

Marina N Rummyantseva

List of Publications by Year in descending order

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205
papers

4,649
citations

94433

37
h-index

138484

58
g-index

206
all docs

206
docs citations

206
times ranked

4248
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural Characterization of Nanocrystalline SnO ₂ by X-Ray and Raman Spectroscopy. Journal of Solid State Chemistry, 1998, 135, 78-85.	2.9	340
2	Raman Surface Vibration Modes in Nanocrystalline SnO ₂ : Correlation with Gas Sensor Performances. Chemistry of Materials, 2005, 17, 893-901.	6.7	162
3	Heterostructured p-CuO (nanoparticle)/n-SnO ₂ (nanowire) devices for selective H ₂ S detection. Sensors and Actuators B: Chemical, 2013, 181, 130-135.	7.8	148
4	CuO/SnO ₂ thin film heterostructures as chemical sensors to H ₂ S. Sensors and Actuators B: Chemical, 1998, 50, 186-193.	7.8	117
5	Nanocomposites SnO ₂ /Fe ₂ O ₃ : Sensor and catalytic properties. Sensors and Actuators B: Chemical, 2006, 118, 208-214.	7.8	117
6	Reduced graphene oxide hybridized with WS ₂ nanoflakes based heterojunctions for selective ammonia sensors at room temperature. Sensors and Actuators B: Chemical, 2019, 282, 290-299.	7.8	112
7	Visible-light activated room temperature NO ₂ sensing of SnS ₂ nanosheets based chemiresistive sensors. Sensors and Actuators B: Chemical, 2020, 305, 127455.	7.8	109
8	Role of surface hydroxyl groups in promoting room temperature CO sensing by Pd-modified nanocrystalline SnO ₂ . Journal of Solid State Chemistry, 2010, 183, 2389-2399.	2.9	81
9	Surface chemistry of nanocrystalline SnO ₂ : Effect of thermal treatment and additives. Sensors and Actuators B: Chemical, 2007, 126, 52-55.	7.8	77
10	Nanocrystalline ZnO(Ga): Paramagnetic centers, surface acidity and gas sensor properties. Sensors and Actuators B: Chemical, 2013, 182, 555-564.	7.8	74
11	Chemical modification of nanocrystalline tin dioxide for selective gas sensors. Russian Chemical Reviews, 2013, 82, 917-941.	6.5	72
12	Dopants in nanocrystalline tin dioxide. Russian Chemical Bulletin, 2003, 52, 1217-1238.	1.5	68
13	Visible light activated room temperature gas sensors based on nanocrystalline ZnO sensitized with CdSe quantum dots. Sensors and Actuators B: Chemical, 2014, 205, 305-312.	7.8	68
14	The Key Role of Active Sites in the Development of Selective Metal Oxide Sensor Materials. Sensors, 2021, 21, 2554.	3.8	67
15	Nanocrystalline BaSnO ₃ as an Alternative Gas Sensor Material: Surface Reactivity and High Sensitivity to SO ₂ . Materials, 2015, 8, 6437-6454.	2.9	63
16	Selective detection of individual gases and CO/H ₂ mixture at low concentrations in air by single semiconductor metal oxide sensors working in dynamic temperature mode. Sensors and Actuators B: Chemical, 2018, 254, 502-513.	7.8	61
17	One-dimensional CuO/SnO ₂ heterojunctions for enhanced detection of H ₂ S. Journal of Materials Chemistry A, 2013, 1, 11261.	10.3	58
18	Effect of combined Pd and Cu doping on microstructure, electrical and gas sensor properties of nanocrystalline tin dioxide. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 85, 43-49.	3.5	56

