

Nguyen Van Duy

List of Publications by Year in descending order

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89
papers

3,775
citations

87888

38
h-index

149698

56
g-index

90
all docs

90
docs citations

90
times ranked

3512
citing authors

#	ARTICLE	IF	CITATIONS
1	Design of SnO ₂ /ZnO hierarchical nanostructures for enhanced ethanol gas-sensing performance. <i>Sensors and Actuators B: Chemical</i> , 2012, 174, 594-601.	7.8	174
2	Effective decoration of Pd nanoparticles on the surface of SnO ₂ nanowires for enhancement of CO gas-sensing performance. <i>Journal of Hazardous Materials</i> , 2014, 265, 124-132.	12.4	125
3	Fabrication of highly sensitive and selective H ₂ gas sensor based on SnO ₂ thin film sensitized with microsized Pd islands. <i>Journal of Hazardous Materials</i> , 2016, 301, 433-442.	12.4	119
4	Chlorine Gas Sensing Performance of On-Chip Grown ZnO, WO ₃ , and SnO ₂ Nanowire Sensors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 4828-4837.	8.0	116
5	One-step fabrication of SnO ₂ porous nanofiber gas sensors for sub-ppm H ₂ S detection. <i>Sensors and Actuators A: Physical</i> , 2020, 303, 111722.	4.1	98
6	Outstanding gas-sensing performance of graphene/SnO ₂ nanowire Schottky junctions. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	93
7	Facile on-chip electrospinning of ZnFe ₂ O ₄ nanofiber sensors with excellent sensing performance to H ₂ S down ppb level. <i>Journal of Hazardous Materials</i> , 2018, 360, 6-16.	12.4	87
8	Facile synthesis of ultrafine rGO/WO ₃ nanowire nanocomposites for highly sensitive toxic NH ₃ gas sensors. <i>Materials Research Bulletin</i> , 2020, 125, 110810.	5.2	80
9	Excellent detection of H ₂ S gas at ppb concentrations using ZnFe ₂ O ₄ nanofibers loaded with reduced graphene oxide. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 876-884.	7.8	75
10	On-chip growth of wafer-scale planar-type ZnO nanorod sensors for effective detection of CO gas. <i>Sensors and Actuators B: Chemical</i> , 2013, 181, 529-536.	7.8	74
11	Meso-/Nanoporous Semiconducting Metal Oxides for Gas Sensor Applications. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-14.	2.7	71
12	Diameter controlled synthesis of tungsten oxide nanorod bundles for highly sensitive NO ₂ gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2013, 183, 372-380.	7.8	70
13	Enhancement of gas-sensing characteristics of hydrothermally synthesized WO ₃ nanorods by surface decoration with Pd nanoparticles. <i>Sensors and Actuators B: Chemical</i> , 2016, 223, 453-460.	7.8	70
14	Controllable growth of ZnO nanowires grown on discrete islands of Au catalyst for realization of planar-type micro gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2014, 193, 888-894.	7.8	69
15	Mixed SnO ₂ /TiO ₂ included with carbon nanotubes for gas-sensing application. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 41, 258-263.	2.7	67
16	Bilayer SnO ₂ /WO ₃ nanofilms for enhanced NH ₃ gas sensing performance. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2017, 224, 163-170.	3.5	67
17	Controlled synthesis of ultrathin MoS ₂ nanoflowers for highly enhanced NO ₂ sensing at room temperature. <i>RSC Advances</i> , 2020, 10, 12759-12771.	3.6	67
18	Comparative study on the gas-sensing performance of ZnO/SnO ₂ external and ZnO/SnO ₂ internal heterojunctions for ppb H ₂ S and NO ₂ gases detection. <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129606.	7.8	65

