

The template-free synthesis of square-shaped SnO₂ nanowires and their catalytic activity for CO oxidation effect and acetone gas sensors

Nanotechnology

19, 185705

DOI: [10.1088/0957-4484/19/18/185705](https://doi.org/10.1088/0957-4484/19/18/185705)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Pd surface modification of SnO ₂ -based nanorod arrays for H ₂ gas sensors. , 2008, , .		2
2	Fabrication and Gas-sensing Properties of Hollow SnO ₂ Microspheres. Chemistry Letters, 2008, 37, 1086-1087.	0.7	8
3	Hydrothermal preparation of fractal dendrites: Cerium carbonate hydroxide and cerium oxide. Materials Research Bulletin, 2009, 44, 1437-1440.	2.7	29
4	Plasma treatment of SnO ₂ nanocolumn arrays deposited by liquid injection plasma-enhanced chemical vapor deposition for gas sensors. Sensors and Actuators B: Chemical, 2009, 138, 201-206.	4.0	35
5	On-chip fabrication of ZnO-nanowire gas sensor with high gas sensitivity. Sensors and Actuators B: Chemical, 2009, 138, 168-173.	4.0	303
6	Gas sensors using hierarchical and hollow oxide nanostructures: Overview. Sensors and Actuators B: Chemical, 2009, 140, 319-336.	4.0	1,336
7	Fast response chlorine gas sensor based on mesoporous SnO ₂ . Sensors and Actuators B: Chemical, 2009, 140, 383-389.	4.0	72
8	Highly sensitive CO and ethanol nanoflower-like SnO ₂ sensor among various morphologies obtained by using single and mixed ionic surfactant templates. Sensors and Actuators B: Chemical, 2009, 141, 89-96.	4.0	74
9	Study of the morphology and luminescence of SnO ₂ micro- and nanostructures synthesized by a two step thermal process. Journal of Crystal Growth, 2009, 311, 1212-1216.	0.7	4
10	Facile synthesis of p-type semiconducting cupric oxide nanowires and their gas-sensing properties. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 42, 146-149.	1.3	45
11	In Situ Growth of Tin Oxide Nanowires, Nanobelts, and Nanodendrites On the Surface of Iron-Doped Tin Oxide/Multiwalled Carbon Nanotube Nanocomposites. Journal of Physical Chemistry C, 2009, 113, 20583-20588.	1.5	9
12	Structural Features of SnO ₂ Nanowires and Raman Spectroscopy Analysis. Crystal Growth and Design, 2009, 9, 3958-3963.	1.4	76
13	Sn O 2 thick films for room temperature gas sensing applications. Journal of Applied Physics, 2009, 106, .	1.1	63
14	Self-assemblies of Pd nanoparticles on the surfaces of single crystal ZnO nanowires for chemical sensors with enhanced performances. Journal of Materials Chemistry, 2009, 19, 4701.	6.7	157
15	Preparation of Porous Tin Oxide Nanotubes Using Carbon Nanotubes as Templates and Their Gas-Sensing Properties. Journal of Physical Chemistry C, 2009, 113, 9581-9587.	1.5	91
16	High sensitivity SnO ₂ single-nanorod sensors for the detection of H ₂ gas at low temperature. Nanotechnology, 2009, 20, 115501.	1.3	76
17	Nanostructured Sb doped SnO ₂ thick films for room temperature NH ₃ sensing. Chemical Physics Letters, 2010, 492, 119-122.	1.2	22
18	Novel sea urchin-like hollow core-shell SnO ₂ superstructures: Facile synthesis and excellent ethanol sensing performance. Sensors and Actuators B: Chemical, 2010, 151, 229-235.	4.0	54

#	ARTICLE	IF	CITATIONS
19	Soft template synthesis of high selectivity mesoporous SnO ₂ gas sensors. Journal of Shanghai University, 2010, 14, 297-300.	0.1	3
20	Biotemplate fabrication of SnO ₂ nanotubular materials by a sonochemical method for gas sensors. Journal of Nanoparticle Research, 2010, 12, 1389-1400.	0.8	60
21	Synthesis and selective gas-sensing properties of hierarchically porous intestine-like SnO ₂ hollow nanostructures. Materials Chemistry and Physics, 2010, 123, 109-113.	2.0	20
22	Controlled synthesis and photoluminescence properties of BaXO ₄ (X=W, Mo) hierarchical nanostructures via a facile solution route. Materials Letters, 2010, 64, 789-792.	1.3	24
23	Hydrothermal Synthesis of a CaNb ₂ O ₆ Hierarchical Micro/Nanostructure and Its Enhanced Photocatalytic Activity. European Journal of Inorganic Chemistry, 2010, 2010, 1275-1282.	1.0	37
24	Synthesis of porous CuO nanowires and its application to hydrogen detection. Sensors and Actuators B: Chemical, 2010, 146, 266-272.	4.0	142
25	Preparation of porous flower-shaped SnO ₂ nanostructures and their gas-sensing property. Sensors and Actuators B: Chemical, 2010, 147, 467-474.	4.0	130
26	Controlled growth of SnO ₂ nanorods clusters via Zn doping and its influence on gas-sensing properties. Sensors and Actuators B: Chemical, 2010, 149, 336-344.	4.0	108
27	Nanowire-Based Sensors. Small, 2010, 6, 1705-1722.	5.2	334
28	Facile and Efficient Electrochemical Synthesis of Lanthanum Hydroxide Nanospindles and Nanorods. Electrochemical and Solid-State Letters, 2010, 13, E15.	2.2	14
29	Integrated Nanorods and Heterostructure Field Effect Transistors for Gas Sensing. Journal of Physical Chemistry C, 2010, 114, 7999-8004.	1.5	16
30	Interaction of Alkaline Metal Cations with Oxidic Surfaces: Effect on the Morphology of SnO ₂ Nanoparticles. Langmuir, 2010, 26, 3590-3595.	1.6	25
31	Au Nanoparticle Modified WO ₃ Nanorods with Their Enhanced Properties for Photocatalysis and Gas Sensing. Journal of Physical Chemistry C, 2010, 114, 2049-2055.	1.5	291
32	Facile Fabrication of Hierarchical SnO ₂ Microspheres Film on Transparent FTO Glass. Inorganic Chemistry, 2010, 49, 1679-1686.	1.9	32
33	Synthesis and characterization of SnO ₂ nanoparticles by thermal decomposition of new inorganic precursor. Journal of Alloys and Compounds, 2010, 496, 638-643.	2.8	156
34	Enhanced gas sensing by assembling Pd nanoparticles onto the surface of SnO ₂ nanowires. Talanta, 2010, 82, 458-463.	2.9	50
35	Synthesis and chlorine sensing properties of nanocrystalline hierarchical porous SnO ₂ by a phenol formaldehyde resin-assisted process. CrystEngComm, 2010, 12, 1280-1285.	1.3	27
36	Pt surface modification of SnO ₂ nanorod arrays for CO and H ₂ sensors. Nanoscale, 2010, 2, 1203.	2.8	56

