Yanbai Shen

List of Publications by Year
in descending order

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108	5,093	76196	98622
papers	citations	40	67
		h-index	g-index

110	110	110	4212
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure and H2 gas sensing properties of undoped and Pd-doped SnO2 nanowires. Sensors and Actuators B: Chemical, 2009, 135, 524-529.	4.0	188
2	Design of Au@WO3 coreâ"shell structured nanospheres for ppb-level NO2 sensing. Sensors and Actuators B: Chemical, 2019, 282, 917-926.	4.0	181
3	Complex-surfactant-assisted hydrothermal synthesis of one-dimensional ZnO nanorods for high-performance ethanol gas sensor. Sensors and Actuators B: Chemical, 2019, 286, 501-511.	4.0	179
4	Low-temperature formaldehyde gas sensors based on NiO-SnO2 heterojunction microflowers assembled by thin porous nanosheets. Sensors and Actuators B: Chemical, 2018, 273, 418-428.	4.0	177
5	O2 and CO sensing of Ga2O3 multiple nanowire gas sensors. Sensors and Actuators B: Chemical, 2008, 129, 666-670.	4.0	169
6	NO2 sensing properties of one-pot-synthesized ZnO nanowires with Pd functionalization. Sensors and Actuators B: Chemical, 2019, 280, 151-161.	4.0	151
7	Influence of effective surface area on gas sensing properties of WO3 sputtered thin films. Thin Solid Films, 2009, 517, 2069-2072.	0.8	149
8	Facile synthesis and NO2 gas sensing of tungsten oxide nanorods assembled microspheres. Sensors and Actuators B: Chemical, 2009, 140, 514-519.	4.0	142
9	Room temperature gas sensing of p-type TeO2 nanowires. Applied Physics Letters, 2007, 90, 173119.	1.5	103
10	Preparation of WO3 nanoparticles and application to NO2 sensor. Applied Surface Science, 2009, 256, 1050-1053.	3.1	103
11	Low-temperature and highly enhanced NO2 sensing performance of Au-functionalized WO3 microspheres with a hierarchical nanostructure. Applied Surface Science, 2018, 434, 922-931.	3.1	101
12	Hydrogen sensors made of undoped and Pt-doped SnO2 nanowires. Journal of Alloys and Compounds, 2009, 488, L21-L25.	2.8	97
13	Bimetallic Au/Pd nanoparticles decorated ZnO nanowires for NO2 detection. Sensors and Actuators B: Chemical, 2019, 289, 160-168.	4.0	97
14	Fabrication, characterization and n-propanol sensing properties of perovskite-type ZnSnO3 nanospheres based gas sensor. Applied Surface Science, 2020, 509, 145335.	3.1	97
15	A facile one-step hydrothermal synthesis of NiO/ZnO heterojunction microflowers for the enhanced formaldehyde sensing properties. Journal of Alloys and Compounds, 2018, 739, 260-269.	2.8	95
16	Synthesis of clinoptilolite-supported BiOCl/TiO2 heterojunction nanocomposites with highly-enhanced photocatalytic activity for the complete degradation of xanthates under visible light. Chemical Engineering Journal, 2021, 407, 126697.	6.6	95
17	Nitrogen dioxide sensing using tungsten oxide microspheres with hierarchical nanorod-assembled architectures by a complexing surfactant-mediated hydrothermal route. Journal of Materials Chemistry A, 2016, 4, 1345-1352.	5.2	91
18	Influence of annealing on microstructure and NO2-sensing properties of sputtered WO3 thin films. Sensors and Actuators B: Chemical, 2007, 128, 173-178.	4.0	90

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19	Proton conduction in metal pyrophosphates (MP2O7) at intermediate temperatures. Journal of Materials Chemistry, 2010, 20, 6214.	6.7	90
20	Highly selective NO2 sensor based on p-type nanocrystalline NiO thin films prepared by solâ€“gel dip coating. Ceramics International, 2018, 44, 753-759.	2.3	89