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19	In-situ decoration of Pd nanocrystals on crystalline mesoporous NiO nanosheets for effective hydrogen gas sensors. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 12090-12100.	7.1	61
20	A morphological control of tungsten oxide nanowires by thermal evaporation method for sub-ppm NO ₂ gas sensor application. <i>Sensors and Actuators B: Chemical</i> , 2012, 171-172, 760-768.	7.8	59
21	A comparative study on the electrochemical properties of nanoporous nickel oxide nanowires and nanosheets prepared by a hydrothermal method. <i>RSC Advances</i> , 2018, 8, 19449-19455.	3.6	57
22	C ₂ H ₅ OH and NO ₂ sensing properties of ZnO nanostructures: correlation between crystal size, defect level and sensing performance. <i>RSC Advances</i> , 2018, 8, 5629-5639.	3.6	55
23	Effects of gamma irradiation on hydrogen gas-sensing characteristics of Pd-SnO ₂ thin film sensors. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 12572-12580.	7.1	54
24	High-performance acetone gas sensor based on Pt-Zn ₂ SnO ₄ hollow octahedra for diabetic diagnosis. <i>Journal of Alloys and Compounds</i> , 2021, 886, 161284.	5.5	54
25	Facile synthesis of SnO ₂ -ZnO core-shell nanowires for enhanced ethanol-sensing performance. <i>Current Applied Physics</i> , 2013, 13, 1637-1642.	2.4	53
26	Novel Self-Heated Gas Sensors Using on-Chip Networked Nanowires with Ultralow Power Consumption. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 6153-6162.	8.0	53
27	Superior enhancement of NO ₂ gas response using n-p-n transition of carbon nanotubes/SnO ₂ nanowires heterojunctions. <i>Sensors and Actuators B: Chemical</i> , 2017, 238, 1120-1127.	7.8	53
28	Enhanced NH ₃ and H ₂ gas sensing with H ₂ S gas interference using multilayer SnO ₂ /Pt/WO ₃ nanofilms. <i>Journal of Hazardous Materials</i> , 2021, 412, 125181.	12.4	52
29	Comparative study on CO ₂ and CO sensing performance of LaOCl-coated ZnO nanowires. <i>Journal of Hazardous Materials</i> , 2013, 244-245, 209-216.	12.4	51
30	Comparative NO ₂ gas-sensing performance of the self-heated individual, multiple and networked SnO ₂ nanowire sensors fabricated by a simple process. <i>Sensors and Actuators B: Chemical</i> , 2014, 201, 7-12.	7.8	51
31	Effective monitoring and classification of hydrogen and ammonia gases with a bilayer Pt/SnO ₂ thin film sensor. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 2418-2428.	7.1	51
32	On-chip hydrothermal growth of ZnO nanorods at low temperature for highly selective NO ₂ gas sensor. <i>Materials Letters</i> , 2016, 169, 231-235.	2.6	50
33	VOC gas sensor based on hollow cubic assembled nanocrystal Zn ₂ SnO ₄ for breath analysis. <i>Sensors and Actuators A: Physical</i> , 2020, 302, 111834.	4.1	50
34	Gas sensing materials roadmap. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 303001.	1.8	49
35	Giant enhancement of H ₂ S gas response by decorating n-type SnO ₂ nanowires with p-type NiO nanoparticles. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	48
36	Nanoporous and crystal evolution in nickel oxide nanosheets for enhanced gas-sensing performance. <i>Sensors and Actuators B: Chemical</i> , 2018, 273, 784-793.	7.8	47

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37	Room temperature highly toxic NO ₂ gas sensors based on rootstock/scion nanowires of SnO ₂ /ZnO, ZnO/SnO ₂ , SnO ₂ /SnO ₂ and, ZnO/ZnO. Sensors and Actuators B: Chemical, 2021, 348, 130652.	7.8	40
38	Crystalline mesoporous tungsten oxide nanoplate monoliths synthesized by directed soft template method for highly sensitive NO ₂ gas sensor applications. Materials Research Bulletin, 2013, 48, 440-448.	5.2	39
39	Porous In ₂ O ₃ nanorods fabricated by hydrothermal method for an effective CO gas sensor. Materials Research Bulletin, 2021, 137, 111179.	5.2	39
40	Synthesis of single-crystal SnO ₂ nanowires for NO _x gas sensors application. Ceramics International, 2012, 38, 6557-6563.	4.8	37
41	Synthesis and gas-sensing characteristics of Î±-Fe ₂ O ₃ hollow balls. Journal of Science: Advanced Materials and Devices, 2016, 1, 45-50.	3.1	37
42	Self-heated Ag-decorated SnO ₂ nanowires with low power consumption used as a predictive virtual multisensor for H ₂ S-selective sensing. Analytica Chimica Acta, 2019, 1069, 108-116.	5.4	37
43	Magnetic iron oxide nanoparticles decorated graphene for chemoresistive gas sensing: The particle size effects. Journal of Colloid and Interface Science, 2019, 539, 315-325.	9.4	37
44	Scalable Fabrication of High-Performance NO ₂ Gas Sensors Based on Tungsten Oxide Nanowires by On-Chip Growth and RuO ₂ -Functionalization. ACS Applied Materials & Interfaces, 2014, 6, 12022-12030.	8.0	36
45	Effective design and fabrication of low-power-consumption self-heated SnO ₂ nanowire sensors for reducing gases. Sensors and Actuators B: Chemical, 2019, 295, 144-152.	7.8	35
46	Inclusion of SWCNTs in Nb/Pt co-doped TiO ₂ thin-film sensor for ethanol vapor detection. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2950-2958.	2.7	34
47	Scalable fabrication of SnO ₂ thin films sensitized with CuO islands for enhanced H ₂ S gas sensing performance. Applied Surface Science, 2015, 324, 280-285.	6.1	34
48	Ethanol-Sensing Characteristics of Nanostructured ZnO: Nanorods, Nanowires, and Porous Nanoparticles. Journal of Electronic Materials, 2017, 46, 3406-3411.	2.2	34
49	On-chip growth of patterned ZnO nanorod sensors with PdO decoration for enhancement of hydrogen-sensing performance. International Journal of Hydrogen Energy, 2017, 42, 16294-16304.	7.1	34
50	Comparative effects of synthesis parameters on the NO ₂ gas-sensing performance of on-chip grown ZnO and Zn ₂ SnO ₄ nanowire sensors. Journal of Alloys and Compounds, 2018, 765, 1237-1242.	5.5	32
51	Significantly enhanced NO ₂ gas-sensing performance of nanojunction-networked SnO ₂ nanowires by pulsed UV-radiation. Sensors and Actuators A: Physical, 2021, 327, 112759.	4.1	31
52	Ultrasensitive NO ₂ gas sensing performance of two dimensional ZnO nanomaterials: Nanosheets and nanoplates. Ceramics International, 2021, 47, 28811-28820.	4.8	31
53	Au doped ZnO/SnO ₂ composite nanofibers for enhanced H ₂ S gas sensing performance. Sensors and Actuators A: Physical, 2021, 317, 112454.	4.1	30
54	Highly selective H ₂ S gas sensor based on WO ₃ -coated SnO ₂ nanowires. Materials Today Communications, 2021, 26, 102094.	1.9	29

