

Slavik Volodia Melkonyan

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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

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

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 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)

Manual

Կիսահաղորդիչների օպտիկայի հիմունքներ
Ալավիկ Վոլոռյայի 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
