

Research Institute of Physics
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📖 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

A. A. Мовсисян

ՀՀ ԳԱԱ գեղությունը 2024 25-32

Article

Quasi-One-Dimensional Fröhlich Polaron Characteristics in ZnO Nanowires under the External Fields [Характеристики квазиодномерного фрелиховского 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 excitation-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
