

# Bal Chandra Yadav

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1336429/publications.pdf>

Version: 2024-02-01

210  
papers

5,445  
citations

81743

39  
h-index

143772

57  
g-index

210  
all docs

210  
docs citations

210  
times ranked

4000  
citing authors

#	ARTICLE	IF	CITATIONS
1	Opto-electronic humidity sensor: A review. <i>Sensors and Actuators A: Physical</i> , 2015, 233, 54-70.	2.0	188
2	Synthesis and characterization of perovskite barium titanate thin film and its application as LPG sensor. <i>Sensors and Actuators B: Chemical</i> , 2017, 241, 1170-1178.	4.0	139
3	Synthesis of ZnO nanopetals and its application as NO <sub>2</sub> gas sensor. <i>Materials Letters</i> , 2015, 152, 189-191.	1.3	118
4	Nano-like magnesium oxide films and its significance in optical fiber humidity sensor. <i>Sensors and Actuators B: Chemical</i> , 2004, 98, 5-11.	4.0	108
5	The recent development of metal oxide heterostructures based gas sensor, their future opportunities and challenges: A review. <i>Sensors and Actuators A: Physical</i> , 2021, 332, 113127.	2.0	104
6	Fabrication and characterization of ZnO-TiO <sub>2</sub> -PANI (ZTP) micro/nanoballs for the detection of flammable and toxic gases. <i>Journal of Hazardous Materials</i> , 2019, 370, 126-137.	6.5	96
7	Ferrite Materials: Introduction, Synthesis Techniques, and Applications as Sensors. <i>International Journal of Green Nanotechnology</i> , 2012, 4, 141-154.	0.3	90
8	Synthesis, characterization and performance of zinc ferrite nanorods for room temperature sensing applications. <i>Journal of Alloys and Compounds</i> , 2015, 618, 475-483.	2.8	90
9	Moisture sensor based on ZnO nanomaterial synthesized through oxalate route. <i>Sensors and Actuators B: Chemical</i> , 2008, 131, 216-222.	4.0	87
10	Synthesis of nanorods and mixed shaped copper ferrite and their applications as liquefied petroleum gas sensor. <i>Applied Surface Science</i> , 2011, 257, 10763-10770.	3.1	78
11	Synthesis of CdS nanoparticle by sol-gel method as low temperature NO <sub>2</sub> sensor. <i>Materials Chemistry and Physics</i> , 2020, 239, 121975.	2.0	78
12	Investigation on effects of surface morphologies on response of LPG sensor based on nanostructured copper ferrite system. <i>Materials Research Bulletin</i> , 2012, 47, 3538-3547.	2.7	76
13	Experimental investigations on NO <sub>2</sub> sensing of pure ZnO and PANI/ZnO composite thin films. <i>RSC Advances</i> , 2016, 6, 56149-56158.	1.7	75
14	Nanonails structured ferric oxide thick film as room temperature liquefied petroleum gas (LPG) sensor. <i>Applied Surface Science</i> , 2011, 257, 1960-1966.	3.1	70
15	VO <sub>2</sub> nanorods for efficient performance in thermal fluids and sensors. <i>Nanoscale</i> , 2015, 7, 6159-6172.	2.8	70
16	Fabrication of nanobeads structured perovskite type neodymium iron oxide film: Its structural, optical, electrical and LPG sensing investigations. <i>Sensors and Actuators B: Chemical</i> , 2013, 177, 730-739.	4.0	68
17	Microstructural, optical and electrical investigations of Sb-SnO <sub>2</sub> thin films deposited by spray pyrolysis. <i>Materials Research Bulletin</i> , 2013, 48, 3315-3322.	2.7	63
18	Nanocrystalline zinc titanate synthesized via physicochemical route and its application as liquefied petroleum gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2013, 177, 605-611.	4.0	62

