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A survey on gas sensing technology

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992	Wireless gas sensor network for detection and monitoring of harmful gases in utility areas and industries. 2012 ,		10
991	Investigations on irreversible- and reversible-type gas sensing for ZnO and Mg0.5Zn0.5Fe2O4chemi-resistive sensors. 2012 , 45, 505306		30
990	Multi-component gas sensing based on slotted photonic crystal waveguide with liquid infiltration. 2013 , 184, 179-188		28
989	Photonic crystal for gas sensing. 2013 , 1, 6087		108
988	Carbon nanotube-based microstrip antenna gas sensor. 2013 ,		5
987	Low-voltage (. 2013 ,		2
986	Facile synthesis of highly stable and porous Cu2O/CuO cubes with enhanced gas sensing properties. 2013 , 188, 533-539		86
985	Gas Sensors Based on ZnO Structures. 2013 , 124, 567-569		8
984	Application and Development Trend of Gas Sensing Technology Based on Absorption Spectroscopy. 2013 ,		
983	Robot assisted gas tomography Localizing methane leaks in outdoor environments. 2014 ,		14
982	The effect of the periodic boundary conditions of a ZnO-coated nanospring on its surface redox-induced electrical response. 2014 , 25, 475501		7
981	Membrane-based characterization of a gas componenta transient sensor theory. <i>Sensors</i> , 2014 , 14, 4599-617	3.8	4
980	Ammonia Gas Detection by Tannic Acid Functionalized and Reduced Graphene Oxide at Room Temperature. 2014 , 2014, 1-6		52
979	Catalyst-Free Vapor-Phase Method for Direct Integration of Gas Sensing Nanostructures with Polymeric Transducing Platforms. 2014 , 2014, 1-9		7
978	Adaptive preheating duration control for low-power ambient air quality sensor networks. <i>Sensors</i> , 2014 , 14, 5536-51	3.8	2
977	Combining non selective gas sensors on a mobile robot for identification and mapping of multiple chemical compounds. <i>Sensors</i> , 2014 , 14, 17331-52	3.8	28
976	Distributed least-squares estimation of a remote chemical source via convex combination in wireless sensor networks. <i>Sensors</i> , 2014 , 14, 11444-66	3.8	12

975	Crystal structure of nanoscale tin dioxide films produced by magnetron sputtering. 2014,	1
974	Noise estimation technique to reduce the effects of 1/f noise in Open Path Tunable Diode Laser Absorption Spectrometry (OP-TDLAS). 2014 ,	O
973	Gas sensing using wavelength modulation spectroscopy. 2014 ,	
972	On the voltage dependence of sensitivity for Schottky-type gas sensor. 2014 , 105, 223503	11
971	Modeling and characterization of the transient performance of a gas detector based on fringe-field capacitance. 2014 ,	2
970	Modal Analysis of a MEMS Cantilever. 2014 , 658, 690-693	
969	Micromachined gas sensors based on tungsten oxide nanoneedles directly integrated via aerosol assisted CVD. 2014 , 198, 210-218	47
968	A practical carbon dioxide gas sensor using room-temperature hydrogen plasma reduced graphene oxide. 2014 , 193, 692-700	196
967	A wireless sensor actuator system for hazardous gases detection and control. 2014, 210, 157-164	48
966	. 2014 , 14, 2056-2063	34
965	. 2014, 14, 2056-2063 Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity Enhancement. 2014, 161, B151-B156	10
	Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity	
965	Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity Enhancement. 2014 , 161, B151-B156 Cholesteric Liquid Crystal Doped by Nanosize Magnetite as an Active Medium of Optical Gas	10
965 964	Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity Enhancement. 2014, 161, B151-B156 Cholesteric Liquid Crystal Doped by Nanosize Magnetite as an Active Medium of Optical Gas Sensor. 2014, 589, 83-89 A simple and template free synthesis of branched ZnO nanoarchitectures for sensor applications.	10
965 964 963	Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity Enhancement. 2014, 161, B151-B156 Cholesteric Liquid Crystal Doped by Nanosize Magnetite as an Active Medium of Optical Gas Sensor. 2014, 589, 83-89 A simple and template free synthesis of branched ZnO nanoarchitectures for sensor applications. 2014, 4, 64075-64084 Development of an ammonia sensor based on silver nanoparticles in a poly-methacrylic acid matrix.	10 10 25
965 964 963 962	Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity Enhancement. 2014, 161, B151-B156 Cholesteric Liquid Crystal Doped by Nanosize Magnetite as an Active Medium of Optical Gas Sensor. 2014, 589, 83-89 A simple and template free synthesis of branched ZnO nanoarchitectures for sensor applications. 2014, 4, 64075-64084 Development of an ammonia sensor based on silver nanoparticles in a poly-methacrylic acid matrix. 2014, 2, 5778	10 10 25 31
965 964 963 962 961	Engineering Silver Nanostructures for Surface Acoustic Wave Humidity Sensors Sensitivity Enhancement. 2014, 161, B151-B156 Cholesteric Liquid Crystal Doped by Nanosize Magnetite as an Active Medium of Optical Gas Sensor. 2014, 589, 83-89 A simple and template free synthesis of branched ZnO nanoarchitectures for sensor applications. 2014, 4, 64075-64084 Development of an ammonia sensor based on silver nanoparticles in a poly-methacrylic acid matrix. 2014, 2, 5778 Hollow zinc oxide microspheres functionalized by Au nanoparticles for gas sensors. 2014, 4, 28005	10 10 25 31 30

957	Fabrication of textile based conductometric polyaniline gas sensor. 2014 , 202, 732-740		49
956	Analytical Modeling and Artificial Neural Network (ANN) Simulation of Current-Voltage Characteristics in Graphene Nanoscroll Based Gas Sensors. 2015 , 10, 1713-1722		2
955	The effect of ultraviolet irradiation on the ultra-thin HfO2 based CO gas sensor. 2015 , 118, 174501		12
954	Conjugated Polymer Nanocomposites-Based Chemical Sensors. 2015 , 619-686		4
953	A highly efficient CMOS nanoplasmonic crystal enhanced slow-wave thermal emitter improves infrared gas-sensing devices. 2015 , 5, 17451		25
952	Low-cost and high-precision measurement of gas concentration by the way of wavelength modulation spectroscopy. 2015 , 126, 4527-4530		1
951	Signal-to-Noise Enhancement of a Nanospring Redox-Based Sensor by Lock-in Amplification. <i>Sensors</i> , 2015 , 15, 13110-20	3.8	6
950	Multi Parameter Flow Meter for On-Line Measurement of Gas Mixture Composition. 2015 , 6, 452-461		5
949	Two-Dimensional Materials for Sensing: Graphene and Beyond. 2015 , 4, 651-687		232
948	Insights on Capacitive Interdigitated Electrodes Coated with MOF Thin Films: Humidity and VOCs Sensing as a Case Study. <i>Sensors</i> , 2015 , 15, 18153-66	3.8	92
947	Development of a compact multipass oxygen sensor used for gas diffusion studies in opaque media. 2015 , 54, 9772-8		3
946	SnO2Nanostructure as Pollutant Gas Sensors: Synthesis, Sensing Performances, and Mechanism. 2015 , 2015, 1-14		38
945	A low cost and reliable fiber optic ethanol sensor based on nano-sized SnO2. 2015 , 24, 93-99		21
944	PRT Embedded Microheaters for Optimum Temperature Distribution of Air-Suspended Structures for Gas Sensor Applications. 2015 , 15, 4137-4140		5
943	Vitamin C-assisted synthesis and gas sensing properties of coaxial In2O3 nanorod bundles. 2015 , 220, 68-74		39
942	Human intestinal gas measurement systems: in vitro fermentation and gas capsules. 2015 , 33, 208-13		65
941	ZnO:Ca nanopowders with enhanced CO2sensing properties. 2015 , 48, 255503		57
940	Very Sensitive Optical System with the Concentration and Decomposition Unit for Explosive Trace Detection. 2015 , 22, 101-110		

A comparative study of the DC and AC model for thin film sensors for the detection of gases. 2015, 939 Performance analysis of different plasmonic metallic nanoparticles using for ultra-sensitive optical 938 sensor. 2015, A new strategy for low temperature gas sensing by nano-sized metal oxides: Development a new 937 5 nerve agent simulant sensor. 2015, 168, 180-186 Performance of hybrid nanostructured conductive cotton threads as LPG sensor at ambient 936 temperature: preparation and analysis. 2015, 5, 99253-99269 Chiral Liquid Crystal-Based Sensor for the Detection of Low Humidity. 2015, 623, 64-73 935 Microstructure core photonic crystal fiber for gas sensing applications. 2015, 54, 8637-43 69 934 Towards Internet of Things for event-driven low-power gas sensing using carbon nanotubes. 2015, 8 933 Ionic liquids tailored for reaction-based gas sensing on quartz crystal microbalance. 2015, 34, 932 9 Dielectric dispersion of rf Sputter-deposited SnO2, ZnO, WO3 thin films using surface plasmon \circ 931 resonance technique. 2015, 22, 3529-3535 Fast gas concentration sensing by analyzing the rate of resistance change. 2015, 209, 906-910 930 27 Activated carbon-based gas sensors: effects of surface features on the sensing mechanism. 2015, 3, 3821-383164 929 Highly sensitive amorphous Inta Into for ppb-level ozone sensing: Effects of deposition 928 15 temperature. 2015, 211, 354-358 Protein Based Localized Surface Plasmon Resonance Gas Sensing. 2015, 32, 018701 927 5 Spin-crossover metalorganic frameworks: promising materials for designing gas sensors. 2015, 3, 1277-1285 926 79 Enhanced room temperature sulfur dioxide sensing behaviour of in situ polymerized 925 50 polyanilineEungsten oxide nanocomposite possessing honeycomb morphology. 2015, 5, 73535-73544 Optimal selection of SAW sensors for E-Nose applications. 2015, 219, 238-244 924 15 Low-cost, portable open-source gas monitoring device based on chemosensory technology. 2015, 923 1 26, 085103 Smart Sensors and Systems. 2015, 922

921	Artificial olfactory sense and recognition system. 2015 , 121-139	1
920	Polydiphenylamine/zeolite Y composite as a sensor material for chemical vapors. 2015 , 220, 91-100	12
919	Graphenethetal oxide nanohybrids for toxic gas sensor: A review. 2015 , 221, 1170-1181	429
918	Analytical modeling of the sensing parameters for graphene nanoscroll-based gas sensors. 2015 , 5, 54700-54	7 0 9
917	A novel image-guided FT-IR sensor using chalcogenide glass optical fibers for the detection of combustion gases. 2015 , 220, 414-419	21
916	Global coverage measurement planning strategies for mobile robots equipped with a remote gas sensor. <i>Sensors</i> , 2015 , 15, 6845-71	11
915	Multiplexed gas sensor based on heterogeneous metal oxide nanomaterial array enabled by localized liquid-phase reaction. 2015 , 7, 10152-61	42
914	Influence of emissivity tailoring on radiative membranes thermal behavior for gas sensing applications. 2015 , 213, 53-58	3
913	Synthesis of WO3 and its gas sensing: a review. 2015 , 26, 4698-4707	69
912	Facile Approach to Synthesize Au@ZnO Core-Shell Nanoparticles and Their Application for Highly Sensitive and Selective Gas Sensors. 2015 , 7, 9462-8	125
911	Room temperature gas sensing properties of tubular hydroxyapatite. 2015 , 39, 3865-3874	24
910	Ag7Au6 Cluster as a Potential Gas Sensor for CO, HCN, and NO Detection. 2015 , 119, 7534-7540	39
909	Recent advances in graphene based gas sensors. 2015 , 218, 160-183	558
908	Effect of silver additive on electrical conductivity and methane sensitivity of SnO2. 2015 , 35, 38-44	34
907	Low-cost NDIR based sensor platform for sub-ppm gas detection. 2015 , 14, 342-350	21
906	Efficient measurement planning for remote gas sensing with mobile robots. 2015 ,	4
905	Gas sensing properties of indiumgalliumgincbxide gas sensors in different light intensity. 2015 , 4, 8-12	21
904	. 2015,	3

(2016-2015)

903	Thermal stability and energy harvesting characteristics of Au nanorods: harsh environment chemical sensing. 2015 ,		О
902	Ultrasensitive Gold Nanostar-Polyaniline Composite for Ammonia Gas Sensing. 2015 , 31, 13247-56		42
901	Temperature-Dependent Abnormal and Tunable p-n Response of Tungsten OxideTin Oxide Based Gas Sensors. 2015 , 7, 24887-94		34
900	Colorimetric detection of hazardous gases using a remotely operated capturing and processing system. 2015 , 59, 434-42		6
899	W@Si 12 cluster as a potential sensor for CO and NO detection. 2015 , 111, 10006		9
898	Schottky-contacted vertically self-aligned ZnO nanorods for hydrogen gas nanosensor applications. 2015 , 118, 034509		29
897	Performance of hybrid nanostructured conductive cotton materials as wearable devices: an overview of materials, fabrication, properties and applications. 2015 , 5, 107716-107770		60
896	Novel Metal Oxide Gas Sensors for Mobile Devices. 2015 , 131-153		
895	A wearable and highly sensitive CO sensor with a macroscopic polyaniline nanofiber membrane. 2015 , 3, 24333-24337		27
894	Response to NO2 and other gases of resistive chemically exfoliated MoS2-based gas sensors. 2015 , 207, 602-613		260
893	Approach for quantification of metal oxide type semiconductor gas sensors used for ambient air quality monitoring. 2015 , 208, 339-345		65
892	Microwave signature for gas sensing: 2005 to present. 2015 , 14, 502-515		11
891	A highly selective and wide range ammonia sensorNanostructured ZnO:Co thin film. 2015 , 191, 41-50		111
890	Low power micro-calorimetric sensors for analysis of gaseous samples. 2015 , 206, 772-787		22
889	Photonics for Smart Cities. 2016 ,		1
888	NO gas sensing at room temperature using single titanium oxide nanodot sensors created by atomic force microscopy nanolithography. 2016 , 7, 1044-51		14
887	A Novel Gas Sensor Based on MgSb2O6 Nanorods to Indicate Variations in Carbon Monoxide and Propane Concentrations. <i>Sensors</i> , 2016 , 16, 177	3.8	24
886	Influence of External Gaseous Environments on the Electrical Properties of ZnO Nanostructures Obtained by a Hydrothermal Method. 2016 , 6,		18

885	An Assessment of Three Different In Situ Oxygen Sensors for Monitoring Silage Production and Storage. <i>Sensors</i> , 2016 , 16,	3.8	6
884	Realtime Gas Emission Monitoring at Hazardous Sites Using a Distributed Point-Source Sensing Infrastructure. <i>Sensors</i> , 2016 , 16,	3.8	17
883	Recognizing Physisorption and Chemisorption in Carbon Nanotubes Gas Sensors by Double Exponential Fitting of the Response. <i>Sensors</i> , 2016 , 16,	3.8	20
882	Investigation of Gas-Sensing Property of Acid-Deposited Polyaniline Thin-Film Sensors for Detecting HB and SOII Sensors, 2016 , 16,	3.8	13
881	Approach for Self-Calibrating COIMeasurements with Linear Membrane-Based Gas Sensors. <i>Sensors</i> , 2016 , 16,	3.8	3
880	Development and Validation of a UAV Based System for Air Pollution Measurements. <i>Sensors</i> , 2016 , 16,	3.8	94
879	CMOS compatible metal-insulator-metal plasmonic perfect absorbers. 2016 , 6, 2389		26
878	A Crowd Simulation Based UAV Control Architecture for Industrial Disaster Evacuation. 2016,		9
877	Gold nanoparticles promote amorphous carbon to be ammonia gas sensor. 2016 , 114, 40001		2
876	The cluster-assembled nanowires based on M12N12 (M = Al and Ga) clusters as potential gas sensors for CO, NO, and NO2 detection. 2016 , 18, 21431-41		37
875	Gas concentration analysis of resistive gas sensor array. 2016,		8
874	Detection of sub-ppm Concentrations of Ammonia in an Ionic Liquid: Enhanced Current Density Using "Filled" Recessed Microarrays. 2016 , 88, 12453-12460		21
873	Wideband long wave infrared metamaterial absorbers based on silicon nitride. 2016 , 120, 203101		17
872	Improvement in the Sensing Response of Nano-Crystalline ZnO-Based Hydrogen Sensor: Effect of Swift Heavy Ion Irradiation. 2016 , 16, 7586-7592		7
871	ELECTRO-OPTICAL INFRARED SENSOR TECHNOLOGIES FOR THE INTERNET OF THINGS. 2016 , 167-185		1
870	Graphene based multiple heterojunctions as an effective approach for high-performance gas sensing. 2016 , 109, 122107		1
869	Development of double spiral MEMS hotplate using front-side etching cavity for gas sensors. 2016 ,		0
868	Flexible NH3 sensor based on spray deposition and inkjet printing. 2016 ,		6

(2016-2016)

