Vardan E Galstyan

List of Publications by Year
in descending order

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55 papers	2,303 citations	218662 26 h-index	214788 47 g-index
56 all docs	56 docs citations	56 times ranked	3097 citing authors

#	Article	IF	Citations
1	Progress towards chemical gas sensors: Nanowires and 2D semiconductors. Sensors and Actuators B: Chemical, 2022, 357, 131466.	7.8	47
2	Detection of volatile organic compounds: From chemical gas sensors to terahertz spectroscopy. Reviews in Analytical Chemistry, 2021, 40, 33-57.	3.2	37
3	â€œQuantum dots: Perspectives in next-generation chemical gas sensorsâ€•â€' A review. Analytica Chimica Acta, 2021, 1152, 238192.	5.4	72
4	TiO₂/Cu₂O/CuO Multi-Nanolayers as Sensors for H₂ and Volatile Organic Compounds: An Experimental and Theoretical Investigation. ACS Applied Materials & Interfaces, 2021, 13, 32363-32380.	8.0	39
5	Study of Gas-Sensing Properties of Titania Nanotubes for Health and Safety Applications. , 2021, 5, .		1
6	Highly sensitive and selective detection of dimethylamine through Nb-doping of TiO2 nanotubes for potential use in seafood quality control. Sensors and Actuators B: Chemical, 2020, 303, 127217.	7.8	46
7	Mesoporous polycrystalline SnO₂ framework synthesized by direct soft templating method for highly selective detection of NO₂. Nanotechnology, 2020, 31, 105502.	2.6	6
8	A novel approach for green synthesis of WO₃ nanomaterials and their highly selective chemical sensing properties. Journal of Materials Chemistry A, 2020, 8, 20373-20385.	10.3	35
9	Chemical Gas Sensors Studied at SENSOR Lab, Brescia (Italy): From Conventional to Energy-Efficient and Biocompatible Composite Structures. Sensors, 2020, 20, 579.	3.8	7
10	Investigation of Reduced Graphene Oxide and a Nb-Doped TiO₂ Nanotube Hybrid Structure To Improve the Gas-Sensing Response and Selectivity. ACS Sensors, 2019, 4, 2094-2100.	7.8	47
11	Selective Gas Sensor Based on Metal Oxide Nanostructure. Proceedings (mdpi), 2019, 14, .	0.2	1
12	Low-Dimensional Composite Material Based on Modified Graphene and Metal Oxide for High-Performance Chemical Sensors. Proceedings (mdpi), 2019, 26, .	0.2	0
13	Highly Sensitive and Selective H2S Chemical Sensor Based on ZnO Nanomaterial. Applied Sciences (Switzerland), 2019, 9, 1167.	2.5	20
14	Finely Tuned SnO₂ Nanoparticles for Efficient Detection of Reducing and Oxidizing Gases: The Influence of Alkali Metal Cation on Gas-Sensing Properties. ACS Applied Materials & Interfaces, 2018, 10, 10173-10184.	8.0	51
15	Multicomponent Metal Oxide Nanostructures: Fabrication and Study of Core Issues to Improve Gas Sensing Performance. Proceedings (mdpi), 2018, 2, .	0.2	0
16	Reduced Graphene Oxideâ€“TiO₂ Nanotube Composite: Comprehensive Study for Gas-Sensing Applications. ACS Applied Nano Materials, 2018, 1, 7098-7105.	5.0	51
17	â€œMetal oxide -based heterostructures for gas sensorsâ€• A review. Analytica Chimica Acta, 2018, 1039, 1-23.	5.4	270
18	Metal Oxide Nanostructures in Food Applications: Quality Control and Packaging. Chemosensors, 2018, 6, 16.	3.6	83

