

Kengo Shimano

List of Publications by Year in descending order

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239
papers

12,681
citations

23544

58
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106
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242
all docs

242
docs citations

242
times ranked

9160
citing authors

#	ARTICLE	IF	CITATIONS
1	Amplifying the receptor function on Ba _{0.9} La _{0.1} FeO ₃ -SnO ₂ composite particle surface for high sensitivity toward ethanol gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2022, 354, 131256.	4.0	3
2	MOF-derived Au-NiO/In ₂ O ₃ for selective and fast detection of toluene at ppb-level in high humid environments. <i>Sensors and Actuators B: Chemical</i> , 2022, 360, 131631.	4.0	18
3	Highly Sensitive Carbon Monoxide Sensor Element with Wide-Range Humidity Resistance by Loading Pd Nanoparticles on SnO ₂ Surface. <i>Sensors</i> , 2022, 22, 2934.	2.1	3
4	MOF-derived porous NiO/NiFe ₂ O ₄ nanocubes for improving the acetone detection. <i>Sensors and Actuators B: Chemical</i> , 2022, 366, 131985.	4.0	18
5	Lowering the sintering temperature of Li _{0.7} La _{0.3} Zr _{0.2} O ₁₂ electrolyte for co-fired all-solid-state batteries via partial Bi substitution and precise control of compositional deviation. <i>Journal of the Ceramic Society of Japan</i> , 2022, 130, 416-423.	0.5	7
6	Highly sensitive isoprene gas sensor using Au-loaded pyramid-shaped ZnO particles. <i>Sensors and Actuators B: Chemical</i> , 2021, 326, 128999.	4.0	53
7	Chemical Activation of Nitrogen-doped Carbon Derived from Chitosan with ZnCl ₂ to Produce a High-performance Gas Diffusion-type Oxygen Electrode. <i>Electrochemistry</i> , 2021, 89, 36-42.	0.6	5
8	Pt nanoparticles supported on nitrogen-doped porous carbon as efficient oxygen reduction catalysts synthesized via a simple alcohol reduction method. <i>SN Applied Sciences</i> , 2021, 3, 1.	1.5	4
9	Highly Porous Chitosan-derived Nitrogen-doped Carbon Applicable for High-performance Gas Diffusion Oxygen Electrodes. <i>Chemistry Letters</i> , 2021, 50, 636-639.	0.7	0
10	The gas sensor utilizing polyaniline/ MoS ₂ nanosheets/ SnO ₂ nanotubes for the room temperature detection of ammonia. <i>Sensors and Actuators B: Chemical</i> , 2021, 332, 129444.	4.0	107
11	Impact of Pd nanoparticle loading method on SnO ₂ surface for natural gas detection in humid atmosphere. <i>Journal of Materials Science</i> , 2021, 56, 13975-13988.	1.7	7
12	N-pentanol sensor based on ZnO nanorods functionalized with Au catalysts. <i>Sensors and Actuators B: Chemical</i> , 2021, 339, 129888.	4.0	35
13	High sensitivity and low detection limit of acetone sensor based on NiO/Zn ₂ SnO ₄ p-n heterojunction octahedrons. <i>Sensors and Actuators B: Chemical</i> , 2021, 339, 129912.	4.0	40
14	Sn doping effect on NiO hollow nanofibers based gas sensors about the humidity dependence for triethylamine detection. <i>Sensors and Actuators B: Chemical</i> , 2021, 340, 129971.	4.0	108
15	Unexpected and enhanced electrostatic adsorption capacity of oxygen vacancy-rich cobalt-doped In ₂ O ₃ for high-sensitive MEMS toluene sensor. <i>Sensors and Actuators B: Chemical</i> , 2021, 342, 129949.	4.0	26
16	DC-Voltage-Induced High Oxygen Permeation through a Lanthanum Silicate Electrolyte with a Cerium Oxide Thin Film. <i>Electrochemistry</i> , 2021, 89, 427-432.	0.6	0
17	Ce _{0.8} Gd _{0.2} O _{1.95} -based mixed potential type triethylamine sensor utilizing La ₂ NiFeO ₆ sensing electrode. <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130438.	4.0	9
18	Fundamentals of semiconductor gas sensors. , 2020, , 3-38.		14

