

# Davit Aleksandr Kananov

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## Research Institute of Physics

Center for Semiconductor Devices and Nanotechnologies  
Junior Researcher

## 🎓 Education

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|--------------------|-------------------------------|
| <b>Institution</b> | Yerevan State University      |
| <b>Faculty</b>     | Radiophysics/Microelectronics |
| <b>Date</b>        | 2020 - 2022                   |
| <b>Degree name</b> | Masters                       |

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|--------------------|-------------------------------|
| <b>Institution</b> | Yerevan State University      |
| <b>Faculty</b>     | Radiophysics/Microelectronics |
| <b>Date</b>        | 2016 - 2020                   |
| <b>Degree name</b> | Bachelor                      |

## 🌐 Language skills

Հայերեն Русский English

## 📁 Work experience

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

## 📖 Publications

Article

### **SnO<sub>2</sub>/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 CO<sub>2</sub> Gas**

Mikayel Aleksanyan, Artak Sayunts, Gevorg Shahkhatuni, Zarine Simonyan, Davit Kananov,  
Rima Papovyan, Dušan Kopecký  
Advanced Materials Interfaces 2025 2500185

Article

**Highly Sensitive Ammonia Gas Sensor Based on MWCNTs Saturated Fe<sub>2</sub>O<sub>3</sub> Nanograins**

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

Andranik Grigoryan, Rima Papovyan, Dušan Kopecký

Langmuir 2025 26614–26627

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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

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Article

**MWCNTs/Fe<sub>2</sub>O<sub>3</sub>: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

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Article

**Fabrication of the Fe<sub>2</sub>O<sub>3</sub>: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

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Article

**Acetone Vapors Detection Using a MWCNTs/SnO<sub>2</sub> Nanocomposite Material**

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

Emma Khachatryan, Dušan Kopecký

ACS Applied Electronic Materials 2024 4090–4098

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Article

**Flexible Gas Sensor Based on the RF-Grown Fe<sub>2</sub>O<sub>3</sub>: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

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Article

**Investigation of the MWCNT/SnO<sub>2</sub> Sensor for the Detection of Acetone Vapors**

M. S. Aleksanyan, G. H. Shahkhatuni, E. A. Khachatryan, 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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Article

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

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

*Conference*

**Fabrication and Characterization of CO<sub>2</sub> 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

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