Kengo Shimanoe

List of Publications by Year
in descending order

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239 papers	12,681 citations	23544 58 h-index	27389 106 g-index
242 all docs	242 docs citations	242 times ranked	9160 citing authors

#	Article	IF	Citations
1	Oxide Semiconductor Gas Sensors. Catalysis Surveys From Asia, 2003, 7, 63-75.	1.0	1,113
2	Theory of power laws for semiconductor gas sensors. Sensors and Actuators B: Chemical, 2008, 128, 566-573.	4.0	596
3	Theory of gas-diffusion controlled sensitivity for thin film semiconductor gas sensor. Sensors and Actuators B: Chemical, 2001, 80, 125-131.	4.0	558
4	New perspectives of gas sensor technology. Sensors and Actuators B: Chemical, 2009, 138, 100-107.	4.0	358
5	Enhanced Gas Sensing Properties of SnO₂ Hollow Spheres Decorated with CeO₂ Nanoparticles Heterostructure Composite Materials. ACS Applied Materials & Interfaces, 2016, 8, 6669-6677.	4.0	271
6	Nanotubular SnO2Templated by Cellulose Fibers: Synthesis and Gas Sensing. Chemistry of Materials, 2005, 17, 3513-3518.	3.2	267
7	Hierarchical Î±-Fe₂O₃/NiO Composites with a Hollow Structure for a Gas Sensor. ACS Applied Materials & Interfaces, 2014, 6, 12031-12037.	4.0	255
8	Cr-doped TiO2 gas sensor for exhaust NO2 monitoring. Sensors and Actuators B: Chemical, 2003, 93, 509-518.	4.0	241
9	Gas sensing characteristics and porosity control of nanostructured films composed of TiO2 nanotubesâ†. Sensors and Actuators B: Chemical, 2009, 137, 513-520.	4.0	238
10	Dilute hydrogen sulfide sensing properties of CuOâ€“SnO2 thin film prepared by low-pressure evaporation method. Sensors and Actuators B: Chemical, 1998, 49, 121-125.	4.0	212
11	Effect of Water Vapor on Pd-Loaded SnO₂ Nanoparticles Gas Sensor. ACS Applied Materials & Interfaces, 2015, 7, 5863-5869.	4.0	201
12	Highly sensitive acetone gas sensor based on porous ZnFe2O4 nanospheres. Sensors and Actuators B: Chemical, 2015, 206, 577-583.	4.0	192
13	Porous ZnO/ZnCo₂O₄hollow spheres: synthesis, characterization, and applications in gas sensing. Journal of Materials Chemistry A, 2014, 2, 17683-17690.	5.2	175
14	Waterâ€“oxygen interplay on tin dioxide surface: Implication on gas sensing. Chemical Physics Letters, 2005, 410, 321-323.	1.2	160
15	WO₃ Nanolamella Gas Sensor: Porosity Control Using SnO₂ Nanoparticles for Enhanced NO₂ Sensing. Langmuir, 2014, 30, 2571-2579.	1.6	160
16	Nanoparticle Cluster Gas Sensor: Controlled Clustering of SnO₂ Nanoparticles for Highly Sensitive Toluene Detection. ACS Applied Materials & Interfaces, 2014, 6, 5319-5326.	4.0	159
17	Highly sensitive NO2 sensors using lamellar-structured WO3 particles prepared by an acidification method. Sensors and Actuators B: Chemical, 2009, 135, 568-574.	4.0	147
18	The design of excellent xylene gas sensor using Sn-doped NiO hierarchical nanostructure. Sensors and Actuators B: Chemical, 2017, 253, 1152-1162.	4.0	147

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19	Hollow SnO₂/Î±-Fe₂O₃spheres with a double-shell structure for gas sensors. Journal of Materials Chemistry A, 2014, 2, 1302-1308.	5.2	142
20	Roles of Shape and Size of Component Crystals in Semiconductor Gas Sensors. Journal of the Electrochemical Society, 2008, 155, J85.	1.3	139
21	Metal oxide semiconductor N2O sensor for medical use. Sensors and Actuators B: Chemical, 2001, 77, 72-77.	4.0	128
22	Synthesis of monodispersed SnO₂ nanocrystals and their remarkably high sensitivity to volatile organic compounds. Chemistry of Materials, 2010, 22, 2662-2667.	3.2	128
23	Enhanced gas sensing properties to acetone vapor achieved by Î±-Fe2O3 particles ameliorated with reduced graphene oxide sheets. Sensors and Actuators B: Chemical, 2017, 241, 904-914.	4.0	124
