

Yanbai Shen

List of Publications by Year in descending order

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108
papers

5,093
citations

76196

40
h-index

98622

67
g-index

110
all docs

110
docs citations

110
times ranked

4212
citing authors

#	ARTICLE	IF	CITATIONS
1	A new chemresistive NO ₂ sensing material: Hafnium diboride. <i>Ceramics International</i> , 2022, 48, 6835-6841.	2.3	1
2	Rational design of CuO/In ₂ O ₃ heterostructures with flower-like structures for low temperature detection of formaldehyde. <i>Journal of Alloys and Compounds</i> , 2022, 896, 162959.	2.8	8
3	NiO-functionalized In ₂ O ₃ flower-like structures with enhanced trimethylamine gas sensing performance. <i>Applied Surface Science</i> , 2022, 577, 151877.	3.1	33
4	Flower-like MoS ₂ hierarchical architectures assembled by 2D nanosheets sensitized with SnO ₂ quantum dots for high-performance NH ₃ sensing at room temperature. <i>Sensors and Actuators B: Chemical</i> , 2022, 353, 131191.	4.0	24
5	Optimal construction and gas sensing properties of SnO ₂ @TiO ₂ heterostructured nanorods. <i>Sensors and Actuators B: Chemical</i> , 2022, 355, 131261.	4.0	14
6	Construction of rGO-SnO ₂ heterojunction for enhanced hydrogen detection. <i>Applied Surface Science</i> , 2022, 585, 152623.	3.1	24
7	Enhanced detection of ppb-level NO ₂ by uniform Pt-doped ZnSnO ₃ nanocubes. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 1295-1303.	2.4	5
8	High response and moisture resistance hydrogen sensors based on sandwich-structured PtSnx-rGO-SnO ₂ nanocomposites. <i>Sensors and Actuators B: Chemical</i> , 2022, 368, 132146.	4.0	9
9	Ultrasensitive and selective sensing material of ultrafine WO ₃ nanoparticles for the detection of ppb-level NO ₂ . , 2022, 1, 261-267.		0
10	Effects of cross-sectional geometry on flow characteristics in spiral separators. <i>Separation Science and Technology</i> , 2021, 56, 2967-2977.	1.3	10
11	Synthesis of clinoptilolite-supported BiOCl/TiO ₂ heterojunction nanocomposites with highly-enhanced photocatalytic activity for the complete degradation of xanthates under visible light. <i>Chemical Engineering Journal</i> , 2021, 407, 126697.	6.6	95
12	P-n junctions based on CuO-decorated ZnO nanowires for ethanol sensing application. <i>Applied Surface Science</i> , 2021, 538, 148140.	3.1	66
13	Design and selection of flotation collectors for zinc oxide minerals based on bond valence model. <i>Minerals Engineering</i> , 2021, 160, 106681.	1.8	13
14	Hydrothermal synthesis of novel ternary hierarchical MoS ₂ /TiO ₂ /clinoptilolite nanocomposites with remarkably enhanced visible light response towards xanthates. <i>Applied Surface Science</i> , 2021, 542, 148578.	3.1	35
15	NH ₃ sensing performance of Pt-doped WO ₃ ·0.33H ₂ O microshuttles induced from scheelite leaching solution. <i>Vacuum</i> , 2021, 184, 109936.	1.6	16
16	Room-temperature NO ₂ sensing properties and mechanism of CuO nanorods with Au functionalization. <i>Sensors and Actuators B: Chemical</i> , 2021, 328, 129070.	4.0	48
17	Hydrothermal growth of overlapping ZnO nanorod arrays on the porous substrate and their H ₂ gas sensing. <i>Materials Characterization</i> , 2021, 172, 110858.	1.9	3
18	Facile synthesis of ZnO-SnO ₂ hetero-structured nanowires for high-performance NO ₂ sensing application. <i>Sensors and Actuators B: Chemical</i> , 2021, 333, 129613.	4.0	65

