

Guido Faglia

List of Publications by Year in descending order

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196
papers

10,743
citations

29994

54
h-index

40881

93
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200
all docs

200
docs citations

200
times ranked

9372
citing authors

#	ARTICLE	IF	CITATIONS
1	Stable and highly sensitive gas sensors based on semiconducting oxide nanobelts. Applied Physics Letters, 2002, 81, 1869-1871.	1.5	1,400
2	Quasi-one dimensional metal oxide semiconductors: Preparation, characterization and application as chemical sensors. Progress in Materials Science, 2009, 54, 1-67.	16.0	582
3	Metal oxide nanocrystals for gas sensing. , 0, , .		451
4	UV light activation of tin oxide thin films for NO ₂ sensing at low temperatures. Sensors and Actuators B: Chemical, 2001, 78, 73-77.	4.0	249
5	Light enhanced gas sensing properties of indium oxide and tin dioxide sensors. Sensors and Actuators B: Chemical, 2000, 65, 260-263.	4.0	214
6	Nanostructured ZnO chemical gas sensors. Ceramics International, 2015, 41, 14239-14244.	2.3	193
7	The Role of Surface Oxygen Vacancies in the NO ₂ Sensing Properties of SnO ₂ Nanocrystals. Journal of Physical Chemistry C, 2008, 112, 19540-19546.	1.5	181
8	TiO ₂ Nanotubes: Recent Advances in Synthesis and Gas Sensing Properties. Sensors, 2013, 13, 14813-14838.	2.1	173
9	Synthesis and characterization of semiconducting nanowires for gas sensing. Sensors and Actuators B: Chemical, 2007, 121, 208-213.	4.0	163
10	Metal oxide nanoscience and nanotechnology for chemical sensors. Sensors and Actuators B: Chemical, 2013, 179, 3-20.	4.0	153
11	Investigation on the O ₃ sensitivity properties of WO ₃ thin films prepared by sol-gel, thermal evaporation and r.f. sputtering techniques. Sensors and Actuators B: Chemical, 2000, 64, 182-188.	4.0	148
12	Adsorption effects of NO ₂ at ppm level on visible photoluminescence response of SnO ₂ nanobelts. Applied Physics Letters, 2005, 86, 011923.	1.5	133
13	Controlled Growth and Sensing Properties of In ₂ O ₃ Nanowires. Crystal Growth and Design, 2007, 7, 2500-2504.	1.4	130
14	A new technique for growing large surface area SnO ₂ thin film (RGTO technique). Semiconductor Science and Technology, 1990, 5, 1231-1233.	1.0	123
15	Nanocomposites SnO ₂ /Fe ₂ O ₃ : Sensor and catalytic properties. Sensors and Actuators B: Chemical, 2006, 118, 208-214.	4.0	117
16	Characterization of a nanosized TiO ₂ gas sensor. Scripta Materialia, 1996, 7, 709-718.	0.5	114
17	Metal oxide nanocrystals for gas sensing. Sensors and Actuators B: Chemical, 2005, 109, 2-6.	4.0	113
18	Tin oxide nanobelts electrical and sensing properties. Sensors and Actuators B: Chemical, 2005, 111-112, 2-6.	4.0	112

