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## Metal oxide nanostructures and their gas sensing properties: a review

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847	Porous CuO superstructure: precursor-mediated fabrication, gas sensing and photocatalytic properties. <b>2012</b> , 383, 75-81		61
846	Structure and gas sensing properties of nanocrystalline Fe-doped ZnO films prepared by spin coating method. <b>2013</b> , 48, 4305-4312		20
845	Solid-state reaction synthesized Pd-doped tin oxide thick film sensor for detection of H <sub>2</sub> , CO, LPG and CH <sub>4</sub> . <b>2013</b> , 24, 2824-2832		18
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842	Pd-Doped Tin-Oxide-Based Thick-Film Sensor Array for Detection of H <sub>2</sub> , CH <sub>4</sub> , and CO. <b>2013</b> , 42, 2793-2802		15
841	Hydrogen sensing with Ni-doped TiO <sub>2</sub> nanotubes. <i>Sensors</i> , <b>2013</b> , 13, 8393-402	3.8	46
840	Low temperature operating In <sub>2</sub> NiO <sub>3</sub> sensors with high response and good selectivity for NO <sub>2</sub> gas. <b>2013</b> , 581, 653-658		21
839	Hierarchically mesoporous SnO <sub>2</sub> nanosheets: Hydrothermal synthesis and highly ethanol-sensitive properties operated at low temperature. <b>2013</b> , 185, 594-601		43
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676	Selectively enhanced sensing performance for oxidizing gases based on ZnO nanoparticle-loaded electrospun SnO <sub>2</sub> nanotube heterostructures. <b>2016</b> , 6, 28419-28427	15
675	Influence of grain size on gas-sensing properties of chemiresistive p-type NiO nanofibers. <b>2016</b> , 227, 149-156	75
674	At room temperature graphene/SnO <sub>2</sub> is better than MWCNT/SnO <sub>2</sub> as NO <sub>2</sub> gas sensor. <b>2016</b> , 169, 28-32	47
673	CdO nanoflake arrays on ZnO nanorod arrays for efficient detection of diethyl ether. <b>2016</b> , 6, 2500-2503	4
672	Influence of copper concentration on the opto-structural, morphological and electrical properties of novel MoSb <sub>2</sub> Cu <sub>x</sub> Se <sub>2</sub> thin films. <b>2016</b> , 41, 398-403	4
671	Photoluminescence from porous textured ZnO films grown by chemical bath deposition. <b>2016</b> , 170, 168-173	18
670	Nonaqueous synthesis of Ag-functionalized In <sub>2</sub> O <sub>3</sub> /ZnO nanocomposites for highly sensitive formaldehyde sensor. <b>2016</b> , 224, 193-200	84

669	Synthesis of fast response, highly sensitive and selective Ni:ZnO based NO <sub>2</sub> sensor. <b>2016</b> , 286, 36-47	85
668	Development of CoFe <sub>2</sub> O <sub>4</sub> thin films for nitrogen dioxide sensing at moderate operating temperature. <b>2016</b> , 657, 414-421	22
667	Responsivity optimization of methane gas sensor through the modification of hexagonal nanorod and reduction of defect states. <b>2017</b> , 102, 459-469	4
666	Reduced graphene oxide-SnO <sub>2</sub> nanocomposite thin film based CNG/PNG sensor. <b>2017</b> , 245, 590-598	16
665	Reversible photoluminescence sensing of gaseous alkylamines using CdSe-based quantum dots. <b>2017</b> , 246, 1074-1079	4
664	Orthorhombic MoO <sub>3</sub> nanobelts based NO <sub>2</sub> gas sensor. <b>2017</b> , 405, 427-440	82
663	Nanoscale PdO Catalyst Functionalized CoO Hollow Nanocages Using MOF Templates for Selective Detection of Acetone Molecules in Exhaled Breath. <b>2017</b> , 9, 8201-8210	182
662	Nanopowder Metal Oxide for Photoluminescent Gas Sensing. <b>2017</b> , 12, 132	27
661	Interface Engineering of Metal Oxide Semiconductors for Biosensing Applications. <b>2017</b> , 4, 1700020	51
