Ashot Harutyun Movsisyan

ashot.movsisyan1@ysu.am

Research Institute of Physics
Laboratory of Solid State Physics
Researcher

Publications

Article
Exciton-optical phonon coupling in non-spherical quantum dots: A resonant Raman study of InP/ZnSe nanocrystals
A.L. Vartanian, A.L. Asatryan, A.H. Movsisyan, L.A. Vardanyan, N. Del Fatti, F. Valle´e

Computational Materials Science 2025 113394/11

Article
Effect of two-dimensional non-local screening on characteristics of transition metal dichalcogenide monolayers
Vram Mughnetsyan, Aram Manaselyan, Ashot Movsisyan, Albert Kirakosyan

Semiconductor Science and Technology 2024 045016

Article
Влияние спин-орбитального взаимодействия на подвижность электрона в нанопроволоке при рассеянии на полярных оптических фононах
А. А. Мовсисян
ՀՀ ԳԱԱ զեկույցներ 2024 25-32

Article
Quasi-One-Dimensional Fröhlich Polaron Characteristics in ZnO Nanowires under the External Fields [Характеристики квазиодномерного фрёлиховского полярона в нанопроволоках ZnO во внешних полях]
A. Asatryan, A. Movsisyan, L. Vardanyan, S. Hayrapetyan, A. Kirakosyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024
287 - 293

Article
Electron–hole interaction in cylindrical quantum dots
Vram Mughnetsyan, Ashot Movsisyan, Albert Kirakosyan

Physica E: Low-dimensional Systems and Nanostructures 2022 115366

Article
External electric and magnetic field effects on the polaron in a wurtzite nitride nanowire embedded in a nonpolar matrix
Anna L. Asatryan, Ashot H. Movsisyan, Arshak L. Vartanian

EUROPEAN PHYSICAL JOURNAL B 2021 id 70/8

Conference
First-order Raman spectra induced by the Fröhlich excition-lattice interaction in a non-spherical core/shell nanocrystals

Anna Asatryan, Ashot Movsisyan, Siranush Avetisyan, Tatevik Hayriyan, Arshak Vartanian

---

Conference

Exciton Resonant Raman Scattering in Colloidal Quantum Dots: The Role of the Frohlich-Type Interaction

A. Asatryan, A. Movsisyan, L. Vardanyan, A. Vartanian
