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Language skills

Հայերեն Русский English

Publications

Article
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

Article
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 Kopecky
ACS Applied Electronic Materials 2024 940-949

Article
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

Article
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

Article
Acetone Vapors Detection Using a MWCNTs/SnO2 Nanocomposite Material
Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov, Emma Khachaturyan, Dušan Kopecký
ACS Applied Electronic Materials 2024 4090–4098

Article
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

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Article

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

Article

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

Article

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

Article

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

Article

Investigation of Nanostructured Fe2O3:ZnO Sensor by Impedance Spectroscopy
G. H. Shahkhatuni
Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 385-390

Article

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

Article

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

Article

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

Article

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

Article

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

Article

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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 139-145

Article

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

Article

Magnetron Sputtered ZnO Thin Films for Hydrogen Peroxide Vapor Detection

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

Gevorg SHAHKHATUNI

Sensors & Transducers 2020 23-31

Article

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

Article

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

Article

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

Conference

Hydrogen Peroxide Vapor Sensor Based on Zinc Oxide
V. M. Aroutiounian, M. S. Aleksanyan, V. M. Arakelyan, G. E. Shahnazaryan, G. H. Shahkhatuni

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Patent

Ջրածնի պերօքսիդի գոլորշիներ հայտնաբերող սենսորի պատրաստման եղանակ
Ալեքսանյան Միքայել Սերյոժայի, Հարությունյան Վլադիմիր Միխաիլի, Շահնազարյան Գոհար Էմիլի,

Շահխաթունի Գևորգ Հարությունի

Patent

Ջրածնի նանոկառուցվածքային ռեզիստիվ սենսոր
Ալեքսանյան Միքայել Սերյոժայի, Սայունց Արտակ Գարեգինի, Շահխաթունի Գևորգ Հարությունի,

Սիմոնյան Զարինե Գևորգի, Շահնազարյան Գոհար Էմիլի, Հարությունյան Վլադիմիր Միխաիլի

Patent

Ջրածնի դետեկտոր
Միքայել Ալեքսանյան, Արտակ Սայունց, Գևորգ Շահխաթունի, Զարինե Սիմոնյան,

Գոհար Շահնազարյան

Conference

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

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Conference

A Chemiresitive 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

Conference

Highly Sensitive Hydrogen Gas Sensor Based on Fe2O3:ZnO Nanostructured Thin Film
Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Gohar Shahnazaryan,

Vladimir Aroutiounian
