Metal Oxide Semi-Conductor Gas Sensors in Environme

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Citation Report

#	Article	IF	Citations
1	Probing the electronic structure of early transition metal oxide clusters: Molecular models towards mechanistic insights into oxide surfaces and catalysis. Chemical Physics Letters, 2010, 500, 185-195.	1.2	98
2	Investigation of poly(o-anisidine)-SnO2 nanocomposites for fabrication of low temperature operative liquefied petroleum gas sensor. Journal of Applied Physics, 2011, 110, .	1.1	15
3	TiO ₂ - and CeO ₂ -Based Biphasic Core–Shell Nanoparticles with Tunable Core Sizes and Shell Thicknesses. Journal of Physical Chemistry C, 2011, 115, 10380-10387.	1.5	20
4	Advances in Electronic-Nose Technologies Developed for Biomedical Applications. Sensors, 2011, 11, 1105-1176.	2.1	315
5	On the Development of a Sensor Module for Real-Time Pollution Monitoring. , 2011, , .		16
6	Study of modal properties in gold nanowire with ZnO cladding by using the finite element method. Applied Optics, 2011, 50, E177.	2.1	7
7	Advanced NOx Sensors for Mechatronic Applications. , 2011, , .		2
8	Nanoparticles in electrochemical sensors for environmental monitoring. TrAC - Trends in Analytical Chemistry, 2011, 30, 1704-1715.	5.8	231
9	Zeolite-modified WO3 gas sensors – Enhanced detection of NO2. Sensors and Actuators B: Chemical, 2011, 160, 475-482.	4.0	52
10	Comparison of the Characteristics of Small Commercial NDIR CO2 Sensor Models and Development of a Portable CO2 Measurement Device. Sensors, 2012, 12, 3641-3655.	2.1	118
11	Application of GPRS modules in data acquisition and control of devices for air quality monitoring. , 2012, , .		6
12	The Fabrication of Porous Barium Titanate Ceramics via Pore-Forming Agents (PFAs) for Thermistor and Sensor Applications. , 2012, , .		2
13	Development of low-cost ammonia gas sensors and data analysis algorithms to implement a monitoring grid of urban environmental pollutants. Journal of Environmental Monitoring, 2012, 14, 1565.	2.1	25
14	Fabrication of a low power CMOS-compatible ZnO nanocomb-based gas sensor. , 2012, , .		O
15	Review of Electronic-nose Technologies and Algorithms to Detect Hazardous Chemicals in the Environment. Procedia Technology, 2012, 1, 453-463.	1.1	193
16	Selective detection of carbon dioxide using LaOCl-functionalized SnO2 nanowires for air-quality monitoring. Talanta, 2012, 88, 152-159.	2.9	77
17	Conduction mechanism and gas sensing properties of CoFe2O4 nanocomposite thick films for H2S gas. Talanta, 2012, 89, 183-188.	2.9	28
18	CO sensing characteristics of hexagonal-shaped CdO nanostructures prepared by microwave irradiation. Sensors and Actuators B: Chemical, 2012, 171-172, 853-859.	4.0	24

#	ARTICLE	IF	Citations
19	Ag/ZnO nanomaterials as high performance sensors for flammable and toxic gases. Nanotechnology, 2012, 23, 025502.	1.3	48
20	WiFi electronic nose for indoor air monitoring. , 2012, , .		8
21	Low-power, fast, selective nanoparticle-based hydrogen sulfide gas sensor. Applied Physics Letters, 2012, 100, .	1.5	67
22	Molecular Simulation for Gas Adsorption at NiO (100) Surface. ACS Applied Materials & amp; Interfaces, 2012, 4, 5691-5697.	4.0	64
23	A Survey on Gas Sensing Technology. Sensors, 2012, 12, 9635-9665.	2.1	1,116
24	NO sensors based on semiconducting metal oxide nanostructures: Progress and perspectives. Sensors and Actuators B: Chemical, 2012, 171-172, 25-42.	4.0	371
25	UV-assisted alcohol sensing using SnO2 functionalized GaN nanowire devices. Sensors and Actuators B: Chemical, 2012, 171-172, 499-507.	4.0	52
26	A morphological control of tungsten oxide nanowires by thermal evaporation method for sub-ppm NO2 gas sensor application. Sensors and Actuators B: Chemical, 2012, 171-172, 760-768.	4.0	59
27	The gas sensing properties of some complex metal oxides prepared by self-propagating high-temperature synthesis. Materials Letters, 2012, 75, 36-38.	1.3	29
28	A new approach to gas sensing with nanotechnology. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 2448-2473.	1.6	133
29	The Preparation of Titanium Dioxide Gas Sensors by the Electric Field Assisted Aerosol CVD Reaction of Titanium Isopropoxide in Toluene. Chemical Vapor Deposition, 2012, 18, 102-106.	1.4	23
30	Tailoring the structure of metal oxide nanostructures towards enhanced sensing properties for environmental applications. Journal of Colloid and Interface Science, 2012, 368, 41-48.	5.0	18
31	Improvement of sensing characteristics of radio-frequency sputtered tungsten oxide films through surface modification by laser irradiation. Materials Chemistry and Physics, 2012, 133, 588-591.	2.0	17
32	MOF @ MEMS: Design optimization for high sensitivity chemical detection. Sensors and Actuators B: Chemical, 2012, 168, 256-262.	4.0	50
33	A review of sensor-based methods for monitoring hydrogen sulfide. TrAC - Trends in Analytical Chemistry, 2012, 32, 87-99.	5.8	310
34	Adsorption of oxygen and hydrogen at the surface of nanostructured SnO2 film. Nanotechnologies in Russia, 2012, 7, 122-126.	0.7	5
35	Nanophase separated amphiphilic polymer co-networks as efficient matrices for optical sensors: Rapid and sensitive detection of NO2. Sensors and Actuators B: Chemical, 2013, 186, 367-373.	4.0	7
36	PdCl2–Polyaniline Composite for CO Detection Applications: Electrical and Optical Response. Journal of Inorganic and Organometallic Polymers and Materials, 2013, 23, 365-372.	1.9	7

#	Article	IF	CITATIONS
37	Context-Adaptive Multimodal Wireless Sensor Network for Energy-Efficient Gas Monitoring. IEEE Sensors Journal, 2013, 13, 328-338.	2.4	164
38	Nanostructured tungsten oxide gas sensors prepared by electric field assisted aerosol assisted chemical vapour deposition. Journal of Materials Chemistry A, 2013, 1, 1827-1833.	5.2	43
39	Automated Control System for Air Pollution Detection in Vehicles. , 2013, , .		25
40	Evaluation of a real-time method for monitoring volatile organic compounds in indoor air in a Japanese university. Environmental Health and Preventive Medicine, 2013, 18, 285-292.	1.4	25
41	Infrared emissivity of transition elements doped ZnO. Journal of Central South University, 2013, 20, 592-598.	1.2	7
42	VOCs classification based on the committee of classifiers coupled with single sensor signals. Chemometrics and Intelligent Laboratory Systems, 2013, 125, 1-10.	1.8	29
43	Sensor Technologies., 2013,,.		67
44	Ammonia gas sensing properties of CSA doped PANi-SnO2 nanohybrid thin films. Synthetic Metals, 2013, 185-186, 1-8.	2.1	21
45	Conductivity and sensing properties of In2O3+ZnO mixed nanostructured films: Effect of composition and temperature. Sensors and Actuators B: Chemical, 2013, 187, 514-521.	4.0	41
46	Electrolyte-Gated, High Mobility Inorganic Oxide Transistors from Printed Metal Halides. ACS Applied Materials & Samp; Interfaces, 2013, 5, 11498-11502.	4.0	67
47	Nanosized Semiconductor CoxOy/SnO2 Materials for Carbon Monoxide Sensors. Theoretical and Experimental Chemistry, 2013, 49, 310-314.	0.2	6
48	Metal Oxides. Integrated Analytical Systems, 2013, , 49-116.	0.4	1
50	A drop-on-demand droplet generator for coating catalytic materials on microhotplates of micropellistor. Sensors and Actuators B: Chemical, 2013, 183, 342-349.	4.0	16
51	Electric field assisted aerosol assisted chemical vapour deposition of nanostructured metal oxide thin films. Thin Solid Films, 2013, 544, 452-456.	0.8	16
52	Thermal Effects Associated with the Raman Spectroscopy of WO ₃ Gas-Sensor Materials. Journal of Physical Chemistry A, 2013, 117, 13825-13831.	1.1	148
53	Metal oxide semiconductor gas sensors in environmental monitoring. , 2013, , 433-466.		38
54	Growth of graphene-like films for NO2 detection. Sensors and Actuators B: Chemical, 2013, 182, 66-70.	4.0	25
55	Detection of volatile organic compounds as biomarkers in breath analysis by different analytical techniques. Bioanalysis, 2013, 5, 2287-2306.	0.6	79

#	Article	IF	CITATIONS
56	Diameter controlled synthesis of tungsten oxide nanorod bundles for highly sensitive NO2 gas sensors. Sensors and Actuators B: Chemical, 2013, 183, 372-380.	4.0	70
57	Sensors for Exhaled Gas Analysis: An Analytical Review. , 2013, , 264-300.		5
58	Gas Dielectric Transistor of CuPc Single Crystalline Nanowire for SO ₂ Detection Down to Subâ€ppm Levels at Room Temperature. Advanced Materials, 2013, 25, 2269-2273.	11.1	158
59	Air purification by heterogeneous photocatalytic oxidation with multi-doped thin film titanium dioxide. Thin Solid Films, 2013, 537, 131-136.	0.8	15
60	Diverse Applications of Electronic-Nose Technologies in Agriculture and Forestry. Sensors, 2013, 13, 2295-2348.	2.1	266
61	Surface-Doping Effect of InVO ₄ Nanoribbons and the Distinctive Behavior as Gas Sensors. ACS Applied Materials & Samp; Interfaces, 2013, 5, 3208-3211.	4.0	29
62	Sensor for Thermal Gas Analysis Based on Micromachined Silicon-Microwires. IEEE Sensors Journal, 2013, 13, 2626-2635.	2,4	14
63	Non-dispersive infra-red (NDIR) measurement of carbon dioxide at $4.2\hat{1}\frac{1}{4}$ m in a compact and optically efficient sensor. Sensors and Actuators B: Chemical, 2013, 186, 580-588.	4.0	153
64	A near single crystalline TiO ₂ nanohelix array: enhanced gas sensing performance and its application as a monolithically integrated electronic nose. Analyst, The, 2013, 138, 443-450.	1.7	73
65	Gas sensing properties of novel CuO nanowire devices. Sensors and Actuators B: Chemical, 2013, 187, 50-57.	4.0	163
66	The future scalability of pH-based genome sequencers: A theoretical perspective. Journal of Applied Physics, 2013, 114, 164311.	1.1	8
67	Ferrite materials for gas sensing applications. , 2013, , .		2
68	Porous FeVO4 nanorods: synthesis, characterization, and gas-sensing properties toward volatile organic compounds. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	43
69	Poly-Use Multi-Level Sampling System for Soil-Gas Transport Analysis in the Vadose Zone. Environmental Science & Description (2013, 47, 11122-11130).	4.6	10
70	Optical fibers as a unique platform for RS/SERS molecular detection. , 2013, , .		1
71	Hydrothermal Synthesis of Pt-, Fe-, and Zn-dopedSnO2Nanospheres and Carbon Monoxide Sensing Properties. Advances in Materials Science and Engineering, 2013, 2013, 1-8.	1.0	5
72	Towards a Chemiresistive Sensor-Integrated Electronic Nose: A Review. Sensors, 2013, 13, 14214-14247.	2.1	173
73	CuO nanowire gas sensors for CO detection in humid atmosphere. , 2013, , .		6

#	Article	IF	CITATIONS
74	Selective Sensing Characteristics of Ca Doped BeO Nanoâ€sized Tube toward H2O and NH3. Chinese Journal of Chemical Physics, 2013, 26, 612-616.	0.6	3
7 5	The next generation of low-cost personal air quality sensors for quantitative exposure monitoring. Atmospheric Measurement Techniques, 2014, 7, 3325-3336.	1.2	206
76	Electric Field–Assisted Chemical Vapor Deposition for Nanostructured Thin Films. , 2014, , 171-190.		3
77	Zinc-oxide nanorod/copper-oxide thin-film heterojunction for a nitrogen-monoxide gas sensor. Journal of the Korean Physical Society, 2014, 65, 1653-1657.	0.3	1
78	Towards point of care testing for <i>C. difficile</i> ii>infection by volatile profiling, using the combination of a short multi-capillary gas chromatography column with metal oxide sensor detection. Measurement Science and Technology, 2014, 25, 065108.	1.4	22
80	Detecting Cannabis Use on the Human Skin Surface via an Electronic Nose System. Sensors, 2014, 14, 13256-13272.	2.1	31
81	Chemical Discrimination in Turbulent Gas Mixtures with MOX Sensors Validated by Gas Chromatography-Mass Spectrometry. Sensors, 2014, 14, 19336-19353.	2.1	67
83	Fabrication of a Miniature Zinc Aluminum Oxide Nanowire Array Gas Sensor and Application for Environmental Monitoring. International Journal of Photoenergy, 2014, 2014, 1-7.	1.4	5
84	An Integrated Low-Power Lock-In Amplifier and Its Application to Gas Detection. Sensors, 2014, 14, 15880-15899.	2.1	20
85	RASPIMON- Smart sensory system for environmental monitoring. , 2014, , .		1
86	Junctionless sub-micron silicon wire device fabricated by atomic force microscope lithography and electrically characterized for gas sensing application at room temperature. , 2014, , .		0
87	Electrical characterization of H2S adsorption on hexagonal WO3 nanowire at room temperature. Journal of Applied Physics, 2014, 116, 164310.	1.1	10
89	Chemical Sensor Array Modeling: Application to Resistive Based Chemo Sensors. Key Engineering Materials, 0, 605, 15-18.	0.4	0
90	Raman gas sensing of modified Ag nanoparticle SERS. , 2014, , .		O
91	Highly Selective SAM–Nanowire Hybrid NO ₂ Sensor: Insight into Charge Transfer Dynamics and Alignment of Frontier Molecular Orbitals. Advanced Functional Materials, 2014, 24, 595-602.	7.8	71
92	Grain shape influence on semiconducting metal oxide based gas sensor performance: modeling versus experiment. Analytical and Bioanalytical Chemistry, 2014, 406, 3977-3983.	1.9	26
93	Electrochemical impedance characterisation of tungsten trioxide–polyaniline nanocomposites for room temperature acetone sensing. Sensors and Actuators B: Chemical, 2014, 194, 283-289.	4.0	26
94	Solution precursor plasma-sprayed tungsten oxide coatings for nitrogen dioxide detection. Ceramics International, 2014, 40, 11427-11431.	2.3	25

#	Article	IF	CITATIONS
95	Ultrasensitive single crystalline TeO $<$ sub $>$ 2 $<$ /sub $>$ nanowire based hydrogen gas sensors. Journal of Materials Chemistry A, 2014, 2, 5394-5398.	5.2	24
96	Advances in artificial olfaction: Sensors and applications. Talanta, 2014, 124, 95-105.	2.9	106
97	Electric field assisted chemical vapour deposition $\hat{a}\in$ a new method for the preparation of highly porous supercapacitor electrodes. Journal of Materials Chemistry A, 2014, 2, 6115-6120.	5.2	29
98	Single electronic traps in tin and zinc oxides. Nanotechnologies in Russia, 2014, 9, 151-156.	0.7	1
99	Comparison of optimization algorithms in the sensor selection for predictive target tracking. Ad Hoc Networks, 2014, 20, 182-192.	3.4	8
100	Estimation of the limit of detection using information theory measures. Analytica Chimica Acta, 2014, 810, 1-9.	2.6	30
101	Review of recent trends in gas sensing technologies and their miniaturization potential. Sensor Review, 2014, 34, 24-35.	1.0	66
102	Enhanced gas-sensing response by gamma ray irradiation: Ag/Ag ₂ SnO ₃ nanoparticle-based sensor to ethanol, nitromethane and acetic acid. Journal of Materials Chemistry C, 2014, 2, 10082-10086.	2.7	18
103	Single-walled carbon nanotube composite inks for printed gas sensors: enhanced detection of NO ₂ , NH ₃ , EtOH and acetone. RSC Advances, 2014, 4, 51395-51403.	1.7	40
104	Hollow zinc oxide microspheres functionalized by Au nanoparticles for gas sensors. RSC Advances, 2014, 4, 28005.	1.7	36
105	Adsorption and splitting of H $<$ sub $>$ 2 $<$ /sub $>$ S on 2D-ZnO $<$ sub $>$ 1 \hat{a} ^ $'x<$ /sub $>$ N $<$ sub $>y<$ /sub $>$: first-principles analysis. Physical Chemistry Chemical Physics, 2014, 16, 10719-10726.	1.3	16
106	Assessing the potential of metal oxide semiconducting gas sensors for illicit drug detection markers. Journal of Materials Chemistry A, 2014, 2, 8952-8960.	5.2	35
107	Hydrothermally processed SnO2 nanocrystals for ultrasensitive NO sensors. RSC Advances, 2014, 4, 22487.	1.7	10
108	Chemical Tuning versus Microstructure Features in Solid-State Gas Sensors: LaFe _{1-x} Ga _{<i>x</i>} O ₃ , a Case Study. Chemistry of Materials, 2014, 26, 1505-1513.	3.2	55
109	Chemiresistor gas sensors using semiconductor metal oxides. , 2014, , 101-124.		6
110	Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of Au@ZnO Yolk–Shell Nanospheres with Enhanced Gas Sensing Properties. ACS Applied Materials & Design of August Properties	4.0	216
111	High sensitivity, moisture selective, ammonia gas sensors based on single-walled carbon nanotubes functionalized with indium tin oxide nanoparticles. Carbon, 2014, 80, 356-363.	5.4	86
112	Ammonia gas sensing using a graphene field–effect transistor gated by ionic liquid. Sensors and Actuators B: Chemical, 2014, 195, 15-21.	4.0	59

#	Article	IF	CITATIONS
113	Effects of Mg doping on optical and CO gas sensing properties of sensitive ZnO nanobelts. CrystEngComm, 2014, 16, 6080-6088.	1.3	52
114	Electrospun Granular Hollow SnO ₂ Nanofibers Hydrogen Gas Sensors Operating at Low Temperatures. Journal of Physical Chemistry C, 2014, 118, 3129-3139.	1.5	166
115	Apparatus to characterize gas sensor response under real-world conditions in the lab. Review of Scientific Instruments, 2014, 85, 055006.	0.6	47
116	Gas Sensing Studies of a n-n Hetero-Junction Array Based on WO ₃ and ZnO Composites. IEEE Sensors Journal, 2014, 14, 3137-3147.	2.4	22
117	Analytical capabilities of chemiresistive microsensor arrays in a simulated Martian atmosphere. Sensors and Actuators B: Chemical, 2014, 197, 280-291.	4.0	6
118	Hydrogen sensing properties of ZnO nanorods: Effects of annealing, temperature and electrode structure. International Journal of Hydrogen Energy, 2014, 39, 5194-5201.	3.8	48
119	Disposable chemical sensors and biosensors made on cellulose paper. Nanotechnology, 2014, 25, 092001.	1.3	98
120	Work Function Based CO2 Gas Sensing Using Metal Oxide Nanoparticles at Room Temperature. Materials Today: Proceedings, 2015, 2, 4190-4195.	0.9	26
121	Junctionless Silicon-based Device for CO2 and N2O Gas Detection at Room Temperature. Procedia Manufacturing, 2015, 2, 385-391.	1.9	1
122	A wafer-level liquid cavity integrated amperometric gas sensor with ppb-level nitric oxide gas sensitivity. Journal of Micromechanics and Microengineering, 2015, 25, 105013.	1.5	9
123	Application of quantum cascade lasers to trace gas detection. Bulletin of the Polish Academy of Sciences: Technical Sciences, 2015, 63, 515-525.	0.8	18
124	Properties of a weakly ionized NO gas sensor based on multi-walled carbon nanotubes. Applied Physics Letters, 2015, 107, .	1.5	18
125	First Fifty Years of Chemoresistive Gas Sensors. Chemosensors, 2015, 3, 1-20.	1.8	392
126	Personal Environmental Monitoring System and network platform. , 2015, , .		8
127	Structure and physicochemical properties of nanostructured metal oxide films for use as the sensitive layer in gas sensors. Russian Journal of Physical Chemistry B, 2015, 9, 733-742.	0.2	17
128	Compact silicon photonic refractometric sensor for atmospheric CO2 gas monitoring. , 2015, , .		0
129	Characterization of tin dioxide nanoparticles synthesized by oxidation. Ceramica, 2015, 61, 328-333.	0.3	23
130	Study on the Sensing Coating of the Optical Fibre CO2 Sensor. Sensors, 2015, 15, 31888-31903.	2.1	25

#	Article	IF	CITATIONS
131	Ammonia Gas Sensing Behavior of Tanninsulfonic Acid Doped Polyaniline-TiO2 Composite. Sensors, 2015, 15, 26415-26429.	2.1	43
132	Nanostructured Tungsten Oxide Composite for High-Performance Gas Sensors. Sensors, 2015, 15, 27035-27046.	2.1	10
133	Assessment and Optimization for Novel Gas Materials Through the Evaluation of Mixed Response Surface Models. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1084-1092.	2.4	14
134	Improved catalytic activity of PrMO ₃ (M = Co and Fe) perovskites: synthesis of thermally stable nanoparticles by a novel hydrothermal method. New Journal of Chemistry, 2015, 39, 2342-2348.	1.4	22
135	Very Sensitive Optical System with the Concentration and Decomposition Unit for Explosive Trace Detection. Metrology and Measurement Systems, 2015, 22, 101-110.	1.4	0
136	Performance analysis of different plasmonic metallic nanoparticles using for ultra-sensitive optical sensor., 2015,,.		1
137	Development of effectively test chamber for SnCl2 gas detection sensor. , 2015, , .		2
138	Sensing mechanism of RuO2–SnO2 thick film pH sensors studied by potentiometric method and electrochemical impedance spectroscopy. Journal of Electroanalytical Chemistry, 2015, 759, 82-90.	1.9	51
139	Synthesis and Sensing Characterization of ZnO Nanofibers Prepared by Electrospinning. Materials Today: Proceedings, 2015, 2, 4499-4502.	0.9	12
140	In 2-X O 3-Y 1D perpendicular nanostructure arrays as ultraviolet detector. Solid State Sciences, 2015, 48, 56-60.	1.5	8
141	Synthesis, characterization and low concentration ethanol sensing performance of sol–gel derived La(III) doped tin oxide. Journal of Materials Science: Materials in Electronics, 2015, 26, 6252-6260.	1.1	10
142	Real-time detection by properties of tin dioxide for formaldehyde gas sensor. , 2015, , .		5
143	The influence of CO2gas sensor parameters on its operation characteristic., 2015,,.		1
144	NiO doped SnO ₂ p–n heterojunction microspheres: preparation, characterisation and CO sensing properties. Materials Technology, 2015, 30, 349-355.	1.5	19
145	lonic liquids tailored for reaction-based gas sensing on quartz crystal microbalance. Reviews in Analytical Chemistry, 2015, 34, .	1.5	10
146	Recent Progress on the Development of Chemosensors for Gases. Chemical Reviews, 2015, 115, 7944-8000.	23.0	661
147	Direct fabrication of La0.7Sr0.3FeO3 nanofibers with tunable hollow structures by electrospinning and their gas sensing properties. Journal of Materials Science, 2015, 50, 1338-1349.	1.7	7
148	Enhanced Gas-Sensing Performance of Fe-Doped Ordered Mesoporous NiO with Long-Range Periodicity. Journal of Physical Chemistry C, 2015, 119, 3228-3237.	1.5	74