21	Enhanced NO2 sensing performance of ZnO nanowires functionalized with ultra-fine In2O3 nanoparticles. Sensors and Actuators B: Chemical, 2020, 308, 127729.	4.0	88
22	ZnO-Reduced Graphene Oxide Composites Sensitized with Graphitic Carbon Nitride Nanosheets for Ethanol Sensing. ACS Applied Nano Materials, 2019, 2, 2734-2742.	2.4	84
23	In-situ growth of ZnO nanowire arrays on the sensing electrode via a facile hydrothermal route for high-performance NO2 sensor. Applied Surface Science, 2018, 435, 1096-1104.	3.1	77
24	Highly sensitive hydrogen sensors based on SnO2 nanomaterials with different morphologies. International Journal of Hydrogen Energy, 2015, 40, 15773-15779.	3.8	76
25	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
26	In-situ growth of mesoporous In2O3 nanorod arrays on a porous ceramic substrate for ppb-level NO2 detection at room temperature. Applied Surface Science, 2019, 498, 143873.	3.1	69
27	In-situ growth of ordered Pd-doped ZnO nanorod arrays on ceramic tube with enhanced trimethylamine sensing performance. Applied Surface Science, 2019, 463, 348-356.	3.1	69
28	Microstructure and enhanced H2S sensing properties of Pt-loaded WO3 thin films. Sensors and Actuators B: Chemical, 2014, 193, 273-279.	4.0	68
29	P-n junctions based on CuO-decorated ZnO nanowires for ethanol sensing application. Applied Surface Science, 2021, 538, 148140.	3.1	66
30	Facile synthesis of ZnO-SnO2 hetero-structured nanowires for high-performance NO2 sensing application. Sensors and Actuators B: Chemical, 2021, 333, 129613.	4.0	65
31	Highly selective NO2 chemiresistive gas sensor based on hierarchical In2O3 microflowers grown on clinoptilolite substrates. Journal of Alloys and Compounds, 2020, 828, 154395.	2.8	56
32	Synthesis of SnO2 nanorods and application to H2 sensor. Journal of Alloys and Compounds, 2014, 593, 271-274.	2.8	50
33	Porous SnO2 sputtered films with high H2 sensitivity at low operation temperature. Thin Solid Films, 2008, 516, 5111-5117.	0.8	49
34	Proton conduction in non-doped and acceptor-doped metal pyrophosphate (MP2O7) composite ceramics at intermediate temperatures. Journal of Materials Chemistry, 2012, 22, 3973.	6.7	48
35	Room-temperature NO2 sensing properties and mechanism of CuO nanorods with Au functionalization. Sensors and Actuators B: Chemical, 2021, 328, 129070.	4.0	48
36	Assembly of 3D flower-like NiO hierarchical architectures by 2D nanosheets: synthesis and their sensing properties to formaldehyde. RSC Advances, 2017, 7, 3540-3549.	1.7	44

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37	A generic approach for controlled synthesis of In2O3 nanostructures for gas sensing applications. Journal of Alloys and Compounds, 2009, 481, L35-L39.	2.8	42
38	Sub-ppm level NO2 sensing properties of polyethyleneimine-mediated WO3 nanoparticles synthesized by a one-pot hydrothermal method. Journal of Alloys and Compounds, 2019, 783, 103-112.	2.8	42
39	Synthesis of ZnO nanowires/Au nanoparticles hybrid by a facile one-pot method and their enhanced NO2 sensing properties. Journal of Alloys and Compounds, 2019, 783, 503-512.	2.8	42
40	Synthesis and Characterization of TeO₂ Nanowires. Japanese Journal of Applied Physics, 2008, 47, 771.	0.8	41
41	Synthesis and characterization of dense SnP2O7â€“SnO2 composite ceramics as intermediate-temperature proton conductors. Journal of Materials Chemistry, 2011, 21, 663-670.	6.7	41
42	Synthesis of high-efficient TiO2/clinoptilolite photocatalyst for complete degradation of xanthate. Minerals Engineering, 2020, 159, 106640.	1.8	41