24	High-performance acetone gas sensor based on Ru-doped SnO2 nanofibers. Sensors and Actuators B: Chemical, 2020, 320, 128292.	4.0	124
25	Nano-sized PdO loaded SnO2 nanoparticles by reverse micelle method for highly sensitive CO gas sensor. Sensors and Actuators B: Chemical, 2009, 136, 99-104.	4.0	122
26	Receptor Function and Response of Semiconductor Gas Sensor. Journal of Sensors, 2009, 2009, 1-21.	0.6	120
27	Preparation of indium oxide thin film by spin-coating method and its gas-sensing properties. Sensors and Actuators B: Chemical, 1998, 46, 139-145.	4.0	119
28	Sensing properties of SnO2â€“Co3O4 composites to CO and H2. Sensors and Actuators B: Chemical, 2004, 98, 166-173.	4.0	117
29	Pore and Particle Size Control of Gas Sensing Films Using SnO₂ Nanoparticles Synthesized by Seed-Mediated Growth: Design of Highly Sensitive Gas Sensors. Journal of Physical Chemistry C, 2013, 117, 17574-17582.	1.5	116
30	Cu-doped Î±-Fe2O3 hierarchical microcubes: Synthesis and gas sensing properties. Sensors and Actuators B: Chemical, 2014, 193, 616-622.	4.0	115
31	Antimony-Doped Tin Dioxide Gas Sensors Exhibiting High Stability in the Sensitivity to Humidity Changes. ACS Sensors, 2016, 1, 913-920.	4.0	114
32	Highâ€Performance Oxygenâ€Permeable Membranes with an Asymmetric Structure Using Ba_{0.95}La_{0.05}FeO_{3â^’Î´} Perovskiteâ€Type Oxide. Advanced Materials, 2010, 22, 2367-2370.	11.1	110
33	Hierarchical Assembly of Î±-Fe₂O₃ Nanorods on Multiwall Carbon Nanotubes as a High-Performance Sensing Material for Gas Sensors. ACS Applied Materials & Interfaces, 2017, 9, 8919-8928.	4.0	108
34	Sn doping effect on NiO hollow nanofibers based gas sensors about the humidity dependence for triethylamine detection. Sensors and Actuators B: Chemical, 2021, 340, 129971.	4.0	108
35	The gas sensor utilizing polyaniline/ MoS2 nanosheets/ SnO2 nanotubes for the room temperature detection of ammonia. Sensors and Actuators B: Chemical, 2021, 332, 129444.	4.0	107
36	Effects of various metal additives on the gas sensing performances of TiO2 nanocrystals obtained from hydrothermal treatments. Sensors and Actuators B: Chemical, 2005, 108, 34-40.	4.0	106

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37	Ultraselective Toluene-Gas Sensor: Nanosized Gold Loaded on Zinc Oxide Nanoparticles. Analytical Chemistry, 2018, 90, 1959-1966.	3.2	103
38	Microstructure control of thermally stable TiO2 obtained by hydrothermal process for gas sensors. Sensors and Actuators B: Chemical, 2004, 103, 312-317.	4.0	98
39	Roles of Shape and Size of Component Crystals in Semiconductor Gas Sensors. Journal of the Electrochemical Society, 2008, 155, J93.	1.3	98
40	Microstructure control of TiO2 nanotubular films for improved VOC sensing. Sensors and Actuators B: Chemical, 2011, 154, 251-256.	4.0	94
41	Hydrogen sulfide gas sensing properties of thin films derived from SnO2 sols different in grain size. Sensors and Actuators B: Chemical, 2005, 105, 437-442.	4.0	89
42	Diffusion equation-based study of thin film semiconductor gas sensor-response transient. Sensors and Actuators B: Chemical, 2002, 83, 216-221.	4.0	88
43	Flower-like ZnO hollow microspheres loaded with CdO nanoparticles as high performance sensing material for gas sensors. Sensors and Actuators B: Chemical, 2017, 250, 692-702.	4.0	84
44	Preparation of grain size-controlled tin oxide sols by hydrothermal treatment for thin film sensor application. Sensors and Actuators B: Chemical, 2004, 103, 386-391.	4.0	82
45	Oxygen Permeation Properties of Partially A-Site Substituted BaFeO[sub 3â^'Î'] Perovskites. Journal of the Electrochemical Society, 2009, 156, E187.	1.3	82