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19	Double-Step Modulation of the Pulse-Driven Mode for a High-Performance SnO ₂ Micro Gas Sensor: Designing the Particle Surface via a Rapid Preheating Process. ACS Sensors, 2020, 5, 3449-3456.	4.0	16
20	Selective Detection of Toluene Using Pulse-Driven SnO ₂ Micro Gas Sensors. ACS Applied Electronic Materials, 2020, 2, 2913-2920.	2.0	30
21	One-Trillionth Level Toluene Detection Using a Dual-Designed Semiconductor Gas Sensor: Material and Sensor-Driven Designs. ACS Applied Electronic Materials, 2020, 2, 4122-4126.	2.0	8
22	High-performance acetone gas sensor based on Ru-doped SnO ₂ nanofibers. Sensors and Actuators B: Chemical, 2020, 320, 128292.	4.0	124
23	Rapid and Stable Detection of Carbon Monoxide in Changing Humidity Atmospheres Using Clustered In ₂ O ₃ /CuO Nanospheres. ACS Sensors, 2020, 5, 1040-1049.	4.0	48
24	Effect of Boron Substitution on Oxide-Ion Conduction in <i>c</i> -Axis-Oriented Apatite-Type Lanthanum Silicate. Journal of Physical Chemistry C, 2020, 124, 2879-2885.	1.5	11
25	Novel Solid Electrolyte CO ₂ Gas Sensors Based on <i>c</i> -Axis-Oriented Y-Doped La _{9.66} Si _{5.3} B _{0.7} O _{26.14} . ACS Applied Materials & Interfaces, 2020, 12, 21515-21520.	4.0	11
26	Crystal Growth Mechanism of Highly <i>c</i> -Axis-Oriented Apatite-Type Lanthanum Borosilicate Using B ₂ O ₃ Vapor. ACS Omega, 2020, 5, 31936-31942.	1.6	3
27	La _{0.4} Ca _{0.6} Mn _{0.9} Fe _{0.1} O ₃ nanoparticle-dispersed nitrogen-doped porous carbon composite as an efficient oxygen reduction electrocatalyst. Catalysis Communications, 2019, 131, 105786.	1.6	2
28	Consideration for Oxygen Adsorption Species on SnO ₂ Semiconductor Gas Sensors. Proceedings (mdpi), 2019, 14, .	0.2	0
29	Ultra-High Sensitive (Ppt) Gas Sensor Based on the Pulse Heating Using MEMS Technique. Proceedings (mdpi), 2019, 14, .	0.2	0
30	Ultra-High Sensitive Gas Detection Using Pulse-Driven MEMS Sensor Based on Tin Dioxide. , 2019, , .		2
31	Effect of Ambient Oxygen Partial Pressure on the Hydrogen Response of SnO ₂ Semiconductor Gas Sensors. Journal of the Electrochemical Society, 2019, 166, B618-B622.	1.3	14
32	Highly Dispersed LaCoO ₃ on Carbon Prepared via Low-energy Bead Milling as an Oxygen Reduction Electrocatalyst. Electrochemistry, 2019, 87, 193-195.	0.6	3
33	Oxygen adsorption on ZrO ₂ -loaded SnO ₂ gas sensors in humid atmosphere. Journal of Materials Science, 2019, 54, 3135-3143.	1.7	16
34	Oxygen pumping based on <i>c</i> -axis-oriented lanthanum silicate ceramics: challenge toward low operating temperature. Journal of the Ceramic Society of Japan, 2019, 127, 1-4.	0.5	7
35	Ultrasensitive Toluene-Gas Sensor: Nanosized Gold Loaded on Zinc Oxide Nanoparticles. Analytical Chemistry, 2018, 90, 1959-1966.	3.2	103
36	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