#	ARTICLE	IF	CITATIONS
37	The interplay of crystallization kinetics and morphology during the formation of SnO ₂ nanorods: snapshots of the crystallization from fast microwave reactions. <i>CrystEngComm</i> , 2011, 13, 2487.	1.3	23
38	Synthesis and Gas Sensing Properties of SnO ₂ Microplatelets. <i>Integrated Ferroelectrics</i> , 2011, 128, 171-176.	0.3	0
39	Heteroepitaxy of SnO ₂ Nanowire Arrays on TiO ₂ Single Crystals: Growth Patterns and Tomographic Studies. <i>Journal of Physical Chemistry C</i> , 2011, 115, 15191-15197.	1.5	27
40	Acetone Sensing by Modified SnO ₂ Nanocrystalline Sensor Materials. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2011, , 409-421.	0.2	3
41	Synthesis of Rutile-Phase Sn _x Ti _{1-x} O ₂ Solid-Solution and (SnO ₂) _x /(TiO ₂) _{1-x} Core/Shell Nanoparticles with Tunable Lattice Constants and Controlled Morphologies. <i>Chemistry of Materials</i> , 2011, 23, 4920-4930.	3.2	45
42	SnO ₂ nanosheets grown on graphene sheets with enhanced lithium storage properties. <i>Chemical Communications</i> , 2011, 47, 7155.	2.2	387
43	Effective solar absorption and radial microchannels of SnO ₂ hierarchical structure for high photocatalytic activity. <i>Catalysis Communications</i> , 2011, 14, 32-36.	1.6	77
44	Semiconducting Oxide Nanowires: Growth, Doping and Device applications. , 0, , .		1
45	Morphological and phase control of tin oxide single-crystals synthesized by dissolution and recrystallization of bulk SnO powders. <i>Journal of the European Ceramic Society</i> , 2011, 31, 2447-2451.	2.8	7
46	Nanostructured SnO ₂ -ZnO sensors: Highly sensitive and selective to ethanol. <i>Sensors and Actuators B: Chemical</i> , 2011, 160, 1298-1303.	4.0	86
47	Effect of cationic/anionic organic surfactants on evaporation induced self assembled tin oxide nanostructured films. <i>Applied Surface Science</i> , 2011, 257, 2929-2934.	3.1	16
48	Effects of morphologies on acetone-sensing properties of tungsten trioxide nanocrystals. <i>Sensors and Actuators B: Chemical</i> , 2011, 153, 373-381.	4.0	141
49	Selectivity of flame-spray-made Nb/ZnO thick films towards NO ₂ gas. <i>Sensors and Actuators B: Chemical</i> , 2011, 156, 360-367.	4.0	39
50	Controlled synthesis of BaWO ₄ hierarchical nanostructures by exploiting oriented attachment in the solution of H ₂ O and C ₂ H ₅ OH. <i>Superlattices and Microstructures</i> , 2011, 49, 599-607.	1.4	17
51	Gas nanosensor design packages based on tungsten oxide: mesocages, hollow spheres, and nanowires. <i>Nanotechnology</i> , 2011, 22, 485503.	1.3	50
52	Anion-induced morphological regulation of In(OH) ₃ nanostructures and their conversion into porous In ₂ O ₃ derivatives. <i>CrystEngComm</i> , 2012, 14, 3397.	1.3	11
53	Catalyst-Assisted Pulsed Laser Deposition of One-Dimensional Single-Crystalline Nanostructures of Tin(IV) Oxide: Interplay of VS and VLS Growth Mechanisms at Low Temperature. <i>Journal of Physical Chemistry C</i> , 2012, 116, 5427-5434.	1.5	11
54	Highly Enhanced Acetone Sensing Performances of Porous and Single Crystalline ZnO Nanosheets: High Percentage of Exposed (100) Facets Working Together with Surface Modification with Pd Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 3797-3804.	4.0	173

