

Rajesh Kumar

List of Publications by Year in descending order

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89
papers

5,324
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81839

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90
all docs

90
docs citations

90
times ranked

6816
citing authors

#	ARTICLE	IF	CITATIONS
1	Luminescence and photodetection characteristics of rare earth-doped zinc oxide nanostructures. , 2022, , 263-294.		1
2	Ti ₃ C ₂ T _x MXene as Electrocatalyst for Designing Robust Glucose Biosensors. Advanced Materials Technologies, 2022, 7, .	3.0	12
3	Cubic shaped hematite (±-Fe ₂ O ₃) micro-structures composed of stacked nanosheets for rapid ethanol sensor application. Sensors and Actuators B: Chemical, 2021, 326, 128851.	4.0	48
4	Colloidal synthesis of NiMn ₂ O ₄ nanodisks decorated reduced graphene oxide for electrochemical applications. Microchemical Journal, 2021, 160, 105630.	2.3	24
5	ZnO-SnO ₂ nanocubes for fluorescence sensing and dye degradation applications. Ceramics International, 2021, 47, 6201-6210.	2.3	39
6	Gas sensor device for high-performance ethanol sensing using ±-MnO ₂ nanoparticles. Materials Letters, 2021, 286, 129232.	1.3	22
7	Methylene blue intercalated layered MnO ₂ nanosheets for high-sensitive non-enzymatic ascorbic acid sensor. Journal of Materials Science: Materials in Electronics, 2021, 32, 8317-8329.	1.1	6
8	Star-Fruit-Shaped CuO Structures for High Performance Ethanol Gas Sensor Device. Science of Advanced Materials, 2021, 13, 724-733.	0.1	5
9	Low-temperature synthesis of cadmium-doped zinc oxide nanosheets for enhanced sensing and environmental remediation applications. Journal of Alloys and Compounds, 2021, 863, 158649.	2.8	9
10	Highly sensitive and selective 2-nitroaniline chemical sensor based on Ce-doped SnO ₂ nanosheets/Nafion-modified glassy carbon electrode. Advanced Composites and Hybrid Materials, 2021, 4, 1015-1026.	9.9	35
11	±-MnO ₂ Nanowires as Potential Scaffolds for a High-Performance Formaldehyde Gas Sensor Device. Coatings, 2021, 11, 860.	1.2	7
12	Ultrathin Leaf-Shaped CuO Nanosheets Based Sensor Device for Enhanced Hydrogen Sulfide Gas Sensing Application. Chemosensors, 2021, 9, 221.	1.8	5
13	Cd-ZnO nanorices for enhanced and selective formaldehyde gas sensing applications. Environmental Research, 2021, 200, 111377.	3.7	42
14	Spindle-like Co ₃ O ₄ -ZnO Nanocomposites Scaffold for Hydrazine Sensing and Photocatalytic Degradation of Rhodamine B Dye. Engineered Science, 2021, , .	1.2	16
15	Nano/micro-scaled materials based optical biosensing of glucose. Ceramics International, 2021, , .	2.3	9
16	Co-Doped ZnO Nano-Agglomerates as a Potential Scaffold for Non-Enzymatic Hydrogen Peroxide Sensing. Science of Advanced Materials, 2021, 13, 1732-1738.	0.1	1
17	Efficient H ₂ gas sensor based on 2D SnO ₂ disks: Experimental and theoretical studies. International Journal of Hydrogen Energy, 2020, 45, 26388-26401.	3.8	57
18	Fern shaped La ₂ O ₃ nanostructures as potential scaffold for efficient hydroquinone chemical sensing application. Ceramics International, 2020, 46, 5141-5148.	2.3	25

