# Artak Garegin Sayunts

sayuntsartak@ysu.am

**Research Institute of Physics**
Նյութագիտության և նանոտեխնոլոգիաների գիտական կենտրոն
Senior Researcher
**Research Institute of Physics**
Նյութագիտության և նանոտեխնոլոգիաների գիտական կենտրոն
Senior Researcher
**Institute of Physics**
Chair of Materials Science and Nanotechnology
Assistant

## Education

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|---|---|
| **Institution** | Yerevan State University |
| **Faculty** | Faculty of Radiophysics / Department of Physics of Semiconductors and Microelectronics |
| **Date** | 2013 - 2016 |
| **Degree name** | PhD student |

| | |
|---|---|
| **Institution** | Yerevan State University |
| **Faculty** | Faculty of Radiophysics / Department of Physics of Semiconductors and Microelectronics |
| **Date** | 2011 - 2013 |
| **Degree name** | Masters |

| | |
|---|---|
| **Institution** | Yerevan State University |
| **Faculty** | Faculty of Radiophysics |
| **Date** | 2007 - 2011 |
| **Degree name** | Bachelor |

## Scientific Rank/degree

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|---|---|
| **Institution** | Yerevan State University |
| **Date** | 2016 |
| **Degree name** | Candidate |
| **Scientific Supervisor** | V.M. Aroutiounian |
| **Research Topic** | Study of semiconductor gas sensors |

## Language skills

## Work experience

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| **Institution** | Department of Physics of Semiconductors and Microelectronics, YSU |
| **Period of time** | 2021 till now |
| **Rank/degree** | Head of Educational Laboratory |

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|---|---|
| **Institution** | Center of Semiconductor Devices and Nanotechnologies, YSU |
| **Period of time** | 2013 till now |
| **Rank/degree** | Research scientist |

## Participation in international conferences and seminars

| | |
|---|---|
| **08/05/2023 - 11/05/2023** | Sensor and Measurement Science International (SMSI 2023)<br>Germany |
| **24/08/2022 - 26/08/2022** | Measurement, Sensor Systems and Applications Conference (MeSSAC 2022)<br>Online and On-demand<br>China |
| **21/11/2020 - 25/11/2020** | The Fifth International Conference on Advances in Sensors, Actuators, Metering and Sensing (ALLSENSORS 2020)<br>Spain |
| **19/09/2018 - 21/09/2018** | 4th International Conference on Sensors Engineering and Electronics Instrumentation Advances (SEIA' 2018)<br>Netherlands (the) |
| **23/06/2017 - 25/06/2017** | The 11th Int. Conference on Semiconductor Micro- and Nanoelectronics (ICSMN 2017)<br>Armenia |
| **19/03/2017 - 23/03/2017** | Second Intern. Conf. on Advances in Sensors, Actuators, Metering and Sensing (ALLSENSORS 2017)<br>France |
| **30/05/2017 - 01/06/2017** | The 18th Int. Conference on Sensors and Measurement Technology (AMA Conferences – SENSOR 2017)<br>Germany |

## 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

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*Article*

**Study of a Flexible ZnO/MWCNTs Thin Film Sensor for Hydrogen Peroxide Vapor Detection by Impedance Spectroscopy**
Gohar Shahnazaryan, Artak Sayunts, Gevorg Shahkhatuni, Rima Papovyan, Zarine Simonyan,

Gabriel Gevorgyan, Andranik Grigoryan, Dušan Kopecký, Mikayel Aleksanyan

Nanotechnology Science and Applications 2026 577983

https://doi.org/10.2147/nsa.s577983

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*Article*

**Enhanced Humidity Sensing Performance of Fe 2 O 3 :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

ACS Omega 2026 31627–31638

https://doi.org/10.1021/acsomega.6c02389

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*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

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*Article*

**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

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*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

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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*

**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

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*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/

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*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

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*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

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*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

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*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

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*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

ACS Applied Electronic Materials 2024 6893–6904

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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

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*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

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*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

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*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

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*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

2023 112-113

https://www.smsi-conference.com

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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

2023 8 - 8

https://aaafm.org/ucla2023/

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*Patent*

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

Գոհար Շահնազարյան

2023

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*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

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*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

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*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

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*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

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*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

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*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

2022 1

https://www.elsevier.com/events/conferences/all/measurement-sensor-systems-and-...