#	ARTICLE	IF	CITATIONS
55	Highly sensitive room-temperature CO gas sensors: Pt and Pd nanoparticle-decorated In ₂ O ₃ flower-like nanobundles. <i>Journal of Materials Chemistry</i> , 2012, 22, 13204.	6.7	107
56	Solution route to SnO ₂ crystals with controllable morphology. <i>Applied Surface Science</i> , 2012, 258, 1958-1963.	3.1	14
57	Solid phase growth of tin oxide nanostructures. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2012, 177, 819-825.	1.7	32
58	Effect of solid inorganic salts on the formation of cubic-like aggregates of ZnSnO ₃ nanoparticles in solventless, organic-free reactions and their gas sensing behaviors. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2012, 177, 942-948.	1.7	15
60	3D hierarchical porous SnO ₂ derived from self-assembled biological systems for superior gas sensing application. <i>Journal of Materials Chemistry</i> , 2012, 22, 1121-1126.	6.7	62
61	Metal Oxide Nanostructures and Their Gas Sensing Properties: A Review. <i>Sensors</i> , 2012, 12, 2610-2631.	2.1	938
62	SnO ₂ and TiO ₂ nanosheets for lithium-ion batteries. <i>Materials Today</i> , 2012, 15, 246-254.	8.3	162
63	Nanomaterials for Sensing Applications: Introduction and Perspective. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2012, , 1-16.	0.5	7
64	Synthesis and sensing properties of spherical flowerlike architectures assembled with SnO ₂ submicron rods. <i>Sensors and Actuators B: Chemical</i> , 2012, 173, 643-651.	4.0	105
65	Observation of Surface/Defect States of SnO ₂ Nanowires on Different Substrates from X-ray Excited Optical Luminescence. <i>Crystal Growth and Design</i> , 2012, 12, 397-402.	1.4	37
66	Effective VOCs gas sensor based on porous SnO ₂ microcubes prepared via spontaneous phase segregation. <i>Sensors and Actuators B: Chemical</i> , 2012, 173, 599-606.	4.0	64
67	Synthesis of phase-pure SnO ₂ nanosheets with different organized structures and their lithium storage properties. <i>CrystEngComm</i> , 2012, 14, 5133.	1.3	50
68	Bioinspired Hierarchical Tin Oxide Scaffolds for Enhanced Gas Sensing Properties. <i>Journal of Physical Chemistry C</i> , 2012, 116, 10274-10281.	1.5	84
69	The Structural and Electronic Properties of Tin Oxide Nanowires: An Ab Initio Investigation. <i>Journal of Physical Chemistry C</i> , 2012, 116, 13382-13387.	1.5	8
70	Design of SnO ₂ /ZnO hierarchical nanostructures for enhanced ethanol gas-sensing performance. <i>Sensors and Actuators B: Chemical</i> , 2012, 174, 594-601.	4.0	174
71	Glycothermal synthesis of assembled vanadium oxide nanostructures for gas sensing. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1.	0.8	32
72	Chemically assembled heterojunctions of SnO ₂ nanorods with TiO ₂ nanoparticles via "click" chemistry. <i>Journal of Materials Chemistry</i> , 2012, 22, 11561.	6.7	12
73	Ultrasensitive ethanol sensor based on 3D aloe-like SnO ₂ . <i>Sensors and Actuators B: Chemical</i> , 2012, 166-167, 7-11.	4.0	54

#	ARTICLE	IF	CITATIONS
74	Comparison of gas sensor performance of SnO ₂ nano-structures on microhotplate platforms. <i>Sensors and Actuators B: Chemical</i> , 2012, 165, 13-18.	4.0	69
75	Influence of surfactants on the morphology of SnO ₂ nanocrystals prepared via a hydrothermal method. <i>Journal of Solid State Chemistry</i> , 2012, 189, 49-56.	1.4	52
76	Exploiting nanostructure-thin film interfaces in advanced sensor device configurations. <i>Vacuum</i> , 2012, 86, 757-760.	1.6	10
77	Solvothermal synthesis of hierarchically porous CeO ₂ nanopalm leaves and their photocatalytic properties. <i>Journal of Sol-Gel Science and Technology</i> , 2013, 66, 15-21.	1.1	12
78	Porous sheet-like and sphere-like nano-architectures of SnO ₂ nanoparticles via a solvent-thermal approach and their gas-sensing performances. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013, 178, 1165-1168.	1.7	4
79	Hierarchically mesoporous SnO ₂ nanosheets: Hydrothermal synthesis and highly ethanol-sensitive properties operated at low temperature. <i>Sensors and Actuators B: Chemical</i> , 2013, 185, 594-601.	4.0	50
80	General and scalable route to synthesize nanowire-structured semiconducting metal oxides for gas-sensor applications. <i>Journal of Alloys and Compounds</i> , 2013, 549, 260-268.	2.8	32
81	Growth and photoluminescence properties of SnO ₂ nanobelts. <i>Materials Letters</i> , 2013, 98, 146-148.	1.3	10
82	Laser induced chemical solution deposition of nanomaterials: A novel process demonstrated by manufacturing SnO ₂ nanotubes. <i>Manufacturing Letters</i> , 2013, 1, 42-45.	1.1	10
83	Recent advances in multistep solution nanosynthesis of nanostructured three-dimensional complexes of semiconductive materials. <i>Progress in Natural Science: Materials International</i> , 2013, 23, 273-285.	1.8	11
84	Hydrothermal synthesis of SnO ₂ nanorods: Morphology dependence, growth mechanism and surface properties. <i>Materials Research Bulletin</i> , 2013, 48, 4118-4124.	2.7	32
85	Low temperature growth of SnO ₂ nanowires by electron beam evaporation and their application in UV light detection. <i>Materials Research Bulletin</i> , 2013, 48, 1545-1552.	2.7	23
86	Novel low-temperature growth of SnO ₂ nanowires and their gas-sensing properties. <i>Scripta Materialia</i> , 2013, 68, 408-411.	2.6	18
87	SnO ₂ -Based Nanomaterials: Synthesis and Application in Lithium-Ion Batteries. <i>Small</i> , 2013, 9, 1877-1893.	5.2	729
88	Metal oxide nanowires for chemiresistive gas sensors: Issues, challenges and prospects. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 439, 101-116.	2.3	139
89	Elaboration and high resolution TEM characterization of SnO ₂ nanowires. <i>Microelectronic Engineering</i> , 2013, 108, 204-208.	1.1	2
90	Synthesis and magnetic properties of Sn _{1-x} Co _x O ₂ nanostructures and their application in gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2013, 184, 288-294.	4.0	30
91	Hydrothermal synthesis of honeycomb-like SnO hierarchical microstructures assembled with nanosheets. <i>Materials Letters</i> , 2013, 98, 234-237.	1.3	15