#	Article	IF	CITATIONS
149	Charge-transfer-based Gas Sensing Using Atomic-layer MoS2. Scientific Reports, 2015, 5, 8052.	1.6	489
150	Electrochemical detection of methyl nicotinate biomarker using functionalized anodized titania nanotube arrays. Materials Research Express, 2015, 2, 025002.	0.8	21
151	Suspended Ring-Core Photonic Crystal Fiber Gas Sensor With High Sensitivity and Fast Response. IEEE Photonics Journal, 2015, 7, 1-9.	1.0	38
152	Highly selective ppb-level detection of NH3 and NO2 gas using patterned porous channels of ITO nanoparticles. Sensors and Actuators B: Chemical, 2015, 216, 482-487.	4.0	20
153	Improvement of ozone detection with GLAD WO3 films. Materials Letters, 2015, 155, 1-3.	1.3	30
154	Gigantically enhanced NO sensing properties of WO3/SnO2 double layer sensors with Pd decoration. Sensors and Actuators B: Chemical, 2015, 220, 398-405.	4.0	40
155	Photoconductivity Measurements in Nanostructured ZnO and ZnO:Al Films., 2015, 8, 623-629.		0
156	Localized aerosol-assisted CVD of nanomaterials for the fabrication of monolithic gas sensor microarrays. Sensors and Actuators B: Chemical, 2015, 216, 374-383.	4.0	23
157	Growth and complex characterization of nanoporous oxide layers on metallic tin during one-step anodic oxidation in oxalic acid at room temperature. Applied Surface Science, 2015, 351, 1034-1042.	3.1	35
158	Effect of Grain-Boundaries in NiO Nanosheet Layers Room-Temperature Sensing Mechanism under NO ₂ . Journal of Physical Chemistry C, 2015, 119, 17930-17939.	1.5	60
159	Mesoporous urchin-like <i>\hat{l} + </i> -Fe < sub>2 O < sub>3 superstructures with high coercivity and excellent gas sensing properties. Materials Research Express, 2015, 2, 045011.	0.8	5
160	The Methanol Response Sensing Properties Using MWCNT-ZnO Composite. Advanced Materials Research, 2015, 1112, 116-119.	0.3	4
161	Gas sensors based on ultrathin porous Co ₃ O ₄ nanosheets to detect acetone at low temperature. RSC Advances, 2015, 5, 59976-59982.	1.7	96
162	High sensitivity wrist-worn pulse active sensor made from tellurium dioxide microwires. Nano Energy, 2015, 14, 102-110.	8.2	33
163	Mechanism of charge transfer and its impacts on Fermi-level pinning for gas molecules adsorbed on monolayer WS2. Journal of Chemical Physics, 2015, 142, 214704.	1.2	124
164	Enhanced Sensitivity of Gas Sensor Based on Poly(3-hexylthiophene) Thin-Film Transistors for Disease Diagnosis and Environment Monitoring. Sensors, 2015, 15, 9592-9609.	2.1	51
165	Multiplexed Gas Sensor Based on Heterogeneous Metal Oxide Nanomaterial Array Enabled by Localized Liquid-Phase Reaction. ACS Applied Materials & Samp; Interfaces, 2015, 7, 10152-10161.	4.0	50
166	A Customized Metal Oxide Semiconductor-Based Gas Sensor Array for Onion Quality Evaluation: System Development and Characterization. Sensors, 2015, 15, 1252-1273.	2.1	51

#	Article	IF	CITATIONS
167	Nitrogen dioxide sensing properties of sprayed tungsten oxide thin film sensor: Effect of film thickness. Journal of Colloid and Interface Science, 2015, 451, 245-254.	5.0	52
168	Detection of triacetone triperoxide using temperature cycled metalâ€oxide semiconductor gas sensors. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1289-1298.	0.8	9
169	Fast testing for explosive properties of mg-scale samples by thermal activation and classification by physical and chemical properties. Sensors and Actuators B: Chemical, 2015, 215, 70-76.	4.0	5
170	Ag ₇ Au ₆ Cluster as a Potential Gas Sensor for CO, HCN, and NO Detection. Journal of Physical Chemistry C, 2015, 119, 7534-7540.	1.5	52
171	Magnetic properties of Mg $12~O~12$ nanocage doped with transition metal atoms (Mn, Fe, Co and Ni): DFT study. Journal of Magnetism and Magnetic Materials, 2015, 385, 138-144.	1.0	26
172	Environmental sensing semiconducting nanoceramics made using a continuous hydrothermal synthesis pilot plant. Sensors and Actuators B: Chemical, 2015, 217, 136-145.	4.0	13
173	Performance study of amperometric sensor for detecting NO2 at ppb concentration level. Ionics, 2015, 21, 2647-2654.	1.2	3
174	Capacitance modeling of gate material engineered cylindrical/surrounded gate MOSFETs for sensor applications. Superlattices and Microstructures, 2015, 88, 271-280.	1.4	6
175	Fiber optic gas sensor for on-line CO2monitoring. , 2015, , .		1
176	Nanoscale Heterostructures Based on Fe ₂ O ₃ @WO _{3-x} Nanoneedles and Their Direct Integration into Flexible Transducing Platforms for Toluene Sensing. ACS Applied Materials & Diterfaces, 2015, 7, 18638-18649.	4.0	79
177	Physisorption-Based Charge Transfer in Two-Dimensional SnS ₂ for Selective and Reversible NO ₂ Gas Sensing. ACS Nano, 2015, 9, 10313-10323.	7.3	624
178	W@Si _{12} cluster as a potential sensor for CO and NO detection. Europhysics Letters, 2015, 111, 10006.	0.7	10
179	Design and Implementation of a Wearable Environmental Monitoring System., 2015,,.		5
180	Detection of methane using multi-walled carbon nanotubes. Bulletin of Materials Science, 2015, 38, 909-913.	0.8	8
181	3D porous α-Ni(OH) ₂ nanostructure interconnected with carbon black as a high-performance gas sensing material for NO ₂ at room temperature. RSC Advances, 2015, 5, 101760-101767.	1.7	17
182	Porous NiO nanosheets self-grown on alumina tube using a novel flash synthesis and their gas sensing properties. RSC Advances, 2015, 5, 4880-4885.	1.7	52
183	Effect of composition and temperature on conductive and sensing properties of CeO2+ln2O3 nanocomposite films. Sensors and Actuators B: Chemical, 2015, 209, 562-569.	4.0	35
184	Gas sensing properties and p-type response of ALD TiO ₂ coated carbon nanotubes. Nanotechnology, 2015, 26, 024004.	1.3	39

#	Article	IF	CITATIONS
185	The rise of low-cost sensing for managing air pollution in cities. Environment International, 2015, 75, 199-205.	4.8	597
186	Approach for quantification of metal oxide type semiconductor gas sensors used for ambient air quality monitoring. Sensors and Actuators B: Chemical, 2015, 208, 339-345.	4.0	87
187	Synthesis and gas sensing behavior of nanostructured V2O5 thin films prepared by spray pyrolysis. Materials Science in Semiconductor Processing, 2015, 29, 132-138.	1.9	62
188	Effects of Surface and Bulk Silver on PrMnO $<$ sub $>3+\hat{l}'sub> Perovskite for CO and Soot Oxidation: Experimental Evidence for the Chemical State of Silver. ACS Catalysis, 2015, 5, 301-309.$	5.5	55
189	Carbon dioxide gas sensing by Ag/TiO2composites prepared by solid-state diffusion and chemical routes. Journal of the Chinese Advanced Materials Society, 2015, 3, 9-16.	0.7	2
190	Effect of solution concentration on physicochemical and gas sensing properties of sprayed WO3 thin films. Current Applied Physics, 2015, 15, 84-93.	1.1	31
191	Ar/O2 and H2O plasma surface modification of SnO2 nanomaterials to increase surface oxidation. Sensors and Actuators B: Chemical, 2015, 208, 379-388.	4.0	33
192	Adsorption of nonmetallic elements on defect-free MgO(001) surface – DFT study. Surface Science, 2015, 632, 39-49.	0.8	19
193	Ferrite Materials Produced From Self-Propagating High-Temperature Synthesis for Gas Sensing Applications. IEEE Sensors Journal, 2015, 15, 196-200.	2.4	8
194	La1â^'xSrxCo1â^'yFeyO3â^'Î^ perovskites: Preparation, characterization and solar photocatalytic activity. Applied Catalysis B: Environmental, 2015, 178, 218-225.	10.8	53
195	Nanostructured SnO ₂ –ZnO composite gas sensors for selective detection of carbon monoxide. Beilstein Journal of Nanotechnology, 2016, 7, 2045-2056.	1.5	34
196	Modeling and Finite Element Analysis Simulation of MEMS Based Acetone Vapor Sensor for Noninvasive Screening of Diabetes. Journal of Sensors, 2016, 2016, 1-14.	0.6	15
197	Perovskites-Based Nanomaterials for Chemical Sensors. , 2016, , .		6
198	A Novel Gas Sensor Based on MgSb2O6 Nanorods to Indicate Variations in Carbon Monoxide and Propane Concentrations. Sensors, 2016, 16, 177.	2.1	30
199	A Microfluidic-Based Fabry-Pérot Gas Sensor. Micromachines, 2016, 7, 36.	1.4	9
200	Influence of External Gaseous Environments on the Electrical Properties of ZnO Nanostructures Obtained by a Hydrothermal Method. Nanomaterials, 2016, 6, 227.	1.9	28
201	Love Acoustic Wave-Based Devices and Molecularly-Imprinted Polymers as Versatile Sensors for Electronic Nose or Tongue for Cancer Monitoring. Sensors, 2016, 16, 915.	2.1	25
202	Investigation of Gas-Sensing Property of Acid-Deposited Polyaniline Thin-Film Sensors for Detecting H2S and SO2. Sensors, 2016, 16, 1889.	2.1	18

#	Article	IF	CITATIONS
203	Performances and limitations of electronic gas sensors to investigate an indoor air quality event. Building and Environment, 2016, 107, 19-28.	3.0	42
204	Security Implementations in Smart Sensor Networks. Studies in Computational Intelligence, 2016, , 187-221.	0.7	0
205	Silver oxide Schottky contacts and metal semiconductor field-effect transistors on SnO ₂ thin films. Applied Physics Express, 2016, 9, 041101.	1.1	30
206	CMOS Integrated Nanocrystalline SnO 2 Gas Sensors for CO Detection. Procedia Engineering, 2016, 168, 297-300.	1.2	6
207	Low working temperature operation of Layered Double Hydroxides sensors for air quality monitoring in smart cities. , 2016 , , .		2
208	2D multi-gas mapper with cascading module system along with wireless sensor network. , 2016, , .		2
209	Room temperature acetone sensor based on nanostructured K <inf>2</inf> W <inf>7</inf> O <inf>22</inf> . , 2016, , .		4
210	Smart capacitive CO2 sensor. , 2016, , .		3
211	CMOS integrated tin dioxide gas sensors functionalized with bimetallic nanoparticles for improved carbon monoxide detection. , $2016, , .$		2
212	Experimental investigations of the acousto-electric effect in high temperature SAW gas sensing. , 2016 , , \cdot		2
214	Calibration transfer and drift counteraction in chemical sensor arrays using Direct Standardization. Sensors and Actuators B: Chemical, 2016, 236, 1044-1053.	4.0	147
215	The role of bioethanol flueless fireplaces on indoor air quality: Focus on odour emissions. Building and Environment, 2016, 98, 98-106.	3.0	11
216	High sensitivity NO2 sensor based on CuO/p-porous silicon heterojunction at room temperature. Journal of Alloys and Compounds, 2016, 685, 364-369.	2.8	59
217	On the verification of sol–gel-derived ZnO nanoparticle properties using first-principles calculation. Journal of Sol-Gel Science and Technology, 2016, 80, 56-67.	1.1	11
218	A paper-based cantilever array sensor: Monitoring volatile organic compounds with naked eye. Talanta, 2016, 158, 57-62.	2.9	23
219	Ultrasonic processing of SbSI nanowires for their application to gas sensors. Ultrasonics, 2016, 69, 67-73.	2.1	21
220	Sensing environmental contaminants using carbon nanofibers doped tin-oxide composites. Surface Engineering and Applied Electrochemistry, 2016, 52, 8-13.	0.3	0
221	Hybrid gas sensor based on platinum nanoparticles/poly(methyl methacrylate)-coated single-walled carbon nanotubes for dichloromethane detection with a high response magnitude. Diamond and Related Materials, 2016, 65, 183-190.	1.8	11

#	Article	IF	Citations
222	Adsorption of gas molecules on $Gd@Au < sub > n < / sub > (n = 14, 15)$ clusters and their implication for molecule sensors. RSC Advances, 2016, 6, 26809-26816.	1.7	6
223	Study of optical and electrical properties of thin films of the conducting comb-like graft copolymer of polymethylsiloxane with poly(3-hexyltiophene) and poly(ethylene) glycol side chains for low temperature NO 2 sensing. Thin Solid Films, 2016, 618, 277-285.	0.8	15
224	Synthesis and Characterization of Tin(IV) Oxide Obtained by Chemical Vapor Deposition Method. Nanoscale Research Letters, 2016, 11, 343.	3.1	30
225	Characterization of embedded microheater of a CMOS–MEMS gravimetric sensor device. Microelectronics Journal, 2016, 55, 179-188.	1.1	2
226	A novel gas sensor based on Ag/Fe2O3 core-shell nanocomposites. Ceramics International, 2016, 42, 18974-18982.	2.3	76
227	Fabrication of a W/CuxO/Cu memristor with sub-micron holes for passive sensing of oxygen. Microelectronic Engineering, 2016, 164, 48-52.	1.1	10
228	Carbon 1s photoemission line analysis of C-based adsorbate on (111)In2O3 surface: The influence of reducing and oxidizing conditions. Applied Surface Science, 2016, 390, 897-902.	3.1	5
229	Synthesis, characterization and gas sensing performance of aluminosilicate azide cancrinite. Bulletin of Materials Science, 2016, 39, 1557-1563.	0.8	3
230	Membranes: Polymer Nanocomposite Membranes for Wastewater Purification., 2016,, 498-507.		0
231	Metal Oxides: Nanostructured Metal Oxides for Gas Sensing Applications. , 2016, , 552-567.		0
232	Tin–Zinc oxide composite ceramics for selective CO sensing. Ceramics International, 2016, 42, 16677-16684.	2.3	13
233	Integration of IDE with ZnO nanoparticles for detection of synthetic formaldehyde liquid. , 2016, , .		1
234	Humidity and H ₂ O ₂ sensing behavior of Te nanowires. International Journal of Higher Education Management, 2016, 2, 8-14.	1.0	11
235	Crowd-sourced air quality studies: A review of the literature & amp; portable sensors. Trends in Environmental Analytical Chemistry, 2016, 11, 23-34.	5.3	83
236	Non-electronic gas sensors from electrospun mats of liquid crystal core fibres for detecting volatile organic compounds at room temperature. Liquid Crystals, 2016, 43, 1986-2001.	0.9	73
237	Online decorrelation of humidity and temperature in chemical sensors for continuous monitoring. Chemometrics and Intelligent Laboratory Systems, 2016, 157, 169-176.	1.8	87
238	Tungsten-Doped Nb ₂ O ₅ Nanorod Sensor for Toxic and Combustible Gas Monitoring Applications. IEEE Electron Device Letters, 2016, 37, 1223-1226.	2.2	3
239	CuO/WO ₃ Hybrid Nanocubes for Highâ€Responsivity and Fastâ€Recovery H ₂ S Sensors Operated at Low Temperature. Particle and Particle Systems Characterization, 2016, 33, 15-20.	1.2	23

#	Article	IF	CITATIONS
240	ZnO and Au/ZnO thin films: Room-temperature chemoresistive properties for gas sensing applications. Sensors and Actuators B: Chemical, 2016, 237, 1085-1094.	4.0	54
241	Fast response ammonia sensors based on TiO ₂ and NiO nanostructured bilayer thin films. RSC Advances, 2016, 6, 77636-77643.	1.7	62
242	Nanotextured Surface on Flexographic Printed ZnO Thin Films for Low-Cost Non-Faradaic Biosensors. ACS Applied Materials & Discrete Romannian (2016), 8, 33802-33810.	4.0	41
243	Synthesis, characterization and sensitivity tests of perovskite-type LaFeO3 nanoparticles in CO and propane atmospheres. Ceramics International, 2016, 42, 18821-18827.	2.3	24
244	C ₅₄ Si ₆ heterofullerene as a potential gas sensor for CO, NO, and HCN detection. RSC Advances, 2016, 6, 89080-89088.	1.7	14
245	Printing Ultrasensitive Artificially Intelligent Sensors Array with a Single Selfâ€Propelled Droplet Containing Nanoparticles. Advanced Functional Materials, 2016, 26, 6359-6370.	7.8	20
246	Flexible and Stretchable Oxide Electronics. Advanced Electronic Materials, 2016, 2, 1600105.	2.6	42
247	Direct Self-Assembly of Conductive Nanorods of Metal–Organic Frameworks into Chemiresistive Devices on Shrinkable Polymer Films. Chemistry of Materials, 2016, 28, 5264-5268.	3.2	171
248	Effect of oxygen flow rate on the electrical and optical characteristics of dopantless tin oxide films fabricated by low pressure chemical vapor deposition. Korean Journal of Chemical Engineering, 2016, 33, 2711-2715.	1.2	6
249	Effects of growth pressure on morphology of ZnO nanostructures by chemical vapor transport. Chemical Physics Letters, 2016, 658, 182-187.	1.2	12
250	Study of sensitivity and selectivity of \hat{l}_{\pm} -Fe2O3 thin films for different toxic gases and alcohols. Materials Science in Semiconductor Processing, 2016, 54, 6-13.	1.9	26
251	Tungsten Oxide Film and Nanorods Grown by Aerosol-Assisted Chemical Vapor Deposition Using κ ² -β-Diketonate and β-Ketoesterate Tungsten (VI) Oxo-Alkoxide Precursors. ECS Journal of Solid State Science and Technology, 2016, 5, Q3095-Q3105.	0.9	6
252	Low-cost fuel-cell based sensor of hydrogen production in lab scale microbial electrolysis cells. International Journal of Hydrogen Energy, 2016, 41, 20465-20472.	3.8	8
253	Fabrication of lotus-like Au@TiO2 nanocomposites with enhanced gas-sensing properties. Sensors and Actuators B: Chemical, 2016, 236, 490-498.	4.0	43
254	Silicon microring refractometric sensor for atmospheric CO_2 gas monitoring. Optics Express, 2016, 24, 1773.	1.7	58
255	A portable air-quality station based on thick film gas sensors for real time detection of traces of atmospheric pollutants. IOP Conference Series: Materials Science and Engineering, 2016, 108, 012005.	0.3	9
256	Ceria-zirconia Mixed Oxide Prepared through a Microwave-assisted Synthesis for CO2 Sensing in Low Power Work Function Sensors. Materials Today: Proceedings, 2016, 3, 429-433.	0.9	10
257	Influence of lanthanum doping via hydrothermal and reflux methods on the SnO2–TiO2 nanoparticles prepared by sol–gel method and their catalytic properties. Journal of Materials Science: Materials in Electronics, 2016, 27, 8493-8498.	1.1	20

#	Article	IF	CITATIONS
258	Mechanism of oxygen sensing on βâ€Ga ₂ O ₃ singleâ€crystal sensors for high temperatures. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 457-462.	0.8	31
259	Structural, textural, surface chemistry and sensing properties of mesoporous Pr, Zn modified SnO 2 –TiO 2 powder composites. Ceramics International, 2016, 42, 14992-14998.	2.3	5
260	Surface defect engineering: gigantic enhancement in the optical and gas detection ability of metal oxide sensor. RSC Advances, 2016, 6, 65146-65151.	1.7	10
261	Transformation of <scp>CuO</scp> from Cuâ€ <scp>MOF</scp> Templates and Their Enhanced Sensing Performance for <scp>HCHO</scp> . Bulletin of the Korean Chemical Society, 2016, 37, 123-128.	1.0	14
262	Two-dimensional layered nanomaterials for gas-sensing applications. Inorganic Chemistry Frontiers, 2016, 3, 433-451.	3.0	306
263	Enhanced performance of \hat{I}^3 -Fe 2 O 3 :WO 3 nanocomposite towards selective acetone vapor detection. Ceramics International, 2016, 42, 7309-7314.	2.3	17
264	Structural, electronic, magnetic and chemical properties of B-, C- and N-doped MgO(001) surfaces. Physical Chemistry Chemical Physics, 2016, 18, 426-435.	1.3	7
265	Titania Nanotube Array Sensor for Electrochemical Detection of Four Predominate Tuberculosis Volatile Biomarkers. Journal of the Electrochemical Society, 2016, 163, B206-B214.	1.3	22
266	The role of surface electron accumulation and bulk doping for gas-sensing explored with single-crystalline In2O3 thin films. Sensors and Actuators B: Chemical, 2016, 236, 909-916.	4.0	41
267	Effect of Nickel Vacancies on the Room-Temperature NO ₂ Sensing Properties of Mesoporous NiO Nanosheets. Journal of Physical Chemistry C, 2016, 120, 3936-3945.	1.5	129
268	Low-temperature NO2-sensing properties and morphology-controllable solvothermal synthesis of tungsten oxide nanosheets/nanorods. Applied Surface Science, 2016, 362, 525-531.	3.1	24
269	Mechanisms of NH3 and NO2 detection in carbon-nanotube-based sensors: An ab initio investigation. Carbon, 2016, 101, 177-183.	5.4	56
270	The effect of Pd on the H 2 and VOC sensing properties of TiO 2 nanorods. Sensors and Actuators B: Chemical, 2016, 229, 692-700.	4.0	72
271	Poly(methyl methacrylate) and thiophene-coated single-walled carbon nanotubes for volatile organic compound discrimination. Japanese Journal of Applied Physics, 2016, 55, 02BD04.	0.8	9
272	Performance improvements in temperature reconstructions of 2-D tunable diode laser absorption spectroscopy (TDLAS). Journal of Thermal Science, 2016, 25, 84-89.	0.9	24
273	Highly sensitive H2S sensors based on ultrathin organic single-crystal microplate transistors. Organic Electronics, 2016, 32, 94-99.	1.4	14
274	Investigation of CO ₂ reaction with copper oxide nanoparticles for room temperature gas sensing. Journal of Materials Chemistry A, 2016, 4, 5294-5302.	5.2	59
275	Selectively enhanced sensing performance for oxidizing gases based on ZnO nanoparticle-loaded electrospun SnO ₂ nanotube heterostructures. RSC Advances, 2016, 6, 28419-28427.	1.7	19