660	Superior selectivity and enhanced response characteristics of palladium sensitized vanadium pentoxide nanorods for detection of nitrogen dioxide gas. <b>2017</b> , 495, 53-60	23
659	Efficient exfoliation of g-C <sub>3</sub> N <sub>4</sub> and NO <sub>2</sub> sensing behavior of graphene/g-C <sub>3</sub> N <sub>4</sub> nanocomposite. <b>2017</b> , 248, 940-948	44
658	Improving methane gas sensing properties of multi-walled carbon nanotubes by vanadium oxide filling. <b>2017</b> , 247, 11-18	37
657	Synthesis of Zn <sub>2</sub> SnO <sub>4</sub> hollow spheres by a template route for high-performance acetone gas sensor. <b>2017</b> , 245, 493-506	62
656	Fabrication of mesoporous In <sub>2</sub> O <sub>3</sub> nanospheres and their ultrasensitive NO <sub>2</sub> sensing properties. <b>2017</b> , 248, 519-526	25
655	Functional hybrid nanostructure materials: Advanced strategies for sensing applications toward volatile organic compounds. <b>2017</b> , 342, 80-105	50
654	Facile synthesis of Fe <sub>2</sub> O <sub>3</sub> @graphene oxide nanocomposites for enhanced gas-sensing performance to ethanol. <b>2017</b> , 28, 12070-12079	20
653	Gas Phase Sensing of Alcohols by Metal Organic Framework-Polymer Composite Materials. <b>2017</b> , 9, 24926-24935	35
652	Ultrathin InO Nanosheets with Uniform Mesopores for Highly Sensitive Nitric Oxide Detection. <b>2017</b> , 9, 16335-16342	80

651	Electrospun manganese (III) oxide nanofiber based electrochemical DNA-nanobiosensor for zeptomolar detection of dengue consensus primer. <b>2017</b> , 90, 378-387	81
650	SbSI Nanosensors: from Gel to Single Nanowire Devices. <b>2017</b> , 12, 97	18
649	Low-temperature prototype hydrogen sensors using Pd-decorated SnO <sub>2</sub> nanowires for exhaled breath applications. <b>2017</b> , 253, 156-163	58
648	Sensitive and Reversible Detection of Methanol and Water Vapor by In Situ Electrochemically Grown CuBTC MOFs on Interdigitated Electrodes. <b>2017</b> , 13, 1604150	20
647	Study of structural properties and defects of Ni-doped SnO nanorods as ethanol gas sensors. <b>2017</b> , 28, 265702	17
646	Metal-organic frameworks-derived porous ZnO/Ni <sub>0.9</sub> Zn <sub>0.1</sub> O double-shelled nanocages as gas sensing material for selective detection of xylene. <b>2017</b> , 252, 649-656	31
645	Adsorption studies of alcohol molecules on monolayer MoS <sub>2</sub> nanosheet: first-principles insights. <b>2017</b> , 413, 109-117	54
644	A carbon dioxide gas sensor based on cobalt oxide containing barium carbonate. <b>2017</b> , 248, 987-992	28
643	Development and characterization of a novel ZnO nanorods-SnO <sub>2</sub> :F nanoflakes thin film for room-temperature ammonia and humidity sensing. <b>2017</b> ,	3
642	Microwave-assisted synthesis of Fe-doped NiO nanofoams assembled by porous nanosheets for fast response and recovery gas sensors. <b>2017</b> , 4, 045015	7
641	Tungsten Sulfide Nanoflakes: Synthesis by Electrospinning and Their Gas Sensing Properties. <b>2017</b> , 72, 375-381	8
640	Step faceting and the self-assembly of nanoislands on miscut YSZ(001) surfaces. <b>2017</b> , 407, 192-196	
639	Arrays of Ultrathin CdS Nanoflakes with High-Energy Surface for Efficient Gas Detection. <b>2017</b> , 9, 602-609	31
638	Influence of Al doping on the structural, morphological, optical, and gas sensing properties of ZnO nanorods. <b>2017</b> , 698, 555-564	122
637	Carbon monoxide detection with CMOS integrated thin film SnO <sub>2</sub> gas sensor. <b>2017</b> , 4, 7128-7131	11