#	ARTICLE	IF	CITATIONS
92	Growth of randomly oriented single-crystalline tin (IV) oxide nanobelts: Control on the predominant crystalline growth axis. <i>Journal of Chemical Physics</i> , 2013, 138, 104704.	1.2	3
93	Developing Semiconductive Catalysts with Three-Dimensional Nanobranches via Solution Routes. , 2013, , 451-472.		0
94	Formation of Sn@C Yolk-Shell Nanospheres and Core-Sheath Nanowires for Highly Reversible Lithium Storage. <i>Particle and Particle Systems Characterization</i> , 2013, 30, 873-880.	1.2	43
95	Nanocrystalline Tin Oxide Nanofibers Deposited by a Novel Focused Electrospinning Method. Application to the Detection of TATP Precursors. <i>Sensors</i> , 2014, 14, 24231-24243.	2.1	23
96	Reduced graphene oxide decorated with CuO-ZnO hetero-junctions: towards high selective gas-sensing property to acetone. <i>Journal of Materials Chemistry A</i> , 2014, 2, 18635-18643.	5.2	150
97	Structural/Optical Properties and CO Oxidation Activities of SnO ₂ Nanostructures. <i>Journal of the American Ceramic Society</i> , 2014, 97, 1303-1310.	1.9	15
98	One-pot synthesis and improved sensing properties of hierarchical flowerlike SnO ₂ assembled from sheet and ultra-thin rod subunits. <i>Sensors and Actuators B: Chemical</i> , 2014, 194, 447-453.	4.0	43
99	Solvothermal synthesis and characterization of ultrathin SnO nanosheets. <i>Materials Letters</i> , 2014, 118, 69-71.	1.3	20
100	Sn doped ZnO layered porous nanocrystals with hierarchical structures and modified surfaces for gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2014, 201, 255-265.	4.0	57
101	A novel rose flower-like SnO hierarchical structure synthesized by a hydrothermal method in an ethanol/water system. <i>Chinese Chemical Letters</i> , 2014, 25, 915-918.	4.8	13
102	Selective Detection of Acetone and Hydrogen Sulfide for the Diagnosis of Diabetes and Halitosis Using SnO ₂ Nanofibers Functionalized with Reduced Graphene Oxide Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2588-2597.	4.0	347
103	Structural interpretation of SnO ₂ nanocrystals of different morphologies synthesized by microwave irradiation and hydrothermal methods. <i>CrystEngComm</i> , 2014, 16, 1079-1090.	1.3	57
104	Bi-functional co-sensitization of graphene oxide sheets and Ir nanoparticles on p-type Co ₃ O ₄ nanofibers for selective acetone detection. <i>Journal of Materials Chemistry B</i> , 2014, 2, 7160-7167.	2.9	70
105	SnO ₂ : A comprehensive review on structures and gas sensors. <i>Progress in Materials Science</i> , 2014, 66, 112-255.	16.0	933
106	Gas chemical nanosensors with sensing elements based on tin dioxide. Part 1. <i>Review Journal of Chemistry</i> , 2014, 4, 132-167.	1.0	4
107	Toluene sensing properties of porous Pd-loaded flower-like SnO ₂ microspheres. <i>Sensors and Actuators B: Chemical</i> , 2014, 202, 795-802.	4.0	49
108	Recent Advances in Tin Dioxide Materials: Some Developments in Thin Films, Nanowires, and Nanorods. <i>Chemical Reviews</i> , 2014, 114, 7442-7486.	23.0	146
109	Meso-/Nanoporous Semiconducting Metal Oxides for Gas Sensor Applications. <i>Journal of Nanomaterials</i> , 2015, 2015, 1-14.	1.5	71

