

Sasokan

List of Publications by Year in descending order

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104
papers

1,712
citations

304743

22
h-index

361022

35
g-index

104
all docs

104
docs citations

104
times ranked

1477
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical and Chemical Thresholds in IV-VI Chalcogenide Glasses. <i>Physical Review Letters</i> , 1989, 62, 808-810.	7.8	83
2	Sensitive detection of C-reactive protein using optical fiber Bragg gratings. <i>Biosensors and Bioelectronics</i> , 2015, 65, 251-256.	10.1	76
3	Enhanced strain and temperature sensing by reduced graphene oxide coated etched fiber Bragg gratings. <i>Optics Letters</i> , 2016, 41, 2604.	3.3	68
4	Fiber bragg grating sensor based device for simultaneous measurement of respiratory and cardiac activities. <i>Journal of Biophotonics</i> , 2017, 10, 278-285.	2.3	66
5	Ultra sensitive NO ₂ gas detection using the reduced graphene oxide coated etched fiber Bragg gratings. <i>Sensors and Actuators B: Chemical</i> , 2016, 223, 481-486.	7.8	59
6	Evidence concerning the effect of topology on electrical switching in chalcogenide network glasses. <i>Physical Review B</i> , 1996, 54, 4413-4415.	3.2	56
7	CO ₂ sensing at room temperature using carbon nanotubes coated core fiber Bragg grating. <i>Review of Scientific Instruments</i> , 2013, 84, 065002.	1.3	56
8	Optical bio-sensing devices based on etched fiber Bragg gratings coated with carbon nanotubes and graphene oxide along with a specific dendrimer. <i>Sensors and Actuators B: Chemical</i> , 2014, 195, 150-155.	7.8	52
9	Fiber Bragg Grating based bite force measurement. <i>Journal of Biomechanics</i> , 2016, 49, 2877-2881.	2.1	49
10	High-pressure studies on Ge-Te glasses. Evidence for a critical composition in IV-VI chalcogenide glassy systems. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1988, 57, 49-60.	0.6	48
11	Highly Sensitive Carbon Nanotubes Coated Etched Fiber Bragg Grating Sensor for Humidity Sensing. <i>IEEE Sensors Journal</i> , 2014, 14, 2615-2619.	4.7	44
12	Optical detection of glucose and glycated hemoglobin using etched fiber Bragg gratings coated with functionalized reduced graphene oxide. <i>Journal of Biophotonics</i> , 2016, 9, 760-769.	2.3	41
13	Composition tunable memory and threshold switching in Al ₂₀ As _x Te _{80-x} semiconducting glasses. <i>Journal of Materials Research</i> , 1998, 13, 2982-2987.	2.6	40
14	Electrical switching and topological thresholds in Ge-Te and Si-Te glasses. <i>Applied Physics A: Materials Science and Processing</i> , 2005, 81, 939-942.	2.3	37
15	Spinal needle force monitoring during lumbar puncture using fiber Bragg grating force device. <i>Journal of Biomedical Optics</i> , 2016, 21, 117002.	2.6	36
16	Fiber Bragg Grating Goniometer for Joint Angle Measurement. <i>IEEE Sensors Journal</i> , 2018, 18, 216-222.	4.7	35
17	Bare fiber Bragg grating immunosensor for real-time detection of <i>Escherichia coli</i> bacteria. <i>Journal of Biophotonics</i> , 2017, 10, 224-230.	2.3	32
18	Easily reversible memory switching in Ge - As - Te glasses. <i>Journal Physics D: Applied Physics</i> , 1996, 29, 2004-2008.	2.8	30