43	Synthesis of WO3 flower-like hierarchical architectures and their sensing properties. Journal of Alloys and Compounds, 2015, 649, 731-738.	2.8	38
44	Fabrication of shrub-like CuO porous films by a top-down method for high-performance ethanol gas sensor. Vacuum, 2018, 157, 332-339.	1.6	37
45	Low-temperature H2S sensing performance of Cu-doped ZnFe2O4 nanoparticles with spinel structure. Applied Surface Science, 2019, 470, 581-590.	3.1	37
46	One-step synthesis and the enhanced trimethylamine sensing properties of Co3O4/SnO2 flower-like structures. Vacuum, 2020, 171, 108994.	1.6	37
47	Hydrogen sensing properties of Pd-doped SnO2 sputtered films with columnar nanostructures. Thin Solid Films, 2009, 517, 6119-6123.	0.8	36
48	Complexing surfactants-mediated hydrothermal synthesis of WO 3 microspheres for gas sensing applications. Materials Letters, 2016, 163, 150-153.	1.3	36
49	Dealloying Derived Synthesis of W Nanopetal Films and Their Transformation into WO₃. Journal of Physical Chemistry C, 2008, 112, 1391-1395.	1.5	35
50	CuO hollow microspheres self-assembled with nanobars: Synthesis and their sensing properties to formaldehyde. Vacuum, 2017, 144, 272-280.	1.6	35
51	Elimination of the Adverse Effect of Calcium Ion on the Flotation Separation of Magnesite from Dolomite. Minerals (Basel, Switzerland), 2017, 7, 150.	0.8	35
52	Hydrothermal synthesis of novel ternary hierarchical MoS2/TiO2/clinoptilolite nanocomposites with remarkably enhanced visible light response towards xanthates. Applied Surface Science, 2021, 542, 148578.	3.1	35
53	Effects of rare earth elements doping on gas sensing properties of ZnO nanowires. Ceramics International, 2021, 47, 24218-24226.	2.3	35
54	Design and application of highly responsive and selective rGO-SnO2 nanocomposites for NO2 monitoring. Materials Characterization, 2020, 163, 110284.	1.9	34

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55	NiO-functionalized In2O3 flower-like structures with enhanced trimethylamine gas sensing performance. Applied Surface Science, 2022, 577, 151877.	3.1	33
56	Catalytic effect of polyethylene glycol on sulfur oxidation in chalcopyrite bioleaching by Acidithiobacillus ferrooxidans. Minerals Engineering, 2016, 95, 74-78.	1.8	32
57	Ultra-long Zn 2 SnO 4 -ZnO microwires based gas sensor for hydrogen detection. Applied Surface Science, 2017, 400, 440-445.	3.1	32
58	Synthesis of NiO-In2O3 heterojunction nanospheres for highly selective and sensitive detection of ppb-level NO2. Vacuum, 2020, 172, 109086.	1.6	32
59	Design and flotation performance of a novel hydroxy polyamine surfactant based on hematite reverse flotation desilication system. Journal of Molecular Liquids, 2020, 301, 112428.	2.3	32
60	A low-temperature n-propanol gas sensor based on TeO₂ nanowires as the sensing layer. RSC Advances, 2015, 5, 29126-29130.	1.7	31
61	Hydroxide Ion Conducting Antimony(V)â€Doped Tin Pyrophosphate Electrolyte for Intermediateâ€Temperature Alkaline Fuel Cells. Angewandte Chemie - International Edition, 2012, 51, 10786-10790.	7.2	30
62	Synthesis and gas sensing properties of NiO/ZnO heterostructured nanowires. Journal of Alloys and Compounds, 2021, 877, 160189.	2.8	30
63	SO2 sensing properties of SnO2 nanowires grown on a novel diatomite-based porous substrate. Ceramics International, 2019, 45, 2556-2565.	2.3	27
64	NO2 sensing properties of WO3 porous films with honeycomb structure. Journal of Alloys and Compounds, 2019, 789, 129-138.	2.8	25
65	Ppb-level NO2 sensing properties of Au-doped WO3 nanosheets synthesized from a low-grade scheelite concentrate. Vacuum, 2020, 172, 109036.	1.6	25