#	ARTICLE	IF	CITATIONS
110	Comparison of the enhanced gas sensing properties of tin dioxide samples doped with different catalytic transition elements. <i>Journal of Colloid and Interface Science</i> , 2015, 448, 265-274.	5.0	33
111	Facile synthesis and gas sensing properties of In ₂ O ₃ –WO ₃ heterojunction nanofibers. <i>Sensors and Actuators B: Chemical</i> , 2015, 209, 622-629.	4.0	102
112	Synthesis of wrinkled and porous ZnO–SnO ₂ hollow nanofibers and their gas sensing properties. <i>Materials Letters</i> , 2015, 145, 48-51.	1.3	17
113	Facet-controlled synthesis and facet-dependent photocatalytic properties of SnO ₂ micropolyhedrons. <i>Applied Surface Science</i> , 2015, 349, 798-804.	3.1	32
114	Synthesis of grass-like SnO ₂ nanostructures on graphene oxide and their excellent field emission properties. <i>Materials Letters</i> , 2015, 158, 322-324.	1.3	15
115	ZnFe ₂ O ₄ nanoparticles: Synthesis, characterization, and enhanced gas sensing property for acetone. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 55-62.	4.0	139
116	An olive-shaped SnO ₂ nanocrystal-based low concentration H ₂ S gas sensor with high sensitivity and selectivity. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 20537-20542.	1.3	30
117	Gas sensors based on ultrathin porous Co ₃ O ₄ nanosheets to detect acetone at low temperature. <i>RSC Advances</i> , 2015, 5, 59976-59982.	1.7	96
118	Synthesis of hierarchical SnO ₂ nanoflowers with enhanced acetic acid gas sensing properties. <i>Applied Surface Science</i> , 2015, 353, 71-78.	3.1	41
119	Detection of triacetone triperoxide using temperature cycled metal oxide semiconductor gas sensors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1289-1298.	0.8	9
120	Synthesis and characterisations of SnO ₂ nanorods via low temperature hydrothermal method. <i>Superlattices and Microstructures</i> , 2015, 88, 396-402.	1.4	21
122	Dispersed SnO ₂ nanoparticles on MoS ₂ nanosheets for superior gas-sensing performances to ethanol. <i>RSC Advances</i> , 2015, 5, 79593-79599.	1.7	58
123	<i>In Situ</i> Integration of Anisotropic SnO ₂ Heterostructures inside Three-Dimensional Graphene Aerogel for Enhanced Lithium Storage. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26085-26093.	4.0	27
125	Acetone sensing using graphene quantum capacitance varactors. , 2016, , .		2
126	Polyethylene glycol (PEG) assisted size-controlled SnO ₂ nanoparticles by sol-gel process. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	0
127	Synthesis and photocatalytic properties of different SnO ₂ microspheres on graphene oxide sheets. <i>Applied Surface Science</i> , 2016, 376, 172-179.	3.1	29
128	Low-Temperature H ₂ S Detection with Hierarchical Cr-Doped WO ₃ Microspheres. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 9674-9683.	4.0	136
129	Electrical, electrochemical, and thermometric sensors for the detection of explosives. <i>Journal of Analytical Chemistry</i> , 2016, 71, 234-242.	0.4	10

#	ARTICLE	IF	CITATIONS
130	Selective Improvement of NO ₂ Gas Sensing Behavior in SnO ₂ Nanowires by Ion-Beam Irradiation. ACS Applied Materials & Interfaces, 2016, 8, 13646-13658.	4.0	110
131	Synthesis of Oxide Nanotubes/Nanorods by Hydrothermal Method. SpringerBriefs in Materials, 2016, , 21-75.	0.1	1
132	Solid acetone structure dependence on pressure: a new fibre textured thin film crystallographic structure studied by grazing-incidence X-ray diffraction. CrystEngComm, 2016, 18, 8220-8228.	1.3	1
133	Mesoporous SnO ₂ Nanostructures of Ultrahigh Surface Areas by Novel Anodization. ACS Applied Materials & Interfaces, 2016, 8, 28862-28871.	4.0	30
134	A Facile Synthesis of PdO-Decorated SnO ₂ Nanocomposites with Open Porous Hierarchical Architectures for Gas Sensors. Journal of the American Ceramic Society, 2016, 99, 3770-3774.	1.9	16
135	The synthesis of multifunctional porous honey comb-like La ₂ O ₃ thin film for supercapacitor and gas sensor applications. Journal of Colloid and Interface Science, 2016, 484, 51-59.	5.0	61
136	Sacrificial Template Synthesis and Properties of 3D Hollow-Silicon Nano- and Microstructures. ACS Applied Materials & Interfaces, 2016, 8, 20491-20498.	4.0	60
137	Scalable solvo-plasma production of porous tin oxide nanowires. Chemical Engineering Science, 2016, 154, 20-26.	1.9	18
138	Enhancement of p-type gas-sensing performances of NiO nanoparticles prepared by precipitation with RuO ₂ impregnation. Sensors and Actuators B: Chemical, 2016, 236, 466-473.	4.0	35
139	Ultrafast breathing humidity sensing properties of low-dimensional Fe-doped SnO ₂ flower-like spheres. RSC Advances, 2016, 6, 27008-27015.	1.7	30
140	Facile Synthesis and Acetone Sensing Performance of Hierarchical SnO ₂ Hollow Microspheres with Controllable Size and Shell Thickness. Industrial & Engineering Chemistry Research, 2016, 55, 3588-3595.	1.8	103
141	Influence of surfactants on the microstructure and electrochemical performance of the tin oxide anode in lithium ion batteries. Materials Research Bulletin, 2016, 74, 299-310.	2.7	10
142	Synthesis and gas sensing properties of porous hierarchical SnO ₂ by grapefruit exocarp biotemplate. Sensors and Actuators B: Chemical, 2016, 222, 1134-1143.	4.0	92
143	Synthesis of three-dimensional flower-like hierarchical ZnO nanostructure and its enhanced acetone gas sensing properties. Journal of Alloys and Compounds, 2016, 654, 371-378.	2.8	143
144	Tuning SnO ₂ architectures with unitary or composite microstructure for the application of gas sensors. Journal of Colloid and Interface Science, 2016, 462, 140-147.	5.0	21
145	Synthesis and the improved sensing properties of hierarchical SnO ₂ hollow nanosheets with mesoporous and multilayered interiors. Sensors and Actuators B: Chemical, 2016, 222, 354-361.	4.0	49
146	Hydrothermal synthesis of monodisperse Fe ₂ O ₃ hollow microspheroids and their high gas-sensing properties. Journal of Alloys and Compounds, 2017, 705, 427-437.	2.8	27
147	Piezo-phototronic effect modulated self-powered UV/visible/near-infrared photodetectors based on CdS:P3HT microwires. Nano Energy, 2017, 34, 155-163.	8.2	84