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19	Photosensitivity activation of SnO ₂ thin film gas sensors at room temperature. <i>Sensors and Actuators B: Chemical</i> , 1996, 31, 99-103.	4.0	109
20	Nanostructured mixed oxides compounds for gas sensing applications. <i>Sensors and Actuators B: Chemical</i> , 2002, 84, 26-32.	4.0	107
21	Influence of chemical composition and structural factors of Fe ₂ O ₃ /In ₂ O ₃ sensors on their selectivity and sensitivity to ethanol. <i>Sensors and Actuators B: Chemical</i> , 2003, 96, 498-503.	4.0	103
22	A novel porous silicon sensor for detection of sub-ppm NO ₂ concentrations. <i>Sensors and Actuators B: Chemical</i> , 2001, 77, 62-66.	4.0	102
23	Reduced graphene oxide/ZnO nanocomposite for application in chemical gas sensors. <i>RSC Advances</i> , 2016, 6, 34225-34232.	1.7	101
24	Nanocrystalline Metal Oxides from the Injection of Metal Oxide Sols in Coordinating Solutions: Synthesis, Characterization, Thermal Stabilization, Device Processing, and Gas-Sensing Properties. <i>Advanced Functional Materials</i> , 2006, 16, 1488-1498.	7.8	97
25	Methods for the preparation of NO, NO ₂ and H ₂ sensors based on tin oxide thin films, grown by means of the r.f. magnetron sputtering technique. <i>Sensors and Actuators B: Chemical</i> , 1992, 8, 79-88.	4.0	96
26	New label free CA125 detection based on gold nanostructured screen-printed electrode. <i>Sensors and Actuators B: Chemical</i> , 2013, 179, 194-200.	4.0	96
27	Defect study of SnO ₂ nanostructures by cathodoluminescence analysis: Application to nanowires. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 6-12.	4.0	93
28	Titanium dioxide thin films prepared for alcohol microsensor applications. <i>Sensors and Actuators B: Chemical</i> , 2000, 66, 139-141.	4.0	90
29	The aging effect on SnO ₂ @Au thin film sensors: electrical and structural characterization. <i>Thin Solid Films</i> , 2000, 371, 249-253.	0.8	89
30	Data preprocessing enhances the classification of different brands of Espresso coffee with an electronic nose. <i>Sensors and Actuators B: Chemical</i> , 2000, 69, 397-403.	4.0	85
31	Gas-sensitive properties of thin film heterojunction structures based on Fe ₂ O ₃ @In ₂ O ₃ nanocomposites. <i>Sensors and Actuators B: Chemical</i> , 2003, 93, 422-430.	4.0	85
32	Semiconductor MoO ₃ @TiO ₂ thin film gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2001, 77, 472-477.	4.0	83
33	Single crystal ZnO nanowires as optical and conductometric chemical sensor. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 7255-7259.	1.3	82
34	Sensitivity enhancement towards ethanol and methanol of TiO ₂ films doped with Pt and Nb. <i>Sensors and Actuators B: Chemical</i> , 2000, 64, 169-174.	4.0	81
35	Multiparametric Porous Silicon Sensors. <i>Sensors</i> , 2002, 2, 121-126.	2.1	81
36	In ₂ O ₃ nanowires for gas sensors: morphology and sensing characterisation. <i>Thin Solid Films</i> , 2007, 515, 8356-8359.	0.8	81

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37	Solvothermal, Chloroalkoxide-based Synthesis of Monoclinic WO ₃ Quantum Dots and Gas-Sensing Enhancement by Surface Oxygen Vacancies. ACS Applied Materials & Interfaces, 2014, 6, 16808-16816.	4.0	78
38	Complex chemical pattern recognition with sensor array: the discrimination of vintage years of wine. Sensors and Actuators B: Chemical, 1995, 25, 801-804.	4.0	71
39	Carbon monoxide response of molybdenum oxide thin films deposited by different techniques. Sensors and Actuators B: Chemical, 2000, 68, 168-174.	4.0	71
40	Synthesis and Gas-Sensing Properties of Pd-Doped SnO ₂ Nanocrystals. A Case Study of a General Methodology for Doping Metal Oxide Nanocrystals. Crystal Growth and Design, 2008, 8, 1774-1778.	1.4	69
41	Functionalised zinc oxide nanowire gas sensors: Enhanced NO ₂ gas sensor response by chemical modification of nanowire surfaces. Beilstein Journal of Nanotechnology, 2012, 3, 368-377.	1.5	69
42	Selectivity enhancement of SnO ₂ sensors by means of operating temperature modulation. Thin Solid Films, 2002, 418, 2-8.	0.8	68
43	Luminescence response of ZnO nanowires to gas adsorption. Sensors and Actuators B: Chemical, 2009, 140, 461-466.	4.0	65
44	TiO ₂ nanotubular and nanoporous arrays by electrochemical anodization on different substrates. RSC Advances, 2011, 1, 1038.	1.7	65
45	Structural and gas response characterization of nano-size SnO ₂ films deposited by SILD method. Sensors and Actuators B: Chemical, 2003, 96, 602-609.	4.0	62
46	Thin-film gas sensor implemented on a low-power-consumption micromachined silicon structure. Sensors and Actuators B: Chemical, 1998, 49, 88-92.	4.0	60
47	Front-side micromachined porous silicon nitrogen dioxide gas sensor. Thin Solid Films, 2001, 391, 261-264.	0.8	59
48	The features of thin film and ceramic sensors at the detection of CO and NO ₂ . Sensors and Actuators B: Chemical, 2000, 68, 344-350.	4.0	58
49	Gas detection with a porous silicon based sensor. Sensors and Actuators B: Chemical, 2000, 65, 257-259.	4.0	57
50	On the mechanism of photoluminescence quenching in tin dioxide nanowires by NO ₂ adsorption. New Journal of Physics, 2008, 10, 043013.	1.2	57
51	Metal oxide nanowires: Preparation and application in gas sensing. Journal of Molecular Catalysis A, 2009, 305, 170-177.	4.8	57
52	Cavitands as selective materials for QMB sensors for nitrobenzene and other aromatic vapours. Sensors and Actuators B: Chemical, 1993, 13, 302-304.	4.0	56
53	Layered WO ₃ /ZnO/36Å° LiTaO ₃ SAW gas sensor sensitive towards ethanol vapour and humidity. Sensors and Actuators B: Chemical, 2006, 117, 442-450.	4.0	56
54	Preparation of Radial and Longitudinal Nanosized Heterostructures of In ₂ O ₃ and SnO ₂ . Nano Letters, 2007, 7, 3553-3558.	4.5	56

