## Bhat Lakshmishri Ramachandra

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3186517/publications.pdf

Version: 2024-02-01

106 papers 4,442 citations

33 h-index 63 g-index

108 all docs

108 docs citations

108 times ranked 5079 citing authors

#	Article	IF	CITATIONS
1	Design and Development of a Nonâ€Enzymatic Electrochemical Biosensor for the Detection of Glutathione. Electroanalysis, 2023, 35, .	2.9	3
2	Development of an Electrodeposited Graphene Quantum Dot Electrode for the Electrochemical Detection of Câ€Reactive Protein (CRP) Biomarker. ChemistrySelect, 2022, 7, .	1.5	4
3	Genetic and chaotic signatures in offspring – an encrypted generation of image family. Multimedia Tools and Applications, 2021, 80, 8581-8609.	3.9	1
4	Room-temperature acetaldehyde-sensing properties of SILAR-deposited ZnO thin films: role of tungsten doping. Journal of Materials Science: Materials in Electronics, 2021, 32, 17700-17715.	2.2	3
5	Electrochemical Probing of H2O2 Using TiO2-ZrO2-HfO2 Modified Glassy Carbon Electrode: A Promoted Sacrificial Behavior of Hf4+ ions. Water, Air, and Soil Pollution, 2021, 232, 1.	2.4	2
6	Fabrication of GQD-Electrodeposited Screen-Printed Carbon Electrodes for the Detection of the CRP Biomarker. ACS Omega, 2021, 6, 32528-32536.	3.5	14
7	Investigations on room temperature dual sensitization of ZnO nanostructures towards fish quality biomarkers. Sensors and Actuators B: Chemical, 2020, 304, 127082.	7.8	23
8	Room-temperature gas sensing of laser-modified anatase TiO2 decorated with Au nanoparticles. Applied Surface Science, 2020, 507, 145169.	6.1	72
9	S,Nâ€GQDs Enzyme Mimicked Electrochemical Sensor to Detect the Hazardous Level of Monocrotophos in Water. Electroanalysis, 2020, 32, 971-977.	2.9	8
10	Fabrication of a Nanoâ€Interfaced Electrochemical Triglyceride Biosensor and its Potential Application towards Distinguishing Cancer and Normal Cells. ChemistrySelect, 2020, 5, 13492-13501.	1.5	1
11	Growth of α-MoO3 Golf Ball Architectures with Interlocking Loops for Selective Probing of Trimethylamine at Room Temperature. Materials Research Bulletin, 2020, 130, 110944.	5.2	12
12	Influence of calcination temperature on the growth of electrospun multi-junction ZnO nanowires: A room temperature ammonia sensor. Materials Science in Semiconductor Processing, 2020, 112, 105006.	4.0	25
13	Room temperature chemiresistive gas sensors: challenges and strategies—a mini review. Journal of Materials Science: Materials in Electronics, 2019, 30, 15825-15847.	2.2	73
14	A facile microwave synthesis of rGO, ZrO2 and rGO–ZrO2 nanocomposite and their room temperature gas sensing properties. Journal of Materials Science: Materials in Electronics, 2019, 30, 17094-17105.	2.2	12
15	Indicator-based lightweight steganography on 32-bit RISC architectures for IoT security. Multimedia Tools and Applications, 2019, 78, 31485-31513.	3.9	6
16	Methylglyoxal – An emerging biomarker for diabetes mellitus diagnosis and its detection methods. Biosensors and Bioelectronics, 2019, 133, 107-124.	10.1	56
17	Development of an acetone sensor using nanostructured Co <sub>3</sub> O <sub>4</sub> thin films for exhaled breath analysis. RSC Advances, 2019, 9, 30226-30239.	3.6	47
18	Encrypted Biography of Biomedical Image - a Pentalayer Cryptosystem on FPGA. Journal of Signal Processing Systems, 2019, 91, 475-501.	2.1	27