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55	MoS ₂ nanosheets-decorated SnO ₂ nanofibers for enhanced SO ₂ gas sensing performance and classification of CO, NH ₃ and H ₂ gases. <i>Analytica Chimica Acta</i> , 2021, 1167, 338576.	5.4	29
56	Micro-wheels composed of self-assembled tungsten oxide nanorods for highly sensitive detection of low level toxic chlorine gas. <i>RSC Advances</i> , 2015, 5, 25204-25207.	3.6	27
57	Ultrasensitive NO ₂ gas sensors using tungsten oxide nanowires with multiple junctions self-assembled on discrete catalyst islands via on-chip fabrication. <i>Sensors and Actuators B: Chemical</i> , 2016, 227, 198-203.	7.8	27
58	SO ₂ and H ₂ S Sensing Properties of Hydrothermally Synthesized CuO Nanoplates. <i>Journal of Electronic Materials</i> , 2018, 47, 7170-7178.	2.2	27
59	Effective hydrogen gas nanosensor based on bead-like nanowires of platinum-decorated tin oxide. <i>Sensors and Actuators B: Chemical</i> , 2012, 173, 211-217.	7.8	26
60	Ultrasensitive NO ₂ gas sensors using hybrid heterojunctions of multi-walled carbon nanotubes and on-chip grown SnO ₂ nanowires. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	26
61	An effective H ₂ S sensor based on SnO ₂ nanowires decorated with NiO nanoparticles by electron beam evaporation. <i>RSC Advances</i> , 2019, 9, 13887-13895.	3.6	26
62	Enhanced H ₂ S gas-sensing performance of Fe_2O_3 nanofibers by optimizing process conditions and loading with reduced graphene oxide. <i>Journal of Alloys and Compounds</i> , 2020, 826, 154169.	5.5	26
63	A novel design and fabrication of self-heated In ₂ O ₃ nanowire gas sensor on glass for ethanol detection. <i>Sensors and Actuators A: Physical</i> , 2022, 345, 113769.	4.1	24
64	On-chip growth of single phase Zn ₂ SnO ₄ nanowires by thermal evaporation method for gas sensor application. <i>Journal of Alloys and Compounds</i> , 2017, 708, 470-475.	5.5	23
65	Ultralow power consumption gas sensor based on a self-heated nanojunction of SnO ₂ nanowires. <i>RSC Advances</i> , 2018, 8, 36323-36330.	3.6	23
66	A comparative study on the VOCs gas sensing properties of Zn ₂ SnO ₄ nanoparticles, hollow cubes, and hollow octahedra towards exhaled breath analysis. <i>Sensors and Actuators B: Chemical</i> , 2021, 343, 130147.	7.8	23
67	Extraordinary H ₂ S gas sensing performance of ZnO/rGO external and internal heterojunctions. <i>Journal of Alloys and Compounds</i> , 2021, 879, 160457.	5.5	23
68	Density-controllable growth of SnO ₂ nanowire junction-bridging across electrode for low-temperature NO ₂ gas detection. <i>Journal of Materials Science</i> , 2013, 48, 7253-7259.	3.7	21
69	Electronic noses based on metal oxide nanowires: A review. <i>Nanotechnology Reviews</i> , 2022, 11, 897-925.	5.8	21
70	Comparison of NO ₂ Gas-Sensing Properties of Three Different ZnO Nanostructures Synthesized by On-Chip Low-Temperature Hydrothermal Growth. <i>Journal of Electronic Materials</i> , 2018, 47, 785-793.	2.2	18
71	New Design of ZnO Nanorod- and Nanowire-Based NO ₂ Room-Temperature Sensors Prepared by Hydrothermal Method. <i>Journal of Nanomaterials</i> , 2019, 2019, 1-9.	2.7	17
72	Dip-coating decoration of Ag ₂ O nanoparticles on SnO ₂ nanowires for high-performance H ₂ S gas sensors. <i>RSC Advances</i> , 2020, 10, 17713-17723.	3.6	17

