

Vladimir Aroutiounian

List of Publications by Year in descending order

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76
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docs citations

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2297
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational Search and Stability Analysis of Two-Dimensional Tin Oxides. <i>Journal of Physical Chemistry C</i> , 2022, 126, 4647-4654.	3.1	0
2	Thin-film SnO ₂ and ZnO detectors of hydrogen peroxide vapors. <i>Journal of Sensors and Sensor Systems</i> , 2018, 7, 281-288.	0.9	21
3	Nanocomposite sensors of propylene glycol, dimethylformamide and formaldehyde vapors. <i>Journal of Sensors and Sensor Systems</i> , 2018, 7, 31-41.	0.9	19
4	Electro-optical characteristics of a liquid crystal cell with graphene electrodes. <i>Beilstein Journal of Nanotechnology</i> , 2017, 8, 2802-2806.	2.8	6
5	EPR Study of TiO ₂ (Rutile) Doped with Vanadium. <i>Applied Magnetic Resonance</i> , 2016, 47, 479-485.	1.2	6
6	InAsSbP quantum dot mid-IR photodetectors operating at room temperature. <i>Infrared Physics and Technology</i> , 2015, 70, 12-14.	2.9	3
7	Magnetoresistance and capacitance oscillations and hysteresis in type-II InAsSbP ellipsoidal quantum dots. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 275302.	2.8	7
8	Technique for Spectropolarimetry Based on Liquid Crystal Polarization Diffraction Grating. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 615, 63-69.	0.9	4
9	Investigation of InAsSbP quantum dot mid-infrared sensors. <i>Journal of Sensors and Sensor Systems</i> , 2015, 4, 249-253.	0.9	2
10	Study of the surface-ruthenated SnO ₂ /MWCNTs nanocomposite thick-film gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2013, 177, 308-315.	7.8	44
11	Preparation and characterization of multiwalled carbon nanotube/In ₂ O ₃ composites. <i>Carbon</i> , 2013, 60, 266-272.	10.3	23
12	Novel Narrow Band-Gap InAsSbP-Based Quantum Dot Mid-Infrared Photodetectors: Fabrication, Optoelectronic and Electrophysical Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 799-803.	0.9	3
13	Manufacturing and investigations of i-butane sensor made of SnO ₂ /multiwall-carbon-nanotube nanocomposite. <i>Sensors and Actuators B: Chemical</i> , 2012, 173, 890-896.	7.8	23
14	Photovoltaic and optoelectronic properties of InAs(100)-based photoconductive cells with quantum dots and nanopits. <i>Infrared Physics and Technology</i> , 2011, 54, 114-120.	2.9	14
15	Competing nucleation mechanisms and growth of InAsSbP quantum dots and nano-pits on the InAs(100) surface. <i>Surface Science</i> , 2010, 604, 1127-1134.	1.9	9
16	Manufacture and investigation of nanoporous titanium oxide photoelectrodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 1782-1785.	0.8	0
17	The growth of InAsSbP-based diode heterostructures with quantum dots as a new material for thermophotovoltaic application. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009, 6, 1456-1459.	0.8	7
18	Study of sensitivity and response kinetics changes for SnO ₂ thin-film hydrogen sensors. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 8438-8443.	7.1	56