867	CMOS integrated tin dioxide gas sensors functionalized with bimetallic nanoparticles for improved carbon monoxide detection. 2016 ,	О
866	Room temperature ionic liquid electrochemical gas sensor for rapid oxygen detection with transient double potential amperometry. 2016 ,	1
865	Carbon dioxide sensor for mobile devices: A novel approach for low-power consuming, highly sensitive NDIR sensors. 2016 ,	3
864	Fiber Bragg grating-based wavelength modulation spectroscopy technique for trace gas sensing. 2016 ,	
863	Effect of CuO as a dopant in TiO2 on ammonia and hydrogen sulphide sensing at room temperature. 2016 , 90, 468-474	24
862	Optical fibre gas detections systems. 2016 ,	
861	Graphene-based composite sensors for energy applications. 2016,	3
860	Effect of laser irradiation on CO gas detecting response of reduced graphene oxide sensor. 2016 , 6, 52817-5	28 4 5
859	High efficiency room temperature detection of NO2 gas based on ultrathin metal/graphene devices. 2016 , 6, 84082-84089	9
858	Measure and control: molecular management is a key to the Sustainocene!. 2016 , 18, 5689-5692	7
857	Microfabricated electrochemical gas sensor. 2016 , 11, 798-802	5
856	Analysis of electronic properties of pseudobrookite thick films with possible application for NO gas sensing. 2016 ,	2
855	Low-Power Gas Sensing Using Single Walled Carbon Nano Tubes in Wearable Devices. 2016 , 1-1	13
854	Gas Sensors for Underground Mines and Hazardous Areas. 2016 , 161-212	7
853	Flexible polymer/multi-walled carbon nanotube composite sensor array equipped with microheater for gas sensing. 2016 ,	1
852	Investigation of Ca substitution on the gas sensing potential of LaFeO3 nanoparticles towards low concentration SO2 gas. 2016 , 45, 13547-55	46
851	Crowd-sourced air quality studies: A review of the literature & portable sensors. 2016 , 11, 23-34	53
850	Non-electronic gas sensors from electrospun mats of liquid crystal core fibres for detecting volatile organic compounds at room temperature. 2016 , 43, 1986-2001	52

849	A generalized fuzzy linguistic model for predicting component concentrations in an optical gas sensing system. 2016 , 158, 21-30	3
848	Viral-templated gold/polypyrrole nanopeapods for an ammonia gas sensor. 2016 , 27, 325502	18
847	A review of recent developments in tin dioxide composites for gas sensing application. 2016 , 44, 1-22	89
846	CO2 Gas Sensing Properties of Screen-Printed La2O3/SnO2 Thick Film. 2016 , 16, 6839-6845	11
845	Resistive Gas Sensors. 2016 , 1-12	5
844	A method for improving detection of gas concentrations using quadrotor. 2016 ,	2
843	Fabrication of an infrared emitter using a generic integration platform based on wire bonding. 2016 , 26, 115010	4
842	Label-Free Vapor Selectivity in Poly(p-Phenylene Oxide) Photonic Crystal Sensors. 2016 , 8, 31941-31950	74
841	Thin Film Growth of nbo MOFs and their Integration with Electroacoustic Devices. 2016 , 26, 1699-1707	42
840	Nanodrfite in Chemo- und Biosensoren: aktueller Stand und Fahrplan ffldie Zukunft. 2016 , 128, 1286-1302	8
839	Nanowire Chemical/Biological Sensors: Status and a Roadmap for the Future. 2016 , 55, 1266-81	196
838	High temperature Ag+Ealumina in situ sensor for sulfur-containing gases. 2016 , 20, 1345-1354	2
837	Carbon nano materials as gas sensors. 2016 , 3, 2483-2492	22
836	An accurate cost effective DFT approach to study the sensing behaviour of polypyrrole towards nitrate ions in gas and aqueous phases. 2016 , 18, 19236-47	40
835	Open-path measurement of ozone and methane gases using quartz-enhanced photoacoustic spectroscopy. 2016 , 49, 469-476	3
834	Detection of hazardous volatile organic compounds (VOCs) by metal oxide nanostructures-based gas sensors: A review. 2016 , 42, 15119-15141	580
833	. 2016 , 16, 235-242	26
832	All-fiber tunable ring laser source near 2 th designed for CO2 sensing. 2016 , 235, 547-553	25

831	Microfabricated test structures for thermal gas sensor. 2016 ,	2
830	Electrical gas sensors based on structured organic ultra-thin films and nanocrystals on solid state substrates. 2016 , 1, 383-393	39
829	Effect of RF power on the structural, optical and gas sensing properties of RF-sputtered Al doped ZnO thin films. 2016 , 6, 9779-9788	64
828	Nickel antimony oxide (NiSb2O6): A fascinating nanostructured material for gas sensing application. 2016 , 646, 41-46	20
827	Self-heating in pulsed mode for signal quality improvement: Application to carbon nanostructures-based sensors. 2016 , 226, 254-265	17
826	MOF-Based Membrane Encapsulated ZnO Nanowires for Enhanced Gas Sensor Selectivity. 2016 , 8, 8323-8	268
825	Development of a printed sensor for volatile organic compound detection at ﴿﴿﴿﴿﴿﴿﴾﴾ ﴾ []// ()/	3
824	Food quality and safety monitoring using gas sensor array in intelligent packaging. 2016 , 36, 169-183	71
823	Microsensing Networks for Sustainable Cities: Pollution as a Key Driving Factor. 2016 , 1-27	1
822	Lewis Acid B ase Adducts for Improving the Selectivity and Sensitivity of Graphene Based Gas Sensors. 2016 , 1, 451-459	23
821	A novel spectrum analysis technique for odor sensing in optical electronic nose. 2016 , 222, 769-779	16
820	Catalyst-decorated hollow WO3 nanotubes using layer-by-layer self-assembly on polymeric nanofiber templates and their application in exhaled breath sensor. 2016 , 223, 301-310	78
819	A NEMS-Array Control IC for Subattogram Mass Sensing Applications in 28 nm CMOS Technology. 2016 , 51, 249-258	5
818	Synthesis of fast response, highly sensitive and selective Ni:ZnO based NO2 sensor. 2016 , 286, 36-47	85
817	Enhanced NO 2 gas sensing performance of bare and Pd-loaded SnO 2 thick film sensors under UV-light irradiation at room temperature. 2016 , 223, 429-439	137
816	Wireless Gas Leak Detection and Localization. 2016 , 12, 768-779	80
815	Pristine ZnO and SnO2 films for sensing of volatile organic compounds. 2017 , 23, 3027-3031	7
814	Renewable energy scenario and environmental aspects of soil emission measurements. 2017 , 68, 1157-1173	12

813	Molecularly imprinted electropolymerization on a metal-coated optical fiber for gas sensing applications. 2017 , 244, 1145-1151	41
812	Semiconductor plasmonic gas sensor using on-chip infrared spectroscopy. 2017 , 123, 1	19
811	Custom designed metal anchored SnO2 sensor for H2 detection. 2017 , 42, 4597-4609	35
810	Investigation of the laser acetylene sensor based on two-dimensional photonic crystal. 2017 , 256, 51-58	3
809	Layer-by-Layer Self-assembly of CoO Nanorod-Decorated MoS Nanosheet-Based Nanocomposite toward High-Performance Ammonia Detection. 2017 , 9, 6462-6471	183
808	Methane gas sensing properties of Pd-doped SnO 2 /reduced graphene oxide synthesized by a facile hydrothermal route. 2017 , 89, 161-169	77
807	Systematic study of inorganic functionalization of ZnO nanorods by Sol-Gel method. 2017 , 786, 012022	2
806	Liquid crystals in micron-scale droplets, shells and fibers. 2017 , 29, 133003	96
805	Ethylene detection using TiO2WO3 composite sensor for fruit ripening applications. 2017, 37, 147-154	15
804	Laser Calorimetry Spectroscopy for ppm-level Dissolved Gas Detection and Analysis. 2017 , 7, 42917	9
803	A photonic microsystem for hydrocarbon gas analysis by mid-infrared absorption spectroscopy. 2017 ,	
802	Environmental mid-infrared gas sensing using MEMS FTIR spectrometer. 2017 ,	2
801	Efficient exfoliation of g-C3N4 and NO2 sensing behavior of graphene/g-C3N4 nanocomposite. 2017 , 248, 940-948	44
800	Investigation of Nanostructured SnO2 Synthesized with Polyol Technique for CO Gas Sensor Applications. 2017 , 170, 60-64	26
799	Miniaturised MOX based sensors for pollutant and explosive gases detection. 2017 , 249, 647-655	12
798	Gas Phase Sensing of Alcohols by Metal Organic Framework-Polymer Composite Materials. 2017 , 9, 24926-24	935)
797	The Effect of Ar/O and HO Plasma Treatment of SnO Nanoparticles and Nanowires on Carbon Monoxide and Benzene Detection. 2017 , 9, 15733-15743	20
796	Photocatalytic air-purification: a low-cost, real-time gas detection method. 2017 , 9, 170-175	

795	Information Quality Ratio as a novel metric for mother wavelet selection. 2017 , 160, 59-71	25
794	Multifunctional sustainable materials: the role of carbon existing protein in the enhanced gas and UV sensing performances of ZnO-based biofilms. 2017 , 5, 5239-5247	25
793	CMOS compatible nanoscale thermal conductivity detector for gas sensing applications. 2017, 261, 9-13	2
792	Stretchable electronic devices using graphene and its hybrid nanostructures. 2017 , 3, 71-91	26
791	Tunable Diode Laser Absorption Spectroscopy- Based Detection of Propane for Explosion Early Warning by Using a Vertical Cavity Surface Enhanced Laser Source and Principle Component Analysis Approach. 2017 , 17, 4975-4982	11
790	Ultra-sensitive and selective NH room temperature gas sensing induced by manganese-doped titanium dioxide nanoparticles. 2017 , 504, 371-386	36
789	Self-heating effects on the toluene sensing of Pt-functionalized SnO2InO corellhell nanowires. 2017 , 251, 781-794	35
788	NiO/SnO 2 hybrid nanowires for enhanced NO 2 gas sensing. 2017 , 43, S541-S546	16
787	Clad modified optical fiber gas sensors based on nanocrystalline nickel oxide embedded coatings. 2017 , 36, 139-143	18
786	NDSRT: An Efficient Virtual Multi-Sensor Response Transformation for Classification of Gases/Odors. 2017 , 17, 3416-3421	9
7 ⁸ 5	Adsorption of gas molecules on Ga-doped graphene and effect of applied electric field: A DFT study. 2017 , 411, 11-17	94
784	Possibility of gas sensor based on C20 molecular devices. 2017 , 381, 1825-1830	8
783	Influence of the concentration of reducing agent on gold nanoparticles decorated reduced graphene oxide and its ammonia sensing performance. 2017 , 123, 1	9
782	. 2017,	2
781	Miniature Low-Cost Carbon Dioxide Sensor for Mobile Devices. 2017 , 17, 2889-2895	24
780	Temperature & light modulation to enhance the selectivity of Pt-modified zinc oxide gas sensor. 2017 , 247, 903-915	30
779	Gas sensors based on membrane diffusion for environmental monitoring. 2017 , 243, 566-578	32
778	Rapid Measurement of Room Temperature Ionic Liquid Electrochemical Gas Sensor using Transient Double Potential Amperometry. 2017 , 242, 658-666	29

777	Simulation and Fabrication of SAW-Based Gas Sensor with Modified Surface State of Active Layer and Electrode Orientation for Enhanced H2 Gas Sensing. 2017 , 46, 679-686	8
776	SENose: An under U\$50 electronic nose for the monitoring of soil gas emissions. 2017 , 133, 15-21	12
775	Nitric oxide sensing properties of a surface acoustic wave sensor with copper-ion-doped polyaniline/tungsten oxide nanocomposite film. 2017 , 243, 1075-1082	13
774	Reusable macroporous photonic crystal-based ethanol vapor detectors by doctor blade coating. 2017 , 487, 360-369	27
773	Gas-Permeable Membrane-Based Conductivity Probe Capable of In Situ Real-Time Monitoring of Ammonia in Aquatic Environments. 2017 , 51, 13265-13273	17
772	A widely tunable, near-infrared laser-based trace gas sensor for hydrogen cyanide (HCN) detection in exhaled breath. 2017 , 123, 1	14
771	Carbon monoxide detection with CMOS integrated thin film SnO 2 gas sensor. 2017 , 4, 7128-7131	11
770	Synthesis of ZnO thin film by sol-gel spin coating technique for H 2 S gas sensing application. 2017 , 527, 7-15	40
769	Surface properties of sulphur based surface modified n-Cu2O thin films for enhanced liquefied petroleum gas sensing. 2017 , 50, 485304	2
768	Investigation and characterization of ZnO/CdS nanocomposites using chemical precipitation method for gas sensing applications. 2017 , 28, 18113-18120	7
767	Transfer of CVD-grown graphene for room temperature gas sensors. 2017 , 28, 414001	24
766	Effect of substrate material on sensing behaviour of SAW based gas sensors. 2017,	
765	The Miniaturization of an Optical Absorption Spectrometer for Smart Sensing of Natural Gas. 2017 , 64, 9666-9674	14
764	Preparation and gas sensing properties of nanocomposite polymers on micro-Interdigitated electrodes for detection of volatile organic compounds at room temperature. 2017 , 252, 1098-1104	6
763	Gas sensing properties of (MoO3)0.4(V2O5)0.6 microsheets: Effect of Pd sensitization. 2017, 144, 135-144	6
762	Evaluation of an electronic nose for odorant and process monitoring of alkaline-stabilized biosolids production. 2017 , 186, 151-159	19
761	Gas sensing behaviour of cerium oxide and magnesium aluminate composites. 2017 , 40, 667-682	7
760	Porous Au/ZnO nanoparticles synthesised through a metal organic framework (MOF) route for enhanced acetone gas-sensing. 2017 , 7, 38444-38451	41

759	BaTiO3 nanostructures for H2S gas sensor: Influence of band-gap, size and shape on sensing mechanism. 2017 , 146, 455-461	18
75 ⁸	Fabrication of Chitosan-Polyethylene Oxide Polymeric Thin Film Using Electrochemical Deposition for Detection of Volatile Organic Compounds. 2017 , 744, 359-363	
757	Effect of Schottky barrier height on hydrogen gas sensitivity of metal/TiO2 nanoplates. 2017 , 42, 22082-2208	39 19
756	Stanene based gas sensors: effect of spin-orbit coupling. 2017 , 19, 31325-31334	37
755	High figure of merit hydrogen sensor using multipolar plasmon resonance modes. 2017 , 252, 385-390	7
754	Assessment of environmental spectral ellipsometry for characterising fluid-induced colour changes in natural photonic structures. 2017 , 4, 4987-4997	4
753	Ultra-low-power chemiresistive microsensor array in a back-end CMOS process towards selective volatile compounds detection and IoT applications. 2017 ,	7
75 ²	NOxSensing Characteristics of Semiconductor Gas Sensors under Controlled Oxygen Activity Conditions Using a Proton-Conducting Electrolyte. 2017 , 164, B397-B402	11
751	MODELLING of a two-dimensional photonic crystal with line defect for a laser gas sensor application. 2017 , 25, 80-88	3
750	A low power ammonia sensor node embedded with a light weight non-linear analytics. 2017 , 263, 357-362	6
749	Fabrication of chemiresistive gas sensors based on multistep reduced graphene oxide for low parts per million monitoring of sulfur dioxide at room temperature. 2017 , 242, 461-468	64
748	Gas modulating effect in room temperature ammonia sensing. 2017 , 242, 404-411	17
747	Enhanced and selective acetone sensing properties of SnO2-MWCNT nanocomposites: Promising materials for diabetes sensor. 2017 , 115, 158-164	63
746	Ion-in-Conjugation: Squaraine as an Ultrasensitive Ammonia Sensor Material. 2017 , 13, 1602190	27
745	Growth of single wall carbon nanotubes using PECVD technique: An efficient chemiresistor gas sensor. 2017 , 87, 261-265	14
744	Xylene gas sensor based on Au-loaded WO3[H2O nanocubes with enhanced sensing performance. 2017 , 238, 364-373	93
743	Hybrid layer-by-layer (LbL) films of polyaniline, graphene oxide and zinc oxide to detect ammonia. 2017 , 238, 795-801	61
742	Wide bandwidth absorption in the MWIR region using a thin and simple metamaterial absorber. 2017 ,	Ο

741 A new sensor system for measuring environmental parameters of switchgear. **2017**,

74°	. 2017,		15
739	A single wire large-area filament emitter for spectroscopic ethanol gas sensing fabricated using a wire bonding tool. 2017 ,		3
738	CVD graphene materials integration: Pressure and argon sensor. 2017,		O
737	Gas detection using absorption properties of liquid crystals. 2017, 25, 32532		3
736	Direct fabrication and characterization of high-aspect-ratio plasmonic nanogratings using tapered-sidewall molds. 2017 , 7, 633		15
735	Highly efficient and angle-tolerant mid-infrared filter based on a cascaded etalon resonator. 2017 , 25, 16083-16091		7
734	Nanostructured Polypyrrole-Based Ammonia and Volatile Organic Compound Sensors. <i>Sensors</i> , 2017 , 17,	3.8	67
733	Electrodes for Semiconductor Gas Sensors. <i>Sensors</i> , 2017 , 17,	3.8	42
732	SAW Sensors for Chemical Vapors and Gases. <i>Sensors</i> , 2017 , 17,	3.8	122
731	Highly Sensitive Sputtered ZnO:Ga Thin Films Integrated by a Simple Stencil Mask Process on Microsensor Platforms for Sub-ppm Acetaldehyde Detection. <i>Sensors</i> , 2017 , 17,	3.8	5
730	Novel Gas Sensor Arrays Based on High-Q SAM-Modified Piezotransduced Single-Crystal Silicon Bulk Acoustic Resonators. <i>Sensors</i> , 2017 , 17,	3.8	4
729	An Investigation into Spike-Based Neuromorphic Approaches for Artificial Olfactory Systems. <i>Sensors</i> , 2017 , 17,	3.8	19
728	Two-Dimensional Zinc Oxide Nanostructures for Gas Sensor Applications. 2017 , 5, 17		93
727	Coactive application of environmental sensors for detection and assessment of spontaneous combustion in underground coal mines. 2017 ,		2
726	HARSH ENVIRONMENT COMPATIBLE PLASMONICS BASED CHEMICAL SENSORS. 2017,		
725	Quantum Confinement in High Electron Mobility Transistors. 2017,		O
724	Gas sensing properties of MWCNT layers electrochemically decorated with Au and Pd nanoparticles. 2017 , 8, 592-603		13

