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Публикации

Статья

SnO₂/MWCNTs Nanostructured Material for High-Performance Acetone and Ethanol Gas Sensors

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,

Emma Khachaturyan, Rima Papovyan, Alena Michalcová, Dušan Kopecký

ACS Omega 2025 7283-7294

Статья

Study of a Nanostructured Co-Doped SnO₂ Sensor for Hydrogen Peroxide Vapor Detection Using Impedance Spectroscopy

Gohar Shahnazaryan, Mikayel Aleksanyan, Artak Sayunts, Zarine Simonyan, Rima Papovyan,

Gevorg Shahkhatuni

ACS Omega 2025 14452 - 14465

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Fabrication and Characterization of MWCNTs Decorated ZnO Nanograins Based Sensor for Enhanced Performance Toward CO₂ Gas

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,

Rima Papovyan, Dušan Kopecký

Advanced Materials Interfaces 2025 2500185

Статья

Highly Sensitive Ammonia Gas Sensor Based on MWCNTs Saturated Fe₂O₃ Nanograins

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,

Andranik Grigoryan, Rima Papovyan, Dušan Kopecký

Langmuir 2025 26614-26627

Статья

Influence of the Growth Parameters on RF-Sputtered CNTs and Their Temperature-Selective Application in Gas Sensors

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,

Rima Papovyan, Dušan Kopecký

ACS Omega 2025 34733-34746

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MWCNTs/Fe₂O₃:ZnO Nanocomposite Material for Chemoresistive Sensing of Hydrogen Peroxide Vapors

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,
Hayk Kasparyan, Dušan Kopecký
ACS Applied Electronic Materials 2024 940-949

Статья

Fabrication of the Fe₂O₃:ZnO Based Nanostructured Sensor for LPG Detection

Mikayel Aleksanyan,, Artak Sayunts, Gevorg Shahkhatuni, Gohar Shahnazaryan, Zarine Simonyan,
Davit Kananov
e-Journal of Surface Science and Nanotechnology 2024 149-156

Статья

Fabrication and characterization of highly responsive hydrogen sensor based on Fe₂O₃:ZnO nanostructured thin film

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Gohar Shahnazaryan,
Vladimir Aroutiounian
Measurement: Sensors 2024 100984

Статья

Acetone Vapors Detection Using a MWCNTs/SnO₂ Nanocomposite Material

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,
Emma Khachatryan, Dušan Kopecký
ACS Applied Electronic Materials 2024 4090-4098

Статья

Flexible Gas Sensor Based on the RF-Grown Fe₂O₃:ZnO/CNTs Material for Propylene Glycol Vapor Detection

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,
Alena Michalcová, Lukáš Koláčný, Dušan Kopecký
ACS Applied Electronic Materials 2024 6893-6904

Статья

Room Temperature Detection of Hydrogen Peroxide Vapor by Fe₂O₃:ZnO Nanograins

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Hayk Kasparyan,
Dušan Kopecký
Nanomaterials 2023 120

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Detection of hydrogen peroxide vapor using flexible gas sensor based on SnO₂ nanoparticles decorated with multi-walled carbon nanotubes

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Vladimir Aroutiounian,
Emma Khachatryan
Advances in Natural Sciences: Nanoscience and Nanotechnology 2023 025001

Статья

Growth, Characterization, and Application of Vertically Aligned Carbon Nanotubes Using the RF-Magnetron Sputtering Method

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Hayk Kasparyan,

Dušan Kopecký

ACS Omega 2023 20949-20958

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Investigation of the MWCNT/SnO₂ Sensor for the Detection of Acetone Vapors

M. S. Aleksanyan, G. H. Shahkhatuni, E. A. Khachaturyan, G. E. Shahnazaryan, A. G. Sayunts,
H. R. Hovhannisyan, D. A. Kananov

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 67-72

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Investigation of Nanostructured Fe₂O₃:ZnO Sensor by Impedance Spectroscopy

G. H. Shahkhatuni

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 385-390

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Flexible SnO₂ (Co)/MWCNT Sensor for Detection Low Concentrations of Hydrogen Peroxide Vapors

M. S. Aleksanyan, A. G. Sayunts, G. H. Shahkhatuni, Z. G. Simonyan, V. M. Aroutiounian,
G. E. Shahnazaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 133-139

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Use of Nanostructured Fe₂O₃:ZnO Film for Detection of Hydrogen

M. S. Aleksanyan, A. G. Sayunts, G. H. Shahkhatuni, Z. G. Simonyan, G. E. Shahnazaryan,
V. M. Aroutiounian

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 140-145

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Investigations of the Impedance Characteristics of a Nanostructured ZnO(La) Sensor for Hydrogen Peroxide Vapors