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19	Nanocomposites SnO ₂ /Fe ₂ O ₃ : Wet chemical synthesis and nanostructure characterization. <i>Sensors and Actuators B: Chemical</i> , 2005, 109, 64-74.	7.8	55
20	UV effect on NO ₂ sensing properties of nanocrystalline In ₂ O ₃ . <i>Sensors and Actuators B: Chemical</i> , 2016, 231, 491-496.	7.8	54
21	Selectivity Modification of SnO ₂ -Based Materials for Gas Sensor Arrays. <i>Electroanalysis</i> , 2010, 22, 2809-2816.	2.9	53
22	Visible light activation of room temperature NO ₂ gas sensors based on ZnO, SnO ₂ and In ₂ O ₃ sensitized with CdSe quantum dots. <i>Thin Solid Films</i> , 2016, 618, 253-262.	1.8	53
23	Chemical modification of nanocrystalline metal oxides: effect of the real structure and surface chemistry on the sensor properties. <i>Russian Chemical Bulletin</i> , 2008, 57, 1106-1125.	1.5	51
24	Co ₃ O ₄ as p-Type Material for CO Sensing in Humid Air. <i>Sensors</i> , 2017, 17, 2216.	3.8	51
25	Mechanism of sensing CO in nitrogen by nanocrystalline SnO ₂ and SnO ₂ (Pd) studied by Mössbauer spectroscopy and conductance measurements. <i>Journal of Materials Chemistry</i> , 2002, 12, 1174-1178.	6.7	49
26	Nature of Gas Sensitivity in Nanocrystalline Metal Oxides. <i>Russian Journal of Applied Chemistry</i> , 2001, 74, 440-444.	0.5	47
27	Microstructure and electrophysical properties of SnO ₂ , ZnO and In ₂ O ₃ nanocrystalline films prepared by reactive magnetron sputtering. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2002, 96, 268-274.	3.5	45
28	Nanocrystalline SnO ₂ and In ₂ O ₃ as materials for gas sensors: The relationship between microstructure and oxygen chemisorption. <i>Thin Solid Films</i> , 2009, 518, 1283-1288.	1.8	44
29	A real-time on-line photoelectrochemical sensor toward chemical oxygen demand determination based on field-effect transistor using an extended gate with 3D TiO ₂ nanotube arrays. <i>Sensors and Actuators B: Chemical</i> , 2019, 289, 106-113.	7.8	44
30	Effect of interdiffusion on electrical and gas sensor properties of CuO/SnO ₂ heterostructure. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1999, 57, 241-246.	3.5	43
31	SnO ₂ /MoO ₃ -nanostructure and alcohol detection. <i>Sensors and Actuators B: Chemical</i> , 2006, 118, 156-162.	7.8	42
32	Synthesis, Structure, and Sensor Properties of Vanadium Pentoxide Nanorods. <i>European Journal of Inorganic Chemistry</i> , 2010, 2010, 5247-5253.	2.0	42
33	Copper and nickel doping effect on interaction of SnO ₂ films with H ₂ S. <i>Journal of Materials Chemistry</i> , 1997, 7, 1785-1790.	6.7	40
34	Oxygen exchange on nanocrystalline tin dioxide modified by palladium. <i>Journal of Solid State Chemistry</i> , 2012, 186, 1-8.	2.9	40
35	ZnSe/NiO heterostructure-based chemiresistive-type sensors for low-concentration NO ₂ detection. <i>Rare Metals</i> , 2021, 40, 1632-1641.	7.1	38
36	Light Activation of Nanocrystalline Metal Oxides for Gas Sensing: Principles, Achievements, Challenges. <i>Nanomaterials</i> , 2021, 11, 892.	4.1	38