723	Gas Measurement Using Static Fourier Transform Infrared Spectrometers. Sensors, 2017, 17,	3.8	11
722	Design and Development of a Salbutamol Intake Detector for Low Respiratory Treatment. 2017 , 226, 012142		
721	Electronic metal 0 rganic framework sensors. 2018 , 5, 979-998		90
720	FeO-decorated graphene assembled porous carbon nanocomposite for ammonia sensing: study using an optical fiber Fabry-Perot interferometer. 2018 , 143, 1890-1898		14
719	Optical properties of Codium tomentosum seaweed like Bi2O3 nanostructure and its gas-sensing activity. 2018 , 24, 1827-1839		5
718	Toward Adequate Operation of Amorphous Oxide Thin-Film Transistors for Low-Concentration Gas Detection. 2018 , 10, 10185-10193		34
717	An electrical circuit model for additive-modified SnO2 ceramics. 2018 , 5, 056303		
716	Exploiting rotational motion in molecular crystals. 2018 , 20, 5872-5883		25
715	Room Temperature Gas Sensing Properties of Sn-Substituted Nickel Ferrite (NiFe2O4) Thin Film Sensors Prepared by Chemical Co-Precipitation Method. 2018 , 47, 3403-3408		7
714	A New Concentration Detection System for SF6/N2 Mixture Gas in Extra/Ultra High Voltage Power Transmission Systems. 2018 , 18, 3806-3812		8
713	Cyclic-Voltammetry-Based Solid-State Gas Sensor for Methane and Other VOC Detection. 2018 , 90, 6102	-6108	3 23
712	Self-powered ammonia nanosensor based on the integration of the gas sensor and triboelectric nanogenerator. 2018 , 49, 31-39		101
711	Enhanced triethylamine sensing properties by fabricating Au@SnO2/Fe2O3 core-shell nanoneedles directly on alumina tubes. 2018 , 262, 70-78		68
710	Plasmonic nose: integrating the MOF-enabled molecular preconcentration effect with a plasmonic array for recognition of molecular-level volatile organic compounds. 2018 , 54, 2546-2549		65
709	Flexible single walled nanotube based chemical sensor for 2,4-dinitrotoluene sensing. 2018 , 29, 6200-620)5	10
708	A study on gaseous extinguishing agent sensing with a simple measurement method. 2018 , 29, 035105		7
707	Detection of gas molecules on single Mn adatom adsorbed graphyne: a DFT-D study. 2018 , 51, 065109		34
706	Liquid crystal/polymer fiber mats as sensitive chemical sensors. 2018 , 267, 490-495		23

705	The optical response of ZnO nanorods induced by oxygen chemisorption and desorption. 2018 , 259, 900-907	16
704	Optical graphene quantum dots gas sensors: Theoretical study. 2018 , 114, 321-330	17
703	Self-heating oxidized suspended Pt nanowire for high performance hydrogen sensor. 2018 , 260, 236-242	15
702	Pore size dependent gas-sensing selectivity based on ZnO@ZIF nanorod arrays. 2018 , 258, 1099-1106	94
701	Optical fiber evanescent-wave sensing technology of hydrogen sulfide gas concentration in oil and gas fields. 2018 , 157, 1094-1100	10
700	Effect of solution concentration on physicochemical and NO2 gas sensing properties of sprayed MoO3 nanobelts. 2018 , 648, 50-61	12
699	Adsorption of gas molecules on a manganese phthalocyanine molecular device and its possibility as a gas sensor. 2018 , 20, 2048-2056	26
698	Semiconductor metal oxide gas sensors: A review. 2018 , 229, 206-217	914
697	Applications of low-cost sensing technologies for air quality monitoring and exposure assessment: How far have they gone?. 2018 , 116, 286-299	268
696	Fabrication of a novel carbon nanotube & graphene based device for gas detection. 2018 , 93, 065801	1
695	A Gradient Grating Period Guided-Mode Resonance Spectrometer. 2018 , 10, 1-9	9
694	Transfer-Free In Situ CCVD Grown Nanocrystalline Graphene for Sub-PPMV Ammonia Detection. 2018 , 7, Q3108-Q3113	4
693	Effect of Sm doping and annealing on magnetic and structural properties of sputter deposited SnO2 thin films. 2018 , 5, 064004	2
692	Improved Sensitivity with Low Limit of Detection of a Hydrogen Gas Sensor Based on rGO-Loaded Ni-Doped ZnO Nanostructures. 2018 , 10, 11116-11124	92
691	Defected and Functionalized Germanene-based Nanosensors under Sulfur Comprising Gas Exposure. 2018 , 3, 867-874	33
690	Towards low-power electronics: self-recovering and flexible gas sensors. 2018 , 6, 7107-7113	20
689	Development of novel complementary metal-oxide semiconductor-based colorimetric sensors for rapid detection of industrially important gases. 2018 , 265, 600-608	11
688	Zinc oxide nanoparticle incorporated graphene oxide as sensing coating for interferometric optical microfiber for ammonia gas detection. 2018 , 254, 239-247	84

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687	Asymmetric enhanced surface interdigitated electrode capacitor with two out-of-plane electrodes. 2018 , 254, 588-596	9
686	Zeolite A coated Zn1&CuXO MOS sensors for NO gas detection. 2018 , 29, 1356-1368	9
685	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. 2018 , 255, 843-853	8
684	Fe-doped graphene nanosheet as an adsorption platform of harmful gas molecules (CO, CO2, SO2 and H2S), and the co-adsorption in O2 environments. 2018 , 427, 227-236	121
683	Miniaturized Planar Room Temperature Ionic Liquid Electrochemical Gas Sensor for Rapid Multiple Gas Pollutants Monitoring. 2018 , 255, 638-646	52
682	Surface functionalized nanocellulose as a veritable inclusionary material in contemporary bioinspired applications: A review. 2018 , 135, 46065	48
681	Pt Nanoparticles Sensitized Ordered Mesoporous WO3 Semiconductor: Gas Sensing Performance and Mechanism Study. 2018 , 28, 1705268	160
680	An evaluation of an olfactory sensor and recognition system using metal-oxide semiconductor gas sensor with variable heater controller. 2018 , 23, 73-79	1
679	Polymer coated silicon microring device for the detection of sub-ppm volatile organic compounds. 2018 , 257, 136-142	13
678	Detection of multiple chemicals based on external cavity quantum cascade laser spectroscopy. 2018 , 191, 532-538	16
677	Humidity and CO2 gas sensing properties of double-layer graphene. 2018, 127, 576-587	43
676	Exploiting Synergies in Catalysis and Gas Sensing using Noble Metal-Loaded Oxide Composites. 2018 , 10, 864-880	39
675	Study on the gas-sensitive properties for formaldehyde based on SnO2-ZnO heterostructure in UV excitation. 2018 , 254, 863-871	36
674	Efficient hydrogen sensor based on Ni-doped ZnO nanostructures by RF sputtering. 2018 , 255, 588-597	72
673	Heavily tin-doped indium oxide nano-pyramids as high-performance gas sensor. 2018 , 8, 115316	1
672	Suspended Graphene Membranes for Strain Sensor Applications. 2018,	
671	An IoT-Based Smart Solution for Preventing Domestic CO and LPG Gas Accidents. 2018,	1
670	Molybdenum carbide chemical sensors with ultrahigh signal-to-noise ratios and ambient stability. 2018 , 6, 23408-23416	21

669	ReviewBystem-on-Chip SMO Gas Sensor Integration in Advanced CMOS Technology. 2018 , 165, B862-B879	14
668	Fabrication and Optimization of Graphene Membrane for Gas Sensor Applications. 2018,	
667	Recent Advances and Techniques in the Hazardous Gases Detection. 2018, 1-19	1
666	Edge-Functionalized Graphene Nanoribbon Chemical Sensor: Comparison with Carbon Nanotube and Graphene. 2018 , 10, 42905-42914	28
665	Indium Nitrite (InN)-Based Ultrasensitive and Selective Ammonia Sensor Using an External Silicone Oil Filter for Medical Application. <i>Sensors</i> , 2018 , 18,	5
664	Light-Enhanced Vanadium Pentoxide (V2O5) Thin Films for Gas Sensor Applications. 2018 , 47, 7331-7342	8
663	Emergent Electrical Properties of Ensembles of 1D Nanostructures and Their Impact on Room Temperature Electrical Sensing of Ammonium Nitrate Vapor. 2018 , 3, 2367-2374	10
662	Research on a Mixed Gas Recognition and Concentration Detection Algorithm Based on a Metal Oxide Semiconductor Olfactory System Sensor Array. <i>Sensors</i> , 2018 , 18,	18
661	Carbon Monoxide Sensing Technologies for Next-Generation Cyber-Physical Systems. <i>Sensors</i> , 2018 , 18,	38
660	Fabrication of three-dimensional zinc oxide nanoflowers for high-sensitivity fiber-optic ammonia gas sensors. 2018 , 57, 7924-7930	18
659	Ag doped SnO2 sensor for ethanol with high sensitivity at room temperature. 2018,	1
658	Heptazine based organic framework as a chemiresistive sensor for ammonia detection at room temperature. 2018 , 6, 18389-18395	34
657	Application of a customizable sensor platform to detection of atmospheric gases by UAS. 2018,	4
656	Growth and properties of ZnO nanorods by RF-sputtering for detection of toxic gases 2018 , 8, 32038-32043	20
655	Modeling, Simulation, and Implementation of Fast Settling Switched PI Controller for MOX Integrated Pt Microheater. 2018 , 18, 8549-8557	2
654	A Study on the Impact of Poly(3-hexylthiophene) Chain Length and Other Applied Side-Chains on the NOISensing Properties of Conducting Graft Copolymers. <i>Sensors</i> , 2018 , 18,	10
653	Using an E-nose machine for detection the adulteration of margarine in cow ghee. 2018 , 41, e12806	15
652	NO2 gas sensing properties of sprayed composite porous MoO3-V2O5 thin films. 2018 , 216, 294-304	21

651	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. 2018 , 236, 36-43		10
650	Filament Assisted Chemical Vapor Deposited organosilicate as chemical layer for nanometric hydrocarbon gas sensors. 2018 , 271, 271-279		2
649	Investigating NO2 gas sensing behavior of flower-like MoS2 and rGO based nano-composite. 2018,		5
648	Key processing of porous and fibrous LaCoO3 nanostructures for successful CO and propane sensing. 2018 , 44, 15402-15410		18
647	Controlling spin off state by gas molecules adsorption on metal-phthalocyanine molecular junctions and its possibility of gas sensor. 2018 , 382, 2666-2672		7
646	Gas sensing behavior of metal-phthalocyanines: Effects of electronic structure on sensitivity. 2018 , 513, 23-34		21
645	Graphene and Graphene-Based Materials in Biomedical Science. 2018 , 35, 1800105		14
644	An Electronic Architecture for Multipurpose Artificial Noses. 2018 , 2018, 1-9		11
643	Graphene-Based Portable, Flexible, and Wearable Sensing Platforms: An Emerging Trend for Health Care and Biomedical Surveillance. 2018 , 307-338		6
642	Potential of Graphene for Miniature Sensors and Conducting Devices for Biomedical Applications. 2018 ,		
641	Label-free vapor selectivity by polymer-inorganic composite photonic crystals sensors. 2018,		4
640	Development of scalable planar MEMS technology for low power operated ethanol sensor. 2018 , 28, 105020		2
639	Plasmonic enhanced CMOS non-dispersive infrared gas sensor for acetone and ammonia detection. 2018 ,		7
638	Synthesis and applications of ZnO nanowire: A review. 2018 ,		12
637	Detection of Ultralow Concentration NO in Complex Environment Using Epitaxial Graphene Sensors. 2018 , 3, 1666-1674		34
636	Recent advances of conjugated polymer (CP) nanocomposite-based chemical sensors and their applications in food spoilage detection: A comprehensive review. 2018 , 273, 1113-1138		53
635	A Survey on Sensor Calibration in Air Pollution Monitoring Deployments. 2018 , 5, 4857-4870		98
634	Analysis of the Sensing Properties of a Highly Stable and Reproducible Ozone Gas Sensor Based on Amorphous In-Ga-Zn-O Thin Film. <i>Sensors</i> , 2018 , 18,	3.8	11

633	A Prototype Sensor for In Situ Sensing of Fine Particulate Matter and Volatile Organic Compounds. <i>Sensors</i> , 2018 , 18,	3.8	6
632	Photo-Induced Room-Temperature Gas Sensing with a-IGZO Based Thin-Film Transistors Fabricated on Flexible Plastic Foil. <i>Sensors</i> , 2018 , 18,	3.8	37
631	Crowdsensing in Smart Cities: Overview, Platforms, and Environment Sensing Issues. <i>Sensors</i> , 2018 , 18,	3.8	57
630	Sensitive and Selective NHIMonitoring at Room Temperature Using ZnO Ceramic Nanofibers Decorated with Poly(styrene sulfonate). <i>Sensors</i> , 2018 , 18,	3.8	32
629	Liquefied Petroleum Gas Monitoring System Based on Polystyrene Coated Long Period Grating. <i>Sensors</i> , 2018 , 18,	3.8	12
628	A Linear-Quadratic Model for the Quantification of a Mixture of Two Diluted Gases with a Single Metal Oxide Sensor. <i>Sensors</i> , 2018 , 18,	3.8	12
627	On Sensing Nitro-Group Containing Compounds Using Thin Planar Arrays of Titanium Dioxide Nanowires. 2018 , 18, 6927-6936		2
626	Performance evaluation of normalized difference based classifier for efficient discrimination of volatile organic compounds. 2018 , 5, 095901		3
625	Low temperature carbon monoxide gas sensor based on Ag-Co3O4 thick film nanocomposite. 2018 , 233, 74-77		17
624	A Novel Integrated Smart System for Indoor Air Monitoring and Gas Recognition. 2018,		10
623	Measuring Vapor and Liquid Concentrations for Binary and Ternary Systems in a Microbubble Distillation Unit via Gas Sensors. 2018 , 6, 31		2
622	Improved Methanol Detection Using Carbon Nanotube-Coated Carbon Fibers Integrated with a Split-Ring Resonator-Based Microwave Sensor. 2018 , 1, 4746-4755		21
621	Laboratory Evaluation and Calibration of Low-Cost Sensors for Air Quality Measurement. 2018,		3
620	Circuit arrangement to suppress crosstalk in chemo-resistive sensor arrays. 2018, 12, 1039-1046		2
619	Impact of surfactants on electrical conduction and preferred orientation of spray-pyrolysed nanostructured SnO2 thin films for LPG and ammonia sensing. 2018 , 29, 13087-13102		3
618	Mechanism of room temperature oxygen sensor based on nanocrystalline TiO2film. 2018 , 995, 012066		
617	Two-dimensional materials for gas sensors: from first discovery to future possibilities. 2018 , 6, 205-230)	14
616	Chemical sensors based on N-substituted polyaniline derivatives: reactivity and adsorption studies via electronic structure calculations. 2018 , 24, 157		14

615	Alcohol Detection. 2018 , 3, 6230-6236	23
614	A Bifacial SnO2 Thin-Film Ethanol Gas Sensor. 2018 , 39, 1223-1225	7
613	NO and NH Sensing Characteristics of Inkjet Printing Graphene Gas Sensors. <i>Sensors</i> , 2019 , 19, 3.8	8
612	Room temperature chemiresistive gas sensors: challenges and strategies mini review. 2019 , 30, 15825-1584	7 30
611	Facile synthesis and controlling factors of highly uniform nanostructured MoS2 thin films as buffer layers in gas sensors. 2019 , 125, 1	2
610	Chemoresistive materials for electronic nose: Progress, perspectives, and challenges. 2019 , 1, 289-316	71
609	A Simulation Study of an Optimized Impedance Spectroscopy Approach for Gas Sensors. 2019,	2
608	Understanding microfluidic-based gas detectors: A numerical model to investigate fundamental sensor operation, influencing phenomena and optimum geometries. 2019 , 300, 126904	5
607	Enhanced triethylamine sensing performance of Fe2O3 nanoparticle/ZnO nanorod heterostructures. 2019 , 298, 126917	44
606	Enhanced methane sensing performance of SnO2 nanoflowers based sensors decorated with Au nanoparticles. 2019 , 237, 121864	23
605	Gas sensing and magnetic studies of Zn-doped CeO2 nanoparticles. 2019,	
604	Fabrication of a quartz crystal microbalance sensor based on graphene oxide/TiO2 composite for the detection of chemical vapors at room temperature. 2019 , 493, 250-260	14
603	Kinetics Analysis of Multichannel Hydrogen Reactions on Plasmonic-Based AuladC Thin-Film Nanocomposites. 2019 , 123, 17925-17932	2
602	High sensitivity and selectivity chlorine gas sensors based on 3D open porous SnO2 synthesized by solid-state method. 2019 , 45, 20566-20574	17
601	A visible-light activated gas sensor based on perylenediimide-sensitized SnO2 for NO2 detection at room temperature. 2019 , 578, 123621	21
600	rGO decorated W doped BiVO4 novel material for sensing detection of trimethylamine. 2019 , 298, 126749	24
599	Highly sensitive room temperature hydrogen sensor based on undoped SnO2 thin films. 2019 , 95, 105928	4
598	Facile Synthesis of Nano-Diced SnO2InO Composite by Chemical Route for Gas Sensor Application. 2019 , 48, 6269-6279	11