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*Patent*

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

Սիմոնյան Զարինե Գևորգի, Շահնազարյան Գոհար Էմիլի, Հարությունյան Վլադիմիր Միխաիլի

2022

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*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

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*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

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*Article*

**Cobalt Doped SnO2 Thin Film for Detection of Vapor Phase Hydrogen Peroxide**
M.S. Aleksanyan, V.M. Aroutiounian, G.E. Shahnazaryan, A.G. Sayunts

Armenian Journal of Physics 2021 8-18

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*Article*

**Study of MWCNT / SnO2/Ru thick-film sensors for detecting thepresence 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

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*Article*

**Tin Oxide/Carbon Nanotube Nanocomposite Sensors for Some Toxic VOCs Detection**
Z.N. Adamyan, A.G. Sayunts, E.A. Khachaturyan, V.M. Aroutiounian

South Florida Journal of Development 2021 1067-1093

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*Article*

**Influence of UV Rays on the Volt-Capacity Characteristic of SnO2:Co Sensor of Vapors of Hydrogen Peroxide**
M. S. Aleksanyan, A. G. Sayunts, A. A. Zakaryan, V. M. Aroutiounian, V. M. Arakelyan, G. E. Shakhnazary

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 151-156

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*Article*

**Investigations of Sensors for Detection of Hydrogen Peroxide Vapors under the Influence of UV Illumination**
M. S. Aleksanyan, A. G. Sayunts, A. A. Zakaryan, V. M. Harutyunyan, V. M. Arakelyan,

G. E. Shakhnazaryan
Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 205-212

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*Article*

**First-Principles Study of the Interaction of H2O2 with the SnO2 (110) Surface**
M. A. Aghamalyan, A. A. Hunanyan, V. M. Aroutiounian, M. S. Aleksanyan, A. G. Sayunts, H. A. Zakaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 235-239

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*Article*

**ВЛИЯНИЕ УЛЬТРАФИОЛЕТОВЫХ ЛУЧЕЙ НА ВОЛЬТ- ЕМКОСТНУЮ ХАРАКТЕРИСТИКУ SnO2:Co СЕНСОРА ПАРОВ ПЕРЕКИСИ ВОДОРОДА**
М.С. АЛЕКСАНЯН, А.Г. САЮНЦ, А.А. ЗАКАРЯН, В.М. АРУТЮНЯН, В.М. АРАКЕЛЯН, Г.Э. ШАХНАЗАРЯН

Proceedings of NAS RA Physics 2020 218-227

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*Article*

**ИССЛЕДОВАНИЕ СЕНСОРА ДЛЯ ОБНАРУЖЕНИЯ ПАРОВ ПЕРЕКИСИ ВОДОРОДА ПОД ДЕЙСТВИЕМ УЛЬТРАФИОЛЕТОВОГО ИЗЛУЧЕНИЯ**
М.С. АЛЕКСАНЯН, А.Г. САЮНЦ, А.А. ЗАКАРЯН, В.М. АРУТЮНЯН, В.М. АРАКЕЛЯН, Г.Э. ШАХНАЗАРЯН

Proceedings of NAS RA Physics 2020 312-324

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*Article*

**Effects of UV Irradiation on the Sensing Properties of Co-doped SnO2 Thin Film for Ethanol**

**Detection**
Mikayel Aleksanyan, Artak Sayunts, Hayk Zakaryan, Vladimir Aroutiounian, Gohar Shahnazaryan,

Valeri Arakelyan

International Journal on Advances in Systems and Measurements 2020 312-321

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*Conference*

**UV-assisted Chemiresistive Alcohol Sensor Based on Cobalt Doped Tin Dioxide**
Mikayel Aleksanyan, Artak Sayunts, Hayk Zakaryan, Vladimir Aroutiounian, Valeri Arakelyan,

Gohar Shahnazaryan

2020 1-5

https://www.iaria.org/conferences2020/ALLSENSORS20.html

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*Article*

**Study of Hydrogen Peroxide Vapors Sensor Made of Nanostructured Co-doped SnO2 Film**
Vladimir AROUTIOUNIAN, Valeri ARAKELYAN, Mikayel ALEKSANYAN, Gohar SHAHNAZARYAN,

Artak SAYUNTS, Berndt JOOST

Sensors & Transducers 2019 24-31

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*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

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*Article*

**ИССЛЕДОВАНИЕ СЕНСОРОВ ПАРОВ ПЕРЕКИСИ ВОДОРОДА, ИЗГОТОВЛЕННЫХ НА ОСНОВЕ УГЛЕРОДНЫХ НАНОТРУБОК, ПОКРЫТЫХ НАНОЧАСТИЦАМИ ДВУОКИСИ ОЛОВА**
З.Н. АДАМЯН, А.Г. САЮНЦ, Э.А. ХАЧАТУРЯН, В.М. АРАКЕЛЯН, В.М. АРУТЮНЯН, B. JOOST

