

Faramarz Hossein-Babaei

List of Publications by Year in descending order

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74
papers

1,583
citations

236925

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330143

37
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74
all docs

74
docs citations

74
times ranked

1071
citing authors

#	ARTICLE	IF	CITATIONS
1	Pressure Sensitivity of Charge Conduction Through the Interface Between a Metal Oxide Nanocrystallite and Graphene. <i>Advanced Materials Interfaces</i> , 2021, 8, 2001815.	3.7	4
2	Atmospheric Dependence of Thermoelectric Generation in SnO ₂ Thin Films with Different Intergranular Potential Barriers Utilized for Self-Powered H ₂ S Sensor Fabrication. <i>ACS Applied Electronic Materials</i> , 2021, 3, 353-361.	4.3	11
3	Si/SiO ₂ /Ag optical sensor. , 2021, , .		1
4	Apparatus for Seebeck Coefficient Measurements on High-Resistance Bulk and Thin-film Samples. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 3070-3077.	4.7	12
5	Growing continuous zinc oxide layers with reproducible nanostructures on the seeded alumina substrates using spray pyrolysis. <i>Ceramics International</i> , 2020, 46, 8567-8574.	4.8	11
6	Tin oxide gas sensor on tin oxide microheater for high-temperature methane sensing. <i>Materials Letters</i> , 2020, 263, 127196.	2.6	20
7	Space-charge-limited current through the electrophoretically formed TiO ₂ /HOPG junction. , 2020, , .		0
8	Direct current powered humidity sensor based on a polymer composite with humidity sensitive electronic conduction. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	5
9	Hydrogen Level Detection via Thermal Conductivity Measurement Using Temporal Temperature Monitoring. , 2019, , .		2
10	Bipolar Resistive Switching of an Al/ZnO/Ti-based Memristor. , 2019, , .		0
11	Ti/PEDOT:PSS/Ti Pressure Sensor. , 2019, , .		3
12	SnO ₂ :F Films Grown by Ultrasonic Spray Pyrolysis Suitable for Transparent Defogger Fabrication. , 2019, , .		0
13	Classification of Dairy Products using Chronoamperometry Performed in a Microfluidic Channel. , 2019, , .		0
14	A Graphene Oxide-Based Humidity Sensor for Wearable Electronic. , 2019, , .		1
15	Quantitative Assessment of Vapor Molecule Adsorption to Solid Surfaces by Flow Rate Monitoring in Microfluidic Channels. <i>Analytical Chemistry</i> , 2019, 91, 12827-12834.	6.5	6
16	Zinc oxide-based direct thermoelectric gas sensor for the detection of volatile organic compounds in air. <i>Sensors and Actuators B: Chemical</i> , 2019, 294, 245-252.	7.8	25
17	Dopant passivation by adsorbed water monomers causes high humidity sensitivity in PEDOT: PSS thin films at ppm-level humidity. <i>Sensors and Actuators B: Chemical</i> , 2019, 293, 329-335.	7.8	24
18	Electronic properties of Ag-doped ZnO: DFT hybrid functional study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 14688-14693.	2.8	22