597	Ag decorated WO3 sensor for the detection of sub-ppm level NO2 concentration in air. 2019 , 103, 104	613	25
596	Macroporous Silicon Filters, a Versatile Platform for NDIR Spectroscopic Gas Sensing in the MIR. 2019 , 166, B1010-B1015		7
595	Thermo-Electro-Mechanical Simulation of Semiconductor Metal Oxide Gas Sensors. 2019 , 12,		7
594	A self-powered gas sensor based on PDMS/Ppy triboelectric-gas-sensing arrays for the real-time monitoring of automotive exhaust gas at room temperature. 2019 , 62, 1433-1444		29
593	Development of instrumentation setup for discrimination of analytes using principal component analysis. 2019 , 1, 025014		
592	Gas sensors based on pearl-necklace-shaped In2O3 nanotubes with highly enhanced formaldehyde-sensing performance. 2019 , 30, 18362-18373		7
591	Microdevices for Low-Level Acetone Gas Sensing Using Tungsten Trioxides. 2019 , 1-8		1
590	On the Use of MOFs and ALD Layers as Nanomembranes for the Enhancement of Gas Sensors Selectivity. 2019 , 9,		7
589	On-Chip Non-Dispersive Infrared CO Sensor Based On an Integrating Cylinder. Sensors, 2019 , 19,	3.8	13
588	Effect of annealing on humidity sensing properties of Sm-doped SnO2 thin films. 2019 , 8, 5862-5866		3
587	A Nondispersive Thermopile Device With an Innovative Method to Detect Fusarium Spores. 2019 , 19, 8657-8667		4
586	Modified Sn-doped LaCrO3 nanostructures: focus on their characterization and applications as ethanol sensor at a lower temperature. 2019 , 9, 231-245		9
585	Accuracy Bounds and Measurements of a Contactless Permittivity Sensor for Gases Using Synchronized Low-Cost mm-Wave Frequency Modulated Continuous Wave Radar Transceivers. <i>Sensors</i> , 2019 , 19,	3.8	2
5 ⁸ 4	Review on Smart Gas Sensing Technology. <i>Sensors</i> , 2019 , 19,	3.8	94
583	Cementing Mesoporous ZnO with Silica for Controllable and Switchable Gas Sensing Selectivity. 2019 , 31, 8112-8120		31
582	Growth and characterization of undoped and aluminium doped zinc oxide thin films for SO2 gas sensing below threshold value limit. 2019 , 496, 143724		14
581	Quality Monitoring and Analysis of Xinjiang KorlalFragrant Pear in Cold Chain Logistics and Home Storage with Multi-Sensor Technology. 2019 , 9, 3895		5
580	Enhanced Living Environments. 2019 ,		3

579	Fire Sensing Technologies: A Review. 2019 , 19, 3191-3202	49
578	Effect of various flow rate on current fluctuations of amperometric gas sensors. 2019 , 283, 321-328	9
577	NO gas sensing performance enhancement based on reduced graphene oxide decorated VO thin films. 2019 , 30, 224001	15
576	Healthcare Sensing and Monitoring. 2019 , 226-262	13
575	Metal oxide nanostructures for sensor applications. 2019 , 34, 043001	106
574	Functionalized Graphene Nanocomposite in Gas Sensing. 2019 , 295-322	4
573	Characterization and NO2 gas sensing performance of CdO:In2O3 polycrystalline thin films prepared by spray pyrolysis technique. 2019 , 1, 1	4
572	An ultra-sensitive gas nanosensor based on asymmetric dual-gate graphene nanoribbon field-effect transistor: proposal and investigation. 2019 , 18, 846-855	19
571	Preparation and Characterization of Developed CuSnO Nanocomposite and Its Promising Methane Gas Sensing Properties. <i>Sensors</i> , 2019 , 19,	15
570	Ammonia gas sensors: A comprehensive review. 2019 , 204, 713-730	150
569	Room temperature resistive gas sensor based on ZIF-8/MWCNT/AgNPs nanocomposite for VOCs detection. 2019 , 30, 12339-12350	28
568	Facile synthesis of polyaniline-silver nanocomposite through chemical route for gas sensing. 2019 ,	1
567	Graphene Decorated with Silver Nanoparticles as a Low-Temperature Methane Gas Sensor. 2019 , 11, 21795-21806	42
566	Metal oxide nanoparticles and their applications in nanotechnology. 2019 , 1, 1	200
565	Rationalization in the ethanol-gas recognition mechanism of Al-doped ZnO nanoparticulate thin film defined on a highly integrated micro hot plate. 2019 , 6, 085052	1
564	Electron transport in CO2 adsorbed ZnO nanowire: DFT study. 2019 , 729, 17-23	14
563	Gas sensing properties of buckled bismuthene predicted by first-principles calculations. 2019 , 21, 11455-1146	6323
562	Methodology for estimating potential explosion hazard of hydrocarbon with hydrogen mixtures without identifying gas composition. 2019 , 293, 273-280	7

561	Modeling and Analysis of the Noise Performance of the Capacitive Sensing Circuit with a Differential Transformer. 2019 , 10,	4
560	Towards Integrated Mid-Infrared Gas Sensors. <i>Sensors</i> , 2019 , 19, 3.8	80
559	MOF-SMO hybrids as a H2S sensor with superior sensitivity and selectivity. 2019 , 292, 32-39	32
558	Improved Planar InAs Avalanche Photodiodes With Reduced Dark Current and Increased Responsivity. 2019 , 37, 2375-2379	2
557	Fiber-Enhanced Raman Gas Spectroscopy for O-C-Labeling Experiments. 2019 , 91, 7562-7569	30
556	Baseline Drift Improvement Through Investigating a Novel Ag Doped SnO2/ZnO Nanocomposite for Selective Ethanol Detection. 2019 , 18, 412-420	2
555	Fast responding hydrogen gas sensors using platinum nanoparticle modified microchannels and ionic liquids. 2019 , 1072, 35-45	23
554	Ammonia Measurement in the IVC Microenvironment. 2019 , 58, 184-189	2
553	Development of Highly Sensitive and Selective Ethanol Sensors Based on RF Sputtered ZnO Nanoplates. 2019 , 48, 3686-3691	7
552	Gas sensing through evanescent coupling of spoof surface acoustic waves. 2019 , 288, 259-265	9
551	⊞MoO nanostructure on carbon cloth substrate for dopamine detection. 2019 , 30, 265501	13
550	Facile Preparation of a ZnO/SnO2-Based Gas Sensor Array by Inkjet Printing for Gas Analysis with BPNN. 2019 , 48, 2373-2381	11
549	Sensitivity Enhancement of Acetone Gas Sensor using Polyethylene Glycol/Multi-Walled Carbon Nanotubes Composite Sensing Film with Thermal Treatment. 2019 , 11,	6
548	Hydrophobic Tungsten-Containing MFI-Type Zeolite Films for Exhaust Gas Detection. 2019 , 11, 12914-12919	12
547	Advanced Micro- and Nano-Gas Sensor Technology: A Review. <i>Sensors</i> , 2019 , 19, 3.8	188
546	ICT. 2019 , 3, 1-19	16
545	Carbon nanotubes and its gas-sensing applications: A review. 2019 , 291, 107-143	109
544	Sensors for Measurement of Respiratory Gases in Fresh Produce Packaging and Storage. 2019,	2

543	Graphene nanoribbon: fundamental aspects in polymeric nanocomposite. 2019 , 58, 579-596	6
542	Gas Sensors Based on Nano/Microstructured Organic Field-Effect Transistors. 2019 , 15, e1805196	59
541	Advances in Computer, Communication and Control. 2019,	1
540	Photonic Crystal for Gas Sensing Application. 2019 , 459-467	O
539	A Wearable IoT Aldehyde Sensor for Pediatric Asthma Research and Management. 2019 , 287, 584-594	16
538	Highly selective and stable acetone sensor based on chemically prepared bismuth ferrite nanoparticles. 2019 , 787, 1204-1211	35
537	SLAM-GDM Implementation on Robot Operating System for Gas Source Localization. 2019 , 705, 012018	О
536	Mixed-gas CH/CO/CO detection based on linear variable optical filter and thermopile detector array. 2019 , 14, 348	5
535	Contactless Gas Mixture Measurements Using Distributed and Synchronized Low-Cost Millimeter-Wave FMCW Radar Sensors. 2019 ,	1
534	Quantitative Analysis of Gas Phase IR Spectra Based on Extreme Learning Machine Regression Model. <i>Sensors</i> , 2019 , 19,	5
533	Promising molybdenum trioxide films for optically detectable gas sensor and solar cell applications. 2019 , 6, 126451	9
532	Remote Monitoring Tool for Condition Assessment of Power Transformers. 2019,	
531	Dual Ring Resonator for Gas sensing Application. 2019,	
530	Modeling of MEMS based Surface Acoustic Wave-Gas Sensor to Obtain Enhanced Sensitivity. 2019,	
529	Enhanced Room Temperature NO Sensing Performance of RGO Nanosheets by Building RGO/SnO Nanocomposite System. <i>Sensors</i> , 2019 , 19,	4
528	Anti-Drift in Electronic Nose via Dimensionality Reduction: A Discriminative Subspace Projection Approach. 2019 , 7, 170087-170095	10
527	Facile fabrication of cobalt-doped SnO2 for gaseous ethanol detection and the catalytic mechanism of cobalt. 2019 , 21, 7528-7534	9
526	Resistive gas sensors based on metal-oxide nanowires. 2019 , 126, 241102	83

525	Gas Detection Using Portable Deep-UV Absorption Spectrophotometry: A Review. <i>Sensors</i> , 2019 , 19,	22
524	. 2019,	
523	IoT-Enabled Gas Sensors: Technologies, Applications, and Opportunities. 2019, 8, 57	33
522	A MnN4 moiety embedded graphene as a magnetic gas sensor for CO detection: A first principle study. 2019 , 473, 820-827	41
521	Highly selective and sensitive xylene gas sensor fabricated from NiO/NiCr2O4 p-p nanoparticles. 2019 , 284, 305-315	60
520	Olfactory telerobotics. A feasible solution for teleoperated localization of gas sources?. 2019 , 113, 1-9	4
519	Amorphous-Carbon/Si Heterojunction Device for Room-Temperature NH3 Sensing. 2019 , 3, 1-4	
518	Wireless Sensing Systems: A Review. 2019 , 143-192	6
517	Apple fruit quality monitoring at room temperature using solgel spin coated NiBnO2 thin film sensor. 2019 , 13, 857-863	4
516	Hybrid Cr/TiO2/ITO nanoporous film prepared by novel two step deposition for room temperature hydrogen sensing. 2019 , 553, 182-189	4
515	Exploiting sensor geometry for enhanced gas sensing properties of fluorinated carbon nanotubes under humid environment. 2019 , 281, 945-952	18
514	Low concentration ammonia sensing performance of Pd incorporated indium tin oxide. 2019 , 780, 245-255	8
513	Preparation and characterization of aqueous stable electro-spun nanofibers using polyvinyl alcohol/polyvinyl pyrrolidone/zeolite. 2019 , 17, 41-56	4
512	Environmental Nanotechnology. 2019 ,	2
511	Resistive and Capacitive Measurement of Nano-Structured Gas Sensors. 2019 , 25-62	6
510	Sensors for Automotive and Aerospace Applications. 2019,	4
509	Resilient distributed state estimation with mobile agents: overcoming Byzantine adversaries, communication losses, and intermittent measurements. 2019 , 43, 743-768	21
508	Reusable nano-BG-FET for point-of-care estimation of ammonia and urea in human urine. 2019 , 30, 145502	8

507	Liquid crystal nose, chiral case: towards increased selectivity and low detection limits. 2019 , 46, 1309-1317	11
506	The influences of temperature, humidity, and O2 on electrical properties of graphene FETs. 2019 , 285, 116-122	20
505	Understanding the sensing mechanism of carbon nanoparticles: MnO2BVP composites sensors using in situ FTIRBnline LCR meter in the detection of ethanol and methanol vapor. 2019 , 30, 3552-3562	3
504	Homonuclear B2/B3 doped carbon allotropes as a universal gas sensor: Possibility of CO oxidation and CO2 hydrogenation. 2019 , 143, 38-50	7
503	Interdigitated Electrodes and Microcantilever Devices for Sensitive Gas Sensor Using Tungsten Trioxide. 2019 , 337-344	1
502	Sensor Systems for Breathprinting: A Review of the Current Technologies for Exhaled Breath Analysis Based on a Sensor Array With the Aim of Integrating Them in a Standard and Shared Procedure. 2019 , 49-79	3
501	. 2019 , 19, 2394-2407	50
500	A simple route for the preparation of nanostructured GdCoO3 via the solution method, as well as its characterization and its response to certain gases. 2019 , 12, 475-483	12
499	Highly stretchable sensors for wearable biomedical applications. 2019 , 54, 5187-5223	34
498	Ultrasensitive gas sensor based on hollow tungsten trioxide-nickel oxide (WO-NiO) nanoflowers for fast and selective xylene detection. 2019 , 535, 458-468	63
497	Rapid detection and classification of citrus fruits infestation by Bactrocera dorsalis (Hendel) based on electronic nose. 2019 , 147, 156-165	28
496	Skin alcohol perspiration measurements using MOX sensors. 2019 , 280, 306-312	14
495	Photoluminescent properties of complex metal oxide nanopowders for gas sensing. 2019, 9, 775-780	6
494	Design of enhanced sensitivity gas sensors by using 1D defect ternary photonic band gap structures. 2020 , 94, 535-539	6
493	Recent Advances in Materials, Parameters, Performance and Technology in Ammonia Sensors: A Review. 2020 , 30, 269-290	19
492	Development of numerical analysis and methane sensing application of highly sensitive quantum crystals based on tin dioxide prepared by hydrothermal. 2020 , 31, 115-124	2
491	A synergistic combination of zinc oxide nanowires array with dual-functional zeolitic imidazolate framework-8 for hybrid nanomaterials-based gas sensors. 2020 , 180, 107552	12
490	Gas sensitivity of heterojunction TiO2NT/GO materials prepared by a simple method with low-concentration acetone. 2020 , 46, 5344-5350	4

489	A New Approach to NO2 Gas Sensing Based on Pulsed UV Light and FFT Analysis Using MOX Sensors. 2020 , 20, 397-404	3
488	The effect of electrode-oxide interfaces in gas sensor operation. 2020 , 71-132	
487	Metal-oxide semiconductors for carbon monoxide (CO) gas sensing: A review. 2020 , 18, 100483	65
486	Electronic Nose and Its Applications: A Survey. 2020 , 17, 179-209	83
485	Headspace Oxygen Concentration Measurement for Pharmaceutical Glass Bottles in Open-Path Optical Environment Using TDLAS/WMS. 2020 , 69, 5828-5842	17
484	Investigation of the electronic and structural properties of graphyne oxide toward CO, CO2 and NH3 adsorption: A DFT and MD study. 2020 , 507, 145134	22
483	Highly selective and sensitive xylene sensors based on Nb-doped NiO nanosheets. 2020 , 308, 127520	20
482	Fabrication techniques for coupling advanced nanomaterials to transducers. 2020 , 103-124	1
481	Optical devices. 2020 , 143-160	1
480	A highly selective sensor to acetylene and ethylene based on LaFeO3. 2020 , 303, 127204	14
479	Methanol and Humidity Capacitive Sensors Based on Thin Films of MOF Nanoparticles. 2020, 12, 4155-4162	60
478	Optical graphene quantum dots gas sensors: experimental study. 2020 , 7, 015608	12
477	Identification of Fresh-Chilled and Frozen-Thawed Chicken Meat and Estimation of their Shelf Life Using an E-Nose Machine Coupled Fuzzy KNN. 2020 , 13, 678-689	15
476	Adsorption of toxic gas molecules on the pre-oxidized Cu2Si nanosheet 🛭 DFT study. 2020 , 173, 109414	17
475	Influence of defects and dopants on the sensitivity of arsenene towards HCN. 2020 , 506, 144936	43
474	Core-shell Ag@In2O3 hollow hetero-nanostructures for selective ethanol detection in air. 2020 , 305, 127450	19
473	Focused Ultrasound Assistance to the MOS Gas Sensor System. 2020 , 67, 1009-1016	1
472	A High-Efficiency Driver Circuit for a Gas-Sensor Microheater Based on a Switch-Mode DC-to-DC Converter. <i>Sensors</i> , 2020 , 20,	1