46	Formulation of gas diffusion dynamics for thin film semiconductor gas sensor based on simple reactionâ€“diffusion equation. Sensors and Actuators B: Chemical, 2003, 96, 226-233.	4.0	81
47	Hydrothermal treatment of tin oxide sol solution for preparation of thin-film sensor with enhanced thermal stability and gas sensitivity. Sensors and Actuators B: Chemical, 2000, 65, 97-100.	4.0	80
48	NASICON thick film-based CO2 sensor prepared by a solâ€“gel method. Sensors and Actuators B: Chemical, 2001, 80, 28-32.	4.0	79
49	Sensing properties of Au-loaded SnO2â€“Co3O4 composites to CO and H2. Sensors and Actuators B: Chemical, 2005, 107, 397-401.	4.0	72
50	Oxygen Permeation Properties of Co-Free Perovskite-Type Oxide Membranes Based on BaFe[sub 1â^'y]Zr[sub y]O[sub 3â^'Î']. Journal of the Electrochemical Society, 2009, 156, E81.	1.3	71
51	Basic approach to the transducer function of oxide semiconductor gas sensors. Sensors and Actuators B: Chemical, 2011, 160, 1352-1362.	4.0	68
52	Synthesis of Copperâ€“Antimony-Sulfide Nanocrystals for Solution-Processed Solar Cells. Inorganic Chemistry, 2015, 54, 7840-7845.	1.9	68
53	Contribution of electron tunneling transport in semiconductor gas sensor. Thin Solid Films, 2007, 515, 8302-8309.	0.8	67
54	Extension of receptor function theory to include two types of adsorbed oxygen for oxide semiconductor gas sensors. Sensors and Actuators B: Chemical, 2012, 163, 128-135.	4.0	66

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55	Pd Size Effect on the Gas Sensing Properties of Pd-Loaded SnO₂ in Humid Atmosphere. ACS Applied Materials & Interfaces, 2015, 7, 15618-15625.	4.0	66
56	Spin-coated thin films of SiO2â€“WO3 composites for detection of sub-ppm NO2. Sensors and Actuators B: Chemical, 1997, 45, 141-146.	4.0	62
57	Preparation of aqueous sols of tungsten oxide dihydrate from sodium tungstate by an ion-exchange method. Sensors and Actuators B: Chemical, 2002, 87, 63-72.	4.0	62
58	Pulse-Driven Micro Gas Sensor Fitted with Clustered Pd/SnO₂ Nanoparticles. Analytical Chemistry, 2015, 87, 8407-8415.	3.2	61
59	Spectroscopic insights into CO sensing of undoped and palladium doped tin dioxide sensors derived from hydrothermally treated tin oxide sol. Sensors and Actuators B: Chemical, 2006, 118, 98-104.	4.0	60
60	Mixed-potential-type propylene sensor based on stabilized zirconia and oxide electrode. Electrochemistry Communications, 2000, 2, 77-80.	2.3	58
61	Wet process-prepared thick films of WO3 for NO2 sensing. Sensors and Actuators B: Chemical, 2003, 95, 258-265.	4.0	58
62	Stability of NASICON-based CO2 sensor under humid conditions at low temperature. Sensors and Actuators B: Chemical, 2001, 75, 179-187.	4.0	56
63	Wet process-based fabrication of WO3 thin film for NO2 detection. Sensors and Actuators B: Chemical, 2004, 101, 107-111.	4.0	56
64	Bi-Functional Oxygen Electrodes Using LaMnO3/LaNiO3 for Rechargeable Metal-Air Batteries. Journal of the Electrochemical Society, 2011, 158, A605.	1.3	56
65	Highly sensitive isoprene gas sensor using Au-loaded pyramid-shaped ZnO particles. Sensors and Actuators B: Chemical, 2021, 326, 128999.	4.0	53
66	A compact solid-state amperometric sensor for detection of NO2 in ppb range. Sensors and Actuators B: Chemical, 1998, 49, 101-109.	4.0	52
67	Preparation of a Stable Sol Suspension of Pd-Loaded SnO₂ Nanocrystals by a Photochemical Deposition Method for Highly Sensitive Semiconductor Gas Sensors. ACS Applied Materials & Interfaces, 2012, 4, 4231-4236.	4.0	52
68	Transition metals (Co, Cu) as additives on hydrothermally treated Tio2 for gas sensing. Sensors and Actuators B: Chemical, 2005, 109, 7-12.	4.0	51