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37	Size-independent and Ultrahigh CO Gas Sensor Based on TiO ₂ Modified ZnO Tetrapods. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1700784.	0.8	10
38	Effect of Humid Aging on the Oxygen Adsorption in SnO ₂ Gas Sensors. <i>Sensors</i> , 2018, 18, 254.	2.1	45
39	Determination of Effective Oxygen Adsorption Species for CO Sensing Based on Electric Properties of Indium Oxide. <i>Journal of the Electrochemical Society</i> , 2018, 165, B275-B280.	1.3	19
40	Pulse-Driven Semiconductor Gas Sensors Toward ppt Level Toluene Detection. <i>Analytical Chemistry</i> , 2018, 90, 11219-11223.	3.2	49
41	Urea treatment of nitrogen-doped carbon leads to enhanced performance for the oxygen reduction reaction. <i>Journal of Materials Research</i> , 2018, 33, 1612-1624.	1.2	24
42	Morphology, microstructure, and surface area of La-added MgFe ₂ O ₄ powder. <i>Journal of the Ceramic Society of Japan</i> , 2018, 126, 402-407.	0.5	7
43	Hierarchical Assembly of Fe ₂ O ₃ Nanorods on Multiwall Carbon Nanotubes as a High-Performance Sensing Material for Gas Sensors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 8919-8928.	4.0	108
44	Flower-like ZnO hollow microspheres loaded with CdO nanoparticles as high performance sensing material for gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2017, 250, 692-702.	4.0	84
45	Visible Light-Driven Photoenergy Storage and Photocatalysis Using Polyoxometallates Coupled with a Ru Complex. <i>Journal of Physical Chemistry C</i> , 2017, 121, 13515-13523.	1.5	11
46	Unexpected gas sensing properties of SiO ₂ /SnO ₂ core-shell nanofibers under dry and humid conditions. <i>Journal of Materials Chemistry C</i> , 2017, 5, 6369-6376.	2.7	30
47	Soot oxidation performance with a HZSM-5 supported Ag nanoparticles catalyst and the characterization of Ag species. <i>RSC Advances</i> , 2017, 7, 43789-43797.	1.7	9
48	The design of excellent xylene gas sensor using Sn-doped NiO hierarchical nanostructure. <i>Sensors and Actuators B: Chemical</i> , 2017, 253, 1152-1162.	4.0	147
49	Effect of Thermal Conductivity of Catalytic Materials on Soot Sensing Performance Based on a Combustion-type Sensor. <i>Chemistry Letters</i> , 2017, 46, 1304-1307.	0.7	0
50	Enhanced gas sensing properties to acetone vapor achieved by Fe ₂ O ₃ particles ameliorated with reduced graphene oxide sheets. <i>Sensors and Actuators B: Chemical</i> , 2017, 241, 904-914.	4.0	124
51	Enhanced Gas Sensing Properties of SnO ₂ Hollow Spheres Decorated with CeO ₂ Nanoparticles Heterostructure Composite Materials. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 6669-6677.	4.0	271
52	Vanadium oxide loading on tin dioxide nanoparticles for improving gas detection in a humid atmosphere. <i>Materials Letters</i> , 2016, 179, 214-216.	1.3	5
53	High Performance of SnO ₂ -Based Gas Sensor by Introducing Perovskite-Type Oxides. <i>ECS Transactions</i> , 2016, 75, 31-37.	0.3	3
54	Efficient solution route to transparent ZnO semiconductor films using colloidal nanocrystals. <i>Journal of Asian Ceramic Societies</i> , 2016, 4, 319-323.	1.0	10