636	First-principles study of the interaction between reduced graphene oxide and nickel hydroxide. <b>2017</b> , 81, 012026	1
635	A framework for analysing E-Nose data based on fuzzy set multiple linear regression: Paddy quality assessment. <b>2017</b> , 267, 200-209	20
634	Surface properties of sulphur based surface modified n-Cu <sub>2</sub> O thin films for enhanced liquefied petroleum gas sensing. <b>2017</b> , 50, 485304	2

633	Gas-sensing enhancement methods for hydrothermal synthesized SnO-based sensors. <b>2017</b> , 28, 452002	12
632	Facile synthesis of In <sub>2</sub> O <sub>3</sub> microcubes with exposed {1 0 0} facets as gas sensing material for selective detection of ethanol vapor. <b>2017</b> , 209, 618-621	19
631	Ethanol gas sensing properties of hydrothermally grown MnO <sub>2</sub> nanorods. <b>2017</b> , 727, 362-369	42
630	CuO hollow microspheres self-assembled with nanobars: Synthesis and their sensing properties to formaldehyde. <b>2017</b> , 144, 272-280	27
629	Nanostructures prepared via laser ablation of tin in water. <b>2017</b> , 41, 11308-11316	7
628	Optical and gas sensing properties of SnO <sub>2</sub> nanowires grown by vapor-liquid-solid mechanism. <b>2017</b> , 28, 17993-18002	5
627	Au-modified Fe <sub>2</sub> O <sub>3</sub> columnar superstructures assembled with nanoplates and their highly improved acetone sensing properties. <b>2017</b> , 728, 944-951	26
626	Core to shell switching of the conduction channel on SnO nanowire sensors. <b>2017</b> , 28, 465501	3
625	Nanoscale insights into doping behavior, particle size and surface effects in trivalent metal doped SnO. <b>2017</b> , 7, 9598	43
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623	Growth and properties of nanostructured titanium dioxide deposited by supersonic plasma jet deposition. <b>2017</b> , 425, 407-415	7
622	Visual and reversible carbon dioxide sensing enabled by doctor blade coated macroporous photonic crystals. <b>2017</b> , 506, 319-328	6
621	Two-Dimensional Nanostructured Materials for Gas Sensing. <b>2017</b> , 27, 1702168	397
620	BaTiO <sub>3</sub> nanostructures for H <sub>2</sub> S gas sensor: Influence of band-gap, size and shape on sensing mechanism. <b>2017</b> , 146, 455-461	18
619	Graphene oxide/SnO <sub>2</sub> nanocomposite: synthesis, characterization, and enhanced gas sensing properties. <b>2017</b> , 28, 16973-16980	10
618	Octahedral-Like CuO/InO Mesocages with Double-Shell Architectures: Rational Preparation and Application in Hydrogen Sulfide Detection. <b>2017</b> , 9, 44632-44640	38
617	Quasi physisorptive two dimensional tungsten oxide nanosheets with extraordinary sensitivity and selectivity to NO. <b>2017</b> , 9, 19162-19175	61
616	On the synergistic interaction of an ionic liquid and biopolymers in the synthesis of strontium niobate. <b>2017</b> , 202, 220-224	5

615	Synthesis, growth mechanism, and photocatalytic activity of Zinc oxide nanostructures: porous microparticles versus nonporous nanoparticles. <b>2017</b> , 52, 2746-2762		30
614	2D Sn-doped ZnO ultrathin nanosheet networks for enhanced acetone gas sensing application. <b>2017</b> , 43, 2418-2423		62
613	Nano Metal-Organic Framework-Derived Inorganic Hybrid Nanomaterials: Synthetic Strategies and Applications. <b>2017</b> , 23, 5631-5651		80
612	Highly-sensitive H <sub>2</sub> sensor operating at room temperature using Pt/TiO <sub>2</sub> nanoscale Schottky contacts. <b>2017</b> , 241, 985-992		42