(2020-2020)

471	Chemiresistive gas sensors based on thermally reduced graphene oxide for sensing sulphur dioxide at room temperature. 2020 , 109, 108039		8
47°	Computational evaluation of Ga-doped phagraphene as a work function-based sensor for detection of some air pollutant molecules. 2020 , 118, 107997		9
469	Highly sensitive and selective ethylene gas sensors based on CeOx-SnO2 nanocomposites prepared by a Co-precipitation method. 2020 , 254, 123540		12
468	Impurities in biogas: Analytical strategies, occurrence, effects and removal technologies. 2020 , 143, 10)5878	13
467	Exfoliated MoSe2 Nanosheets Doped on the Surface of ZnO Nanorods for Hydrogen Sensing Applications. 2020 , 3, 12139-12147		8
466	Semiconductor Gas Sensors: Materials, Technology, Design, and Application. <i>Sensors</i> , 2020 , 20,	3.8	56
465	Polyfuran-based chemical sensors: Identification of promising derivatives via DFT calculations and fully atomistic reactive molecular dynamics. 2020 , 141, 110085		8
464	Graphene and Perovskite-Based Nanocomposite for Both Electrochemical and Gas Sensor Applications: An Overview. <i>Sensors</i> , 2020 , 20,	3.8	8
463	Fiber-Coupled Quartz-Enhanced Photoacoustic Spectroscopy System for Methane and Ethane Monitoring in the Near-Infrared Spectral Range. 2020 , 25,		9
462	Development of a Tuneable NDIR Optical Electronic Nose. Sensors, 2020 , 20,	3.8	9
461	Liquid crystal nose based on chiral photonic bandgap materials: principles of selective response. 2020 , 126, 1		6
460	Enhanced mid-wavelength infrared refractive index of organically modified chalcogenide (ORMOCHALC) polymer nanocomposites with thermomechanical stability. 2020 , 108, 110197		7
459	Integration of Gas Sensors with CMOS Technology. 2020 ,		0
458	Synthesis, characterization, and NH3 gas sensing application of Zn doped cobalt oxide nanoparticles. 2020 , 120, 108145		10
457	Laser-Deposited Carbon Aerogel Derived from Graphene Oxide Enables NO-Selective Parts-per-Billion Sensing. 2020 , 12, 39541-39548		2
456	A Review of Methane Gas Detection Sensors: Recent Developments and Future Perspectives. 2020 , 5, 28		25
455	Sniffing Out Urinary Tract Infection-Diagnosis Based on Volatile Organic Compounds and Smell Profile. 2020 , 10,		9
454	Hydrogen Sensor: Detecting Far-Field Scattering of Nano-Blocks (Mg, Ag, and Pd). <i>Sensors</i> , 2020 , 20,	3.8	1

453	Smart Multi-Sensor Platform for Analytics and Social Decision Support in Agriculture. <i>Sensors</i> , 2020 , 20,	5
452	Sensing mechanism of an optimized room temperature optical hydrogen gas sensor made of zinc oxide thin films. 2020 , 9, 10624-10634	6
451	. 2020,	4
450	Room temperature CO2 sensing using Au-decorated ZnO nanorods deposited on an optical fiber. 2020 , 262, 114720	5
449	Integrated Ammonia Sensor Using a Telecom Photonic Integrated Circuit and a Hollow Core Fiber. 2020 , 7, 93	0
448	Aerogels Based on Reduced Graphene Oxide/Cellulose Composites: Preparation and Vapour Sensing Abilities. 2020 , 10,	5
447	Conducting polymer percolation gas sensor on a flexible substrate. 2020 , 8, 12669-12676	18
446	Enhancing room temperature ethanol sensing using electrospun Ag-doped SnO2InO nanofibers. 2020 , 31, 17212-17224	O
445	A superlattice-based resonant cavity-enhanced photodetector operating in the long-wavelength infrared. 2020 , 117, 073503	4
444	Active-matrix monolithic gas sensor array based on MoS2 thin-film transistors. 2020 , 1,	8
443	Design and Developement of an Embedded Based Device for the Detection of Toxic Gases with Raspberry Pi. 2020 ,	1
442	Enhanced, stable, humidity-tolerant xylene sensing using ordered macroporous NiO/ZrO2 nanocomposites. 2020 , 324, 128648	11
441	Design and Development of Instrumentation for Remote Detection of Hydrogen Using Metal Oxide Sensor. 2020 , 1-11	
440	Interpenetrating Polymer Semiconductor Nanonetwork Channel for Ultrasensitive, Selective, and Fast Recovered Chemodetection. 2020 , 12, 55107-55115	2
439	A simple and low-cost integrative sensor system for methane and hydrogen measurement. 2020 , 1, 100032	4
438	Imidazole-based ionogel as room temperature benzene and formaldehyde sensor. 2020 , 187, 638	8
437	Investigation of the Gas Sensitive Properties of Tin Dioxide Films Obtained by Magnetron Sputtering. 2020 , 1006, 239-244	2
436	Quartz-Enhanced Photoacoustic Detection of Ethane in the Near-IR Exploiting a Highly Performant Spectrophone. 2020 , 10, 2447	8

435	Chip-Level Integration of Covalent Organic Frameworks for Trace Benzene Sensing. 2020, 5, 1474-1481	25
434	Direct thermal emission testing of aperiodic dielectric stack for narrowband thermal emission at mid-IR. 2020 , 127, 114502	1
433	Multispecies Continuous Gas Detection With Supercontinuum Laser at Telecommunication Wavelength. 2020 , 20, 10591-10597	9
432	The synthesis mechanism of Mo2C on Ag-Cu alloy substrates by chemical vapor deposition and the impact of substrate choice. 2020 , 7, 035022	5
431	Fabrication and characterization of porous WO3 thin film as a high accuracy cyclohexene sensor. 2020 , 118, 105220	4
430	Electrolyte-gated transistor for CO2 gas detection at room temperature. 2020 , 317, 128201	9
429	Extending the detection range and response of TiO2 based hydrogen sensors by surface defect engineering. 2020 , 45, 18057-18065	8
428	On the Performance of Intracavity Gas Sensors Based on Whispering-Gallery Microlasers. 2020 , 20, 9772-9778	1
427	Polyfuran-based chemical sensors: reactivity analysis via Fukui indexes and reactive molecular dynamics. 2020 , 5, 497-503	4
426	Smart Polymer-Based Chemical Sensors. 2020 , 75-138	2
425	Synthesis of CuO Nanoflowers and Their Application Towards Inflammable Gas Sensing. 2020 , 49, 5070-5076	2
424	Local Discriminant Subspace Learning for Gas Sensor Drift Problem. 2020 , 1-13	6
423	An electronic nose using a single graphene FET and machine learning for water, methanol, and ethanol. 2020 , 6, 50	49
422	Quartz-enhanced photoacoustic spectroscopy for hydrocarbon trace gas detection and petroleum exploration. 2020 , 277, 118118	20
421	Synthesis of nanocrystalline ZnS/TiO2 films for enhanced NO2 gas sensing. 2020 , 709, 138190	5
420	A Convenient Approach to Constructing Superhydrophobic Paper Sensor for Gas Detection with High Immunity to Humidity. 2020 , 15, 2050091	3
419	Study of the Substrate Materials and Thin Film Sensing Layer on the SAW Sensor Behaviour for VOCs. 2020 ,	
418	CuO-GaO Thin Films as a Gas-Sensitive Material for Acetone Detection. <i>Sensors</i> , 2020 , 20, 3.8	6

417	Heterobilayer CaS/CaSe: A promising sensor for environmental toxic NO2 gas with high selectivity and sensitivity. 2020 , 528, 146996	12
416	iHWG-MOX: A Hybrid Breath Analysis System via the Combination of Substrate-Integrated Hollow Waveguide Infrared Spectroscopy with Metal Oxide Gas Sensors. 2020 , 5, 1033-1039	10
415	Frontiers of graphene and 2D material-based gas sensors for environmental monitoring. 2020 , 7, 032002	35
414	Reversible chemocapacitor system based on PDMAEMA polymers for fast sensing of VOCs mixtures. 2020 , 227, 111304	4
413	Atomic Layer Deposition of SnO-Coated Anodic One-Dimensional TiO Nanotube Layers for Low Concentration NO Sensing. 2020 , 12, 33386-33396	13
412	Interconnected graphene scaffolds for functional gas sensors with tunable sensitivity. 2020 , 58, 16-23	9
411	Selective Ultrasonic Gravimetric Sensors Based on Capacitive Micromachined Ultrasound Transducer Structure-A Review. <i>Sensors</i> , 2020 , 20,	0
410	Morphology dependent structural stability and electronic properties of ZnO nanowire. 2020,	
409	Applications of electronic nose (e-nose) and electronic tongue (e-tongue) in food quality-related properties determination: A review. 2020 , 4, 104-115	62
408	Gas Sensing Performance and Mechanism of CuO()-WO() Composites to HS Gas. 2020, 10,	4
407	Au-incorporated tungsten trioxide obtained by pulsed laser deposition. 2020,	3
406	Blockchain Technology for Smart Cities. 2020 ,	3
405	Ultrafast Response and High Selectivity toward Acetone Vapor Using Hierarchical Structured TiO Nanosheets. 2020 , 12, 13200-13207	30
404	MoS2-Based Nanomaterials for Room-Temperature Gas Sensors. 2020 , 5, 1901062	50
403	Opportunities for photonic integrated circuits in optical gas sensors. 2020 , 2, 012002	14
402	Increasing oxygen vacancies at room temperature in SnO2 for enhancing ethanol gas sensing. 2020 , 111, 104962	27
401	The Effect of the Orientation Towards Analyte Flow on Electrochemical Sensor Performance and Current Fluctuations. <i>Sensors</i> , 2020 , 20,	7
400	Micro gas preconcentrator using metal organic framework embedded metal foam for detection of low-concentration volatile organic compounds. 2020 , 392, 122145	10

399	Utilizing ZnO Nanorods for CO gas detection by SPR technique. 2020 , 463, 125490	4
398	Isomeric effect of solvents on a sugar-based supergelator with self-healing ability. 2020 , 513, 145814	2
397	Highly Rapid and Sensitive Formaldehyde Detection at Room Temperature Using a ZIF-8/MWCNT Nanocomposite. 2020 , 5, 4395-4402	12
396	Synthesis, Characterization, and Study of NO2 Gas Sensing Behavior of CSA Doped PANi-Ta2O5 Nanocomposite. 2020 , 20, 3429-3441	2
395	Gas-sensing properties of ITO materials with different morphologies prepared by sputtering. 2020 , 2, 1	4
394	Discriminative dimensionality reduction for sensor drift compensation in electronic nose: A robust, low-rank, and sparse representation method. 2020 , 148, 113238	5
393	Low temperature CO sensing under infield conditions with in doped Pd/SnO2. 2020 , 308, 127717	4
392	Nanostructured copper sulfide thin film via a spatial successive ionic layer adsorption and reaction process showing significant surface-enhanced infrared absorption of CO2. 2020 , 8, 3069-3078	5
391	A Review on Metal Oxide-Graphene Derivative Nano-Composite Thin Film Gas Sensors. 2020 ,	2
390	Computation-led design of pollutant gas sensors with bare and carbon nanotube supported rhodium alloys. 2020 , 151, 159-171	2
389	A resonant single frequency molecular detector with high sensitivity and selectivity for gas mixtures. 2020 , 10, 1537	3
388	Studies of NO Gas-Sensing Characteristics of a Novel Room-Temperature Surface-Photovoltage Gas Sensor Device. <i>Sensors</i> , 2020 , 20,	4
387	Analytical Prediction of Highly Sensitive CNT-FET-Based Sensor Performance for Detection of Gas Molecules. 2020 , 8, 12655-12661	6
386	Ppb-level formaldehyde detection system based on a 3.6 µm interband cascade laser and mode-locked cavity enhanced absorption spectroscopy with self-calibration of the locking frequency. 2020 , 105, 103205	3
385	Hydrogen Sensing Performance of ZnO Schottky Diodes in Humid Ambient Conditions with PMMA Membrane Layer. <i>Sensors</i> , 2020 , 20,	5
384	CO2 sensing under ambient conditions using metalBrganic frameworks. 2020 , 5, 1071-1076	6
383	Design of High Efficient Mid-Wavelength Infrared Polarizer on ORMOCHALC Polymer. 2020 , 305, 2000033	6
382	Architectural tailoring of orthorhombic MoO3 nanostructures toward efficient NO2 gas sensing. 2020 , 55, 8109-8122	10

381	Metal Oxide Gas Sensors by Nanostructures. 2020 ,	8
380	Au-decorated porous structure graphene with enhanced sensing performance for low-concentration NO2 detection. 2020 , 39, 651-658	33
379	Nanostructured Metal Oxides and Devices. 2020,	1
378	Recent Progress and Perspectives on Polyurethane Membranes in the Development of Gas Sensors. 2020 , 1-12	3
377	A novel Internet of things-based plug-and-play multigas sensor for environmental monitoring. 2021 , 32, e3967	
376	Sensitivity analysis of multilayered C-axis inclined zigzag zinc oxide thin-film bulk acoustic resonators for CO2 concentration monitoring. 2021 , 28, 699-708	3
375	Recent developments in graphene based field effect transistors. 2020 , 45, 1524-1524	7
374	An insight into improvement of room temperature formaldehyde sensitivity for graphene-based gas sensors. 2021 , 160, 105607	9
373	Preparation and gas-sensing performance of GO/SnO2/NiO gas-sensitive composite materials. 2021 , 47, 7528-7538	7
372	Detecting cooking state of grilled chicken by electronic nose and computer vision techniques. 2021 , 345, 128747	7
371	Remote Detection of HCN, HF, and Nerve Agent Vapors Based on Self-Referencing, Dye-Impregnated Porous Silicon Photonic Crystals. 2021 , 6, 418-428	2
370	Inkjet-Printed Composites for Room-Temperature VOC Sensing: From Ink Formulation to Sensor Characterization. 2021 , 6, 2000929	2
369	M.A.T.H: Methanol vapor analytics through handheld sensing platform. 2021 , 368, 137624	7
368	. 2021 , 70, 1-11	12
367	Photovoltaic Self-Powered Gas Sensing: A Review. 2021 , 21, 5628-5644	15
366	Performance assessment of low-cost environmental monitors and single sensors under variable indoor air quality and thermal conditions. 2021 , 187, 107415	18
365	Multicomponent SnMoD-containing films formed in anodic alumina matrixes by ionic layer deposition. 2021 , 37, 4064-4070	3
364	Application of polyvinyl alcohol/polypropylene/zinc oxide nanocomposites as sensor: modeling approach. 2021 , 53, 1	3

363 Solid state gas sensor. **2021**, 49, 3245-3245

362	Potential of Impedance Spectroscopy towards Quantified Analysis of Gas Sensors: A Tutorial. 2021 , 1-1		3
361	Polythiophene derivatives as chemical sensors: a DFT study on the influence of side groups. 2021 , 27, 17		4
360	Chemically Synthesized Novel Materials for Gas-Sensing Applications Based on Metal Oxide Nanostructure. 2021 , 807-820		
359	A review on metal-oxide based p-n and n-n heterostructured nano-materials for gas sensing applications. 2021 , 2, 100085		13
358	Gold-carbonaceous materials based heterostructures for gas sensing applications. 2021 , 11, 13674-13699		4
357	Synthesis of CdS:Cu5% thin films by chemical method based on silicon for gas sensor applications. 2021 , 45, 5800-5803		0
356	Trap-dominated nitrogen dioxide and ammonia responses of air-stable p-channel conjugated polymers from detailed bias stress analysis. 2021 , 9, 3531-3545		4
355	Fiber Optic Gas Sensors Based on Lossy Mode Resonances and Sensing Materials Used Therefor: A Comprehensive Review. <i>Sensors</i> , 2021 , 21,	8	16
354	QCM nanocomposite gas sensors Expanding the application of waterborne polymer composites based on graphene nanoribbon. 2021 , 213, 123335		9
353	Interband Cascade Photonic Integrated Circuits on Native III-V Chip. Sensors, 2021 , 21, 3.	8	4
352	Socio-economic demands and challenges for non-invasive disease diagnosis through a portable breathalyzer by the incorporation of 2D nanosheets and SMO nanocomposites 2021 , 11, 21216-21234		9
351	Recent progresses on metamaterials for optical absorption and sensing: a review. 2021 , 54, 113002		19
350	Printed Polymer Composite Sensors for Low-Power, Near Room-Temperature Detection and Classification of VOCS. 2021 ,		1
349	Nanostructured gas sensors in smart manufacturing. 2021 , 445-485		
348	Room Temperature Gas Sensor Based on Reduced Graphene Oxide for Environmental Monitoring. 2021 , 3243-3261		
347	Current trends and future outlook in spectroscopic monitoring of the atmosphere. 2021 , 1-25		1
346	The frontiers of functionalized graphene-based nanocomposites as chemical sensors. 2021 , 10, 330-369		12