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#	Article	IF	Citations
19	Chemically synthesized butein and butin: Optical, structure and electrochemical redox functionality at electrode interface. Journal of Photochemistry and Photobiology B: Biology, 2018, 182, 122-129.	3.8	12
20	Networked hardware assisted key image and chaotic attractors for secure RGB image communication. Multimedia Tools and Applications, 2018, 77, 23449-23482.	3.9	26
21	Wavelet based spectral approach for solving surface coverage model in an electrochemical arsenic sensor - An operational matrix approach. Electrochimica Acta, 2018, 266, 27-33.	5.2	5
22	A non-enzymatic two step catalytic reduction of methylglyoxal by nanostructured V $2~\rm O~5$ modified electrode. Biosensors and Bioelectronics, 2018, 103, 143-150.	10.1	18
23	A non-linear analytical model to estimate the response and recovery times of gaseous ammonia nanosensor. Measurement: Journal of the International Measurement Confederation, 2018, 125, 176-181.	5.0	2
24	Fabrication of Electrochemical Biosensor with ZnO-PVA Nanocomposite Interface for the Detection of Hydrogen Peroxide. Journal of Nanoscience and Nanotechnology, 2018, 18, 4371-4379.	0.9	11
25	Transreceiving of encrypted medical image – a cognitive approach. Multimedia Tools and Applications, 2018, 77, 8393-8418.	3.9	25
26	V2O5 nanofibers: Potential contestant for high performance xylene sensor. Journal of Alloys and Compounds, 2018, 731, 805-812.	5.5	29
27	Fabrication of an electrochemical biosensor with ZnO nanoflakes interface for methylglyoxal quantification in food samples. Food Science and Biotechnology, 2018, 27, 9-17.	2.6	8
28	Growth of Eshelby twisted ZnO nanowires through nanoflakes & amp; nanoflowers: A room temperature ammonia sensor. Sensors and Actuators B: Chemical, 2018, 277, 129-143.	7.8	57
29	Significance of Nanoparticles and the Role of Amino Acids in Structuring Them—A Review. Journal of Nanoscience and Nanotechnology, 2018, 18, 5222-5233.	0.9	14
30	Fluorine doped ZnO thin film as acetaldehyde sensor. Semiconductor Science and Technology, 2018, 33, 095005.	2.0	25
31	PANI–CdO Nanocomposite Thin Films as a Room Temperature Methanol Sensor. Journal of Electronic Materials, 2018, 47, 6000-6006.	2.2	11
32	Chaos triggered image encryption - a reconfigurable security solution. Multimedia Tools and Applications, 2018, 77, 11669-11692.	3.9	22
33	Zinc oxide nanoparticles-based electrochemical sensor for the detection of nitrate ions in water with a low detection limit—a chemometric approach. Journal of Analytical Chemistry, 2017, 72, 316-326.	0.9	17
34	Fabrication of electrochemical biosensor with vanadium pentoxide nano-interface for the detection of methylglyoxal in rice. Analytical Biochemistry, 2017, 528, 19-25.	2.4	11
35	Design and development of amperometric biosensor for the detection of lead and mercury ions in water matrix—a permeability approach. Analytical and Bioanalytical Chemistry, 2017, 409, 4257-4266.	3.7	26
36	Simultaneous voltammetric determination of captan, carbosulfan, 2,3,7,8-tetrachlorodibenzodioxin and pentachlorophenol in groundwater by ceria nanospheres decorated platinum electrode and chemometrics. Measurement: Journal of the International Measurement Confederation, 2017, 109, 130-136.	5.0	6

