

Slavik Volodia Melkonyan

✉ smelkonyan@ysu.am

Institute of Physics

Chair of Semiconductor Physics and Microelectronics

Professor

Education

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

Scientific Rank/degree

Institution	Yerevan State University
Date	2016
Degree name	Professor
Specialty	Physico-mathematical sciences

Institution	Yerevan State University
Date	2007
Degree name	Doctor
Specialty	Physico-mathematical sciences
Research Topic	Equilibrium phonon 1/f fluctuations of electron lattice mobility in homogeneous semiconductors

Language skills

Русский English

Work experience

Institution	Yerevan State University
Period of time	1980 till now
Rank/degree	professor

Scientific interests

- Fluctuation phenomena in semiconductor materials and devices
- Surface phenomena

- Graphene nanostructures
 - Rayleigh and Raman scatterings
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Membership

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

Publications

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)

Manual

Կիսահաղորդիչների օպտիկայի հիմունքներ

Սլավիկ Վոլոդյայի Մելքոնյան

2015 155

Article

Electron-acoustic phonon field induced tunnel scattering

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

Condensed Matter Physics 2015 23702/ 1-12

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

Conference

On the theory of intravalley Raman scattering in intrinsic graphene

S.V. Melkonyan

Conference

Electron lattice mobility fluctuations in equilibrium semiconductors

T.A. Zalinyan, S.V. Melkonyan
