

Tomasz Osuch

List of Publications by Year in descending order

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56
papers

474
citations

840776

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56
all docs

56
docs citations

56
times ranked

434
citing authors

#	ARTICLE	IF	CITATIONS
1	Simultaneous Measurement of Liquid Level and Temperature Using Tilted Fiber Bragg Grating. IEEE Sensors Journal, 2016, 16, 1205-1209.	4.7	54
2	Linearly chirped tapered fiber-Bragg-grating-based Fabry-Perot cavity and its application in simultaneous strain and temperature measurement. Optics Letters, 2017, 42, 1464.	3.3	39
3	Fiber-Optic Strain Sensors Based on Linearly Chirped Tapered Fiber Bragg Gratings With Tailored Intrinsic Chirp. IEEE Sensors Journal, 2016, 16, 7508-7514.	4.7	30
4	Self-Organized, One-Dimensional Periodic Structures in a Gold Nanoparticle-Doped Nematic Liquid Crystal Composite. ACS Nano, 2019, 13, 10154-10160.	14.6	28
5	Numerical model of tapered fiber Bragg gratings for comprehensive analysis and optimization of their sensing and strain-induced tunable dispersion properties. Applied Optics, 2015, 54, 5525.	2.1	26
6	Coupling independent fiber optic tilt and temperature sensor based on chirped tapered fiber Bragg grating in double-pass configuration. Sensors and Actuators A: Physical, 2016, 252, 76-81.	4.1	26
7	Experimental Investigation of Mid-Infrared Laser Action From Dy ³⁺ Doped Fluorozirconate Fiber. IEEE Photonics Technology Letters, 2018, 30, 1083-1086.	2.5	26
8	Tapered and linearly chirped fiber Bragg gratings with co-directional and counter-directional resultant chirps. Optics Communications, 2016, 366, 194-199.	2.1	25
9	Numerical analysis of apodized fiber Bragg gratings formation using phase mask with variable diffraction efficiency. Optics Communications, 2011, 284, 567-572.	2.1	23
10	Temperature Independent Tapered Fiber Bragg Grating-Based Inclinator. IEEE Photonics Technology Letters, 2015, 27, 2312-2315.	2.5	17
11	Numerical analysis of double chirp effect in tapered and linearly chirped fiber Bragg gratings. Applied Optics, 2016, 55, 4505.	2.1	16
12	System for modification of exposure time in fiber Bragg gratings fabrication with using scanning phase mask method. , 2005, , .		11
13	Fabrication of phase masks with variable diffraction efficiency using HEBS glass technology. Applied Optics, 2011, 50, 5977.	2.1	11
14	Modeling of fiber Bragg gratings written in tapered optical fibers. Proceedings of SPIE, 2013, , .	0.8	11
15	Modeling of amplification and light generation in one-dimensional photonic crystal using a multiwavelength transfer matrix approach. Applied Optics, 2009, 48, 5401.	2.1	10
16	Shaping the spectral characteristics of fiber Bragg gratings written in optical fiber taper using phase mask method. Photonics Letters of Poland, 2012, 4, .	0.4	10
17	Spectral transmission characteristics of weakly tilted and tilted chirped fiber gratings: comparative studies. Proceedings of SPIE, 2013, , .	0.8	9
18	Quasi-Uniform Fiber Bragg Gratings. Journal of Lightwave Technology, 2015, 33, 4849-4856.	4.6	9