#	ARTICLE	IF	CITATIONS
19	TiO <sub>2</sub> @PANI nanocomposite thin film prepared by spin coating technique working as room temperature CO <sub>2</sub> gas sensing. Journal of Materials Science: Materials in Electronics, 2016, 27, 11726-11732.	1.1	61
20	Carbon Nanotube: Synthesis and Application in Solar Cell. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 1231-1242.	1.9	57
21	Self-healing and shape memory metallopolymers: state-of-the-art and future perspectives. Dalton Transactions, 2020, 49, 3042-3087.	1.6	54
22	Detection of liquefied petroleum gas below lowest explosion limit (LEL) using nanostructured hexagonal strontium ferrite thin film. Sensors and Actuators B: Chemical, 2017, 249, 96-104.	4.0	53
23	Optical humidity sensors based on titania films fabricated by sol-gel and thermal evaporation methods. Measurement Science and Technology, 2007, 18, 260-264.	1.4	51
24	Development of Fe <sub>2</sub> O <sub>3</sub> @PANI nanocomposite thin film based sensor for NO <sub>2</sub> detection. Journal of the Taiwan Institute of Chemical Engineers, 2017, 77, 276-281.	2.7	51
25	Facile synthesis of molybdenum disulfide (MoS <sub>2</sub> ) quantum dots and its application in humidity sensing. Nanotechnology, 2019, 30, 295501.	1.3	51
26	Fabrication of nanostructured yttria stabilized zirconia multilayered films and their optical humidity sensing capabilities based on transmission. Sensors and Actuators B: Chemical, 2016, 232, 283-291.	4.0	50
27	MWCNT Doped ZnO Nanocomposite Thin Film as LPG Sensing. Journal of Inorganic and Organometallic Polymers and Materials, 2016, 26, 1434-1440.	1.9	50
28	Assessment of Indian bioenergy policy for sustainable environment and its impact for rural India: Strategic implementation and challenges. Environmental Technology and Innovation, 2020, 20, 101078.	3.0	48
29	Synthesis and characterization of ZnO@TiO <sub>2</sub> nanocomposite and its application as a humidity sensor. Philosophical Magazine, 2008, 88, 1113-1124.	0.7	47
30	Synthesis, characterization, magnetic properties and gas sensing applications of Zn <sub>x</sub> Cu <sub>1-x</sub> Fe <sub>2</sub> O <sub>4</sub> (0.0 ≤ x ≤ 0.8) nanocomposites. Materials Science in Semiconductor Processing, 2014, 27, 934-949.	1.9	47
31	Detection of acetone via exhaling human breath for regular monitoring of diabetes by low-cost sensing device based on perovskite BaSnO <sub>3</sub> nanorods. Sensors and Actuators B: Chemical, 2022, 361, 131708.	4.0	47
32	Synthesis and characterization of CuO@SnO <sub>2</sub> nanocomposite and its application as liquefied petroleum gas sensor. Materials Science in Semiconductor Processing, 2014, 18, 88-96.	1.9	46
33	Development of humidity sensor using modified curved MWCNT based thin film with DFT calculations. Sensors and Actuators B: Chemical, 2019, 288, 399-407.	4.0	46
34	Green synthesis of iron nanoparticle from extract of waste tea: An application for phenol red removal from aqueous solution. Environmental Nanotechnology, Monitoring and Management, 2018, 10, 377-387.	1.7	45
35	Synthesis of carbon nanotubes by direct liquid injection chemical vapor deposition method and its relevance for developing an ultra-sensitive room temperature based CO <sub>2</sub> sensor. Journal of the Taiwan Institute of Chemical Engineers, 2019, 96, 652-663.	2.7	45
36	Fabrication of self-assembled hierarchical flowerlike zinc stannate thin film and its application as liquefied petroleum gas sensor. Sensors and Actuators B: Chemical, 2014, 205, 102-110.	4.0	44

#	ARTICLE	IF	CITATIONS
37	Fabrication of tin substituted nickel ferrite (Sn-NiFe <sub>2</sub> O <sub>4</sub> ) thin film and its application as opto-electronic humidity sensor. <i>Sensors and Actuators A: Physical</i> , 2018, 272, 267-273.	2.0	44
38	Synthesis and porous h-BN 3D architectures for effective humidity and gas sensors. <i>RSC Advances</i> , 2016, 6, 87888-87896.	1.7	43
39	Embedded fibre optic microbend sensor for measurement of high pressure and crack detection. <i>Sensors and Actuators A: Physical</i> , 2006, 128, 33-36.	2.0	42
40	Nanostructured ZnFe <sub>2</sub> O <sub>4</sub> thick film as room temperature liquefied petroleum gas sensor. <i>Journal of Experimental Nanoscience</i> , 2015, 10, 703-717.	1.3	42
41	Design and fabrication of quick responsive and highly sensitive LPG sensor using ZnO/SnO <sub>2</sub> heterostructured film. <i>Materials Research Express</i> , 2021, 8, 045013.	0.8	40
42	Nanostructured cobalt oxide and cobalt titanate thin films as optical humidity sensor: A new approach. <i>Optics and Laser Technology</i> , 2013, 49, 68-74.	2.2	39
43	Study of humidity sensing properties and ion beam induced modifications in SnO <sub>2</sub> -TiO <sub>2</sub> nanocomposite thin films. <i>Surface and Coatings Technology</i> , 2020, 392, 125768.	2.2	39
44	Evaluation of structural, dielectric and electrical humidity sensor behaviour of MgFe <sub>2</sub> O <sub>4</sub> ferrite nanoparticles. <i>Ceramics International</i> , 2021, 47, 15995-16008.	2.3	39
45	Synthesis, characterization, magnetic measurements and liquefied petroleum gas sensing properties of nanostructured cobalt ferrite and ferric oxide. <i>Materials Science in Semiconductor Processing</i> , 2014, 23, 122-135.	1.9	38
46	Fabrication of Polyaniline (PANI)-Tungsten oxide (WO <sub>3</sub> ) Composite for Humidity Sensing Application. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2016, 26, 1421-1427.	1.9	37
47	Humidity sensing investigation on nanostructured polyaniline synthesized via chemical polymerization method. <i>Materials Letters</i> , 2016, 167, 300-302.	1.3	37
48	Growth and characterization of sol-gel processed rectangular shaped nanostructured ferric oxide thin film followed by humidity and gas sensing. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 5270-5280.	1.1	37
49	Synthesis and Characterization of Nanostructured Copper Zinc Tin Sulphide (CZTS) for Humidity Sensing Applications. <i>IEEE Sensors Journal</i> , 2019, 19, 2837-2846.	2.4	37
50	Polymer chemistry underpinning materials for triboelectric nanogenerators (TEGs): Recent trends. <i>European Polymer Journal</i> , 2021, 142, 110163.	2.6	37
51	Sol-gel processed (Mg-Zn-Ti) oxide nanocomposite film deposited on prism base as an opto-electronic humidity sensor. <i>Sensors and Actuators B: Chemical</i> , 2010, 148, 413-419.	4.0	36
52	Self-assembled carbon nitride/cobalt (III) porphyrin photocatalyst for mimicking natural photosynthesis. <i>Diamond and Related Materials</i> , 2020, 101, 107648.	1.8	36
53	Fabrication and characterization of nanostructured indium tin oxide film and its application as humidity and gas sensors. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 4172-4179.	1.1	35
54	Spherical growth of nanostructures ZnO based optical sensing and photovoltaic application. <i>Optical Materials</i> , 2018, 83, 342-347.	1.7	35

