

## 📖 Публикации

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### **The Use of Biosilica to Increase the Compressive Strength of Cement Mortar: The Effect of the Mixing Method**

Nelli G. Muradyan, Avetik A. Arzumanyan, Marine A. Kalantaryan, Yeghiazar V. Vardanyan,

Mkrtich Yerosyan, Malgorzata Ulewicz, David Laroze, Manuk G. Barseghyan

MATERIALS 2023 5516

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### **Electronic and Magnetic Properties of Laser Dressed Quantum Dot and Ring with Rashba Spin-Orbit Coupling**

Vram Mughnetsyan, Aram Manaselyan, Manuk Barseghyan, Albert Kirakosyan, Laura M. Perez,

David Laroze

Springer Proceedings in Physics (Optics and Its Applications) 2022 145-154

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### **Effective tuning of isotropic and anisotropic properties of quantum dots and rings by external fields**

Manuk G. Barseghyan, Aram Manaselyan, Albert A. Kirakosyan, Laura M. Perez, David Laroze

Physica E: Low-dimensional Systems and Nanostructures 2020 113807(1-7)

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### **Effect of the impurity on the Aharonov-Bohm oscillations and the intraband absorption in GaAs/ Ga1-xAlxAs quantum ring under intense THz laser field**

M.G. Barseghyan, V.N. Mughnetsyan, L.M. Perez, A.A. Kirakosyan, D. Laroze

Physica E: Low-dimensional Systems and Nanostructures 2019 91-97

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### **Size or shape - What matters most at the nanoscale?**

I. Popescu, M. Hristache, S.-S. Ciobanu, M.G. Barseghyan, J.A. Vinasco, A.L. Morales, A. Radu, C.A. Duque

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### **Intersubband optical properties of a laser-dressed asymmetric triple quantum well nanostructure**

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### **Rashba splitting of Dirac points and symmetry breaking in strained artificial graphene**

Vram Mughnetsyan, Aram Manaselyan, Manuk Barseghyan, Albert Kirakosyan, David Laroze

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**Controllable continuous evolution of electronic states in a single quantum ring**

Tapash Chakraborty, Aram Manaselyan, Manuk Barseghyan, David Laroze

Physical Review B 2018 041304(R),(1-5)

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**Effective tuning of electron charge and spin distribution in a dot-ring nanostructure at the ZnO interface**

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**Modeling of anisotropic properties of double quantum rings by the terahertz laser field**

Henrikh M. Baghrmalyan, Manuk G. Barseghyan, Albert A. Kirakosyan, Judith H. Ojeda, Jean Bragard,

David Laroze

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**Electronic, Magnetic and Optical Properties of Quantum Rings in Novel Systems**

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**Intense Terahertz Radiation Effect on Electronic and Intraband Optical Properties of Semiconductor Quantum Rings**

H.M. Baghrmalyan, M.G. Barseghyan, A.A. Kirakosyan, D. Laroze

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**Laser driven intraband optical transitions in two-dimensional quantum dots and quantum rings**

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**Irregular Aharonov-Bohm effect for interacting electrons in a ZnO quantum ring**

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## **LASER DRIVEN IMPURITY STATES IN TWO DIMENSIONAL CONCENTRIC DOUBLE QUANTUM RINGS**

M. G. BARSEGHYAN

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### **Molecular spectrum of laterally coupled quantum rings under intense terahertz radiation**

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### **Influence of lateral electric field on intraband optical absorption in concentric double quantum rings**

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