

Zhihua Zhou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7091/publications.pdf>

Version: 2024-02-01

72
papers

3,597
citations

101384

36
h-index

138251

58
g-index

72
all docs

72
docs citations

72
times ranked

4543
citing authors

#	ARTICLE	IF	CITATIONS
1	Fabrication of Cu ₂ ZnSnS ₄ screen printed layers for solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2010, 94, 2042-2045.	3.0	200
2	Design of Hetero-Nanostructures on MoS ₂ Nanosheets To Boost NO ₂ Room-Temperature Sensing. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 22640-22649.	4.0	199
3	High-performance solid-state supercapacitors based on graphene-ZnO hybrid nanocomposites. <i>Nanoscale Research Letters</i> , 2013, 8, 473.	3.1	155
4	Single-walled carbon nanotube/cobalt phthalocyanine derivative hybrid material: preparation, characterization and its gas sensing properties. <i>Journal of Materials Chemistry</i> , 2011, 21, 3779.	6.7	154
5	Biosynthesis and Antibacterial Activity of Silver Nanoparticles Using Yeast Extract as Reducing and Capping Agents. <i>Nanoscale Research Letters</i> , 2020, 15, 14.	3.1	121
6	Enhanced formaldehyde detection based on Ni doping of SnO ₂ nanoparticles by one-step synthesis. <i>Sensors and Actuators B: Chemical</i> , 2018, 263, 120-128.	4.0	107
7	Construction of MoS ₂ /SnO ₂ heterostructures for sensitive NO ₂ detection at room temperature. <i>Applied Surface Science</i> , 2019, 493, 613-619.	3.1	104
8	Gas sensors based on deposited single-walled carbon nanotube networks for DMMP detection. <i>Nanotechnology</i> , 2009, 20, 345502.	1.3	103
9	Ammonia gas sensors based on chemically reduced graphene oxide sheets self-assembled on Au electrodes. <i>Nanoscale Research Letters</i> , 2014, 9, 251.	3.1	98
10	Interface engineered WS ₂ /ZnS heterostructures for sensitive and reversible NO ₂ room temperature sensing. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126666.	4.0	98
11	Ultrasensitive room temperature NO ₂ sensors based on liquid phase exfoliated WSe ₂ nanosheets. <i>Sensors and Actuators B: Chemical</i> , 2019, 300, 127013.	4.0	93
12	Hydrothermal fabrication of porous MoS ₂ and its visible light photocatalytic properties. <i>Materials Letters</i> , 2014, 131, 122-124.	1.3	90
13	Controllable synthesis of heterostructured CuO@NiO nanotubes and their synergistic effect for glycol gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2020, 304, 127347.	4.0	87
14	Two-dimensional Cd-doped porous Co ₃ O ₄ nanosheets for enhanced room-temperature NO ₂ sensing performance. <i>Sensors and Actuators B: Chemical</i> , 2020, 305, 127393.	4.0	87
15	Sonochemical synthesis of hierarchical WO ₃ flower-like spheres for highly efficient triethylamine detection. <i>Sensors and Actuators B: Chemical</i> , 2020, 306, 127536.	4.0	75
16	Controllable synthesis of crescent-shaped porous NiO nanoplates for conductometric ethanol gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126642.	4.0	74
17	Broadband efficiency enhancement in quantum dot solar cells coupled with multispiked plasmonic nanostars. <i>Nano Energy</i> , 2015, 13, 827-835.	8.2	68
18	Glucose-assisted synthesis of hierarchical flower-like Co ₃ O ₄ nanostructures assembled by porous nanosheets for enhanced acetone sensing. <i>Sensors and Actuators B: Chemical</i> , 2019, 288, 699-706.	4.0	66