69	Study on the response and recovery properties of semiconductor gas sensors using a high-speed gas-switching system. Sensors and Actuators B: Chemical, 2008, 134, 928-933.	4.0	50
70	Theoretical approach to the gas response of oxide semiconductor film devices under control of gas diffusion and reaction effects. Sensors and Actuators B: Chemical, 2011, 154, 277-282.	4.0	50
71	Pulse-Driven Semiconductor Gas Sensors Toward ppt Level Toluene Detection. Analytical Chemistry, 2018, 90, 11219-11223.	3.2	49
72	Rapid and Stable Detection of Carbon Monoxide in Changing Humidity Atmospheres Using Clustered In₂O₃/CuO Nanospheres. ACS Sensors, 2020, 5, 1040-1049.	4.0	48

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73	Preparation of oxygen evolution layer/La0.6Ca0.4CoO3 dense membrane/porous support asymmetric structure for high-performance oxygen permeation. Solid State Ionics, 2008, 179, 1377-1381.	1.3	47
74	Oxygen-permeable membranes based on partially B-site substituted BaFe1â˜'yMyO3â˜'Î´ (M=Cu or Ni). Journal of Solid State Chemistry, 2010, 183, 2426-2431.	1.4	46
75	Highly Sensitive Ethanol Gas Sensor Using Pyramid-Shaped ZnO Particles with (0001) Basal Plane. Journal of Physical Chemistry C, 2018, 122, 7353-7360.	1.5	46
76	Determination of Oxygen Adsorption Species on SnO₂: Exact Analysis of Gas Sensing Properties Using a Sample Gas Pretreatment System. Journal of the Electrochemical Society, 2014, 161, B123-B128.	1.3	45
77	Effect of Humid Aging on the Oxygen Adsorption in SnO2 Gas Sensors. Sensors, 2018, 18, 254.	2.1	45
78	Synthesis of Manganite Perovskites by Reverse Homogeneous Precipitation Method in the Presence of Alkylammonium Cations. Chemistry Letters, 2000, 29, 1202-1203.	0.7	42
79	Preparation of Cr-Doped TiO2Thin Film of P-type Conduction for Gas Sensor Application. Chemistry Letters, 2002, 31, 892-893.	0.7	41
80	Preparation of size and habit-controlled nano crystallites of tungsten oxide. Sensors and Actuators B: Chemical, 2003, 93, 486-494.	4.0	40
81	High sensitivity and low detection limit of acetone sensor based on NiO/Zn2SnO4 p-n heterojunction octahedrons. Sensors and Actuators B: Chemical, 2021, 339, 129912.	4.0	40
82	C2H4O sensing properties for thick film sensor using La2O3-modified SnO2. Sensors and Actuators B: Chemical, 2006, 118, 171-176.	4.0	39
83	Dense/Porous Asymmetric-Structured Oxygen Permeable Membranes Based on La_{0.6}Ca_{0.4}CoO₃ Perovskite-Type Oxide. Chemistry of Materials, 2008, 20, 6965-6973.	3.2	39
84	Adsorption Species of Transition Metal Ions on Silicon Wafer in SCâ€1 Solution. Journal of the Electrochemical Society, 1995, 142, 3104-3109.	1.3	38
85	Proposal of contact potential promoted oxide semiconductor gas sensor. Sensors and Actuators B: Chemical, 2013, 187, 162-167.	4.0	38
86	Solution-Processed Cu₂ZnSnS₄ Nanocrystal Solar Cells: Efficient Stripping of Surface Insulating Layers Using Alkylating Agents. Journal of Physical Chemistry C, 2014, 118, 804-810.	1.5	38
87	Detection of organic gases using TiO2 nanotube-based gas sensors. Procedia Chemistry, 2009, 1, 192-195.	0.7	37
88	Hollow zinc oxide microspheres functionalized by Au nanoparticles for gas sensors. RSC Advances, 2014, 4, 28005.	1.7	36
89	Microwave hydrothermal synthesis and gas sensing application of porous ZnO coreâ€“shell microstructures. RSC Advances, 2014, 4, 32538.	1.7	36
90	Reverse Micelle Assisted Dispersion of Lanthanum Manganite on Carbon Support for Oxygen Reduction Cathode. Journal of the Electrochemical Society, 2004, 151, A158.	1.3	35

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91	Influences of ball-milling time on gas-sensing properties of Co3O4â€“SnO2 composites. Sensors and Actuators B: Chemical, 2005, 107, 516-522.	4.0	35