Proceedings of NAS RA Physics 2019 75–84

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*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

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*Patent*

**Օդում ջրածնի պերօքսիդի գոլորշիների հայտնաբերման եղանակ**
Վ. Հարությունյան, Վ. Առաքելյան, Մ. Ալեքսանյան, Զ. Ադամյան, Ա. Սայունց, Գ. Շահնազարյան,

Պ. Կաչեր

2019

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*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

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*Conference*

**Co-doped SnO2 Sensor for Detection of Hydrogen Peroxide Vapors**
V. M. Aroutiounian, V. M. Arakelyan, M. S. Aleksanyan, G. E. Shahnazaryan, A. G. Sayunts, B. Joost

2018 49-52

http://www.seia-conference.com/

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*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

2018 53-56

http://www.seia-conference.com/

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*Patent*

**Արդյունաբերական թունավոր նյութերի ռեզիստիվ սենսոր**
Հարությունյան Վլադիմիր Միխաիլի, Առաքելյան Վալերի Միքայելի, Վրնատա Մարտին,

Ալեքսանյան Միքայել Սերյոժայի, Ադամյան Զավեն Նիկոլայի, Սայունց Արտակ Գարեգինի,

Շահնազարյան Գոհար Էմիլի, Ադամյան Արսեն Զավենի, Խաչատուրյան Էմմա Արսենի,

Ֆիտլ Պրեմիսլ, Վլչեկ Յան

2018

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*Patent*

**Ռազմական թունավոր ազդանյութերի ռեզիստիվ սենսոր**
Հարությունյան Վլադիմիր Միխաիլի, Առաքելյան Վալերի Միքայելի, Վրնատա Մարտին,

Ալեքսանյան Միքայել Սերյոժայի, Ադամյան Զավեն Նիկոլայի, Սայունց Արտակ Գարեգինի,

Շահնազարյան Գոհար Էմիլի, Ֆիտլ Պրեմիսլ, Վլչեկ Յան, Կասպարյան Հայկ Սերգեյի

2018

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*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

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*Article*

**Nanostructured Sensors for Detection of Hydrogen Peroxide Vapours**
Vladimir AROUTIOUNIAN, Valeri ARAKELYAN, Mikayel ALEKSANYAN, Artak SAYUNTS,

Gohar SHAHNAZARYAN, Petr KACER, Pavel PICHA, Jiri KOVARIK, Jakub PEKAREK, Berndt JOOST

Sensors & Transducers 2017 46-53

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

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*Article*

**Sensor for detection of chemical agents made of Co-doped SnO2**
V. M. Aroutiounian, V. M. Arakelyan, M. S. Aleksanyan, A. G. Sayunts, G. E. Shahnazaryan, M. Vrnata,

P. Fitl, J. Viček, K. S. Gharajyan, H. S. Kasparyan

Armenian Journal of Physics 2017 122-127

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*Conference*

**Hydrogen Peroxide Vapours Sensors Made From ZnO and SnO2 Films**
V. Aroutiounian, V. Arakelyan, M. Aleksanyan, A. Sayunts, G. Shahnazaryan, P. Kacer, P. Picha,

J. A. Kovarik, J. Pekarek, B. Joost

2017 36-38

http://www.iaria.org/conferences2017/ALLSENSORS17.html

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*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

2017 44-49

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**Detection of Simulants of Chemical Warfare Agents on Textile Chemiresistors**
A. Sýkorová, E. Marešová, D. Tomeček, Š. Havlová, P. Hozák, J. Vlček, L. Fišer, P. Fitl, M. Aleksanyan,

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**SnO2 and ZnO Detectors of Hydrogen Peroxide Vapors**
Vladimir M. Aroutiounian, Valeri M. Arakelyan, Mikayel S. Aleksanyan, Artak G. Sayunts,

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**Co-DOPED SnO2 SENSOR FOR DETECTION OF CHEMICAL AGENTS**
V.M. Arakelyan, M.S. Aleksanyan, A.G. Sayunts, G.E. Shahnazaryan, M. Vrnata, P. Fitl, J. Viček,

K.S. Gharajyan, H.S. Kasparyan

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**Исследование нанокомпозитных толстопленочных сенсоров паров бутанола**
З.Н. Адамян, А.Г. Саюнц, Э.А. Хачатрян, В.М. Арутюнян

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**Study of Nanocomposite Thick-Film Butanol Vapor Sensors**
Z.N. Adamyan, A.G. Sayunts, E.A. Khachaturyan, V.M. Aroutiounian

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**Study of MWCNT/SnO2 Nanocomposite Acetone and Toluene Vapor Sensors**
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