#	ARTICLE	IF	CITATIONS
19	Numerical analysis of the harmonic components of the Bragg wavelength content in spectral responses of apodized fiber Bragg gratings written by means of a phase mask with a variable phase step height. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2016, 33, 172.	1.5	6
20	UVA Sensor Based on Highly Birefringent Fiber Covered With Graphene Oxide. <i>IEEE Photonics Technology Letters</i> , 2018, 30, 845-848.	2.5	6
21	Nanostructured active and photosensitive silica glass for fiber lasers with built-in Bragg gratings. <i>Optics Express</i> , 2021, 29, 10659.	3.4	6
22	In-Plane Strain Measurement in Composite Structures with Fiber Bragg Grating Written in Side-Hole Elliptical Core Optical Fiber. <i>Materials</i> , 2022, 15, 77.	2.9	6
23	Self-Similarity Properties of Complex Quasi-Periodic Fibonacci and Cantor Photonic Crystals. <i>Photonics</i> , 2021, 8, 558.	2.0	6
24	Numerical and experimental studies of dispersion characteristics of tapered fiber Bragg gratings under the influence of axial strain. <i>Proceedings of SPIE</i> , 2014, , .	0.8	5
25	Temperature fiber Bragg grating based sensor for respiration monitoring. <i>Proceedings of SPIE</i> , 2017, , .	0.8	5
26	Inscription of Bragg gratings in nanostructured graded index single-mode fibers. <i>Optics Express</i> , 2019, 27, 13721.	3.4	5
27	Nonlinear analysis of a photonic crystal laser. <i>Journal of Modern Optics</i> , 2011, 58, 1538-1550.	1.3	4
28	Optical microphone based on Sagnac interferometer with polarization maintaining optical fibers. , 2013, , .		4
29	Enhancement of spectral response of Bragg gratings written in nanostructured and multi-stepped optical fibers with radially shaped GeO ₂ concentration. <i>Optics Express</i> , 2020, 28, 14774.	3.4	4
30	Fiber Bragg Gratings Based Tuning of an Optoelectronic Oscillator. , 2014, , .		3
31	Custom FBGs inscription using modified phase mask method with precise micro- and nano-positioning. , 2016, , .		3
32	Deep learning-based method for the continuous detection of heart rate in signals from a multi-fiber Bragg grating sensor compatible with magnetic resonance imaging. <i>Biomedical Optics Express</i> , 2021, 12, 7790.	2.9	3
33	Nanostructured Large Mode Area Fiber for Laser Applications. <i>Journal of Lightwave Technology</i> , 2022, 40, 3947-3953.	4.6	3
34	Width of the apodization area in the case of diffractive optical elements with variable efficiency. , 2006, , .		2
35	Recent advances in tapered fiber Bragg grating technology and applications. , 2017, , .		2
36	Self-Apodization Effect in Tapered Fiber Bragg Gratings. <i>Journal of Lightwave Technology</i> , 2018, 36, 2882-2887.	4.6	2

#	ARTICLE	IF	CITATIONS
37	Theoretical Analysis of Slow-light in π -phase-shifted fiber Bragg grating for sensing applications. , 2019, , .		2
38	Theoretical Analysis of π -Phase-Shifted Fiber Bragg Grating for Longitudinal Ultrasonic Acoustic Wave. , 2019, , .		2
39	UV Sensor Based on Fiber Bragg Grating Covered with Graphene Oxide Embedded in Composite Materials. Sensors, 2020, 20, 5468.	3.8	2
40	Analysis of the Talbot effect in apodized diffractive optical elements. Photonics Letters of Poland, 2009, 1, .	0.4	2
41	Three-Dimensional-Printed Mechanical Transmission Element with a Fiber Bragg Grating Sensor Embedded in a Replaceable Measuring Head. Sensors, 2022, 22, 3381.	3.8	2
42	Inscription of fiber Bragg gratings with wavelength flexibility using phase mask interferometer in Talbot's configuration. , 2005, , .		1
43	Validation of the automated system for simultaneous spectral transmission/reflection and dispersion characteristics measurement of fiber Bragg gratings and optical fibers. , 2013, , .		1
44	Impact of fiber ring laser configuration on detection capabilities in FBG based sensor systems. , 2014, , .		1
45	Accelerated-aging tests of fiber Bragg gratings written in hydrogen loaded tapered optical fibers. , 2014, , .		1
46	Optoelectronic comb oscillators with FBG based frequency control. , 2015, , .		1
47	Influence of optical fiber location behind an apodized phase mask on Bragg grating reflection efficiencies at Bragg wavelength and its harmonics. Optics Communications, 2017, 382, 36-41.	2.1	1
48	Ytterbium-doped nanostructured core silica fiber with built-in Bragg grating for laser applications. , 2019, , .		1
49	Diffractive gratings with varying period's shape. Photonics Letters of Poland, 2019, 11, 41.	0.4	1
50	Threshold Mode Analysis of 2-D Square and Triangular Lattice Gain and Index Coupled Photonic Crystal Lasers. IEEE Journal of Quantum Electronics, 2014, 50, 554-562.	1.9	0
51	Optimization of group delay response of (apodized) tapered fiber Bragg grating by shaping taper transition and apodization window. , 2016, , .		0
52	A dual-parameter tilted fiber Bragg grating-based sensor for liquid level and temperature monitoring. , 2016, , .		0
53	Design and fabrication principles of chirped tapered fiber-Bragg-grating-based Fabry-Perot cavity. , 2017, , .		0
54	Nanostructured Core Optical Fibres for Laser Applications. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
55	Fiber Bragg grating as UVA sensor. Photonics Letters of Poland, 2018, 10, 14.	0.4	0
56	Application of fiber Bragg gratings for stress analysis of high mobility vehicle frame. , 2018, , .		0