92	Two types of moisture effects on the receptor function of neat tin oxide gas sensor to oxygen. Sensors and Actuators B: Chemical, 2013, 176, 443-452.	4.0	35
93	N-pentanol sensor based on ZnO nanorods functionalized with Au catalysts. Sensors and Actuators B: Chemical, 2021, 339, 129888.	4.0	35
94	Fabrication of CO2 sensor using NASICON thick film. Sensors and Actuators B: Chemical, 2003, 93, 250-256.	4.0	34
95	A new capacitive-type NO2 gas sensor combining an MIS with a solid electrolyte. Sensors and Actuators B: Chemical, 2005, 109, 216-220.	4.0	33
96	Receptor function of small semiconductor crystals with clean and electron-traps dispersed surfaces. Thin Solid Films, 2009, 517, 6148-6155.	0.8	33
97	Theoretical approach to the rate of response of semiconductor gas sensor. Sensors and Actuators B: Chemical, 2010, 150, 132-140.	4.0	33
98	Effect of preparation routes on the catalytic activity over SmFeO3 oxide. Catalysis Today, 2008, 139, 125-129.	2.2	32
99	High Oxygen Permeation in Ba_{0.95}La_{0.05}FeO_{3-Î´} Membranes with Surface Modification. ACS Applied Materials & Interfaces, 2010, 2, 2849-2853.	4.0	32
100	Oxygen Reduction Activity of Carbon-Supported La_{1â€“x}Ca_xMn_{1â€“y}Fe_yO_{3±δ} Nanoparticles. Chemistry of Materials, 2013, 25, 3072-3079.	8.2	32
101	Amperometric sensor based on NASICON and NO oxidation catalysts for detection of total NOx in atmospheric environment. Solid State Ionics, 2000, 136-137, 583-588.	1.3	31
102	Potentiometric sensor based on NASICON and In2O3 for detection of CO2 at room temperature â€” modification with foreign substances. Sensors and Actuators B: Chemical, 2001, 76, 639-643.	4.0	31
103	High sensitive gas sensor based on Pd-loaded WO3 nanolamellae. Thin Solid Films, 2013, 548, 677-682.	0.8	31
104	High-Performance Oxygen Reduction Catalyst Using Carbon-Supported La-Mn-Based Perovskite-Type Oxide. Electrochemical and Solid-State Letters, 2011, 14, A67.	2.2	30
105	Unexpected gas sensing properties of SiO₂/SnO₂ coreâ€“shell nanofibers under dry and humid conditions. Journal of Materials Chemistry C, 2017, 5, 6369-6376.	2.7	30
106	Selective Detection of Toluene Using Pulse-Driven SnO₂ Micro Gas Sensors. ACS Applied Electronic Materials, 2020, 2, 2913-2920.	2.0	30
107	Preparation of BiMeVOx (Me=Cu, Ti, Zr, Nb, Ta) compounds as solid electrolyte and behavior of their oxygen concentration cells. Sensors and Actuators B: Chemical, 2005, 109, 307-314.	4.0	29
108	Interfacial structure of NASICON-based sensor attached with Li2CO3â^'CaCO3 auxiliary phase for detection of CO2. Solid State Ionics, 2000, 136-137, 647-653.	1.3	28

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109	Durability of Carbon-Supported La-Mn-Based Perovskite-Type Oxides as Oxygen Reduction Catalysts in Strong Alkaline Solution. Journal of the Electrochemical Society, 2011, 158, A411-A416.	1.3	28
110	Surface-modification of SnO₂ nanoparticles by incorporation of Al for the detection of combustible gases in a humid atmosphere. RSC Advances, 2015, 5, 86347-86354.	1.7	28
111	A Standard Sample Preparation Method for the Determination of Metal Impurities on a Silicon Wafer by Total Reflection X-Ray Fluorescence Spectrometryt. Analytical Sciences, 1995, 11, 499-504.	0.8	27
112	Preparation of carbon-supported nano-sized LaMnO3 using reverse micelle method for energy-saving oxygen reduction cathode. Catalysis Today, 2007, 126, 313-319.	2.2	27
113	Preparation of Carbon-Supported Perovskite-Type Oxides LaMn[sub 1â^'y]Fe[sub y]O[sub 3+Î] Based on Reverse Homogeneous Precipitation Method. Journal of the Electrochemical Society, 2004, 151, A1559.	1.3	26