611	Highly enhanced acetone sensing performance of porous C-doped WO <sub>3</sub> hollow spheres by carbon spheres as templates. <b>2017</b> , 239, 597-607		68
610	Highly reactive 0D ZnS nanospheres and nanoparticles for formaldehyde gas-sensing properties. <b>2017</b> , 239, 1243-1250		43
609	Monodisperse ZnFe <sub>2</sub> O <sub>4</sub> nanospheres synthesized by a nonaqueous route for a highly selective low-ppm-level toluene gas sensor. <b>2017</b> , 239, 1231-1236		37
608	Inorganic and Organic Solution-Processed Thin Film Devices. <b>2017</b> , 9, 3		123
607	Acetone gas detection using TiO <sub>2</sub> nanoparticles functionalized In <sub>2</sub> O <sub>3</sub> nanowires for diagnosis of diabetes. <b>2017</b> , 696, 655-662		73
606	Facile Preparation of High-Performance Copper Oxide Sensors for Electroanalysis of Hydrogen Peroxide. <b>2017</b> , 4, 12457-12469		4
605	Grain size dependence of tin oxide nanopaste on sintering temperature. <b>2017</b> , 14, 276		1
604	Electrochemical Sensors for Monitoring of Indoor and Outdoor Air Pollution. <b>2017</b> ,		6
603	Nanostructured Polypyrrole-Based Ammonia and Volatile Organic Compound Sensors. <i>Sensors</i> , <b>2017</b> , 17,	3.8	67
602	Impact of Temperature and UV Irradiation on Dynamics of NO <sub>2</sub> Sensors Based on ZnO Nanostructures. <b>2017</b> , 7,		19
601	Optimization of Perovskite Gas Sensor Performance: Characterization, Measurement and Experimental Design. <i>Sensors</i> , <b>2017</b> , 17,	3.8	11
600	Surface Acoustic Wave (SAW) for Chemical Sensing Applications of Recognition Layers. <i>Sensors</i> , <b>2017</b> , 17,	3.8	83
599	Nano-Aptasensing in Mycotoxin Analysis: Recent Updates and Progress. <b>2017</b> , 9,		36
598	The Morphologies of the Semiconductor Oxides and Their Gas-Sensing Properties. <i>Sensors</i> , <b>2017</b> , 17,	3.8	45

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596	Insight into the Mechanism of CO Oxidation on WO <sub>3</sub> (001) Surfaces for Gas Sensing: A DFT Study. <i>Sensors</i> , <b>2017</b> , 17,	3.8	16
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592	Gas sensing and capturing based on two-dimensional layered materials: Overview from theoretical perspective. <b>2018</b> , 8, e1361		67
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590	Enhancement of sensor response of as fabricated SWCNT sensor with gold decorated nanoparticles. <b>2018</b> , 274, 85-93		10
589	Porous coral-like NiCo <sub>2</sub> O <sub>4</sub> nanospheres with promising xylene gas sensing properties. <b>2018</b> , 261, 203-209		31
588	Co <sub>3</sub> O <sub>4</sub> nanosheet-built hollow spheres containing ultrafine neck-connected grains templated by PS@Co-LDH and their ppb-level gas-sensing performance. <b>2018</b> , 261, 553-565		30
587	Functionalized carbon nanotubes decorated with fluorine-doped titanium dioxide nanoparticles on silicon substrate as template for titanium dioxide film photo-anode grown by chemical vapour deposition. <b>2018</b> , 656, 30-36		3
586	Ammonia sensing by closely packed WO <sub>3</sub> microspheres with oxygen vacancies. <b>2018</b> , 204, 202-209		24
585	A new method for mapping the three-dimensional atomic distribution within nanoparticles by atom probe tomography (APT). <b>2018</b> , 190, 30-38		34
584	Adsorption of cyanogen chloride on the surface of boron nitride nanotubes for CNCl sensing. <b>2018</b> , 700, 7-14		25
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582	High-performance H <sub>2</sub> sensors with selectively hydrophobic micro-plate for self-aligned upload of Pd nanodots modified mesoporous In <sub>2</sub> O <sub>3</sub> sensing-material. <b>2018</b> , 267, 83-92		28