#	ARTICLE	IF	CITATIONS
55	Development of WO <sub>3</sub> -PEDOT: PSS hybrid nanocomposites based devices for liquefied petroleum gas (LPG) sensor. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 13593-13603.	1.1	35
56	Low temperature study of nanostructured Fe <sub>2</sub> O <sub>3</sub> thin films as NO <sub>2</sub> sensor. <i>Materials Today: Proceedings</i> , 2016, 3, 2315-2320.	0.9	34
57	Review on pressure sensors for structural health monitoring. <i>Photonic Sensors</i> , 2017, 7, 294-304.	2.5	34
58	ZnS Nanosheets in a Polyaniline Matrix as Metallopolymer Nanohybrids for Flexible and Biofriendly Photodetectors. <i>ACS Applied Nano Materials</i> , 2022, 5, 4860-4874.	2.4	34
59	Development of nanostructured nickel reinforced polyacrylamide via frontal polymerization for a reliable room temperature humidity sensor. <i>European Polymer Journal</i> , 2019, 112, 161-169.	2.6	33
60	Transient photodetection studies on 2D ZnO nanostructures prepared by simple organic-solvent assisted route. <i>Sensors and Actuators A: Physical</i> , 2021, 321, 112600.	2.0	33
61	2-D self-healable polyaniline-polypyrrole nanoflakes based triboelectric nanogenerator for self-powered solar light photo detector with DFT study. <i>Journal of Colloid and Interface Science</i> , 2021, 600, 572-585.	5.0	33
62	Solid-state titania-based gas sensor for liquefied petroleum gas detection at room temperature. <i>Bulletin of Materials Science</i> , 2011, 34, 1639-1644.	0.8	32
63	The functionalization of polyacrylamide with MoS <sub>2</sub> nanoflakes for use in transient photodetectors. <i>Sustainable Energy and Fuels</i> , 2021, 5, 1394-1405.	2.5	32
64	Development of 2D based ZnO-MoS <sub>2</sub> nanocomposite for photodetector with light-induced current study. <i>Optical Materials</i> , 2022, 123, 111860.	1.7	31
65	Preparation and Properties of Nanostructured PANI Thin Film and Its Application as Low Temperature NO <sub>2</sub> Sensor. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2016, 26, 1428-1433.	1.9	30
66	Synthesis and characterization of copper (II) nitrate polyacrylamide & its application as opto-electronic humidity sensor. <i>Sensors and Actuators A: Physical</i> , 2017, 263, 415-422.	2.0	30
67	Synthesis and characterization of highly porous hexagonal shaped CeO <sub>2</sub> -Gd <sub>2</sub> O <sub>3</sub> -CoO nanocomposite and its opto-electronic humidity sensing. <i>Applied Surface Science</i> , 2019, 479, 326-333.	3.1	30
68	Design and development of flexible humidity sensor for baby diaper alarm: Experimental and theoretical study. <i>Sensors and Actuators B: Chemical</i> , 2022, 350, 130818.	4.0	30
69	Synthesis, Characterization of Nickel Ferrite and Its Uses as Humidity and LPG Sensors. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2016, 26, 1404-1412.	1.9	29
70	The beauty inhabited inside the modified Graphene for moisture detection at different frequencies. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 10836-10845.	1.1	29
71	Eosin-Y and sulfur-codoped g-C <sub>3</sub> N <sub>4</sub> composite for photocatalytic applications: the regeneration of NADH/NADPH and the oxidation of sulfide to sulfoxide. <i>Catalysis Science and Technology</i> , 2021, 11, 6401-6410.	2.1	29
72	Synthesis of nano-sized ZnO using drop wise method and its performance as moisture sensor. <i>Sensors and Actuators A: Physical</i> , 2009, 153, 137-141.	2.0	28