#	ARTICLE	IF	CITATIONS
148	Ultrasensitive Room-Temperature Operable Gas Sensors Using p-Type Na:ZnO Nanoflowers for Diabetes Detection. ACS Applied Materials & Interfaces, 2017, 9, 8796-8804.	4.0	102
149	Hierarchical Assembly of Fe_2O_3 Nanorods on Multiwall Carbon Nanotubes as a High-Performance Sensing Material for Gas Sensors. ACS Applied Materials & Interfaces, 2017, 9, 8919-8928.	4.0	108
150	Pseudo-monocrystalline properties of cylindrical nanowires confinedly grown by electrodeposition in nanoporous alumina templates. RSC Advances, 2017, 7, 13817-13826.	1.7	22
151	Metal-Organic Framework Templated Catalysts: Dual Sensitization of Pd@ZnO Composite on Hollow SnO_2 Nanotubes for Selective Acetone Sensors. ACS Applied Materials & Interfaces, 2017, 9, 18069-18077.	4.0	173
152	Gold-tin co-sensitized ZnO layered porous nanocrystals: enhanced responses and anti-humidity. RSC Advances, 2017, 7, 20273-20280.	1.7	12
153	Synthesis, characterization and enhanced acetone sensing performance of Pd loaded Sm doped SnO_2 nanoparticles. Ceramics International, 2017, 43, 10307-10315.	2.3	17
154	Facile synthesis of low-dimensional SnO_2 nanostructures: An investigation of their performance and mechanism of action as anode materials for lithium-ion batteries. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 91, 119-127.	1.3	8
155	Pd-loaded SnO_2 ultrathin nanorod-assembled hollow microspheres with the significant improvement for toluene detection. Sensors and Actuators B: Chemical, 2017, 243, 465-474.	4.0	42
156	Optical and gas sensing properties of SnO_2 nanowires grown by vapor-liquid-solid mechanism. Journal of Materials Science: Materials in Electronics, 2017, 28, 17993-18002.	1.1	5
157	A GaN HFET sensor for respiration monitoring. , 2017, , .		0
158	One-step synthesis of 2D C_3N_4 -tin oxide gas sensors for enhanced acetone vapor detection. Sensors and Actuators B: Chemical, 2017, 253, 641-651.	4.0	74
159	Controllable synthesis of single crystalline Sn-based oxides and their application in perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 79-86.	5.2	45
160	Horseshoe-shaped SnO_2 with annulus-like mesoporous for ethanol gas sensing application. Sensors and Actuators B: Chemical, 2017, 240, 1321-1329.	4.0	76
161	Enhanced ethanol gas-sensing performance of Pb-doped In_2O_3 nanostructures prepared by sonochemical method. Sensors and Actuators B: Chemical, 2017, 242, 778-791.	4.0	91
162	Enhanced toluene sensing performances of Pd-loaded SnO_2 cubic nanocages with porous nanoparticle-assembled shells. Sensors and Actuators B: Chemical, 2017, 241, 1121-1129.	4.0	42
163	Au modified single crystalline and polycrystalline composite tin oxide for enhanced n-butanol sensing performance. Powder Technology, 2018, 331, 270-275.	2.1	13
164	One-step synthesis of SnO hierarchical architectures under room temperature and their photocatalytic properties. Nanotechnology, 2018, 29, 284002.	1.3	5
165	CeO_2 -based mixed potential type acetone sensor using MMnO_3 (M: Sr, Ca, La and Sm) sensing electrode. Solid State Ionics, 2018, 317, 53-59.	1.3	25