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19	Fluctuation-enhanced gas sensing. <i>Procedia Chemistry</i> , 2009, 1, 216-219.	0.7	10
20	Hydrogen Sensor Made of Porous Silicon and Covered by TiO_2 or ZnO Thin Film. <i>IEEE Sensors Journal</i> , 2009, 9, 9-12.	4.7	24
21	Investigations of hydrogen sensors made of porous silicon. <i>Thin Solid Films</i> , 2008, 517, 239-241.	1.8	20
22	Thin film n-titanium oxide photoanodes for photoelectrochemical production of hydrogen. <i>Renewable Energy</i> , 2008, 33, 299-303.	8.9	9
23	InAsSbP/InAs heterostructures for thermophotovoltaic converters: Growth technology and properties. <i>Technical Physics Letters</i> , 2008, 34, 69-71.	0.7	8
24	On thermoelectric figure-of-merit of $\text{Pb}_{0.78}\text{Sn}_{0.22}\text{Te}-\text{Ge}$ solid solution. <i>Journal of Alloys and Compounds</i> , 2008, 463, 480-483.	5.5	1
25	Strain-induced InAsSbP islands and quantum dots grown by liquid phase epitaxy on a $\text{InAs}(100)$ substrate. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 162004.	2.8	24
26	Noise Spectroscopy of Gas Sensors. <i>IEEE Sensors Journal</i> , 2008, 8, 786-790.	4.7	32
27	Investigation of Transient Processes in Nematic Liquid Crystal Cells with Semiconductor Substrate, Caused by the Electric Field Applied to Semiconductor. <i>Molecular Crystals and Liquid Crystals</i> , 2008, 488, 231-237.	0.9	1
28	Wide gap semiconductor microwave devices. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 6355-6385.	2.8	70
29	Photoelectrochemistry of tin-doped iron oxide electrodes. <i>Solar Energy</i> , 2007, 81, 1369-1376.	6.1	91
30	Metal oxide hydrogen, oxygen, and carbon monoxide sensors for hydrogen setups and cells. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 1145-1158.	7.1	209
31	Sol-gel derived thin-film semiconductor hydrogen gas sensor. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 4101-4108.	7.1	83
32	Hydrogen sensitive gas sensor based on porous silicon/ TiO_2 structure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007, 38, 219-221.	2.7	23
33	Current-voltage and low-frequency noise characteristics of structures with porous silicon layers exposed to different gases. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007, 38, 160-163.	2.7	9
34	Almost zero reflectance of a silicon oxynitride/porous silicon double layer antireflection coating for silicon photovoltaic cells. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 1623-1625.	2.8	50
35	Determination of basic parameters of porous silicon. <i>Journal Physics D: Applied Physics</i> , 2006, 39, 3543-3546.	2.8	3
36	Temperature dependencies of frequency characteristics of HTSC RLC circuit. <i>Applied Surface Science</i> , 2006, 252, 5441-5444.	6.1	0

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37	Phonon mechanism of mobility equilibrium fluctuation and properties of 1/f-noise. Physica B: Condensed Matter, 2006, 382, 65-70.	2.7	31
38	A new model of noise characteristics of SiC Schottky barrier MESFET with deep impurity levels and traps. Applied Surface Science, 2006, 252, 5445-5448.	6.1	5
39	Photoelectrochemistry of semiconductor electrodes made of solid solutions in the system Fe ₂ O ₃ -Nb ₂ O ₅ . Solar Energy, 2006, 80, 1098-1111.	6.1	61
40	Investigations of the structure of the iron oxide semiconductor-electrolyte interface. Comptes Rendus Chimie, 2006, 9, 325-331.	0.5	14
41	Peculiarities of electron distribution function's fluctuations damping in homogeneous semiconductors. Physica B: Condensed Matter, 2005, 357, 398-407.	2.7	11
42	Metal oxide photoelectrodes for hydrogen generation using solar radiation-driven water splitting. Solar Energy, 2005, 78, 581-592.	6.1	289
43	I-V characteristics of structures with porous silicon in electrolyte. Optical Materials, 2005, 27, 962-966.	3.6	6
44	Investigation of thermoelectric parameters of solid solutions Pb _{1-x} Sn _x Te-Cd and determination of their applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 107, 78-83.	3.5	5
45	Silicon carbide TUNNETT diodes. Solid-State Electronics, 2004, 48, 1569-1577.	1.4	5
46	Thermoelectric coefficient of the non-homogeneously doped p-n junctions made on Si and Pb _{0.8} Sn _{0.2} Te. Sensors and Actuators A: Physical, 2004, 113, 370-375.	4.1	0
47	Low-frequency noise in non-homogeneously doped semiconductor. Sensors and Actuators A: Physical, 2004, 113, 338-343.	4.1	14
48	Low reflectance of diamond-like carbon/porous silicon double layer antireflection coating for silicon solar cells. Journal Physics D: Applied Physics, 2004, 37, L25-L28.	2.8	58
49	Smoke sensor with overcoming of humidity cross-sensitivity. Sensors and Actuators B: Chemical, 2003, 93, 416-421.	7.8	28
50	Structural properties of porous media. Physica Status Solidi A, 2003, 197, 419-424.	1.7	7
51	Features of optical absorption and photoluminescence of porous silicon. Physica Status Solidi A, 2003, 197, 425-431.	1.7	4
52	Electrical conductivity mechanisms in porous silicon. Physica Status Solidi A, 2003, 197, 462-466.	1.7	33
53	Preparation of SnO ₂ Films with Thermally Stable Nanoparticles. Sensors, 2003, 3, 438-442.	3.8	16
54	Investigation of ceramic Fe ₂ O ₃ -Ta photoelectrodes for solar energy photoelectrochemical converters. International Journal of Hydrogen Energy, 2002, 27, 33-38.	7.1	81