345	A Method of Full-Range Gas Concentration Detection Based on Multi-Frequency Ultrasonic Cross-Cycle Phase Difference Measurement. 2021 , 9, 51983-51995	0
344	Prototyping of a highly sensitive and selective chemisresistive sensor based on pencil graphite for the rapid detection of NO2 and NH3. 2021 , 45, 2804-2813	O
343	An exploration into two-dimensional metal oxides, and other 2D materials, synthesised via liquid metal printing and transfer techniques. 2021 , 50, 7513-7526	12
342	Gas Indicators and Sensors Used for MAP. 2021 , 215-246	
341	Investigation into surface acoustic wave sensor for DCM gas detection using COMSOL multiphysics. 2021 , 572, 94-105	3
340	Self-Healing Soft Sensors: From Material Design to Implementation. 2021 , 33, e2004190	35
339	Nanoengineering Approaches Toward Artificial Nose. 2021 , 9, 629329	7
338	Mid-infrared photoacoustic gas monitoring driven by a gas-filled hollow-core fiber laser. 2021 , 11, 3512	3
337	MoS2/WO3 Nanosheets for Detection of Ammonia. 2021 , 4, 2594-2605	28
336	Impact of Residual Water Vapor on the Simultaneous Measurements of Trace CH4 and N2O in Air with Cavity Ring-Down Spectroscopy. 2021 , 12, 221	2
335	Analytic Optimization of Cantilevers for Photoacoustic Gas Sensor with Capacitive Transduction. <i>Sensors</i> , 2021 , 21,	1
334	Simulation and analysis of ZnO- based extended-gate gate-stack junctionless NWFET for hydrogen gas detection. 2021 , 127, 1	2
333	Ab-initio study of molybdenum carbide (Mo2C) as an adsorption-based filter. 2021 , 392, 127119	O
332	Advances in fiber-based quartz enhanced photoacoustic spectroscopy for trace gas sensing. 2021 , 63, 2031-2039	8
331	Phosphorene Oxide Quantum Dots Decorated ZnO Nanostructure-Based Hydrogen Gas Sensor. 2021 , 21, 7283-7290	5
330	Highly sensitive broadband differential infrared photoacoustic spectroscopy with wavelet denoising algorithm for trace gas detection. 2021 , 21, 100228	23
329	Scalable chemical vapor deposited graphene field-effect transistors for bio/chemical assay. 2021 , 8, 011311	5
328	Nanostructured metal oxide semiconductor-based sensors for greenhouse gas detection: progress and challenges. 2021 , 8, 201324	10

327	Near Room Temperature Sensing by InDIDecorated Silicon Nanowires for Sensitive Detection of Ethanol. 2021 , 21, 7275-7282	1
326	Printed Capacitive Sensors Based on Ionic Liquid/Metal-Organic Framework Composites for Volatile Organic Compounds Detection. 2021 , 31, 2010703	4
325	Arch microbeam bifurcation gas sensors. 2021 , 104, 923-940	8
324	Application of TDM and FDM methods in TDLAS based multi-gas detection. 2021 , 53, 1	3
323	Low-Cost Air Quality Sensing towards Smart Homes. 2021 , 12, 453	6
322	Impact of Molybdenum Doping on the Structural, Optical and Dielectric Properties of ⊞Al2⊠ MoxO3. 2021 , 10, 043007	O
321	The Key Role of Active Sites in the Development of Selective Metal Oxide Sensor Materials. <i>Sensors</i> , 2021 , 21,	24
320	Stannous Oxide Thick Film Nanosensors Design by Screen Printing Technology: Structural, Electrical Parameters and H2s Gas Detection Study. 2021 , 18, 66-74	
319	Fabrication of Fast and Reliable Pulse Laser-Ablated ZnO Nanoparticles-Based Formaldehyde Sensor. 2021 , 68, 1872-1877	3
318	Miniature piezoresistive sensor for detecting volatile organic components. 2021 , 333, 129524	2
317	Recent Development of Gas Sensing Platforms Based on 2D Atomic Crystals. 2021 , 2021, 9863038	8
316	Electrochemical impedimetric biosensors, featuring the use of Room Temperature Ionic Liquids (RTILs): Special focus on non-faradaic sensing. 2021 , 177, 112940	17
315	Enhanced NO2 Gas Sensing Performance of Multigate Pt/AlGaN/GaN High Electron Mobility Transistors. 2021 , 168, 047502	3
314	Printed Acoustic Sensor for Low Concentration Volatile Organic Compound Monitoring. 2021 , 21, 9808-9818	3
313	The interaction of two-dimensional P2SiS nanosheet with environmental toxic NCG molecules for sensor application: A DFT study. 2021 , 322, 112608	7
312	On the Use of Pulsed UV or Visible Light Activated Gas Sensing of Reducing and Oxidising Species with WO and WS Nanomaterials. <i>Sensors</i> , 2021 , 21,	
311	Facile strategy to synthesize donut-shaped Fe2O3 nanoparticles for enhanced LPG detection. 2021 , 334, 129668	4
310	Hollow-core fiber photothermal methane sensor with temperature compensation. 2021 , 46, 2762-2765	3

309	Acoustic analysis of gas compositions based on molecular relaxation features. 2021 , 25, 104304	1
308	A versatile acoustic gas sensing method via extracting intrinsic molecular internal specific heat. 2021 , 401, 127349	1
307	Gold-Carbon Nanocomposites for Environmental Contaminant Sensing. 2021 , 12,	7
306	Oxygen Ratio Effect on Zinc Oxide Films Fabricated by Radio Frequency Magnetron Sputtering for Photoluminescence Type Gas Sensor Application. 2021 ,	
305	MoS2⊠Sex Nanoparticles for NO Detection at Room Temperature. 2021 , 4, 6861-6871	4
304	Review of recent progress on graphene-based composite gas sensors. 2021 , 47, 16367-16384	18
303	A first principle study of heme molecule as an active adsorbent for halogenated hydrocarbons. 2021 , 27, 209	1
302	CO2Gas Sensing By Cmos-Mems Scaln-Based Pyroelectric Detector Based on MID-IR Absorption. 2021 ,	O
301	Spatially Ordered Matrix of Nanostructured Tin-Tungsten Oxides Nanocomposites Formed by Ionic Layer Deposition for Gas Sensing. <i>Sensors</i> , 2021 , 21,	2
300	AN INVESTIGATION OF THE SENSITIVITY OF POLYMER-COATED SURFACE ACOUSTIC WAVE-BASED GAS SENSORS IN THE DETECTION OF VOLATILE ORGANIC COMPOUNDS. 2021 , 22, 168-177	O
299	Fluid sensing strategies adopted in photonic devices: A review. 2021 , 139, 106975	1
298	Embedded gas sensing setup for air samples analysis. 2021 , 92, 074102	3
297	Rapid and Broadband Spectroscopic Gas Sensing By Extended Optical Linear Chirp Chain. 2021 , 39, 4847-485	2
296	Highly sensitive ozone and hydrogen sensors based on perovskite microcrystals directly grown on electrodes. 2021 ,	4
295	Sensing and Delineating Mixed-VOC Composition in the Air Using a Single Metal Oxide Sensor. 2021 , 3, 519-533	1
294	SnO2 nanostructured materials used as gas sensors for the detection of hazardous and flammable gases: A review. 2021 ,	8
293	Insights into theoretical detection of CO2, NO, CO, O2, and O3 gases molecules using Zinc phthalocyanine with peripheral mono and tetra quinoleinoxy substituents: Molecular geometries, Electronic properties, and Vibrational analysis. 2021 , 547, 111198	О
292	The UV Effect on the Chemiresistive Response of ZnO Nanostructures to Isopropanol and Benzene at PPM Concentrations in Mixture with Dry and Wet Air. 2021 , 9, 181	2

291	A comprehensive first-principle study of borophene-based nano gas sensor with gold electrodes. 2022 , 17, 1		Ο
290	A Statistical Image Feature-Based Deep Belief Network for Fire Detection. 2021 , 2021, 1-12		3
289	A Review on Gas Sensor Technology and Its Applications. 2022 , 165-175		0
288	A Miniaturised, Fully Integrated NDIR CO Sensor On-Chip. Sensors, 2021, 21,	3.8	2
287	He2O3/rGO cooperated with tri-alkyl-substituted-imidazolium ionic liquids for enhancing oxygen sensing. 2021 , 341, 130029		0
286	Non-Layered Gold-Silicon and All-Silicon Frequency-Selective Metasurfaces for Potential Mid-Infrared Sensing Applications. <i>Sensors</i> , 2021 , 21,	3.8	5
285	New insights on temperature dependent electrical properties of samarium doped tin oxide thin films. 2021 , 2007, 012069		
284	Quartz-enhanced photoacoustic spectroscopy for multi-gas detection: A review 2022 , 1202, 338894		8
283	Solution-Processed Chloroaluminum Phthalocyanine (ClAlPc) Ammonia Gas Sensor with Vertical Organic Porous Diodes. <i>Sensors</i> , 2021 , 21,	3.8	1
282	The smell of lung disease: a review of the current status of electronic nose technology. 2021 , 22, 246		4
281	Hydrothermal synthesis of WO3 film on rough surface to analyze methanol gas at room temperature. 2021 , 8, 095503		1
280	Research of Low-Power MEMS-Based Micro Hotplates Gas Sensor: A Review. 2021 , 21, 18368-18380		3
279	Plasmonic Au-Metal Oxide Nanocomposites for High-Temperature and Harsh Environment Sensing Applications. 2021 , 16, 3558-3584		0
278	Effects of rare earth elements doping on gas sensing properties of ZnO nanowires. 2021 , 47, 24218-242	226	11
277	Air Stable Nickel-Decorated Black Phosphorus and Its Room-Temperature Chemiresistive Gas Sensor Capabilities. 2021 , 13, 44711-44722		10
276	Non-injective gas sensor arrays: identifying undetectable composition changes. 2021 , 33,		
275	Ultra-fast and low detection limit of H2S sensor based on hydrothermal synthesized Cu7S4-CuO microflowers. 2021 , 350, 130847		3
274	A direct relationship between the sensitivity of the sensors and the intensity of IR CO2 peak in in situ FTIR-LCR meter chemi-impedance SnO2Barbon nanoparticles polymer-based sensors in the detection of organic compounds vapor. 2021 , 11, 105203		1

273	Insect odorant receptor-based biosensors: Current status and prospects. 2021 , 53, 107840	4
272	Effect of moisture and molecular weight of polyaniline on H2S sensing characteristics. 2021 , 344, 130323	2
271	Synthesis and gas sensing properties of NiO/ZnO heterostructured nanowires. 2021 , 877, 160189	12
270	NDIR CO2 gas sensing using CMOS compatible MEMS ScAlN-based pyroelectric detector. 2021 , 346, 130437	6
269	A review on resistive-based gas sensors for the detection of volatile organic compounds using metal-oxide nanostructures. 2021 , 133, 108893	13
268	One-pot wet chemical synthesis of reduced graphene oxide-zinc oxide nanocomposites for fast and selective ammonia sensing at room temperature. 2021 , 331, 112965	2
267	Metal-oxide-semiconductor Sensors Modeling Using Ordered Weighted Averaging (OWA) Operators in Electronic Nose. 2021 , 184, 109932	1
266	Preparation of composite SnO2/CuO nanotubes by electrospinning and excellent gas selectivity to ethanol. 2021 , 332, 113090	1
265	Gas sensing performance of sprayed NiO thin films toward NO2 gas. 2021 , 885, 160908	7
264	Hydrothermal synthesis of SnO2-CuO composite nanoparticles as a fast-response ethanol gas sensor. 2021 , 886, 161299	6
263	Monolayer PC: A promising material for environmentally toxic nitrogen-containing multi gases. 2022 , 422, 126761	3
262	Conductometric Gas Sensors. 2021 ,	1
261	Advanced development of metal oxide nanomaterials for H2 gas sensing applications. 2021 , 2, 1530-1569	7
260	Recent advances in ultrathin 2D hexagonal boron nitride based gas sensors. 2021 , 9, 1537-1549	13
259	Ultra-wide-dynamic-range gas sensing by optical pathlength multiplexed absorption spectroscopy. 2021 , 9, 193	5
258	Automatic Smoke Detection Based on SLIC-DBSCAN Enhanced Convolutional Neural Network. 2021 , 9, 63933-63942	4
257	MetalBrganic framework based systems for CO2 sensing.	3
256	Room Temperature Gas Sensor Based on Reduce Graphene Oxide for Environmental Monitoring. 2020 , 1-19	1

255	Analytical Detection of Pesticides, Pollutants, and Pharmaceutical Waste in the Environment. 2020 , 87-129	3
254	Mobile Wireless System for Outdoor Air Quality Monitoring. 2017 , 345-354	2
253	Gas Sensing Using Monolayer MoS2. 2019 , 71-95	1
252	Analysis of a Data Acquisition System for a Compact Electronic Nose. 2020 , 615-628	1
251	Optical Micro-ring Resonator for Detection of Carbon Dioxide Gas. 2020 , 157-161	1
250	Mode-phase-difference photothermal spectroscopy for gas detection with an anti-resonant hollow-core optical fiber. 2020 , 11, 847	42
249	Detection of nitrous oxide using infrared optical plasmonics coupled with carbon nanotubes. 2020 , 2, 4615-4626	2
248	First-principles investigation of carbon dioxide adsorption on MN4 doped graphene. 2020 , 10, 125013	2
247	Ultrafast humidity sensor based on liquid phase exfoliated graphene. 2021 , 32, 025505	2
246	An Overview of Oxide Materials for Gas Sensors. 2020 ,	1
246 245	An Overview of Oxide Materials for Gas Sensors. 2020 , . 2020 , 67, 5710-5716	1
·		
245	. 2020 , 67, 5710-5716	1
245 244	. 2020, 67, 5710-5716 Photoacoustic cell on silicon for mid-infrared QCL-based spectroscopic analysis. 2019, Application of laser absorption spectroscopy and machine learning for component analysis of	1
245 244 243	. 2020, 67, 5710-5716 Photoacoustic cell on silicon for mid-infrared QCL-based spectroscopic analysis. 2019, Application of laser absorption spectroscopy and machine learning for component analysis of multicomponent gas media. 2020, The binary oxide NiO-CuO nanocomposite based thick film sensor for the acute detection of	1 1
245 244 243	. 2020, 67, 5710-5716 Photoacoustic cell on silicon for mid-infrared QCL-based spectroscopic analysis. 2019, Application of laser absorption spectroscopy and machine learning for component analysis of multicomponent gas media. 2020, The binary oxide NiO-CuO nanocomposite based thick film sensor for the acute detection of Hydrogen Sulphide gas vapours. 2020, 17, 260-269	1 1 2 6
245 244 243 242 241	. 2020, 67, 5710-5716 Photoacoustic cell on silicon for mid-infrared QCL-based spectroscopic analysis. 2019, Application of laser absorption spectroscopy and machine learning for component analysis of multicomponent gas media. 2020, The binary oxide NiO-CuO nanocomposite based thick film sensor for the acute detection of Hydrogen Sulphide gas vapours. 2020, 17, 260-269 Atmospheric CO sensing using Scheimpflug-lidar based on a 1.57-μm fiber source. 2019, 27, 17348-17358	1 1 2 6

237	Overview on conductometric solid-state gas dosimeters. 2014 , 3, 29-46	32
236	Field evaluation of a low-cost indoor air quality monitor to quantify exposure to pollutants in residential environments. 2018 , 7, 373-388	37
235	Design of Semiconducting Gas Sensors for Room-Temperature Operation. 2020 , 29, 1-6	3
234	Graphene plasmon enhanced infrared spectroscopy. 2019 , 68, 148103	4
233	Gas Sensing with Two-Dimensional Materials Beyond Graphene. 2021,	0
232	A Review: Application and Implementation of Optic Fibre Sensors for Gas Detection. <i>Sensors</i> , 2021 , 21,	2
231	N-doped reduced graphene oxide for room-temperature NO gas sensors. 2021 , 11, 20719	2
230	The Internet of things and indoor air quality on ship. 2021 , 872, 012015	2
229	Metal Oxide Nanostructure-Based Gas Sensor for Carbon Dioxide Detection. 2021 , 58, 15-26	1
228	Material Screening for Gas Sensing Using an Electronic Nose: Gas Sorption Thermodynamic and Kinetic Considerations. 2021 , 6, 3808-3821	1
227	Preparation of Powders Containing Sb, Ni, and O for the Design of a Novel CO and C3H8 Sensor. 2021 , 11, 9536	0
226	Selectivity and Sensitivity Property of Metal Oxide Semiconductor Based Gas Sensor with Dopants Variation: A Review. 1	1
225	OPTIMIZATION OF MICROHOTPLATE FOR GAS SENSING APPLICATIONS. 2017 , 7, 9	
224	An Optimized Platinum (Pt) Doped Tin-oxide(SnO2) Ink for Deposition of Gas Sensing Thick Film on LTCC Micro-hotplate. 2017 , 14, 158-163	O
223	Interband cascade laser based quartz-enhanced photoacoustic sensor for multiple hydrocarbons detection. 2018 ,	0
222	Influence of near UV irradiation on ZnO nanomaterials NO2 gas sensing properties. 2018,	O
221	G№enlik takibi il⁄n sensli f⊠yonlu ak⊞giysi tasar⊞n li 2018 , 2018,	
220	Recent Advances and Techniques in the Hazardous Gases Detection. 2019 , 1293-1310	

(2020-2019)