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19	Square disks-based crossed architectures of SnO ₂ for ethanol gas sensing applications—An experimental and theoretical investigation. <i>Sensors and Actuators B: Chemical</i> , 2020, 304, 127352.	4.0	34
20	Solid-state synthesis of Ag-doped PANI nanocomposites for their end-use as an electrochemical sensor for hydrogen peroxide and dopamine. <i>Electrochimica Acta</i> , 2020, 363, 137158.	2.6	50
21	NiCo ₂ O ₄ Nano-/Microstructures as High-Performance Biosensors: A Review. <i>Nano-Micro Letters</i> , 2020, 12, 122.	14.4	62
22	Study of structural, optical and electrochemical properties of ZnO nanostructures and ZnO-PANI nanocomposites. <i>Materials Research Express</i> , 2020, 7, 025024.	0.8	9
23	Iron-Doped Titanium Dioxide Nanoparticles As Potential Scaffold for Hydrazine Chemical Sensor Applications. <i>Coatings</i> , 2020, 10, 182.	1.2	18
24	An efficient chemical sensor based on CeO ₂ nanoparticles for the detection of acetylacetone chemical. <i>Journal of Electroanalytical Chemistry</i> , 2020, 864, 114089.	1.9	34
25	High sensitive and low-concentration sulfur dioxide (SO ₂) gas sensor application of heterostructure NiO-ZnO nanodisks. <i>Sensors and Actuators B: Chemical</i> , 2019, 298, 126870.	4.0	209
26	Synthesis and characterization of cellulose based graft copolymers with binary vinyl monomers for efficient removal of cationic dyes and Pb(II) ions. <i>Journal of Polymer Research</i> , 2019, 26, 1.	1.2	12
27	Functionalized cellulose with hydroxyethyl methacrylate and glycidyl methacrylate for metal ions and dye adsorption applications. <i>International Journal of Biological Macromolecules</i> , 2019, 134, 704-721.	3.6	41
28	Sorption of Ni(II), Pb(II) and Cu(II) ions from aqueous solutions by cellulose grafted with poly(HEMA-co-AAc): Kinetic, isotherm and thermodynamic study. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103088.	3.3	22
29	Synthesis and characterization of cellulose based adsorbents for removal of Ni(II), Cu(II) and Pb(II) ions from aqueous solutions. <i>Reactive and Functional Polymers</i> , 2019, 140, 82-92.	2.0	46
30	Grafting of cellulose with N-isopropylacrylamide and glycidyl methacrylate for efficient removal of Ni(II), Cu(II) and Pd(II) ions from aqueous solution. <i>Separation and Purification Technology</i> , 2019, 219, 249-259.	3.9	62
31	Nitroaniline chemi-sensor based on bitter gourd shaped ytterbium oxide (Yb ₂ O ₃) doped zinc oxide (ZnO) nanostructures. <i>Ceramics International</i> , 2019, 45, 13825-13831.	2.3	24
32	Metal ions and organic dyes sorption applications of cellulose grafted with binary vinyl monomers. <i>Separation and Purification Technology</i> , 2019, 209, 684-697.	3.9	48
33	Highly sensitive carbon monoxide (CO) gas sensors based on Ni and Zn doped SnO ₂ nanomaterials. <i>Ceramics International</i> , 2018, 44, 4392-4399.	2.3	181
34	Pt nanoparticles decorated SnO ₂ nanoneedles for efficient CO gas sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2018, 256, 656-664.	4.0	200
35	Highly sensitive and selective non-enzymatic monosaccharide and disaccharide sugar sensing based on carbon paste electrodes modified with perforated NiO nanosheets. <i>New Journal of Chemistry</i> , 2018, 42, 964-973.	1.4	26
36	Fabrication and characterization of highly sensitive and selective sensors based on porous NiO nanodisks. <i>Sensors and Actuators B: Chemical</i> , 2018, 259, 604-615.	4.0	85