#	Article	IF	Citations
276	Investigating the Use Of Portable Air Pollution Sensors to Capture the Spatial Variability Of Traffic-Related Air Pollution. Environmental Science & Environmental Science & 2016, 50, 313-320.	4.6	65
277	CO gas sensing properties of In4Sn3O12 and TeO2 composite nanoparticle sensors. Journal of Hazardous Materials, 2016, 305, 130-138.	6.5	73
278	Reviewâ€"The Development of Gas Sensor Based on Carbon Nanotubes. Journal of the Electrochemical Society, 2016, 163, B97-B106.	1.3	51
279	Effects of the Dopant Ratio on Polyaniline Coated Fiber Bragg Grating for pH detection. Synthetic Metals, 2016, 211, 132-141.	2.1	11
280	Carbon dioxide gas detection by open metal site metal organic frameworks and surface functionalized metal organic frameworks. Sensors and Actuators B: Chemical, 2016, 225, 363-368.	4.0	47
281	Epitaxial Atomic Layer Deposition of Sn-Doped Indium Oxide. Crystal Growth and Design, 2016, 16, 640-645.	1.4	12
282	Chemoresistive properties of photo-activated thin and thick ZnO films. Sensors and Actuators B: Chemical, 2016, 222, 1251-1256.	4.0	40
283	Mg-doped TiO2 thin films deposited by low cost technique for CO gas monitoring. Ceramics International, 2016, 42, 405-410.	2.3	36
284	Exploring the Impact of Nano-Particles Shape on the Performance of Plasmonic Based Fiber Optics Sensors. Plasmonics, 2017, 12, 563-570.	1.8	9
285	Pristine ZnO and SnO2 films for sensing of volatile organic compounds. Microsystem Technologies, 2017, 23, 3027-3031.	1.2	10
286	Performances of new reconstruction algorithms for CT-TDLAS (computer tomography-tunable diode) Tj ETQq0 0	O ggBT /O	verlgck 10 Tf
287	Facile chemical bath deposition method for interconnected nanofibrous polythiophene thin films and their use for highly efficient room temperature NO2 sensor application. Sensors and Actuators B: Chemical, 2017, 244, 522-530.	4.0	28
288	Nanostructured tin oxide films: Physical synthesis, characterization, and gas sensing properties. Journal of Colloid and Interface Science, 2017, 493, 162-170.	5.0	49
289	Design, fabrication, and characterization of bridge-type micro-hotplates with an SU-8 supporting layer for a smart gas sensing system. Journal of Micromechanics and Microengineering, 2017, 27, 024003.	1.5	7
290	Morphology and Gas-Sensing Properties of Tin Oxide Foams with Dual Pore Structure. Journal of Electronic Materials, 2017, 46, 3748-3756.	1.0	15
291	Zinc oxide for gas sensing of formaldehyde: Density functional theory modelling of the effect of nanostructure morphology and gas concentration on the chemisorption reaction. Materials Chemistry and Physics, 2017, 193, 274-284.	2.0	23
292	Liquid crystals in micron-scale droplets, shells and fibers. Journal of Physics Condensed Matter, 2017, 29, 133003.	0.7	140
293	Nanoscale PdO Catalyst Functionalized Co ₃ O ₄ Hollow Nanocages Using MOF Templates for Selective Detection of Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules in Exhaled Breath. ACS Applied Materials & Acetone Molecules & Acetone & Acetone Molecules & Acetone & A	4.0	240

#	Article	IF	CITATIONS
294	Simple Route to Obtain Nanostructured CeO2 Microspheres and CO Gas Sensing Performance. Nanoscale Research Letters, 2017, 12, 169.	3.1	19
295	A Miniaturized Electrochemical System Based on Nickel Oxide Species for Glucose Sensing Applications. BioNanoScience, 2017, 7, 58-63.	1.5	6
296	Clustering approaches to improve the performance of low cost air pollution sensors. Faraday Discussions, 2017, 200, 621-637.	1.6	32
297	Ultra-low power hydrogen sensor by suspended and palladium coated silicon nanowire. , 2017, , .		3
298	Enhanced field emission performance of NiMoO4 nanosheets by tuning the phase. Applied Surface Science, 2017, 418, 270-274.	3.1	21
299	Machine Olfaction. , 2017, , 55-56.		4
300	Extremely sensitive and selective sub-ppm CO detection by the synergistic effect of Au nanoparticles and core–shell nanowires. Sensors and Actuators B: Chemical, 2017, 249, 177-188.	4.0	63
301	Influence of pH in La-doped SnO2 nanoparticles towards sensor applications. Ionics, 2017, 23, 2909-2917.	1.2	17
302	Micropatterning of metal oxide nanofibers by electrohydrodynamic (EHD) printing towards highly integrated and multiplexed gas sensor applications. Sensors and Actuators B: Chemical, 2017, 250, 574-583.	4.0	74
303	Ultrathin In ₂ O ₃ Nanosheets with Uniform Mesopores for Highly Sensitive Nitric Oxide Detection. ACS Applied Materials & Samp; Interfaces, 2017, 9, 16335-16342.	4.0	108
304	The Effect of Ar/O ₂ and H ₂ O Plasma Treatment of SnO ₂ Nanoparticles and Nanowires on Carbon Monoxide and Benzene Detection. ACS Applied Materials & Amp; Interfaces, 2017, 9, 15733-15743.	4.0	27
305	Template-assisted synthesis of hierarchical MoO3 microboxes and their high gas-sensing performance. Sensors and Actuators B: Chemical, 2017, 249, 458-466.	4.0	60
306	Facile synthetic method of catalyst-loaded ZnO nanofibers composite sensor arrays using bio-inspired protein cages for pattern recognition of exhaled breath. Sensors and Actuators B: Chemical, 2017, 243, 166-175.	4.0	47
307	Preparation, Properties and the Application of Hybrid Nanomaterials in Sensing Environmental Pollutants., 2017,, 321-347.		1
308	Gas sensing in 2D materials. Applied Physics Reviews, 2017, 4, .	5 . 5	600
309	Development of gas sensing application for formaldehyde gas detection and characterization of tin dioxide. AIP Conference Proceedings, 2017, , .	0.3	0
310	SbSI Nanosensors: from Gel to Single Nanowire Devices. Nanoscale Research Letters, 2017, 12, 97.	3.1	23
311	Construction of WO3 coatings with micro-nano hybrid structures by liquid precursor flame spray for enhanced sensing performances to sub-ppm ozone. Materials Letters, 2017, 205, 106-109.	1.3	13

#	Article	IF	CITATIONS
312	Preparation of electrospun Cu-doped \hat{l} ±-Fe 2 O 3 semiconductor nanofibers for NO 2 gas sensor. Ceramics International, 2017, 43, S535-S540.	2.3	33
313	Nitrogen Dioxide Gas Sensor Based on Monolayer SnS: A First-Principle Study. IEEE Electron Device Letters, 2017, 38, 983-986.	2.2	55
314	Simulation of Electronic DNA Sequencing Based on Intrinsic Molecular Charges. IEEE Nanotechnology Magazine, 2017, 16, 711-720.	1.1	0
315	NiO/SnO 2 hybrid nanowires for enhanced NO 2 gas sensing. Ceramics International, 2017, 43, S541-S546.	2.3	18
316	Thermal stability of ZnO thin films fabricated by pulsed laser deposition. Materials Science in Semiconductor Processing, 2017, 66, 21-25.	1.9	40
317	Highly sensitive and selective trimethylamine sensors based on WO 3 nanorods decorated with Au nanoparticles. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 90, 109-115.	1.3	30
318	Tungsten Sulfide Nanoflakes: Synthesis by Electrospinning and Their Gas Sensing Properties. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2017, 72, 375-381.	0.7	10
319	INFLUENCE OF ANNEALING TEMPERATURE ON THE CHARACTERISTICS OF NANOCRYSTALLINE SnO ₂ THIN FILMS PRODUCED BY Sol–Gel AND CHEMICAL BATH DEPOSITION FOR GAS SENSOR APPLICATIONS. Surface Review and Letters, 2017, 24, 1750104.	0.5	18
320	Ag Nanoparticle/Polydimethylsiloxane Composite Films for High-Sensitivity Strain Gauge Applications. Journal of Nano Research, 0, 46, 57-63.	0.8	1
321	Artificial Neural Network: Gas recognition. IFMBE Proceedings, 2017, , 283-288.	0.2	0
322	Electrical properties of TiO2-pillared bidimensional manganese oxides. Applied Clay Science, 2017, 141, 157-170.	2.6	8
323	Enhanced room-temperature NO ₂ gas sensing with TeO ₂ /SnO ₂ brush- and bead-like nanowire hybrid structures. Nanotechnology, 2017, 28, 045501.	1.3	19
324	Rapid measurement of room temperature ionic liquid electrochemical gas sensor using transient double potential amperometry. Sensors and Actuators B: Chemical, 2017, 242, 658-666.	4.0	36
325	SENose: An under U\$50 electronic nose for the monitoring of soil gas emissions. Computers and Electronics in Agriculture, 2017, 133, 15-21.	3.7	16
326	An array of WO ₃ and CTO heterojunction semiconducting metal oxide gas sensors used as a tool for explosive detection. Journal of Materials Chemistry A, 2017, 5, 2172-2179.	5.2	50
327	Nitric oxide sensing properties of a surface acoustic wave sensor with copper-ion-doped polyaniline/tungsten oxide nanocomposite film. Sensors and Actuators B: Chemical, 2017, 243, 1075-1082.	4.0	18
328	Chemicapacitors as a versatile platform for miniature gas and vapor sensors. Measurement Science and Technology, 2017, 28, 022001.	1.4	19
329	Surface properties of sulphur based surface modified <i>n</i> -Cu ₂ O thin films for enhanced liquefied petroleum gas sensing. Journal Physics D: Applied Physics, 2017, 50, 485304.	1.3	4

#	Article	IF	CITATIONS
330	Toward breath analysis on a chip for disease diagnosis using semiconductor-based chemiresistors: recent progress and future perspectives. Lab on A Chip, 2017, 17, 3537-3557.	3.1	162
331	DFT insights into the electronic properties and adsorption of NO ₂ on metal-doped carbon nanotubes for gas sensing applications. New Journal of Chemistry, 2017, 41, 14936-14944.	1.4	27
332	Transfer of CVD-grown graphene for room temperature gas sensors. Nanotechnology, 2017, 28, 414001.	1.3	30
333	Role of vacancy sites and UV-ozone treatment on few layered MoS ₂ nanoflakes for toxic gas detection. Nanotechnology, 2017, 28, 435502.	1.3	35
334	Co ₃ O ₄ â€"SnO ₂ nanobox sensor with a PN junction and semiconductorâ€"conductor transformation for high selectivity and sensitivity detection of H ₂ S. CrystEngComm, 2017, 19, 5742-5748.	1.3	35
335	Effect of the composition and structure of metal oxide nanocomposites on the sensor process when detecting reducing gases. Russian Journal of Physical Chemistry A, 2017, 91, 1609-1620.	0.1	5
336	A broadband photodetector based on Rhodamine B-sensitized ZnO nanowires film. Scientific Reports, 2017, 7, 11384.	1.6	26
337	Effect of NO2 and NH3 on the resistive switching behavior of W/Cu \times O/Cu devices. Journal of Micromechanics and Microengineering, 2017, 27, 105013.	1.5	2
338	Solution combustion synthesis and enhanced gas sensing properties of porous In2O3/ZnO heterostructures. RSC Advances, 2017, 7, 34482-34487.	1.7	11
339	The Miniaturization of an Optical Absorption Spectrometer for Smart Sensing of Natural Gas. IEEE Transactions on Industrial Electronics, 2017, 64, 9666-9674.	5. 2	17
340	Tunable thermochromic properties of V 2 O 5 coatings. Materials Today Physics, 2017, 2, 1-5.	2.9	20
341	End-user perspective of low-cost sensors for outdoor air pollution monitoring. Science of the Total Environment, 2017, 607-608, 691-705.	3.9	326
342	Gas sensing properties of (MoO 3) 0.4 (V 2 O 5) 0.6 microsheets: Effect of Pd sensitization. Vacuum, 2017, 144, 135-144.	1.6	8
343	A new 3D cupric coordination polymer as chemiresistor humidity sensor: narrow hysteresis, high sensitivity, fast response and recovery. Science China Chemistry, 2017, 60, 1197-1204.	4.2	27
344	Porous Au/ZnO nanoparticles synthesised through a metal organic framework (MOF) route for enhanced acetone gas-sensing. RSC Advances, 2017, 7, 38444-38451.	1.7	56
345	An Ultrasensitive Organic Semiconductor NO ₂ Sensor Based on Crystalline TIPSâ€Pentacene Films. Advanced Materials, 2017, 29, 1703192.	11.1	158
346	Octahedral-Like CuO/In ₂ O ₃ Mesocages with Double-Shell Architectures: Rational Preparation and Application in Hydrogen Sulfide Detection. ACS Applied Materials & Samp; Interfaces, 2017, 9, 44632-44640.	4.0	46
347	High Time-Resolution Optical Sensor for Monitoring Atmospheric Nitrogen Dioxide. Analytical Chemistry, 2017, 89, 13064-13068.	3.2	9

#	Article	IF	CITATIONS
348	Surfactant-mediated self-assembly of nanocrystals to form hierarchically structured zeolite thin films with controlled crystal orientation. RSC Advances, 2017, 7, 49048-49055.	1.7	6
349	Enhancement of Gas Sensitivity For MoO3 Nanobelt Sensor by Thermionic Field Emission., 2017, 1, 1-4.		0
350	Efficient room temperature hydrogen sensor based on UV-activated ZnO nano-network. Nanotechnology, 2017, 28, 365502.	1.3	38
351	Capturing the sensitivity of land-use regression models to short-term mobile monitoring campaigns using air pollution micro-sensors. Environmental Pollution, 2017, 230, 280-290.	3.7	42
352	Ab-initio investigation of adsorption of CO and CO 2 molecules on graphene: Role of intrinsic defects on gas sensing. Applied Surface Science, 2017, 394, 219-230.	3.1	87
353	Advanced Mechatronics and MEMS Devices II. Microsystems and Nanosystems, 2017, , .	0.1	10
354	Wearable Carbon Nanotube Devices for Sensing. , 2017, , 179-199.		7
355	Study on the effect of cuprite content on the electrical and CO2 sensing properties of cuprite-copper ferrite nanopowder composites. Journal of Alloys and Compounds, 2017, 695, 937-943.	2.8	4
356	Detection of CO2 using CNT-based sensors: Role of Fe catalyst on sensitivity and selectivity. Materials Chemistry and Physics, 2017, 186, 353-364.	2.0	33
357	Electrochemically Derived Oxide Nanoform-Based Gas Sensor Devices: Challenges and Prospects with MEMS Integration. Microsystems and Nanosystems, 2017, , 297-328.	0.1	1
358	Investigation of low temperature effects on work function based CO2 gas sensing of nanoparticulate CuO films. Sensors and Actuators B: Chemical, 2017, 247, 968-974.	4.0	36
359	Ultra-sensitive benzene detection by a novel approach: Core-shell nanowires combined with the Pd-functionalization. Sensors and Actuators B: Chemical, 2017, 239, 578-585.	4.0	43
360	Ultrasensitive WO 3 gas sensors for NO 2 detection in air and low oxygen environment. Sensors and Actuators B: Chemical, 2017, 239, 1051-1059.	4.0	165
361	Applicability of superposition for responses of resistive sensors in a diluted mixed gas environment. Sensors and Actuators B: Chemical, 2017, 239, 841-847.	4.0	9
362	The mechanisms of sensory phenomena in binary metal-oxide nanocomposites. Sensors and Actuators B: Chemical, 2017, 240, 613-624.	4.0	49
363	Zn doped MoO3 nanobelts and the enhanced gas sensing properties to ethanol. Applied Surface Science, 2017, 393, 377-384.	3.1	78
364	Facile approach to prepare hierarchical Au-loaded In2O3 porous nanocubes and their enhanced sensing performance towards formaldehyde. Sensors and Actuators B: Chemical, 2017, 241, 1130-1138.	4.0	63
365	Hybrid layer-by-layer (LbL) films of polyaniline, graphene oxide and zinc oxide to detect ammonia. Sensors and Actuators B: Chemical, 2017, 238, 795-801.	4.0	81

#	Article	IF	Citations
366	High-sensitivity low-power tungsten doped niobium oxide nanorods sensor for nitrogen dioxide air pollution monitoring. Sensors and Actuators B: Chemical, 2017, 238, 204-213.	4.0	20
367	Hydrocarbon detection with metal oxide semiconducting gas sensors modified by overlayer or admixture of zeolites Na-A, H-Y and H-ZSM-5. Sensors and Actuators B: Chemical, 2017, 242, 1281-1295.	4.0	27
368	A new sensor system for measuring environmental parameters of switchgear., 2017,,.		0
369	Reliable gas sensing with memristive array. , 2017, , .		4
370	Room-temperature H2S Gas Sensor Based on Au-doped ZnFe2O4 Yolk-shell Microspheres. Analytical Sciences, 2017, 33, 945-951.	0.8	17
371	Gas Sensing Ionic Liquids on Quartz Crystal Microbalance. , 2017, , .		2
372	Impact of Temperature and UV Irradiation on Dynamics of NO2 Sensors Based on ZnO Nanostructures. Nanomaterials, 2017, 7, 312.	1.9	33
373	Optical Gas Sensing of Ammonia and Amines Based on Protonated Porphyrin/TiO2 Composite Thin Films. Sensors, 2017, 17, 24.	2.1	40
374	Cross-Selectivity Enhancement of Poly(vinylidene fluoride-hexafluoropropylene)-Based Sensor Arrays for Detecting Acetone and Ethanol. Sensors, 2017, 17, 595.	2.1	28
375	Electrodes for Semiconductor Gas Sensors. Sensors, 2017, 17, 683.	2.1	63
376	Development of the MOOSY4 eNose IoT for Sulphur-Based VOC Water Pollution Detection. Sensors, 2017, 17, 1917.	2.1	14
377	Drawing Sensors with Ball-Milled Blends of Metal-Organic Frameworks and Graphite. Sensors, 2017, 17, 2192.	2.1	90
378	Surface Acoustic Wave (SAW) for Chemical Sensing Applications of Recognition Layers. Sensors, 2017, 17, 2716.	2.1	122
379	The Morphologies of the Semiconductor Oxides and Their Gas-Sensing Properties. Sensors, 2017, 17, 2779.	2.1	69
380	Two-Dimensional Zinc Oxide Nanostructures for Gas Sensor Applications. Chemosensors, 2017, 5, 17.	1.8	134
381	How Sensors Might Help Define the External Exposome. International Journal of Environmental Research and Public Health, 2017, 14, 434.	1.2	73
382	Novel Preparation of Fe Doped TiO ₂ Nanoparticles and Their Application for Gas Sensor and Photocatalytic Degradation. Advances in Materials Science and Engineering, 2017, 2017, 1-6.	1.0	23
383	Practical Use of Metal Oxide Semiconductor Gas Sensors for Measuring Nitrogen Dioxide and Ozone in Urban Environments. Sensors, 2017, 17, 1653.	2.1	98

#	Article	IF	Citations
384	The effect of annealing on band gap and optical properties of CdS/CdS-TiO $<$ inf $>$ 2 $<$ /inf $>$ nanoparticles. , 2017, , .		0
385	Enhanced carbon monoxide sensing properties of TiO2 with exposed (0 0 1) facet: A combined first-principle and experimental study. Applied Surface Science, 2018, 442, 507-516.	3.1	85
386	Electronic metal–organic framework sensors. Inorganic Chemistry Frontiers, 2018, 5, 979-998.	3.0	120
387	Hollow CuFe2O4/α-Fe2O3 composite with ultrathin porous shell for acetone detection at ppb levels. Sensors and Actuators B: Chemical, 2018, 258, 436-446.	4.0	61
388	Multi-unit calibration rejects inherent device variability of chemical sensor arrays. Sensors and Actuators B: Chemical, 2018, 265, 142-154.	4.0	26
389	Room-Temperature Ammonia Gas Sensing Using Mixed-Valent CuCo ₂ O ₄ Nanoplatelets: Performance Enhancement through Stoichiometry Control. ACS Omega, 2018, 3, 1977-1982.	1.6	44
390	Barium hexaferrite thick-films for ozone detection at low temperature. Solid State Ionics, 2018, 320, 24-32.	1.3	10
391	A review on chemiresistive room temperature gas sensors based on metal oxide nanostructures, graphene and 2D transition metal dichalcogenides. Mikrochimica Acta, 2018, 185, 213.	2.5	502
392	Interface Asymmetry Induced by Symmetric Electrodes on Metal–Al:TiO\$_{x}\$–Metal Structures. IEEE Nanotechnology Magazine, 2018, 17, 867-872.	1.1	8
393	Highly sensitive and selective SO ₂ MOF sensor: the integration of MFM-300 MOF as a sensitive layer on a capacitive interdigitated electrode. Journal of Materials Chemistry A, 2018, 6, 5550-5554.	5. 2	131
394	AACVD and gas sensing properties of nickel oxide nanoparticle decorated tungsten oxide nanowires. Journal of Materials Chemistry C, 2018, 6, 5181-5192.	2.7	30
395	Ni: Fe 2 O 3, Mg: Fe 2 O 3 and Fe 2 O 3 thin films gas sensor application. Physica B: Condensed Matter, 2018, 541, 14-18.	1.3	27
396	Efficient sensing approaches for high-density memristor sensor array. Journal of Computational Electronics, 2018, 17, 1285-1296.	1.3	22
397	The Sputter Time Duration Effect on the Structural and Optical Properties of Zinc Oxide by RF Magnetron Sputtering. Silicon, 2018, 10, 2901-2906.	1.8	2
398	Piezophototronic Effect Enhanced Photoresponse of the Flexible Cu(In,Ga)Se ₂ (CIGS) Heterojunction Photodetectors. Advanced Functional Materials, 2018, 28, 1707311.	7.8	58
399	Ammoniaâ€ S ensing Using a Composite of Graphene Oxide and Conducting Polymer. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800037.	1.2	18
400	FFT analysis of temperature modulated semiconductor gas sensor response for the prediction of ammonia concentration under humidity interference. Microelectronics Reliability, 2018, 84, 163-169.	0.9	22
401	Design and Simulation of Microelectromechanical Systems (MEMS) for Ozone Gas Sensors. Transactions on Electrical and Electronic Materials, 2018, 19, 41-46.	1.0	8

#	Article	IF	CITATIONS
402	Silicon Plasmonics On-Chip Mid-IR Gas Sensor. IEEE Photonics Technology Letters, 2018, 30, 931-934.	1.3	12
403	Detection of CO2 and O2 by iron loaded LTL zeolite films. Frontiers of Chemical Science and Engineering, 2018, 12, 94-102.	2.3	7
404	Zinc oxide nanotips growth by controlling vapor deposition on substrates. Journal of Materials Science: Materials in Electronics, 2018, 29, 6149-6156.	1.1	7
405	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
406	Analyses of odours from concentrated animal feeding operations: A review. Atmospheric Environment, 2018, 175, 100-108.	1.9	24
407	A highly sensitive gas-sensing platform based on a metal-oxide nanowire forest grown on a suspended carbon nanowire fabricated at a wafer level. Sensors and Actuators B: Chemical, 2018, 260, 55-62.	4.0	27
408	Semiconductor metal oxide gas sensors: A review. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2018, 229, 206-217.	1.7	1,446
409	High Sensitive Breath Sensor Based on Nanostructured K ₂ W ₇ O ₂₂ for Detection of Type 1 Diabetes. IEEE Sensors Journal, 2018, 18, 4399-4404.	2.4	31
410	Novel Method for Thermal Characterization of MEMS. Journal of Microelectromechanical Systems, 2018, 27, 521-528.	1.7	1
411	Room-temperature processed films of colloidal carved rod-shaped nanocrystals of reduced tungsten oxide as interlayers for perovskite solar cells. Physical Chemistry Chemical Physics, 2018, 20, 11396-11404.	1.3	12
412	Highly sensitive and wearable gas sensors consisting of chemically functionalized graphene oxide assembled on cotton yarn. RSC Advances, 2018, 8, 11991-11996.	1.7	52
413	Improved gas sensing performance of p-copper oxide thin film/n-TiO2 nanotubes heterostructure. Journal of Alloys and Compounds, 2018, 749, 221-228.	2.8	50
414	MOF-derived porous ZnO/Co3O4 nanocomposites for high performance acetone gas sensing. Journal of Materials Science: Materials in Electronics, 2018, 29, 8535-8546.	1.1	29
415	Multivariate estimation of the limit of detection by orthogonal partial least squares in temperature-modulated MOX sensors. Analytica Chimica Acta, 2018, 1019, 49-64.	2.6	58
416	Synthesis of Nanoparticles in a Pulsed-Periodic Gas Discharge and Their Potential Applications. Russian Journal of Physical Chemistry A, 2018, 92, 607-612.	0.1	18
417	In depth study on the notable room-temperature NO2 gas sensor based on CuO nanoplatelets prepared by sonochemical method: Comparison of various bases. Sensors and Actuators B: Chemical, 2018, 266, 761-772.	4.0	69
418	CO2 responses based on pure and doped CeO2 nano-pellets. Journal of Materials Research and Technology, 2018, 7, 14-20.	2.6	45
419	All villi-like metal oxide nanostructures-based chemiresistive electronic nose for an exhaled breath analyzer. Sensors and Actuators B: Chemical, 2018, 257, 295-302.	4.0	51