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19	Optical absorption and thermal diffusivity in $\text{Ge}_{1-x}\text{Te}_{10-x}$, glasses by the photoacoustic technique. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1988, 58, 123-132.	0.6	29
20	Strain-Temperature Discrimination Using a Single Fiber Bragg Grating. IEEE Photonics Technology Letters, 2010, 22, 778-780.	2.5	28
21	Knee Angle Measurement Device Using Fiber Bragg Grating Sensor. IEEE Sensors Journal, 2018, 18, 10034-10040.	4.7	25
22	Bite force measurement based on fiber Bragg grating sensor. Journal of Biomedical Optics, 2017, 22, 1.	2.6	25
23	Highly sensitive fiber Bragg grating-based pressure sensor using side-hole packaging. Applied Optics, 2019, 58, 115.	1.8	23
24	Blood pressure evaluation using sphygmomanometry assisted by arterial pulse waveform detection by fiber Bragg grating pulse device. Journal of Biomedical Optics, 2013, 18, 067010.	2.6	22
25	Temperature sensor based on multi-layer MoS_2 coated etched fiber Bragg grating. Applied Optics, 2019, 58, 535.	1.8	22
26	A Novel Approach to Acquire the Arterial Pulse by Finger Plethysmography Using Fiber Bragg Grating Sensor. IEEE Sensors Journal, 2020, 20, 5921-5928.	4.7	21
27	Pulmonary Function Test Using Fiber Bragg Grating Spirometer. Journal of Lightwave Technology, 2016, 34, 5682-5688.	4.6	20
28	Electrical switching behavior of bulk AsTeSi glasses: composition dependence and topological effects. Applied Physics A: Materials Science and Processing, 2005, 80, 249-252.	2.3	18
29	Evidence of an intermediate phase in a quaternary Ag bearing telluride glass system using alternating DSC. Solid State Communications, 2014, 177, 108-112.	1.9	18
30	Feasibility Study on Thermography of Embedded Tumor Using Fiber Bragg Grating Thermal Sensor. IEEE Sensors Journal, 2020, 20, 2452-2459.	4.7	18
31	Fiber Bragg grating sensors for aerospace applications: a review. ISSS Journal of Micro and Smart Systems, 2022, 11, 257-275.	2.0	18
32	Structural Shape Estimation by Mode Shapes Using Fiber Bragg Grating Sensors: A Genetic Algorithm Approach. IEEE Sensors Journal, 2020, 20, 2945-2952.	4.7	17
33	Comparison of Force Required for Lumbar Puncture With Different Gauges of Spinal Needle Using Fiber Bragg Grating Force Device. IEEE Sensors Journal, 2018, 18, 8028-8033.	4.7	16
34	Etched Fiber Bragg Grating Sensor for Quantification of DNA. IEEE Sensors Journal, 2021, 21, 1588-1595.	4.7	16
35	Thermally reversing window in $\text{Ge}_{15}\text{Te}_{85-x}\text{In}_x$ glasses: Nanoindentation and micro-Raman studies. Journal of Non-Crystalline Solids, 2012, 358, 3103-3108.	3.1	15
36	Thermal diffusivities and molar volumes of ternary $\text{Al}_{20}\text{As}_x\text{Te}_{80-x}$ alloy glasses: evidence of self-organization. Solid State Communications, 2005, 135, 323-326.	1.9	14

