

Areg Ashot Hunanyan

✉ areg.hunanyan@ysu.am

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Research Institute of Physics

Computational Materials Science Laboratory

Researcher

Education

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|--------------------|--------------------------|
| Institution | Yerevan state university |
| Faculty | Radiophysics |
| Date | 2017 - 2019 |
| Degree name | Masters |

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|--------------------|--------------------------|
| Institution | Yerevan state university |
| Faculty | Radiophysics |
| Date | 2013 - 2017 |
| Degree name | Bachelor |

Scientific Rank/degree

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|------------------------------|--|
| Institution | Yerevan state university |
| Date | 2022 |
| Degree name | Candidate |
| Specialty | Physico-mathematical sciences |
| 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

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| 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, 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

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

Article

Computational Search and Stability Analysis of Two-Dimensional Tin Oxides

Areg A. Hunanyan, Hayk A. Zakaryan, Vladimir M. Aroutiounian
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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

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
Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 282-286