G.E. Shahnazaryan, G.A. Shahkhatuni, M.S. Aleksanyan, Z.G. Simonyan, V.M. Aroutiounian, A.G. Sayunts

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 254-262

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Gas Sensor Based on ZnO Nanostructured Film for the Detection of Ethanol Vapor

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Gohar Shahnazaryan,

Vladimir Aroutiounian

Chemosensors 2022 245/17

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Flexible sensor based on multi-walled carbon nanotube-SnO₂ nanocomposite material for hydrogen detection

Mikayel S Aleksanyan, Artak G Sayunts, Gevorg H Shahkhatuni, Zarine G Simonyan,

Vladimir M Aroutiounian, Gohar E Shahnazaryan

Advances in Natural Sciences: Nanoscience and Nanotechnology 2022 035003

Статья

Study of Gas Sensitivity of SnO₂ (Nb) Film in Liquefied Petroleum Gas

M. S. Aleksanyan, A. G. Sayunts, G. H. Shahkhatuni, G. E. Shahnazaryan, V. M. Aroutiounian

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Influence of Ultraviolet Rays on Sensitivity of Sensors for Acetone Vapor Detection

M. S. Aleksanyan, A. G. Sayunts, V. M. Aroutiounian, G. E. Shahnazaryan, G. H. Shahkhatuni

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 109-116

Статья

Magnetron Sputtered ZnO Thin Films for Hydrogen Peroxide Vapor Detection

Mikayel ALEKSANYAN, Vladimir AROUTIOUNIAN, Valeri ARAKELYAN, Gohar SHAHNAZARYAN,

Gevorg SHANKHATUNI

Sensors & Transducers 2020 23-31

Статья

Исследование сенсора на основе ZnO:La для детектирования паров перекиси водорода методом импедансной спектроскопии

Г.А. Шахатуни, В.М. Арутюнян, В.М. Аракелян, М.С. Алексанян, Г. Э. Шахназарян

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 253-262

Статья

Investigation of sensor made of ZnO:La for detection of hydrogen peroxide vapours by impedance spectroscopy method

G. H. Shahkhatuni, V. M. Aroutiounian, V. M. Arakelyan, M. S. Aleksanyan, G. E. Shahnazaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 188-195

Статья

Conductometric sensor for hydrogen peroxide vapors detection

G. H. Shahkhatuni, V. M. Aroutiounian, V. M. Arakelyan, M. S. Aleksanyan, G. E. Shahnazaryan

Armenian Journal of Physics 2018 153-159

Конференция

Hydrogen Peroxide Vapor Sensor Based on Zinc Oxide

V. M. Aroutiounian, M. S. Aleksanyan, V. M. Arakelyan, G. E. Shahnazaryan, G. H. Shahkhatuni

Патент

Ջրածնի պերօքսիդի գոլորշիներ հայտնաբերող սենսորի պատրաստման եղանակ

Ալեքսանյան Միքայել Սերյոժայի, Հարությունյան Վլադիմիր Միխայիլի, Շահնազարյան Գոհար Էմիլի,

Շահխաթունի Գևորգ Հարությունի

Патент

Ջրածնի նանոկառուցվածքին ռեզիստիվ սենսոր

Ալեքսանյան Միքայել Սերյոժայի, Սայունց Արտակ Գարեգինի, Շահխաթունի Գևորգ Հարությունի,

Սիմոնյան Չարինե Գևորգի, Շահնազարյան Գոհար Էմիլի, Հարությունյան Վլադիմիր Միխայիլի

Патент

Ջրածնի դետեկտոր

Միքայել Ալեքսանյան, Արտակ Սայունց, Գևորգ Շահխաթունի, Չարինե Սիմոնյան,

Գոհար Շահնազարյան

Конференция

Highly Sensitive Hydrogen Sensor Based on ZnO/MWCNTs Nanocomposite Material

M.S. Aleksanyan, A.G. Sayunts, G.H. Shahkhatuni, Z.G. Simonyan, G.E. Shahnazaryan

Конференция

A Chemiresistive Gas Sensor Based on SnO₂:ZnO Nanostructured Thin Film for the Detection of Hydrogen Peroxide Vapor

Mikayel Seryozha Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Vladimir Aroutiounian,

Gohar Shahnazaryan

Конференция

Highly Sensitive Hydrogen Gas Sensor Based on Fe₂O₃:ZnO Nanostructured Thin Film

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Gohar Shahnazaryan,

Vladimir Aroutiounian

Конференция

Fabrication and Characterization of CO₂ Sensor Using ZnO<In> Nanograins

M. Aleksanyan, G. Shahkhatuni, Z. Simonyan, G. Shahnazaryan, R. Papovyan, D. Kananov, A. Grigoryan,

G. Gevorgyan, G. Stepanyan, A. Sayunts