581	Coordination Polymer-Derived Multishelled Mixed Ni-Co Oxide Microspheres for Robust and Selective Detection of Xylene. <b>2018</b> , 10, 15314-15321		50
580	Highly Sensitive Bulk Silicon Chemical Sensors with Sub-5 nm Thin Charge Inversion Layers. <b>2018</b> , 12, 2948-2954		27



579	Hollow Pt-Functionalized SnO Hemipill Network Formation Using a Bacterial Skeleton for the Noninvasive Diagnosis of Diabetes. <b>2018</b> , 3, 661-669	30
578	Synthesis, properties and applications of ZnO nanomaterials with oxygen vacancies: A review. <b>2018</b> , 44, 7357-7377	219
577	High-Performance Volatile Organic Compounds Microsensor Based on Few-Layer MoS <sub>2</sub> -Coated Photonic Crystal Cavity. <b>2018</b> , 6, 1700882	9
576	Photocurrent generation in SnO <sub>2</sub> thin film by surface charged chemisorption O ions. <b>2018</b> , 442, 398-402	8
575	Flexible single walled nanotube based chemical sensor for 2,4-dinitrotoluene sensing. <b>2018</b> , 29, 6200-6205	10
574	Alcohol gas sensors capable of wireless detection using In <sub>2</sub> O <sub>3</sub> /Pt nanoparticles and Ag nanowires. <b>2018</b> , 259, 825-832	28
573	Tungsten Oxide Photonic Crystals as Optical Transducer for Gas Sensing. <b>2018</b> , 3, 191-199	23
572	Solution precursor plasma sprayed tungsten oxide particles and coatings. <b>2018</b> , 33, 1107-1114	5
571	Nanoscale PtO Catalysts-Loaded SnO Multichannel Nanofibers toward Highly Sensitive Acetone Sensor. <b>2018</b> , 10, 2016-2025	73
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569	Semiconductor metal oxide gas sensors: A review. <b>2018</b> , 229, 206-217	914
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567	High selectivity of N-doped ZnO nano-ribbons in detecting H <sub>2</sub> , O <sub>2</sub> and CO <sub>2</sub> molecules: Effect of negative-differential resistance on gas-sensing. <b>2018</b> , 270, 167-178	26
566	Nanostructured stannic oxide: Synthesis and characterisation for potential energy storage applications. <b>2018</b> , 9, 1391-1402	8
565	A non-linear analytical model to estimate the response and recovery times of gaseous ammonia nanosensor. <b>2018</b> , 125, 176-181	1
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563	Improved gas sensing performance of p-copper oxide thin film/n-TiO <sub>2</sub> nanotubes heterostructure. <b>2018</b> , 749, 221-228	32
562	MOF-derived porous ZnO/Co <sub>3</sub> O <sub>4</sub> nanocomposites for high performance acetone gas sensing. <b>2018</b> , 29, 8535-8546	19

561	Improved Sensitivity with Low Limit of Detection of a Hydrogen Gas Sensor Based on rGO-Loaded Ni-Doped ZnO Nanostructures. <b>2018</b> , 10, 11116-11124	92
560	Direct growth of Al-doped ZnO ultrathin nanosheets on electrode for ethanol gas sensor application. <b>2018</b> , 447, 173-181	54
559	Self-template derived ZnFe <sub>2</sub> O <sub>4</sub> double-shell microspheres for chemresistive gas sensing. <b>2018</b> , 265, 625-631	50
558	Development of novel complementary metal-oxide semiconductor-based colorimetric sensors for rapid detection of industrially important gases. <b>2018</b> , 265, 600-608	11
557	Au-nanoparticle-decorated SnO <sub>2</sub> nanorod sensor with enhanced xylene-sensing performance. <b>2018</b> , 15, 742-750	7
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555	Iron and carbon codoped WO <sub>3</sub> with hierarchical walnut-like microstructure for highly sensitive and selective acetone sensor. <b>2018</b> , 256, 27-37	62