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19	Chemical modification of TiO2 nanotube arrays for label-free optical biosensing applications. Applied Surface Science, 2017, 419, 235-240.	6.1	38
20	Detection of food and skin pathogen microbiota by means of an electronic nose based on metal oxide chemiresistors. Sensors and Actuators B: Chemical, 2017, 238, 1224-1230.	7.8	35
21	Pure and Highly Nb-Doped Titanium Dioxide Nanotubular Arrays: Characterization of Local Surface Properties. Nanomaterials, 2017, 7, 456.	4.1	19
22	Chili Pepper Scent: Study and Recognition with Chemiresistors Array. Proceedings (mdpi), 2017, 1, .	0.2	0
23	Metal Oxide Gas Sensors, a Survey of Selectivity Issues Addressed at the SENSOR Lab, Brescia (Italy). Sensors, 2017, 17, 714.	3.8	126
24	Porous TiO2-Based Gas Sensors for Cyber Chemical Systems to Provide Security and Medical Diagnosis. Sensors, 2017, 17, 2947.	3.8	61
25	Hierarchically Assembled Titania Based Nanostructures: Innovative and Efficient Strategies for the Synthesis and the Improvement of Sensing Properties. Proceedings (mdpi), 2017, 1, 293.	0.2	1
26	A composite structure based on reduced graphene oxide and metal oxide nanomaterials for chemical sensors. Beilstein Journal of Nanotechnology, 2016, 7, 1421-1427.	2.8	34
27	ZnO Quasi-1D Nanostructures: Synthesis, Modeling, and Properties for Applications in Conductometric Chemical Sensors. Chemosensors, 2016, 4, 6.	3.6	36
28	Quality Evaluation of Parmigiano Reggiano Cheese by a Novel Nanowire Device S3 and Evaluation of the VOCs Profile. Procedia Engineering, 2016, 168, 460-464.	1.2	10
29	Graphene-zinc Oxide Based Nanomaterials for Gas Sensing Devices. Procedia Engineering, 2016, 168, 1172-1175.	1.2	8
30	Reduced graphene oxide/ZnO nanocomposite for application in chemical gas sensors. RSC Advances, 2016, 6, 34225-34232.	3.6	101
31	Conductance and Work Function of TiO 2 Nanotubes Based Gas Sensors. Procedia Engineering, 2015, 120, 769-772.	1.2	5
32	Skin Microbiota Monitoring by Nanowire MOS Sensors. Procedia Engineering, 2015, 120, 756-759.	1.2	2
33	Highly conductive titanium oxide nanotubes chemical sensors. Microporous and Mesoporous Materials, 2015, 208, 165-170.	4.4	26
34	Nanostructured ZnO chemical gas sensors. Ceramics International, 2015, 41, 14239-14244.	4.8	193
35	Large surface area biphase titania for chemical sensing. Sensors and Actuators B: Chemical, 2015, 209, 1091-1096.	7.8	26
36	Two-phase Titania Nanotubes for Gas Sensing. Procedia Engineering, 2014, 87, 176-179.	1.2	8

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37	Synthesis of self-ordered and well-aligned Nb₂O₅ nanotubes. CrystEngComm, 2014, 16, 10273-10279.	2.6	30
38	Synthesis and electrochemical study of a hybrid structure based on PDMS-TEOS and titania nanotubes for biomedical applications. Nanotechnology, 2014, 25, 365701.	2.6	9
39	Well-Ordered Titania Nanostructures for Gas Sensing. Lecture Notes in Electrical Engineering, 2014, , 127-131.	0.4	1
40	Synthesis of self-assembled chain-like ZnO nanostructures on stiff and flexible substrates. CrystEngComm, 2013, 15, 2881.	2.6	22
41	Metal oxide nanoscience and nanotechnology for chemical sensors. Sensors and Actuators B: Chemical, 2013, 179, 3-20.	7.8	153
42	TiO2 Nanotubes: Recent Advances in Synthesis and Gas Sensing Properties. Sensors, 2013, 13, 14813-14838.	3.8	173
43	Fabrication and investigation of gas sensing properties of Nb-doped TiO₂nanotubular arrays. Nanotechnology, 2012, 23, 235706.	2.6	51
44	Growth and gas sensing properties of self-assembled chain-like ZnO nanostructures. , 2012, , .		1
45	Growth and Gas Sensing Properties of Self-Assembled Chain-Like ZnO Nanostructures. Procedia Engineering, 2012, 47, 762-765.	1.2	1
46	Fabrication of pure and Nbâ€“TiO2 nanotubes and their functional properties. Journal of Alloys and Compounds, 2012, 536, S488-S490.	5.5	17
47	Flexible dye sensitized solar cells using TiO2 nanotubes. Energy and Environmental Science, 2011, 4, 3408.	30.8	67
48	Fabrication of TiO2 and TiO2<Nb> Nanotubular Arrays and Their Gas Sensing Properties. Procedia Engineering, 2011, 25, 757-760.	1.2	4
49	TiO2 nanotubular and nanoporous arrays by electrochemical anodization on different substrates. RSC Advances, 2011, 1, 1038.	3.6	65
50	Vertically Aligned TiO₂ Nanotubes on Plastic Substrates for Flexible Solar Cells. Small, 2011, 7, 2437-2442.	10.0	25
51	Hydrogen Sensor Made of Porous Silicon and Covered by TiO$_{2-{m x}}$ or ZnO$langle$Al$angle$ Thin Film. IEEE Sensors Journal, 2009, 9, 9-12.	4.7	24
52	Investigations of hydrogen sensors made of porous silicon. Thin Solid Films, 2008, 517, 239-241.	1.8	20
53	Porous silicon near room temperature nanosensor covered by TiO 2 or ZnO thin films. , 2008, , .		2
54	Hydrogen sensitive gas sensor based on porous silicon/TiO2â˜x structure. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 38, 219-221.	2.7	23

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55	Room temperature gas sensor based on porous silicon/metal oxide structure. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2059-2062.	0.8	15