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37	Influence of copper on sensor properties of tin dioxide films in H ₂ S. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996, 41, 228-234.	3.5	37
38	Materials for solid-state gas sensors. <i>Inorganic Materials</i> , 2000, 36, 293-301.	0.8	37
39	Hydrogen sensitivity of SnO ₂ thin films doped with Pt by laser ablation. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 387-391.	7.8	37
40	Role of Pt Aggregates in Pt/SnO ₂ Thin Films Used as Gas Sensors Investigations of the Catalytic Effect. <i>Journal of the Electrochemical Society</i> , 2000, 147, 3131.	2.9	36
41	Active Sites on Nanocrystalline Tin Dioxide Surface: Effect of Palladium and Ruthenium Oxides Clusters. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21541-21549.	3.1	35
42	Optical and photoelectrical properties of nanocrystalline indium oxide with small grains. <i>Thin Solid Films</i> , 2015, 595, 25-31.	1.8	33
43	Comparison of Au-functionalized semiconductor metal oxides in sensitivity to VOC. <i>Sensors and Actuators B: Chemical</i> , 2021, 326, 128980.	7.8	33
44	Nanocrystalline tin dioxide: Basics in relation with gas sensing phenomena. Part I. Physical and chemical properties and sensor signal formation. <i>Inorganic Materials</i> , 2015, 51, 1329-1347.	0.8	32
45	Sub-ppm Formaldehyde Detection by n-n TiO ₂ @SnO ₂ Nanocomposites. <i>Sensors</i> , 2019, 19, 3182.	3.8	32
46	Effect of AuPd Bimetal Sensitization on Gas Sensing Performance of Nanocrystalline SnO ₂ Obtained by Single Step Flame Spray Pyrolysis. <i>Nanomaterials</i> , 2019, 9, 728.	4.1	31
47	Sub-ppm H ₂ S sensing by tubular ZnO-Co ₃ O ₄ nanofibers. <i>Sensors and Actuators B: Chemical</i> , 2020, 307, 127624.	7.8	31
48	Doping effects on electrical and optical properties of spin-coated ZnO thin films. <i>Vacuum</i> , 2015, 114, 198-204.	3.5	30
49	Quasi Similar Routes of NO ₂ and NO Sensing by Nanocrystalline WO ₃ : Evidence by In Situ DRIFT Spectroscopy. <i>Sensors</i> , 2019, 19, 3405.	3.8	30
50	Role of PdO and RuO ₄ Clusters in Oxygen Exchange between Nanocrystalline Tin Dioxide and the Gas Phase. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23858-23867.	3.1	28
51	Sensor properties of vanadium oxide nanotubes. <i>Mendeleev Communications</i> , 2008, 18, 6-7.	1.6	27
52	Chemically modified nanocrystalline SnO ₂ -based materials for nitrogen-containing gases detection using gas sensor array. <i>Journal of Alloys and Compounds</i> , 2017, 691, 514-523.	5.5	27
53	Gold Decoration and Photoresistive Response to Nitrogen Dioxide of WS ₂ Nanotubes. <i>Chemistry - A European Journal</i> , 2018, 24, 18952-18962.	3.3	27
54	Effect of Au and NiO catalysts on the NO ₂ sensing properties of nanocrystalline SnO ₂ . <i>Inorganic Materials</i> , 2010, 46, 232-236.	0.8	26