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37	Grafted cellulose: a bio-based polymer for durable applications. <i>Polymer Bulletin</i> , 2018, 75, 2213-2242.	1.7	43
38	Removal of organic dyes and metal ions by cross-linked graft copolymers of cellulose obtained from the agricultural residue. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 6037-6048.	3.3	30
39	Ag-Doped ZnO Nanoparticles for Enhanced Ethanol Gas Sensing Application. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 3557-3562.	0.9	44
40	Extraction of Cellulose Micro-Whiskers from Rice Husk: A Greener Approach. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 3702-3708.	0.9	16
41	Fabrication and Characterizations of Ethanol Sensor Based on CuO Nanoparticles. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 2892-2897.	0.9	6
42	Hydroquinone Sensor Based on Neodymium (Nd) Doped ZnO Hexagonal Nanorods. <i>Nanoscience and Nanotechnology Letters</i> , 2018, 10, 351-357.	0.4	3
43	Methanol Gas Sensor Based on ZnO-SnO ₂ Hollow Urchins. <i>Nanoscience and Nanotechnology Letters</i> , 2018, 10, 1405-1411.	0.4	6
44	Synthesis, characterization and acetone gas sensing applications of Ag-doped ZnO nanoneedles. <i>Ceramics International</i> , 2017, 43, 6765-6770.	2.3	97
45	Cellulose based grafted biosorbents - Journey from lignocellulose biomass to toxic metal ions sorption applications - A review. <i>Journal of Molecular Liquids</i> , 2017, 232, 62-93.	2.3	162
46	CuO nanosheets as potential scaffolds for gas sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2017, 250, 24-31.	4.0	137
47	Two-dimensional ytterbium oxide nanodisks based biosensor for selective detection of urea. <i>Biosensors and Bioelectronics</i> , 2017, 98, 254-260.	5.3	59
48	Synthesis and Characterization of CuO Nanodisks for High-Sensitive and Selective Ethanol Gas Sensor Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 1455-1459.	0.9	23
49	Antimicrobial properties of ZnO nanomaterials: A review. <i>Ceramics International</i> , 2017, 43, 3940-3961.	2.3	388
50	Zinc oxide nanostructure-based dye-sensitized solar cells. <i>Journal of Materials Science</i> , 2017, 52, 4743-4795.	1.7	79
51	Morphologically-dependent photocatalytic and gas sensing application of Dy-doped ZnO nanoparticles. <i>Journal of Alloys and Compounds</i> , 2017, 726, 1274-1285.	2.8	47
52	2D Sn-doped ZnO ultrathin nanosheet networks for enhanced acetone gas sensing application. <i>Ceramics International</i> , 2017, 43, 2418-2423.	2.3	81
53	A Highly-Sensitive Picric Acid Chemical Sensor Based on ZnO Nanopeanuts. <i>Materials</i> , 2017, 10, 795.	1.3	33
54	Fabrication and Characterization of Highly Sensitive Acetone Chemical Sensor Based on ZnO Nanoballs. <i>Materials</i> , 2017, 10, 799.	1.3	15

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55	In-Doped ZnO Hexagonal Stepped Nanorods and Nanodisks as Potential Scaffold for Highly-Sensitive Phenyl Hydrazine Chemical Sensors. <i>Materials</i> , 2017, 10, 1337.	1.3	25
56	Ag-doped ZnO nanoellipsoids based highly sensitive gas sensor. <i>Materials Express</i> , 2017, 7, 380-388.	0.2	12
57	Structural and dielectric properties of CTAB modified ZrO ₂ nanoparticles. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	1
58	Microwave-assisted synthesis of ZnO doped CeO ₂ nanoparticles as potential scaffold for highly sensitive nitroaniline chemical sensor. <i>Ceramics International</i> , 2016, 42, 11562-11567.	2.3	46
59	Bi ₂ O ₂ CO ₃ nanoplates: Fabrication and characterization of highly sensitive and selective cholesterol biosensor. <i>Journal of Alloys and Compounds</i> , 2016, 683, 433-438.	2.8	46
60	Development of highly sensitive and selective ethanol sensor based on lance-shaped CuO nanostructures. <i>Materials and Design</i> , 2016, 105, 16-24.	3.3	100
61	Sm ₂ O ₃ -doped ZnO beech fern hierarchical structures for nitroaniline chemical sensor. <i>Ceramics International</i> , 2016, 42, 16505-16511.	2.3	53
62	Quantum information entropy of Eckart potential. <i>International Journal of Quantum Chemistry</i> , 2016, 116, 1413-1418.	1.0	23
63	Cauliflower-shaped ZnO nanomaterials for electrochemical sensing and photocatalytic applications. <i>Electrochimica Acta</i> , 2016, 222, 463-472.	2.6	36
64	Forced Convective Heat Transfer of MWCNT/Water Nanofluid Under Constant Heat Flux: An Experimental Investigation. <i>Arabian Journal for Science and Engineering</i> , 2016, 41, 599-609.	1.1	23
65	Synthesis and Characterization of Mimosa Pudica Leaves Shaped <math>\pm</math>-Iron Oxide Nanostructures for Ethanol Chemical Sensor Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 2944-2949.	0.9	7
66	Platinum nanoparticles decorated carbon nanotubes for highly sensitive 2-nitrophenol chemical sensor. <i>Ceramics International</i> , 2016, 42, 9257-9263.	2.3	27
67	Fabrication of Nitroaniline Chemical Sensor Based on Polyaniline Coated Multi-Walled Carbon Nanotubes. <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 193-199.	0.4	1
68	Highly Sensitive Ethanol Gas Sensors Based on Ag-Doped ZnO Nanocones. <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 241-246.	0.4	10
69	Poly(Acrylic Acid)/Multi-Walled Carbon Nanotube Composites: Efficient Scaffold for Highly Sensitive 2-Nitrophenol Chemical Sensor. <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 200-206.	0.4	5
70	Synthesis of Sn-Doped ZnO Nanostructures for 4-Nitrophenol Chemical Sensor Application. <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 827-832.	0.4	8
71	Fabrication and Characterization of Highly Sensitive and Selective Glucose Biosensor Based on ZnO Decorated Carbon Nanotubes. <i>Nanoscience and Nanotechnology Letters</i> , 2016, 8, 853-858.	0.4	7
72	Growth and properties of well-crystalline cerium oxide (CeO ₂) nanoflakes for environmental and sensor applications. <i>Journal of Colloid and Interface Science</i> , 2015, 454, 61-68.	5.0	94