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37	Photo-thermal deflection and electrical switching studies on Ge ^x Te ^{1-x} I chalcogenide glasses. Journal of Physics Condensed Matter, 2007, 19, 036224.	1.8	14
38	Studies on electrical switching behavior and optical band gap of amorphous Ge ^x Te ^{1-x} Sn thin films. Applied Physics A: Materials Science and Processing, 2012, 106, 989-994.	2.3	14
39	Fiber Bragg Grating Sensor Package for Submicron Level Displacement Measurements. Experimental Techniques, 2015, 39, 19-24.	1.5	14
40	Detecting stages of needle penetration into tissues through force estimation at needle tip using fiber Bragg grating sensors. Journal of Biomedical Optics, 2016, 21, 127009.	2.6	14
41	Effect of indium doping on the electrical switching behaviour of Ge ^x Te glasses. Philosophical Magazine, 2007, 87, 5109-5116.	1.6	13
42	Radial arterial compliance measurement by fiber Bragg grating pulse recorder. Journal of Human Hypertension, 2014, 28, 736-742.	2.2	13
43	Fiber Bragg Grating-Based Pulse Monitoring Device for Real-Time Non-Invasive Blood Pressure Measurement—A Feasibility Study. IEEE Sensors Journal, 2021, 21, 9179-9185.	4.7	13
44	Selective detection of lead in water using etched fiber Bragg grating sensor. Sensors and Actuators B: Chemical, 2022, 354, 131208.	7.8	13
45	Thermal diffusivity of As _x Te _{1-x} glasses measured using the photoacoustic technique. Journal of Materials Science Letters, 1988, 7, 1333-1335.	0.5	12
46	High pressure room temperature and high pressure low temperature resistivity studies on As-Te-Se glasses. High Pressure Research, 1992, 10, 629-635.	1.2	12
47	Thermal and electrical switching studies on Ge ₂₀ Se _{80-x} Bix (1 ≤ x ≤ 13) ternary chalcogenide glassy system. Journal of Non-Crystalline Solids, 2010, 356, 1637-1643.	3.1	12
48	Thermodynamic, Raman and electrical switching studies on Si ₁₅ Te _{85-x} Agx (4 ≤ x ≤ 20) glasses. Journal of Applied Physics, 2012, 111, .	2.5	12
49	A broad pore size distribution mesoporous SnO ₂ as anode for lithium-ion batteries. Journal of Solid State Electrochemistry, 2012, 16, 3643-3649.	2.5	12
50	Calibration of Etched Fiber Bragg Grating Sensor Arrays for Measurement of Molecular Surface Adsorption. Journal of Lightwave Technology, 2013, 31, 2400-2406.	4.6	12
51	Carotid Arterial Pulse Waveform Measurements Using Fiber Bragg Grating Pulse Probe. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1415-1420.	6.3	12
52	Temperature Compensated FBG Displacement Sensor for Long-Range Applications. , 2020, 4, 1-4.		12
53	Lead (Pb ²⁺) ion sensor development using optical fiber gratings and nanocomposite materials. Sensors and Actuators B: Chemical, 2022, 364, 131818.	7.8	12
54	Electrical switching in AgI based fast ion conducting glasses: Possibility for newer applications. Journal of Applied Physics, 1995, 78, 1358-1360.	2.5	10