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37	Fabrication of PANI–ZnO nanocomposite thin film for room temperature methanol sensor. Journal of Materials Science: Materials in Electronics, 2017, 28, 10799-10805.	2.2	23
38	Design and Development of Acetylthiocholine Electrochemical Biosensor Based on Zinc Oxide–Cerium Oxide Nanohybrid Modified Platinum Electrode. Bulletin of Environmental Contamination and Toxicology, 2017, 98, 662-671.	2.7	5
39	Monomer: Design of ZnO Nanostructures (Nanobush and Nanowire) and Their Room-Temperature Ethanol Vapor Sensing Signatures. ACS Applied Materials & Samp; Interfaces, 2017, 9, 38135-38145.	8.0	56
40	Tamper Proofing Identification and Authenticated DICOM Image Transmission Using Wireless Channels and CR Network. Wireless Personal Communications, 2017, 97, 5573-5595.	2.7	5
41	Room temperature ethanol sensing properties of ZnO nanorods prepared using an electrospinning technique. Journal of Materials Chemistry C, 2017, 5, 10869-10880.	5.5	62
42	Non-enzymatic detection of glucose in fruits using TiO2–Mn3O4 hybrid nano interface. Applied Nanoscience (Switzerland), 2017, 7, 309-316.	3.1	8
43	Implementation of extended Kalman filter-based simultaneous localization and mapping: a point feature approach. Sadhana - Academy Proceedings in Engineering Sciences, 2017, 42, 1495-1504.	1.3	4
44	A low power ammonia sensor node embedded with a light weight non-linear analytics. Sensors and Actuators A: Physical, 2017, 263, 357-362.	4.1	6
45	Simultaneous electrochemical detection of Cd(II), Pb(II), As(III) and Hg(II) ions using ruthenium(II)-textured graphene oxide nanocomposite. Talanta, 2017, 162, 574-582.	5.5	107
46	Fusion of confusion and diffusion: a novel image encryption approach. Telecommunication Systems, 2017, 65, 65-78.	2.5	22
47	Design and development of electrochemical biosensor for the simultaneous detection of melamine and urea in adulterated milk samples. Sensors and Actuators B: Chemical, 2017, 238, 1283-1292.	7.8	69
48	Fabrication of mediator-free hybrid nano-interfaced electrochemical biosensor for monitoring cancer cell proliferation. Biosensors and Bioelectronics, 2017, 87, 832-841.	10.1	32
49	Room temperature ammonia sensing properties of ZnO thin films grown by spray pyrolysis: Effect of Mg doping. Journal of Alloys and Compounds, 2016, 688, 422-429.	5.5	85
50	Electrocatalytic nanocauliflower structured fluorine doped CdO thin film as a potential arsenic sensor. Sensors and Actuators B: Chemical, 2016, 234, 426-434.	7.8	30
51	Calcium carbide in mangoes: an electrochemical way for detection. Analytical Methods, 2016, 8, 4590-4599.	2.7	11
52	Nanostructured Cerium-doped ZnO thin film – A breath sensor. Ceramics International, 2016, 42, 18289-18295.	4.8	57
53	Racetrack Effect on the Dissimilar Sensing Response of ZnO Thin Film—An Anisotropy of Isotropy. ACS Applied Materials & Samp; Interfaces, 2016, 8, 24924-24932.	8.0	36
54	Zinc oxide surface: a versatile nanoplatform for solvent-free synthesis of diverse isatin derivatives. Tetrahedron Letters, 2016, 57, 3472-3475.	1.4	23

