

Davit Aleksandr Kananov

 d.kananov@ysu.am

Research Institute of Physics

Նյութագիտության և նանոտեխնոլոգիաների գիտական կենտրոն
Junior Researcher

Education

Institution	Yerevan State University
Faculty	Radiophysics/Microelectronics
Date	2020 - 2022
Degree name	Masters

Institution	Yerevan State University
Faculty	Radiophysics/Microelectronics
Date	2016 - 2020
Degree name	Bachelor

Language skills

Հայերեն Русский English

Work experience

Institution	Center of Semiconductor Devices and Nanotechnologies of Yerevan State University
Period of time	2022 till now
Rank/degree	Junior Researcher

Publications

Article
Ultra-high selective hydrogen peroxide vapor sensor based on the Fe₂O₃/MWCNTs nanocomposite
Artak Sayunts, Rima Papovyan, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov, Gabriel Gevorgyan, Dušan Kopecký, Mikayel Aleksanyan
International Journal of Smart and Nano Materials 2026 2637516
<https://www.tandfonline.com/doi/full/10.1080/19475411.2026.2637516>

Article
Enhanced Humidity Sensing Performance of Fe₂O₃:ZnO/MWCNTs Nanocomposite: Fabrication and Characterization
Artak Sayunts, Gevorg Shahkhatuni, Rima Papovyan, Zarine Simonyan, Davit Kananov, Gohar Shahnazaryan, Gabriel Gevorgyan, Andranik Grigoryan, Dušan Kopecký, Mikayel Aleksanyan

Article

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

Article

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

Article

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

Article

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

Conference

Fabrication and Characterization of CO₂ Sensor Using ZnO Nanograins

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

2025 307-308

<https://www.smsi-conference.com/>

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 Kopecký

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

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 Kolář, Dušan Kopecký

ACS Applied Electronic Materials 2024 6893–6904

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

Optoelectronic Transimpedance Converter Based on MOS Photovaricap for High Resistive Gas Sensors

Semerjyan B.O., D.A. Kananov, M.S. Alexanyan

Armenian Journal of Physics 2023 119 -125