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19	Linking thermoelectric generation in polycrystalline semiconductors to grain boundary effects sets a platform for novel Seebeck effect-based sensors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10370-10378.	10.3	27
20	P2MM.8 - Conduction Activation Energy in PEDOT:PSS Thin Films. , 2018, , .		2
21	The ohmic contact between zinc oxide and highly oriented pyrolytic graphite. <i>Materials Letters</i> , 2017, 192, 52-55.	2.6	17
22	The selective flow of volatile organic compounds in conductive polymer-coated microchannels. <i>Scientific Reports</i> , 2017, 7, 42299.	3.3	31
23	Ten micron-thick undoped SnO ₂ layers grown by spray pyrolysis for microheater fabrication. <i>Materials Letters</i> , 2017, 196, 104-107.	2.6	30
24	Growth of ZnO nanorods on the surface and edges of a multilayer graphene sheet. <i>Scripta Materialia</i> , 2017, 139, 77-82.	5.2	25
25	Seebeck voltage measurement in undoped metal oxide semiconductors. <i>Measurement Science and Technology</i> , 2017, 28, 115002.	2.6	11
26	Electrophoretic deposition of ZnO on highly oriented pyrolytic graphite substrates. <i>Materials Letters</i> , 2017, 209, 404-407.	2.6	14
27	Diffusion Bonding of Metal Wires Directly to the Functional Metal Oxide Semiconductors for Forming Reliable Electrical Contacts. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 26637-26641.	8.0	24
28	A model for the electric conduction in metal/poly-TiO ₂ /metal structure. <i>Journal of Physics: Conference Series</i> , 2017, 939, 012010.	0.4	2
29	Oxygen adsorption at noble metal/TiO ₂ junctions. <i>IOP Conference Series: Materials Science and Engineering</i> , 2016, 108, 012030.	0.6	9
30	Transient molecular diffusion in microfluidic channels: Modeling and experimental verification of the results. <i>Sensors and Actuators B: Chemical</i> , 2016, 233, 646-653.	7.8	14
31	Electronic Conduction in Ti/Poly-TiO ₂ /Ti Structures. <i>Scientific Reports</i> , 2016, 6, 29624.	3.3	39
32	Identifying volatile organic compounds by determining their diffusion and surface adsorption parameters in microfluidic channels. <i>Sensors and Actuators B: Chemical</i> , 2015, 220, 607-613.	7.8	15
33	The energy barrier at noble metal/TiO ₂ junctions. <i>Applied Physics Letters</i> , 2015, 106, .	3.3	73
34	Forming ohmic Ag/SnO ₂ contacts. <i>Materials Letters</i> , 2015, 141, 141-144.	2.6	46
35	Alteration of pore size distribution by sol-gel impregnation for dynamic range and sensitivity adjustment in Kelvin condensation-based humidity sensors. <i>Sensors and Actuators B: Chemical</i> , 2014, 191, 572-578.	7.8	38
36	Recognition of complex odors with a single generic tin oxide gas sensor. <i>Sensors and Actuators B: Chemical</i> , 2014, 194, 156-163.	7.8	73

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37	A gold/organic semiconductor diode for ppm-level humidity sensing. Sensors and Actuators B: Chemical, 2014, 205, 143-150.	7.8	19
38	Air-stable electrical conduction in oxidized poly[2-methoxy-5-(2-ethylhexyloxy)-p-phenylene vinylene] thin films. Applied Physics Letters, 2013, 103, .	3.3	11
39	A miniature gas analyzer made by integrating a chemoresistor with a microchannel. Lab on A Chip, 2012, 12, 1874.	6.0	43
40	A concept of microfluidic electronic tongue. Microfluidics and Nanofluidics, 2012, 13, 331-344.	2.2	14
41	A microfluidic gas analyzer for selective detection of biomarker gases. , 2012, , .		7
42	Large area Ag ⁺ TiO ₂ UV radiation sensor fabricated on a thermally oxidized titanium chip. Sensors and Actuators A: Physical, 2012, 173, 116-121.	4.1	43
43	A breakthrough in gas diagnosis with a temperature-modulated generic metal oxide gas sensor. Sensors and Actuators B: Chemical, 2012, 166-167, 419-425.	7.8	84
44	Assessing the diagnostic information in the response patterns of a temperature-modulated tin oxide gas sensor. Measurement Science and Technology, 2011, 22, 035201.	2.6	35
45	Separate assessment of chemoresistivity and Schottky-type gas sensitivity in M ⁿ metal oxide ⁿ M ⁿ structures. Sensors and Actuators B: Chemical, 2011, 160, 174-180.	7.8	45
46	Titanium and silver contacts on thermally oxidized titanium chip: Electrical and gas sensing properties. Solid-State Electronics, 2011, 56, 185-190.	1.4	43
47	Silver-Rutile UV Sensor Fabricated on Thermally Oxidized Titanium Foil . Key Engineering Materials, 2011, 495, 18-22.	0.4	0
48	Compensation for the drift-like terms caused by environmental fluctuations in the responses of chemoresistive gas sensors. Sensors and Actuators B: Chemical, 2010, 143, 641-648.	7.8	95
49	Gas Analysis by Monitoring Molecular Diffusion in a Microfluidic Channel. Analytical Chemistry, 2010, 82, 8349-8355.	6.5	46
50	Extracting discriminative information from the Pad ⁺ -Z-transformed responses of a temperature-modulated chemoresistive sensor for gas recognition. Sensors and Actuators B: Chemical, 2009, 142, 19-27.	7.8	31
51	Gas Sensitive Porous Silver-Rutile High-Temperature Schottky Diode on Thermally Oxidized Titanium. IEEE Sensors Journal, 2009, 9, 237-243.	4.7	31
52	Porous silver-TiO ₂ Schottky-type chemical sensor fabricated on thermally oxidised titanium. Electronics Letters, 2008, 44, 161.	1.0	34
53	Analyzing the Responses of a Thermally Modulated Gas Sensor Using a Linear System Identification Technique for Gas Diagnosis. IEEE Sensors Journal, 2008, 8, 1837-1847.	4.7	31
54	Porosity modification for the adjustment of the dynamic range of ceramic humidity sensors. , 2008, , .		1

