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Research Institute of Physics

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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

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

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 Khachaturyan
Advances in Natural Sciences: Nanoscience and Nanotechnology 2023 025001

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

Study of MWCNT / SnO₂/Ru thick-film sensors for detecting the presence of certain harmful gases in air

Z.N. Adamyan, A.G. Sayunts, E.A. Khachaturyan, V.M. Aroutiounian
Armenian Journal of Physics 2021 49-73

Article

Tin Oxide/Carbon Nanotube Nanocomposite Sensors for Some Toxic VOCs Detection

Z.N. Adamyan, A.G. Sayunts, E.A. Khachaturyan, V.M. Aroutiounian

Article

Nanocomposite H₂O₂ Vapor Sensors Made on the Base of Carbon Nanotubes Covered with SnO₂ Nanoparticles

Zaven ADAMYAN, Artak SAYUNTS, Emma KHACHATURYAN, Valeri ARAKELYAN, Vladimir AROUTIOUNIAN,

Bernth JOOST

Sensors & Transducers 2019 18-23

Article

ИССЛЕДОВАНИЕ СЕНСОРОВ ПАРОВ ПЕРЕКИСИ ВОДОРОДА, ИЗГОТОВЛЕННЫХ НА ОСНОВЕ УГЛЕРОДНЫХ НАНОТРУБОК, ПОКРЫТЫХ НАНОЧАСТИЦАМИ ДВУОКИСИ ОЛОВА

Յ.Ն. ԱԴԱՄՅԱՆ, Ա.Գ. ՏԱՅՈՒՆՇ, Է.Ա. ԽԱՇԱՏՄՅԱՆ, Վ.Մ. ԱՐԱԿԵԼՅԱՆ, Վ.Մ. ԱՐՄՅՈՒՆՅԱՆ, Վ. ՋՕՍՏ

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

75-84

Article

Study of Hydrogen Peroxide Vapors Sensors Based on Carbon Nanotubes Coated with Tin Oxide Nanoparticles

Z. N. Adamyan, A. G. Sayunts, E. A. Khachaturyan, V. M. Araqelyan, V. M. Aroutiounian, B. Joost

Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 57-64

Article

Nanocomposite sensors of propylene glycol, dimethylformamide and formaldehyde vapors

Zaven Adamyan, Artak Sayunts, Vladimir Aroutiounian, Emma Khachaturyan, Martin Vrnata, Premysl Fitl,

Jan Vlcek

Journal of Sensors and Sensor Systems 2018 31-41

Article

Study of Propylene Glycol, Dimethylformamide and Formaldehyde Vapors Sensors Based on MWCNTs/SnO₂ Nanocomposites

Zaven Adamyan, Artak Sayunts, Vladimir Aroutiounian, Emma Khachaturyan, Arsen Adamyan,

Martin Vrnata, Přemysl Fitl, Jan Vlček

Sensors & Transducers 2017 38-45

<http://www.sensorsportal.com/HTML/DIGEST/Submission.htm>

Article

Исследование нанокompозитных толстопленочных сенсоров паров бутанола

Յ.Ն. ԱԴԱՄՅԱՆ, Ա.Գ. ՏԱՅՈՒՆՇ, Է.Ա. ԽԱՇԱՏՄՅԱՆ, Վ.Մ. ԱՐՄՅՈՒՆՅԱՆ

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2016

192-201

<http://www.flib.sci.am/eng/Fizika/Frame.html>

Article

Study of Nanocomposite Thick-Film Butanol Vapor Sensors

Z.N. Adamyan, A.G. Sayunts, E.A. Khachaturyan, V.M. Aroutiounian

Journal of Contemporary Physics (Armenian Academy of Sciences) 2016 143-149

<http://www.springer.com/physics/particle+and+nuclear+physics/journal/11958>

Article

Comparative Study of VOC Sensors Based on Ruthenated MWCNT/SnO₂ Nanocomposites

Vladimir Aroutiounian, Zaven Adamyan, Artak Sayunts, Emma Khachaturyan, Arsen Adamyan,

Klara Hernadi, Zoltan Nemeth, Peter Berki

International journal of Emerging Trends in Science and Technology 2014 1309-1319

<http://ijetst.in/>

Conference

Study of propylene glycol and dimethylformamide vapors sensors based on MWCNTs/SnO₂ nanocomposites

Z. Adamyan, A. Sayunts, V. Aroutiounian, E. Khachaturyan, A. Adamyan, M. Vrnata, P. Fitl, J. Vlček

Conference

Study of MWCNT/SnO₂ Nanocomposite Acetone and Toluene Vapor Sensors

Vladimir M. Aroutiounian, Zaven N. Adamyan, Artak G. Sayunts, Emma A. Khachaturyan,

Arsen Z. Adamyan

Conference

MWCNTs/SnO₂ Harmful Gas Sensors

Z. Adamyan, A. Sayunts, V. Aroutiounian, E. Khachaturyan, A. Adamyan, M. Vrnata, P. Fitl, J. Vlček

Conference

STUDY OF MWCNTs/SnO₂ NANOCOMPOSITE FORMALDEHYDE GAS SENSOR

Z.N. Adamyan, A.G. Sayunts, E.A. Khachaturyan, V.M. Aroutiounian

Conference

Study of MWCNTs/SnO₂ Nanocomposite H₂O₂ Vapor Sensors

Z. N. Adamyan, A. G. Sayunts, E. A. Khachaturyan, V. M. Araqelyan, V. M. Aroutiounian, B. Joost

Patent

Արդյունաբերական թունավոր նյութերի ռեզիստիվ սենսոր

Հարուբյունյան Վլադիմիր Միխայիլի, Առաքելյան Վալերի Միքայելի, Վրնատա Մարտին, Ալեքսանյան Միքայել Սերյոժայի, Ադամյան Չավեն Նիկոլայի, Սայունց Արտակ Գարեգինի, Շահնազարյան Գոհար Էմիլի, Ադամյան Արսեն Չավենի, Խաչատուրյան Էմմա Արսենի, Ֆիտլ Պրեմիսլ, Վլչեկ Յան