66	Facile synthesis of clinoptilolite-supported Ag/TiO2 nanocomposites for visible-light degradation of xanthates. Journal of the Taiwan Institute of Chemical Engineers, 2021, 122, 231-240.	2.7	25
67	Flower-like MoS2 hierarchical architectures assembled by 2D nanosheets sensitized with SnO2 quantum dots for high-performance NH3 sensing at room temperature. Sensors and Actuators B: Chemical, 2022, 353, 131191.	4.0	24
68	Construction of rGO-SnO2 heterojunction for enhanced hydrogen detection. Applied Surface Science, 2022, 585, 152623.	3.1	24
69	Highly sensitive and selective room temperature alcohol gas sensors based on TeO2 nanowires. Journal of Alloys and Compounds, 2016, 664, 229-234.	2.8	23
70	Construction of ZnOâ€“SnO2 n-n junction for dual-sensing of nitrogen dioxide and ethanol. Vacuum, 2020, 181, 109615.	1.6	23
71	Immobilization of Cu(II) and Zn(II) in simulated polluted soil using sulfurizing agent. Chemical Engineering Journal, 2015, 277, 312-317.	6.6	21
72	Effect of noble metal elements on ethanol sensing properties of ZnSnO3 nanocubes. Journal of Alloys and Compounds, 2021, 887, 161409.	2.8	21

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73	Adsorption and desorption of butyl xanthate on chalcopyrite. Journal of Materials Research and Technology, 2020, 9, 12654-12660.	2.6	18
74	Fe0.4Ta0.5P2O7-based composite membrane for high-temperature, low-humidity proton exchange membrane fuel cells. Electrochimica Acta, 2014, 128, 287-291.	2.6	17
75	Controllable Synthesis of Zn-Doped Î±-Fe2O3 Nanowires for H2S Sensing. Nanomaterials, 2019, 9, 994.	1.9	17
76	Effect of pore structure of the metakaolin-based porous substrate on the growth of SnO2 nanowires and their H2S sensing properties. Vacuum, 2019, 167, 118-128.	1.6	17
77	Effect of noble metal element on microstructure and NO2 sensing properties of WO3 nanoplates prepared from a low-grade scheelite concentrate. Journal of Alloys and Compounds, 2020, 818, 152927.	2.8	17
78	Effects of monohydric alcohols of varying chain lengths and isomeric structures on magnesite and dolomite flotation by dodecylamine. Powder Technology, 2020, 374, 233-240.	2.1	17
79	Intermediate-temperature, non-humidified proton exchange membrane fuel cell with a highly proton-conducting Fe0.4Ta0.5P2O7 electrolyte. Electrochemistry Communications, 2012, 24, 82-84.	2.3	16
80	Influence of Synthesis Conditions on Microstructure and NO2 Sensing Properties of WO3 Porous Films Synthesized by Non-Hydrolytic Solâ€“Gel Method. Nanomaterials, 2019, 9, 8.	1.9	16
81	In-situ growth of V2O5 flower-like structures on ceramic tubes and their trimethylamine sensing properties. Chinese Chemical Letters, 2020, 31, 2133-2136.	4.8	16
82	NH3 sensing performance of Pt-doped WO3Â·0.33H2O microshuttles induced from scheelite leaching solution. Vacuum, 2021, 184, 109936.	1.6	16
83	Potential application of an eco-friendly amine oxide collector in flotation separation of quartz from hematite. Separation and Purification Technology, 2021, 278, 119668.	3.9	16
84	Effective Surface Area of SnO2-Sputtered Films Evaluated by Measurement of Physical Adsorption Isotherms. Japanese Journal of Applied Physics, 2006, 45, 9180-9184.	0.8	15
85	Alumina substrate-supported electrochemical device for potential application as a diesel particulate matter sensor. Sensors and Actuators B: Chemical, 2010, 145, 708-712.	4.0	15
86	Proton conduction in AIII0.5BV0.5P2O7 compounds at intermediate temperatures. Journal of Materials Chemistry, 2012, 22, 14907.	6.7	15