219	Quartz-enhanced photoacoustic sensors for detection of multiple hydrocarbon and methane isotopes. 2019 ,	
218	Fabrication and Characterization of Hexagonal Tungsten Oxide Nanopowders for High Performance Gas Sensing Application. 2019 , 26, 28-33	
217	Slitesis y Caracterizacili de la Sensibilidad de las Nanopartilulas de ZnO Mediante Precipitacili Homogliea Impurificadas con Ni y Cu. 2019 , 9, 5	
216	Real-time and non-destructive gas mixture analysis using linear various filter enabled mid-infrared visualization. 2019 , 27, 26512-26522	4
215	Visible to mid-infrared integrated sensors for air quality measurement. 2019 ,	
214	Detection of CF4 Gas Using a Nanomaterial-Based Gas Sensor Fabricated by Dielectrophoresis. 2020 , 481-488	1
213	Blockchain for Intelligent Gas Monitoring in Smart City Scenario. 2020 , 59-75	1
212	Comprehensive Review of Latest e-Nose Sensor Technologies. 2020 , 9, 31-41	
211	Micro PA detector: pushing the limits of mid IR photoacoustic spectroscopy integrated on silicon. 2020 ,	О
210	Remarks on Recognition of Aromas from Tea Sources Using MQ3, MQ5, MQ7 Sensor Signal. 2020 , 244-252	O
209	Recognition of Aromas from Tea Sources based on MQ3, MQ5, MQ7 Sensor Signal. 2020 , 259-264	
208	Sensing of Airborne Infochemicals for Green Pest Management: What Is the Challenge?. 2021 , 6, 3824-3840	1
207	A large-area single-filament infrared emitter and its application in a spectroscopic ethanol gas sensing system. 2021 , 7, 87	1
206	Room Temperature Hydrogen Sensing Investigation of Zinc Oxide Schottky Thin-Film Transistors: Dependence on Film Thickness. 2020 , 67, 5701-5709	3
205	Modeling the Effect of Additives on Metal Oxide Chemiresistor Gas Sensors. 2020,	
204	Investigation of the Optical and Dielectric Behaviour of SnO2-CuO Mixed Oxides Thin Films.	
203	Recent trends in gas sensing via carbon nanomaterials: outlook and challenges.	6
202	Emission of Air Pollution in the Transport Sector: Case Study of the City of Campos dos Goytacazes, Brazil. 2020 , 12, 851-862	1

201	Ferrites as an Alternative Source of Renewable Energy for Hydroelectric Cell. 2021, 399-436	1
200	NOX ORO TARIAI MATUOTI SKIRTO ELEKTROCHEMINIO JUTIKLIO SU VOLFRAMO TRIOKSIDU TYRIMAI IR VERTINIMAS.	
199	Room Temperature Chemiresistive Gas Sensing Characteristics of Pristine Polyaniline and Polyaniline/TiO2 Nanocomposites. 2020 , 383-397	
198	Metal Oxide Semiconductor Gas Sensors. 2020 , 211-232	
197	Metal Oxide Thin Films for Chemical and UV Sensors. 1-8	
196	Dimension dependency of tungsten oxide for efficient gas sensing.	3
195	Graphene quantum dots, graphene nanoplatelets, and graphene nanoribbons with polymers. 2022, 91-116	
194	Polyaniline-based gas sensors: DFT study on the effect of side groups. 2022 , 1207, 113526	1
193	Gas sensors data analysis system: A user-friendly interface for fast and reliable response-recovery analysis. 2022 , 220, 104460	0
192	Hydrothermally synthesized ZnO and Z-rGO nanorods: Effect of post-annealing temperature and rGO incorporation on hydrogen sensing. 1	О
191	Portable Flow Injection Amperometric Sensor Consisting of Pd Nanochains, Graphene Nanoflakes, and WS2 Nanosheets for Formaldehyde Detection. 2021 , 4, 12429-12441	4
190	Graphdiyne-Based Materials in Sensors and Separation Applications. 2022 , 341-365	
189	Silicon substrate-integrated hollow waveguide for miniaturized optical gas sensing.	0
188	Porous SiOCH thin films for gravimetric gas sensors. 2021 , 330, 111560	О
187	Application of machine learning algorithms and laser absorption spectroscopy to solve the problem of determining components with a low concentration in multicomponent gas mixtures. 2021 ,	
186	Design and Sensitivity Improvement of Microstructured-Core Photonic Crystal Fiber Based Sensor for Methane and Hydrogen Fluoride Detection. 2021 , 1-1	21
185	Nanocomposite of graphene and WO3 nanowires for carbon monoxide sensors. 2021 , 7, 225-236	0
184	Manipulation of the SnSe2 gas sensing properties via Au nanoparticles decoration. 2022 , 28, 101673	2

183	Preparation of nanocrystalline Pd/SnO2 thin films deposited on alumina substrate by reactive magnetron sputtering for efficient CO gas sensing. 2022 , 148, 111692		1
182	Informative Path Planning for Gas Distribution Mapping in Cluttered Environments. 2020,		2
181	Detection of Volatile Organic Compounds in Fabricated MEMS Cantilever Sensor. 2021,		
180	Parameter optimization of a gas sensing chamber for the detection of Volatile Organic Compounds using Finite Element Method. 2021 ,		
179	Trimesic acid based Co(II) MOFs as colorimetric sensor for detection of ammonia gas. 2022, 1-1		3
178	Dual chamber YSZ-based sensor for simultaneous measurement of methane and water vapor concentrations in CH4 + H2O + N2 gas mixtures. 2022 , 26, 739-747		О
177	A Robust Miniaturized Gas Sensor for H and CO Detection Based on the 3 Method <i>Sensors</i> , 2022 , 22,	3.8	O
176	In Situ Grown Gold Nanoisland-Based Chemiresistive Electronic Nose for Sniffing Distinct Odor Fingerprints 2022 ,		
175	Nanoparticle design and assembly for p-type metal oxide gas sensors 2022,		1
174	Data-Driven Techniques for Low-Cost Sensor Selection and Calibration for the Use Case of Air Quality Monitoring <i>Sensors</i> , 2022 , 22,	3.8	3
173	New hybrid photonic crystal fiber gas sensor with high sensitivity for ammonia gas detection. 2022 , 100, 129-137		O
172	Amorphous molybdenum trioxide thin films for gas sensing applications. 2022 , 335, 113355		2
171	Evaluating the Response Time of an Optical Gas Sensor Based on Gasochromic Nanostructures <i>Sensors</i> , 2021 , 21,	3.8	1
170	Electronic Noses and Tongue-Based Sensor Systems in Food Science. 2022 , 357-384		
169	Nanomaterial-based gas sensors: A review on experimental and theoretical studies. 2022 , 12, 1-33		4
168	Research on Cnn ´Fire Detection ´Based on Parallel Decision- Layer.		
167	Sythesis and Gas-Sensing Performance of MOF-Derived Zn/Co Composite Microstructures for Cyclohexanone Detection. 2022 ,		
166	Analysis of Multimode Interference Based More Sensitive Fiber Optic Methane Gas Sensor Using Bessel Beam with Wave Theory. 2022 , 633-638		

165 Air Miner. **2022**, 254-273

Huorinated Iron and Cobalt Phthalocyanine Nanowire Chemiresistors for Environmental Gas Monitoring at Parts per-Billion Levels. Recent Development of Hierarchical Metal Oxides Based Gas Sensors: From Gas Sensing performance to Applications. 2100370 Bisordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and anti-counterfeiting displays. 2022, 8, eabm8598 Igo Pirist-principles insight into two-dimensional palladium phosphide tellurium (PdPTe) monolayer as a principles insight into two-dimensional palladium phosphide tellurium (PdPTe) monolayer as a promising scavenger for detecting SF6 decompositions. 2022, 57, 5497-5506 Iso Simultaneous measurement of N2O, C.Hd., and NH3 with a compact quartz-enhanced photoacoustic sensor for monitoring agricultural activities. 2022, Biso PolyMUMPs-Based MEMS Gas Sensor. 2022, 13, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, A Review of Gas Measurement Set-Ups Sensors and udoped SnSe2 monolayer, 2022, Challenges and limitation of wearable sensors used in firefighters/protective clothing. 073490412210790 A DET study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 A DET study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 Iso Single InputSingle Output MEMS Gas Sensor. 2022, 321-334 151 Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 3 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, 149 Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	Monitoring at Parts-per-Billion Levels. Recent Development of Hierarchical Metal Oxides Based Gas Sensors: From Gas Sensing Performance to Applications. 2100370 Solid-State Gas Sensors. 2022, 77, 131-144 Disordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and
Performance to Applications. 2100370 162 Solid-State Gas Sensors. 2022, 77, 131-144 161 Disordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and anti-counterfeiting displays 2022, 8, eabm8598 160 First-principles insight into two-dimensional palladium phosphide tellurium (PdPTe) monolayer as a promising scavenger for detecting SF6 decompositions. 2022, 57, 5497-5506 4 Simultaneous measurement of N2O, CH4, and NH3 with a compact quartz-enhanced photoacoustic sensor for monitoring agricultural activities. 2022, 158 Fabrication and Characterization of the Micro-Heater and Temperature Sensor for PolyMUMPs-Based MEMS Gas Sensor 2022, 13, 157 A Review of Gas Measurement Set-Ups Sensors, 2022, 22, 158 Strain facilitated small gas molecules sensing properties on Au doped Sn5e2 monolayer. 2022, 159 Challenges and limitation of wearable sensors used in firefighters(brotective clothing, 073490412210790) 150 Challenges and limitation of wearable sensors used in firefighters(brotective clothing, 073490412210790) 150 Challenges and limitation of wearable sensors used in firefighters(brotective clothing, 073490412210790) 151 Enhancing gas detection-based swarming through deep reinforcement learning. 1 158 Single InputSingle Output MEMS Gas Sensor. 2022, 321-334 159 Single InputSingle Output MEMS Gas Sensor. 2022, 321-334 150 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, 159 Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	Performance to Applications. 2100370 Solid-State Gas Sensors. 2022, 77, 131-144 Disordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and
Disordered-nanoparticle-based etaton for ultrafast humidity-responsive colorimetric sensors and anti-counterfeiting displays 2022, 8, eabm8598 150 First-principles insight into two-dimensional palladium phosphide tellurium (PdPTe) monolayer as a promising scavenger for detecting SF6 decompositions. 2022, 57, 5497-5506 4 Simultaneous measurement of N2O, CH4, and NH3 with a compact quartz-enhanced photoacoustic sensor for monitoring agricultural activities. 2022, 158 Fabrication and Characterization of the Micro-Heater and Temperature Sensor for PolyMUMPs-Based MEMS Gas Sensor 2022, 13, 157 A Review of Gas Measurement Set-Ups Sensors, 2022, 22, 158 Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022, 159 Challenges and limitation of wearable sensors used in firefighters/protective clothing. 073490412210790 154 Enhancing gas detection-based swarming through deep reinforcement learning. 1 153 A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 158 159 Single InputBingle Output MEMS Gas Sensor. 2022, 321-334 150 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	Disordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and
anti-counterfeiting displays 2022, 8, eabm8598 160 First-principles insight into two-dimensional palladium phosphide tellurium (PdPTe) monolayer as a promising scavenger for detecting SF6 decompositions. 2022, 57, 5497-5506 4 Simultaneous measurement of N2O, CH4, and NH3 with a compact quartz-enhanced photoacoustic sensor for monitoring agricultural activities. 2022, 158 Fabrication and Characterization of the Micro-Heater and Temperature Sensor for PolyMUMPs-Based MEMS Gas Sensor 2022, 13, 157 A Review of Gas Measurement Set-Ups Sensors, 2022, 22, 158 Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022. 159 Challenges and limitation of wearable sensors used in firefighters[protective clothing. 073490412210790 on the compact of the properties on Au doped SnSe2 monolayer. 2022. 159 Enhancing gas detection-based swarming through deep reinforcement learning. 1	Disordered-nanoparticle-based etalon for ultrafast humidity-responsive colorimetric sensors and
promising scavenger for detecting SF6 decompositions. 2022, 57, 5497-5506 Simultaneous measurement of N2O, CH4, and NH3 with a compact quartz-enhanced photoacoustic sensor for monitoring agricultural activities. 2022, Fabrication and Characterization of the Micro-Heater and Temperature Sensor for PolyMUMPs-Based MEMS Gas Sensor. 2022, 13, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022, Challenges and limitation of wearable sensors used in firefighters@rotective clothing. 073490412210790 Challenges and limitation of wearable sensors used in firefighters@rotective clothing. 073490412210790 A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 , 145, 106635 A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 1 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	anti-counterfeiting displays 2022 , 8, eabm8598
Fabrication and Characterization of the Micro-Heater and Temperature Sensor for PolyMUMPs-Based MEMS Gas Sensor 2022, 13, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022, Challenges and limitation of wearable sensors used in firefighters[protective clothing. 073490412210790] Challenges and limitation of wearable sensors used in firefighters[protective clothing. 073490412210790] ADFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022, 145, 106635 ADFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022, 145, 106635 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	
PolyMUMPs-Based MEMS Gas Sensor. 2022, 13, A Review of Gas Measurement Set-Ups Sensors, 2022, 22, 3.8 1 156 Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022, Challenges and limitation of wearable sensors used in firefighters[brotective clothing. 073490412210790 o 154 Enhancing gas detection-based swarming through deep reinforcement learning. 1 1 A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 1 152 Single InputBingle Output MEMS Gas Sensor. 2022, 321-334 151 Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 3 150 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	
Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022, o 155 Challenges and limitation of wearable sensors used in firefighters[protective clothing. 073490412210790 o 154 Enhancing gas detection-based swarming through deep reinforcement learning. 1 1 155 ADFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 1 156 Single InputBingle Output MEMS Gas Sensor. 2022, 321-334 157 Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 3 158 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, 9 Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	
Challenges and limitation of wearable sensors used in firefighters[protective clothing. 073490412210790 o 154 Enhancing gas detection-based swarming through deep reinforcement learning. 1 153 A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 154 155 Single InputBingle Output MEMS Gas Sensor. 2022, 321-334 157 Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 158 3 159 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, 149 Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	157 A Review of Gas Measurement Set-Ups Sensors, 2022 , 22, 3.8 1
Enhancing gas detection-based swarming through deep reinforcement learning. 1 A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 1, 145, 106635 Single InputBingle Output MEMS Gas Sensor. 2022, 321-334 Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	156 Strain facilitated small gas molecules sensing properties on Au doped SnSe2 monolayer. 2022 , o
A DFT study of silver decorated bismuthene for gas sensing properties and effect of humidity. 2022 1	Challenges and limitation of wearable sensors used in firefighters[protective clothing. 073490412210790 o
153 ,145,106635 154 Single InputBingle Output MEMS Gas Sensor. 2022, 321-334 155 Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 3 150 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	154 Enhancing gas detection-based swarming through deep reinforcement learning. 1
Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021, 9, 16937-16945 Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	15)
Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021, Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021, 9, 345	152 Single InputBingle Output MEMS Gas Sensor. 2022 , 321-334
Flexible Low-Temperature Ammonia Gas Sensor Based on Reduced Graphene Oxide and Molybdenum Disulfide. 2021 , 9, 345	Paper-Based Wearable Sensors for Humidity and VOC Detection. 2021 , 9, 16937-16945
Molybdenum Disulfide. 2021 , 9, 345	Three-Port Lorentz Resonance Based Permittivity Sensor and Microwave Comparator. 2021 ,
148 Nanotechnology in Fire Protection-Application and Requirements 2021 , 14,	
	Nanotechnology in Fire Protection-Application and Requirements 2021 , 14,

147	Adsorption of NO and NO 2 on Rh-Doped Hexagonal Boron Nitride Monolayers: A First-Principles Study. 2021 , 6, 13609-13615	O
146	Performance Analysis, Design and simulation of Piezoresistive Pressure Sensor. 2022,	
145	Emerging Methods of Monitoring Volatile Organic Compounds for Detection of Plant Pests and Disease 2022 , 12,	3
144	Liquid-Phase Growth of Nanocrystalline ZnO Thin Films and Their Gas-Sensitive Properties. 2022 , 67, 539-546	3
143	Production of H2S gas sensor by a facile fabrication of Au-decorated ZnO.	
142	Room temperature sputtered nanocrystalline SnO2 thin films sensitized with Pd nanoparticles for high performance CO gas sensing application. 2022 , 128, 112362	2
141	Quartz-enhanced photoacoustic sensors for environmental monitoring applications. 2022,	
140	Recent Advances in Sensors for Fire Detection Sensors, 2022 , 22, 3.8	1
139	Tin-oxide nanoparticles for detecting hazardous gas: Synthesis and characterization. 2022,	
138	Highly sensitive NO2 gas sensor based on Ag decorated ZnO nanorods. 2022 , 128, 1	1
137	Direct Absorption and Photoacoustic Spectroscopy for Gas Sensing and Analysis: A Critical Review. 2100556	2
136	Polyethylenimine/Nitrogen-Doped Reduced Graphene Oxide/ZnO Nanorod Layered Composites for Carbon Dioxide Sensing at Room Temperature.	1
135	A Micropowered Chemoresistive Sensor Based on a Thin Alumina Nanoporous Membrane and SnxBikMoyOz Nanocomposite. <i>Sensors</i> , 2022 , 22, 3640	O
134	Nanostructured metal oxide semiconductor-based gas sensors: A comprehensive review. 2022 , 341, 113578	6
133	Gas sensing technology for meat quality assessment: A review.	O
132	Gas-Responsive and Self-Powered Visual Composite Langmuir-Blodgett Films for Ultrathin Gas Sensors 2022 ,	
131	Noise analysis and optimization of front-end circuit in ultra-high precision capacitive transducer. 2022 , 1-1	1
130	Perfume identification using a chemical sensor array via LightGBM and prepositive feature reduction. 2022 ,	1