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73	Sonophotocatalytic degradation of methyl orange using ZnO nano-aggregates. Journal of Alloys and Compounds, 2015, 629, 167-172.	2.8	98
74	Photoluminescence quenching of Zirconia nanoparticle by surface modification. Applied Surface Science, 2015, 334, 216-221.	3.1	48
75	Ce-doped ZnO nanoparticles for efficient photocatalytic degradation of direct red-23 dye. Ceramics International, 2015, 41, 7773-7782.	2.3	150
76	Zinc Oxide Nanostructures for NO ₂ Gas Sensor Applications: A Review. Nano-Micro Letters, 2015, 7, 97-120.	14.4	649
77	Experimental investigation of the convective heat transfer characteristics of TiO ₂ /distilled water nanofluids under constant heat flux boundary condition. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2015, 37, 1347-1356.	0.8	18
78	Effect of annealing temperature on the properties and photocatalytic efficiencies of ZnO nanoparticles. Journal of Alloys and Compounds, 2015, 648, 46-52.	2.8	92
79	Organic-Inorganic Hybrid Nanocomposite-Based Gas Sensors for Environmental Monitoring. Chemical Reviews, 2015, 115, 4571-4606.	23.0	429
80	Facile synthesis and photocatalytic activity of cocoon-shaped CuO nanostructures. Materials Letters, 2015, 156, 138-141.	1.3	51
81	Synthesis, characterization and dielectric investigation of ZnO-doped polyaniline nanocomposites. Journal of Information Display, 2015, 16, 49-55.	2.1	6
82	Facile and Rapid Synthesis of ZnO Nanoparticles for Photovoltaic Device Application. Journal of Nanoscience and Nanotechnology, 2015, 15, 6807-6812.	0.9	8
83	ZnO nanostructured thin films: Depositions, properties and applications A review. Materials Express, 2015, 5, 3-23.	0.2	75
84	Pulse Laser Deposited Nanostructured ZnO Thin Films: A Review. Journal of Nanoscience and Nanotechnology, 2014, 14, 1911-1930.	0.9	54
85	Photocatalytic Degradation of Direct Red-23 Dye with ZnO Nanoparticles. Journal of Nanoscience and Nanotechnology, 2014, 14, 7161-7166.	0.9	23
86	A comprehensive review of experimental investigations of forced convective heat transfer characteristics for various nanofluids. International Journal of Mechanical and Materials Engineering, 2014, 9, .	1.1	50
87	Silica nanowires: Growth, integration, and sensing applications. Mikrochimica Acta, 2014, 181, 1759-1780.	2.5	38
88	Zinc Oxide Nanomaterials for Photocatalytic Degradation of Methyl Orange: A Review. Nanoscience and Nanotechnology Letters, 2014, 6, 631-650.	0.4	60
89	ZnO nano-mushrooms for photocatalytic degradation of methyl orange. Materials Letters, 2013, 97, 100-103.	1.3	156