#	ARTICLE	IF	CITATIONS
73	Fabrication of iron titanium oxide thin film and its application as opto-electronic humidity and liquefied petroleum gas sensors. <i>Optics and Laser Technology</i> , 2014, 57, 181-188.	2.2	28
74	LPG Sensing of Nanostructured Zinc Oxide and Zinc Niobate. <i>Sensor Letters</i> , 2008, 6, 714-718.	0.4	28
75	Experimental Investigations on Solid State Conductivity of Cobaltzincate Nanocomposite for Liquefied Petroleum Gas Sensing. <i>Sensor Letters</i> , 2009, 7, 1119-1123.	0.4	27
76	Nanocrystalline SnO <sub>2</sub> •TiO <sub>2</sub> thin film deposited on base of equilateral prism as an opto-electronic humidity sensor. <i>Optics and Laser Technology</i> , 2012, 44, 1681-1688.	2.2	27
77	Synthesis of MWCNT/PPY nanocomposite using oxidation polymerization method and its employment in sensing such as CO <sub>2</sub> and humidity. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2020, 113, 419-427.	2.7	27
78	Development of MoO <sub>3</sub> -CdO nanoparticles based sensing device for the detection of harmful acetone levels in our skin and body via nail paint remover. <i>Sensors and Actuators B: Chemical</i> , 2022, 368, 132102.	4.0	27
79	Fabrication of Cu/Pd bimetallic nanostructures with high gas sorption ability towards development of LPG sensor. <i>Materials Chemistry and Physics</i> , 2015, 154, 16-21.	2.0	26
80	State of the Art Metallopolymer Based Functional Nanomaterial for Photodetector and Solar Cell Application. <i>Journal of Inorganic and Organometallic Polymers and Materials</i> , 2022, 32, 2807-2826.	1.9	26
81	A comparative study on surface morphological investigations of ferric oxide for LPG and opto-electronic humidity sensors. <i>Applied Surface Science</i> , 2012, 258, 8780-8789.	3.1	25
82	Growth mechanism of hexagonal ZnO nanocrystals and their sensing application. <i>Materials Letters</i> , 2015, 160, 581-584.	1.3	25
83	Ultrafast responsive humidity sensor based on roasted gram derived carbon quantum dots: Experimental and theoretical study. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129116.	4.0	25
84	Fabrication of lithium substituted copper ferrite (Li-CuFe <sub>2</sub> O <sub>4</sub> ) thin film as an efficient gas sensor at room temperature. <i>Journal of Science: Advanced Materials and Devices</i> , 2018, 3, 145-150.	1.5	24
85	Improved sensing behaviour of self-healable solar light photodetector based on core-shell type Ni <sub>0.2</sub> Zn <sub>0.8</sub> Fe <sub>2</sub> O <sub>4</sub> @ poly (Urea-Formaldehyde). <i>Solar Energy</i> , 2019, 188, 278-290.	2.9	23
86	Fabrication of leaf shaped SnO <sub>2</sub> nanoparticles via sol-gel route and its application for the optoelectronic humidity sensor. <i>Materials Letters</i> , 2020, 278, 128451.	1.3	23
87	Healable, highly sensitive LPG sensor based on Ni <sub>0.4</sub> Zn <sub>0.6</sub> Fe <sub>2</sub> O <sub>4</sub> nanohybrid grown by autocombustion process. <i>Sensors and Actuators B: Chemical</i> , 2021, 327, 128840.	4.0	23
88	Low Temperature Operated NO <sub>2</sub> Gas Sensor Based on SnO <sub>2</sub> •ZnO Nanocomposite Thin Film. <i>Advanced Science Letters</i> , 2014, 20, 911-916.	0.2	23
89	Morphological and Humidity Sensing Investigations on Niobium, Neodymium, and Lanthanum Oxides. <i>IEEE Sensors Journal</i> , 2010, 10, 1759-1766.	2.4	22
90	Polymer-matrix nanocomposite gas-sensing materials. <i>Inorganic Materials</i> , 2014, 50, 296-305.	0.2	22

#	ARTICLE	IF	CITATIONS
91	Synthesis and characterizations of exohedral functionalized graphene oxide with iron nanoparticles for humidity detection. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 13013-13023.	1.1	22
92	Chemical Route Deposited SnO <sub>2</sub> , SnO <sub>2</sub> -Pt and SnO <sub>2</sub> -Pd Thin Films for LPG Detection. <i>Advanced Science Letters</i> , 2014, 20, 1023-1027.	0.2	22
93	Preparation of PANI doped TiO <sub>2</sub> nanocomposite thin film and its relevance as room temperature liquefied petroleum gas sensor. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 14471-14475.	1.1	21
94	Preparation of zinc (II) nitrate poly acryl amide (PAAm) and its optoelectronic application for humidity sensing. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 7770-7777.	1.1	21
95	Synthesis of Nanostructured Cobalt Titanate and Its Application as Liquefied Petroleum Gas Sensor at Room Temperature. <i>Sensor Letters</i> , 2011, 9, 533-540.	0.4	21
96	Flexible, environmentally-acceptable and long-durable-energy-efficient novel WS <sub>2</sub> polyacrylamide MOFs for high-performance photodetectors. <i>Materials Advances</i> , 2022, 3, 3994-4005.	2.6	21
97	Synthesis and Characterization of ZnO Nanorods by the Hydroxide Route and Their Application as Humidity Sensors. <i>Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry</i> , 2007, 37, 417-423.	0.6	20
98	Frontal polymerization of acrylamide complex with nanostructured ZnS and PbS: Their characterizations and sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2015, 207, 460-469.	4.0	20
99	Effect of direct current biasing on the adjustable radio-frequency negative permittivity characteristics of Bi <sub>2</sub> SiO <sub>5</sub> /multiwall carbon nanotube metacomposites. <i>Ceramics International</i> , 2021, 47, 1389-1398.	2.3	20
100	Visible light-induced, highly responsive, below lower explosive limit (LEL) LPG sensor based on hydrothermally synthesized barium hexaferrite nanorods. <i>Sensors and Actuators B: Chemical</i> , 2021, 348, 130714.	4.0	20
101	Structural analysis of nanostructured iron antimonate by experimental and quantum chemical simulation and its LPG sensing. <i>Sensors and Actuators B: Chemical</i> , 2014, 195, 373-381.	4.0	19
102	Fabrication of nanostructured lead-free bismuth sodium titanate thin film and its liquefied petroleum gas sensing. <i>Sensors and Actuators A: Physical</i> , 2020, 301, 111765.	2.0	19
103	Structural, optical and LPG sensing properties of zinc-doped nickel oxide pellets operated at room temperature. <i>Sensors and Actuators A: Physical</i> , 2021, 319, 112484.	2.0	19
104	High efficient carbon coated TiO <sub>2</sub> electrode for ultra-capacitor applications. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 055501.	1.3	19
105	EXPERIMENTAL INVESTIGATIONS ON NANOSIZED FERRIC OXIDE AND ITS LPG SENSING. <i>International Journal of Nanoscience</i> , 2011, 10, 135-139.	0.4	18
106	Preparation and characterization of nanocrystalline nickel ferrite thin films for development of a gas sensor at room temperature. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 8047-8054.	1.1	18
107	Ion beam engineering in WO <sub>3</sub> -PEDOT: PSS hybrid nanocomposite thin films for gas sensing measurement at room temperature. <i>Inorganic Chemistry Communication</i> , 2020, 119, 108000.	1.8	18
108	Nanocatalyst (Pt, Ag and CuO) Doped SnO <sub>2</sub> Thin Film Based Sensors for Low Temperature Detection of NO <sub>2</sub> Gas. <i>Advanced Science Letters</i> , 2014, 20, 1374-1377.	0.2	18