#	Article	IF	CITATIONS
420	Palladium (Pd) sensitized molybdenum trioxide (MoO 3) nanobelts for nitrogen dioxide (NO 2) gas detection. Solid-State Electronics, 2018, 139, 21-30.	0.8	38
421	CulnS2 QDs decorated ring-like NiO for significantly enhanced room-temperature NO2 sensing performances via effective interfacial charge transfer. Sensors and Actuators B: Chemical, 2018, 256, 1001-1010.	4.0	18
422	Porous silicon ZnO/SnO2 structures for CO2 detection. Journal of Alloys and Compounds, 2018, 731, 853-863.	2.8	55
423	Methane detection scheme based upon the changing optical constants of a zinc oxide/platinum matrix created by a redox reaction and their effect upon surface plasmons. Sensors and Actuators B: Chemical, 2018, 255, 843-853.	4.0	9
424	A novel coral-shaped Dy2O3 gas sensor for high sensitivity NH3 detection at room temperature. Sensors and Actuators B: Chemical, 2018, 255, 1308-1315.	4.0	64
425	How shell thickness can affect the gas sensing properties of nanostructured materials: Survey of literature. Sensors and Actuators B: Chemical, 2018, 258, 270-294.	4.0	117
426	Elucidating iron doping induced n- to p- characteristics of Strontium titanate based ethanol sensors. Current Applied Physics, 2018, 18, 246-253.	1.1	11
427	Exploring Temperature-Modulated Operation Mode of Metal Oxide Gas Sensors for Robust Signal Processing. Proceedings (mdpi), 2019, 2, .	0.2	2
428	Preliminary studies of Mn (x) Zn $(2\hat{a}^2x)$ FeO 4 (x = 0 dan 0.1) thick film semiconductors as an ethanol gas sensor. IOP Conference Series: Materials Science and Engineering, 2018, 434, 012027.	0.3	1
429	V2O5 Thin Films as Nitrogen Dioxide Sensors. Proceedings (mdpi), 2018, 2, .	0.2	3
430	Highly sensitive two-dimensional MoS ₂ gas sensor decorated with Pt nanoparticles. Royal Society Open Science, 2018, 5, 181462.	1.1	69
431	In Situ Measurement of Methane Flux from Residential Compost Using Automated Static Chamber and Electrochemical Sensor. , 2018, , .		3
432	Bake-Out Strategy Considering Energy Consumption for Improvement of Indoor Air Quality in Floor Heating Environments. International Journal of Environmental Research and Public Health, 2018, 15, 2720.	1.2	4
433	Ammonia Detection at Low Temperature by Tungsten Oxide Nanowires. Proceedings (mdpi), 2018, 2, .	0.2	1
434	Silver Growth on Tungsten Oxide Nanowires for Nitrogen Dioxide Sensing at Low Temperature. Proceedings (mdpi), 2018, 2, .	0.2	0
435	Design and Development of a Low-Cost IoT based Environmental Pollution Monitoring System. , 2018, , .		17
436	Reviewâ€"System-on-Chip SMO Gas Sensor Integration in Advanced CMOS Technology. Journal of the Electrochemical Society, 2018, 165, B862-B879.	1.3	24
437	An ultra-sensitive and selective nitrogen dioxide sensor based on a novel P ₂ C ₂ monolayer from a theoretical perspective. Nanoscale, 2018, 10, 21936-21943.	2.8	28

#	Article	IF	Citations
438	Selective Polymer Distributed Bragg Reflector Vapor Sensors. Polymers, 2018, 10, 1161.	2.0	28
439	Recent Advances and Techniques in the Hazardous Gases Detection. , 2018, , 1-19.		1
440	Non-Linear Machine Learning with Active Sampling for MOX Drift Compensation. , 2018, , .		3
441	Analysis of TPCx-IoT: The First Industry Standard Benchmark for IoT Gateway Systems., 2018,,.		27
442	Evolution of Wireless Sensor Network for Air Quality Measurements. Electronics (Switzerland), 2018, 7, 342.	1.8	28
443	Double Notched Long-Period Fiber Grating Characterization for CO2 Gas Sensing Applications â€. Sensors, 2018, 18, 3206.	2.1	2
444	Highly Sensitive Room-Temperature Sensor Based on Nanostructured K2W7O22 for Application in the Non-Invasive Diagnosis of Diabetes. Sensors, 2018, 18, 3703.	2.1	11
445	Enhanced Gas-Sensing Performance of GO/TiO2 Composite by Photocatalysis. Sensors, 2018, 18, 3334.	2.1	29
446	2D Materials for Gas Sensing Applications: A Review on Graphene Oxide, MoS2, WS2 and Phosphorene. Sensors, 2018, 18, 3638.	2.1	382
447	Emergent Electrical Properties of Ensembles of 1D Nanostructures and Their Impact on Room Temperature Electrical Sensing of Ammonium Nitrate Vapor. ACS Sensors, 2018, 3, 2367-2374.	4.0	14
448	High performance and low temperature coal mine gas sensor activated by UV-irradiation. Scientific Reports, 2018, 8, 16298.	1.6	10
449	Microhotplates for Metal Oxide Semiconductor Gas Sensor Applications—Towards the CMOS-MEMS Monolithic Approach. Micromachines, 2018, 9, 557.	1.4	84
450	Carbon Monoxide Sensing Technologies for Next-Generation Cyber-Physical Systems. Sensors, 2018, 18, 3443.	2.1	68
451	Gas sensing properties of nanocomposites with ZnO nanowires. Journal of Physics: Conference Series, 2018, 1038, 012047.	0.3	1
452	A Novel Type Room Temperature Surface Photovoltage Gas Sensor Device. Sensors, 2018, 18, 2919.	2.1	5
453	Development of malodor monitoring system based on electronic nose technology. , 2018, , .		2
454	Modeling, Simulation, and Implementation of Fast Settling Switched PI Controller for MOX Integrated Pt Microheater. IEEE Sensors Journal, 2018, 18, 8549-8557.	2.4	5
455	Optical, vibrational and fiber optic gas-sensing properties of hematite microparticles. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	11

#	Article	IF	CITATIONS
456	Selective Detection of NO and NO2 with CNTs-Based Ionization Sensor Array. Micromachines, 2018, 9, 354.	1.4	14
457	Sensitivity Tests of Pellets Made from Manganese Antimonate Nanoparticles in Carbon Monoxide and Propane Atmospheres. Sensors, 2018, 18, 2299.	2.1	19
458	The influence of humidity on the performance of a low-cost air particle mass sensor and the effect of atmospheric fog. Atmospheric Measurement Techniques, 2018, 11, 4883-4890.	1.2	194
459	Assessing the accuracy of commercially available gas sensors for the measurement of ambient ozone and nitrogen dioxide. Journal of Occupational and Environmental Hygiene, 2018, 15, 782-791.	0.4	8
460	Development of a multirotor-based system for air quality monitoring. , 2018, , .		3
461	CO gas sensors based on p-type CuO nanotubes and CuO nanocubes: Morphology and surface structure effects on the sensing performance. Talanta, 2018, 188, 41-49.	2.9	161
462	Thermal stability of NO on Ga-doped graphene and effect of external electric field. Computational Materials Science, 2018, 151, 214-221.	1.4	18
463	Application of a novel S3 nanowire gas sensor device in parallel with GC-MS for the identification of Parmigiano Reggiano from US and European competitors. Journal of Food Engineering, 2018, 236, 36-43.	2.7	13
464	Low temperature NO2 sensing properties of RF-sputtered SnO-SnO2 heterojunction thin-film with p-type semiconducting behavior. Ceramics International, 2018, 44, 17283-17289.	2.3	46
465	Chemical sensing with 2D materials. Chemical Society Reviews, 2018, 47, 4860-4908.	18.7	513
466	Low operating temperature CO sensor prepared using SnO2 nanoparticles. Journal of Electroceramics, 2018, 41, 28-36.	0.8	6
467	MOFs-derived porous nanomaterials for gas sensing. Polyhedron, 2018, 152, 155-163.	1.0	67
468	Mid-infrared photonic gas sensing using a silicon waveguide and an integrated emitter. Sensors and Actuators B: Chemical, 2018, 274, 60-65.	4.0	30
469	Highly sensitive and selective gas sensing using the defect mode of a compact terahertz photonic crystal cavity. Sensors and Actuators B: Chemical, 2018, 274, 188-193.	4.0	23
470	Structural, Optical and Sensing Behavior of Neodymium-Doped Vanadium Pentoxide Thin Films. Iranian Journal of Science and Technology, Transaction A: Science, 2018, 42, 2375-2386.	0.7	11
471	Photocatalytic treatment of VOC industrial emissions: IPA removal using a sensor-instrumented reactor. Chemical Engineering Journal, 2018, 353, 394-409.	6.6	29
472	Impact Analysis of Temperature and Humidity Conditions on Electrochemical Sensor Response in Ambient Air Quality Monitoring. Sensors, 2018, 18, 59.	2.1	115
473	Evaluation of a CO <inf>2</inf> sensitive thermopile with an integrated multilayered infrared absorber by using a long path length NDIR platform. , 2018, , .		1

#	Article	IF	CITATIONS
474	Detection of Ultralow Concentration NO ₂ in Complex Environment Using Epitaxial Graphene Sensors. ACS Sensors, 2018, 3, 1666-1674.	4.0	45
475	Colorimetric Materials for Fire Gas Detection—A Review. Chemosensors, 2018, 6, 14.	1.8	14
476	Pd-Functionalized, Suspended Graphene Nanosheet for Fast, Low-Energy Multimolecular Sensors. ACS Applied Nano Materials, 2018, 1, 3886-3894.	2.4	18
477	Hydrogen sulfide sensor based on cupric oxide thin films. Optik, 2018, 172, 117-126.	1.4	16
478	A Survey on Sensor Calibration in Air Pollution Monitoring Deployments. IEEE Internet of Things Journal, 2018, 5, 4857-4870.	5.5	195
479	Applications and Advances in Bioelectronic Noses for Odour Sensing. Sensors, 2018, 18, 103.	2.1	61
480	Low Power Operation of Temperature-Modulated Metal Oxide Semiconductor Gas Sensors. Sensors, 2018, 18, 339.	2.1	86
481	Chemical Sensor Systems and Associated Algorithms for Fire Detection: A Review. Sensors, 2018, 18, 553.	2.1	100
482	The Effect of Film Thickness on the Gas Sensing Properties of Ultra-Thin TiO2 Films Deposited by Atomic Layer Deposition. Sensors, 2018, 18, 735.	2.1	49
483	A Fast and Easily-Realized Concentration Sensor for Binary Gas Mixtures and Its Design Analysis. Sensors, 2018, 18, 1257.	2.1	8
484	Roles of catalytic PtO2 nanoparticles on nitric oxide sensing mechanisms of flame-made SnO2 nanoparticles. Applied Surface Science, 2018, 458, 281-292.	3.1	22
485	On Sensing Nitro-Group Containing Compounds Using Thin Planar Arrays of Titanium Dioxide Nanowires. IEEE Sensors Journal, 2018, 18, 6927-6936.	2.4	2
486	A Laser and Electric Pulse Modulated Nonvolatile Photoelectric Response in Nanoscale Copper Dusted Metalâ€Oxideâ€Semiconductor Structures. Advanced Electronic Materials, 2018, 4, 1800234.	2.6	4
487	Investigation of Sm1â^'xCaxFe0.7Co0.3O3 films (x = 0.0â€"0.3) prepared by modified solâ€"gel spin-coa method for carbon monoxide and propane gas sensing. Journal of Materials Science: Materials in Electronics, 2018, 29, 15587-15596.	ting 1.1	5
488	Hierarchical aloe-like SnO ₂ nanoflowers and their gas sensing properties. Journal of Materials Research, 2018, 33, 1433-1441.	1.2	12
489	NH3 sensing properties and mechanism of Ru-loaded WO3 nanosheets. Journal of Materials Science: Materials in Electronics, 2018, 29, 11336-11344.	1.1	19
490	Reduced graphene oxide-ZnO composites based gas sensors: A review. AIP Conference Proceedings, 2018, , .	0.3	7
491	Quantum confinement effects on the harmfulâ€gasâ€sensing properties of silicon nanowires. International Journal of Quantum Chemistry, 2018, 118, e25713.	1.0	9

#	Article	IF	CITATIONS
492	Electrical characteristics of interfacial barriers at metalâ€"TiO⟨sub⟩2⟨/sub⟩ contacts. Journal Physics D: Applied Physics, 2018, 51, 425101.	1.3	22
493	Fabrication and characterization of a sensitive, room temperature methane sensor based on SnO2@reduced graphene oxide-polyaniline ternary nanohybrid. Materials Science in Semiconductor Processing, 2018, 88, 139-147.	1.9	32
494	Circuit arrangement to suppress crosstalk in chemoâ€resistive sensor arrays. IET Science, Measurement and Technology, 2018, 12, 1039-1046.	0.9	5
495	Highly sensitive and on-site NO ₂ SERS sensors operated under ambient conditions. Analyst, The, 2018, 143, 3006-3010.	1.7	27
496	Coral-Like Cu $<$ sub $>$ x $<$ /sub $>$ Ni $<$ sub $>$ (1 \hat{a} °x) $<$ /sub $>$ O-Based Resistive Sensor for Humidity and VOC Detection. IEEE Sensors Journal, 2018, 18, 6078-6084.	2.4	13
497	Mechanism of room temperature oxygen sensor based on nanocrystalline TiO ₂ film. Journal of Physics: Conference Series, 2018, 995, 012066.	0.3	3
498	Nanofibers of Semiconductor Oxides as Sensitive Materials for Detection of Gaseous Products Formed in Low-Temperature Pyrolysis of Polyvinyl Chloride. Russian Journal of Applied Chemistry, 2018, 91, 447-453.	0.1	4
500	Nonlinear optical, IR and orbital properties of Ni doped MgO nanoclusters: A DFT investigation. Computational and Theoretical Chemistry, 2018, 1138, 39-47.	1.1	21
501	Physicochemical and Electrophysical Properties of Metal/Semiconductor Containing Nanostructured Composites. Russian Journal of Physical Chemistry A, 2018, 92, 1087-1098.	0.1	1
502	Oxygen detection using nanostructured TiO2 thin films obtained by the molecular layering method. Applied Surface Science, 2019, 463, 197-202.	3.1	30
503	Towards Low Cost and Low Temperature Capacitive CO2 Sensors Based on Amine Functionalized Silica Nanoparticles. Nanomaterials, 2019, 9, 1097.	1.9	11
504	An Innovative Modular eNose System Based on a Unique Combination of Analog and Digital Metal Oxide Sensors. ACS Sensors, 2019, 4, 2277-2281.	4.0	22
505	Quasi Similar Routes of NO2 and NO Sensing by Nanocrystalline WO3: Evidence by In Situ DRIFT Spectroscopy. Sensors, 2019, 19, 3405.	2.1	30
506	Room temperature chemiresistive gas sensors: challenges and strategies—a mini review. Journal of Materials Science: Materials in Electronics, 2019, 30, 15825-15847.	1.1	73
507	Gas Phase Electrodeposition Enabling the Programmable Three-Dimensional Growth of a Multimodal Room Temperature Nanobridge Gas Sensor Array. ACS Applied Materials & Samp; Interfaces, 2019, 11, 33497-33504.	4.0	5
508	Sensors for CO Based on Semiconductor Nanomaterials Pd/SnO2. Theoretical and Experimental Chemistry, 2019, 55, 201-206.	0.2	3
509	\hat{l}^2 -Ga2O3 nanowires and thin films for metal oxide semiconductor gas sensors: Sensing mechanisms and performance enhancement strategies. Journal of Materiomics, 2019, 5, 542-557.	2.8	83
510	TiO ₂ based sensor with butterfly wing configurations for fast acetone detection at room temperature. Journal of Materials Chemistry C, 2019, 7, 11118-11125.	2.7	38

#	ARTICLE	IF	CITATIONS
511	Chemoresistive materials for electronic nose: Progress, perspectives, and challenges. Informa \ddot{A} n \tilde{A} -Materi \tilde{A}_i ly, 2019, 1, 289-316.	8.5	123
512	Understanding microfluidic-based gas detectors: A numerical model to investigate fundamental sensor operation, influencing phenomena and optimum geometries. Sensors and Actuators B: Chemical, 2019, 300, 126904.	4.0	9
513	Nanocomposite Zn2SnO4/SnO2 Thick films as a Humidity Sensing Material. , 2019, , .		1
514	The optimization of ZnFe ₂ O ₄ /Mn ₂ O ₃ -based nanocomposite ceramic fabrication utilizing local minerals as an ethanol gas detector. Materials Research Express, 2019, 6, 095908.	0.8	7
516	Enhancement of ethanol gas sensing mechanism at high humidity levels and optical features using Sr-doped ZnO NPs. Journal of Materials Science: Materials in Electronics, 2019, 30, 14167-14181.	1.1	2
517	Growth of MWCNTs on Plasma Ion-Bombarded Thin Gold Films and Their Enhancements of Ammonia-Sensing Properties Using Inkjet Printing. Journal of Nanotechnology, 2019, 2019, 1-11.	1.5	5
518	Gas sensor based on defective graphene/pristine graphene hybrid towards high sensitivity detection of NO2. AIP Advances, $2019, 9, .$	0.6	33
519	Ultrasensitive sensor based on Y2O3-In2O3 nanocomposites for the detection of methanol at room temperature. Ceramics International, 2019, 45, 21497-21504.	2.3	29
520	Highly electron-depleted ZnO/ZnFe2O4/Au hollow meshes as an advanced material for gas sensing application. Sensors and Actuators B: Chemical, 2019, 297, 126769.	4.0	42
521	A highly sensitive breathable fuel cell gas sensor with nanocomposite solid electrolyte. InformaÄnÃ-Materiály, 2019, 1, 234-241.	8.5	32
522	The Synthesis of the Pomegranate-Shaped \hat{l}_{\pm} -Fe2O3 Using an In Situ Corrosion Method of Scorodite and Its Gas-Sensitive Property. Nanomaterials, 2019, 9, 977.	1.9	3
523	Effect of heterogeneous catalytic methane oxidation on kinetics of conductivity response of adsorption semiconductor sensors based on Pd/SnO2 nanomaterial. Research on Chemical Intermediates, 2019, 45, 4101-4111.	1.3	14
524	Identification of Volatile Organic Compounds and Their Concentrations Using a Novel Method Analysis of MOS Sensors Signal. Journal of Food Science, 2019, 84, 2077-2085.	1.5	26
525	Thermo-Electro-Mechanical Simulation of Semiconductor Metal Oxide Gas Sensors. Materials, 2019, 12, 2410.	1.3	20
526	WO3 nanowires loaded with cobalt oxide nanoparticles, deposited by a two-step AACVD for gas sensing applications. Sensors and Actuators B: Chemical, 2019, 298, 126868.	4.0	26
527	Gas Sensors Based on Two-Dimensional Materials and Its Mechanisms. , 2019, , 205-258.		18
528	Development of instrumentation setup for discrimination of analytes using principal component analysis. Engineering Research Express, 2019, 1, 025014.	0.8	0
529	Joule-Heated and Suspended Silicon Nanowire Based Sensor for Low-Power and Stable Hydrogen Detection. ACS Applied Materials & Interfaces, 2019, 11, 42349-42357.	4.0	28

#	ARTICLE	IF	Citations
530	Artificially Fabricated Subgap States for Visible-Light Absorption in Indium–Gallium–Zinc Oxide Phototransistor with Solution-Processed Oxide Absorption Layer. ACS Applied Materials & Interfaces, 2019, 11, 38964-38972.	4.0	32
531	Hydrogen gas sensing methods, materials, and approach to achieve parts per billion level detection: A review. International Journal of Hydrogen Energy, 2019, 44, 26076-26099.	3.8	122
532	Electrochemical sensor for environmental monitoring system: A review. AIP Conference Proceedings, 2019, , .	0.3	21
533	CMOS-Compatible Gas Sensors. , 2019, , .		1
534	CeO2–MxOy (M = Fe, Co, Ni, and Cu)-Based Oxides for Direct NO Decomposition. Journal of Physical Chemistry C, 2019, 123, 28695-28706.	1.5	21
535	Excellent ambipolar gas sensing response of Eu[Pc(OC ₄ H ₉) ₈] ₂ /acidified multiwalled carbon nanotubes hybrid at room temperature. Journal of Porphyrins and Phthalocyanines, 2019, 23, 1455-1462.	0.4	5
536	GaN/Ga2O3 Core/Shell Nanowires Growth: Towards High Response Gas Sensors. Applied Sciences (Switzerland), 2019, 9, 3528.	1.3	13
537	Gas Sensing Properties of Perovskite Decorated Graphene at Room Temperature. Sensors, 2019, 19, 4563.	2.1	34
538	Synthesis and characterization of ZnO nanocrystal line for gas sensor application. Journal of Physics: Conference Series, 2019, 1279, 012064.	0.3	0
539	Application of Iron Manganite Thick Films for Humidity Sensing. , 2019, , .		2
540	Ultrasensitive room temperature NO2 sensors based on liquid phase exfoliated WSe2 nanosheets. Sensors and Actuators B: Chemical, 2019, 300, 127013.	4.0	93
541	Density Functional Theory Analysis of Gas Adsorption on Monolayer and Few Layer Transition Metal Dichalcogenides: Implications for Sensing. ACS Applied Nano Materials, 2019, 2, 6076-6080.	2.4	49
542	High-Temperature Synthesis of Nickel-Based Nanoparticles for Use as Materials in Sensors of Potentially Hazardous Gases. International Journal of Self-Propagating High-Temperature Synthesis, 2019, 28, 159-172.	0.2	6
543	Growth and characterization of undoped and aluminium doped zinc oxide thin films for SO2 gas sensing below threshold value limit. Applied Surface Science, 2019, 496, 143724.	3.1	18
544	Electronic Noses in Medical Diagnostics. Current Medicinal Chemistry, 2019, 26, 197-215.	1.2	49
545	Synthesis of SnO2 Nanoparticles via Hydrothermal Method and Their Gas Sensing Applications for Ethylene Detection. Materials Today: Proceedings, 2019, 17, 810-819.	0.9	25
546	High Response CO Sensor Based on a Polyaniline/SnO2 Nanocomposite. Polymers, 2019, 11, 184.	2.0	47
547	Semiconductor Metal Oxides as Chemoresistive Sensors for Detecting Volatile Organic Compounds. Sensors, 2019, 19, 233.	2.1	157