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55	Gas sensing characteristics of Fe-doped tungsten oxide thin films. <i>Sensors and Actuators B: Chemical</i> , 2012, 168, 345-353.	4.0	56
56	Indium oxide quasi-monodimensional low temperature gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 204-207.	4.0	55
57	A novel PVD technique for the preparation of SnO ₂ thin films as C ₂ H ₅ OH sensors. <i>Sensors and Actuators B: Chemical</i> , 1992, 7, 721-726.	4.0	54
58	Metal Oxide Nanowire and Thin-Film-Based Gas Sensors for Chemical Warfare Simulants Detection. <i>IEEE Sensors Journal</i> , 2008, 8, 735-742.	2.4	54
59	Model and Experimental Characterization of the Dynamic Behavior of Low-Power Carbon Monoxide MOX Sensors Operated With Pulsed Temperature Profiles. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2009, 58, 1324-1332.	2.4	54
60	Fabrication and investigation of gas sensing properties of Nb-doped TiO ₂ nanotubular arrays. <i>Nanotechnology</i> , 2012, 23, 235706.	1.3	51
61	Very low power consumption micromachined CO sensors. <i>Sensors and Actuators B: Chemical</i> , 1999, 55, 140-146.	4.0	50
62	Orthorhombic Pbcn SnO ₂ nanowires for gas sensing applications. <i>Journal of Crystal Growth</i> , 2008, 310, 253-260.	0.7	49
63	On the role of catalytic additives in gas-sensitivity of SnO ₂ -Mo based thin film sensors. <i>Sensors and Actuators B: Chemical</i> , 2001, 77, 268-274.	4.0	48
64	Effect of nickel ions on sensitivity of In ₂ O ₃ thin film sensors to NO ₂ . <i>Sensors and Actuators B: Chemical</i> , 1999, 57, 153-158.	4.0	47
65	Metal-oxide nanowire sensors for CO detection: Characterization and modeling. <i>Sensors and Actuators B: Chemical</i> , 2010, 148, 283-291.	4.0	47
66	Gold-catalysed porous silicon for NO _x sensing. <i>Sensors and Actuators B: Chemical</i> , 2000, 68, 74-80.	4.0	46
67	Semiconducting tin oxide nanowires and thin films for Chemical Warfare Agents detection. <i>Thin Solid Films</i> , 2009, 517, 6156-6160.	0.8	46
68	Conductivity and work function ozone sensors based on indium oxide. <i>Sensors and Actuators B: Chemical</i> , 1998, 49, 63-67.	4.0	45
69	Cr-inserted TiO ₂ thin films for chemical gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2007, 128, 312-319.	4.0	44
70	SnO ₂ /RGTO UV Activation for CO Monitoring. <i>IEEE Sensors Journal</i> , 2004, 4, 17-20.	2.4	43
71	Tailoring the textured surface of porous nanostructured NiO thin films for the detection of pollutant gases. <i>Thin Solid Films</i> , 2015, 583, 233-238.	0.8	43
72	One-dimensional nanostructured oxides for thermoelectric applications and excitonic solar cells. <i>Nano Energy</i> , 2012, 1, 372-390.	8.2	41

