Areg Ashot Hunanyan

areg.hunanyan@ysu.am

Research Institute of Physics
Նյութագիտության և նանոտեխնոլոգիաների գիտական կենտրոն
Scientific Worker

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Scientific Worker

Institute of Physics
Chair of Materials Science and Nanotechnology
Lecturer on an hourly basis

Education

Institution	Yerevan State University
Faculty	Radiophysics
Date	2017 - 2019
Degree name	Masters

Institution	Yerevan State University
Faculty	Radiophysics
Date	2013 - 2017
Degree name	Bachelor

Scientific Rank/degree

Institution	Yerevan State University
Date	2022
Degree name	Candidate
Scientific Supervisor	Vladimir M. Aroutiounian
Research Topic	Computational search for novel two dimensional tin oxides and their application in semiconductor gas sensors

Language skills

Հայերեն English Русский Français

Work experience

Institution	Yerevan state university

Period of time	2020 till now
Rank/degree	Junior research scientist

Publications

Article

Computational screening for novel solid-state electrolytes in Li3MX6 composition
Hayk A. Zakaryan, Olgert L. Dallakyan, Alexey P. Maltsev, Ilya V. Chepkasov, Misha A. Aghamalyan,

Areg A. Hunanyan, Nane Z. Petrosyan, Mikayel S. Chobanyan, Mikayel T. Sahakyan,

Luiza G. Khachatryan, Artem R. Oganov

Journal of Energy Chemistry 2026 495-504

Article

Computational Discovery of Li6PO5I: An Oxide Argyrodite for Solid-State Electrolytes
Nane Petrosyan, Areg Hunanyan, Olgert Dallakyan, Luiza Khachatryan, Mikayel Sahakyan,

Mikayel Chobanyan, Hayk Zakaryan

ACS Applied Energy Materials 2026 1159–1167

https://pubs.acs.org/doi/10.1021/acsaem.5c03545

Article

Machine-learning-accelerated discovery of amorphous lithium-ion electrolytes
Areg Hunanyan, Hayk Zakaryan

Computational Materials Science 2026 114732

https://doi.org/10.1016/j.commatsci.2026.114732

Article

Gas sensing properties of two dimensional tin oxides: A DFT study
Areg Hunanyan, Nane Petrosyan, Hayk Zakaryan

Applied Surface Science 2024 160814

Article

Computational Search and Stability Analysis of Two-Dimensional Tin Oxides
Areg A. Hunanyan, Hayk A. Zakaryan, Vladimir M. Aroutiounian

The Journal of Physical Chemistry C 2022 4647–4654

Article

Interaction of Water Molecule with Two-Dimensional Tin Dioxide

A. A. Hunanyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2021 265-268

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

Article

Formation Energy of Intrinsic and Impurity Defects in Tin Dioxide
A. A. Hunanyan, M. A. Aghamalyan, V. M. Aroutiounian, H. A. Zakaryan