#	ARTICLE	IF	CITATIONS
109	Preparation of carbon quantum dots using bike pollutant soot: Evaluation of structural, optical and moisture sensing properties. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 139, 115174.	1.3	18
110	Experimental investigations on liquefied petroleum gas sensing of Cd(NO <sub>3</sub> ) <sub>2</sub> ·(AAm) <sub>4</sub> ·2H <sub>2</sub> O and CdS/polyacrylamide synthesized via frontal polymerization. <i>Sensors and Actuators B: Chemical</i> , 2011, 160, 826-834.	4.0	17
111	Room-Temperature Gas Sensing Properties of Nanocrystalline-Structured Indium-Substituted Copper Ferrite Thin Film. <i>Journal of Electronic Materials</i> , 2018, 47, 6366-6372.	1.0	17
112	Synthesis and characterization of nanostructured MnO <sub>2</sub> ·CoO and its relevance as an opto-electronic humidity sensing device. <i>RSC Advances</i> , 2018, 8, 20534-20542.	1.7	17
113	Study of variable range hopping conduction mechanism in nanocrystalline carbon thin films deposited by modified anodic jet carbon arc technique: application to light-dependent resistors. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 2535-2546.	1.1	17
114	Anthracene-based g-C <sub>3</sub> N <sub>4</sub> photocatalyst for regeneration of NAD(P)H and sulfide oxidation based on Z-scheme nature. <i>International Journal of Energy Research</i> , 2021, 45, 13117-13129.	2.2	17
115	Gigantic stimulation in response by solar irradiation in self-healable and self-powered LPG sensor based on triboelectric nanogenerator: Experimental and DFT computational study. <i>Sensors and Actuators B: Chemical</i> , 2022, 359, 131573.	4.0	17
116	The synthesis of a Cu <sub>0.8</sub> Zn <sub>0.2</sub> Sb <sub>2</sub> polyacrylamide nanocomposite by frontal polymerization for moisture and photodetection performance. <i>Materials Advances</i> , 2020, 1, 2804-2817.	2.6	16
117	Synthesis of TiO <sub>2</sub> nanorods using wet chemical method and their photovoltaic and humidity sensing applications. <i>Sensors International</i> , 2021, 2, 100095.	4.9	16
118	Comparative study on humidity sensing abilities of synthesized mono and poly rhodium acryl amide tin oxide (RhAAm/SnO <sub>2</sub> ) nanocomposites. <i>Sensors and Actuators A: Physical</i> , 2021, 330, 112839.	2.0	16
119			



#	ARTICLE	IF	CITATIONS
127	Earth-abundant and environmentally benign Ni <sup>2+</sup> /Zn iron oxide intercalated in a polyaniline based nanohybrid as an ultrafast photodetector. Dalton Transactions, 2022, 51, 7864-7877.	1.6	15
128	Facile synthesized zinc oxide nanorod film humidity sensor based on variation in optical transmissivity. Nanoscale Advances, 2022, 4, 2902-2912.	2.2	15
129	Polymer-assisted synthesis of metallopolymer nanocomposites and their applications in liquefied petroleum gas sensing at room temperature. Sensors and Actuators B: Chemical, 2012, 166-167, 281-291.	4.0	14
130	Nanostructured Spherical-Shaped Sc(III) Polyacrylate for Monitoring the Moisture Level. IEEE Sensors Journal, 2018, 18, 4384-4391.	2.4	14
131	Development of an Impedance-Based Electrical Humidity Sensor Using Sb-Doped Ge-Se-Te Chalcogenide Glasses. Journal of Electronic Materials, 2020, 49, 6492-6500.	1.0	14
132	Hierarchical flower-like Bi <sub>2</sub> SiO <sub>5</sub> /MWCNT nanocomposites for highly sensitive LPG sensor at room temperature. Journal of Alloys and Compounds, 2021, 856, 158157.	2.8	14
133	Fabrication, structural, and physical properties of alumina doped calcium silicate glasses for carbon dioxide gas sensing applications. Journal of Non-Crystalline Solids, 2022, 583, 121475.	1.5	14
134	Adsorption of As(III) and As(V) from aqueous solution by magnetic biosorbents derived from chemical carbonization of pea peel waste biomass: Isotherm, kinetic, thermodynamic and breakthrough curve modeling studies. Journal of Environmental Management, 2022, 312, 114948.	3.8	14
135	Titania Prepared by Ball Milling: Its Characterization and Application as Liquefied Petroleum Gas Sensor. Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2015, 45, 487-494.	0.6	13
136	Synthesis and investigation of cubical shaped barium titanate and its application as opto-electronic humidity sensor. Journal of Materials Science: Materials in Electronics, 2018, 29, 12951-12958.	1.1	13
137	Development of scattering based glucose sensor using hydrothermally synthesized cuprous oxide nanoparticles. Results in Physics, 2019, 15, 102772.	2.0	13
138	Highly sensitive and selective LPG sensor working below lowest explosion limit (LEL) at room temperature using as-fabricated indium doped SnO <sub>2</sub> thin film. Materials Chemistry and Physics, 2022, 287, 126275.	2.0	13
139	Fabrication of nanostructured magnesium ferrite polyhedrons and their applications in heat transfer management and gas/humidity sensors. Journal of Materials Science: Materials in Electronics, 2020, 31, 80-89.	1.1	11
140	Effect of annealing temperature on a highly sensitive nickel oxide-based LPG sensor operated at room temperature. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	11
141	A review on the polymers with shape memory assisted self-healing properties for triboelectric nanogenerators. Journal of Materials Research, 2021, 36, 1225-1240.	1.2	11
142	Synthesis of Nanostructured Cuprous Oxide and Its Performance as Humidity and Temperature Sensor. International Journal of Green Nanotechnology: Materials Science and Engineering, 2009, 1, M16-M31.	0.5	10
143	A mechanochemical synthesis of nanostructured zinc oxide via acetate route for LPG sensing. Journal of Experimental Nanoscience, 2014, 9, 501-511.	1.3	10
144	Study on nanocrystalline silicon thin films grown by the filtered cathodic vacuum arc technique using boron doped solid silicon for fast photo detectors. Journal of the Taiwan Institute of Chemical Engineers, 2018, 86, 185-191.	2.7	10