#	Article	IF	CITATIONS
548	Semiconducting Metal Oxides for Gas Sensing. , 2019, , .		36
549	Understanding Semiconducting Metal Oxide Gas Sensors. , 2019, , 1-22.		0
550	Highly selective ozone gas sensor based on nanocrystalline Zn0.95Co0.05O thin film obtained via spray pyrolysis technique. Applied Surface Science, 2019, 478, 347-354.	3.1	53
551	Semiconducting Metal Oxides: Microstructure and Sensing Performance. , 2019, , 105-135.		1
552	Characterization and NO2 gas sensing performance of CdO:In2O3 polycrystalline thin films prepared by spray pyrolysis technique. SN Applied Sciences, 2019, 1, 1.	1.5	7
553	Conduction mechanisms in one dimensional core-shell nanostructures for gas sensing: A review. Sensors and Actuators B: Chemical, 2019, 295, 127-143.	4.0	150
554	Silicon Wafer Functionalization with a Luminescent Tb(III) Coordination Complex: Synthesis, Characterization, and Application to the Optical Detection of NO in the Gas Phase. Molecules, 2019, 24, 1914.	1.7	11
555	Facile synthesis of PdO/SnO2/CuO nanocomposite with enhanced carbon monoxide gas sensing performance at low operating temperature. Materials Research Bulletin, 2019, 118, 110496.	2.7	42
556	The Dependence of Crystal Plane on Hydrogen Sensing Properties of ZnO Bulk Substrates. ECS Journal of Solid State Science and Technology, 2019, 8, Q85-Q88.	0.9	4
557	Crystallinity and grain boundary control of TIPS-pentacene in organic thin-film transistors for the ultra-high sensitive detection of NO ₂ . Journal of Materials Chemistry C, 2019, 7, 10196-10202.	2.7	34
558	Nanomaterials in Air Pollution Trace Detection. , 2019, , 427-447.		1
559	Highly sensitive and low detection limit of resistive NO2 gas sensor based on a MoS2/graphene two-dimensional heterostructures. Applied Surface Science, 2019, 492, 449-454.	3.1	88
560	The influence of deposition temperature on the structural, morphological and optical properties of micro-size structures of beta-Ga2O3. Results in Physics, 2019, 14, 102475.	2.0	26
561	Ultrasensitive room temperature ppb-level NO ₂ gas sensors based on SnS ₂ /rGO nanohybrids with P–N transition and optoelectronic visible light enhancement performance. Journal of Materials Chemistry C, 2019, 7, 8616-8625.	2.7	85
562	Nanostructured tungsten oxide using pulsed laser deposition for biosensing and environmental sensing applications., 2019,, 363-384.		1
563	Synthesis of Y2O3-ZnO nanocomposites for the enhancement of room temperature 2-methoxyethanol gas sensing performance. Journal of Alloys and Compounds, 2019, 798, 438-445.	2.8	20
564	Application of levitation-jet synthesized nickel-based nanoparticles for gas sensing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2019, 244, 81-92.	1.7	12
565	Selective carbon monoxide sensing properties of bismuth iron oxide. Materialia, 2019, 7, 100363.	1.3	7

#	Article	IF	CITATIONS
566	Influence of humidity on complex impedance and dielectric properties of iron manganite (FeMnO3). Journal of Materials Science: Materials in Electronics, 2019, 30, 12399-12405.	1.1	13
567	Synthesis of Cu2O microspheres with hollow and solid morphologies and their gas sensing properties. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 114, 113564.	1.3	22
568	Rationalization in the ethanol-gas recognition mechanism of Al-doped ZnO nanoparticulate thin film defined on a highly integrated micro hot plate. Materials Research Express, 2019, 6, 085052.	0.8	1
569	Photo-Fenton Activity of Magnesium Substituted Cerium Ferrite Perovskites for Degradation of Methylene Blue via Sol–Gel Method. Journal of Nanoscience and Nanotechnology, 2019, 19, 5116-5129.	0.9	13
570	Real-Time Carbon Dioxide Monitoring Based on IoT & Cloud Technologies., 2019,,.		16
571	Application of an Array of Metal-Oxide Semiconductor Gas Sensors in an Assistant Personal Robot for Early Gas Leak Detection. Sensors, 2019, 19, 1957.	2.1	51
572	UV-induced desorption of oxygen at the TiO2 surface for highly sensitive room temperature O2 sensing. Journal of Alloys and Compounds, 2019, 793, 583-589.	2.8	22
573	High-performance carbon monoxide gas sensor based on palladium/tin oxide/porous graphitic carbon nitride nanocomposite. Journal of Alloys and Compounds, 2019, 795, 79-90.	2.8	42
574	Comparative study on gas sensing by a Schottky diode electrode prepared with graphene–semiconductor–polymer nanocomposites. RSC Advances, 2019, 9, 11484-11492.	1.7	51
575	MOCVD growth and characterization of TiO ₂ thin films for hydrogen gas sensor application. Materials Research Express, 2019, 6, 076313.	0.8	11
576	Baseline Drift Improvement Through Investigating a Novel Ag Doped SnO2/ZnO Nanocomposite for Selective Ethanol Detection. IEEE Nanotechnology Magazine, 2019, 18, 412-420.	1.1	3
577	Evolution and growth mechanism of hexagonal ZnO nanorods and their LPG sensing response at low operating temperature. Sensors and Actuators A: Physical, 2019, 293, 207-214.	2.0	21
578	Improvement of Gas and Humidity Sensing Properties of Organ-like MXene by Alkaline Treatment. ACS Sensors, 2019, 4, 1261-1269.	4.0	232
579	Energy Effects in Bulk Metals. , 2019, , .		2
580	Fast responding hydrogen gas sensors using platinum nanoparticle modified microchannels and ionic liquids. Analytica Chimica Acta, 2019, 1072, 35-45.	2.6	31
581	Effect of noble metal functionalization and film thickness on sensing properties of sprayed TiO2 ultra-thin films. Sensors and Actuators A: Physical, 2019, 293, 242-258.	2.0	19
582	Effect of Fe doping on the NH3 sensing properties of CuO nanostructures. Journal of Materials Science: Materials in Electronics, 2019, 30, 6920-6928.	1.1	3
583	Reinforced photocatalytic reduction of SnO2 nanoparticle by La incorporation for efficient photodegradation under visible light irradiation. Journal of Materials Science: Materials in Electronics, 2019, 30, 8479-8492.	1.1	15

#	Article	IF	CITATIONS
584	Preparation and characterization of ZnO/ZnAl2O4-mixed metal oxides for dye-sensitized photodetector using Zn/Al-layered double hydroxide as precursor. Journal of Nanoparticle Research, 2019, 21, 1.	0.8	24
585	Nanostructured GaN and AlGaN/GaN heterostructure for catalyst-free low-temperature CO sensing. Applied Surface Science, 2019, 481, 379-384.	3.1	17
586	Advanced Micro- and Nano-Gas Sensor Technology: A Review. Sensors, 2019, 19, 1285.	2.1	375
587	Enhanced Gas Sensing Performance of Surfaceâ€Activated MoS ₂ Nanosheets Made by Hydrothermal Method with Excess Sulfur Precursor. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800999.	0.8	7
588	Metal oxide nanohybrids-based low-temperature sensors for NO2 detection: a short review. Journal of Materials Science: Materials in Electronics, 2019, 30, 8160-8170.	1.1	27
589	Selective ammonia sensor based on copper oxide/reduced graphene oxide nanocomposite. Journal of Alloys and Compounds, 2019, 788, 422-428.	2.8	75
590	Recent Advances in 2D Inorganic Nanomaterials for SERS Sensing. Advanced Materials, 2019, 31, e1803432.	11.1	184
591	Optimization of Ge substrates for ZnO deposition and their application for CO2 detection. Journal of Materials Science: Materials in Electronics, 2019, 30, 6660-6668.	1.1	7
592	One step synthesis of PANI/Fe ₂ O ₃ nanocomposites and flexible film for enhanced NH ₃ sensing performance at room temperature. Nanotechnology, 2019, 30, 255502.	1.3	37
593	Electrical Properties of Metal-Porous GaAs Structure at Water Adsorption. Journal of Electronic Materials, 2019, 48, 2587-2592.	1.0	8
594	Nanostructured Chemiresistive Gas Sensors for Medical Applications. Sensors, 2019, 19, 462.	2.1	74
595	DFT study of response mechanism and selectivity of poly(3,4-ethylenedioxythiophene) towards CO2 and SO2 as gas sensor. Structural Chemistry, 2019, 30, 1427-1436.	1.0	8
596	A wearable IoT aldehyde sensor for pediatric asthma research and management. Sensors and Actuators B: Chemical, 2019, 287, 584-594.	4.0	33
597	Study of WO3–In2O3 nanocomposites for highly sensitive CO and NO2 gas sensors. Journal of Solid State Chemistry, 2019, 273, 25-31.	1.4	50
598	Exploration of catalytic performance of nano-La2O3 as an efficient catalyst for dihydropyrimidinone/thione synthesis and gas sensing. Journal of Nanostructure in Chemistry, 2019, 9, 61-76.	5. 3	55
599	MoS ₂ -Based Optoelectronic Gas Sensor with Sub-parts-per-billion Limit of NO ₂ Gas Detection. ACS Nano, 2019, 13, 3196-3205.	7.3	349
600	Development of MOX Gas Sensors Module for Indoor Air Contaminant Measurement. IOP Conference Series: Materials Science and Engineering, 2019, 705, 012029.	0.3	4
601	Ultrafast and highly selective CO gas sensor based on rGO/Fe ₃ O ₄ nanocomposite at room temperature., 2019, , .		3

#	Article	IF	CITATIONS
602	Air pollution monitoring network of PM2.5, NO2 and radiation of 137Cs., 2019, , 323-338.		1
603	Preparation of poison gas sensor from WO3 nanostructure by pulsed laser deposition. , 2019, , .		6
604	Resistive gas sensors based on metal-oxide nanowires. Journal of Applied Physics, 2019, 126, .	1.1	148
605	Structural and luminescence studies on TiO2-MoO3 thin films. Advanced Composites and Hybrid Materials, 2019, 2, 735-742.	9.9	6
606	Low-Cost Gas Sensing: Dynamic Self-Compensation of Humidity in CNT-Based Devices. ACS Sensors, 2019, 4, 3141-3146.	4.0	22
607	Adsorption of carbon dioxide and ammonia in transition metal–doped boron nitride nanotubes. Journal of Molecular Modeling, 2019, 25, 359.	0.8	9
608	Environmental Monitoring System Based on Blockchain., 2019,,.		4
609	Smart Environmental Monitoring System. International Journal of Green Computing, 2019, 10, 43-54.	0.6	2
610	Study of the formation of tungsten powder by hydrogen reduction of ammonium paratungstate and stereometric analyses of the powder texture. Materials Research Express, 2019, 6, 1265f7.	0.8	9
611	Measurement Enhancement on Two-Dimensional Temperature Distribution of Methane-Air Premixed Flame Using SMART Algorithm in CT-TDLAS. Applied Sciences (Switzerland), 2019, 9, 4955.	1.3	9
612	All-printed low-power metal oxide gas sensors on polymeric substrates. Flexible and Printed Electronics, 2019, 4, 015002.	1.5	25
613	Synthesis of palladium tellurolate complexes derived from hemi-labile tellurolate ligands and studies their reactivity as gas sensing materials. Inorganica Chimica Acta, 2019, 487, 395-397.	1.2	10
614	Design and analysis of electrostatic-charge plasma based dopingless IGZO vertical nanowire FET for ammonia gas sensing. Superlattices and Microstructures, 2019, 125, 256-270.	1.4	28
615	Low concentration ammonia sensing performance of Pd incorporated indium tin oxide. Journal of Alloys and Compounds, 2019, 780, 245-255.	2.8	15
616	Environmental Nanotechnology. Environmental Chemistry for A Sustainable World, 2019, , .	0.3	5
617	A review on porous polymer composite materials for multifunctional electronic applications. Polymer-Plastics Technology and Materials, 2019, 58, 1253-1294.	0.6	19
618	Detection of Benzene and Volatile Aromatic Compounds by Molecularly Imprinted Polymer-Coated Quartz Crystal Microbalance Sensor. IEEE Sensors Journal, 2019, 19, 885-892.	2.4	26
619	Resistive and Capacitive Measurement of Nano-Structured Gas Sensors. Environmental Chemistry for A Sustainable World, 2019, , 25-62.	0.3	9

#	Article	IF	CITATIONS
620	On the preparation of Tri-vanadium hepta-oxide thin films for electrochromic applications. Vacuum, 2019, 160, 238-245.	1.6	14
621	Porous Polymers as Multifunctional Material Platforms toward Taskâ€Specific Applications. Advanced Materials, 2019, 31, e1802922.	11.1	315
622	One step synthesis of branched SnO2/ZnO heterostructures and their enhanced gas-sensing properties. Sensors and Actuators B: Chemical, 2019, 281, 415-423.	4.0	185
623	Sensing and adsorption study of gaseous phase chlorophenols on functionalized carbon nanotube membrane. Environmental Progress and Sustainable Energy, 2019, 38, S315.	1.3	5
624	Bilayer Au nanoparticle-decorated WO3 porous thin films: On-chip fabrication and enhanced NO2 gas sensing performances with high selectivity. Sensors and Actuators B: Chemical, 2019, 280, 192-200.	4.0	61
625	Highly conductive polyaniline/graphene nano-platelet composite sensor towards detection of toluene and benzene gases. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	36
626	Hydrogen Sulfide (H ₂ S) Gas Sensor: A Review. IEEE Sensors Journal, 2019, 19, 2394-2407.	2.4	96
627	Colorimetric Sensor Array for Monitoring CO and Ethylene. Analytical Chemistry, 2019, 91, 797-802.	3.2	72
628	Neck-connected ZnO films derived from core-shell zeolitic imidazolate framework-8 (ZIF-8)@ZnO for highly sensitive ethanol gas sensors. Sensors and Actuators B: Chemical, 2019, 283, 93-98.	4.0	31
629	Selective detection of CO at room temperature with CuO nanoplatelets sensor for indoor air quality monitoring manifested by crystallinity. Applied Surface Science, 2019, 466, 545-553.	3.1	61
630	Sensor Systems Simulations. , 2020, , .		2
631	Fabrication of Tin Oxide Nanoparticles for CO2 Gas Sensing Layer. IETE Journal of Research, 2020, 66, 460-465.	1.8	5
632	Introduction to semiconductor gas sensors. , 2020, , 133-157.		1
633	Two-dimensional Cd-doped porous Co3O4 nanosheets for enhanced room-temperature NO2 sensing performance. Sensors and Actuators B: Chemical, 2020, 305, 127393.	4.0	87
634	Porosity controlled 3D SnO2 spheres via electrostatic spray: Selective acetone sensors. Sensors and Actuators B: Chemical, 2020, 304, 127350.	4.0	47
635	The effect of electrode-oxide interfaces in gas sensor operation. , 2020, , 71-132.		0
636	Metal-oxide semiconductors for carbon monoxide (CO) gas sensing: A review. Applied Materials Today, 2020, 18, 100483.	2.3	151
637	Low-cost sensors for outdoor air quality monitoring. , 2020, , 235-288.		13

#	ARTICLE	IF	Citations
639	Fast response and highly selective nitrogen dioxide gas sensor based on Zinc Stannate thin films. Materials Science for Energy Technologies, 2020, 3, 36-42.	1.0	19
640	Ruthenium-decorated tungsten disulfide quantum dots for a CO $<$ sub $>$ 2 $<$ /sub $>$ gas sensor. Nanotechnology, 2020, 31, 135502.	1.3	28
641	NO2 gas sensing properties of Pd/WO3 films prepared by glancing angle deposition. Journal of Materials Science: Materials in Electronics, 2020, 31, 5827-5832.	1.1	5
642	Facile control of room temperature nitrogen dioxide gas selectivity induced by copper oxide nanoplatelets. Journal of Colloid and Interface Science, 2020, 560, 755-768.	5.0	26
643	Effect of Pd-decoration on the sensing properties of ZnO nanostructures. Thin Solid Films, 2020, 693, 137693.	0.8	16
644	Size-tunable ferromagnetic ZnFe2O4 nanoparticles and their ethanol detection capabilities. Applied Surface Science, 2020, 508, 144863.	3.1	35
645	Significant nonlinear optical response of alkaline earth metals doped beryllium and magnesium oxide nanocages. Materials Chemistry and Physics, 2020, 242, 122507.	2.0	44
646	Structural Changes in Palladium Nanofilms during Thermal Oxidation. Inorganic Materials, 2020, 56, 1020-1026.	0.2	7
647	Use of Surface Acoustic Wave (SAW) for Thermal Conductivity Sensing of Gases – a Review. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2021, 38, 611-621.	2.1	3
648	Origin of irreversible to reversible transition in acetone detection for Y-doped BiFeO3 perovskite. Journal of Applied Physics, 2020, 128, .	1.1	15
649	Printing Sensor on Flexible Substrates for Detection of Volatile Organic Compounds. , 2020, , .		0
650	One Dimensional ZnO Nanostructures: Growth and Chemical Sensing Performances. Nanomaterials, 2020, 10, 1940.	1.9	27
651	Design and characterization of rectangular slotted porous core photonic crystal fiber for sensing CO2 gas. Sensing and Bio-Sensing Research, 2020, 30, 100379.	2.2	13
652	Lanthanum Phosphate-Incorporated Organosilane Nanocomposites for Gas-Phase CO ₂ Detection. ACS Applied Nano Materials, 2020, 3, 10040-10048.	2.4	1
653	CO and CO2 sensing by Al-Mg-ZnO based conductometric sensor. , 2020, , .		1
654	Small molecule gas adsorption onto blue phosphorene oxide layers. Applied Surface Science, 2020, 530, 147039.	3.1	6
655	Nanomaterial-Based CO2 Sensors. Nanomaterials, 2020, 10, 2251.	1.9	20
656	Semiconductor Gas Sensors: Materials, Technology, Design, and Application. Sensors, 2020, 20, 6694.	2.1	215

#	Article	IF	CITATIONS
657	Theoretical Insight on the Biosensing Applications of 2D Materials. Journal of Physical Chemistry B, 2020, 124, 11098-11122.	1.2	25
658	Chemisorbed CO2 molecules on ZnO nanowires (100Ânm) surface leading towards enhanced piezoelectric voltage. Vacuum, 2020, 182, 109565.	1.6	12
659	Integration of Gas Sensors with CMOS Technology. , 2020, , .		3
660	A Review of Methane Gas Detection Sensors: Recent Developments and Future Perspectives. Inventions, 2020, 5, 28.	1.3	91
661	Recent Trends and Developments in Graphene/Conducting Polymer Nanocomposites Chemiresistive Sensors. Materials, 2020, 13, 3311.	1.3	39
662	Enhancing the Sensing Performance of Zigzag Graphene Nanoribbon to Detect NO, NO2, and NH3 Gases. Sensors, 2020, 20, 3932.	2.1	39
663	Wireless Hand-Held Device Based on Polylactic Acid-Protected, Highly Stable, CTAB-Functionalized Phosphorene for CO ₂ Gas Sensing. ACS Applied Materials & Samp; Interfaces, 2020, 12, 38365-38375.	4.0	18
664	Carbonâ€nanotubeâ€loaded planar gas and humidity sensor. Microwave and Optical Technology Letters, 2020, 62, 3857-3863.	0.9	4
665	Environmental chemical sensing using small drones: A review. Science of the Total Environment, 2020, 748, 141172.	3.9	109
666	First-principle insights of CO and NO detection via antimonene nanoribbons. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	8
667	3D printed and structurally strengthened ammonia sensor. Composites Part A: Applied Science and Manufacturing, 2020, 139, 106100.	3.8	29
668	High sensitive label-free optical sensor based on Goos–Hächen effect by the single chirped laser pulse. Scientific Reports, 2020, 10, 17176.	1.6	2
669	Ammonia Gas Sensor Response of a Vertical Zinc Oxide Nanorod-Gold Junction Diode at Room Temperature. ACS Sensors, 2020, 5, 3568-3575.	4.0	47
670	Optical and structural characterization of aluminium doped zinc oxide thin films prepared by thermal evaporation system. Optical Materials, 2020, 109, 110374.	1.7	18
671	Effect of Tungsten Oxide Nanostructures on Sensitivity and Selectivity of Pollution Gases. Sensors, 2020, 20, 4801.	2.1	6
672	Air Quality Monitoring Systems using IoT: A Review. , 2020, , .		13
673	CO Oxidation on Ceria Studied by Electrochemical Impedance Spectroscopy. ChemCatChem, 2020, 12, 5926-5931.	1.8	6
674	An eNose-based method performing drift correction for online VOC detection under dry and humid conditions. Analytical Methods, 2020, 12, 4724-4733.	1.3	16

#	Article	IF	CITATIONS
675	Porous Silicon Gas Sensors: The Role of the Layer Thickness and the Silicon Conductivity. Sensors, 2020, 20, 4942.	2.1	10
676	SEMICONDUCTOR MATERIALS Ce-SnO2/Sb2O5 AND Pd-SnO2/Sb2O5 FOR CREATING SENSITIVE ELEMENTS OF SENSORS FOR HYDROGEN. Theoretical and Experimental Chemistry, 2020, 56, 117-123.	0.2	3
677	Fabrication and Characterization of SnO–Cu2O Mixed Metal Oxide Thin Films for Photoelectrochemical Applications. Journal of Nanoscience and Nanotechnology, 2020, 20, 7705-7709.	0.9	2
678	A Chemiresistive CO ₂ Sensor Based on CNT-Functional Polymer Composite Films., 2020,,.		4
679	A simple and low-cost integrative sensor system for methane and hydrogen measurement. Sensors International, 2020, 1, 100032.	4.9	12
680	Effect of Environmental Temperature and Humidity on Different Metal Oxide Gas Sensors at Various Gas Concentration Levels. IOP Conference Series: Materials Science and Engineering, 2020, 864, 012152.	0.3	16
681	Room-temperature synthesis and CO ₂ -gas sensitivity of bismuth oxide nanosensors. RSC Advances, 2020, 10, 17217-17227.	1.7	26
682	Design and engineering of Mn conical sculptured thin films as both electrodes for a gas sensor: ionization and field emission studies. Journal of Micromechanics and Microengineering, 2020, 30, 075001.	1.5	66
683	Complex Impedance Analyses of Li doped ZnO Electrolyte Materials. Scientific Reports, 2020, 10, 8228.	1.6	24
684	Advances in the Development of Innovative Sensor Platforms for Field Analysis. Micromachines, 2020, 11, 491.	1.4	13
685	Enhanced visible light photocatalytic performance of SnO2 nanoparticle co-doped with (Co, Nb) for organic dye degradation. Journal of Materials Science: Materials in Electronics, 2020, 31, 10689-10701.	1.1	12
686	AC characterization of three-dimensional reduced graphene oxide/molybdenum disulfide nanorose hybrids for ethanol vapor detection. Applied Surface Science, 2020, 520, 146346.	3.1	1
687	Enhanced NO2 sensing properties of Pt/WO3 films grown by glancing angle deposition. Ceramics International, 2020, 46, 21388-21394.	2.3	19
688	Enhanced NO ₂ Sensitivity in Schottky-Contacted n-Type SnS ₂ Gas Sensors. ACS Applied Materials & Diterfaces, 2020, 12, 26746-26754.	4.0	49
689	Formaldehyde detection using Sn doped ZnO thin film. Journal of Sol-Gel Science and Technology, 2020, 95, 265-275.	1.1	6
690	Oneâ€Step Fabrication of Nanocrystalline Nanonetwork SnO ₂ Gas Sensors by Integrated Multilaser Processing. Advanced Materials Technologies, 2020, 5, 2000281.	3.0	10
691	Highly sensitive detection of ammonia gas by 3D flower-like ÉMnO2 nanostructure chemiresistor. Journal of the Taiwan Institute of Chemical Engineers, 2020, 111, 293-301.	2.7	13
692	Unusual Sequential Annealing Effect in Achieving High Thermal Stability of Conductive Al-Doped ZnO Nanofilms. ACS Applied Electronic Materials, 2020, 2, 2064-2070.	2.0	10