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55	Gas-sensing behaviors of TiO ₂ -layer-modified SnO ₂ quantum dots in self-heating mode and effects of the TiO ₂ layer. <i>Sensors and Actuators B: Chemical</i> , 2020, 310, 127870.	7.8	26
56	Inorganic structures as materials for gas sensors. <i>Russian Chemical Reviews</i> , 2004, 73, 939-956.	6.5	25
57	Photoconductivity of nanocrystalline SnO ₂ sensitized with colloidal CdSe quantum dots. <i>Journal of Materials Chemistry C</i> , 2013, 1, 1005-1010.	5.5	25
58	Pyrosol spraying deposition of copper- and nickel-doped tin oxide films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996, 41, 333-338.	3.5	24
59	Catalytic impact of RuO _x clusters to high ammonia sensitivity of tin dioxide. <i>Sensors and Actuators B: Chemical</i> , 2012, 175, 186-193.	7.8	24
60	pH control of the structure, composition, and catalytic activity of sulfated zirconia. <i>Journal of Solid State Chemistry</i> , 2013, 198, 496-505.	2.9	24
61	Effect of Humidity on Light-Activated NO and NO ₂ Gas Sensing by Hybrid Materials. <i>Nanomaterials</i> , 2020, 10, 915.	4.1	24
62	Photoresistive gas sensor based on nanocrystalline ZnO sensitized with colloidal perovskite CsPbBr ₃ nanocrystals. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129035.	7.8	24
63	CO and NH ₃ sensor properties and paramagnetic centers of nanocrystalline SnO ₂ modified by Pd and Ru. <i>Thin Solid Films</i> , 2011, 520, 904-908.	1.8	23
64	Influence of Mono- and Bimetallic PtO _x , PdO _x , PtPdO _x Clusters on CO Sensing by SnO ₂ Based Gas Sensors. <i>Nanomaterials</i> , 2018, 8, 917.	4.1	22
65	Nanocrystalline LaCoO ₃ modified by Ag nanoparticles with improved sensitivity to H ₂ S. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126661.	7.8	22
66	Nanocomposites SnO ₂ /SiO ₂ for CO Gas Sensors: Microstructure and Reactivity in the Interaction with the Gas Phase. <i>Materials</i> , 2019, 12, 1096.	2.9	22
67	Two successive effects in the interaction of nanocrystalline SnO ₂ thin films with reducing gases. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000, 77, 159-166.	3.5	21
68	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.	0.8	21
69	Nanocrystalline ferrites Ni _x Zn _{1-x} Fe ₂ O ₄ : Influence of cation distribution on acidic and gas sensing properties. <i>Journal of Solid State Chemistry</i> , 2011, 184, 2799-2805.	2.9	20
70	p-CoO _x /n-SnO ₂ nanostructures: New highly selective materials for H ₂ S detection. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 564-571.	7.8	20
71	Selective modified SnO ₂ -based materials for gas sensors arrays. <i>Procedia Chemistry</i> , 2009, 1, 204-207.	0.7	19
72	Cobalt location in p-CoO _x /n-SnO ₂ nanocomposites: Correlation with gas sensor performances. <i>Journal of Alloys and Compounds</i> , 2017, 721, 249-260.	5.5	19

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73	Effect of microstructure on the stability of nanocrystalline tin dioxide ceramics. Journal of Materials Chemistry, 1997, 7, 2269-2272.	6.7	18
74	Metal-oxide based nanocomposites as materials for gas sensors. Russian Journal of General Chemistry, 2008, 78, 1081-1092.	0.8	18
75	Active sites on the surface of nanocrystalline semiconductor oxides ZnO and SnO ₂ and gas sensitivity. Russian Chemical Bulletin, 2017, 66, 1728-1764.	1.5	18
76	Sensitivity of nanocrystalline tungsten oxide to CO and ammonia gas determined by surface catalysts. Sensors and Actuators B: Chemical, 2018, 277, 336-346.	7.8	18
77	Photosensitive Organic-Inorganic Hybrid Materials for Room Temperature Gas Sensor Applications. Nanomaterials, 2018, 8, 671.	4.1	18
78	Room Temperature Formaldehyde Sensing of Hollow SnO ₂ /ZnO Heterojunctions Under UV-LED Activation. IEEE Sensors Journal, 2019, 19, 7207-7214.	4.7	18
79	Ga ₂ O ₃ (Sn) Oxides for High-Temperature Gas Sensors. Nanomaterials, 2021, 11, 2938.	4.1	18
80	Mass Spectrometric Study of Nanocrystalline ZnO Vaporization. Inorganic Materials, 2003, 39, 594-598.	0.8	17
81	Influence of the microstructure of semiconductor sensor materials on oxygen chemisorption on their surface. Russian Journal of General Chemistry, 2008, 78, 2556-2565.	0.8	17
82	Specific Interaction of PdO _x - and RuO _y -Modified Tin Dioxide with CO and NH ₃ Gases: Kelvin Probe and DRIFT Studies. Journal of Physical Chemistry C, 2015, 119, 24342-24350.	3.1	17
83	Effects of Ag Additive in Low Temperature CO Detection with In ₂ O ₃ Based Gas Sensors. Nanomaterials, 2018, 8, 801.	4.1	17
84	Hydrothermal Synthesis of Nanocrystalline SnO ₂ for Gas Sensors. Inorganic Materials, 2003, 39, 1158-1162.	0.8	16
85	Pd nanoparticles on SnO ₂ (Sb) whiskers: Aggregation and reactivity in CO detection. Journal of Alloys and Compounds, 2013, 565, 6-10.	5.5	16
86	Selectivity of Catalytically Modified Tin Dioxide to CO and NH ₃ Gas Mixtures. Chemosensors, 2015, 3, 241-252.	3.6	16
87	Synergy Effect of Au and SiO ₂ Modification on SnO ₂ Sensor Properties in VOCs Detection in Humid Air. Nanomaterials, 2020, 10, 813.	4.1	16
88	Impedance spectroscopy of ultrafine-grain SnO ₂ ceramics with a variable grain size. Semiconductors, 2006, 40, 104-107.	0.5	15
89	Charge carrier transport mechanisms in nanocrystalline indium oxide. Thin Solid Films, 2014, 558, 320-325.	1.8	15
90	Highly Sensitive ZnO(Ga, In) for Sub-ppm Level NO ₂ Detection: Effect of Indium Content. Chemosensors, 2017, 5, 18.	3.6	15

