

# Areg Ashot Hunanyan

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## Research Institute of Physics

Computational Materials Science Laboratory

Researcher

## Education

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<b>Institution</b>	Yerevan state university
<b>Faculty</b>	Radiophysics
<b>Date</b>	2017 - 2019
<b>Degree name</b>	Masters

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<b>Institution</b>	Yerevan state university
<b>Faculty</b>	Radiophysics
<b>Date</b>	2013 - 2017
<b>Degree name</b>	Bachelor

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## Scientific Rank/degree

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<b>Institution</b>	Yerevan state university
<b>Date</b>	2022
<b>Degree name</b>	Candidate
<b>Specialty</b>	Physico-mathematical sciences
<b>Scientific Supervisor</b>	Vladimir M. Aroutiounian
<b>Research Topic</b>	Computational search for novel two dimensional tin oxides and their application in semiconductor gas sensors

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## Language skills

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Հայերեն English Русский Français

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## Work experience

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<b>Institution</b>	Yerevan state university
<b>Period of time</b>	2020 till now
<b>Rank/degree</b>	Junior research scientist

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## Publications

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Article

**Computational screening for novel solid-state electrolytes in Li<sub>3</sub>MX<sub>6</sub> composition**

Hayk A. Zakaryan, Olmert 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

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*Article*

**Gas sensing properties of two dimensional tin oxides: A DFT study**

Areg Hunanyan, Nane Petrosyan, Hayk Zakaryan  
Applied Surface Science 2024 160814

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*Article*

**Computational Search and Stability Analysis of Two-Dimensional Tin Oxides**

Areg A. Hunanyan, Vladimir M. Aroutiounian, Hayk A. Zakaryan  
Journal of Physical Chemistry C 2022 4647-4654

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*Article*

**Computational Search and Stability Analysis of Two-Dimensional Tin Oxides**

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Journal of Physical Chemistry C 2022 4647-4654

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*Article*

**Interaction of Water Molecule with Two-Dimensional Tin Dioxide**

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

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*Article*

**First-Principles Study of the Interaction of H<sub>2</sub>O<sub>2</sub> with the SnO<sub>2</sub> (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*

**Formation Energy of Intrinsic and Impurity Defects in Tin Dioxide**

A. A. Hunanyan, M. A. Aghamalyan, V. M. Aroutiounian, H. A. Zakaryan  
Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 282-286

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