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55	Multiplexed stego path on reconfigurable hardware: A novel random approach. Computers and Electrical Engineering, 2016, 55, 153-163.	4.8	7
56	Chaos based crossover and mutation for securing DICOM image. Computers in Biology and Medicine, 2016, 72, 170-184.	7.0	171
57	Estimation of methylglyoxal in cow milk – an accurate electrochemical response time based approach. Analytical Methods, 2016, 8, 2207-2217.	2.7	11
58	Simultaneous detection of monocrotophos and dichlorvos in orange samples using acetylcholinesterase–zinc oxide modified platinum electrode with linear regression calibration. Sensors and Actuators B: Chemical, 2016, 230, 306-313.	7.8	29
59	Substrate Temperature Effects on Room Temperature Sensing Properties of Nanostructured ZnO Thin Films. Journal of Nanoscience and Nanotechnology, 2016, 16, 489-496.	0.9	6
60	Electrochemical acetylcholinesterase biosensor based on ZnO nanocuboids modified platinum electrode for the detection of carbosulfan in rice. Biosensors and Bioelectronics, 2016, 77, 1070-1077.	10.1	73
61	Evaluation of Inhibition Efficiency for the Detection of Captan, 2,3,7,8-Tetrachlorodibenzodioxin, Pentachlorophenol and Carbosulfan in Water: An Electrochemical Approach. Bulletin of Environmental Contamination and Toxicology, 2016, 96, 217-223.	2.7	8
62	ZnO nanoarchitectures: Ultrahigh sensitive room temperature acetaldehyde sensor. Sensors and Actuators B: Chemical, 2016, 223, 343-351.	7.8	78
63	Nano interfaced biosensor for detection of choline in triple negative breast cancer cells. Journal of Colloid and Interface Science, 2016, 462, 334-340.	9.4	34
64	Tuning selectivity through cobalt doping in spray pyrolysis deposited ZnO thin films. Ceramics International, 2016, 42, 1408-1415.	4.8	33
65	Cyclic voltammetric acetylcholinesterase biosensor for the detection of captan in apple samples with the aid of chemometrics. Analytical and Bioanalytical Chemistry, 2015, 407, 4863-4868.	3.7	16
66	Facile synthesis of ZnO nanostructures by spray pyrolysis technique and its application as highly selective H2S sensor. Materials Letters, 2015, 158, 373-376.	2.6	47
67	Selective recognition of hydrogen sulfide using template and catalyst free grown ZnO nanorods. RSC Advances, 2015, 5, 54952-54962.	3.6	29
68	Triple chaotic image scrambling on RGB $\hat{a} \in \text{``a random image encryption approach. Security and Communication Networks, 2015, 8, 3335-3345.}$	1.5	37
69	Highly selective acetaldehyde sensor using sol–gel dip coated nano crystalline TiO2 thin film. Journal of Materials Science: Materials in Electronics, 2015, 26, 5135-5139.	2.2	18
70	Medical data sheet in safe havens – A tri-layer cryptic solution. Computers in Biology and Medicine, 2015, 62, 264-276.	7.0	53
71	A review on detection of heavy metal ions in water – An electrochemical approach. Sensors and Actuators B: Chemical, 2015, 213, 515-533.	7.8	785
72	Electrospun tailored ZnO nanostructures – role of chloride ions. RSC Advances, 2015, 5, 85363-85372.	3.6	21

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73	Investigation of Electron Transfer Properties of Nanoceria Based Acetylcholine Biosensor Using Chemometric Methods. Journal of Computational and Theoretical Nanoscience, 2015, 12, 1652-1660.	0.4	1
74	A highly selective and wide range ammonia sensorâ€"Nanostructured ZnO:Co thin film. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 191, 41-50.	3.5	138
75	Thickness Dependent Room Temperature Sensing Properties of Spray Pyrolysis Deposited Nanostructured ZnO Thin Films. Nanoscience and Nanotechnology Letters, 2015, 7, 885-891.	0.4	8
76	Chemometric Analysis for the Determination of Methylglyoxal in Grilled Chicken Using ZnO Flakes Based Glyoxalase 1 Biosensor. Sensor Letters, 2015, 13, 245-253.	0.4	9
77	Theoretical Investigation of Surface Coverage in the Electrochemical Behaviour of Enzyme Modified Electrodes. Sensor Letters, 2015, 13, 344-348.	0.4	6
78	Optimization of Electrochemical Parameters for Specific Blood Methylglyoxal Determination Using ZnO Sepals Based Glyoxalase 1 Biosensor. Sensor Letters, 2015, 13, 328-337.	0.4	7
79	Modulation of ZnO film thickness and formation of water-hyacinth nanostructure. EPJ Applied Physics, 2014, 67, 20301.	0.7	4
80	Stego on FPGA: An IWT Approach. Scientific World Journal, The, 2014, 2014, 1-9.	2.1	15
81	Electrochemical enzymeless detection of superoxide employing naringin–copper decorated electrodes. Biosensors and Bioelectronics, 2014, 59, 134-139.	10.1	25
82	Electrochemical biosensor with ceria–polyaniline core shell nano-interface for the detection of carbonic acid in blood. Journal of Colloid and Interface Science, 2014, 425, 52-58.	9.4	31
83	Development of electrochemical biosensor with ceria–PANI core–shell nano-interface for the detection of histamine. Sensors and Actuators B: Chemical, 2014, 199, 330-338.	7.8	84
84	Impact of annealing duration on spray pyrolysis deposited nanostructured zinc oxide thin films. Superlattices and Microstructures, 2014, 67, 82-87.	3.1	23
85	Novel and facile synthesis of randomly interconnected ZnO nanoplatelets using spray pyrolysis and their room temperature sensing characteristics. Sensors and Actuators B: Chemical, 2014, 198, 125-133.	7.8	103
86	Influence of copper doping on structural, optical and sensing properties of spray deposited zinc oxide thin films. Journal of Alloys and Compounds, 2014, 582, 414-419.	5.5	78
87	Effect of nickel doping on structural, optical, electrical and ethanol sensing properties of spray deposited nanostructured ZnO thin films. Ceramics International, 2014, 40, 7993-8001.	4.8	49
88	A simple and template free synthesis of branched ZnO nanoarchitectures for sensor applications. RSC Advances, 2014, 4, 64075-64084.	3.6	32
89	Solvent volume driven ZnO nanopetals thin films: Spray pyrolysis. Materials Letters, 2014, 134, 47-50.	2.6	27
90	CO2 gas sensing properties of DC reactive magnetron sputtered ZnO thin film. Ceramics International, 2014, 40, 13115-13122.	4.8	92

