

Институт физики

Кафедра молекулярной физики

Доцент

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Two-dimensional pair-interacting hole gas thermodynamics: Exactly solvable Moshinsky model for lens-shaped quantum dots

Y.S. Mamasakhlisov, M.A. Mkrtchyan, D.B. Hayrapetyan, S. Baskoutas, H.A. Sarkisyan

Heliyon 2024 e34762

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Sequence disorder-induced first order phase transition in confined polyelectrolytes

Y.Sh. Mamasakhlisov, V.F. Morozov, V. Stepanyan, A. Badasyan, R. Podgornik

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Pair-Interacting Heavy Holes Gas in a Strongly Prolate Ellipsoidal Quantum Dot: Thermodynamic Properties [Парно-взаимодействующий газ тяжелых дырок в сильно-вытянутой эллипсоидальной квантовой точке: термодинамические свойства]

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Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 391-396

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Computational Design of Gas Sensors Based on V3S4 Monolayer

Hayk A. Zakaryan, Misha A. Aghamalyan, Yevgeni Sh. Mamasakhlisov, Ilya V. Chepkasov,

Ekaterina V. Sukhanova, Alexander G. Kvashnin, Anton M. Manakhov, Zakhar I Popov,

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Adsorption of Hydrogen Peroxide on Two-Dimensional Transition Metal Chalcogenides

M. A. Aghamalyan, V. M. Aroutiounian, E. S. Mamasakhlisov, E. V. Sukhanova, A. G. Kvashnin, Z. I. Popov,

A. A. Zakaryan

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The mechanism of flip-flops in a AOT lamella: A molecular dynamics study

Y. Sh. Mamasakhlisov, A.H. Poghosyan

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Spectroscopic Study of Protein Complexes with Low-Molecular Compounds

P.O. Vardevanyan, M.A. Shahinyan, N.H. Petrosyan, Y.Sh. Mamasakhlisov

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A molecular dynamics study of protein denaturation induced by sulfonate-based surfactants

Yevgeni S. Mamasakhlisov, Armen H. Poghosyan, Aram A. Shahinyan, Gayane R. Kirakosyan,

Naira M. Ayvazyan, Garegin A. Papoian

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Cold denaturation of RNA secondary structures with loop entropy and quenched disorder

Yevgeni Mamasakhlisov, Flavio Iannelli, Roland R Netz

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Statistical mechanics of DNA-nanotube adsorption

Yevgeni Mamasakhlisov, Shushanik Tonoyan, Davit Khechyan, Artem Badasyan

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The Conductivity of the Monolayer of DNA - Quantum Dot Complexes in the Presence of Intercalating Charged Ligands

Y.S. Mamasakhlisov, V.F. Morozov, S.A. Tonoyan, E.M. Kazaryan, A.Y. Mamasakhlisov

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The Rouse Model of Viscoelasticity and Diffusion Behavior of Chromatin

Stepanyan V. A., Hayrapetyan A. A., Mamasakhlisov E.S

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Differential Melting Curves in Heterogeneous Biopolymers

V. F. Morozov, A. Y. Mamasakhlisov, A. Asatryan

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THE CONDUCTIVITY OF THE MONOLAYER OF COMPLEXES OF DNA WITH QUANTUM DOTS IN THE PRESENCE OF INTERCALATING LIGANDS

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Sensitivity of DNA Sensors in the Presence of Charged Ligands

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Переход порядок-беспорядок в гетерогенных биологических макромолекулах
А.В. Асатрян, А.К. Андриасян, Ш.А. Тоноян, Е.Ш. Мамасахлисов, В.Ф. Морозов

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AN INTEGRATED WEB-BASED INTERACTIVE DATA PLATFORM FOR MOLECULAR DYNAMICS SIMULATIONS

HRACHYA ASTSATRYAN, WAHI NARSISIAN, ELIZA GYULGYULYAN, VARDAN BAGHDASARYAN,
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Effect of ligands binding on the isotherm of hybridization of the DNA-chip
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Fluctuations in order-disorder transitions in the DNA-ligand complexes with various binding mechanisms

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On the Performance and Energy Consumption of Molecular Dynamics Applications for Heterogeneous CPU-GPU Platforms Based on Gromacs
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A. Badasyan, Y. Sh. Mamasakhlisov, R. Podgornik, V. A. Parsegian

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Collapse and hybridization of RNA: View from replica technique approach

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The dsDNA duplex stability and carbon nanotube induced crystallization: the effect of two - component solvent

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Theoretical Description of ssDNA Adsorption on Carbon Nanotubes

Shushanik Tonoyan, Davit Khechyan, Vardges Mambreyan, Vladimir Morozov, Yevgeni Mamasakhlisov

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Constrained Annealing Approach for Order-Disorder Transitions in heterogeneous Macromolecular Systems

Shushanik Tonoyan, A. Andreassian, A. Hakobyan, V.F. Morozov, Y.Sh. Mamasakhlisov

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The Helix-Coil Transition the Frames of GMPC. Ligands Effects

Vladimir Morozov, Aram Andriasyan, Saadat Mirtavoosi, Shushanik Tonoyan, Yevgeni Mamasakhlisov

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Reentrant Melting of Single - Stranded RNA with Quenched Sequence Randomness

Yevgeni Mamasakhlisov, A. Andreassian, A. Hakobyan

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Study of human serum albumin interaction with some ligands

P. Vardevanyan, Y. Mamasakhlisov, M. Shahinyan, M. Mikaelyan, N. Petrosyan