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19	Facile synthesis of clinoptilolite-supported Ag/TiO ₂ nanocomposites for visible-light degradation of xanthates. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2021, 122, 231-240.	2.7	25
20	Effects of rare earth elements doping on gas sensing properties of ZnO nanowires. <i>Ceramics International</i> , 2021, 47, 24218-24226.	2.3	35
21	Synthesis and gas sensing properties of NiO/ZnO heterostructured nanowires. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160189.	2.8	30
22	Understanding adsorption of amine surfactants on the solvated quartz (1 0 1) surface by a jointed Dreiding-ClayFF force field. <i>Applied Surface Science</i> , 2021, 566, 150737.	3.1	12
23	Effect of noble metal elements on ethanol sensing properties of ZnSnO ₃ nanocubes. <i>Journal of Alloys and Compounds</i> , 2021, 887, 161409.	2.8	21
24	Potential application of an eco-friendly amine oxide collector in flotation separation of quartz from hematite. <i>Separation and Purification Technology</i> , 2021, 278, 119668.	3.9	16
25	One-step synthesis and the enhanced trimethylamine sensing properties of Co ₃ O ₄ /SnO ₂ flower-like structures. <i>Vacuum</i> , 2020, 171, 108994.	1.6	37
26	Effect of noble metal element on microstructure and NO ₂ sensing properties of WO ₃ nanoplates prepared from a low-grade scheelite concentrate. <i>Journal of Alloys and Compounds</i> , 2020, 818, 152927.	2.8	17
27	Ppb-level NO ₂ sensing properties of Au-doped WO ₃ nanosheets synthesized from a low-grade scheelite concentrate. <i>Vacuum</i> , 2020, 172, 109036.	1.6	25
28	Synthesis of NiO-In ₂ O ₃ heterojunction nanospheres for highly selective and sensitive detection of ppb-level NO ₂ . <i>Vacuum</i> , 2020, 172, 109086.	1.6	32
29	Adsorption and desorption of butyl xanthate on chalcopyrite. <i>Journal of Materials Research and Technology</i> , 2020, 9, 12654-12660.	2.6	18
30	Numerical simulation of the effect of burden profile on gas flow in a COREX shaft furnace. <i>Powder Technology</i> , 2020, 376, 537-548.	2.1	14
31	In-situ growth of V ₂ O ₅ flower-like structures on ceramic tubes and their trimethylamine sensing properties. <i>Chinese Chemical Letters</i> , 2020, 31, 2133-2136.	4.8	16
32	Construction of ZnO/SnO ₂ n-n junction for dual-sensing of nitrogen dioxide and ethanol. <i>Vacuum</i> , 2020, 181, 109615.	1.6	23
33	Effects of monohydric alcohols of varying chain lengths and isomeric structures on magnesite and dolomite flotation by dodecylamine. <i>Powder Technology</i> , 2020, 374, 233-240.	2.1	17
34	Synthesis of high-efficient TiO ₂ /clinoptilolite photocatalyst for complete degradation of xanthate. <i>Minerals Engineering</i> , 2020, 159, 106640.	1.8	41
35	Highly selective NO ₂ chemiresistive gas sensor based on hierarchical In ₂ O ₃ microflowers grown on clinoptilolite substrates. <i>Journal of Alloys and Compounds</i> , 2020, 828, 154395.	2.8	56
36	Fabrication, characterization and n-propanol sensing properties of perovskite-type ZnSnO ₃ nanospheres based gas sensor. <i>Applied Surface Science</i> , 2020, 509, 145335.	3.1	97