554	Synthesis of hierarchical 3D porous ZnO microspheres decorated by ultra-small Au nanoparticles and its highly enhanced acetylene gas sensing ability. <b>2018</b> , 731, 1029-1036	21
553	Ultrasensitive ppb-level NO <sub>2</sub> gas sensor based on WO <sub>3</sub> hollow nanosphers doped with Fe. <b>2018</b> , 434, 891-897	97
552	Graphene as biomedical sensing element: State of art review and potential engineering applications. <b>2018</b> , 134, 193-206	90
551	Facile synthesis of SnO <sub>2</sub> hierarchical porous nanosheets from graphene oxide sacrificial scaffolds for high-performance gas sensors. <b>2018</b> , 258, 492-500	67
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549	ZnO nanowires: Synthesis and charge transfer mechanism in the detection of ammonia vapour. <b>2018</b> , 692, 50-56	6
548	Influence of metal (W, Pd)-doping on gas sensing properties of the NiO flower-like thin films for o-xylene detection. <b>2018</b> , 737, 122-129	13
547	Facile synthesis of ZnFe <sub>2</sub> O <sub>4</sub> /Fe <sub>2</sub> O <sub>3</sub> porous microrods with enhanced TEA-sensing performance. <b>2018</b> , 737, 255-262	43
546	Comparing different ITO-metal thin film structures for ethanol and carbon dioxide sensing application. <b>2018</b> , 38, 34-43	3
545	Synthesis and characterization of nanocrystalline NiO-GDC via sodium alginate-mediated ionic sol-gel method. <b>2018</b> , 44, 3201-3210	14
544	Synthesis and structural characterization of ZnO-and CuO-NPs supported mesoporous silica materials (hexagonal SBA-15 and lamellar-SiO <sub>2</sub> ). <b>2018</b> , 691, 211-218	13

543	Zinc peroxide combustion promoter in preparation of CuO layers for conductometric CO <sub>2</sub> sensing. <b>2018</b> , 257, 1027-1034	15
542	Sensitivity enhancement of ammonia gas sensor based on Ag/ZnO flower and nanoellipsoids at low temperature. <b>2018</b> , 255, 672-683	148
541	Current Progress of Nanomaterials in Molecularly Imprinted Electrochemical Sensing. <b>2018</b> , 48, 15-32	50
540	Semiconducting Metal Oxides Nanocomposites for Enhanced Detection of Explosive Vapors. <b>2018</b> , 1, 98-119	4
539	Nanostructured Tin Oxide Sensors Based on Nanofibers and Nanowires for Detection of Low NO <sub>2</sub> concentration. <b>2018</b> ,	
538	Highly Sensitive ALD SnO <sub>2</sub> Sensors and the Role of its Thickness in Gas Sensing Capabilities. <b>2018</b> ,	0
537	Nano Structured Gas Sensing Device and Its Application in Underground Mines. <b>2018</b> ,	2
536	Gas Sensing Performances of ZnO Hierarchical Structures for Detecting Dissolved Gases in Transformer Oil: A Mini Review. <b>2018</b> , 6, 508	10
535	Clean Block Copolymer Microparticles from Supercritical CO <sub>2</sub> : Universal Templates for the Facile and Scalable Fabrication of Hierarchical Mesostructured Metal Oxides. <b>2018</b> , 18, 7560-7569	10
534	Rhodium Oxide Surface-Loaded Gas Sensors. <b>2018</b> , 8,	20
533	Nitric Oxide Detector Based on WO <sub>3</sub> -1wt%In <sub>2</sub> O <sub>3</sub> -1wt%Nb <sub>2</sub> O <sub>5</sub> with State-of-the-Art Selectivity and ppb-Level Sensitivity. <b>2018</b> , 10, 42583-42592	16
532	Affinity Ionic Liquids for Chemoselective Gas Sensing. <b>2018</b> , 23,	5
531	2D Materials for Gas Sensing Applications: A Review on Graphene Oxide, MoS <sub>2</sub> and Phosphorene. <i>Sensors</i> , <b>2018</b> , 18,	3.8 230
530	Investigation of ZnO thin-film sensing properties for CO <sub>2</sub> detection: effect of Mn doping. <b>2018</b> , 12, 219-225	23