114	Unexpected and enhanced electrostatic adsorption capacity of oxygen vacancy-rich cobalt-doped In2O3 for high-sensitive MEMS toluene sensor. Sensors and Actuators B: Chemical, 2021, 342, 129949.	4.0	26
115	Electrochemical detection of volatile organic compounds using a Na3Zr2Si2PO12/Bi2Cu0.1V0.9O5.35 heterojunction device. Electrochimica Acta, 2011, 56, 7484-7490.	2.6	25
116	Urea treatment of nitrogen-doped carbon leads to enhanced performance for the oxygen reduction reaction. Journal of Materials Research, 2018, 33, 1612-1624.	1.2	24
117	H2 Sensing Mechanism of Pd-Loaded WO3 Nanoparticle Gas Sensors. Chemistry Letters, 2014, 43, 1435-1437.	0.7	23
118	Preparation of nano-LaNiO3 support electrode for rechargeable metal-air batteries. Electrochemistry Communications, 2012, 24, 50-52.	2.3	22
119	Mixed-potential type N2O sensor using stabilized zirconia- and SnO2-based sensing electrode. Sensors and Actuators B: Chemical, 2001, 75, 121-124.	4.0	21
120	Discharge/charge characteristic of Li-air cells using carbon-supported LaMn0.6Fe0.4O3 as an electrocatalyst. Journal of Power Sources, 2013, 242, 216-221.	4.0	21
121	Hollow cylinder ZnO/SnO2 nanostructures synthesized by ultrasonic spray pyrolysis and their gas-sensing performance. CrystEngComm, 2014, 16, 6135.	1.3	21
122	Planar NASICON-Based CO[sub 2] Sensor Using BiCuVO[sub x]/Perovskiteâ€“Type Oxide as a Solid-Reference Electrode. Journal of the Electrochemical Society, 2008, 155, J117.	1.3	20
123	Explicit formulation for the response of neat oxide semiconductor gas sensor to reducing gas. Sensors and Actuators B: Chemical, 2011, 158, 28-34.	4.0	20
124	Spin-coated indium oxide thin film on alumina and silicon substrates and their gas sensing properties. Sensors and Actuators B: Chemical, 2000, 65, 312-315.	4.0	19
125	Reverse Micelle-Based Preparation of Carbon-Supported La[sub 1â^'x]Sr[sub x]Mn[sub 1â^'y]Fe[sub y]O[sub 3+Î] for Oxygen Reduction Electrode. Journal of the Electrochemical Society, 2004, 151, A1690.	1.3	19
126	Application of a Solid Electrolyte CO₂ Sensor for the Analysis of Standard Volatile Organic Compound Gases. Analytical Chemistry, 2010, 82, 3315-3319.	3.2	19

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127	Determination of Effective Oxygen Adsorption Species for CO Sensing Based on Electric Properties of Indium Oxide. Journal of the Electrochemical Society, 2018, 165, B275-B280.	1.3	19
128	MOF-derived Au-NiO/In2O3 for selective and fast detection of toluene at ppb-level in high humid environments. Sensors and Actuators B: Chemical, 2022, 360, 131631.	4.0	18
129	MOF-derived porous NiO/NiFe2O4 nanocubes for improving the acetone detection. Sensors and Actuators B: Chemical, 2022, 366, 131985.	4.0	18
130	Exploration of Reverse Micelle Synthesis of Carbon-Supported LaMnO[sub 3]. Journal of the Electrochemical Society, 2004, 151, A1477.	1.3	17
131	NASICON-based potentiometric CO2 sensor combined with new materials operative at room temperature. Sensors and Actuators B: Chemical, 2005, 108, 352-358.	4.0	17
132	Control of Electrode Reactions in a Mixed-Potential-Type Gas Sensor Based on a BiCuVOx Solid Electrolyte. Journal of Physical Chemistry C, 2010, 114, 15141-15148.	1.5	17
133	Catalytic Combustionâ€Type Hydrogen Sensor Using <scp><scp>BaTiO</scp></scp>₃â€based <scp>PTC</scp> Thermistor. Journal of the American Ceramic Society, 2013, 96, 1789-1794.	1.9	17
134	Development of FET-type CO2 sensor operative at room temperature. Sensors and Actuators B: Chemical, 2004, 102, 14-19.	4.0	16
135	Impurity level in SnO2 materials and its impact on gas sensing properties. Sensors and Actuators B: Chemical, 2015, 210, 719-725.	4.0	16