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73	Nanoporous ZnO nanostructure synthesis by a facile method for superior sensitivity ethanol sensor applications. RSC Advances, 2016, 6, 64215-64218.	3.6	16
74	Controlled Growth of Vertically Oriented Trilayer MoS ₂ Nanoflakes for Room-Temperature NO ₂ Gas Sensor Applications. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2000004.	1.8	16
75	Urea mediated synthesis and acetone-sensing properties of ultrathin porous ZnO nanoplates. Materials Today Communications, 2020, 25, 101445.	1.9	15
76	ZnO coral-like nanoplates decorated with Pd nanoparticles for enhanced VOC gas sensing. Journal of Science: Advanced Materials and Devices, 2021, 6, 453-461.	3.1	15
77	Ammonia-Gas-Sensing Characteristics of WO ₃ /Carbon Nanotubes Nanocomposites: Effect of Nanotube Content and Sensing Mechanism. Science of Advanced Materials, 2016, 8, 524-533.	0.7	15
78	Hollow ZnO nanorices prepared by a simple hydrothermal method for NO ₂ and SO ₂ gas sensors. RSC Advances, 2021, 11, 33613-33625.	3.6	15
79	Facile Hydrothermal Synthesis of Two-Dimensional Porous ZnO Nanosheets for Highly Sensitive Ethanol Sensor. Journal of Nanomaterials, 2019, 2019, 1-7.	2.7	13
80	Quantitative Assessment of Trout Fish Spoilage with a Single Nanowire Gas Sensor in a Thermal Gradient. Nanomaterials, 2021, 11, 1604.	4.1	13
81	Nitrogen-Doped Graphene Synthesized from a Single Liquid Precursor for a Field Effect Transistor. Journal of Electronic Materials, 2016, 45, 839-845.	2.2	12
82	CuO Nanofibers Prepared by Electrospinning for Gas Sensing Application: Effect of Copper Salt Concentration. Journal of Nanoscience and Nanotechnology, 2016, 16, 7910-7918.	0.9	11
83	Design and fabrication of effective gradient temperature sensor array based on bilayer SnO ₂ /Pt for gas classification. Sensors and Actuators B: Chemical, 2022, 351, 130979.	7.8	11
84	Facile synthesis of single-crystal nanoporous $\hat{\pm}$ -NiS nanosheets from Ni(OH) ₂ counterpart. Materials Letters, 2015, 161, 282-285.	2.6	10
85	Realization of a portable H ₂ S sensing instrument based on SnO ₂ nanowires. Journal of Science: Advanced Materials and Devices, 2020, 5, 40-47.	3.1	9
86	Facile Synthesis of Pd-CuO Nanoplates with Enhanced SO ₂ and H ₂ Gas-Sensing Characteristics. Journal of Electronic Materials, 2021, 50, 2767-2778.	2.2	8
87	Investigation of zinc electronucleation and growth mechanisms onto platinum electrode from a deep eutectic solvent for gas sensing applications. Journal of Applied Electrochemistry, 2022, 52, 299-309.	2.9	8
88	Fabrication of <i>p</i> -Type Co ₃ O ₄ Nanofiber Sensors for Ultra-Low H ₂ S Gas Detection at Low Temperature. Journal of Nanoscience and Nanotechnology, 2021, 21, 2626-2632.	0.9	2
89	Preparation and Gas Sensing Properties of rGO/CuO Nanocomposites. ECS Journal of Solid State Science and Technology, 2022, 11, 035009.	1.8	1