60	Investigation of Self-Healing Property of Composite Vector Vortex Beams. , 2017, , .		1
61	Detection of Guided Waves in a Composite Plate Using Surface Bonded Fiber Bragg Gratings Sensor. , 2018, , .		1
62	Nonlinearity-Assisted All-Optical Clock Recovery for Phase Modulated Lightwave Systems. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-9.	2.9	1
63	Design and experimental demonstration of a Fourier-domain mode-locked laser based on erbium-doped fiber amplifier. Optical Engineering, 2017, 56, 1.	1.0	1
64	Demonstration of Correlation Peak Profiling in Frequency Correlated Brillouin Optical Time Domain Analysis. , 2015, , .		1
65	Design and Demonstration of an All-Fiber Tandem Pumped Master Oscillator Power Amplifier. , 2016, , .		1
66	Investigation of scalability of all-fiber fused mode selective coupler for generating multiple OAM states. , 2016, , .		1
67	Multimode Raman Pumping for Power-Scaling of Large Area Higher Order Modes in Fiber Amplifiers. , 2017, , .		1
68	Sub-harmonic injection locking of quantum-dash lasers using spectral enrichment from semiconductor optical amplifiers. Applied Optics, 2017, 56, 9913.	1.8	1
69	All-Optical Clock Recovery from 10 Gbps NRZ OOK and BPSK Data through Injection-Locking of Fiber Laser. , 2018, , .		1
70	Deconvolution Algorithm for Accurate Estimation of Brillouin Frequency in Brillouin Optical Correlation Domain Analysis. , 2018, , .		1
71	Single Shot Modal Decomposition of Optical Fiber Output in OAM Basis using Optical Correlation Technique. , 2019, , .		1
72	Raman Amplification of Charge-15 Orbital Angular Momentum Mode in a Large Core Step Index Fiber. , 2020, , .		1

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73	Wave visualization of ultrasonic guided waves in a metallic structure using fiber Bragg gratings. , 2021, , .		1
74	<title>Upconversion fiber lasers</title>. , 1998, 3211, 397.		0
75	Countering Atmospheric Turbulence in Free Space Optical Links Using Wavelet Based Signal Processing. , 2008, , .		0
76	Implementation of a low cost short-haul optical wireless link. , 2009, , .		0
77	Optimization of cavity configuration of a Q-switched fibre laser. Proceedings of SPIE, 2010, , .	0.8	0
78	A flexible rugged testbed for passive solar collector development. , 2011, , .		0
79	Investigation of scattering profiles for passive solar light collectors. , 2011, , .		0
80	Investigation of stimulated Brillouin scattering spectra of an optical fiber with use of a frequency modulated laser. Proceedings of SPIE, 2011, , .	0.8	0
81	Precise, rugged spectrum-based calibration of distributed anti-stokes raman thermometry systems. , 2011, , .		0
82	Formulation of adaptive Adam-Bashforth method for solving ordinary differential equations: modeling of highly doped waveguide amplifiers. Proceedings of SPIE, 2012, , .	0.8	0
83	Repetition rate independent scheme for the stabilization of re-generatively mode-locked fiber lasers. , 2012, , .		0
84	Distributed fiber optic sensor based on correlation coded Brillouin scattering for long range condition monitoring. , 2014, , .		0
85	Fast distributed temperature sensing using Brillouin beat spectrum of large effective area fiber (LEAF). Proceedings of SPIE, 2014, , .	0.8	0
86	Sub-Harmonic Injection-Locking of Quantum Dash Lasers through Spectral Enrichment for All-Optical Clock Recovery. , 2015, , .		0
87	Studies on the propagation of orbital angular momentum beams through optical fibers with different index profiles. , 2015, , .		0
88	Development of a 535 nm frequency doubled fiber laser with enhanced spatial coherence for diabetic retinopathy. , 2015, , .		0
89	Novel method of defect identification in bent structures through feature-guided wave detection using fiber Bragg grating sensors. Proceedings of SPIE, 2015, , .	0.8	0
90	Fiber interrogator for Bragg grating sensors based on cavity ring-down technique. Proceedings of SPIE, 2015, , .	0.8	0

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91	Spectral tailoring of fiber Bragg gratings through scanning beam fabrication technique. Journal of Optics (India), 2015, 44, 330-336.	1.7	0
92	Fiber Bragg grating-based wavelength modulation spectroscopy technique for trace gas sensing. Proceedings of SPIE, 2016, , .	0.8	0
93	Investigation of fractional charge OAM beam generation and its decomposition. , 2016, , .		0
94	Fiber Bragg grating-based detection of cross sectional irregularities in metallic pipes. , 2017, , .		0
95	Simultaneous Multi-point Sensing through External Phase Modulation based Brillouin Optical Correlation Domain Analysis. , 2017, , .		0
96	Predicting Onset of Combustion Instability in Gas Turbines Using Fiber Optic Sensors. IEEE Sensors Journal, 2020, , 1-1.	4.7	0
97	Predicting Onset of Combustion Instability in Gas Turbines Using Fiber Bragg Grating Pressure Sensors. Springer Proceedings in Physics, 2021, , 161-164.	0.2	0
98	Investigation of water dropletâ€initiated discharges on laser textured silicone nanoâ€micro composites using UHF and fluorescent fibre techniques. IET Nanodielectrics, 0, , .	4.1	0
99	Compact optical rotation sensor using CCD array. , 2007, , .		0
100	Predicting the Decay of Fiber Bragg Gratings from their Growth. , 2010, , .		0
101	Investigation of Coal Gasification Through Distributed Temperature Sensing Using Fiber Bragg Gratings. , 2010, , .		0
102	Demonstration of filterless and tunable thulium doped fiber ring laser with emission in the 2Âµm region. , 2016, , .		0
103	Investigation of Passive Mode Locking Characteristics of Thulium Doped Fiber Ring Laser. , 2016, , .		0
104	Performance Analysis of All-optical Clock Recovery Using Fabry-Perot Fiber Bragg Gratings. , 2016, , .		0
105	Riding the Feature - Feature Guided Wave-Based Defect Identification using Fiber Bragg Grating Sensors. , 2016, , .		0
106	Modal decomposition of optical fiber output in OAM basis using optical correlation technique. , 2018, , .		0
107	Simultaneous Multi-point Sensing based on Brillouin Optical Correlation Domain Analysis with Digital Lock-in Detection Scheme. , 2021, , .		0
108	Accurate BFS Estimation in Simultaneous Multi-Point Sensing Based on External Modulation BOCDA. , 2020, , .		0

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109	Demonstration of a Multi-Channel Dynamic Interrogation System based on Matched Filters for Elastic Wave Sensing. , 2021, , .		0
110	Investigation of the corona discharge activity in liquid nitrogen under transient voltage conditions using fluorescent fiber sensor. Cryogenics, 2022, 124, 103456.	1.7	0
111	Generation of High Power Ultrashort Pulses in Tapered Yb-Doped PCF Through Self-Similar Compression. IEEE Journal of Quantum Electronics, 2022, 58, 1-8.	1.9	0