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73	Organotin films deposited by laser-induced CVD as active layers in chemical gas sensors. Thin Solid Films, 1998, 323, 291-295.	0.8	40
74	Title is missing!. Journal of Sol-Gel Science and Technology, 2003, 26, 741-744.	1.1	40
75	Inverse opal gas sensors: Zn(II)-doped tin dioxide systems for low temperature detection of pollutant gases. Sensors and Actuators B: Chemical, 2008, 130, 567-573.	4.0	40
76	p-Type copper aluminum oxide thin films for gas-sensing applications. Sensors and Actuators B: Chemical, 2015, 209, 287-296.	4.0	40
77	ZnO / TiO ₂ nanonetwork as efficient photoanode in excitonic solar cells. Applied Physics Letters, 2009, 95, .	1.5	39
78	A time delay neural network for estimation of gas concentrations in a mixture. Sensors and Actuators B: Chemical, 2000, 65, 267-269.	4.0	38
79	Nanocrystals as Very Active Interfaces: Ultrasensitive Room-Temperature Ozone Sensors with In ₂ O ₃ Nanocrystals Prepared by a Low-Temperature Sol-Gel Process in a Coordinating Environment. Journal of Physical Chemistry C, 2007, 111, 13967-13971.	1.5	38
80	SnO ₂ :Sb A new material for high-temperature MEMS heater applications: Performance and limitations. Sensors and Actuators B: Chemical, 2007, 124, 421-428.	4.0	38
81	CO and NO ₂ response of tin oxide silicon doped thin films. Sensors and Actuators B: Chemical, 2001, 76, 270-274.	4.0	37
82	Electrical and structural properties of RGTO-In ₂ O ₃ sensors for ozone detection. Sensors and Actuators B: Chemical, 1999, 57, 188-191.	4.0	36
83	Gas sensitive light emission properties of tin oxide and zinc oxide nanobelts. Journal of Non-Crystalline Solids, 2006, 352, 1457-1460.	1.5	35
84	Gas response times of nano-scale SnO ₂ gas sensors as determined by the moving gas outlet technique. Sensors and Actuators B: Chemical, 2007, 126, 174-180.	4.0	35
85	Direct integration of metal oxide nanowires into an effective gas sensing device. Nanotechnology, 2010, 21, 145502.	1.3	35
86	Influence of the completion of oxidation on the long-term response of RGTO SnO ₂ gas sensors. Sensors and Actuators B: Chemical, 2000, 66, 40-42.	4.0	34
87	Pd- and Ca-doped iron oxide for ethanol vapor sensing. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 139, 41-47.	1.7	34
88	Interactions of nanocrystalline tin oxide powder with NO ₂ : A Raman spectroscopic study. Sensors and Actuators B: Chemical, 2007, 126, 1-5.	4.0	34
89	Chemical synthesis of In ₂ O ₃ nanocrystals and their application in highly performing ozone-sensing devices. Sensors and Actuators B: Chemical, 2008, 130, 483-487.	4.0	34
90	Colloidal Counterpart of the TiO ₂ -Supported V ₂ O ₅ System: A Case Study of Oxide-on-Oxide Deposition by Wet Chemical Techniques. Synthesis, Vanadium Speciation, and Gas-Sensing Enhancement. Journal of Physical Chemistry C, 2013, 117, 20697-20705.	1.5	34