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91	Light-Activated Sub-ppm NO ₂ Detection by Hybrid ZnO/QD Nanomaterials vs. Charge Localization in Core-Shell QD. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	15
92	The electrical conductivity of polycrystalline SnO ₂ (Cu) films and their sensitivity to hydrogen sulfide. <i>Semiconductors</i> , 1997, 31, 335-339.	0.5	14
93	Crystallite size effect on the conductivity of the ultradisperse ceramics of SnO ₂ and In ₂ O ₃ . <i>Mendeleev Communications</i> , 2004, 14, 167-169.	1.6	14
94	Materials based on modified SnO ₂ for selective gas sensors. <i>Inorganic Materials</i> , 2010, 46, 1100-1105.	0.8	14
95	Conductivity of nanocrystalline ZnO(Ga). <i>Semiconductors</i> , 2013, 47, 650-654.	0.5	14
96	High-temperature resistive gas sensors based on ZnO/SiC nanocomposites. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 1537-1547.	2.8	14
97	Electrospun ZnO/Pd Nanofibers: CO Sensing and Humidity Effect. <i>Sensors</i> , 2020, 20, 7333.	3.8	14
98	Acidic and catalytic co-functionalization for tuning the sensitivity of sulfated tin oxide modified by ruthenium oxide to ammonia gas. <i>Sensors and Actuators B: Chemical</i> , 2018, 255, 3523-3532.	7.8	13
99	Determination of gold and cobalt dopants in advanced materials based on tin oxide by slurry sampling high-resolution continuum source graphite furnace atomic absorption spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2018, 140, 1-4.	2.9	13
100	Effect of Zinc Oxide Modification by Indium Oxide on Microstructure, Adsorbed Surface Species, and Sensitivity to CO. <i>Frontiers in Materials</i> , 2019, 6, .	2.4	13
101	Unusual distribution of the constituents of an (Fe ₂ O ₃) _{0.8} (SnO ₂) _{0.2} nanocomposite evidenced by ⁵⁷ Fe and ¹¹⁹ Sn Mössbauer spectroscopy. <i>Mendeleev Communications</i> , 2004, 14, 140-141.	1.6	12
102	Synthesis, microstructure, and gas-sensing properties of SnO ₂ /MoO ₃ nanocomposites. <i>Inorganic Materials</i> , 2005, 41, 370-377.	0.8	12
103	Charge carrier transport in indium oxide nanocrystals. <i>Journal of Experimental and Theoretical Physics</i> , 2010, 111, 653-658.	0.9	12
104	Microstructure and gas-sensing properties of nanocrystalline NiFe ₂ O ₄ prepared by spray pyrolysis. <i>Inorganic Materials</i> , 2010, 46, 1254-1259.	0.8	12
105	The Effect of CdSe and InP Quantum Dots on the Interaction of ZnO with NO ₂ under Visible Light Irradiation. <i>Russian Journal of Inorganic Chemistry</i> , 2018, 63, 512-518.	1.3	12
106	Effect of W–O bonding on gas sensitivity of nanocrystalline Bi ₂ WO ₆ and WO ₃ . <i>Journal of Alloys and Compounds</i> , 2021, 856, 158159.	5.5	12
107	Sensor Properties of Pd-Doped SnO ₂ Films Deposited by Laser Ablation. <i>Inorganic Materials</i> , 2002, 38, 374-379.	0.8	11
108	Metal Oxide Nanocomposites: Synthesis and Characterization in Relation with Gas Sensing Phenomena. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2009, , 3-30.	0.2	11