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55	Micronization of MgFe ₂ O ₄ particles doped with Si. Journal of the Ceramic Society of Japan, 2016, 124, 777-780.	0.5	2
56	Antimony-Doped Tin Dioxide Gas Sensors Exhibiting High Stability in the Sensitivity to Humidity Changes. ACS Sensors, 2016, 1, 913-920.	4.0	114
57	Thermally Stable SnO ₂ Nanocrystals: Synthesis and Application to Gas Sensors. Crystal Growth and Design, 2016, 16, 4203-4208.	1.4	13
58	Role of vanadium oxide and palladium multiple loading on the sensitivity and recovery kinetics of tin dioxide based gas sensors. RSC Advances, 2016, 6, 5169-5176.	1.7	12
59	Influence of Processing Conditions on the Performance of Cu ₂ ZnSnS ₄ Nanocrystal Solar Cells. ChemistrySelect, 2016, 1, 86-93.	0.7	4
60	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
61	Oxygen separation from air using Ba _{0.95} La _{0.05} FeO ₃ membranes fitted with porous La _{1-x} Sr _x FeO ₃ layers. Ceramics International, 2015, 41, 7830-7835.	2.3	8
62	Impurity level in SnO ₂ materials and its impact on gas sensing properties. Sensors and Actuators B: Chemical, 2015, 210, 719-725.	4.0	16
63	Effect of Water Vapor on Pd-Loaded SnO ₂ Nanoparticles Gas Sensor. ACS Applied Materials & Interfaces, 2015, 7, 5863-5869.	4.0	201
64	Pulse-Driven Micro Gas Sensor Fitted with Clustered Pd/SnO ₂ Nanoparticles. Analytical Chemistry, 2015, 87, 8407-8415.	3.2	61
65	Synthesis of Copper-Antimony-Sulfide Nanocrystals for Solution-Processed Solar Cells. Inorganic Chemistry, 2015, 54, 7840-7845.	1.9	68
66	Pd Size Effect on the Gas Sensing Properties of Pd-Loaded SnO ₂ in Humid Atmosphere. ACS Applied Materials & Interfaces, 2015, 7, 15618-15625.	4.0	66
67	Visible-Light Sensitization and Photoenergy Storage in Quantum Dot/Polyoxometalate Systems. Chemistry - A European Journal, 2015, 21, 7462-7469.	1.7	14
68	Surface-modification of SnO ₂ nanoparticles by incorporation of Al for the detection of combustible gases in a humid atmosphere. RSC Advances, 2015, 5, 86347-86354.	1.7	28
69	Highly sensitive acetone gas sensor based on porous ZnFe ₂ O ₄ nanospheres. Sensors and Actuators B: Chemical, 2015, 206, 577-583.	4.0	192
70	Cu-doped γ -Fe ₂ O ₃ hierarchical microcubes: Synthesis and gas sensing properties. Sensors and Actuators B: Chemical, 2014, 193, 616-622.	4.0	115
71	H ₂ O/D ₂ O Exchange on SnO ₂ Materials in the Presence of CO: Operando Spectroscopic and Electric Resistance Measurements. Journal of Physical Chemistry C, 2014, 118, 2554-2563.	1.5	12
72	Solution-Processed Cu ₂ ZnSnS ₄ Nanocrystal Solar Cells: Efficient Stripping of Surface Insulating Layers Using Alkylating Agents. Journal of Physical Chemistry C, 2014, 118, 804-810.	1.5	38

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73	Hollow zinc oxide microspheres functionalized by Au nanoparticles for gas sensors. RSC Advances, 2014, 4, 28005.	1.7	36
74	Microwave hydrothermal synthesis and gas sensing application of porous ZnO core-shell microstructures. RSC Advances, 2014, 4, 32538.	1.7	36
75	Nanoparticle Cluster Gas Sensor: Controlled Clustering of SnO ₂ Nanoparticles for Highly Sensitive Toluene Detection. ACS Applied Materials & Interfaces, 2014, 6, 5319-5326.	4.0	159
76	Hierarchical Fe ₂ O ₃ /NiO Composites with a Hollow Structure for a Gas Sensor. ACS Applied Materials & Interfaces, 2014, 6, 12031-12037.	4.0	255
77	Determination of Oxygen Adsorption Species on SnO ₂ : Exact Analysis of Gas Sensing Properties Using a Sample Gas Pretreatment System. Journal of the Electrochemical Society, 2014, 161, B123-B128.	1.3	45
78	Porous ZnO/ZnCo ₂ O ₄ hollow spheres: synthesis, characterization, and applications in gas sensing. Journal of Materials Chemistry A, 2014, 2, 17683-17690.	5.2	175
79	WO ₃ Nanolamella Gas Sensor: Porosity Control Using SnO ₂ Nanoparticles for Enhanced NO ₂ Sensing. Langmuir, 2014, 30, 2571-2579.	1.6	160
80	Hollow cylinder ZnO/SnO ₂ nanostructures synthesized by ultrasonic spray pyrolysis and their gas-sensing performance. CrystEngComm, 2014, 16, 6135.	1.3	21
81	Hollow SnO ₂ /Fe ₂ O ₃ spheres with a double-shell structure for gas sensors. Journal of Materials Chemistry A, 2014, 2, 1302-1308.	5.2	142
82	H ₂ Sensing Mechanism of Pd-Loaded WO ₃ Nanoparticle Gas Sensors. Chemistry Letters, 2014, 43, 1435-1437.	0.7	23
83	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
84	Oxygen Reduction Activity of Carbon-Supported La _x Ca _x Mn _{1-y} Fe _y O ₃ Nanoparticles. Chemistry of Materials, 2013, 25, 3072-3079.		32
85	Pore and Particle Size Control of Gas Sensing Films Using SnO ₂ Nanoparticles Synthesized by Seed-Mediated Growth: Design of Highly Sensitive Gas Sensors. Journal of Physical Chemistry C, 2013, 117, 17574-17582.	1.5	116
86	High sensitive gas sensor based on Pd-loaded WO ₃ nanolamellae. Thin Solid Films, 2013, 548, 677-682.	0.8	31
87	Proposal of contact potential promoted oxide semiconductor gas sensor. Sensors and Actuators B: Chemical, 2013, 187, 162-167.	4.0	38
88	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
89	Catalytic Combustion-Type Hydrogen Sensor Using BaTiO ₃ -based PTC Thermistor. Journal of the American Ceramic Society, 2013, 96, 1789-1794.	1.9	17
90	Discharge/charge characteristic of Li-air cells using carbon-supported LaMn _{0.6} Fe _{0.4} O ₃ as an electrocatalyst. Journal of Power Sources, 2013, 242, 216-221.	4.0	21