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91	A composite structure based on reduced graphene oxide and metal oxide nanomaterials for chemical sensors. Beilstein Journal of Nanotechnology, 2016, 7, 1421-1427.	1.5	34
92	Kelvin probe as an effective tool to develop sensitive p-type CuO gas sensors. Sensors and Actuators B: Chemical, 2016, 222, 1257-1263.	4.0	34
93	Surface Ionization Gas Detection on Platinum and Metal Oxide Surfaces. IEEE Sensors Journal, 2009, 9, 1727-1733.	2.4	33
94	Multiparametric porous silicon gas sensors with improved quality and sensitivity. Physica Status Solidi A, 2003, 197, 523-527.	1.7	32
95	Room-temperature gas sensing based on visible photoluminescence properties of metal oxide nanobelts. Journal of Optics, 2006, 8, S585-S588.	1.5	32
96	Gas sensing properties of zinc oxide nanostructures prepared by thermal evaporation. Applied Physics A: Materials Science and Processing, 2007, 88, 45-48.	1.1	31
97	Nanowires of metal oxides for gas sensing applications. Surface and Interface Analysis, 2008, 40, 575-578.	0.8	31
98	Hydrogen and humidity sensing properties of C60 thin films. Synthetic Metals, 1996, 77, 273-275.	2.1	30
99	Monitoring plants health in greenhouse for space missions. Sensors and Actuators B: Chemical, 2005, 108, 278-284.	4.0	30
100	Insight into the Formation Mechanism of One-Dimensional Indium Oxide Wires. Crystal Growth and Design, 2010, 10, 140-145.	1.4	30
101	Synthesis of self-ordered and well-aligned Nb ₂ O ₅ nanotubes. CrystEngComm, 2014, 16, 10273-10279.	1.3	30
102	Transfer of CVD-grown graphene for room temperature gas sensors. Nanotechnology, 2017, 28, 414001.	1.3	30
103	Performance evaluation of an SnO ₂ -based sensor array for the quantitative measurement of mixtures of H ₂ S and NO ₂ . Sensors and Actuators B: Chemical, 1994, 20, 217-224.	4.0	29
104	Monitoring penetration of ethanol in a porous silicon microcavity by photoluminescence interferometry. Applied Physics Letters, 2001, 78, 3744-3746.	1.5	29
105	Exploratory data analysis for industrial safety application. Sensors and Actuators B: Chemical, 2008, 131, 100-109.	4.0	29
106	Capacitive humidity sensor with controlled performances, based on porous Al ₂ O ₃ thin film grown on SiO ₂ -Si substrate. Sensors and Actuators B: Chemical, 1994, 19, 551-553.	4.0	27
107	Plasma-induced enhancement of UV photoluminescence in ZnO nanowires. CrystEngComm, 2013, 15, 7981.	1.3	27
108	Integration of ZnO and CuO nanowires into a thermoelectric module. Beilstein Journal of Nanotechnology, 2014, 5, 927-936.	1.5	27

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109	Polyphosphazene membrane as a very sensitive resistive and capacitive humidity sensor. <i>Sensors and Actuators B: Chemical</i> , 1996, 35, 99-102.	4.0	26
110	Pt doping triggers growth of TiO ₂ nanorods: nanocomposite synthesis and gas-sensing properties. <i>CrystEngComm</i> , 2012, 14, 3882.	1.3	26
111	Highly conductive titanium oxide nanotubes chemical sensors. <i>Microporous and Mesoporous Materials</i> , 2015, 208, 165-170.	2.2	26
112	Large surface area biphasic titania for chemical sensing. <i>Sensors and Actuators B: Chemical</i> , 2015, 209, 1091-1096.	4.0	26
113	Tin Oxide Nanowires Decorated with Ag Nanoparticles for Visible Light-Enhanced Hydrogen Sensing at Room Temperature: Bridging Conductometric Gas Sensing and Plasmon-Driven Catalysis. <i>Journal of Physical Chemistry C</i> , 2018, 122, 5026-5031.	1.5	26
114	Study of the effect of the sensor operating temperature on SnO ₂ -based sensor-array performance. <i>Sensors and Actuators B: Chemical</i> , 1995, 23, 187-191.	4.0	25
115	Catalytic enhancement of SnO ₂ gas sensors as seen by the moving gas outlet method. <i>Sensors and Actuators B: Chemical</i> , 2008, 130, 193-199.	4.0	25
116	Vertically Aligned TiO ₂ Nanotubes on Plastic Substrates for Flexible Solar Cells. <i>Small</i> , 2011, 7, 2437-2442.	5.2	25
117	Sensitivity of Porous Silicon Photoluminescence to Low Concentrations of CH ₄ and CO. <i>Journal of Porous Materials</i> , 2000, 7, 287-290.	1.3	24
118	Oxygen gas sensing properties of undoped and Li-doped SnO ₂ thin films. <i>Sensors and Actuators B: Chemical</i> , 1993, 13, 117-120.	4.0	23
119	Frequency effect on highly sensitive NO ₂ sensors based on RGTO SnO ₂ (Al) thin films. <i>Sensors and Actuators B: Chemical</i> , 1994, 19, 497-499.	4.0	22
120	Monitoring reliability of sensors in an array by neural networks. <i>Sensors and Actuators B: Chemical</i> , 2000, 67, 128-133.	4.0	22
121	Synthesis of self-assembled chain-like ZnO nanostructures on stiff and flexible substrates. <i>CrystEngComm</i> , 2013, 15, 2881.	1.3	22
122	Metal oxide nanowire chemical and biochemical sensors. <i>Journal of Materials Research</i> , 2013, 28, 2911-2931.	1.2	22
123	Quantification of H ₂ S and NO ₂ using gas sensor arrays and an artificial neural network. <i>Sensors and Actuators B: Chemical</i> , 1997, 43, 235-238.	4.0	21
124	Square and collinear four probe array and Hall measurements on metal oxide thin film gas sensors. <i>Sensors and Actuators B: Chemical</i> , 1998, 53, 69-75.	4.0	21
125	Preparation and characterisation of titanium tungsten sensors. <i>Sensors and Actuators B: Chemical</i> , 2000, 65, 264-266.	4.0	21
126	SnO ₂ /Fe ₂ O ₃ nanocomposites: Ethanol-sensing performance and catalytic activity for oxidation of ethanol. <i>Inorganic Materials</i> , 2006, 42, 1088-1093.	0.2	21

