# Slavik Volodia Melkonyan

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**Institute of Physics**
Chair of Materials Science and Nanotechnology
Professor

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**Research Institute of Physics**
Նյութագիտության և նանոտեխնոլոգիաների գիտական կենտրոն
Scientific Worker

## Education

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| **Institution** | Yerevan State University |
| **Faculty** | faculty of radiophysics |
| **Date** | 1975 - 1980 |
| **Degree name** | Qualified specialist |

## Scientific Rank/degree

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| **Institution** | Yerevan State University |
| **Date** | 2016 |
| **Degree name** | Professor |

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| **Institution** | Yerevan State University |
| **Date** | 2007 |
| **Degree name** | Doctor |
| **Research Topic** | Equilibrium phonon 1/f fluctuations of electron lattice mobility in homogeneous semiconductors |

## Language skills

Русский English

## Work experience

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| **Institution** | Yerevan State University |
| **Period of time** | 1980 till now |

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| **Rank/degree** | professor |

## Membership

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| **Institution** | Physics scientific council 049, YSU |
| **Period of time** | 2020 till now |

## Publications

*Article*

**Graphene Raman G Scattering Kinematics**
Sargis Melkonyan, Tigran Zalinyan, Slavik Melkonyan

Journal of Raman Spectroscopy 2026 297-304

https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/jrs.70046

*Article*

**Electron Mobility Fluctuations in Polar Semiconductors [Флуктуации подвижности электронов в полярных полупроводниках]**
T. A. Zalinyan, S. V. Melkonyan

Proceedings of NAS RA Physics 2024 426–436

*Article*

**Basic principles of resonance Rayleigh scattering in Graphene**
S.V. Melkonyan, T.A. Zalinyan

Carbon Letters 2023 1783-1789

*Article*

**On the interpretation of single and bilayer graphene minimal conductivity**
Slavik V. Melkonyan
Universal Journal of Carbon Research 2023 56-65

*Article*

**The Equation of Electron Diffusion in the Momentum Space in Graphene**
T.A. Zalinyan, S.V. Melkonyan

Armenian Journal of Physics 2022 112-119

*Article*

**Coulomb mechanism of Raman radiation in graphene**
S.V. Melkonyan
Carbon Letters 2021 1051-1059

*Article*

**Electron Mobility Non-Damping Fluctuations in Semiconductors**
Slavik V. Melkonyan, Tigran A. Zalinyan, Sargis S. Melkonyan

FLUCTUATION AND NOISE LETTERS 2018 1850018(1-15)

*Conference*

**On the theory of intravalley Raman scattering in intrinsic graphene**

S.V. Melkonyan

2017 9-13

http://www.icsmn.ysu.am/11th%20ICSMN-Proceedings.pdf

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*Conference*

**Electron lattice mobility fluctuations in equilibrium semiconductors**

T.A. Zalinyan, S.V. Melkonyan

2017 14-18

http://www.icsmn.ysu.am/11th%20ICSMN-Proceedings.pdf

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*Article*

**Electron-acoustic phonon field induced tunnel scattering**

T.A. Zalinyan, S.V. Melkonyan, A.L. Harutyunyan

Condensed Matter Physics 2015 23702/ 1–12

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*Study manual*

**Կիսահաղորդիչների օպտիկայի հիմունքներ**

Սլավիկ Վոլոդյայի Մելքոնյան

2015 155

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*Article*

**Electron Mobility Noise Spectral Density and Variance in a Semiconductor**

T.A. Zalinyan, S.V. Melkonyan, A.L. HarutyunyaN

Armenian Journal of Physics 2014 224-243

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