

Research Institute of Physics
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Publications

Article

Comparative study on polaronic quantum confinement effects in wurtzite ZnO and GaN nanowires under external fields

Anna Asatryan, Arshak Vartanian, Serob Hayrapetyan, Tigran Ghukasyan, Artak Avetisyan, Ya-Hong Xie
Results in Physics 2025 108535

Article

In situ microstructural and electrical characterizations of liquid metal stretchable conductors

Souren Grigorian, Dmitriy Ksenzov, Tigran Ghukasyan, Arshak L. Vartanian
Materials Today Communications 2025 114317

Article

Simultaneous effects of the confinement of polar optical phonons and spin-orbit coupling on the free carrier absorption of a nanowire

A.L. Vartanian, T.K. Ghukasyan, A.L. Asatryan, K.A. Vardanyan, A.A. Kirakosyan
Micro and Nanostructures (Previously known as Superlattices and Microstructures) 2022 207287

Article

Polaronic effects on the electron Raman scattering in a spherical anisotropic quantum dot

T.K. Ghukasyan, A.L. Asatryan, L.A. Vardanyan, A.A. Kirakosyan, A.L. Vartanian
Armenian Journal of Physics 2022 175-181

Article

Polaronic effects on the impurity-related linear and nonlinear optical properties in a nanowire with magnetic field

Arshak L. Vartanian, Tigran K. Ghukasyan
Micro and Nanostructures (Previously known as Superlattices and Microstructures) 2020 106339(1-13)

Conference

Phonon-Assisted Optical Absorption for Nanowires with Spin-Orbit Coupling

Ghukasyan T. K., Asatryan A.L., Vardanyan K.A., Kirakosyan A.A., Vartanian A.L.