#	ARTICLE	IF	CITATIONS
145	Nanostructured cobalt antimonate: a fast responsive and highly stable sensing material for liquefied petroleum gas detection at room temperature. <i>RSC Advances</i> , 2020, 10, 33770-33781.	1.7	10
146	Tunable negative permittivity of Bi <sub>2</sub> O <sub>3</sub> @SiO <sub>2</sub> /MWCNT@glass-nanocomposites at radio frequency region. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 11791-11800.	1.1	10
147	Ultra-sensitive behaviour of ruthenium-doped nickel ferrite thin film humidity sensor. <i>Journal of Experimental Nanoscience</i> , 2021, 16, 43-50.	1.3	10
148	Covalent Triazine Framework as an Efficient Photocatalyst for Regeneration of NAD(P)H and Selective Oxidation of Organic Sulfide. <i>Photochemistry and Photobiology</i> , 2022, 98, 150-159.	1.3	10
149	Synthesis and Characterization of Copper Doped Tin Oxide for Humidity Sensing Applications. <i>Advanced Science Letters</i> , 2014, 20, 895-902.	0.2	10
150	Effect of Nanostructured Zinc Oxide Additives on the Humidity and Temperature Sensing Properties of Cuprous Oxide. <i>International Journal of Green Nanotechnology</i> , 2012, 4, 345-353.	0.3	9
151	Catalytic growth of MWCNT using CVD and its application as opto-electronic humidity sensor. <i>Carbon Letters</i> , 2020, 30, 215-224.	3.3	9
152	Surface modification and characterization of h-BN-doped PVP thin film and its application as humidity sensor with theoretical DFT calculations. <i>Chemical Papers</i> , 2021, 75, 4055-4068.	1.0	9
153	Influence of tin doping on the liquefied petroleum gas and humidity sensing properties of NiO nanoparticles. <i>Journal of Materials Research</i> , 2022, 37, 369-379.	1.2	9
154	Investigation on structural and optical properties of porous SnO <sub>2</sub> nanomaterial fabricated by direct liquid injection chemical vapour deposition technique. <i>Solid State Communications</i> , 2022, 348-349, 114723.	0.9	9
155	Synthesis of La <sub>2</sub> O <sub>3</sub> -Cr <sub>2</sub> O <sub>3</sub> -SrO nanocomposite by pyrolysis of metal carboxylates; its characterization, DFT studies and significance in humidity sensing. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2022, 283, 115813.	1.7	9
156	Synthesis and Characterization of ZnO/ZnNb <sub>2</sub> O <sub>6</sub> Nanocomposite and Its Application as Humidity and LPG Sensor. <i>International Journal of Green Nanotechnology</i> , 2011, 3, 56-71.	0.3	8
157	Synthesis of TiO <sub>2</sub> -Nb <sub>2</sub> O <sub>5</sub> and TiO <sub>2</sub> -CuO Nano Co-Oxides and Their Application as Solid State Humidity Sensors. <i>International Journal of Green Nanotechnology</i> , 2011, 3, 160-169.	0.3	8
158	Frontal polymerization synthesis of scandium polyacrylamide nanomaterial and its application in humidity testing. <i>Colloid and Polymer Science</i> , 2022, 300, 191-202.	1.0	8
159	High efficient activated carbon-based asymmetric electrode for energy storage devices. <i>Materials Today: Proceedings</i> , 2022, 57, 5-10.	0.9	8
160	Synthesis, characterization and liquefied petroleum gas sensing of cobalt acetylenedicarboxylate and its polymer. <i>Sensors and Actuators B: Chemical</i> , 2014, 192, 503-511.	4.0	7
161	State of Art: An Approach to the Synthesis of Pure and Doped Graphene. <i>Advanced Science, Engineering and Medicine</i> , 2018, 10, 638-644.	0.3	7
162	Synthesis of double perovskite LaMgCo <sub>2</sub> O <sub>5.5</sub> nanopowder and its robust electrical humidity sensing behavior. <i>Ceramics International</i> , 2022, 48, 14518-14527.	2.3	7