#	Article	IF	CITATIONS
693	The Influence of Catalysts on the Gas Sensitivity of a Gas Sensor Based on SnO ₂ Films + 1 % at. Si. Nano Hybrids and Composites, 0, 28, 161-169.	0.8	0
694	Characterization of metal oxide gas sensors via optical techniques. Analytical and Bioanalytical Chemistry, 2020, 412, 4575-4584.	1.9	10
695	Investigation of Rapid Gas-Sensitive Properties Degradation of ZnO–SnO2 Thin Films Grown on the Glass Substrate. Chemosensors, 2020, 8, 40.	1.8	14
696	iHWG-MOX: A Hybrid Breath Analysis System via the Combination of Substrate-Integrated Hollow Waveguide Infrared Spectroscopy with Metal Oxide Gas Sensors. ACS Sensors, 2020, 5, 1033-1039.	4.0	19
697	Ionization Gas Sensor Using Suspended Carbon Nanotube Beams. Sensors, 2020, 20, 1660.	2.1	7
698	Mid-infrared Gas Sensing Using Graphene Plasmons Tuned by Reversible Chemical Doping. ACS Photonics, 2020, 7, 879-884.	3.2	46
699	Nanocomposite Zn ₂ SnO ₄ /SnO ₂ Thick Films as a Humidity Sensing Material. IEEE Sensors Journal, 2020, 20, 7509-7516.	2.4	10
700	Evaluation of gas and particle sensors for detecting spacecraft-relevant fire emissions. Fire Safety Journal, 2020, 113, 102977.	1.4	14
701	Deposition of Gallium Oxide Nanostructures at Low Substrate Temperature by Chemical Vapor Deposition. ECS Journal of Solid State Science and Technology, 2020, 9, 035006.	0.9	13
702	W-doped indium oxide synthetized via hydrothermal route for low-temperature ozone sensing. Solid State Ionics, 2020, 347, 115271.	1.3	7
703	The development of the simultaneous reconstruction of 2D temperature and concentration using a 6-peaks algorithm for CT-TDLAS. Journal of Mechanical Science and Technology, 2020, 34, 2067-2074.	0.7	3
704	Nanomaterial-based gas sensor for environmental science and technology. , 2020, , 229-252.		2
705	Tuning of CO gas sensing performance of spray pyrolyzed ZnO thin films by electron beam irradiation. Materials Science in Semiconductor Processing, 2020, 119, 105249.	1.9	16
706	Construction of Cdln2O4/ln2O3 composites containing n-n heterojunctions with excellent nitro-alkanes sensing performance. Materials Today Communications, 2020, 25, 101405.	0.9	1
707	N-Doped Graphene Quantum Dot-Decorated Three-Dimensional Ordered Macroporous In ₂ O ₃ for NO ₂ Sensing at Low Temperatures. ACS Applied Materials & Diterials & Accordance (Sensing 2018) Accordance (Sensing 2018) Accordance (Sensing 2018) Accordance (Sensing 2018) Note (Sensing 2018) Accordance (Sensi	4.0	62
708	Synthesis of Metal Oxide Semiconductor Nanostructures for Gas Sensors. , 2020, , .		2
709	Design and fabrication of g-C3N4 nanosheets decorated TiO2 hybrid sensor films for improved performance towards CO2 gas. Inorganic Chemistry Communication, 2020, 119, 108060.	1.8	49
710	Ce oxide nanoparticles on porous reduced graphene oxides for stable hydrogen detection in air/HMDSO environment. Sensors and Actuators B: Chemical, 2020, 321, 128529.	4.0	11

#	ARTICLE	IF	CITATIONS
711	Covalent triazine-based frameworks for NH3 gas sensing at room temperature. Sensors and Actuators B: Chemical, 2020, 321, 128513.	4.0	20
712	Enhancement in the Selectivity and Sensitivity of Ni and Pd Functionalized MoS ₂ Toxic Gas Sensors. Journal of the Electrochemical Society, 2020, 167, 106506.	1.3	20
713	Metal-Organic frameworks-derived bamboo-like CuO/In2O3 Heterostructure for high-performance H2S gas sensor with Low operating temperature. Sensors and Actuators B: Chemical, 2020, 310, 127828.	4.0	140
714	Cellulose-Copper Oxide hybrid nanocomposites membranes for H2S gas detection at low temperatures. Scientific Reports, 2020, 10, 2940.	1.6	33
715	Construction of Cr2O3:ZnO Nanostructured Thin Film Prepared by Pulsed Laser Deposition Technique for NO2 Gas Sensor. Transactions on Electrical and Electronic Materials, 2020, 21, 355-365.	1.0	5
716	Utilizing ZnO Nanorods for CO gas detection by SPR technique. Optics Communications, 2020, 463, 125490.	1.0	14
717	Combinatorial gas phase electrodeposition for fabrication of three-dimensional multimodal gas sensor array. Materials Today: Proceedings, 2020, 33, 2451-2457.	0.9	3
718	Microporous Elastomer Filter Coated with Metal Organic Frameworks for Improved Selectivity and Stability of Metal Oxide Gas Sensors. ACS Applied Materials & Samp; Interfaces, 2020, 12, 13338-13347.	4.0	39
719	Surface Potential-Based Approach to Estimate Bias Dependent Sensitivity of 1-D Metal Oxide Resistive Gas Sensors. IEEE Sensors Journal, 2020, 20, 5766-5775.	2.4	6
720	Nanowires-assembled WO3 nanomesh for fast detection of ppb-level NO2 at low temperature. Journal of Advanced Ceramics, 2020, 9, 17-26.	8.9	37
721	Band gap engineering in ZnO based nanocomposites. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 119, 113969.	1.3	27
722	Enhanced and unconventional responses in chemiresistive sensing devices for nitrogen dioxide and ammonia from carboxylated alkylthiophene polymers. Materials Horizons, 2020, 7, 1358-1371.	6.4	17
723	Computation-led design of pollutant gas sensors with bare and carbon nanotube supported rhodium alloys. Monatshefte FA $\frac{1}{4}$ r Chemie, 2020, 151, 159-171.	0.9	4
724	Studies of NO2 Gas-Sensing Characteristics of a Novel Room-Temperature Surface-Photovoltage Gas Sensor Device. Sensors, 2020, 20, 408.	2.1	8
725	Analytical Prediction of Highly Sensitive CNT-FET-Based Sensor Performance for Detection of Gas Molecules. IEEE Access, 2020, 8, 12655-12661.	2.6	9
726	Curating Metal–Organic Frameworks To Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions. ACS Applied Materials & Compose Robust Gas Sensor Arrays in Dilute Conditions.	4.0	25
727	Development of LTCC microâ€hotplate with PTC temperature sensor for gasâ€sensing applications. International Journal of Applied Ceramic Technology, 2020, 17, 1430-1439.	1.1	10
728	Hydrogen Sensing Performance of ZnO Schottky Diodes in Humid Ambient Conditions with PMMA Membrane Layer. Sensors, 2020, 20, 835.	2.1	14

#	ARTICLE	IF	CITATIONS
729	Structural, morphological and textural properties of iron manganite (FeMnO3) thick films applied for humidity sensing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2020, 257, 114547.	1.7	8
730	Fabrication of MoSe ₂ –Graphene Hybrid Nanoflakes for Toxic Gas Sensor with Tunable Sensitivity. Advanced Materials Interfaces, 2020, 7, 2000140.	1.9	39
731	A Comprehensive Review: Materials for the Fabrication of Optical Fiber Refractometers Based on Lossy Mode Resonance. Sensors, 2020, 20, 1972.	2.1	34
732	Superior Selfâ€Charged and â€Powered Chemical Sensing with High Performance for NO ₂ Detection at Room Temperature. Advanced Optical Materials, 2020, 8, 1901863.	3.6	27
733	Design of Hollow Nanofibrous Structures using Electrospinning: An Aspect of Chemical Sensor Applications. ChemNanoMat, 2020, 6, 1014-1027.	1.5	16
734	Nanomaterials for detection and removal of gases. , 2020, , 219-260.		0
735	Effect of PMMA on the surface of exfoliated MoS2 nanosheets and their highly enhanced ammonia gas sensing properties at room temperature. Journal of Alloys and Compounds, 2020, 832, 155005.	2.8	24
737	Volatile organic compound gas sensors based on methylammonium lead iodide perovskite operating at room temperature. RSC Advances, 2020, 10, 12982-12987.	1.7	48
738	Healable, highly sensitive LPG sensor based on Ni0.4Zn0.6Fe2O4 nanohybrid grown by autocombustion process. Sensors and Actuators B: Chemical, 2021, 327, 128840.	4.0	23
739	Sensor applications based on AlGaN/GaN heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 263, 114849.	1.7	34
740	Effect of temperature modulation, on the gas sensing characteristics of ZnO nanostructures, for gases O2, CO and CO2. Sensors International, 2021, 2, 100059.	4.9	40
741	Fabrication of ultrasensitive hexagonal disc structured ZnO thin film sensor to trace nitric oxide. Journal of Asian Ceramic Societies, 2021, 9, 96-105.	1.0	8
742	Identification of gas mixtures via sensor array combining with neural networks. Sensors and Actuators B: Chemical, 2021, 329, 129090.	4.0	106
743	Development of a Low-Cost Portable Gas Sensing System Based on Molecularly Imprinted Quartz Crystal Microbalance Sensor for Detection of Eugenol in Clove Oil. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	2.4	9
744	Recent advances in energy-saving chemiresistive gas sensors: A review. Nano Energy, 2021, 79, 105369.	8.2	282
745	A Novel Sensor-Integrated Aperture Coupled Microwave Patch Resonator for Humidity Detection. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	28
746	Volatile components in papaya fruits are the non-invasive biomarkers to monitor the ripening stage and the nutritional value. European Food Research and Technology, 2021, 247, 907-919.	1.6	10
747	Carbon Nanomaterials for Emerging Electronic Devices and Sensors. Advances in Sustainability Science and Technology, 2021, , 215-258.	0.4	0

#	Article	IF	Citations
748	Chemically Synthesized Novel Materials for Gas-Sensing Applications Based on Metal Oxide Nanostructure. , 2021, , 807-820.		0
749	Detection of the Freshness of Kiwifruit With a TD-GC-MS and a Gas-Sensing Array Based on the Surface-Acoustic-Wave Technique. IEEE Transactions on Nanobioscience, 2022, 21, 363-369.	2.2	4
750	A review on metal-oxide based p-n and n-n heterostructured nano-materials for gas sensing applications. Sensors International, 2021, 2, 100085.	4.9	37
751	Design and analysis of double-gate junctionless vertical TFET for gas sensing applications. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	15
752	Electrohydrodynamic jet printed conducting polymer for enhanced chemiresistive gas sensors. Journal of Materials Chemistry C, 2021, 9, 4591-4596.	2.7	31
753	The exceptionally high moisture responsiveness of a new conductive-coordination-polymer based chemiresistive sensor. CrystEngComm, 2021, 23, 3549-3556.	1.3	7
754	Socio-economic demands and challenges for non-invasive disease diagnosis through a portable breathalyzer by the incorporation of 2D nanosheets and SMO nanocomposites. RSC Advances, 2021, 11, 21216-21234.	1.7	25
755	Development of a Ternary AlMgZnO-Based Conductometric Sensor for Carbon Oxides Sensing. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-7.	2.4	6
756	An overview on the incorporation of graphene quantum dots on TiO2 for enhanced performances. Journal of Materials Science, 2021, 56, 6031-6051.	1.7	14
757	Oxidized eutectic gallium–indium (EGaln) nanoparticles for broadband light response in a graphene-based photodetector. Materials Advances, 2021, 2, 4414-4422.	2.6	3
758	Sensitive and Low-Power Metal Oxide Gas Sensors with a Low-Cost Microelectromechanical Heater. ACS Omega, 2021, 6, 1216-1222.	1.6	49
759	Preventing Evaporation Products for High-Quality Metal Film in Directed Energy Deposition: A Review. Metals, 2021, 11, 353.	1.0	3
761	A Gas Sensor for Application as a Propane Leak Detector. Journal of Sensors, 2021, 2021, 1-11.	0.6	5
762	Simple hollow core photonic crystal fiber for monitoring carbon dioxide gas with very high accuracy. Sensing and Bio-Sensing Research, 2021, 31, 100401.	2.2	20
763	Fabrication and Characterization of CdO Gas Sensor with Tube Shape. Materials Science Forum, 0, 1021, 317-326.	0.3	2
764	Printable and flexible wireless oxygen sensor. Engineering Research Express, 2021, 3, 015021.	0.8	1
765	New Electronic Interface Circuits for Humidity Measurement Based on the Current Processing Technique. Measurement Science Review, 2021, 21, 1-10.	0.6	2
766	Design and Simulation of Metal Oxide Gas Sensor for Breath Analyzer Application. Key Engineering Materials, 0, 877, 96-101.	0.4	0

#	Article	IF	Citations
767	Room Temperature Methanol Sensors Based on Rod-Shaped Nanostructures of MoS2 Functionalized With Ag Nanoparticles. IEEE Sensors Journal, 2021, 21, 4233-4240.	2.4	11
768	Scalable Superior Chemical Sensing Performance of Stretchable Ionotronic Skin via a Ï€â€Hole Receptor Effect. Advanced Materials, 2021, 33, e2007605.	11.1	25
769	Influence Different Substrates on the Sensing Performance of Copper Oxide Thin Films Synthesis via the Hydrothermal Method. IOP Conference Series: Materials Science and Engineering, 2021, 1095, 012006.	0.3	1
770	Semiconductor Sensors of Gases Based on Pd/SnO2-Sb2O5 Materials. Theoretical and Experimental Chemistry, 2021, 57, 64-70.	0.2	3
771	Multifunctional two-dimensional glassy graphene devices for vis-NIR photodetection and volatile organic compound sensing. Science China Materials, 2021, 64, 1964-1976.	3.5	5
772	Recent Advances in Sensing and Assessment of Corrosion in Sewage Pipelines. Chemical Engineering Research and Design, 2021, 147, 192-213.	2.7	81
773	Nanomaterials-Based Resistive Sensors for Detection of Environmentally Hazardous H2S Gas. Journal of Electronic Materials, 2021, 50, 2531-2555.	1.0	27
774	Pd ₈₀ Co ₂₀ Nanohole Arrays Coated with Poly(methyl methacrylate) for High-Speed Hydrogen Sensing with a Part-per-Billion Detection Limit. ACS Applied Nano Materials, 2021, 4, 3664-3674.	2.4	5
775	Nanostructured metal oxide semiconductor-based sensors for greenhouse gas detection: progress and challenges. Royal Society Open Science, 2021, 8, 201324.	1.1	48
776	An efficient colorimetric inspection of ammonia using silver nanoparticles synthesized by 3â€(1â€(2,4â€dinitrophenyl)hydrazono)ethyl)â€1 H â€indole as chemoâ€sensors in water environment. Jour Physical Organic Chemistry, 2021, 34, e4205.	n el øf	1
777	Chemical Gas Sensors: Recent Developments, Challenges, and the Potential of Machine Learningâ€"A Review. Sensors, 2021, 21, 2877.	2.1	94
778	Unraveling the Dynamic Evolution of Pd Species on Pd-Loaded ZnO Nanorods for Different Hydrogen Sensing Behaviors. ACS Sustainable Chemistry and Engineering, 2021, 9, 6370-6379.	3.2	20
779	Adsorption, Gas-Sensing, and Optical Properties of Molecules on a Diazine Monolayer: A First-Principles Study. ACS Omega, 2021, 6, 11418-11426.	1.6	20
780	Performance Optimization of Nitrogen Dioxide Gas Sensor Based on Pd-AlGaN/GaN HEMTs by Gate Bias Modulation. Micromachines, 2021, 12, 400.	1.4	9
781	Low-Cost Air Quality Sensing towards Smart Homes. Atmosphere, 2021, 12, 453.	1.0	22
782	Self-assembled Nano-BiFeO3 Chemi-resistive VOC Sensor: A Non-conventional MOS Sensor Highly Selective toward Acetone. Journal of the Institution of Engineers (India): Series C, 0, , 1.	0.7	O
783	A sensitive thick film as a candidate for ethanol gas sensor from Jarosite-based minerals. Journal of Physics: Conference Series, 2021, 1869, 012194.	0.3	0
784	Efficient acetone sensing by Pd nanoparticle loaded graphene Field Effect Transistor. , 2021, , .		O

#	Article	IF	CITATIONS
785	Optimizing MOX sensor array performances with a reconfigurable self-adaptive temperature modulation interface. Sensors and Actuators B: Chemical, 2021, 333, 129509.	4.0	19
786	Tuning of organic heterojunction conductivity by the substituents' electronic effects in phthalocyanines for ambipolar gas sensors. Sensors and Actuators B: Chemical, 2021, 332, 129505.	4.0	26
787	In Silico Designing of Mg₁₂O₁₂ Nanoclusters with a Late Transition Metal for NO ₂ Adsorption: An Efficient Approach toward the Development of NO ₂ Sensing Materials. ACS Omega, 2021, 6, 14191-14199.	1.6	23
788	Detection and measurement of aroma compounds with the electronic nose and a novel method for MOS sensor signal analysis during the wheat bread making process. Food and Bioproducts Processing, 2021, 127, 90-98.	1.8	34
789	Synthesis and Parameterization of Gas Sensor Models. Proceedings of Southwest State University, 2021, 25, 138-161.	0.3	0
790	Optical temperature measurement method of premixed flames using a multi-laser system. Journal of Mechanical Science and Technology, 2021, 35, 2535-2542.	0.7	4
791	Visual colorimetric detection of ammonia under gaseous and aqueous state: Approach on cesium lead bromide perovskite-loaded porous electrospun nanofibers. Journal of Industrial and Engineering Chemistry, 2021, 97, 515-522.	2.9	15
792	MoS2 doping for enhanced H2S detection. Applied Surface Science, 2021, 547, 149026.	3.1	20
793	MoO2 Nanospheres Synthesized by Microwave-Assisted Solvothermal Method for the Detection of H2S in Wide Concentration Range at Low Temperature. Frontiers in Materials, 2021, 8, .	1.2	1
794	Simple preparation of Ni/CuO nanocomposites with superior sensing activity toward the detection of methane gas. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	15
795	Detecting Benzene Vapor via a Low-Cost Nanostructured TiOâ,, Sensor. IEEE Sensors Journal, 2021, 21, 13828-13836.	2.4	3
796	Material dependent and temperature driven adsorption switching (p- to n- type) using CNT/ZnO composite-based chemiresistive methanol gas sensor. Sensors and Actuators B: Chemical, 2021, 336, 129729.	4.0	42
797	WO ₃ Nanoflakes Coupled with Hexagonal Boron Nitride Nanosheets for Triethylamine Sensing. ACS Applied Nano Materials, 2021, 4, 6316-6327.	2.4	18
798	Oxygen Ratio Effect on Zinc Oxide Films Fabricated by Radio Frequency Magnetron Sputtering for Photoluminescence Type Gas Sensor Application. , 2021, , .		0
799	Characteristics of highly sensitive and selective nitric oxide gas sensors using defect-functionalized single-walled carbon nanotubes at room temperature. Applied Surface Science, 2021, 550, 149250.	3.1	32
800	Electrochemical MoO _x /Carbon Nanocomposite-Based Gas Sensor for Formaldehyde Detection at Room Temperature. Journal of the Electrochemical Society, 2021, 168, 067525.	1.3	9
801	Sensing Properties of NiO Loaded SnO2 Nanoparticles—Specific Selectivity to H2S. Chemosensors, 2021, 9, 125.	1.8	4
802	Gas sensing materials roadmap. Journal of Physics Condensed Matter, 2021, 33, 303001.	0.7	49

#	ARTICLE	IF	CITATIONS
803	Ethanol sensing property of CuO thin film synthesised by CBD method. Materials Research Innovations, 0, , 1-7.	1.0	1
804	A Highly Sensitive and Flexible Metal–Organic Framework Polymer-Based H ₂ S Gas Sensor. ACS Omega, 2021, 6, 17690-17697.	1.6	46
805	Improvement of gas sensitivity of ferric oxide thin films by adding Mn nanoparticles. Bulletin of Materials Science, 2021, 44, 1.	0.8	3
806	Room temperature ammonia vapour detection on hBN flakes. JPhys Materials, 2021, 4, 044007.	1.8	6
807	A comprehensive comparison study on magnetic behaviour, defects-related emission and Ni substitution to clarify the origin of enhanced acetone detection capabilities. Sensors and Actuators B: Chemical, 2021, 339, 129860.	4.0	9
808	Adsorption of nitrogen-based gases on different layers of blue phosphorene oxides. Journal of Materials Science, 2021, 56, 15824-15843.	1.7	2
809	Adsorption-Semiconductor Sensor Based on Nanosized SnO2 for Early Warning of Indoor Fires., 0,,.		0
810	Vehicle Emission Controlling on Carbon Monoxide by using GSM Modem. , 2021, , .		O
811	Performance analysis, modeling, and development of a signal conditioning unit of n-type metal oxide gas sensor for acetone gas detection. Journal of Computational Electronics, 2021, 20, 1938-1947.	1.3	4
812	The Exposome in the Era of the Quantified Self. Annual Review of Biomedical Data Science, 2021, 4, 255-277.	2.8	10
813	Layered Double Hydroxide-Based Gas Sensors for VOC Detection at Room Temperature. ACS Omega, 2021, 6, 20205-20217.	1.6	19
814	A Theoretical Framework of Zinc-Decorated Inorganic Mg ₁₂ O ₁₂ Nanoclusters for Efficient COCl ₂ Adsorption: A Step Forward toward the Development of COCl ₂ Sensing Materials. ACS Omega, 2021, 6, 19435-19444.	1.6	30
815	Compensating Altered Sensitivity of Duty-Cycled MOX Gas Sensors with Machine Learning. , 2021, , .		5
816	P-type α-Fe ₂ O ₃ hexagonal nanosheets: Synthesis and aniline-sensing performance. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2022, 236, 2317-2325.	0.7	1
817	Structural and Magnetic Properties of RMO3 (R = Pr, Nd and M = Fe, Co) Perovskites. Journal of Superconductivity and Novel Magnetism, O, , 1.	0.8	2
818	Highly sensitive gas sensing platforms based on field effect Transistor-A review. Analytica Chimica Acta, 2021, 1172, 338575.	2.6	26
819	Pt-decorated foam-like Ga-In bimetal oxide nanofibers for trace acetone detection in exhaled breath. Journal of Alloys and Compounds, 2021, 873, 159813.	2.8	9
820	A Review on Gas Sensor Technology and Its Applications. Smart Innovation, Systems and Technologies, 2022, , 165-175.	0.5	6