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91	Efficient Photorecovery of Noble Metals from Solution Using a $\text{H}^3\text{-SiW10O36}$ /Surfactant Hybrid Photocatalyst. <i>Langmuir</i> , 2013, 29, 2128-2135.	1.6	8
92	Photocatalytic Recovery of Noble Metals from Waste Solutions Using a Polyoxometallate (POM)-Based Hybrid Photocatalyst. <i>Advanced Materials Research</i> , 2013, 747, 518-521.	0.3	1
93	A Micro Gas Sensor Using TiO_2 Nanotubes to Detect Volatile Organic Compounds. <i>Applied Physics Express</i> , 2013, 6, 047201.	1.1	12
94	Interaction of Water Vapor with SnO_2 Sensor Materials: A Comparison of DRIFTS and Resistance Measurements. <i>ECS Transactions</i> , 2013, 50, 221-229.	0.3	1
95	Effects of Crystallite Size and Donor Density on the Sensor Response of SnO_2 Nano-Particles in the State of Volume Depletion. <i>Journal of the Electrochemical Society</i> , 2012, 159, J136-J141.	1.3	13
96	Preparation of nano- LaNiO_3 support electrode for rechargeable metal-air batteries. <i>Electrochemistry Communications</i> , 2012, 24, 50-52.	2.3	22
97	Preparation of a Stable Sol Suspension of Pd-Loaded SnO_2 Nanocrystals by a Photochemical Deposition Method for Highly Sensitive Semiconductor Gas Sensors. <i>ACS Applied Materials & Interfaces</i> , 2012, 4, 4231-4236.	4.0	52
98	Extension of receptor function theory to include two types of adsorbed oxygen for oxide semiconductor gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2012, 163, 128-135.	4.0	66
99	Preparation and measurement of standard organic gases using a diffusion method and a NASICON-based CO_2 sensor combined with a combustion catalyst. <i>Analytical Methods</i> , 2011, 3, 1887.	1.3	4
100	Semiconductor gas sensor using nano-sized oxide for high-sensitive detection of environment-related gases. , 2011, , .		6
101	High-Performance Oxygen Reduction Catalyst Using Carbon-Supported La-Mn-Based Perovskite-Type Oxide. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, A67.	2.2	30
102	Bi-Functional Oxygen Electrodes Using $\text{LaMnO}_3/\text{LaNiO}_3$ for Rechargeable Metal-Air Batteries. <i>Journal of the Electrochemical Society</i> , 2011, 158, A605.	1.3	56
103	Gas sensor using noble metal-loaded TiO_2 nanotubes for detection of large-sized volatile organic compounds. <i>Journal of the Ceramic Society of Japan</i> , 2011, 119, 884-889.	0.5	15
104	Basic approach to the transducer function of oxide semiconductor gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2011, 160, 1352-1362.	4.0	68
105	Electrochemical detection of volatile organic compounds using a $\text{Na}_3\text{Zr}_2\text{Si}_2\text{PO}_{12}/\text{Bi}_2\text{Cu}_0.1\text{V}_0.9\text{O}_{5.35}$ heterojunction device. <i>Electrochimica Acta</i> , 2011, 56, 7484-7490.	2.6	25
106	Theoretical approach to the gas response of oxide semiconductor film devices under control of gas diffusion and reaction effects. <i>Sensors and Actuators B: Chemical</i> , 2011, 154, 277-282.	4.0	50
107	Microstructure control of TiO_2 nanotubular films for improved VOC sensing. <i>Sensors and Actuators B: Chemical</i> , 2011, 154, 251-256.	4.0	94
108	Explicit formulation for the response of neat oxide semiconductor gas sensor to reducing gas. <i>Sensors and Actuators B: Chemical</i> , 2011, 158, 28-34.	4.0	20

