Pabitra Nath

List of Publications by Year in descending order

#	Article	IF	Citations
1	Label-free biodetection using a smartphone. Lab on A Chip, 2013, 13, 2124.	6.0	281
2	Low-Cost, Robust, and Field Portable Smartphone Platform Photometric Sensor for Fluoride Level Detection in Drinking Water. Analytical Chemistry, 2017, 89, 767-775.	6.5	99
3	Smartphone based LSPR sensing platform for bio-conjugation detection and quantification. RSC Advances, 2016, 6, 21871-21880.	3.6	92
4	Water salinity detection using a smartphone. Sensors and Actuators B: Chemical, 2017, 239, 1042-1050.	7.8	74
5	Gold-coated electrospun PVA nanofibers as SERS substrate for detection of pesticides. Sensors and Actuators B: Chemical, 2018, 273, 710-717.	7.8	65
6	Ground and river water quality monitoring using a smartphone-based pH sensor. AIP Advances, 2015, 5, .	1.3	54
7	Evanescent Wave Coupled Spectroscopic Sensing Using Smartphone. IEEE Photonics Technology Letters, 2014, 26, 568-570.	2.5	52
8	Protein, enzyme and carbohydrate quantification using smartphone through colorimetric digitization technique. Journal of Biophotonics, 2017, 10, 623-633.	2.3	37
9	All fiberâ€optic sensor for liquid level measurement. Microwave and Optical Technology Letters, 2008, 50, 1982-1984.	1.4	33
10	Blu-ray DVD as SERS substrate for reliable detection of albumin, creatinine and urea in urine. Sensors and Actuators B: Chemical, 2019, 285, 108-115.	7.8	33
11	Dye-Assisted pH Sensing Using a Smartphone. IEEE Photonics Technology Letters, 2015, 27, 2363-2366.	2.5	32
12	Estimation of trace-mercury concentration in water using a smartphone. Measurement: Journal of the International Measurement Confederation, 2020, 154, 107507.	5.0	26
13	Surface Plasmon Resonance-Based Protein Bio-Sensing Using a Kretschmann Configured Double Prism Arrangement. IEEE Sensors Journal, 2015, 15, 6791-6796.	4.7	25
14	Design of a Smartphone Platform Compact Optical System Operational Both in Visible and Near Infrared Spectral Regime. IEEE Sensors Journal, 2018, 18, 4933-4939.	4.7	25
15	SERS on paper: an extremely low cost technique to measure Raman signal. Journal Physics D: Applied Physics, 2017, 50, 485601.	2.8	24
16	A naturally occurring diatom frustule as a SERS substrate for the detection and quantification of chemicals. Journal Physics D: Applied Physics, 2017, 50, 175103.	2.8	22
17	Turbidimetric analysis of growth kinetics of bacteria in the laboratory environment using smartphone. Journal of Biophotonics, 2020, 13, e201960159.	2.3	16
18	Wide-field multi-modal microscopic imaging using smartphone. Optics and Lasers in Engineering, 2021, 137, 106343.	3.8	14

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19	Detection and quantification of phosphate in water and soil using a smartphone. Microchemical Journal, 2022, 172, 106949.	4.5	14
20	Smartphone-based platform optical setup measuring Ï€/256 optical phase difference in an interference process. Applied Optics, 2015, 54, 5739.	2.1	13
21	Enhanced sensitive fiberâ€optic sensor with double pass evanescent field absorption. Microwave and Optical Technology Letters, 2009, 51, 3004-3006.	1.4	12
22	Periodically Varying Height in Metal Nano-pillars for Enhanced Generation of Localized Surface Plasmon Field. Plasmonics, 2015, 10, 1367-1372.	3.4	12
23	Carbon Nanodotâ€"Neutral Red-Based Photometric and Fluorescence Sensing for Trace Detection of Nitrite in Water and Soil Using Smartphone. ACS Applied Nano Materials, 2022, 5, 3265-3274.	5.0	11
24	All Fiber-Optic Sensor for Monitoring Pressure Fluctuations in ON/OFF State. IEEE Sensors Journal, 2013, 13, 1148-1152.	4.7	10
25	Fiber-Optic pH Sensor Based on SPR of Silver Nanostructured Film. , 2009, , .		8
26	Fiber-Optic Volumetric Sensor Based on Beer-Lambert Principle. IEEE Sensors Journal, 2013, 13, 3345-3346.	4.7	8
27	Diagonally Aligned Squared Metal Nano-pillar with Increased Hotspot Density as a Highly Reproducible SERS Substrate. Plasmonics, 2017, 12, 1353-1358.	3.4	7
28	Programmable illumination smartphone microscopy (PISM): A multimodal imaging platform for biomedical applications. Optics and Lasers in Engineering, 2022, 151, 106931.	3.8	7
29	An affordable, handheld multimodal microscopic system with onboard cell morphology and counting features on a mobile device. Analyst, The, 2022, 147, 2859-2869.	3.5	6
30	Fiber-optic liquid level sensor based on coupling optical path length variation. Review of Scientific Instruments, 2012, 83, 055006.	1.3	5
31	Smartphone-Based Spectrometric Analyzer for Accurate Estimation of pH Value in Soil. IEEE Sensors Journal, 2020, , 1-1.	4.7	5
32	Non-intrusive refractometer sensor. Pramana - Journal of Physics, 2010, 74, 661-668.	1.8	4
33	Dual Mode Smartphone Based Sensing for Accurate Estimation of Sulphate and Chloride in Water. IEEE Sensors Journal, 2021, 21, 19314-19321.	4.7	4
34	A smartphone-based photometric and fluorescence sensing for accurate estimation of zinc ion in water. Sensors and Actuators A: Physical, 2022, 341, 113586.	4.1	3
35	Lightwave splitting in two dimensional photonic crystal analogue of coupler. Optics Communications, 2008, 281, 4784-4787.	2.1	2
36	Single-mode fibre coupler as refractometer sensor. Pramana - Journal of Physics, 2012, 79, 1525-1532.	1.8	2

#	Article	IF	Citations
37	Design, fabrication and testing of 3D printed smartphone-based device for collection of intrinsic fluorescence from human cervix. Scientific Reports, 2022, 12, .	3.3	2
38	Cobalt chloride doped polymer film for relative humidity measurement. , 2007, , .		1
39	Blu-ray DVD as SERS substrate for reliable detection and quantification of urea. , 2018, , .		1
40	Smartphone Based Platform for Colorimetric Sensing of Dyes. Springer Proceedings in Physics, 2015, , 541-546.	0.2	0
41	A fully automated colorimetric sensing device using smartphone for biomolecular quantification. , 2017, , .		0
42	Accurate estimation of mercury level concentration in water using smartphone. , 2018, , .		0