129	Filament-induced nonlinear hyperspectral fluorescence imaging. 2022 , 156, 107109	
128	A Novel Room Temperature So2 Gas Sensor Based on Tio2/Rgo Buried-Gate Fet.	
127	Adsorption of Industrial Gases (CH4, CO2, and CO) on Olympicene: A DFT and CCSD(T) Investigation.	1
126	Metasurface-Enhanced Infrared Spectroscopy: An Abundance of Materials and Functionalities. 2110163	O
125	Design and Characteristics of various types of gas sensors for hydrogen sulfide gas detection - A Review. 2022 , 2267, 012008	
124	ይ ոO2<Co>/ መመመጠ መመ 2022 , 57, 194-203	
123	The Recent Development in Chemoresistive-Based Heterostructure Gas Sensor Technology, Their Future Opportunities and Challenges: A Review. 2022 , 12, 555	O
122	Flexible SnO2?Co?/MWCNT Sensor for Detection Low Concentrations of Hydrogen Peroxide Vapors. 2022 , 57, 133-139	
121	Disasters in Mine: Strategies for Prevention, Management and Control. 2022, 273-318	
120	Real-time Acetone Vapor Detection Using Mid-Infrared Nanoporous Membrane. 2022, 1-1	
119	High-Performance Humidity Sensor Based on Plasma Modified Graphene.	
118	Two-Dimensional (2D) Nanostructures for Hazardous Gas Sensing Applications. 2022 , 1-21	
117	Zinc oxide-decorated graphene oxide nanocomposites for industrial volatile organic compound chemical sensor applications. 2022 , 219-249	
116	Sub-ppm detection of H2S with CuO-loaded SnO2 hollow nanospheres deposited on interdigitated electrodes. 2022 ,	
115	DFT analysis of hydrogen gas adsorption properties on Ag doped graphene. 2022,	О
114	SnO2 NSs synthesized by hydrothermal method for Cl2 sensing. 2022 ,	
113	Direct Laser Writing of Microscale Metal Oxide Gas Sensors from Liquid Precursors. 2022 , 14, 28163-28173	2
112	Laboratory evaluation of low-cost air quality monitors and single sensors for monitoring typical indoor emission events in Dutch daycare centers. 2022 , 107372	O

111	Metal-Organic Frameworks-Based Photonic Crystals Platforms for Gas Sensing: A Review.	O
110	Template-assisted nanostructures for gas sensing applications. 2022 , 63-91	
109	Nanotube- and nanowire-based sensors for air quality monitoring. 2022 , 307-345	
108	Metal oxide semiconductor thin-film transistors for gas sensing applications. 2022 , 25-45	
107	In-flow measurement of the composition of a binary gas mixture. 2022 , 1240, 012047	
106	Planar Polymer Optical Waveguide with Metal-Organic Framework Coating for Carbon Dioxide Sensing. 2200395	1
105	Diagnostic Performance of Electronic Noses in Cancer Diagnoses Using Exhaled Breath. 2022 , 5, e2219372	О
104	ST Sensor for Volatile Organic Compound Fingerprint Discovery and R2C Based Classification. 2023 , 133-137	
103	Cost-effective synthesis of NiO nanoparticles and realization of highly selective NO2 sensors. 2022 , 128,	1
102	Formaldehyde gas sensing using metal oxide semiconductor: a brief review.	O
101	A novel room temperature SO2 gas sensor based on TiO2/rGO buried-gate FET. 2022 , 263, 111841	О
100	Heterojunctions of rGO/Metal Oxide Nanocomposites as Promising Gas-Sensing Materials A Review. 2022 , 12, 2278	3
99	Sensitive mid-infrared photothermal gas detection enhanced by self-heterodyne harmonic amplification of a mode-locked fiber laser probe.	
98	A DFT Study of the Ag-Doped h-BN Monolayer for Harmful Gases (NO2, SO2F2, and NO). 2022 , 32, 102113	2
97	Low temperature operated ZTO thin film transistor based gas sensor for selective detection of H2S. 2022 , 150, 106927	1
96	a-InGaZnO Thin-film Transistor as an Oxygen Gas Sensor with In-Situ Electrical Characterization. 2020 ,	
95	Oxygen Adsorption and Desorption Kinetics in CuO Nanowire Bundle Networks: Implications for	
	MOx-Based Gas Sensors.	

93 Gas Sensors. **2022**, 193-218

92	Hydrogen Gas On Carbon-Doped Boron Nitride Nanoribbon Performance Analysis. 2022,	
91	Carbon Dioxide Detectors based on Al- and Ni-Doped ZnO. 2200247	
90	Nanostructured NiO Thin Film for Ammonia Sensing at Elevated Temperatures.	
89	High-performance humidity sensor based on plasma modified graphene.	0
88	Flower-like ZnO Nanostructures Local Surface Morphology and Chemistry. 2022 , 12, 2666	O
87	Inkjet-printed graphene and molybdenum disulfide based gas sensors for toxic, flammable, and atmospheric gases. 2022 ,	
86	Chemiresistive gas sensors based on layered double hydroxides (LDHs) structures: A review. 2022 , 346, 113827	
85	Transition metal decorated ZnO monolayer for CO and NO sensing: A DFT´+´U study with vdW correction. 2022 , 604, 154570	0
84	SnO2 as a gas sensor in detection of volatile organic compounds: A review. 2022 , 346, 113845	1
83	Application of Metal-Organic Frameworks in Gas Pre-concentration, Pre-separation and Detection. 2022 , 80, 1183	О
82	First-Principles Investigation of Adsorption Behaviors, Electronic, Optical, and Gas-Sensing Properties of the Pure and Pd-Decorated Ges2 Monolayers.	0
81	Stimuli-responsive one-dimensional photonic crystals: design, fabrication and sensing.	1
80	High-Performance Detection of Toxic Gases Using a New Microsensor based on Graphene Field-Effect Transistor. 2022 ,	0
79	Investigation of Sensing Characteristics for the Detection of Formaldehyde Using a Multichannel Data Acquisition System and Semiconductor Metal Oxide Sensor. 2022 , 23,	0
78	Synthesis and applications of TiO2/ZnO hybrid nanostructures by ZnO deposition on TiO2 nanotubes using electrochemical processes. 2022 ,	O
77	Growth of Graphitic Carbon Nitride-Incorporated ZnO Nanorods on Silicon Pyramidal Substrates for Enhanced Hydrogen Sensing Applications. 2022 , 14, 41481-41488	0
76	Density Functional Theory Study of Cu-Modified B12N12 Nanocage as a Chemical Sensor for Carbon Monoxide Gas.	1

75	Investigation of photoluminescent properties of MgO and Ga2O3 nanopowders for gas sensor applications.	О
74	Part-per-Trillion Trace Selective Gas Detection Using Frequency Locked Whispering-Gallery Mode Microtoroids. 2022 , 14, 42430-42440	O
73	Investigation of Thin-Barrier AlGaN/GaN HEMT Heterostructures for Enhanced Gas-Sensing Performance. 2022 , 22, 18306-18312	О
72	Nd3+ added MgICd ferrite material study the thick film gas sensing properties. 2022, 126871	O
71	Electronic nose and wireless sensor network for environmental monitoring application in pulp and paper industry: a review. 2022 , 194,	1
70	Environmental gas sensors based on electroactive hybrid organic-inorganic nanocomposites.	О
69	Green Nanomaterials for Remediation of Environmental Air Pollution. 2022, 1-26	О
68	Planar Polymer Optical Waveguide Coated with Metal-Organic Framework for CO2 Sensing Application. 2022 , 267, 02038	О
67	Advances of Semiconductor Gas Sensing Materials, Structures, and Algorithms for Breath Analysis. 2022 ,	0
66	CORRELATION OF THE SURFACE STRUCTURE OF THE RuO2/TIAND TIO2 /TIFILMS WITH ELECTROCHEMICAL IMPEDANCE DATA. 2022 , 88, 97-105	O
65	Compact Non-Dispersive Infrared Multi-Gas Sensing Platform for Large Scale Deployment with Sub-ppm Resolution. 2022 , 13, 1789	2
64	TiO2 Gas Sensors Combining Experimental and DFT Calculations: A Review. 2022 , 12, 3611	1
63	Application of Two-Dimensional Materials towards CMOS-Integrated Gas Sensors. 2022, 12, 3651	1
62	Nanoporous SilicaAlumina Films Fabricated on Silicon Photonic Chips for Selective Ammonia Sensing.	О
61	Highly sensitive ultra-thin optical CO2 gas sensors using nanowall honeycomb structure and plasmonic nanoparticles. 10,	1
60	Highly sensitive HF detection based on absorption enhanced light-induced thermoelastic spectroscopy with a quartz tuning fork of receive and shallow neural network fitting. 2022 , 100422	4
59	Recent Progress on Flexible Room-Temperature Gas Sensors Based on Metal Oxide Semiconductor. 2022 , 14,	2
58	Performance analysis and optimization of high Q-factor toroidal resonance refractive index sensor based on all-dielectric metasurface. 2023 , 157, 108752	1

57	Optimization of multilayer graphene-based gas sensors by ultraviolet photoactivation. 2023, 610, 155393	0
56	Cesium Lead Bromide Nanocrystals: Synthesis, Modification, and Application to O2 Sensing. 2022 , 22, 8853	O
55	Luminescent Silicon Nanowires as Novel Sensor for Environmental Air Quality Control. 2022, 22, 8755	О
54	Effect of dopant oxidation states on enhanced low ppm CO sensing by copper doped zinc oxide. 2022 , 127047	O
53	Classification of Food Types in a Box with Gas Sensors Using a Machine Learning Method. Case Study of Intelligent Electronic Nose. 2022 , 500-510	0
52	Conductometric Gas Sensors. 2022 ,	O
51	Real-time monitoring of CO2 gas using inverse opal photonic gel containing Poly(2-(dimethylamino)ethylmethacrylate. 2023 , 377, 133041	0
50	Tuning the sensing selectivity of mesoporous hierarchical Ti-doped Co3O4 to toluene and xylene via controlling the oxygen defects. 2023 , 614, 156079	1
49	Quantum tailoring of electronic properties in covalently functionalized graphene: application to ammonia gas detection. 2022 , 12, 36002-36011	0
48	First-Principles Investigation of Adsorption Behaviors and Electronic, Optical, and Gas-Sensing Properties of Pure and Pd-Decorated GeS2 Monolayers. 2022 , 7, 46440-46451	O
47	Ammonia sensing performance of Ni doped-WO3 nano particles prepared by simple hydrothermal method at room temperature. 2022 ,	0
46	Recent Progress on Anti-Humidity Strategies of Chemiresistive Gas Sensors. 2022 , 15, 8728	4
45	Optical Gas Sensors.	0
44	a-ITZO based thin film transistor for ammonia gas sensing: a simulation study. 2022 , 4, 045032	O
43	Metal oxide semiconductors for gas sensing.	0
42	Synthesis and characterization of nanostructured Ag- and In-doped vanadium pentoxide for ethanol-sensing application. 2022 ,	O
41	Liquid Metal @ Mxene Spring Supports Ionic Gel with Excellent Mechanical Properties for High-Sensitivity Wearable Strain Sensor. 2023 , 141370	0
40	Detection of H2S, HF and H2 pollutant gases on the surface of penta-PdAs2 monolayer using DFT approach. 2023 , 13,	1

39	Enhanced Nitric Oxide Sensing Performance of Conjugated Polymer Films through Incorporation of Graphitic Carbon Nitride. 2023 , 24, 1158	0
38	A positive observer for the chemostat model with biogas measurement. 2023 , 122, 49-58	O
37	Influence of defects upon mechanical properties of oxide materials. 2023, 253-280	0
36	Environmental monitoring and membrane technologies: a possible marriage?. 2023, 101-135	O
35	Development of highly sensitive Al, Ga, and In doped ZnO films by drop casting method for NH3 gas sensing.	0
34	Carbon nanomaterials-based gas sensors. 2023 , 25-49	Ο
33	Design of SnO2-based CH4 sensors with reactive anti-poisoning layers: excellent stability and high resistance to hexamethyldisiloxane. 2023 , 58, 2140-2155	0
32	Gas Sensor Based on Lossy Mode Resonances by Means of Thin Graphene Oxide Films Fabricated onto Planar Coverslips. 2023 , 23, 1459	Ο
31	An Alternative Approach for the Synthesis of Zinc Aluminate Nanoparticles for CO and Propane Sensing Applications. 2023 , 11, 105	О
30	Emerging applications of nanotechnology for e-nose. 2023 , 57-100	Ο
29	Illustration of an extremely sensitive SPR based fiber optic gas sensor irradiated by Bessel-Gauss beam and wave theory based approach. 2023 , 275, 170599	
	beam and wave theory based approach. 2023 , 273, 170399	0
28	Quartz-Enhanced Photoacoustic Sensors for Detection of Eight Air Pollutants.	0
28		
	Quartz-Enhanced Photoacoustic Sensors for Detection of Eight Air Pollutants. Highly sensitive and wide range hydrogen sensor based on thin films of AgInO2 by pulsed laser	0
27	Quartz-Enhanced Photoacoustic Sensors for Detection of Eight Air Pollutants. Highly sensitive and wide range hydrogen sensor based on thin films of AgInO2 by pulsed laser deposition. 2023, 383, 133599 Moisture-enhanced trace chloroalkanes detection in bimetallic metal-organic frameworks	0
27	Quartz-Enhanced Photoacoustic Sensors for Detection of Eight Air Pollutants. Highly sensitive and wide range hydrogen sensor based on thin films of AgInO2 by pulsed laser deposition. 2023, 383, 133599 Moisture-enhanced trace chloroalkanes detection in bimetallic metal-organic frameworks 3-dimensional photonic crystal. 2023, 1254, 341117	0 0
27 26 25	Quartz-Enhanced Photoacoustic Sensors for Detection of Eight Air Pollutants. Highly sensitive and wide range hydrogen sensor based on thin films of AgInO2 by pulsed laser deposition. 2023, 383, 133599 Moisture-enhanced trace chloroalkanes detection in bimetallic metal-organic frameworks 3-dimensional photonic crystal. 2023, 1254, 341117 Graphene-sensitized microring gas sensor probing with a single-wavelength laser. 2023, 537, 129447 Metal Oxide Gas Sensors to Study Acetone Detection Considering Their Potential in the Diagnosis	0 0

21	Double-Layer Carbon Encapsulated Co Particles Combined with Ionic Liquid for Enhancing Electrochemical Detection of Oxygen. 2023 , 11, 3023-3035	Ο
20	Carbon nanomaterial-based chemiresistive sensors. 2023 , 107-131	O
19	Facile Electrodeposition-Based Chemosensors Using PANI and C-Hybrid Nanomaterials for the Selective Detection of Ammonia and Nitrogen Dioxide at Room Temperature. 2023 , 11, 132	0
18	Spatial Upscaling-Based Algorithm for Detection and Estimation of Hazardous Gases. 2023 , 11, 17731-17738	O
17	Highly Sensitive Photoacoustic NO2 Measurement System Based on an Optimized Ring-Shaped Resonant Cell. 2023 , 72, 1-10	0
16	Recent advances in bioelectronic noses based on olfactory receptors. 2023, 125-141	O
15	TSMC-Net: Deep-Learning Multigas Classification Using THz Absorption Spectra. 2023 , 8, 1230-1240	Ο
14	Ultrahigh dielectric permittivity in oxide ceramics by hydrogenation. 2023 , 9,	О
13	A review of piezoelectric MEMS sensors and actuators for gas detection application. 2023, 18,	0
12	Innovative Photonic Sensors for Safety and Security, Part I: Fundamentals, Infrastructural and Ground Transportations. 2023 , 23, 2558	2
11	Photoacoustic detection of CO2 using a H2-filled mid-infrared fiber Raman laser source. 2023,	O
10	Advances in sensing mechanisms and micro/nanostructured sensing layers for surface acoustic wave-based gas sensors.	O
9	Hydrogen gas sensing performance of a carbon-doped boron nitride nanoribbon at elevated temperatures. 2023 , 18, e0282370	O
8	Trace Gas Detection System Based on Photoacoustic and Photothermal Spectroscopy Using Ring Fiber Laser and Quartz Tuning Fork. 2023 , 1-1	O
7	Multiplexed DNA-functionalized graphene sensor with artificial intelligence-based discrimination performance for analyzing chemical vapor compositions. 2023 , 9,	0
6	A Variational Bayesian Blind Calibration Approach for Air Quality Sensor Deployments. 2023 , 23, 7129-7141	O
5	Development and measurement of airborne oxygen sensor for aircraft inerting system based on TDLAS with pressure compensation and 2f/1f normalized method. 2023 , 104689	O
4	Development of new co-planar platform configuration of MOX gas sensor. 2023 , 129,	O

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Recent development and challenges on design and fabrication of flexible substrate based carbon monoxide gas sensor: a review.

Detection of xylene from C/Co3O4 nanocomposites synthesized from double-template using g-C3N4/ZIF-67. 2023, 466, 143363

Improving Hazardous Gas Detection Behavior with Palladium Decorated SnO2 Nanobelts Networks. 2023, 23, 4783