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109	The Enhancement of Response Speed by Loading the Noble Metal into the Sensing Layer for FET-Type NO ₂ Sensors. Journal of the Electrochemical Society, 2011, 158, J36.	1.3	1
110	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
111	CO ₂ Sensor Combining an MISiC Capacitor and a Binary Carbonate. Electrochemical and Solid-State Letters, 2011, 14, J4.	2.2	4
112	Combustion-Type H ₂ Gas Sensor Using a PTC Thermistor Based on Bi, Na-Codoped BaTiO ₃ as a Transducer. Sensor Letters, 2011, 9, 21-25.	0.4	2
113	Enhanced Gas Sensing Characteristics of Au-Loaded TiO ₂ Nanotube Sensors. Sensor Letters, 2011, 9, 26-30.	0.4	8
114	Stability and Interfacial Structure of a NASICON-Based CO ₂ Sensor Fitted with a Solid-Reference Electrode. Sensor Letters, 2011, 9, 288-293.	0.4	7
115	Wet process-preparation of Re-doped WO ₃ for wide range of NO ₂ detection. Journal of the Ceramic Society of Japan, 2010, 118, 184-187.	0.5	3
116	High Oxygen Permeation in Ba _{0.95} La _{0.05} FeO _{3-δ} Membranes with Surface Modification. ACS Applied Materials & Interfaces, 2010, 2, 2849-2853.	4.0	32
117	Structural optimization of gas diffusion electrodes loaded with LaMnO ₃ electrocatalysts. Journal of Applied Electrochemistry, 2010, 40, 675-681.	1.5	7
118	High-Performance Oxygen-Permeable Membranes with an Asymmetric Structure Using Ba _{0.95} La _{0.05} FeO _{3-δ} Perovskite-Type Oxide. Advanced Materials, 2010, 22, 2367-2370.	11.1	110
119	Oxygen-permeable membranes based on partially B-site substituted BaFe _{1-y} MyO _{3-δ} (M=Cu or Ni). Journal of Solid State Chemistry, 2010, 183, 2426-2431.	1.4	46
120	Theoretical approach to the rate of response of semiconductor gas sensor. Sensors and Actuators B: Chemical, 2010, 150, 132-140.	4.0	33
121	Microstructure Effect on the Oxygen Permeation through Ba _{0.95} La _{0.05} FeO _{3-δ} Membranes Fabricated by Different Methods. Journal of the American Ceramic Society, 2010, 93, 2012-2017.	1.9	2
122	Synthesis of monodispersed SnO ₂ nanocrystals and their remarkably high sensitivity to volatile organic compounds. Chemistry of Materials, 2010, 22, 2662-2667.	3.2	128
123	Application of a Solid Electrolyte CO ₂ Sensor for the Analysis of Standard Volatile Organic Compound Gases. Analytical Chemistry, 2010, 82, 3315-3319.	3.2	19
124	Control of Electrode Reactions in a Mixed-Potential-Type Gas Sensor Based on a BiCuVO _x Solid Electrolyte. Journal of Physical Chemistry C, 2010, 114, 15141-15148.	1.5	17
125	Receptor Function and Response of Semiconductor Gas Sensor. Journal of Sensors, 2009, 2009, 1-21.	0.6	120
126	Glass-Coated Mixed Conducting Cobaltites as Solid-Reference Electrode Materials for NASICON-Based Potentiometric CO ₂ Sensors. Journal of the Electrochemical Society, 2009, 156, J351.	1.3	6