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127	Surface Modification of TiO ₂ Nanocrystals by WO _x Coating or Wrapping: Solvothermal Synthesis and Enhanced Surface Chemistry. ACS Applied Materials & Interfaces, 2015, 7, 6898-6908.	4.0	21
128	Evidence of catalytic activation of anatase nanocrystals by vanadium oxide surface layer: Acetone and ethanol sensing properties. Sensors and Actuators B: Chemical, 2015, 217, 193-197.	4.0	21
129	Metal Oxide Nanowire Preparation and Their Integration into Chemical Sensing Devices at the SENSOR Lab in Brescia. Sensors, 2017, 17, 1000.	2.1	21
130	A systematic investigation on the use of time-dependent sensor signals in signal-processing techniques. Sensors and Actuators B: Chemical, 1995, 25, 785-789.	4.0	20
131	Influence of gaseous species transport on the response of solid state gas sensors within enclosures. Sensors and Actuators B: Chemical, 2001, 78, 144-150.	4.0	19
132	Composition influence on the properties of sputtered Sn _n -W _m -O films. Sensors and Actuators B: Chemical, 2003, 89, 225-231.	4.0	19
133	SnO ₂ lithographic processing for nanopatterned gas sensors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2784.	1.6	19
134	Iron-doped indium oxide by modified RGTO deposition for ozone sensing. Sensors and Actuators B: Chemical, 2006, 118, 221-225.	4.0	19
135	Identification and quantification of methane and ethyl alcohol in an environment at variable humidity by an hybrid array. Sensors and Actuators B: Chemical, 1997, 44, 517-520.	4.0	18
136	SnO ₂ sub-micron wires for gas sensors. Microelectronic Engineering, 2005, 78-79, 178-184.	1.1	18
137	Pt/Ga ₂ O ₃ /SiC MRISiC devices: a study of the hydrogen response. Journal Physics D: Applied Physics, 2005, 38, 754-763.	1.3	18
138	TiO ₂ colloidal nanocrystals surface modification by V ₂ O ₅ species: Investigation by ^{47,49} Ti MAS-NMR and H ₂ , CO and NO ₂ sensing properties. Applied Surface Science, 2015, 351, 1169-1173.	3.1	18
139	Functional nanowires of tin oxide. Applied Physics A: Materials Science and Processing, 2007, 89, 73-76.	1.1	17
140	Correlation between atomic composition and gas sensing properties in tungsten-iron oxide thin films. Sensors and Actuators B: Chemical, 2007, 127, 22-28.	4.0	17
141	Exploitation of a low-cost electronic system, designed for low-conductance and wide-range measurements, to control metal oxide gas sensors with temperature profile protocols. Sensors and Actuators B: Chemical, 2012, 175, 149-156.	4.0	17
142	Fabrication of pure and Nb-TiO ₂ nanotubes and their functional properties. Journal of Alloys and Compounds, 2012, 536, S488-S490.	2.8	17
143	Micromachined gas sensors for environmental pollutants. Microsystem Technologies, 1999, 6, 54-59.	1.2	16
144	Oxide Nanobelts as Conductometric Gas Sensors. Materials and Manufacturing Processes, 2006, 21, 229-232.	2.7	16