#	ARTICLE	IF	CITATIONS
19	Fast and recoverable NO ₂ detection achieved by assembling ZnO on Ti ₃ C ₂ T _x MXene nanosheets under UV illumination at room temperature. <i>Nanoscale</i> , 2022, 14, 3441-3451.	2.8	65
20	Two-dimensional MoSe ₂ nanosheets via liquid-phase exfoliation for high-performance room temperature NO ₂ gas sensors. <i>Nanotechnology</i> , 2019, 30, 445503.	1.3	63
21	Strain-free ring-shaped nanostructures by droplet epitaxy for photovoltaic application. <i>Applied Physics Letters</i> , 2012, 101, 043904.	1.5	57
22	Glucose-assisted synthesis of hierarchical NiO-ZnO heterostructure with enhanced glycol gas sensing performance. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129167.	4.0	56
23	Hierarchical WS ₂ –WO ₃ Nanohybrids with N Heterojunctions for NO ₂ Detection. <i>ACS Applied Nano Materials</i> , 2021, 4, 1626-1634.	2.4	56
24	Rapid large-scale preparation of ZnO nanowires for photocatalytic application. <i>Nanoscale Research Letters</i> , 2011, 6, 536.	3.1	54
25	Preparation of NiO two-dimensional grainy films and their high-performance gas sensors for ammonia detection. <i>Nanoscale Research Letters</i> , 2015, 10, 119.	3.1	54
26	Controlled growth of vertically aligned ultrathin In ₂ S ₃ nanosheet arrays for photoelectrochemical water splitting. <i>Nanoscale</i> , 2018, 10, 1153-1161.	2.8	54
27	Hierarchical CoNi ₂ S ₄ nanosheet/nanotube array structure on carbon fiber cloth for high-performance hybrid supercapacitors. <i>Electrochimica Acta</i> , 2019, 305, 81-89.	2.6	54
28	A Novel Artificial Neuron-Like Gas Sensor Constructed from CuS Quantum Dots/Bi ₂ S ₃ Nanosheets. <i>Nano-Micro Letters</i> , 2022, 14, 8.	14.4	53
29	Bi-metal organic framework nanosheets assembled on nickel wire films for volumetric-energy-dense supercapacitors. <i>Journal of Power Sources</i> , 2019, 423, 80-89.	4.0	50
30	Highly sensitive and recoverable room-temperature NO ₂ gas detection realized by 2D/0D MoS ₂ /ZnS heterostructures with synergistic effects. <i>Sensors and Actuators B: Chemical</i> , 2021, 347, 130608.	4.0	50
31	Design of p heterojunctions based on CuO decorated WS ₂ nanosheets for sensitive NH ₃ gas sensing at room temperature. <i>Nanotechnology</i> , 2021, 32, 445502.	1.3	48
32	Study on cerium-doped nano-TiO ₂ coatings for corrosion protection of 316L stainless steel. <i>Nanoscale Research Letters</i> , 2012, 7, 227.	3.1	47
33	Scalable synthesis of ⁵⁶ Fe ₂ O ₃ /CNT composite as high-performance anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2019, 770, 116-124.	2.8	47
34	Laterally aligned quantum rings: From one-dimensional chains to two-dimensional arrays. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	44
35	Highly repeatable and sensitive three-dimensional ⁵⁶ Fe ₂ O ₃ @reduced graphene oxide gas sensors by magnetic-field assisted assembly process. <i>Sensors and Actuators B: Chemical</i> , 2020, 306, 127546.	4.0	43
36	Construction, Application and Verification of a Novel Formaldehyde Gas Sensor System Based on Ni-Doped SnO ₂ Nanoparticles. <i>IEEE Sensors Journal</i> , 2021, 21, 11023-11030.	2.4	43

#	ARTICLE	IF	CITATIONS
37	Three-dimensional skeleton networks of reduced graphene oxide/nanosheets/vanadium pentoxide nanobelts hybrid for high-performance supercapacitors. <i>Electrochimica Acta</i> , 2019, 295, 14-21.	2.6	38
38	High Responsivity Photoconductors Based on Iron Pyrite Nanowires Using Sulfurization of Anodized Iron Oxide Nanotubes. <i>Nano Letters</i> , 2014, 14, 6002-6009.	4.5	34
39	Engineering sulfonated polyaniline molecules on reduced graphene oxide nanosheets for high-performance corrosion protective coatings. <i>Applied Surface Science</i> , 2019, 484, 663-675.	3.1	34
40	High-Performance Wearable Sensor Inspired by the Neuron Conduction Mechanism through Gold-Induced Sulfur Vacancies. <i>ACS Sensors</i> , 2022, 7, 816-826.	4.0	34
41	Rapid mass production of ZnO nanowires by a modified carbothermal reduction method. <i>Materials Letters</i> , 2011, 65, 832-835.	1.3	33
42	Growth and band alignment of Bi ₂ Se ₃ topological insulator on H-terminated Si(111) van der Waals surface. <i>Applied Physics Letters</i> , 2013, 102, 074106.	1.5	33
43	Highly sensitive NO ₂ gas sensors based on hexagonal SnS ₂ nanoplates operating at room temperature. <i>Nanotechnology</i> , 2020, 31, 075501.	1.3	30
44	Field emission from in situ-grown vertically aligned SnO ₂ nanowire arrays. <i>Nanoscale Research Letters</i> , 2012, 7, 117.	3.1	28
45	Noble metal (Ag, Au, Pd and Pt) doped TaS ₂ monolayer for gas sensing: a first-principles investigation. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 18359-18368.	1.3	28
46	Rapid synthesis and characterization of magnesium oxide nanocubes via DC arc discharge. <i>Materials Letters</i> , 2011, 65, 100-103.	1.3	26
47	Development of dextran nanoparticles for stabilizing delicate proteins. <i>Nanoscale Research Letters</i> , 2013, 8, 197.	3.1	26
48	Linear humidity response of carbon dot-modified molybdenum disulfide. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 4083-4091.	1.3	25
49	Room temperature DMMP gas sensing based on cobalt phthalocyanine derivative/graphene quantum dot hybrid materials. <i>RSC Advances</i> , 2021, 11, 14805-14813.	1.7	24
50	Three-Dimensional Fe ₃ O ₄ @Reduced Graphene Oxide Heterojunctions for High-Performance Room-Temperature NO ₂ Sensors. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	23
51	Enhancing room-temperature NO ₂ gas sensing performance based on a metal phthalocyanine/graphene quantum dot hybrid material. <i>RSC Advances</i> , 2021, 11, 5618-5628.	1.7	22
52	Functionalized self-assembled monolayers on mesoporous silica nanoparticles with high surface coverage. <i>Nanoscale Research Letters</i> , 2012, 7, 334.	3.1	20
53	Microwave fabrication of Cu ₂ ZnSnS ₄ nanoparticle and its visible light photocatalytic properties. <i>Nanoscale Research Letters</i> , 2014, 9, 477.	3.1	20
54	A low-cost and efficient electronic nose system for quantification of multiple indoor air contaminants utilizing HC and PLSR. <i>Sensors and Actuators B: Chemical</i> , 2022, 350, 130768.	4.0	20