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55	Diaphragm-Micro-Stylus-Based Fiber Bragg Grating Tactile Sensor. IEEE Sensors Journal, 2020, 20, 6394-6399.	4.7	10
56	Raman signatures of intermediate phase in quaternary Ge ₁₅ Te ₈₀ xIn ₅ Agx glasses. Journal of Non-Crystalline Solids, 2014, 387, 143-147.	3.1	9
57	FBG Tactile Sensor for Surface Thickness and Shape Measurement. IEEE Sensors Journal, 2021, 21, 10695-10702.	4.7	9
58	A Non-Invasive Breast Cancer Detection System Using FBG Thermal Sensor Array: A Feasibility Study. IEEE Sensors Journal, 2021, 21, 24106-24113.	4.7	9
59	Electrical transport and high pressure studies on bulk Ge ₂₀ Te ₈₀ glass. Pramana - Journal of Physics, 1984, 23, 17-29.	1.8	8
60	Pressure-induced electronic and structural transformations in bulk GeSe ₂ glass. Pramana - Journal of Physics, 1984, 23, 31-37.	1.8	8
61	Near ideal electrical switching in fast ion conducting glasses: Evidence for an electronic process with chemical origin. Bulletin of Materials Science, 1995, 18, 301-307.	1.7	8
62	Signatures of an extended rigidity percolation in the photo-degradation behavior and the composition dependence of photo-response of Ge-Te-In glasses. Journal of Non-Crystalline Solids, 2008, 354, 3732-3734.	3.1	8
63	Optical, photo-acoustic and electrical switching studies of amorphous GeS ₂ thin films. Applied Physics A: Materials Science and Processing, 2014, 115, 1151-1158.	2.3	8
64	Physical and mechanical properties of intermediate phase chalcogenide glasses with centroid compositions in the Ge-Te-In-Ag system. Journal of Non-Crystalline Solids, 2020, 543, 120112.	3.1	8
65	Thermal diffusivity measurements on As-Te-Ga glasses by photo-thermal deflection technique: Composition dependence and topological thresholds. Journal of Non-Crystalline Solids, 2009, 355, 58-60.	3.1	7
66	Electrical switching, SET-RESET, and Raman scattering studies on Ge ₁₅ Te ₈₀ xIn ₅ Agx glasses. Journal of Applied Physics, 2014, 115, 164505.	2.5	7
67	Pulse transit time differential measurement by fiber Bragg grating pulse recorder. Journal of Biomedical Optics, 2015, 20, 057005.	2.6	7
68	A Study on MoS ₂ , Nanolayer Coated Etched Fiber Bragg Grating Strain Sensor. IEEE Sensors Journal, 2021, 21, 9171-9178.	4.7	7
69	Fiber Bragg Grating Respiratory Measurement Device. , 2018, , .		6
70	Enhanced Optical Sensitivity of Polyvinyl Alcohol-Reduced Graphene Oxide Electrospun Nanofiber Coated Etched Fiber Bragg Grating Sensor for Detection of Myoglobin a Cardiac Biomarker. Advanced Photonics Research, 2021, 2, 2000138.	3.6	6
71	Fiber Bragg grating (FBG)-based Hydrophone with side-hole packaging for underwater acoustic sensing. ISSS Journal of Micro and Smart Systems, 2021, 10, 119-125.	2.0	6
72	Monitoring of ultraviolet pulse rate dependent photomechanical actuation in carbon nanotubes using fiber Bragg gratings. Applied Physics Letters, 2014, 104, .	3.3	5

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73	Thermal Modeling of Organic Light-Emitting Diode Display Panels. Journal of Display Technology, 2015, 11, 1048-1055.	1.2	5
74	Investigation of fast and sizeable photostriction effect in tellurium thin films using fiber Bragg grating sensors. Sensors and Actuators A: Physical, 2018, 279, 688-693.	4.1	5
75	FIBER BRAGG GRATING SENSORS: NEW IDEAS ON STRAIN-TEMPERATURE DISCRIMINATION. International Journal on Smart Sensing and Intelligent Systems, 2010, 3, 108-117.	0.7	5
76	Low electric field, easily reversible electrical <i>set</i> and <i>reset</i> processes in a Ge ₁₅ Te ₈₃ Si ₂ glass for phase change memory applications. Journal of Applied Physics, 2011, 109, .	2.5	4
77	Fiber Bragg grating sensor-based communication assistance device. Journal of Biomedical Optics, 2016, 21, 086012.	2.6	4
78	Investigations on photo-mechanical and photo-thermo-mechanical strain variations in amorphous selenium using fiber Bragg grating sensor. Journal of Non-Crystalline Solids, 2017, 477, 7-11.	3.1	4
79	A novel fiber Bragg grating system for eye tracking. Journal of Advanced Research, 2019, 16, 25-34.	9.5	4
80	Influence of Cu Doping in Si ⁴⁺ -Te-Based Chalcogenide Glasses and Thin Films: Electrical Switching, Morphological and Raman Studies. IEEE Transactions on Electron Devices, 2021, 68, 1196-1201.	3.0	4
81	A Novel Fiber Bragg Grating Based Sensing Methodology for Direct Measurement of Surface Strain on Body Muscles during Physical Exercises. International Journal of Optomechatronics, 2012, 6, 189-198.	6.6	3
82	The Role of Photo-Striction in Tailoring the Nano-Scale Phase Changes in Amorphous Selenium Thin Films. MRS Advances, 2016, 1, 2743-2748.	0.9	3
83	Non invasive assessment of brachial arterial stiffness using fiber Bragg grating sensor. , 2016, , .		3
84	Fiber Bragg Grating differential pressure sensor. , 2016, , .		3
85	Switching behavior of bulk, fast ion conducting, vitreous Ag ₂ O-MoO ₃ solids with inert electrode. Journal of the American Ceramic Society, 2019, 102, 7244-7252.	3.8	3
86	Detection of copper nanoparticles templated by DNA using etched Fibre Bragg Grating sensor. IEEE Sensors Journal, 2020, , 1-1.	4.7	3
87	Thermal studies of the effect of thallium in ternary Ge-Te-Tl chalcogenide glasses. Journal of Materials Science: Materials in Electronics, 2021, 32, 853-860.	2.2	3
88	Electrochemical impedance spectroscopy study of Ag ₂ O-MoO ₃ glasses: understanding the diffusion, relaxation, fragility and power law behaviour. Philosophical Magazine, 2021, 101, 400-419.	1.6	3
89	Assessment of Spatio-Temporal Parameters of Human Gait Using Fiber Bragg Grating Sensor-Based Devices. IEEE Sensors Journal, 2021, 21, 9186-9193.	4.7	3
90	pH sensing by single and multi-layer hydrogel coated Fiber Bragg Grating. , 2012, , .		2