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145	Gas Sensing Properties of Hydrogenated Amorphous Silicon Films. IEEE Sensors Journal, 2007, 7, 1506-1512.	2.4	15
146	Visible electroluminescence from a ZnO nanowires/p-GaN heterojunction light emitting diode. Optics Express, 2015, 23, 18937.	1.7	15
147	Towards a Deeper Comprehension of the Interaction Mechanisms between Mesoporous Silicon and NO ₂ . Physica Status Solidi A, 2000, 182, 465-471.	1.7	14
148	Photo-Induced Unpinning of Fermi Level in WO ₃ . Sensors, 2005, 5, 594-603.	2.1	14
149	Cr ²⁺ Sn oxide thin films: Electrical and spectroscopic characterisation with CO, NO ₂ , NH ₃ and ethanol. Sensors and Actuators B: Chemical, 2006, 118, 142-148.	4.0	14
150	Influence of iron addition on ethanol and CO sensing properties of tin oxide prepared with the RGTO technique. Sensors and Actuators B: Chemical, 2006, 115, 561-566.	4.0	14
151	NO ₂ adsorption effects on p-n silicon junctions surrounded by a porous layer. Sensors and Actuators B: Chemical, 2008, 134, 922-927.	4.0	14
152	Vertically Coupling ZnO Nanorods onto MoS ₂ Flakes for Optical Gas Sensing. Chemosensors, 2020, 8, 19.	1.8	14
153	Improvement in signal evaluation methods for semiconductor gas sensors. Sensors and Actuators B: Chemical, 1995, 27, 267-270.	4.0	13
154	Seebeck effect in ZnO nanowires for micropower generation. Procedia Engineering, 2011, 25, 1481-1484.	1.2	13
155	Thermal treatment stabilization processes in SnO ₂ /thin films catalyzed with Au and Pt. IEEE Sensors Journal, 2002, 2, 102-106.	2.4	12
156	Influence of metallic impurities on response kinetics in metal oxide thin film gas sensors. Sensors and Actuators B: Chemical, 2004, 103, 448-456.	4.0	12
157	Planar Thermoelectric Generator based on Metal-Oxide Nanowires for Powering Autonomous Microsystems. Procedia Engineering, 2012, 47, 346-349.	1.2	12
158	On the alignment of ZnO nanowires by Langmuir-Blodgett technique for sensing application. Applied Surface Science, 2020, 528, 146959.	3.1	12
159	Metal Oxides One-Dimensional Nanostructures for Gas Sensing and Light Emission. Journal of the American Ceramic Society, 2012, 95, 831-850.	1.9	11
160	Chemoresistive sensing of light alkanes with SnO ₂ nanocrystals: a DFT-based insight. Physical Chemistry Chemical Physics, 2009, 11, 3634.	1.3	10
161	Electrical-Based Gas Sensing. , 2009, , 1-61.		9
162	Two step, hydrolytic-solvothermal synthesis of redispersible titania nanocrystals and their gas-sensing properties. Journal of Sol-Gel Science and Technology, 2011, 60, 254-259.	1.1	9