#	ARTICLE	IF	CITATIONS
166	Sensing mechanism of ethanol and acetone at room temperature by SnO ₂ nano-columns synthesized by aerosol routes: theoretical calculations compared to experimental results. Journal of Materials Chemistry A, 2018, 6, 2053-2066.	5.2	82
167	Accelerated microwave-assisted hydrothermal/solvothermal processing: Fundamentals, morphologies, and applications. Journal of Electroceramics, 2018, 40, 271-292.	0.8	15
168	Nanomaterial-based gas sensors: A review. Instrumentation Science and Technology, 2018, 46, 115-145.	0.9	94
169	Enhanced photovoltaic performance of dye sensitized solar cell using SnO ₂ nanoflowers. Optical Materials, 2018, 75, 601-606.	1.7	16
170	Imparting sensitivity and selectivity to a gold nanoparticle chemiresistor through thiol monolayer functionalization for sensing acetone. RSC Advances, 2018, 8, 35618-35624.	1.7	13
171	Fabrication, characterization and excellent formaldehyde gas sensing of Tb-doped In ₂ O ₃ beaded-porous nanotubes. Journal of Materials Science: Materials in Electronics, 2018, 29, 19111-19122.	1.1	6
172	A review on flexible gas sensors: From materials to devices. Sensors and Actuators A: Physical, 2018, 284, 209-231.	2.0	164
173	Acetone Sensing Properties and Mechanism of SnO ₂ Thick-Films. Sensors, 2018, 18, 3425.	2.1	31
174	Platinum Coating on an Ultrathin InN Epilayer as a Dual Gas Sensor for Selective Sensing of Ammonia and Acetone by Temperature Modulation for Liver Malfunction and Diabetes Applications. ECS Journal of Solid State Science and Technology, 2018, 7, Q3221-Q3229.	0.9	7
175	Highly Sensitive Acetone Gas Sensor Based on g-C ₃ N ₄ Decorated MgFe ₂ O ₄ Porous Microspheres Composites. Sensors, 2018, 18, 2211.	2.1	47
176	Conductometric Gas Sensing Based on ZnO Thin Films: An Impedance Spectroscopy Study. ECS Journal of Solid State Science and Technology, 2018, 7, P487-P490.	0.9	6
177	High sensitivity and selectivity chlorine gas sensors based on 3D open porous SnO ₂ synthesized by solid-state method. Ceramics International, 2019, 45, 20566-20574.	2.3	33
178	Effect of high energy Ti ⁹⁺ ion beam induced modifications in titanium dioxide and tin oxide nanocomposite thin films and detailed analysis of optical, structural and morphological properties. Optical Materials, 2019, 88, 320-332.	1.7	13
179	An urchin-like SnO ₂ /NaNbO ₃ nanocomposite with stable humidity-sensing properties at room temperature. Sensors and Actuators B: Chemical, 2019, 283, 643-650.	4.0	30
180	3D-Printed Chemiresistive Sensor Array on Nanowire CuO/Cu ₂ O/Cu Heterojunction Nets. ACS Applied Materials & Interfaces, 2019, 11, 25508-25515.	4.0	52
181	Highly sensitive and selective ethanol sensors based on porous Co ₃ O ₄ nanobelts synthesized through a facile wet-chemistry method. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	8
182	In-situ Grown SnO ₂ Nanospheres on Reduced GO Nanosheets as Advanced Anodes for Lithium-ion Batteries. ChemistryOpen, 2019, 8, 712-718.	0.9	16
183	Synthesis of three-dimensionally ordered macro/mesoporous C-doped WO ₃ materials: Effect of template sizes on gas sensing properties. Sensors and Actuators B: Chemical, 2019, 288, 656-666.	4.0	30

#	ARTICLE	IF	CITATIONS
184	Surfactant-assisted spray pyrolyzed SnO ₂ nanostructures for NO ₂ gas-sensing application. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	9
185	Design of NiCo ₂ O ₄ @SnO ₂ heterostructure nanofiber and their low temperature ethanol sensing properties. Journal of Alloys and Compounds, 2019, 791, 1025-1032.	2.8	45
186	Characterization of an Acetone Detector Based on a Suspended WO ₃ -Gate AlGaIn/GaN HEMT Integrated With Microheater. IEEE Transactions on Electron Devices, 2019, 66, 4373-4379.	1.6	11
187	IrO ₂ and Pt Doped Mesoporous SnO ₂ Nanospheres as Efficient Electrocatalysts for the Facile OER and HER. ChemCatChem, 2019, 11, 583-592.	1.8	82
188	Flower-shaped ZnO nanomaterials for low-temperature operations in NO _x gas sensors. Ceramics International, 2020, 46, 5706-5714.	2.3	55
189	Ultrasensitive and low detection limit of acetone gas sensor based on ZnO/SnO ₂ thick films. RSC Advances, 2020, 10, 35958-35965.	1.7	22
190	A new open-access online database for resistive-type gas sensor properties and performance. Sensors and Actuators B: Chemical, 2020, 321, 128591.	4.0	9
191	Feasibility study of doped SnO ₂ nanomaterial for electronic nose towards sensing biomarkers of lung cancer. Journal of Materials Science: Materials in Electronics, 2020, 31, 15751-15763.	1.1	6
192	Unveiling the unconventional roles of methyl number on the ring-opening barrier in photocatalytic decomposition of benzene, toluene and o-xylene. Applied Catalysis B: Environmental, 2020, 278, 119318.	10.8	57
193	Coca-Cola solvothermal synthesis of mesoporous SnO ₂ blooming flower-like architecture assembled from single crystal nanorods and its gas sensing properties. Powder Technology, 2020, 375, 463-471.	2.1	3
194	Graphene-Doped Tin Oxide Nanofibers and Nanoribbons as Gas Sensors to Detect Biomarkers of Different Diseases through the Breath. Sensors, 2020, 20, 7223.	2.1	13
195	Surface tuning of halloysite nanotubes with Fe ₃ O ₄ and 3-D MnO ₂ nanoflakes for highly selective and sensitive acetone gas sensing. Ceramics International, 2020, 46, 21292-21303.	2.3	18
196	Synthesis of CuO Nanoflowers and Their Application Towards Inflammable Gas Sensing. Journal of Electronic Materials, 2020, 49, 5070-5076.	1.0	13
197	Highly sensitive and selective acetone sensor based on three-dimensional ordered WO ₃ /Au nanocomposite with enhanced performance. Sensors and Actuators B: Chemical, 2020, 320, 128405.	4.0	50
198	On-chip selective growth of SnO ₂ nanowires for DNA sensor development. Sensors and Actuators A: Physical, 2020, 312, 112171.	2.0	5
199	Synergistic Photocatalytic Decomposition of a Volatile Organic Compound Mixture: High Efficiency, Reaction Mechanism, and Long-Term Stability. ACS Catalysis, 2020, 10, 7230-7239.	5.5	98
200	Modulating the properties of SnO ₂ nanocrystals: morphological effects on structural, photoluminescence, photocatalytic, electrochemical and gas sensing properties. Journal of Materials Chemistry C, 2020, 8, 4604-4635.	2.7	88
201	Nanomaterial-based gas sensors used for breath diagnosis. Journal of Materials Chemistry B, 2020, 8, 3231-3248.	2.9	142