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109	EPR study of nanocrystalline tin dioxide. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 1957-1960.	0.8	11
110	Hybrid sensor materials based on tin(IV) oxide and crown-containing 4-amino-1,8-naphthalimides. <i>Mendeleev Communications</i> , 2011, 21, 12-14.	1.6	11
111	Pulsed laser deposition of conductive indium tin oxide thin films. <i>Inorganic Materials</i> , 2012, 48, 1020-1025.	0.8	11
112	Cation distribution in nanocrystalline $Ni_{1-x}Zn_xFe_2O_4$ spinel ferrites. <i>Inorganic Materials</i> , 2012, 48, 525-530.	0.8	11
113	Organic-Inorganic Hybrid Materials for Room Temperature Light-Activated Sub-ppm NO Detection. <i>Nanomaterials</i> , 2020, 10, 70.	4.1	11
114	UV-Activated NO ₂ Gas Sensing by Nanocrystalline ZnO: Mechanistic Insights from Mass Spectrometry Investigations. <i>Chemosensors</i> , 2022, 10, 147.	3.6	11
115	Physicochemical properties of fine-particle ZnFe ₂ O ₄ prepared by spray pyrolysis of nitrate solutions. <i>Inorganic Materials</i> , 2007, 43, 853-859.	0.8	10
116	Influence of antimony doping on structure and conductivity of tin oxide whiskers. <i>Thin Solid Films</i> , 2009, 518, 1359-1362.	1.8	10
117	Inversion of NH ₃ sensor signal and paramagnetic centers of nanocrystalline ZnO(Ga). <i>Procedia Engineering</i> , 2011, 25, 296-299.	1.2	10
118	Photoconductivity of structures based on the SnO ₂ porous matrix coupled with core-shell CdSe/CdS quantum dots. <i>Applied Physics Letters</i> , 2013, 103, 133115.	3.3	10
119	The acetic acid vapor sensing properties of BaSnO ₃ microtubes prepared by electrospinning method. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2020, 259, 114606.	3.5	10
120	High-Sensitivity Humidity Sensor Based on a Single Sb-Doped SnO ₂ Whisker. <i>Sensor Letters</i> , 2009, 7, 1025-1029.	0.4	10
121	Crystalline WO ₃ nanoparticles for NO ₂ sensing. <i>Processing and Application of Ceramics</i> , 2020, 14, 282-292.	0.8	10
122	Design, Synthesis and Application of Metal Oxide-Based Sensing Elements: A Chemical Principles Approach. , 2013, , 69-115.		9
123	Ultrasonic disintegration of tungsten trioxide pseudomorphs after ammonium paratungstate as a route for stable aqueous sols of nanocrystalline WO ₃ . <i>Journal of Materials Science</i> , 2018, 53, 1758-1768.	3.7	9
124	Enhancement of Lewis Acidity of Cr ³⁺ -Doped Nanocrystalline SnO ₂ : Effect on Surface NH ₃ Oxidation and Sensory Detection Pattern. <i>ChemPhysChem</i> , 2019, 20, 1985-1996.	2.1	9
125	p-n Transition-Enhanced Sensing Properties of rGO-SnO ₂ Heterojunction to NO ₂ at Room Temperature. <i>IEEE Sensors Journal</i> , 2020, 20, 4562-4570.	4.7	9
126	Microstructure and sensing properties of nanocrystalline indium oxide prepared using hydrothermal treatment. <i>Russian Journal of Inorganic Chemistry</i> , 2009, 54, 163-171.	1.3	8