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163	Synthesis and electrochemical study of a hybrid structure based on PDMS-TEOS and titania nanotubes for biomedical applications. <i>Nanotechnology</i> , 2014, 25, 365701.	1.3	9
164	Oxide nanocrystals from a low-temperature, self-limiting sol-gel transition in a coordinating environment: Nanocrystal synthesis, processing of gas-sensing devices and application to organic compounds. <i>Sensors and Actuators B: Chemical</i> , 2007, 126, 163-167.	4.0	7
165	Model and experimental characterization of dynamic behaviour of low power Carbon Monoxide MOX sensors with pulsed temperature profile. , 2008, , .		7
166	Mineralization of 3D Osteogenic Model Based on Gelatin-Dextran Hybrid Hydrogel Scaffold Bioengineered with Mesenchymal Stromal Cells: A Multiparametric Evaluation. <i>Materials</i> , 2021, 14, 3852.	1.3	7
167	Study of the Degradation of Biobased Plastic after Stress Tests in Water. <i>Coatings</i> , 2021, 11, 1330.	1.2	7
168	High-precision neural pre-processing for signal analysis of a sensor array. <i>Sensors and Actuators B: Chemical</i> , 1998, 47, 77-83.	4.0	6
169	Response dynamics of metal oxide gas sensors working with temperature profile protocols. <i>Procedia Engineering</i> , 2011, 25, 1173-1176.	1.2	6
170	Fabrication of TiO ₂ and TiO ₂ <Nb> Nanotubular Arrays and Their Gas Sensing Properties. <i>Procedia Engineering</i> , 2011, 25, 757-760.	1.2	4
171	Sensing Properties of E-Beam Evaporated Nanostructured Pure and Iron-Doped Tungsten Oxide Thin Films. <i>Sensor Letters</i> , 2011, 9, 759-762.	0.4	4
172	Selective semiconductor gas sensor based on surface photovoltage. , 2002, , .		3
173	New Trends in Optical Resonant Bio-Chemical Sensing. <i>IEEE Sensors Journal</i> , 2021, 21, 12856-12867.	2.4	3
174	Selective and sensitive humidity sensor based on barium chloride dihydrate. <i>Sensors and Actuators B: Chemical</i> , 1993, 14, 615-616.	4.0	2
175	Physical Vapor Deposition of Copper Oxide Nanowires. <i>Procedia Engineering</i> , 2010, 5, 1051-1054.	1.2	2
176	Stable and very sensitive gas sensor based on novel mixed-metal oxides. , 2004, , .		1
177	High Temperature Phases of Nanostructured Tungsten Oxide for Gas Sensing Applications. <i>Materials Research Society Symposia Proceedings</i> , 2006, 915, 1.	0.1	1
178	SnO ₂ nanowire bio-transistor for electrical DNA sensing. , 2007, , .		1
179	SnO ₂ nanowires for optical and optoelectronic gas sensing. , 2009, , .		1
180	Growth and Gas Sensing Properties of Self-Assembled Chain-Like ZnO Nanostructures. <i>Procedia Engineering</i> , 2012, 47, 762-765.	1.2	1

#	ARTICLE	IF	CITATIONS
181	Fabrication of single-nanowire sensing devices by electron beam lithography. , 2015, , .		1
182	THE CATALYTIC EFFECT OF Mo ON THE PROPERTIES OF SnO ₂ -BASED THIN FILM SENSORS. , 2000, , .		1
183	Investigation of Seebeck Effect in Metal Oxide Nanowires for Powering Autonomous Microsystems. Lecture Notes in Electrical Engineering, 2014, , 3-7.	0.3	1
184	On the Route towards Efficient Light Emitting Diodes Based on Porous Silicon. Solid State Phenomena, 1997, 54, 27-36.	0.3	0
185	Helium purity control by thin film gas sensors at the NA-48 experiment at CERN. Sensors and Actuators B: Chemical, 1998, 47, 54-58.	4.0	0
186	Gas sensing applications of novel semiconductor materials. , 0, , .		0
187	Mixed In/Fe oxide thin films for ppb-level ozone sensing. , 0, , .		0
188	Surface photovoltage studies of porous silicon in presence of polluting gases: toward a selective gas sensor. , 2003, 5222, 12.		0
189	Sub-micron structured Metal Oxide gas sensors by means of lithographic techniques. Materials Research Society Symposia Proceedings, 2004, 828, 108.	0.1	0
190	Highly sensitive single crystalline metal oxide nanowires gas sensors. , 2006, , .		0
191	Metal oxide nanowires for biochemical gas sensing. , 2007, , .		0
192	Single crystalline metal oxide nano-wires/tubes: controlled growth for sensitive gas sensor devices. , 2007, , .		0
193	SnO ₂ nanowires for detection of chemical warfare agents. , 2009, , .		0
194	The Power of Nanomaterial Approaches in Gas Sensors. Springer Series on Chemical Sensors and Biosensors, 2011, , 53-78.	0.5	0
195	Investigation of Seebeck Effect in ZnO Nanowires for Micropower Generation in Autonomous Sensor Systems. Lecture Notes in Electrical Engineering, 2014, , 245-249.	0.3	0
196	Surface modification, heterojunctions, and other structures: composing metal oxide nanocrystals for chemical sensors. Proceedings of SPIE, 2015, , .	0.8	0