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91	<i>In situ</i> monitoring of photostriction in chalcogenide glass film using fiber Bragg grating sensors. <i>International Journal of Optomechatronics</i> , 2017, 11, 27-35.	6.6	2
92	Evaluation of fiber Bragg grating sensor interrogation using InGaAs linear detector arrays and Gaussian approximation on embedded hardware. <i>Review of Scientific Instruments</i> , 2018, 89, 025102.	1.3	2
93	Structural Shape Estimation by Mode Shapes Using Fiber Bragg Grating Sensors: A Genetic Algorithm Approach. , 2018, , .		2
94	Effect of Sn addition on glassy Si-Te bulk sample. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	2
95	Fiber Bragg Grating Based Ice Detection Sensor. , 2019, , .		2
96	High pressure studies on the electrical resistivity of Ge ⁴⁰ Te ⁴⁰ Tl glasses. <i>High Pressure Research</i> , 2014, 34, 309-316.	1.2	1
97	Variation of Electrical Resistivity with High Pressure in Ge-Te-Sn Glasses: A Composition Dependent Study. <i>Acta Physica Polonica A</i> , 2015, 127, 1666-1671.	0.5	1
98	Force sensing for object grasp with fiber Bragg grating based wearable haptic device. , 2019, , .		1
99	Effect of high pressure on the electrical resistivity of Ge ⁷⁰ Te ³⁰ In glasses. <i>AIP Conference Proceedings</i> , 2015, , .	0.4	0
100	Fiber Bragg Grating based Landslide Early Warning System. , 2018, , .		0
101	Spinal Needles Insertion and Traversal Based on Fiber Bragg Gratings – From Conceptual Approach to Prototype Development. <i>Lecture Notes in Mechanical Engineering</i> , 2022, , 463-470.	0.4	0
102	A composition-dependent thermal behavior of Si ₂₀ Te _{80-x} Sn _x glasses: Observation of Boudier intermediate phase. <i>Journal of Non-Crystalline Solids</i> , 2021, 577, 121311.	3.1	0
103	Design and development of optical fiber Bragg grating based device for measurement of handgrip force. <i>Optical and Quantum Electronics</i> , 2022, 54, 1.	3.3	0
104	Experiments and Modeling of Hand Grip Strength Measurement for Musculoskeletal Parameters Monitoring. , 2022, , .		0