#	Article	IF	CITATIONS
821	Enhance The Gas-Sensing Performances Of Graphene Oxide (GO) Thin Films For Detecting Nitrogen Dioxide Gas. Al-Qadisiyah Journal of Pure Science, 2021, 26, 432-443.	0.1	0
822	Hazardous gases sensors based on conducting polymer composites: Review. Chemical Physics Letters, 2021, 776, 138703.	1,2	53
823	Evaluation of spray pyrolysed In:ZnO nanostructures for CO gas sensing at low concentration. Journal of Materials Science: Materials in Electronics, 2021, 32, 22599-22616.	1.1	10
824	Preparation of Ce-doped SnO2 cuboids with enhanced 2-butanone sensing performance. Sensors and Actuators B: Chemical, 2021, 341, 130039.	4.0	32
825	Investigation of N + SiGe juntionless vertical TFET with gate stack for gas sensing application. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	22
826	PEI-Functionalized Carbon Nanotube Thin Film Sensor for CO2 Gas Detection at Room Temperature. Micromachines, 2021, 12, 1053.	1.4	17
827	Method to determine the suitability of non-dispersive infrared carbon dioxide sensor models in Heating, Ventilation and Air Conditioning systems. , 2021, , .		0
828	SO ₂ Capture by Two Aluminum-Based MOFs: Rigid-like MIL-53(Al)-TDC <i>versus</i> Breathing MIL-53(Al)-BDC. ACS Applied Materials & (amp; Interfaces, 2021, 13, 39363-39370.	4.0	39
829	Surface engineering of electrodeposited cuprous oxide (Cu2O) thin films: Effect on hydrophobicity and LP gas sensing. Applied Surface Science, 2021, 561, 150020.	3.1	14
830	Enhanced selectivity of microfluidic gas sensors by modifying microchannel geometry and surface chemistry with graphene quantum dots. Sensors and Actuators B: Chemical, 2021, 342, 130050.	4.0	17
831	Chemical Sensing Properties of BaF2-Modified hBN Flakes towards Detection of Volatile Organic Compounds. Chemosensors, 2021, 9, 263.	1.8	0
832	Practical Particulate Matter Sensing and Accurate Calibration System Using Low-Cost Commercial Sensors. Sensors, 2021, 21, 6162.	2.1	9
833	Electrostatic deposition and functionalization of CVD grown multiwalled carbon nanotubes for sensitive & Samp; selective detection of CO and NOx at room temperature. Analytica Chimica Acta, 2021, 1177, 338766.	2.6	4
834	Highly sensitive and wearable NO ₂ gas sensor based on PVDF nanofabric containing embedded polyaniline/g-C ₃ N ₄ nanosheet composites. Nanotechnology, 2021, 32, 485504.	1.3	15
835	Acetone-Sensitive Thin Films Comprising Coal Fly Ash Na-X Zeolites and Sol–Gel Nb2O5 Matrix. Nanomaterials, 2021, 11, 2399.	1.9	0
836	Enhanced sensing performance toward alcohols using copper oxide based on exposed crystal facet driven catalytic oxidation. Journal of Materials Science: Materials in Electronics, 2021, 32, 26676-26687.	1.1	2
837	Performance analysis of heterojunction tunnel FET device with variable Temperature. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	20
838	Highly selective and reversible 2D PtX2 (XÂ=ÂP, As) hazardous gas sensors: Ab-initio study. Applied Surface Science, 2021, 563, 150391.	3.1	11

#	ARTICLE	IF	CITATIONS
839	Evaluation of the effects of Au addition into ZnFe2O4 nanostructures on acetone detection capabilities. Materials Research Bulletin, 2021, 142, 111395.	2.7	15
840	Conductometric NOx sensor based on exfoliated two-dimensional layered MnPSe3. Sensors and Actuators B: Chemical, 2021, 347, 130633.	4.0	8
841	A review on resistive-based gas sensors for the detection of volatile organic compounds using metal-oxide nanostructures. Inorganic Chemistry Communication, 2021, 133, 108893.	1.8	52
842	Recognition of binary mixture of NO2 and NO gases using a chemiresistive sensors array combined with principal component analysis. Sensors and Actuators A: Physical, 2021, 331, 112980.	2.0	22
843	One-pot wet chemical synthesis of reduced graphene oxide-zinc oxide nanocomposites for fast and selective ammonia sensing at room temperature. Sensors and Actuators A: Physical, 2021, 331, 112965.	2.0	22
844	Reduced graphene oxide (rGO) decorated ZnO-SnO2: A ternary nanocomposite towards improved low concentration VOC sensing performance. Journal of Alloys and Compounds, 2021, 881, 160406.	2.8	27
845	Co(â¢) doped-CoFe layered double hydroxide growth with graphene oxide as cataluminescence catalyst for detection of carbon monoxide. Sensors and Actuators B: Chemical, 2021, 347, 130600.	4.0	9
846	Enhanced room temperature NH3 sensing of rGO/Co3O4 nanocomposites. Materials Chemistry and Physics, 2021, 272, 125033.	2.0	31
847	Gas sensing of fibrous red phosphorene towards inorganic air pollutants: Insights from first-principles calculations. Applied Surface Science, 2021, 565, 150546.	3.1	7
848	Discrimination of gases with a single chemiresistive multi-gas sensor using temperature sweeping and machine learning. Sensors and Actuators B: Chemical, 2021, 348, 130725.	4.0	26
849	Qualitative and quantitative recognition method of drug-producing chemicals based on SnO2 gas sensor with dynamic measurement and PCA weak separation. Sensors and Actuators B: Chemical, 2021, 348, 130698 ensing properties of smml:math.xmlns:mml="http://www.w3.org/1998/Math/MathML"	4.0	76
850	display="inline" id="d1e435" altimg="si19.svg"> <mml:mi>I²</mml:mi> -In <mml:math altimg="si18.svg" display="inline" id="d1e440" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mrow></mml:mrow></mml:msub></mml:math> Se <mml:math< td=""><td>1.4</td><td>6</td></mml:math<>	1.4	6
851	Performance of NiO intercalated rGO nanocomposites for NH3 sensing at room temperature. Materials Science in Semiconductor Processing, 2022, 137, 106221.	1.9	23
852	Sea urchin-like mesoporous WO3 (SUS-WO3) for sensitive 3-hydroxy-2-butanone biomarker detection. Materials Science in Semiconductor Processing, 2022, 137, 106160.	1.9	4
853	Near Infrared Sensor to Determine Carbon Dioxide Gas Based on Ionic Liquid. Coatings, 2021, 11, 163.	1.2	0
854	Perovskite-based material for sensor applications. , 2021, , 135-145.		4
855	Structural evolution of imine-linked covalent organic frameworks and their NH ₃ sensing performance. Journal of Materials Chemistry C, 2021, 9, 8562-8569.	2.7	31
856	Metal–organic framework based systems for CO ₂ sensing. Journal of Materials Chemistry C, 2021, 9, 16132-16142.	2.7	18

#	Article	IF	CITATIONS
857	Recent progress in intrinsic and stimulated room-temperature gas sensors enabled by low-dimensional materials. Journal of Materials Chemistry C, 2021, 9, 3026-3051.	2.7	48
859	Sensing and Sensor Fundamentals. , 2013, , 15-50.		41
860	Electro-Thermal-Mechanical Modeling of Gas Sensor Hotplates., 2020,, 17-72.		7
861	Semiconductor Nanomaterials for Gas Sensor Applications. Environmental Chemistry for A Sustainable World, 2020, , 305-355.	0.3	2
862	An Air Quality and Event Detection System with Life Logging for Monitoring Household Environments. , 2017, , 251-270.		5
863	Analysis of a Data Acquisition System for a Compact Electronic Nose. Lecture Notes in Electrical Engineering, 2020, , 615-628.	0.3	1
864	Arsenic pentafluoride surface adsorption studies on Kagome-phosphorene – a DFT outlook. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126552.	0.9	16
865	Recent Advances in Gas and Humidity Sensors Based on 3D Structured and Porous Graphene and Its Derivatives., 2020, 2, 1381-1411.		50
866	Detection of nitrous oxide using infrared optical plasmonics coupled with carbon nanotubes. Nanoscale Advances, 2020, 2, 4615-4626.	2.2	4
867	Surface-enhanced Raman spectroscopic investigation on adsorption kinetic of carbon monoxide at the solid–gas interface. Journal of Chemical Physics, 2020, 153, 234704.	1.2	4
868	Breath analysis for the screening and diagnosis of diseases. Applied Spectroscopy Reviews, 2021, 56, 702-732.	3.4	23
869	Insight the process of hydrazine gas adsorption on layered WS ₂ : a first principle study. Nanotechnology, 2020, 31, 495703.	1.3	6
870	An Overview of Oxide Materials for Gas Sensors. , 2020, , .		2
871	Influence of Humidity and Different Gases on a Resistive Room Temperature NO ₂ Gas Dosimeter Based on Al-Doped ZnO for ppb-Concentration Detection. Journal of the Electrochemical Society, 2020, 167, 167516.	1.3	10
872	Effect of Annealing and Surface Passivation on Doped SnO2 Thin Films Prepared by Spray Pyrolysis Technique. Advances in Materials, 2015, 4, 51.	0.3	3
873	Ag Nanoparticles Sensitized In2O3 Nanograin for the Ultrasensitive HCHO Detection at Room Temperature. Nanoscale Research Letters, 2019, 14, 365.	3.1	34
874	Excitation of Surface Acoustic Waves in a Zsection of Piezoelectric Crystals by the Electric Field of a Long Electrode. International Journal of Applied Physics, 2019, 6, 42-50.	0.0	7
875	Design and Analysis of Single-Mode PCF in Optical Communication Covering E to L Bands with Ultra-High Negative Dispersion. Ukrainian Journal of Physics, 2017, 62, 818-826.	0.1	7

#	Article	IF	CITATIONS
876	Low-cost multispecies air quality sensor. , 2015, , .		1
877	Causes and Measures of Fume in Directed Energy Deposition: A Review. Journal of Korean Institute of Metals and Materials, 2020, 58, 383-396.	0.4	2
878	Excellent Carbon Monoxide Sensing Performance of Au-Decorated SnO2 Nanofibers. Korean Journal of Materials Research, 2016, 26, 741-750.	0.1	19
879	Fabrication and Characterization of CuO Thin Film/ZnO Nanorods Heterojunction Structure for Efficient Detection of NO Gas. Korean Journal of Materials Research, 2018, 28, 32-37.	0.1	2
880	Sensing of gaseous malodors characteristic of landfills and waste treatment plants. Journal of Sensors and Sensor Systems, 2014, 3, 61-67.	0.6	1
881	Nanocomposite sensors of propylene glycol, dimethylformamide and formaldehyde vapors. Journal of Sensors and Sensor Systems, 2018, 7, 31-41.	0.6	19
882	THE REVIEW OF SEMICONDUCTOR GAS SENSOR FOR NOX DETCTING. The Turkish Online Journal of Design Art and Communication, 2016, 6, 898-937.	0.1	6
883	Flexible sensor and energy storage device based on piezoelectric nanogenerator. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 170701.	0.2	5
884	A Study & Seal Time Monitoring of Metal Oxide Semiconductor (MOS) Gas Sensor. IOSR Journal of Electronics and Communication Engineering, 2016, 01, 07-12.	0.1	5
885	Low Complexity System on Chip Design to Acquire Signals from MOS Gas Sensor Applications. Sensors, 2021, 21, 6552.	2.1	2
886	A Review: Application and Implementation of Optic Fibre Sensors for Gas Detection. Sensors, 2021, 21, 6755.	2.1	15
887	Diffusive Representation: A Powerful Method to Analyze Temporal Signals from Metal-Oxide Gas Sensors Used in Pulsed Mode. Electronics (Switzerland), 2021, 10, 2578.	1.8	0
888	Selective detection of VOCs using microfluidic gas sensor with embedded cylindrical microfeatures coated with graphene oxide. Journal of Hazardous Materials, 2022, 424, 127566.	6.5	28
889	A polymer based self-powered ethanol gas sensor to eliminate the interference of ultraviolet light. Sensors and Actuators A: Physical, 2021, 332, 113173.	2.0	10
890	Metal Oxide Nanostructure-Based Gas Sensor for Carbon Dioxide Detection. Latvian Journal of Physics and Technical Sciences, 2021, 58, 15-26.	0.4	2
891	Advanced Strategies to Improve Performances of Molybdenum-Based Gas Sensors. Nano-Micro Letters, 2021, 13, 207.	14.4	43
892	Electrical Response of the Spinel ZnAl2O4 and Its Application in the Detection of Propane Gas. Applied Sciences (Switzerland), 2021, 11, 9488.	1.3	2
893	3.3.4 Zeolite Modified Gas Sensors For Environmental Monitoring. , 2012, , .		0

#	Article	IF	CITATIONS
894	Gas-sensing properties at room temperature for the sensors based on tungsten oxide thin films sputtered on n-type ordered porous silicon. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 057102.	0.2	4
895	Development of an Arduino shield for measurement and characterization of resistive sensors. , 2013, , .		0
896	Fabrication of CO2Gas Sensors Using Graphene Decorated Au Nanoparticles and Their Characteristics. Journal of Sensor Science and Technology, 2013, 22, 197-201.	0.1	0
897	Adsorption Properties of an Organic Thin Film Prepared by an R.F. Sputtering with a Poly(Ethylene) Tj ETQq1 Micromachines, 2014, 134, 278-283.	1 0.784314 rg 0.0	BT /Overlook 0
898	Carbon monoxide control system in industrial premises. Eastern-European Journal of Enterprise Technologies, 2014, 2, 33.	0.3	0
899	Generation of Size, Structure, and Shape-Controlled Metal Nanoparticles Using Cavitation., 2014,, 49-74.		0
900	Automated System for Air Pollution Detection and Control in Vehicles. International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering, 2014, 03, 12196-12200.	0.0	7
901	Nitrogen Monoxide Gas Sensing Properties of Copper Oxide Thin Films Fabricated by a Spin Coating Method. Korean Journal of Materials Research, 2015, 25, 171-176.	0.1	1
902	THIN FILM TECHNOLOGY IN THE FIELD OF ENVIRONMENT. International Journal of Research -GRANTHAALAYAH, 2015, 3, 1-3.	0.1	0
903	Rectifying and Nitrogen Monoxide Gas Sensing Properties of a Spin-Coated ZnO/CuO Heterojunction. Korean Journal of Materials Research, 2016, 26, 84-89.	0.1	1
904	Design and Development of Gas Sensor Based On Acoustic Resonance. KnE Engineering, 0, 1, .	0.1	0
905	Highly Sensitive Gas Sensors Based on Electrospun Indium Oxide Nanofibers for Indoor Toxic CO and HCHO Gases. Journal of the Korean Institute of Electrical and Electronic Material Engineers, 2016, 29, 803-808.	0.0	0
907	Utilization of ZnO nanorods growth on a tip of plastic optical fiber toward the realization of low-cost CO and CO2 gas sensor. Journal of Nanophotonics, 2017, 11, 1.	0.4	0
908	Intelligent Sensing Using Metal Oxide Semiconductor Based-on Support Vector Machine for Odor Classification. International Journal of Electrical and Computer Engineering, 2018, 8, 4133.	0.5	0
909	Recent Advances and Techniques in the Hazardous Gases Detection., 2019,, 1293-1310.		0
910	Incorporation of High-Altitude Balloon Experiment in High School Science Classrooms. Creative Education, 2019, 10, 262-272.	0.2	2
911	Introduction to Environmental Nanotechnology. Advances in Environmental Engineering and Green Technologies Book Series, 2019, , 1-27.	0.3	0
912	DETECTION OF Na ATOMIC CONCENTRATION BY LAYERED CHALCOGENIDES OF TIN: AB INITIO CALCULATION Sensor Electronics and Microsystem Technologies, 2019, 16, 50-58.	N. _{0.1}	1

#	Article	IF	Citations
913	Application of Neural Networks in the Problem of Quantitative Analysis of Air Composition. Proceedings of Southwest State University, 2020, 24, 159-174.	0.3	2
914	Semiconductor Metal Oxide Nanoparticles: A Review for the Potential of H2S Gas Sensor Application. Earthline Journal of Chemical Sciences, 0, , 199-208.	0.0	3
915	ZnO-SnO2 nanocomposites modified by PdO nanoparticles named PdO-ZSO as gas sensing material for hydrogen and butane with the excellent response time and recovery time. Journal of Materials Science: Materials in Electronics, 2021, 32, 28891-28908.	1.1	4
917	Electronic Nose Testing for Confined Space Application Utilizes Principal Component Analysis and Support Vector Machine. IOP Conference Series: Materials Science and Engineering, 0, 932, 012072.	0.3	1
918	PRINCIPLES OF CREATING A VIRTUAL MULTI-SENSOR SYSTEM FOR RECOGNITION GAS MIXTURES. Physical and Chemical Aspects of the Study of Clusters, Nanostructures and Nanomaterials, 2020, , 827-835.	0.2	0
919	Introduction to Environmental Nanotechnology. , 2022, , 44-70.		0
920	Preparation of Pd/PdO@ZnO-ZnO nanorods by using metal organic framework templated catalysts for selective detection of triethylamine. Sensors and Actuators B: Chemical, 2022, 350, 130840.	4.0	33
921	Metal Oxide Semiconductor Gas Sensors. Materials Horizons, 2020, , 211-232.	0.3	O
922	ZnO thin film based ethanol sensor derived by RF sputtering technique. AIP Conference Proceedings, 2020, , .	0.3	1
923	A Lowâ€Power CuSCN Hydrogen Sensor Operating Reversibly at Room Temperature. Advanced Functional Materials, 2022, 32, 2102635.	7.8	8
924	Viologen-based covalent triazine frameworks for NO2 sensing at room temperature. Sensors and Actuators B: Chemical, 2022, 352, 131045.	4.0	7
925	Nanostructured Gas Sensors for Health Care: An Overview. Journal of Personalized Nano Medicine, 2015, 1, 10-23.	0.8	4
926	A Carbon Nanotube-Functional Polymer Composite Film for Low-Power Indoor COâ,, Monitoring. IEEE Sensors Journal, 2022, 22, 11233-11240.	2.4	3
927	Combined chemoresistive and in situ FTIR spectroscopy study of nanoporous NiO films for light-activated nitrogen dioxide and acetone gas sensing. Sensors and Actuators B: Chemical, 2022, 353, 131125.	4.0	24
928	Towards On-demand Gas Sensing. , 2021, , .		0
929	Handling non-stationarity in E-nose design: a review. Sensor Review, 2022, 42, 39-61.	1.0	2
930	Design of MoS ₂ /graphene heterostructure thin film sensors for high performance NO ₂ gas sensor applications. Journal of Physics: Conference Series, 2021, 2070, 012131.	0.3	4
931	Integration of a Metal–Organic Framework Film with a Tubular Whispering-Gallery-Mode Microcavity for Effective CO ₂ Sensing. ACS Applied Materials & Samp; Interfaces, 2021, 13, 58104-58113.	4.0	12

#	Article	IF	CITATIONS
932	An 8 MeV Electron Beam Modified In:ZnO Thin Films for CO Gas Sensing towards Low Concentration. Nanomaterials, 2021, 11, 3151.	1.9	2
933	Fabrication of ZnO/CNTs for Application in CO2 Sensor at Room Temperature. Nanomaterials, 2021, 11, 3087.	1.9	37
934	Adsorption of hazardous gases on poly(3,4â€ethylenedioxythiophene): Density functional theory study. International Journal of Chemical Kinetics, 2022, 54, 121-129.	1.0	5
935	Reconfigurable Modular Platform for Prolonged Sensing of Toxic Gases in Particle Polluted Environments. Chemosensors, 2021, 9, 328.	1.8	1
936	Recent advances in the fabrication of 2D metal oxides. IScience, 2022, 25, 103598.	1.9	45
937	Self-template synthesis of mesoporous Au-SnO2 nanospheres for low-temperature detection of triethylamine vapor. Sensors and Actuators B: Chemical, 2022, 356, 131358.	4.0	34
938	A novel yttria-doped ZrO2 based conductometric sensor for hydrogen leak monitoring. International Journal of Hydrogen Energy, 2022, 47, 9819-9828.	3.8	19
939	Establishing A Sustainable Low-Cost Air Quality Monitoring Setup: A Survey of the State-of-the-Art. Sensors, 2022, 22, 394.	2.1	41
940	Synthesis of enhanced (Sn $\$ _{0.05}\$\$Sb\$\$_{0.15}\$\$)\$\$_2\$\$(Te\$\$_{0.02}\$\$Se\$\$_{0.18}\$\$)\$\$_3\$\$ crystals for multi-sensing applications. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	5
941	Resistive Chemosensors for the Detection of CO Based on Conducting Polymers and Carbon Nanocomposites: A Review. Molecules, 2022, 27, 821.	1.7	5
942	Autonomous Multi-Rotor Aerial Platform for Air Pollution Monitoring. Sensors, 2022, 22, 860.	2.1	10
943	Metal–organic frameworks for advanced transducer based gas sensors: review and perspectives. Nanoscale Advances, 2022, 4, 697-732.	2.2	33
944	Nanostructured Metal Oxide Semiconductors towards Greenhouse Gas Detection. Chemosensors, 2022, 10, 57.	1.8	14
945	CO sensing properties of nanostructured WSe2/GaN and MoSe2/GaN based gas sensors. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 139, 115147.	1.3	6
946	A theoretical study of gas adsorption on tin arsenic and its application as a highly sensitive NO2 sensor. Journal of Materials Science, 2022, 57, 444-452.	1.7	3
947	Classification of Two Volatiles Using an eNose Composed by an Array of 16 Single-Type Miniature Micro-Machined Metal-Oxide Gas Sensors. Sensors, 2022, 22, 1120.	2.1	10
948	Realization of ppb-level acetone detection using noble metals (Au, Pd, Pt) nanoparticles loaded GO FET sensors with simultaneous back-gate effect. Microelectronic Engineering, 2022, 256, 111719.	1.1	14
949	Laser Fabricated Cu ₂ O uO/Ag Nanocomposite Films for SERS Application**. ChemistrySelect, 2022, 7, .	0.7	2

#	Article	IF	CITATIONS
950	CO2 sensing performance enhanced by Pt-catalyzed SnO2/porous-silicon hybrid structures. Sensors International, 2022, 3, 100165.	4.9	3
951	P-Type Metal Oxide Semiconductor Thin Films: Synthesis and Chemical Sensor Applications. Sensors, 2022, 22, 1359.	2.1	46
952	Analytical methods applied for ozone gas detection: A review. TrAC - Trends in Analytical Chemistry, 2022, 149, 116552.	5.8	19
953	Statistical analysis of Sr substituted NiFe2O4 thin films for liquefied petroleum gas sensor applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 278, 115614.	1.7	5
954	Flexible Cu ₃ (HHTP) ₂ MOF Membranes for Gas Sensing Application at Room Temperature. SSRN Electronic Journal, 0, , .	0.4	0
956	A new approach to increasing the sensitivity of a gas sensor based on nanocrystalline silicon carbide films. Tekhnologiya I Konstruirovanie V Elektronnoi Apparature, 2021, , 11-15.	0.1	0
957	Nitrogen doped In ₂ O ₃ â€"ZnO nanocomposite mesoporous thin film based highly sensitive and selective ethanol sensors. Nanoscale, 2022, 14, 5185-5193.	2.8	6
958	Fabrication of Highly Sensitive Room Temperature Operated No2 Gas Sensor Using Back Gated 2d-Mos2 Fets. SSRN Electronic Journal, 0, , .	0.4	0
959	Cr2o3-Doped Graphene Sensor for Early Diagnosis of Liver Cirrhosis: A First-Principles Study. SSRN Electronic Journal, 0, , .	0.4	0
960	Solid-State Gas Sensors. Journal of Analytical Chemistry, 2022, 77, 131-144.	0.4	4
961	The Prototype Monitoring System for Pollution Sensing and Online Visualization with the Use of a UAV and a WebRTC-Based Platform. Sensors, 2022, 22, 1578.	2.1	6
962	The Combination of Two-Dimensional Nanomaterials with Metal Oxide Nanoparticles for Gas Sensors: A Review. Nanomaterials, 2022, 12, 982.	1.9	111
963	Toward practical gas sensing with rapid recovery semiconducting carbon nanotube film sensors. Science China Information Sciences, 2022, 65, 1 .	2.7	13
964	Improved room temperature liquefied petroleum gas sensing performance of Ni0.5Zn0.5Fe2O4@Cl–doped polypyrrole nanoweb. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2022, 279, 115660.	1.7	6
965	Chemiresistive gas sensor based on electrospun hollow SnO2 nanotubes for detecting NO at the ppb level. Vacuum, 2022, 199, 110961.	1.6	19
966	Low-energy consumption CuSCN-based ultra-low-ppb level ozone sensor, operating at room temperature. Sensors and Actuators A: Physical, 2022, 338, 113462.	2.0	1
967	Adsorption of NO2 and CO molecules on Ni $(1\ 1\ 1)$ supported defective Graphene: A DFT study. Applied Surface Science, 2022, 590, 153027.	3.1	7
968	Study of the Sensitivity of Porous SnO2-Based Thick-Film Elements to the Hydrogen Concentration in Air. Semiconductors, 2021, 55, 1063-1066.	0.2	1