87	Density Functional Theory Study on the Surface Properties and Floatability of Hemimorphite and Smithsonite. Minerals (Basel, Switzerland), 2018, 8, 542.	0.8	15
88	Xanthate sensing properties of Pt-functionalized WO3 microspheres synthesized by one-pot hydrothermal method. Ceramics International, 2018, 44, 4814-4823.	2.3	14
89	Numerical simulation of the effect of burden profile on gas flow in a COREX shaft furnace. Powder Technology, 2020, 376, 537-548.	2.1	14
90	Optimal construction and gas sensing properties of SnO2@TiO2 heterostructured nanorods. Sensors and Actuators B: Chemical, 2022, 355, 131261.	4.0	14

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91	Ethanol sensing properties of TeO2 thin films prepared by non-hydrolytic solâ€“gel process. Sensors and Actuators B: Chemical, 2016, 230, 667-672.	4.0	13
92	Design and selection of flotation collectors for zinc oxide minerals based on bond valence model. Minerals Engineering, 2021, 160, 106681.	1.8	13
93	Understanding adsorption of amine surfactants on the solvated quartz (1 0 1) surface by a jointed Dreiding-ClayFF force field. Applied Surface Science, 2021, 566, 150737.	3.1	12
94	Microstructure and Room-temperature H2 Sensing Properties of Undoped and Impurity-doped SnO2 Nanowires. Chemistry Letters, 2013, 42, 492-494.	0.7	10
95	Effects of cross-sectional geometry on flow characteristics in spiral separators. Separation Science and Technology, 2021, 56, 2967-2977.	1.3	10
96	Synthesis and in-situ noble metal modification of WO3Â·0.33H2O nanorods from a tungsten-containing mineral for enhancing NH3 sensing performance. Chinese Chemical Letters, 2020, 31, 2037-2040.	4.8	9
97	High response and moisture resistance hydrogen sensors based on sandwich-structured PtSnx-rGO-SnO2 nanocomposites. Sensors and Actuators B: Chemical, 2022, 368, 132146.	4.0	9
98	Fabrication of WO3 Nanoflakes by a Dealloying-based Approach. Chemistry Letters, 2008, 37, 296-297.	0.7	8
99	Synthesis and Characterization of Single-Crystalline SnO₂Nanowires. Journal of Nanomaterials, 2013, 2013, 1-6.	1.5	8
100	Rational design of CuO/In2O3 heterostructures with flower-like structures for low temperature detection of formaldehyde. Journal of Alloys and Compounds, 2022, 896, 162959.	2.8	8
101	InvestigationÂonÂTrimethylamineÂSensingÂPerformanceÂofÂPdOâ€DecoratedÂZnOÂFlowerâ€Like StructuresÂSynthesizedÂbyÂOneâ€•StepÂHydrothermalÂMethod. ChemistrySelect, 2019, 4, 2694-2702.	0.7	6
102	Enhanced detection of ppb-level NO2 by uniform Pt-doped ZnSnO3 nanocubes. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 1295-1303.	2.4	5
103	CTAB-Assisted Hydrothermal Synthesis of WO3Hierarchical Porous Structures and Investigation of Their Sensing Properties. Journal of Nanomaterials, 2015, 2015, 1-10.	1.5	3
104	Hydrothermal growth of overlapping ZnO nanorod arrays on the porous substrate and their H2 gas sensing. Materials Characterization, 2021, 172, 110858.	1.9	3
105	Influence of annealing temperature on microstructure and H2 sensing properties of Pd-doped SnO2 sputtered thin films. , 0, , .		1
106	A new chemresistive NO2 sensing material: Hafnium diboride. Ceramics International, 2022, 48, 6835-6841.	2.3	1
107	Low-Temperature and Highly Enhanced NO2 Sensing Performance of Au-Functionalized WO3 Microspheres with a Hierarchical Nanostructure. ECS Meeting Abstracts, 2020, MA2020-02, 3384-3384.	0.0	1
108	Ultrasensitive and selective sensing material of ultrafine WO3 nanoparticles for the detection of ppb-level NO2. , 2022, 1, 261-267.		0