#	ARTICLE	IF	CITATIONS
163	Morphological and humidity sensing characteristics of SnO <sub>2</sub> -CuO, SnO <sub>2</sub> -Fe <sub>2</sub> O <sub>3</sub> and SnO <sub>2</sub> -Sb <sub>2</sub> O <sub>3</sub> nanocooides. Bulletin of Materials Science, 2011, 34, 689-698.	0.8	6
164	Highly Efficient Sâ€¢gâ€¢CN/Moâ€¢368 Catalyst for Synergistically NADH Regeneration Under Solar Light. Photochemistry and Photobiology, 2022, 98, 160-168.	1.3	6
165	Carbon Nanotubes Based Thin Films as Opto-Electronic Moisture Sensor. Advanced Science, Engineering and Medicine, 2018, 10, 785-787.	0.3	6
166	An Overview on the Importance of Chemical Vapour Deposition Technique for Graphene Synthesis. Advanced Science, Engineering and Medicine, 2018, 10, 760-763.	0.3	6
167	One-pot synthesis of phosphine-free indium selenide (InSe) QDs and their structural characterization for LPG and humidity sensing. Journal of Materials Science: Materials in Electronics, 2022, 33, 11802-11812.	1.1	6
168	Improved room temperature liquefied petroleum gas sensing performance of Ni <sub>0.5</sub> Zn <sub>0.5</sub> Fe <sub>2</sub> O <sub>4</sub> @Clâ€¢doped polypyrrole nanoweb. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 279, 115660.	1.7	6
169	Liquefied petroleum gas (LPG) sensing of biphasic Cu <sub>6</sub> Sn <sub>5</sub> :SnO <sub>2</sub> nanocomposite thin-films. Materials Chemistry and Physics, 2022, 289, 126459.	2.0	6
170	Experimental investigations on barium titanate nanocomposite thin films as an opto-electronic humidity sensor. Journal of Experimental Nanoscience, 2014, 9, 669-677.	1.3	5
171	The rapid response and high sensitivity of a ruthenium-doped copper ferrite thin film (Ruâ€¢CuFe <sub>2</sub> O <sub>4</sub> ) sensor. RSC Advances, 2020, 10, 13611-13615.	1.7	5
172	Solar light <sc>active flexible</sc> activated carbon clothâ€¢based photocatalyst for <sc>Markovnikovâ€¢selective radicalâ€¢radical crossâ€¢coupling</sc> of <i>S</i> <sc>â€¢nucleophiles</sc> to terminal alkyne and liquefied petroleum gas sensing. Journal of the Chinese Chemical Society, 2021, 68, 1435-1444.	0.8	5
173	Zn-Doped TiO <sub>2</sub> Nanoparticles Employed as Room Temperature Liquefied Petroleum Gas Sensor. Advanced Science, Engineering and Medicine, 2018, 10, 736-740.	0.3	5
174	A review Report on Nanostructured Ferrites as Liquefied Petroleum Gas Sensor. International Journal of Science, Technology and Society, 2015, 1, .	0.2	5
175	An Opto-Electronic Sensor for Monitoring Glucose Concentration in Water. Journal of Optics (India), 2003, 32, 13-17.	0.8	4
176	Synthesis and Optical Properties of Anatase-TiO <sub>2</sub> Nanoparticles in Commercial Poly(methylmethacrylate): A Green Approach for Wider Acceptability?. International Journal of Green Nanotechnology: Materials Science and Engineering, 2009, 1, M3-M10.	0.5	4
177	Humidity Sensing Investigations on Nanostructured Zinc Stannate Synthesized via Chemical Precipitation Method. International Journal of Green Nanotechnology, 2012, 4, 37-45.	0.3	4
178	Design and development of lab model of piezo-optic sensor for Structural Health Monitoring. Smart Materials and Structures, 2017, 26, 105047.	1.8	4
179	Sol-gel formed spherical nanostructured titania based liquefied petroleum gas sensor. AIP Conference Proceedings, 2018, .	0.3	4
180	Synthesis and structural investigations of microporous graphene-reinforced h-BN solids for LPG sensing applications. Materials Research Express, 2019, 6, 125090.	0.8	4