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127	Antimony doped whiskers of SnO ₂ grown from vapor phase. <i>Journal of Crystal Growth</i> , 2010, 312, 386-390.	1.5	8
128	Nanocrystalline tin dioxide: Basics in relation with gas sensing phenomena part II. Active centers and sensor behavior. <i>Inorganic Materials</i> , 2016, 52, 1311-1338.	0.8	8
129	Quantification of modifiers in advanced materials based on zinc oxide by total reflection X-ray fluorescence and inductively coupled plasma mass spectrometry. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2016, 118, 62-65.	2.9	8
130	Effect of Bimetallic Pd/Pt Clusters on the Sensing Properties of Nanocrystalline SnO ₂ in the Detection of CO. <i>Russian Journal of Inorganic Chemistry</i> , 2018, 63, 1007-1011.	1.3	8
131	First-principles study of CO and OH adsorption on in-doped ZnO surfaces. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 132, 172-181.	4.0	8
132	Nanocomposites SnO ₂ /SiO ₂ :SiO ₂ Impact on the Active Centers and Conductivity Mechanism. <i>Materials</i> , 2019, 12, 3618.	2.9	8
133	Influence of In ₂ O ₃ Nanocrystals Size on the Sensitivity to NO ₂ . <i>Journal of Nanoelectronics and Optoelectronics</i> , 2011, 6, 452-455.	0.5	8
134	Au Functionalized SnS ₂ Nanosheets Based Chemiresistive NO ₂ Sensors. <i>Chemosensors</i> , 2022, 10, 165.	3.6	8
135	Memory effect and its switching by electric field in solid-state gas sensors. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2000, 77, 106-109.	3.5	7
136	Vapor growth of SnO ₂ whiskers. <i>Inorganic Materials</i> , 2007, 43, 964-967.	0.8	7
137	Effect of oxygen partial pressure on SnO ₂ whisker growth. <i>Inorganic Materials</i> , 2008, 44, 268-271.	0.8	7
138	H ₂ S Sensing by Hybrids Based on Nanocrystalline SnO ₂ Functionalized with Cu(II) Organometallic Complexes: The Role of the Ligand Platform. <i>Nanomaterials</i> , 2017, 7, 384.	4.1	7
139	Nanocrystalline complex oxides Ni _x Co _{3-x} O ₄ : Cations distribution impact on electrical and gas sensor behaviour. <i>Journal of Alloys and Compounds</i> , 2020, 828, 154420.	5.5	7
140	Conductivity of ultradispersed SnO ₂ ceramic in strong electric fields. <i>Semiconductors</i> , 2009, 43, 156-157.	0.5	6
141	Frequency-dependent electrical conductivity of nanocrystalline SnO ₂ . <i>Inorganic Materials</i> , 2013, 49, 1000-1004.	0.8	6
142	SnO ₂ (Au ₀ , Co _{II} , III) nanocomposites: A synergistic effect of the modifiers in CO detection. <i>Inorganic Materials</i> , 2016, 52, 94-100.	0.8	6
143	Nanocrystalline Oxides Ni _x Co _{3-x} O ₄ : Sub-ppm H ₂ S Sensing and Humidity Effect. <i>Chemosensors</i> , 2021, 9, 34.	3.6	6
144	UV-VIS Photoconductivity of Nanocrystalline Tin Oxide. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2012, 7, 623-628.	0.5	6

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145	In ₂ O ₃ Based Hybrid Materials: Interplay between Microstructure, Photoelectrical and Light Activated NO ₂ Sensor Properties. <i>Chemosensors</i> , 2022, 10, 135.	3.6	6
146	Copper diffusion in SnO ₂ polycrystalline films. <i>Journal of Materials Science Letters</i> , 1994, 13, 1632-1634.	0.5	5
147	Conductivity of structures based on doped nanocrystalline SnO ₂ films with gold contacts. <i>Semiconductors</i> , 1999, 33, 175-176.	0.5	5
148	Properties of diode heterostructures based on nanocrystalline n-SnO ₂ on p-Si under the conditions of gas Adsorption. <i>Semiconductors</i> , 2000, 34, 955-959.	0.5	5
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