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37	Design and flotation performance of a novel hydroxy polyamine surfactant based on hematite reverse flotation desilication system. <i>Journal of Molecular Liquids</i> , 2020, 301, 112428.	2.3	32
38	Enhanced NO ₂ sensing performance of ZnO nanowires functionalized with ultra-fine In ₂ O ₃ nanoparticles. <i>Sensors and Actuators B: Chemical</i> , 2020, 308, 127729.	4.0	88
39	Synthesis and in-situ noble metal modification of WO ₃ ·0.33H ₂ O nanorods from a tungsten-containing mineral for enhancing NH ₃ sensing performance. <i>Chinese Chemical Letters</i> , 2020, 31, 2037-2040.	4.8	9
40	Design and application of highly responsive and selective rGO-SnO ₂ nanocomposites for NO ₂ monitoring. <i>Materials Characterization</i> , 2020, 163, 110284.	1.9	34
41	Low-Temperature and Highly Enhanced NO ₂ Sensing Performance of Au-Functionalized WO ₃ Microspheres with a Hierarchical Nanostructure. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 3384-3384.	0.0	1
42	Controllable Synthesis of Zn-Doped Fe ₂ O ₃ Nanowires for H ₂ S Sensing. <i>Nanomaterials</i> , 2019, 9, 994.	1.9	17
43	In-situ growth of mesoporous In ₂ O ₃ nanorod arrays on a porous ceramic substrate for ppb-level NO ₂ detection at room temperature. <i>Applied Surface Science</i> , 2019, 498, 143873.	3.1	69
44	Complex-surfactant-assisted hydrothermal synthesis of one-dimensional ZnO nanorods for high-performance ethanol gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 286, 501-511.	4.0	179
45	Effect of pore structure of the metakaolin-based porous substrate on the growth of SnO ₂ nanowires and their H ₂ S sensing properties. <i>Vacuum</i> , 2019, 167, 118-128.	1.6	17
46	ZnO-Reduced Graphene Oxide Composites Sensitized with Graphitic Carbon Nitride Nanosheets for Ethanol Sensing. <i>ACS Applied Nano Materials</i> , 2019, 2, 2734-2742.	2.4	84
47	Bimetallic Au/Pd nanoparticles decorated ZnO nanowires for NO ₂ detection. <i>Sensors and Actuators B: Chemical</i> , 2019, 289, 160-168.	4.0	97
48	NO ₂ sensing properties of WO ₃ porous films with honeycomb structure. <i>Journal of Alloys and Compounds</i> , 2019, 789, 129-138.	2.8	25
49	Investigation on Trimethylamine Sensing Performance of Pd-Decorated ZnO Flower-Like Structures Synthesized by One-Step Hydrothermal Method. <i>ChemistrySelect</i> , 2019, 4, 2694-2702.	0.7	6
50	In-situ growth of ordered Pd-doped ZnO nanorod arrays on ceramic tube with enhanced trimethylamine sensing performance. <i>Applied Surface Science</i> , 2019, 463, 348-356.	3.1	69
51	Influence of Synthesis Conditions on Microstructure and NO ₂ Sensing Properties of WO ₃ Porous Films Synthesized by Non-Hydrolytic Sol-Gel Method. <i>Nanomaterials</i> , 2019, 9, 8.	1.9	16
52	SO ₂ sensing properties of SnO ₂ nanowires grown on a novel diatomite-based porous substrate. <i>Ceramics International</i> , 2019, 45, 2556-2565.	2.3	27
53	Low-temperature H ₂ S sensing performance of Cu-doped ZnFe ₂ O ₄ nanoparticles with spinel structure. <i>Applied Surface Science</i> , 2019, 470, 581-590.	3.1	37
54	Sub-ppm level NO ₂ sensing properties of polyethyleneimine-mediated WO ₃ nanoparticles synthesized by a one-pot hydrothermal method. <i>Journal of Alloys and Compounds</i> , 2019, 783, 103-112.	2.8	42

