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ORCID iD

Научно-исследовательский институт физики

Центр полупроводниковых приборов и нанотехнологий

Научный сотрудник

Образование

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| Учреждение | Ереванский Государственный Университет |
| Факультет | Радиофизика |
| Дата | 2020 - 2022 |
| Степень / Звание | Магистр |

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|------------------|----------------------------------------|
| Учреждение | Ереванский Государственный Университет |
| Факультет | Радиофизика |
| Дата | 2016 - 2020 |
| Степень / Звание | Бакалавр |

Знание языков

Հայերեն Русский English

Опыт работы

| | |
|----------------|---------------------------------------------------|
| Учреждение | Центр полупроводниковых приборов и нанотехнологий |
| Период времени | 2021 до настоящего времени |
| Звание/степень | научный сотрудник |

Научные интересы

- Газовые сенсоры
- Гибкие газовые сенсоры
- Углеродные нанотрубки

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 Khachatryan, 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

Статья

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

Статья

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

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

Статья

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

Статья

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

Патент

Զրաձևի դետեկտոր

Միրայել Ալեքսանյան, Արտակ Սայունց, Գևորգ Շահխատունի, 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

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