#	ARTICLE	IF	CITATIONS
181	In Situ Prepared Solar Light-Driven Flexible Actuated Carbon Cloth-Based Nanorod Photocatalyst for Selective Radical-Radical Coupling to Vinyl Sulfides. <i>Photochemistry and Photobiology</i> , 2021, 97, 955-962.	1.3	4
182	Nanostructured Zinc Ferrite as Electrical and Optoelectronic Humidity Sensors. <i>Advanced Science Letters</i> , 2014, 20, 917-922.	0.2	4
183	Fabrication of a novel nanocomposite SiO <sub>2</sub> -H <sub>3</sub> BO <sub>3</sub> -V <sub>2</sub> O <sub>5</sub> -Al <sub>2</sub> O <sub>3</sub> via melt-quenching technique: structural and surface morphological characteristics for carbon dioxide gas sensing applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 1192-1210.	1.1	4
184	Development of ultrafast room temperature LPG sensor using Fe <sub>2</sub> O <sub>3</sub> /PVP nanocomposite. <i>Applied Physics A: Materials Science and Processing</i> , 2022, 128, 1.	1.1	4
185	Thermal donor formation in CZ-silicon with reference to dimers, trimers and V-O interaction. <i>Physica B: Condensed Matter</i> , 2009, 404, 1070-1073.	1.3	3
186	Flame Synthesis of Carbon Nanotubes using Camphor and its Characterization. <i>International Journal of Green Nanotechnology</i> , 2011, 3, 170-179.	0.3	3
187	Humidity Sensor Based on Nanostructured Ferric Oxide Thick Film. <i>International Journal of Green Nanotechnology</i> , 2012, 4, 215-218.	0.3	3
188	Biodegradable Nanocomposites for Energy Harvesting, Self-healing, and Shape Memory. <i>Springer Series on Polymer and Composite Materials</i> , 2017, , 377-397.	0.5	3
189	Kinetics of new thermal donors (NTDs) in CZ-silicon based on FTIR analysis. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	3
190	Developments in Bioenergy and Sustainable Agriculture Sectors for Climate Change Mitigation in Indian Context: A State of Art. <i>Climate Change and Environmental Sustainability</i> , 2015, 3, 93.	0.3	3
191	Synthesis and structural characterizations of HAp-NaOH-Al <sub>2</sub> O <sub>3</sub> composites for liquid petroleum gas sensing applications. <i>Oxford Open Materials Science</i> , 2020, 1, .	0.5	3
192	Effect of Organic Chromophore on Nano-Sized TiO <sub>2</sub> : Optical Properties and Humidity Sensing. <i>International Journal of Green Nanotechnology: Physics and Chemistry</i> , 2009, 1, P40-P50.	1.5	2
193	Fabrication and characterization of nanostructured (Sn-Ti)O <sub>2</sub> pellets and films for liquefied petroleum gas sensing. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 7852-7863.	1.1	2
194	Synthesis and characterization of catalytic CVD growth pristine and functionalized MWCNT. <i>Journal of Applied Physics</i> , 2021, 130, 075106.	1.1	2
195	Co-precipitation Synthesis with a Variation of the Sulphur Composition of Kesterite Phase Cu <sub>2</sub> ZnSnS <sub>4</sub> (CZSS) without Annealing Process. <i>Journal of Physical Science</i> , 2021, 32, 27-39.	0.5	2
196	Improved growth of nano tin ferrites with their decoration on carbon foam for wastewater treatment. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2021, 16, 100546.	1.7	2
197	Synthesis of Titanium Dioxide (TiO <sub>2</sub> ) via Sol-Gel Method and Fabrication of Dye-Sensitized Solar Cell. <i>Advanced Science, Engineering and Medicine</i> , 2018, 10, 695-699.	0.3	2
198	Humidity Sensing Investigations on Nanostructured Antimony-Substituted Tin Oxide Nanoparticles. <i>Advanced Science Letters</i> , 2014, 20, 887-894.	0.2	2

#	ARTICLE	IF	CITATIONS
199	Experimental Investigations on Solid State LPG Sensor Using ZnFe <sub>2</sub> O <sub>4</sub> Nanocomposite Prepared by Co-Precipitation Method. Journal of Materials Science and Engineering B, 2015, 5, .	0.2	2
200	Traveling-waves of metal-containing monomer polymerization without diffusion and heat-transfer. Heliyon, 2019, 5, e02829.	1.4	1
201	Investigation on Polyvinyl Alcohol (PVA)-Polypyrrole (PPY) Nanocomposite for Opto-Electronic Humidity Sensing Application. Advanced Science, Engineering and Medicine, 2018, 10, 689-694.	0.3	1
202	Synthesis and Characterization of 20% Pt-Fe/C Alloy as a Cathode Catalyst for Oxygen Reduction Reaction PEMFCs. Journal of New Materials for Electrochemical Systems, 2012, 15, 241-247.	0.3	1
203	Synthesis and Characterization of Nanostructured Cobalt Zincate and Its Application as LPG Sensor. Advanced Science Letters, 2014, 20, 939-945.	0.2	1
204	High-Performance Humidity Sensing of Arsenic Based Chalcogenide Thin Films at Different Frequencies. Science of Advanced Materials, 2021, 13, 2033-2042.	0.1	1
205	Investigation on Metal Nanoparticles: Nickel Oxide, Cuprous Oxide and Tin Ferrite with Their Humidity Sensing at Room Temperature. Nano LIFE, 2022, 12, .	0.6	1
206	Experimental Investigation on Moisture Sensing Behavior of La <sub>2</sub> O <sub>3</sub> with La(OH) <sub>3</sub> at Nanoscale. International Journal of Green Nanotechnology, 2011, 3, 98-108.	0.3	0
207	Integrated Management of Web Blight (Rhizoctonia solani $\frac{1}{4}$ hn) of French Bean. , 2014, , 265-271.		0
208	Synthesis of Copper Titanate Nanocomposite via Solâ€“Gel Method and Its Application as Liquefied Petroleum Gas Sensor. Advanced Science Letters, 2014, 20, 933-938.	0.2	0
209	Selected Peer-Reviewed Articles from International Conference on Nanoscience and Nanotechnology, Lucknow, India, November 18â€“20, 2013. Advanced Science Letters, 2014, 20, 885-886.	0.2	0
210	Selected Peer-Reviewed Articles from the 2nd International Conference on Nanoscience and Nanotechnology (ICNN-2017), Lucknow, Uttar Pradesh, India, 22â€“24 September, 2017. Advanced Science, Engineering and Medicine, 2018, 10, 635-637.	0.3	0