Cristian Eugen Simion

List of Publications by Year
in descending order

35	1,601	516710 16	395702 33
papers	citations	h-index	g-index

35	35	35	2111
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Influence of humidity on CO sensing with p-type CuO thick film gas sensors. Sensors and Actuators B: Chemical, 2011, 153, 347-353.	7.8	471
2	Modeling of sensing and transduction for p-type semiconducting metal oxide based gas sensors. Journal of Electroceramics, 2010, 25, 11-19.	2.0	340
3	CO sensing mechanism with WO3 based gas sensors. Sensors and Actuators B: Chemical, 2010, 151, 103-106.	7.8	134
4	Investigations of conduction mechanism in Cr2O3 gas sensing thick films by ac impedance spectroscopy and work function changes measurements. Sensors and Actuators B: Chemical, 2008, 133, 78-83.	7.8	121
5	Synthesis, Mechanism, and Gasâ€Sensing Application of Surfactant Tailored Tungsten Oxide Nanostructures. Advanced Functional Materials, 2009, 19, 1767-1774.	14.9	101
6	The Effect of Film Thickness on the Gas Sensing Properties of Ultra-Thin TiO2 Films Deposited by Atomic Layer Deposition. Sensors, 2018, 18, 735.	3.8	49
7	NO2 sensing mechanism of ZnOâ€“Eu2O3 binary oxide under humid air conditions. Sensors and Actuators B: Chemical, 2013, 186, 687-694.	7.8	38
8	Humidity-Tolerant Ultrathin NiO Gas-Sensing Films. ACS Sensors, 2020, 5, 1389-1397.	7.8	38
9	Low level NO 2 detection under humid background and associated sensing mechanism for mesoporous SnO 2. Sensors and Actuators B: Chemical, 2016, 231, 166-174.	7.8	32
10	Structure, properties and gas sensing effect of SnSe2 films prepared by pulsed laser deposition method. Journal of Non-Crystalline Solids, 2007, 353, 1865-1869.	3.1	29
11	Sensors based on mesoporous SnO 2 -CuWO 4 with high selective sensitivity to H 2 S at low operating temperature. Journal of Hazardous Materials, 2017, 331, 150-160.	12.4	27
12	Nanoclustered Pd decorated nanocrystalline Zn doped SnO2 for ppb NO2 detection at low temperature. Sensors and Actuators B: Chemical, 2019, 294, 148-156.	7.8	25
13	Structure and properties of silver doped SnSe₂ and Ge₂Sb₂Te₅ thin films prepared by pulsed laser deposition. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 516-520.	1.8	21
14	NO2 sensing properties of Cr2O3 highlighted by work function investigations. Thin Solid Films, 2012, 522, 395-400.	1.8	19
15	Hydrothermal synthesis of ZnOâ€“Eu2O3 binary oxide with straight strips morphology and sensitivity to NO2 gas. Materials Letters, 2012, 89, 219-222.	2.6	17
16	Conductance Model for Single-Crystalline/Compact Metal Oxide Gas-Sensing Layers in the Nondegenerate Limit: Example of Epitaxial SnO₂(101). ACS Sensors, 2019, 4, 2420-2428.	7.8	17
17	H2S sensing mechanism of SnO2-CuWO4 operated under pulsed temperature modulation. Sensors and Actuators B: Chemical, 2018, 259, 258-268.	7.8	15
18	Room temperature ammonia sensing with barium strontium titanate under humid air background. Sensors and Actuators B: Chemical, 2015, 220, 1241-1246.	7.8	12

#	ARTICLE	IF	CITATIONS
19	Insights about CO Gas-Sensing Mechanism with NiO-Based Gas Sensorsâ€”The Influence of Humidity. Chemosensors, 2021, 9, 244.	3.6	12
20	H2S selective sensitivity of Cu doped BaSrTiO3 under operando conditions and the associated sensing mechanism. Sensors and Actuators B: Chemical, 2018, 264, 327-336.	7.8	10
21	Direct Production of a Novel Iron-Based Nanocomposite from the Laser Pyrolysis of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mrow><mml:mtext>Fe</mml:mtext><mml:m Structural and Sens. Journal of Nanomaterials, 2010, 2010, 1-12.	2.7	8
22	Mesopororous Sn0.9â^'xIn0.1Cux(I)O2â^'Î´ gas sensors with selectivity to H2S working under humid air conditions. Microporous and Mesoporous Materials, 2014, 197, 63-71.	4.4	8
23	Nanostructured Cobalt Doped Barium Strontium Titanate Thin Films with Potential in CO2 Detection. Materials, 2020, 13, 4797.	2.9	8
24	Influence of relative humidity on CO2 interaction mechanism for Gd-doped SnO2 with respect to pure SnO2 and Gd2O3. Sensors and Actuators B: Chemical, 2022, 368, 132130.	7.8	8
25	Networked mesoporous SnO2 nanostructures templated by BrijÂ® 35 with enhanced H2S selective performance. Microporous and Mesoporous Materials, 2018, 270, 93-101.	4.4	7
26	Low temperature CO sensing under infield conditions with in doped Pd/SnO2. Sensors and Actuators B: Chemical, 2020, 308, 127717.	7.8	7
27	Bulk Versus Surface Modification of Alumina with Mn and Ce Based Oxides for CH4 Catalytic Combustion. Materials, 2019, 12, 1771.	2.9	5
28	CeO2:Mn3O4 Catalytic Micro-Converters Tuned for CH4 Detection Based on Catalytic Combustion under Real Operating Conditions. Materials, 2020, 13, 2196.	2.9	5
29	CuWO4 with CuO and Cu(OH)2 Native Surface Layers for H2S Detection under in-Field Conditions. Materials, 2021, 14, 465.	2.9	5
30	Sensing Properties of NiO Loaded SnO2 Nanoparticlesâ€”Specific Selectivity to H2S. Chemosensors, 2021, 9, 125.	3.6	4
31	Effects of Calcination Temperature on CO-Sensing Mechanism for NiO-Based Gas Sensors. Chemosensors, 2022, 10, 191.	3.6	4
32	Tuned sensitivity towards H2S and NH3 with Cu doped barium strontium titanate materials. AIP Conference Proceedings, 2014, , .	0.4	3
33	Methane Combustion Using Pd Deposited on CeOx-MnOx/La-Al2O3 Pellistors. Materials, 2020, 13, 4888.	2.9	1
34	Gas sensing properties of NiO/mesoporous SnO<inf>2</inf>. , 2017, , .		0
35	Special Issue â€œAdvanced Materials for Gas Sensorsâ€. Materials, 2021, 14, 6765.	2.9	0