

Misha Arthur Aghamalyan

✉ misha.aghamalyan@ysu.am



Research Institute of Physics

Computational Materials Science Laboratory
Researcher

Education

Institution	Yerevan State University
Faculty	Faculty of Radiophysics chair of semiconductor physics and microelectronics
Date	2020 - 2022
Degree name	PhD student

Institution	Yerevan State University
Faculty	Faculty of Radiophysics
Date	2018 - 2020
Degree name	Masters

Institution	Yerevan State University
Faculty	Faculty of Radiophysics
Date	2014 - 2018
Degree name	Bachelor

Scientific Rank/degree

Institution	Yerevan State University
Date	2022
Degree name	Candidate
Specialty	Physico-mathematical sciences
Scientific Supervisor	Vladimir M. Aroutiounian
Research Topic	Computational search for novel 2D transitional metal chalcogenides and investigation of their properties for applications in semiconductor devices

Language skills

Հայերեն Русский English

Work experience

Institution	Yerevan State University
Period of time	2021 till now

Rank/degree Junior research Scientist

Institution Gate42 quantum computing lab

Period of time 2019 - 2020

Rank/degree Research scientist



Scientific interests

- Computational chemistry, computational materials science, advanced materials for energy conversion and storage applications, solid-state electrolytes, catalysis, gas sensing, semiconductor devices
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Publications

Article

Computational Design of Gas Sensors Based on V3S4 Monolayer

Hayk A. Zakaryan, Misha A. Aghamalyan, Yevgeni Sh. Mamasakhlisov, Ilya V. Chepkasov,

Ekaterina V. Sukhanova, Alexander G. Kvashnin, Anton M. Manakhov, Zakhar I Popov,

Dmitry G. Kvashnin

Nanomaterials 2022 774

Article

2D-Mo3S4 phase as promising contact for MoS2

H.A. Zakaryan, M.A. Aghamalyan, E.V. Sukhanova, A.G. Kvashnin, L.A. Bereznikova, D.G. Kvashnin,

Z.I. Popov

Applied Surface Science 2022 152971

Article

Adsorption of Hydrogen Peroxide on Two-Dimensional Transition Metal Chalcogenides

M. A. Aghamalyan, V. M. Aroutiounian, E. S. Mamasakhlisov, E. V. Sukhanova, A. G. Kvashnin, Z. I. Popov,

A. A. Zakaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 170-173

Article

Investigation of Carbon Dioxide Interaction with Transition Metal Dichalcogenides by First Principles

M. A. Aghamalyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 166-169

Article

Map of Two-Dimensional Tungsten Chalcogenide Compounds (W-S, W-Se, W-Te) Based on USPEX Evolutionary Search

E. V. Sukhanova, A. G. Kvashnin, M. A. Aghamalyan, H. A. Zakaryan, Z. I. Popov

JETP Letters 2022 292-296

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