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91	An electrochemical biosensor with nanointerface for lactate detection based on lactate dehydrogenase immobilized on zinc oxide nanorods. Journal of Colloid and Interface Science, 2014, 414, 90-96.	9.4	51
92	Selective detection of ammonia using spray pyrolysis deposited pure and nickel doped ZnO thin films. Applied Surface Science, 2014, 311, 405-412.	6.1	116
93	ZnO Nanospheres to Nanorods – Morphology Transition via Fe-doping. Superlattices and Microstructures, 2013, 62, 39-46.	3.1	18
94	Fabrication of lactate biosensor based on lactate dehydrogenase immobilized on cerium oxide nanoparticles. Journal of Colloid and Interface Science, 2013, 410, 158-164.	9.4	83
95	A highly selective room temperature ammonia sensor using spray deposited zinc oxide thin film. Sensors and Actuators B: Chemical, 2013, 183, 459-466.	7.8	223
96	Lipase immobilized on nanostructured cerium oxide thin film coated on transparent conducting oxide electrode for butyrin sensing. Materials Chemistry and Physics, 2013, 137, 892-897.	4.0	20
97	Modulation of hiding intensity by channel intensity - Stego by pixel commando. , 2012, , .		7
98	Who decides hiding capacity? I, the pixel intensity. , 2012, , .		10
99	An intelligent chaotic embedding approach to enhance stego-image quality. Information Sciences, 2012, 193, 115-124.	6.9	121
100	Structural, morphological, electrical and vapour sensing properties of Mn doped nanostructured ZnO thin films. Sensors and Actuators B: Chemical, 2012, 166-167, 624-631.	7.8	78
101	Synthesis and Characterization of Cerium Oxide Nanoparticles by Hydroxide Mediated Approach. Journal of Applied Sciences, 2012, 12, 1734-1737.	0.3	96
102	Smart bit manipulation for K bit encoded hiding in K-1 pixel bits. , 2011, , .		2
103	Wave (let) decide choosy pixel embedding for stego. , 2011, , .		20
104	Steg-OFDM blend for highly secure multi-user communication. , 2011, , .		20
105	Covered CDMA multi-user writing on spatially divided image. , 2011, , .		16
106	ETHANOL AND TRIMETHYL AMINE SENSING BYZnO-BASED NANOSTRUCTURED THIN FILMS. International Journal of Nanoscience, 2011, 10, 1161-1165.	0.7	10