#	ARTICLE	IF	CITATIONS
55	Development of Inorganic Solar Cells by Nano-technology. Nano-Micro Letters, 2012, 4, 124-134.	14.4	18
56	Highly enhanced gas sensing in single-walled carbon nanotube-based thin-film transistor sensors by ultraviolet light irradiation. Nanoscale Research Letters, 2012, 7, 644.	3.1	18
57	The effect of pristine carbon-based nanomaterial on the growth of green gram sprouts and pH of water. Nanoscale Research Letters, 2014, 9, 583.	3.1	17
58	Phase-pure iron pyrite nanocrystals for low-cost photodetectors. Nanoscale Research Letters, 2014, 9, 549.	3.1	16
59	SnO ₂ Nanowire Arrays and Electrical Properties Synthesized by Fast Heating a Mixture of SnO ₂ and CNTs Waste Soot. Nanoscale Research Letters, 2009, 4, 1434-8.	3.1	15
60	Enhancing room-temperature NO ₂ detection of cobalt phthalocyanine based gas sensor at an ultralow laser exposure. Physical Chemistry Chemical Physics, 2020, 22, 18499-18506.	1.3	14
61	Influence of graphite oxide drying temperature on ultra-fast microwave synthesis of graphene. Journal of Materials Science: Materials in Electronics, 2013, 24, 1298-1302.	1.1	10
62	Monolithic integration of metastable In_{2}Se_3 thin film on H-passivated Si(111) for photovoltaic applications. Journal Physics D: Applied Physics, 2016, 49, 145108.	1.3	10
63	Mid-infrared photodetectors based on InSb micro/nanostructures grown on low-cost mica substrates. Materials Letters, 2016, 169, 77-81.	1.3	10
64	Ion-Beam-Directed Self-Ordering of Ga Nanodroplets on GaAs Surfaces. Nanoscale Research Letters, 2016, 11, 38.	3.1	9
65	Site-controlled fabrication of Ga nanodroplets by focused ion beam. Applied Physics Letters, 2014, 104, 133104.	1.5	8
66	The high-yield growth of Bi ₂ Se ₃ nanostructures via facile physical vapor deposition. Vacuum, 2017, 140, 58-62.	1.6	8
67	Microwave-Assisted Chitosan-Functionalized Graphene Oxide as Controlled Intracellular Drug Delivery Nanosystem for Synergistic Antitumour Activity. Nanoscale Research Letters, 2021, 16, 75.	3.1	8
68	Patterning Bi ₂ Se ₃ single-crystalline thin films on Si(111) substrates using strong oxidizing acids. RSC Advances, 2017, 7, 32294-32299.	1.7	6
69	In situ coating nickel organic complexes on free-standing nickel wire films for volumetric-energy-dense supercapacitors. Nanotechnology, 2018, 29, 275401.	1.3	5
70	Significant Enhancement of Hydrogen Production in MoS ₂ /Cu ₂ ZnSnS ₄ Nanoparticles. Particle and Particle Systems Characterization, 2018, 35, 1700472.	1.2	4
71	Photovoltaic enhancement of Si solar cells by assembled carbon nanotubes. Nano-Micro Letters, 2010, 2, 22.	14.4	4
72	Low Cost Pyranometer for Broad Range and Its Credibility Check with Standard Pyranometer. Journal of Nanoelectronics and Optoelectronics, 2015, 10, 119-125.	0.1	2