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55	Synthesis of ZnO nanowires/Au nanoparticles hybrid by a facile one-pot method and their enhanced NO ₂ sensing properties. <i>Journal of Alloys and Compounds</i> , 2019, 783, 503-512.	2.8	42
56	NO ₂ sensing properties of one-pot-synthesized ZnO nanowires with Pd functionalization. <i>Sensors and Actuators B: Chemical</i> , 2019, 280, 151-161.	4.0	151
57	Design of Au@WO ₃ core-shell structured nanospheres for ppb-level NO ₂ sensing. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 917-926.	4.0	181
58	A facile one-step hydrothermal synthesis of NiO/ZnO heterojunction microflowers for the enhanced formaldehyde sensing properties. <i>Journal of Alloys and Compounds</i> , 2018, 739, 260-269.	2.8	95
59	Xanthate sensing properties of Pt-functionalized WO ₃ microspheres synthesized by one-pot hydrothermal method. <i>Ceramics International</i> , 2018, 44, 4814-4823.	2.3	14
60	Highly selective NO ₂ sensor based on p-type nanocrystalline NiO thin films prepared by sol-gel dip coating. <i>Ceramics International</i> , 2018, 44, 753-759.	2.3	89
61	In-situ growth of ZnO nanowire arrays on the sensing electrode via a facile hydrothermal route for high-performance NO ₂ sensor. <i>Applied Surface Science</i> , 2018, 435, 1096-1104.	3.1	77
62	Low-temperature and highly enhanced NO ₂ sensing performance of Au-functionalized WO ₃ microspheres with a hierarchical nanostructure. <i>Applied Surface Science</i> , 2018, 434, 922-931.	3.1	101
63	Density Functional Theory Study on the Surface Properties and Floatability of Hemimorphite and Smithsonite. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 542.	0.8	15
64	Fabrication of shrub-like CuO porous films by a top-down method for high-performance ethanol gas sensor. <i>Vacuum</i> , 2018, 157, 332-339.	1.6	37
65	Low-temperature formaldehyde gas sensors based on NiO-SnO ₂ heterojunction microflowers assembled by thin porous nanosheets. <i>Sensors and Actuators B: Chemical</i> , 2018, 273, 418-428.	4.0	177
66	Ultra-long Zn ₂ SnO ₄ -ZnO microwires based gas sensor for hydrogen detection. <i>Applied Surface Science</i> , 2017, 400, 440-445.	3.1	32
67	Assembly of 3D flower-like NiO hierarchical architectures by 2D nanosheets: synthesis and their sensing properties to formaldehyde. <i>RSC Advances</i> , 2017, 7, 3540-3549.	1.7	44
68	CuO hollow microspheres self-assembled with nanobars: Synthesis and their sensing properties to formaldehyde. <i>Vacuum</i> , 2017, 144, 272-280.	1.6	35
69	Elimination of the Adverse Effect of Calcium Ion on the Flotation Separation of Magnesite from Dolomite. <i>Minerals (Basel, Switzerland)</i> , 2017, 7, 150.	0.8	35
70	Ethanol sensing properties of TeO ₂ thin films prepared by non-hydrolytic sol-gel process. <i>Sensors and Actuators B: Chemical</i> , 2016, 230, 667-672.	4.0	13
71	Catalytic effect of polyethylene glycol on sulfur oxidation in chalcopyrite bioleaching by <i>Acidithiobacillus ferrooxidans</i> . <i>Minerals Engineering</i> , 2016, 95, 74-78.	1.8	32
72	Nitrogen dioxide sensing using tungsten oxide microspheres with hierarchical nanorod-assembled architectures by a complexing surfactant-mediated hydrothermal route. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1345-1352.	5.2	91

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73	Highly sensitive and selective room temperature alcohol gas sensors based on TeO ₂ nanowires. Journal of Alloys and Compounds, 2016, 664, 229-234.	2.8	23
74	Complexing surfactants-mediated hydrothermal synthesis of WO ₃ microspheres for gas sensing applications. Materials Letters, 2016, 163, 150-153.	1.3	36
75	CTAB-Assisted Hydrothermal Synthesis of WO ₃ Hierarchical Porous Structures and Investigation of Their Sensing Properties. Journal of Nanomaterials, 2015, 2015, 1-10.	1.5	3
76	Immobilization of Cu(II) and Zn(II) in simulated polluted soil using sulfurizing agent. Chemical Engineering Journal, 2015, 277, 312-317.	6.6	21
77	Synthesis of WO ₃ flower-like hierarchical architectures and their sensing properties. Journal of Alloys and Compounds, 2015, 649, 731-738.	2.8	38
78	Flower-like NiO hierarchical microspheres self-assembled with nanosheets: Surfactant-free solvothermal synthesis and their gas sensing properties. Journal of Alloys and Compounds, 2015, 636, 357-362.	2.8	73
79	Highly sensitive hydrogen sensors based on SnO ₂ nanomaterials with different morphologies. International Journal of Hydrogen Energy, 2015, 40, 15773-15779.	3.8	76
80	A low-temperature n-propanol gas sensor based on TeO ₂ nanowires as the sensing layer. RSC Advances, 2015, 5, 29126-29130.	1.7	31
81	Synthesis of SnO ₂ nanorods and application to H ₂ sensor. Journal of Alloys and Compounds, 2014, 593, 271-274.	2.8	50
82	Microstructure and enhanced H ₂ S sensing properties of Pt-loaded WO ₃ thin films. Sensors and Actuators B: Chemical, 2014, 193, 273-279.	4.0	68
83	Fe _{0.4} Ta _{0.5} P ₂ O ₇ -based composite membrane for high-temperature, low-humidity proton exchange membrane fuel cells. Electrochimica Acta, 2014, 128, 287-291.	2.6	17
84	Synthesis and Characterization of Single-Crystalline SnO ₂ Nanowires. Journal of Nanomaterials, 2013, 2013, 1-6.	1.5	8
85	Microstructure and Room-temperature H ₂ Sensing Properties of Undoped and Impurity-doped SnO ₂ Nanowires. Chemistry Letters, 2013, 42, 492-494.	0.7	10
86	Intermediate-temperature, non-humidified proton exchange membrane fuel cell with a highly proton-conducting Fe _{0.4} Ta _{0.5} P ₂ O ₇ electrolyte. Electrochemistry Communications, 2012, 24, 82-84.	2.3	16
87	Proton conduction in non-doped and acceptor-doped metal pyrophosphate (MP ₂ O ₇) composite ceramics at intermediate temperatures. Journal of Materials Chemistry, 2012, 22, 3973.	6.7	48
88	Proton conduction in Al _{1/3} B _{2/3} V _{0.5} P ₂ O ₇ compounds at intermediate temperatures. Journal of Materials Chemistry, 2012, 22, 14907.	6.7	15
89	Hydroxide Ion Conducting Antimony(V)-Doped Tin Pyrophosphate Electrolyte for Intermediate-Temperature Alkaline Fuel Cells. Angewandte Chemie - International Edition, 2012, 51, 10786-10790.	7.2	30
90	Synthesis and characterization of dense SnP ₂ O ₇ /SnO ₂ composite ceramics as intermediate-temperature proton conductors. Journal of Materials Chemistry, 2011, 21, 663-670.	6.7	41

