

Arup Lal Chakraborty

List of Publications by Year in descending order

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36
papers

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citations

840776

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36
all docs

36
docs citations

36
times ranked

249
citing authors

#	ARTICLE	IF	CITATIONS
1	A Fiber Bragg Grating-Based Sensor for Passive Cavitation Detection at MHz Frequencies. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 1682-1690.	3.0	4
2	A fibre Bragg grating sensor-based instrumented glove for virtual rehabilitation applications. , 2022, , .		0
3	Detection of ultrasound up to 10 MHz frequency using an FBG sensor. , 2022, , .		0
4	Design and Evaluation of an FBG Sensor-Based Glove to Simultaneously Monitor Flexure of Ten Finger Joints. IEEE Sensors Journal, 2021, 21, 7620-7630.	4.7	22
5	Correlating microbial bioluminescence to the different phases of growth using a 2004 nm VCSEL-based 2f wavelength modulation spectroscopy. , 2021, , .		0
6	QCL-Based Open-Path, Single-Pass Measurement of Ambient Carbon Monoxide Using R _{1f} WMS. IEEE Photonics Technology Letters, 2021, 33, 982-985.	2.5	2
7	Light-induced in situ active tuning of the LSPR of gold nanorods over 90%nm. Optics Letters, 2021, 46, 4562.	3.3	5
8	Wavelength Modulation Spectroscopy. Progress in Optical Science and Photonics, 2021, , 321-362.	0.5	2
9	Time-Resolved Studies of Bioluminescence From <i>Photobacterium Leignathi</i> and Rapid Antimicrobial Susceptibility Testing on <i>E. Coli</i> Using Tunable Diode Laser Spectroscopy. IEEE Sensors Journal, 2020, 20, 11073-11081.	4.7	4
10	Intensity Modulation-Normalized Calibration-Free 1 _f and 2 _f Wavelength Modulation Spectroscopy. IEEE Sensors Journal, 2020, 20, 12691-12701.	4.7	14
11	Quantum cascade laser-based wavelength modulation spectroscopy. , 2020, , .		0
12	Field deployment of a 4320-nm quantum cascade laser-based TDLS system to compare the background CO ₂ levels in Mt. Abu with foreground measurements in Gandhinagar, India. Optical Engineering, 2020, 59, 1.	1.0	0
13	Plasmonic CoO-Decorated Au Nanorods for Photoelectrocatalytic Water Oxidation. ACS Applied Nano Materials, 2019, 2, 5795-5803.	5.0	23
14	An FBG-Based Sensing Glove to Measure Dynamic Finger Flexure With an Angular Resolution of 0.1° up to Speeds of 80 ^{circ} /s. Journal of Lightwave Technology, 2019, 37, 4734-4740.	4.6	16
15	Quantifying the CO and CO ₂ Mole Fraction in the Plume of an Aerosol-Based Fire Extinguishing Agent Using 4560 nm and 4320 nm QCLs. IEEE Sensors Journal, 2019, 19, 9728-9735.	4.7	3
16	Photoelectrochemical Water Splitting with Cobalt Oxide Coated Gold Nanorods under Visible Excitation. , 2019, , .		0
17	Real-time Accurate Monitoring of Ten Finger Joint Angles Using a Fiber Bragg Grating Sensor-based Glove for use in Virtual Rehabilitation. , 2019, , .		4
18	A Fiber Bragg Grating Sensor-based Wearable System to Detect the Pre-dicrotic and Dicrotic Notch in the Arterial Pulse Pressure Waveform. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
19	Quantum cascade laser-based in situ measurement of atmospheric CO and CO ₂ in Gandhinagar using 1f and 2f wavelength modulation spectroscopy. , 2019, , .		0
20	Synthesis of Gold Nanodroplets with Field Enhancement of 105 at their Tips using a Simple Wet-Chemical Method. , 2019, , .		0
21	A Fiber Bragg Grating Strain Sensor-Based Glove to Accurately Measure the Bend Angle of the Finger Flexed at the Proximal Interphalangeal Joints. , 2018, , .		4
22	A Fiber Bragg Grating-based Sensing Glove with a Sensitivity of 18.45 pm/degree to Accurately Assess Finger Flexure. , 2018, , .		4
23	Measurement of atmospheric carbon dioxide and water vapor in built-up urban areas in the Gandhinagar-Ahmedabad region in India using a portable tunable diode laser spectroscopy system. Applied Optics, 2017, 56, H57.	1.8	9
24	Fiber Bragg grating interrogation using wavelength modulated tunable distributed feedback lasers and a fiber-optic Mach-Zehnder interferometer. Applied Optics, 2017, 56, 3562.	2.1	11
25	Absolute noninvasive measurement of CO ₂ mole fraction emitted by E coli and S aureus using calibration-free 2f WMS applied to a 2004 nm VCSEL. Optics Letters, 2017, 42, 2138.	3.3	4
26	Detecting metabolic carbon dioxide using a tunable laser for non-invasive monitoring of growth of bacterial pathogens. , 2017, , .		0
27	Absolute concentration measurements of bacterial CO ₂ emission using a 2004 nm vertical cavity surface emitting tunable diode laser. , 2015, , .		1
28	Residual Amplitude Modulation Method Implemented at the Phase Quadrature Frequency of a 1650-nm Laser Diode for Line Shape Recovery of Methane. IEEE Sensors Journal, 2015, 15, 1153-1160.	4.7	18
29	Calibration-free 2f WMS with in situ real-time laser characterization and 2f RAM nulling. Optics Letters, 2015, 40, 4086.	3.3	36
30	Rapid detection of methane, carbon dioxide and ammonia for harsh environments using tunable diode laser spectroscopy. , 2013, , .		0
31	Suppression of intensity modulation contributions to signals in second harmonic wavelength modulation spectroscopy. Optics Letters, 2010, 35, 2400.	3.3	20
32	Detection of CH ₄ in the Mid-IR Using Difference Frequency Generation With Tunable Diode Laser Spectroscopy. Journal of Lightwave Technology, 2010, 28, 1435-1442.	4.6	18
33	Influence of the wavelength-dependence of fiber couplers on the background signal in wavelength modulation spectroscopy with RAM-nulling. Optics Express, 2010, 18, 267.	3.4	12
34	Elimination of residual amplitude modulation in tunable diode laser wavelength modulation spectroscopy using an optical fiber delay line. Optics Express, 2009, 17, 9602.	3.4	56
35	Compensation for temperature dependence of Stokes signal and dynamic self-calibration of a Raman distributed temperature sensor. Optics Communications, 2007, 274, 396-402.	2.1	22
36	Bidirectional frequency-domain digital filtering to simultaneously improve temperature resolution and eliminate spatial inaccuracy of a distributed temperature sensor. Optical Engineering, 2004, 43, 2724.	1.0	4