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55	Quantum dot solar cells. Journal of Applied Physics, 2001, 89, 2268-2271.	2.5	283
56	Photo-emf in Parabolic Graded-Gap Semiconductors. Physica Status Solidi A, 2001, 184, 433-436.	1.7	0
57	Electrophysical and photoelectrical properties of UV-range injection structures made of silicon carbide. Applied Surface Science, 2001, 184, 460-465.	6.1	3
58	Investigations of the Fe _{1.99} Ti _{0.01} O ₃ electrolyte interface. Electrochimica Acta, 2000, 45, 1999-2005.	5.2	23
59	LASER-STIMULATED DOPING OF SILICON WITH MAGNESIUM. Modern Physics Letters B, 1999, 13, 479-484.	1.9	1
60	Microwave characteristics of BARITT diodes based on silicon carbide. Solid-State Electronics, 1999, 43, 343-348.	1.4	12
61	An IR-Radiometer with Internal Signal Modulation. Journal of Infrared, Millimeter and Terahertz Waves, 1998, 19, 827-833.	0.6	2
62	A New Method of Determination of Parameters of Traps in Semiconductors. Physica Status Solidi (B): Basic Research, 1998, 210, 805-808.	1.5	0
63	A New Model for Light Emitting Structures with a Porous Material Layer. Physica Status Solidi A, 1998, 165, 105-109.	1.7	5
64	Electro- and Photoluminescence in Graded-Gap Structures with Double Injection. Physica Status Solidi A, 1998, 165, 135-139.	1.7	2
65	Response of HTSC films to modulated optical radiation. Solid State Communications, 1998, 108, 579-581.	1.9	4
66	An optical sensor based on a layered structure with moving borders. Sensors and Actuators A: Physical, 1998, 65, 123-127.	4.1	0
67	To the theory of semiconductor gas sensors. Sensors and Actuators B: Chemical, 1998, 50, 80-84.	7.8	23
68	Optical transitions coupled with the two-dimensional surface subbands. Applied Surface Science, 1998, 134, 267-270.	6.1	0
69	Sub-linear dependencies of the surface conductivity on the gas pressure. Applied Surface Science, 1998, 135, 1-7.	6.1	3
70	Smoke-detector signal micrologic processing circuit. Sensors and Actuators B: Chemical, 1996, 35, 60-61.	7.8	2
71	Smoke sensor on the base of Bi ₂ O ₃ sesquioxide. Sensors and Actuators B: Chemical, 1996, 35, 241-243.	7.8	53
72	A new principle for creating an optochemical sensor on the basis of a waveguide with moving borders. Sensors and Actuators B: Chemical, 1996, 35, 192-196.	7.8	0

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73	A new type of gas sensor based on the semiconductor-cleft-semiconductor structure. Sensors and Actuators B: Chemical, 1995, 25, 353-356.	7.8	4
74	Selective petrol vapour sensor based on an Fe ₂ O ₃ thin film. Sensors and Actuators B: Chemical, 1994, 18, 155-157.	7.8	17
75	The influence of exciton field dissociation on the efficiency of photoelectrochemical production of hydrogen. International Journal of Hydrogen Energy, 1994, 19, 209-213.	7.1	4
76	Current-voltage response of an electrochemical photosensor. Sensors and Actuators B: Chemical, 1993, 14, 632-634.	7.8	2