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91	Alumina substrate-supported electrochemical device for potential application as a diesel particulate matter sensor. <i>Sensors and Actuators B: Chemical</i> , 2010, 145, 708-712.	4.0	15
92	Proton conduction in metal pyrophosphates (MP2O7) at intermediate temperatures. <i>Journal of Materials Chemistry</i> , 2010, 20, 6214.	6.7	90
93	Microstructure and H ₂ gas sensing properties of undoped and Pd-doped SnO ₂ nanowires. <i>Sensors and Actuators B: Chemical</i> , 2009, 135, 524-529.	4.0	188
94	Influence of effective surface area on gas sensing properties of WO ₃ sputtered thin films. <i>Thin Solid Films</i> , 2009, 517, 2069-2072.	0.8	149
95	Preparation of WO ₃ nanoparticles and application to NO ₂ sensor. <i>Applied Surface Science</i> , 2009, 256, 1050-1053.	3.1	103
96	Hydrogen sensing properties of Pd-doped SnO ₂ sputtered films with columnar nanostructures. <i>Thin Solid Films</i> , 2009, 517, 6119-6123.	0.8	36
97	Facile synthesis and NO ₂ gas sensing of tungsten oxide nanorods assembled microspheres. <i>Sensors and Actuators B: Chemical</i> , 2009, 140, 514-519.	4.0	142
98	A generic approach for controlled synthesis of In ₂ O ₃ nanostructures for gas sensing applications. <i>Journal of Alloys and Compounds</i> , 2009, 481, L35-L39.	2.8	42
99	Hydrogen sensors made of undoped and Pt-doped SnO ₂ nanowires. <i>Journal of Alloys and Compounds</i> , 2009, 488, L21-L25.	2.8	97
100	O ₂ and CO sensing of Ga ₂ O ₃ multiple nanowire gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2008, 129, 666-670.	4.0	169
101	Porous SnO ₂ sputtered films with high H ₂ sensitivity at low operation temperature. <i>Thin Solid Films</i> , 2008, 516, 5111-5117.	0.8	49
102	Synthesis and Characterization of TeO ₂ Nanowires. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 771.	0.8	41
103	Dealloying Derived Synthesis of W Nanopetal Films and Their Transformation into WO ₃ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 1391-1395.	1.5	35
104	Fabrication of WO ₃ Nanoflakes by a Dealloying-based Approach. <i>Chemistry Letters</i> , 2008, 37, 296-297.	0.7	8
105	Room temperature gas sensing of p-type TeO ₂ nanowires. <i>Applied Physics Letters</i> , 2007, 90, 173119.	1.5	103
106	Influence of annealing on microstructure and NO ₂ -sensing properties of sputtered WO ₃ thin films. <i>Sensors and Actuators B: Chemical</i> , 2007, 128, 173-178.	4.0	90
107	Effective Surface Area of SnO ₂ -Sputtered Films Evaluated by Measurement of Physical Adsorption Isotherms. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 9180-9184.	0.8	15
108	Influence of annealing temperature on microstructure and H ₂ sensing properties of Pd-doped SnO ₂ sputtered thin films. , 0, , .		1