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55	Wide dynamic range hydrogen sensing using silver-rutile Schottky diode. , 2008, , .		3
56	Gas Diagnosis by the application of system identification technique on the response of a thermally modulated semiconductor gas sensor. , 2006, , .		0
57	Online Gas Diagnosis by a Capillary-attached Gas Sensor Coupled to a Pattern Recognition System. , 2006, , .		1
58	Diffusion-physisorption of a trace material in a capillary tube. Journal of Applied Physics, 2006, 100, 124917.	2.5	12
59	Gas diagnosis by a quantitative assessment of the transient response of a capillary-attached gas sensor. Sensors and Actuators B: Chemical, 2005, 107, 461-467.	7.8	30
60	A resistive gas sensor based on undoped p-type anatase. Sensors and Actuators B: Chemical, 2005, 110, 28-35.	7.8	60
61	Transient regime of gas diffusion-physisorption through a microporous barrier. IEEE Sensors Journal, 2005, 5, 1004-1010.	4.7	23
62	A Novel Approach to Hydrogen Sensing. IEEE Sensors Journal, 2004, 4, 802-806.	4.7	29
63	Analysis of thickness dependence of the sensitivity in thin film resistive gas sensors. Sensors and Actuators B: Chemical, 2003, 89, 256-261.	7.8	62
64	Gas diagnosis based on selective diffusion retardation in an air filled capillary. Sensors and Actuators B: Chemical, 2003, 96, 298-303.	7.8	27
65	Fabrication of poly-Si thick films by electrophoretic deposition. Electronics Letters, 2001, 37, 1090.	1.0	3
66	Electrophoretic deposition of MgO thick films from an acetone suspension. Journal of the European Ceramic Society, 2000, 20, 2165-2168.	5.7	26
67	Electrophoretically deposited zinc oxide thick film gas sensor. Electronics Letters, 2000, 36, 1815.	1.0	42
68	Hydrogen Detection with Noble Metal-TiO ₂ Schottky Diodes. Key Engineering Materials, 0, 495, 289-293.	0.4	6
69	Single Sensor Gas Analysis Using a Microfluidic Channel. Key Engineering Materials, 0, 495, 302-305.	0.4	1
70	Discriminating among Acid-, Base-, and Salt-Based Electrolytes Using a Single Microfluidic Channel. Key Engineering Materials, 0, 543, 285-288.	0.4	0
71	Obtaining Highly Selective Responses from a Bulk Tin Oxide Gas Sensor. Key Engineering Materials, 0, 543, 239-242.	0.4	2
72	Differentiating among Gas Mixtures Using a Single Tin Oxide Gas Sensor. Key Engineering Materials, 0, 605, 189-193.	0.4	2

#	ARTICLE	IF	CITATIONS
73	Electrical Resistance and Seebeck Effect in Undoped Polycrystalline Zinc Oxide. Key Engineering Materials, 0, 605, 185-188.	0.4	4
74	A Novel Material for Chemical Sensor Applications: Oxidized MEH-PPV. Key Engineering Materials, 0, 644, 12-15.	0.4	0