#	Article	IF	CITATIONS
969	Design of high-performance ternary ammonia gas sensors based on Au NPs hybrid PANI-TiO2 nanocomposites on flexible polyimide substrate. , 2021 , , .		1
970	Adsorption of NO and NO ₂ on Rhâ€Doped Hexagonal Boron Nitride Monolayers: A Firstâ€Principles Study. ChemistrySelect, 2021, 6, 13609-13615.	0.7	3
971	Synthesis of PSi-n/CuO-p/Cu2O-n heterostructure for CO2 gas sensing at room temperature. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	11
972	Effect of Cr on ZrO2 nanostructures for gas sensing investigation. Bulletin of Materials Science, 2021, 44, 1.	0.8	1
973	Terahertz sensing with high sensitivity and substance identification capability using a novel High-quality resonance supported by a thin structured silicon film. Optics and Laser Technology, 2022, 152, 108177.	2.2	2
974	Flame-annealed porous TiO2/CeO2 nanosheets for enhenced CO gas sensors. Applied Surface Science, 2022, 593, 153418.	3.1	18
975	Metal oxide semiconducting nanomaterials for air quality gas sensors: operating principles, performance, and synthesis techniques. Mikrochimica Acta, 2022, 189, 196.	2.5	46
976	Gas Sensors Based on Porous Ceramic Bodies of MSnO3 Perovskites (M = Ba, Ca, Zn): Formation and Sensing Properties towards Ethanol, Acetone, and Toluene Vapours. Molecules, 2022, 27, 2889.	1.7	6
977	Tin-oxide nanoparticles for detecting hazardous gas: Synthesis and characterization. Materials Today: Proceedings, 2022, 62, 3642-3646.	0.9	0
978	Synthesis, characterization, and sensitivity tests of a novel sensor based on barium antimonate powders. Materials Today Communications, 2022, 31, 103579.	0.9	2
979	Electronic noses based on metal oxide semiconductor sensors for detecting crop diseases and insect pests. Computers and Electronics in Agriculture, 2022, 197, 106988.	3.7	35
980	Plasmonic Hydrogen Sensors. Small, 2022, 18, e2107882.	5.2	14
981	A review on degradation of organic dyes by using metal oxide semiconductors. Environmental Science and Pollution Research, 2023, 30, 71912-71932.	2.7	29
982	Highly sensitive and selective LPG sensor working below lowest explosion limit (LEL) at room temperature using as-fabricated indium doped SnO2 thin film. Materials Chemistry and Physics, 2022, 287, 126275.	2.0	13
983	Annealing and operating temperatures effect on spray-deposited nanocrystalline ZnO thin-film gas sensor. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	5
984	High sensitivity LPG and H2 gas sensing behavior of MoS2/graphene hybrid sensors prepared by facile hydrothermal method. Ceramics International, 2022, 48, 29322-29331.	2.3	7
985	Design and Characteristics of various types of gas sensors for hydrogen sulfide gas detection - A Review. Journal of Physics: Conference Series, 2022, 2267, 012008.	0.3	0
986	Low power memristive gas sensor architectures with improved sensing accuracy. Journal of Computational Electronics, 2022, 21, 1005-1016.	1.3	1

#	Article	IF	CITATIONS
987	Applied Machine Learning in Industry 4.0: Case-Study Research in Predictive Models for Black Carbon Emissions. Sensors, 2022, 22, 3947.	2.1	4
988	Analysis of the Response Characteristics of Toluene Gas Sensors with a ZnO Nanorod Structure by a Heat Treatment Process. Sensors, 2022, 22, 4125.	2.1	4
989	Catalytic effect of Ag embedded with ZnO prepared by Co-sputtering on H2S gas sensing MEMS device. Vacuum, 2022, 202, 111210.	1.6	5
990	Core-shell Au@SiO2 nanocrystals doped PANI for highly sensitive, reproducible and flexible ammonia sensor at room temperature. Applied Surface Science, 2022, 598, 153821.	3.1	18
991	Glucose Reduced Graphene Oxide Incorporated Green Tea-Leaf Derived Nanoporous Carbon Materials and Their Enhanced Ammonia Sensing Properties. SSRN Electronic Journal, 0, , .	0.4	0
993	Zn ₂ SnO ₄ Thin Film for Ozone Gas Sensor Developed on MEMS Device and Synthesized by HiPIMS Co-sputtering. ECS Journal of Solid State Science and Technology, 2022, 11, 067004.	0.9	2
994	Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. ACS Applied Materials & Direct Laser Writing & D	4.0	10
995	Application of Tungsten-Oxide-Based Electrochromic Devices for Supercapacitors. Applied System Innovation, 2022, 5, 60.	2.7	6
996	CO2 gas sensing properties of Na3BiO4-Bi2O3 mixed oxide nanostructures. Environmental Science and Pollution Research, 0, , .	2.7	1
997	Gallium Oxide Nanostructures: A Review of Synthesis, Properties and Applications. Nanomaterials, 2022, 12, 2061.	1.9	35
998	Algorithmic Correction of MOS Gas Sensor for Ambient Temperature and Relative Humidity Fluctuations. IEEE Sensors Journal, 2022, 22, 15054-15061.	2.4	7
999	Tetrazine-based 1D polymers for the selective chemiresistive sensing of nitrogen dioxide via the interplay between hydrogen bonding and n-heteroatom interactions. Polymer Journal, 2022, 54, 1191-1201.	1.3	4
1000	N–p-Conductor Transition of Gas Sensing Behaviors in Mo ₂ CT _{<i>x</i>} MXene. ACS Sensors, 2022, 7, 2225-2234.	4.0	20
1001	Synthesis of the oxide NiSb2O6 and its electrical characterization in toxic atmospheres for its application as a gas sensor. Journal of Materials Science: Materials in Electronics, 2022, 33, 18268-18283.	1.1	2
1003	The enhancement of ethanol gas sensors response based on calcium and zinc co-doped LaFeO3/Fe2O3 thick film ceramics utilizing yarosite minerals extraction as Fe2O3 precursor., 2021, 31, 71-77.		1
1005	Highly Sensitive and Selective Surface Acoustic Wave Ammonia Sensor Operated at Room Temperature with a Polyacrylic Acid Sensing Layer. Sensors, 2022, 22, 6349.	2.1	3
1006	Carbon Dioxide Detectors based on Al―and Niâ€Doped ZnO. Physica Status Solidi (A) Applications and Materials Science, 0, , 2200247.	0.8	0
1007	Device for Measurement Concentration of Toxic Gas in an Enclosure. Macromolecular Symposia, 2022, 404, .	0.4	1

#	Article	IF	CITATIONS
1008	Flower-like ZnO Nanostructures Local Surface Morphology and Chemistry. Nanomaterials, 2022, 12, 2666.	1.9	2
1009	Scalable, top-down optical lithography for electrically contacting monolayer crystallites of vapor grown WSe2 for gas sensing applications. , 2022, , .		1
1010	PbS/graphene hybrid nanostructures coated glassy carbon electrode for the electrochemical sensing of copper ions in aqueous solution. Food and Chemical Toxicology, 2022, 168, 113375.	1.8	5
1011	Metal oxide nanofibers based chemiresistive H2S gas sensors. Coordination Chemistry Reviews, 2022, 471, 214752.	9.5	28
1012	Tuning the selective sensing properties of transition metal dichalcogenides (MoX2: X= Se, Te) toward sulfurrich gases. Materials Today Chemistry, 2022, 26, 101069.	1.7	7
1013	Enhanced Ambient Sensing Environment—A New Method for Calibrating Low-Cost Gas Sensors. Sensors, 2022, 22, 7238.	2.1	7
1014	Influence of MgPc modification on NO2 sensing characteristics of RGTO grown SnO2 thin films. Materials Science in Semiconductor Processing, 2022, 152, 107104.	1.9	2
1015	Selective detection of trace carbon monoxide at room temperature based on CuO nanosheets exposed to (111) crystal facets. Journal of Hazardous Materials, 2023, 442, 130041.	6.5	24
1016	A Cr ₂ O ₃ -doped graphene sensor for early diagnosis of liver cirrhosis: a first-principles study. Physical Chemistry Chemical Physics, 2022, 24, 21372-21380.	1.3	0
1017	Highly Selective Multiple Gases Detection Using a Thermal-Conductivity-Based MEMS Resonator and Machine Learning. IEEE Sensors Journal, 2022, 22, 19858-19866.	2.4	4
1018	Gas Sensors Based on Metal Oxide. , 2022, , 179-199.		3
1019	Cu _x O/Cu based electrochemical sensor for the detection of CO ₂ gas. Indian Chemical Engineer, 0, , 1-15.	0.9	0
1020	Thin films of graphene decorated with NiS2 hybrid sensor for detection of NO2 gas. Journal of Materials Science: Materials in Electronics, 2022, 33, 23404-23417.	1.1	1
1021	Large-Area Ordered Palladium Nanostructures by Colloidal Lithography for Hydrogen Sensing. Molecules, 2022, 27, 6100.	1.7	4
1022	The design and validation of a fast and low-cost multi-purpose electronic nose for rapid gas identification. Sensor Review, 2022, 42, 613-630.	1.0	1
1023	Development of a 1064/532nm Scanning Depolarization Lidar System and Wavelengths Dependence Measurements of Atmospheric Matters over Daejeon City. The Journal of Korean Institute of Information Technology, 2022, 20, 95-103.	0.1	O
1024	Investigations on RuO2–In2O3 nanostructured porous composite thin films for benzene detection. Microporous and Mesoporous Materials, 2022, 345, 112247.	2.2	5
1025	Hexagonal Al ₂ O ₃ /TiO ₂ /TiN Nanotubesâ€Based Sensor for CO ₂ Detection. Physica Status Solidi - Rapid Research Letters, 2022, 16, .	1.2	1

#	Article	IF	Citations
1026	Effect of grain size on sensitivity properties of CuO/PS via hydrothermal method. AIP Conference Proceedings, 2022, , .	0.3	0
1027	CORRELATION OF THE SURFACE STRUCTURE OF THE RuO2/TiAND TiO2 /TIFILMS WITH ELECTROCHEMICAL IMPEDANCE DATA. Ukrainian Chemistry Journal, 2022, 88, 97-105.	0.1	1
1028	Development of Tetrapod Zinc Oxide-Based UV Sensor for Precision Livestock Farming and Productivity. Biosensors, 2022, 12, 837.	2.3	5
1029	2D Van der Waals Heterostructures for Chemical Sensing. Advanced Functional Materials, 2022, 32, .	7.8	34
1030	The Effect of Rare Earths on the Response of Photo UV-Activate ZnO Gas Sensors. Sensors, 2022, 22, 8150.	2.1	11
1031	Review of IoT-based AI analysis method through real-time indoor air quality and health effect monitoring - Focusing on indoor air pollution that are harmful to the respiratory organ Tuberculosis and Respiratory Diseases, 0, , .	0.7	2
1032	Photoactivated In2O3-GaN Gas Sensors for Monitoring NO2 with High Sensitivity and Ultralow Operating Power at Room Temperature. Chemosensors, 2022, 10, 405.	1.8	0
1033	An overview on room-temperature chemiresistor gas sensors based on 2D materials: Research status and challenge. Composites Part B: Engineering, 2023, 248, 110378.	5.9	21
1034	E-nose: A low-cost fruit ripeness monitoring system. Journal of Agricultural Engineering, 0, , .	0.7	2
1035	An Automated, Self-Powered, and Integrated Analytical Platform for On-Line and In Situ Air Quality Monitoring. Chemosensors, 2022, 10, 454.	1.8	2
1036	Hybrid material based on single walled carbon nanotubes and cobalt phthalocyanine bearing sixteen pyrene moieties as a sensing layer for hydrogen sulfide detection. Dyes and Pigments, 2023, 209, 110903.	2.0	5
1037	Detection and recognition of toluene and butanone in mixture based on SnO2 sensor via dynamic transient and steady-state response analysis in jump heating voltage mode. Sensors and Actuators B: Chemical, 2023, 376, 132969.	4.0	11
1038	Blue shift in optical emission spectra of ZnGa2O4 by lattice deformation due to Eu atom amount in spinel lattice. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	1
1039	Increased CO2 levels in the operating room correlate with the number of healthcare workers present: an imperative for intentional crowd control. Patient Safety in Surgery, 2022, 16, .	1.1	6
1040	Portable, low-cost, Raspberry Pi-based optical sensor (PiSENS): Continuous monitoring of atmospheric nitrogen di-oxide. Analytical Methods, 0, , .	1.3	0
1041	Gas sensing mechanisms in ABO3 perovskite materials at room temperature: A review. Materials Science in Semiconductor Processing, 2023, 156, 107271.	1.9	16
1042	Ultra-low detection limit chemoresistive NO ₂ gas sensor using single transferred MoS ₂ flake: an advanced nanofabrication. RSC Advances, 2022, 12, 33403-33408.	1.7	1
1043	Facile Use of In-Situ Doped Onion-Like Carbon Nanoparticles for Detecting Toluene at Room Temperature. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
1044	Application of metal oxide semiconductor for detection of ammonia emissions from agricultural sources. Sensing and Bio-Sensing Research, 2022, 38, 100541.	2.2	2
1046	Elektronik Burun Metal Oksit Yarı İletken Sensörlerin Gıda Analizlerinde Kullanımı. Akademik Gıda, 0, 454-473.	'0.5	О
1047	Pristine and transition metal decorated holey graphyne monolayer as an ammonia sensor: insights from DFT simulations. Journal Physics D: Applied Physics, 2023, 56, 055402.	1.3	9
1048	Low-Cost CO Sensor Calibration Using One Dimensional Convolutional Neural Network. Sensors, 2023, 23, 854.	2.1	6
1049	Application of Optical Communication for an Enhanced Health and Safety System in Underground Mine. Sensors, 2023, 23, 692.	2.1	4
1050	Study of ZrS3-based field-effect transistors toward the understanding of the mechanisms of light-enhanced gas sensing by transition metal trichalcogenides. Materials Today Communications, 2023, 34, 105379.	0.9	3
1051	Stimulation in fullerene for adsorbing pollutant gases: A review. Chemical Physics Impact, 2023, 6, 100156.	1.7	2
1052	Monitoring of hourly carbon dioxide concentration under different land use types in arid ecosystem. Open Life Sciences, 2022, 18, .	0.6	O
1053	Development of highly sensitive Al, Ga, and In-doped ZnO films by the drop casting method for NH ₃ gas sensing. New Journal of Chemistry, 2023, 47, 4880-4887.	1.4	5
1054	Electrochemical Carbon Dioxide Detection. , 2023, , 119-148.		O
1055	Polymer composites for gas sensors. , 2023, , 173-198.		0
1056	Emerging air quality monitoring methods. , 2023, , 105-172.		О
1057	Design of SnO2-based CH4 sensors with reactive anti-poisoning layers: excellent stability and high resistance to hexamethyldisiloxane. Journal of Materials Science, 2023, 58, 2140-2155.	1.7	2
1058	MOX-Based Resistive Gas Sensors with Different Types of Sensitive Materials (Powders, Pellets, Films), Used in Environmental Chemistry. Chemosensors, 2023, 11, 95.	1.8	4
1059	Optimization of SAW Sensors for Nanoplastics and Grapevine Virus Detection. Biosensors, 2023, 13, 197.	2.3	2
1060	Semiconductor oxide nanomaterial., 2023,, 41-74.		1
1061	Upcycling air pollutants to fuels and chemicals via electrochemical reduction technology. Journal of Environmental Management, 2023, 334, 117477.	3.8	5
1062	Development of a Neural Model of a Semiconductor Gas Sensor. Proceedings of Southwest State University, 2021, 25, 123-139.	0.3	О

#	Article	IF	CITATIONS
1063	Enhanced H ₂ S Gas-Sensing Performance of Ni-Doped ZnO Nanowire Arrays. ACS Omega, 2023, 8, 7595-7601.	1.6	5
1064	Ga-doped AlN monolayer nano-sheets as promising materials for environmental sensing applications. Computational and Theoretical Chemistry, 2023, 1223, 114086.	1.1	6
1065	Synthesis and characterization of dip-coated ZnOâ€'CuO composite thin film for room-temperature CO2 gas sensing. Thin Solid Films, 2023, 773, 139838.	0.8	5
1066	Co/Au bimetal synergistically modified SnO2-In2O3 nanocomposite for efficient CO sensing. Ceramics International, 2023, 49, 15979-15989.	2.3	5
1067	Engineering three-dimensionally ordered mesoporous structure of TiO2 for the fast responsive NH3 gas sensor at ambient conditions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 666, 131281.	2.3	1
1068	ZnGa2O4 and ZnGa2O4:N thin films applied as sensors for detection of acetaldehyde in ethanol. Physica B: Condensed Matter, 2023, 658, 414834.	1.3	0
1069	An investigation of the influence of nanofibers morphology on the performance of QCM-based ethanol vapor sensor utilizing polyvinylpyrrolidone nanofibers active layer. Sensors and Actuators B: Chemical, 2023, 386, 133708.	4.0	3
1070	Sensitivity and Stability Analysis of Double-Gate Graphene Nanoribbon Vertical Tunnel FET for Different Gas Sensing. ECS Journal of Solid State Science and Technology, 2023, 12, 027003.	0.9	2
1071	Metal Oxide Gas Sensors to Study Acetone Detection Considering Their Potential in the Diagnosis of Diabetes: A Review. Molecules, 2023, 28, 1150.	1.7	5
1072	An E-Nose Using Metal Oxide Semiconductor Sensors Array to Recognize the Odors of Fall Armyworm Pest for Its Early Detection in the Farm. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2022, , 69-81.	0.2	0
1073	Recent development and prospects for metal Selenide-based gas sensors. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 290, 116333.	1.7	7
1074	ZnO/graphene heterostructure for electrical interaction and application for CO ₂ gas sensing. Japanese Journal of Applied Physics, 2023, 62, SG1015.	0.8	3
1075	Structural, optical, photoluminescence, and magnetic properties of Mo0.6â°xTi0.3Zn0.1ErxO3 nanorods films fabricated by sol–gel/spin coating technique. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1,1	0
1076	Current perspectives of e-noses. , 2023, , 433-456.		0
1077	Environmental Applications of Zeolites: Preparation and Screening of Cu-Modified Zeolites as Potential CO Sensors. Chemistry, 2023, 5, 314-333.	0.9	1
1078	Application of a Charge Plasma Tunnel FET with SiGe Pocket as an Effective Hydrogen Gas Sensor. ECS Journal of Solid State Science and Technology, 2023, 12, 031003.	0.9	3
1079	Wafer-Level Patterning of Tin Oxide Nanosheets for MEMS Gas Sensors. , 2023, , .		0
1080	Low-cost piezoelectric sensors and gamma ray attenuation fabricated from novel polymeric nanocomposites. AIMS Materials Science, 2023, 10, 288-300.	0.7	17

#	Article	IF	CITATIONS
1081	A DFT Based Approach for NO ₂ Sensing Using Vander Wall Hetero Monolayer. IETE Journal of Research, 0, , 1-12.	1.8	0
1082	High selectivity and response H2 sensors based on ZnO@ZIF-71@Ag nanorod arrays. Ceramics International, 2023, 49, 19728-19736.	2.3	1
1083	The Effect of Couple Doping Gd and Co on The Physical Characteristics of LaFeO3 Thick Film for Acetone Gas Sensor Application. Jurnal Penelitian Fisika Dan Aplikasinya, 2022, 12, 115-126.	0.1	0
1084	Recent advances in the material design for intelligent wearable devices. Materials Chemistry Frontiers, 2023, 7, 3278-3297.	3.2	12
1085	GAS SENSORS BASED ON METAL OXIDE NANOPARTICLES AND THEIR APPLICATION FOR ENVIRONMENTALLY HAZARDOUS GASES DETECTION A MINI-REVIEW. Zeszyty Naukowe SGSP, 2023, 85, 7-27.	0.0	1
1086	Introduction in Gas Sensing. , 2023, , 161-175.		0
1087	Analysis of Air Pollution in a Smart City Infrastructure using IoT., 2023,,.		0
1089	(MgO)60: A magic cluster active in UV range under DFT study. Materials Today: Proceedings, 2023, , .	0.9	0
1090	Ammonia gas detection by solution combustion-processed pristine & Dirichoped ZnO transparent films: a reverse effect of doping on gas response. Journal of Materials Science: Materials in Electronics, 2023, 34, .	1.1	2
1095	Two-Dimensional (2D) Nanostructures for Hazardous Gas Sensing Applications. , 2023, , 2033-2053.		0
1098	Design Issues and Challenges of Memristor Structured Gas Receptive System. , 2023, , .		0
1099	Use of Next Generation Emission Measurement Sensors and Data Analysis in Industrial Applications. , 2021, , .		0
1105	A Review of the High-Performance Gas Sensors Using Machine Learning. , 2023, , 163-198.		0
1106	Advance IOT Based Air Pollution Detection and Control System in Vehicles. , 2023, , .		0
1107	Air Monitoring with Cloud and IoT., 2023, , .		0
1118	CVD-Grown MoS2 Nanosheets-Based Gas Sensor for Low-Limit Detection of NO2 Gas. Lecture Notes in Electrical Engineering, 2023, , 439-447.	0.3	0
1134	Understanding Semiconducting Metal Oxide Gas Sensors. , 2023, , 1-32.		0
1135	Semiconducting Metal Oxides: Microstructure and Sensing Performance., 2023, , 149-187.		0

#	Article	IF	CITATIONS
1161	bSafe: A Framework for Hazardous Situation Monitoring in Industries. Lecture Notes in Networks and Systems, 2024, , 115-126.	0.5	0
1168	Boron Nitride and Its Hybrids: Synthesis, Properties and Potential Applications. Engineering Materials, 2024, , 1-29.	0.3	0
1169	A Review on Vehicle Pollution Monitoring System. , 2023, , .		0
1174	Exploring the Remarkable Gas Sensing Capability of Molybdenum Diselenide Nanoparticles. Minerals, Metals and Materials Series, 2024, , 30-46.	0.3	0
1176	Carbon monoxide as an indicator of indoor air quality. Environmental Science Atmospheres, 2024, 4, 291-305.	0.9	0