#	ARTICLE	IF	CITATIONS
202	Facile hydrothermal synthesis of double shelled Si@SnO ₂ @C as advanced cathode for high-temperature lithium batteries. Journal of Alloys and Compounds, 2021, 858, 157661.	2.8	11
203	High-performance broadband photodetectors based on all-inorganic perovskite CsPb(Br/I) ₃ nanocrystal/CdS-microwire heterostructures. RSC Advances, 2021, 11, 11663-11671.	1.7	9
204	Enhanced acetone sensing properties based on in situ growth SnO ₂ nanotube arrays. Nanotechnology, 2021, 32, 245503.	1.3	21
205	Nickel nanoparticle-decorated reduced graphene oxide/WO ₃ nanocomposite – a promising candidate for gas sensing. Beilstein Journal of Nanotechnology, 2021, 12, 343-353.	1.5	14
206	Study of MWCNT / SnO ₂ /Ru thick-film sensors for detecting the presence of certain harmful gases in air. Armenian Journal of Physics, 0, , 49-73.	0.0	0
207	Hierarchical assembly of SnO ₂ nanorod on spindle-like γ -Fe ₂ O ₃ for enhanced acetone gas-sensing performance. Ceramics International, 2021, 47, 12181-12188.	2.3	16
208	Highly selective detection of acetone by TiO ₂ -SnO ₂ heterostructures for environmental biomarkers of diabetes. Sensors and Actuators B: Chemical, 2021, 349, 130733.	4.0	24
209	Tin Oxide/Carbon Nanotube Nanocomposite Sensors for Some Toxic VOCs Detection. South Florida Journal of Development, 2021, 2, 1067-1093.	0.0	2
210	The Most Common Methods for Breath Acetone Concentration Detection: A Review. IEEE Sensors Journal, 2021, 21, 14540-14558.	2.4	23
211	Cathodoluminescence of N-doped SnO ₂ nanowires and microcrystals. AIMS Materials Science, 2016, 3, 525-537.	0.7	2
212	Gas sensitivity of stoichiometric and excess-iron Ni-Zn ferrite prepared by sol-gel auto-combustion. Energetika, 2012, 58, .	0.6	10
214	Morph-Genetic Materials Inspired from Butterfly Wing Scales. Advanced Topics in Science and Technology in China, 2012, , 75-122.	0.0	3
216	Effect of synthesis temperature and N ₂ /O ₂ flow on morphology and field emission property of SnO ₂ nanowires. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 237901.	0.2	2
217	Acetone Sensing Properties of Nanostructured Copper Oxide Films on Glass Substrate. IFMBE Proceedings, 2020, , 285-290.	0.2	0
218	Preparation and characterization of SnO nanoflowers with controllable thicknesses using imidazolium-based ionic liquids as green media: Visible light photocatalytic degradation of Acid Blue 19. Materials Chemistry and Physics, 2022, 278, 125442.	2.0	2
219	WO ₃ –graphene–Cu nanocomposites for CO, NO ₂ and acetone gas sensors. Nano Structures Nano Objects, 2022, 29, 100824.	1.9	10
220	Novel Au-activated SnO ₂ @Fe ₂ O ₃ hetero-alternated multilayer nanosheets with enhanced low-concentration acetone detection. Sensors and Actuators B: Chemical, 2022, 358, 131478.	4.0	8
221	A review of recent developments in tin dioxide nanostructured materials for gas sensors. Ceramics International, 2022, 48, 7405-7440.	2.3	28

#	ARTICLE	IF	CITATIONS
222	Gas- and Biosensors Made from Metal Oxides Doped with Carbon Nanotubes. Journal of Contemporary Physics, 2022, 57, 54-75.	0.1	5
224	Effects of transverse geometry on the thermal conductivity of Si and Ge nanowires. Surfaces and Interfaces, 2022, 30, 101834.	1.5	6
225	Precise control of surface oxygen vacancies in ZnO nanoparticles for extremely high acetone sensing response. Journal of Advanced Ceramics, 2022, 11, 769-783.	8.9	33
226	Acetone sensing in liquid and gas phases using cyclic voltammetry. Scientific Reports, 2022, 12, .	1.6	2
227	Morphological evolution driven semiconducting nanostructures for emerging solar, biological and nanogenerator applications. Materials Advances, 2022, 3, 8030-8062.	2.6	7
228	Tin Oxide Based Hybrid Nanostructures for Efficient Gas Sensing. Molecules, 2022, 27, 7038.	1.7	16
229	Implementation of binder-free SnO ₂ NWs@C electrode and LiTFSI-based electrolyte for high-performance lithium-ion battery. Journal Physics D: Applied Physics, 2023, 56, 015501.	1.3	2
230	Nanomaterial-Based Sensors for Exhaled Breath Analysis: A Review. Coatings, 2022, 12, 1989.	1.2	10
231	Template-Free Synthesis of One-Dimensional SnO ₂ Nanostructures Using Highly Efficient Hydrothermal Method. Applied Sciences (Switzerland), 2023, 13, 2048.	1.3	1
232	Ag ₂ SO ₄ -Ag ₂ S transformation in SnO ₂ -based nanofibers for high selectivity and response H ₂ S sensors. Nanotechnology, 2023, 34, 215501.	1.3	1
237	Effect of pre-heating conditions on MOS gas sensors towards acetone vapor. , 2023, , .		0