136	Oxygen adsorption on ZrO2-loaded SnO2 gas sensors in humid atmosphere. Journal of Materials Science, 2019, 54, 3135-3143.	1.7	16
137	Double-Step Modulation of the Pulse-Driven Mode for a High-Performance SnO₂ Micro Gas Sensor: Designing the Particle Surface via a Rapid Preheating Process. ACS Sensors, 2020, 5, 3449-3456.	4.0	16
138	A compact amperometric NO2 sensor based on Na+ conductive solid electrolyte. Journal of Applied Electrochemistry, 1998, 28, 863-865.	1.5	15
139	Field effect transistor type NO2 sensor combined with NaNO2 auxiliary phase. Sensors and Actuators B: Chemical, 2001, 77, 512-516.	4.0	15
140	Development of SnO2-based gas sensor sensitive to dilute ethylene oxide in air. Sensors and Actuators B: Chemical, 2005, 108, 130-133.	4.0	15
141	Cathodoluminescence study of SnO2 powders aimed for gas sensor applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 130, 200-205.	1.7	15
142	Densification of SiO2â€“Al2O3â€“TiO2 based ceramic film coated on steel for high thermal stabilty and mechanical properties. Surface and Coatings Technology, 2006, 201, 880-885.	2.2	15
143	Planar-type BiCuVOx solid electrolyte sensor for the detection of volatile organic compounds. Sensors and Actuators B: Chemical, 2009, 137, 147-153.	4.0	15
144	Gas sensor using noble metal-loaded TiO2 nanotubes for detection of large-sized volatile organic compounds. Journal of the Ceramic Society of Japan, 2011, 119, 884-889.	0.5	15

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145	Organic gas sensor using BiCuVOx solid electrolyte. Electrochemistry Communications, 2008, 10, 311-314.	2.3	14
146	Gas reception and signal transduction of neat tin oxide semiconductor sensor for response to oxygen. Thin Solid Films, 2013, 548, 695-702.	0.8	14
147	Visibleâ€Light Sensitization and Photoenergy Storage in Quantum Dot/Polyoxometalate Systems. Chemistry - A European Journal, 2015, 21, 7462-7469.	1.7	14
148	Surface chemistry of neat tin oxide sensor for response to hydrogen gas in air. Sensors and Actuators B: Chemical, 2016, 227, 403-410.	4.0	14
149	Effect of Ambient Oxygen Partial Pressure on the Hydrogen Response of SnO2 Semiconductor Gas Sensors. Journal of the Electrochemical Society, 2019, 166, B618-B622.	1.3	14
150	Fundamentals of semiconductor gas sensors. , 2020, , 3-38.		14
151	Standard Sample Preparation for the Analysis of Several Metals on Silicon Wafer. Analytical Sciences, 1996, 12, 141-143.	0.8	13
152	Influences of water vapor on NASICON-based CO2 sensor operative at room temperature. Sensors and Actuators B: Chemical, 2003, 93, 243-249.	4.0	13
153	Behavior of oxygen concentration cells using BiCuVOx oxide-ion conductor. Sensors and Actuators B: Chemical, 2005, 108, 335-340.	4.0	13
154	Photoinduced Recovery of Gold Using an Inorganic/Organic Hybrid Photocatalyst. Journal of Physical Chemistry C, 2009, 113, 19986-19993.	1.5	13
155	Effects of Crystallite Size and Donor Density on the Sensor Response of SnO₂Nano-Particles in the State of Volume Depletion. Journal of the Electrochemical Society, 2012, 159, J136-J141.	1.3	13
156	Thermally Stable SnO₂ Nanocrystals: Synthesis and Application to Gas Sensors. Crystal Growth and Design, 2016, 16, 4203-4208.	1.4	13
157	Reaction analysis on sensing electrode of amperometric NO2 sensor based on sodium ion conductor by using chronopotentiometry. Sensors and Actuators B: Chemical, 2001, 77, 78-83.	4.0	12
158	Improvement of warming-up characteristics of potentiometric CO2 sensor by using solid reference counter electrode. Sensors and Actuators B: Chemical, 2005, 108, 364-367.	4.0	12
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