529	Noble Metal/Tin Dioxide Hierarchical Hollow Spheres for Low-Concentration Breath Methane Sensing. <b>2018</b> , 1, 6327-6336	21
528	Acetone gas sensor based on iron molybdate nanoparticles prepared by hydrothermal method with PVP as surfactant. <b>2018</b> , 5, 125013	9
527	Facile synthesis of size-controlled FeO nanoparticle-decorated carbon nanotubes for highly sensitive HS detection.. <b>2018</b> , 8, 31874-31880	7
526	Ag doped SnO <sub>2</sub> sensor for ethanol with high sensitivity at room temperature. <b>2018</b> ,	1

525	Nanostructured titania based electrochemical impedimetric biosensor for non-invasive cancer detection. <b>2018</b> , 5, 125405		6
524	Fabrication of shrub-like CuO porous films by a top-down method for high-performance ethanol gas sensor. <b>2018</b> , 157, 332-339		26
523	Polytetrafluoroethylene bindered hematite ( $\text{Fe}_2\text{O}_3$ ) nanostructure for ammonia gas detection at room temperature. <b>2018</b> , 5, 125002		5
522	Sensitivity Tests of Pellets Made from Manganese Antimonate Nanoparticles in Carbon Monoxide and Propane Atmospheres. <i>Sensors</i> , <b>2018</b> , 18,	3.8	13
521	Exploring NiO nanosize structures for ammonia sensing. <b>2018</b> , 29, 11870-11877		12
520	Facet-dependent electrical and mechanical properties of polyhedral Cu <sub>2</sub> O under compression. <b>2018</b> , 762, 835-841		2
519	A smart LPG sensor based on chemo-bio synthesized MgO nanostructure. <b>2018</b> , 29, 11679-11687		13
518	Facile synthesis of noble-metal free polygonal Zn <sub>2</sub> TiO <sub>4</sub> nanostructures for highly efficient photocatalytic hydrogen evolution under solar light irradiation. <b>2018</b> , 43, 13145-13157		24
517	Effect of neutral red incorporation on Al-doped ZnO thin films and its bio-electrochemical interaction with NAD/NADP dependent enzymes. <b>2018</b> , 116, 57-63		3
516	Hybrid nanomaterials designed for volatile organic compounds sensors: A review. <b>2018</b> , 156, 154-166		81
515	Chemical sensing with 2D materials. <b>2018</b> , 47, 4860-4908		317
514	ZnO nanorod/multi-walled carbon nanotube nanocomposite for ethanol vapour detection. <b>2018</b> , 13, 779-783		6
513	An Overview of Metal Oxide Nanostructures. <b>2018</b> , 19-57		22
512	Design and Optimization of an Al Doped ZnO in Si-Slot for Gas Sensing. <b>2018</b> , 10, 1-10		1
511	Intra-urban spatial variability of surface ozone in Riverside, CA: viability and validation of low-cost sensors. <b>2018</b> , 11, 1777-1792		26
510	Cataluminescence sensing of carbon disulfide based on CeO hierarchical hollow microspheres. <b>2018</b> , 410, 5113-5122		7
509	MOFs-derived porous nanomaterials for gas sensing. <b>2018</b> , 152, 155-163		44
508	Density Gradient Strategy for Preparation of Broken InO Microtubes with Remarkably Selective Detection of Triethylamine Vapor. <b>2018</b> , 10, 27131-27140		59

507	Synthesis and applications of ZnO nanowire: A review. <b>2018</b> ,		12
506	Strain-Driven Self-Assembling of Nano-Voids and Formation of CoreShell Bubbles in SiSn/Si Layers. <b>2018</b> , 255, 1700635		1
505	Sensing Technologies for Detection of Acetone in Human Breath for Diabetes Diagnosis and Monitoring. <b>2018</b> , 8,		83
504	ZnO/ZnS Core-Shell Nanostructures for Low-Concentration NO <sub>2</sub> Sensing at Room Temperature. <b>2018</b> , 18, 7203-7208		13
503	Large Area Synthesis of Vertical Aligned Metal Oxide Nanosheets by Thermal Oxidation of Stainless Steel Mesh and Foil. <b>2018</b> , 11,		2
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