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127	Oxygen Permeation Properties of Co-Free Perovskite-Type Oxide Membranes Based on BaFe _{1-y} Zr _y O _{3-δ} . Journal of the Electrochemical Society, 2009, 156, E81.	1.3	71
128	Detection of organic gases using TiO ₂ nanotube-based gas sensors. Procedia Chemistry, 2009, 1, 192-195.	0.7	37
129	Gas Response of Oxide Semiconductor Film Devices under Control of Diffusion and Reaction Effects. Procedia Chemistry, 2009, 1, 658-661.	0.7	1
130	Highly sensitive NO ₂ sensors using lamellar-structured WO ₃ particles prepared by an acidification method. Sensors and Actuators B: Chemical, 2009, 135, 568-574.	4.0	147
131	Gas sensing characteristics and porosity control of nanostructured films composed of TiO ₂ nanotubes. Sensors and Actuators B: Chemical, 2009, 137, 513-520.	4.0	238
132	Receptor function of small semiconductor crystals with clean and electron-traps dispersed surfaces. Thin Solid Films, 2009, 517, 6148-6155.	0.8	33
133	Nano-sized PdO loaded SnO ₂ nanoparticles by reverse micelle method for highly sensitive CO gas sensor. Sensors and Actuators B: Chemical, 2009, 136, 99-104.	4.0	122
134	Planar-type BiCuVO _x solid electrolyte sensor for the detection of volatile organic compounds. Sensors and Actuators B: Chemical, 2009, 137, 147-153.	4.0	15
135	New perspectives of gas sensor technology. Sensors and Actuators B: Chemical, 2009, 138, 100-107.	4.0	358
136	Microstructure control of WO ₃ film by adding nano-particles of SnO ₂ for NO ₂ detection in ppb level. Procedia Chemistry, 2009, 1, 212-215.	0.7	10
137	Photoinduced Recovery of Gold Using an Inorganic/Organic Hybrid Photocatalyst. Journal of Physical Chemistry C, 2009, 113, 19986-19993.	1.5	13
138	Oxygen Permeation Properties of Partially A-Site Substituted BaFeO _{3-δ} Perovskites. Journal of the Electrochemical Society, 2009, 156, E187.	1.3	82
139	Oxygen Permeation of a Dense/Porous Asymmetric Membrane Using La _{0.6} Ca _{0.4} CoO _{3-δ} /BaFe _{0.975} Zr _{0.025} O _{3-δ} System. Chemistry Letters, 2009, 38, 94-95.	0.7	12
140	Preparation of metal-loaded oxide nanoparticles for gas sensor applications. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2009, 17, 116-121.	0.0	0
141	Preparation of oxygen evolution layer/La _{0.6} Ca _{0.4} CoO ₃ dense membrane/porous support asymmetric structure for high-performance oxygen permeation. Solid State Ionics, 2008, 179, 1377-1381.	1.3	47
142	Theory of power laws for semiconductor gas sensors. Sensors and Actuators B: Chemical, 2008, 128, 566-573.	4.0	596
143	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
144	Effect of preparation routes on the catalytic activity over SmFeO ₃ oxide. Catalysis Today, 2008, 139, 125-129.	2.2	32

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145	Organic gas sensor using BiCuVO _x solid electrolyte. <i>Electrochemistry Communications</i> , 2008, 10, 311-314.	2.3	14
146	Dense/Porous Asymmetric-Structured Oxygen Permeable Membranes Based on La _{0.6} Ca _{0.4} CoO ₃ Perovskite-Type Oxide. <i>Chemistry of Materials</i> , 2008, 20, 6965-6973.	3.2	39
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