

Институт физики

Кафедра молекулярной физики

Доцент

📖 Публикации

Статья

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

Journal of Chemical Physics 2024 134906

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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]

Y. S. Mamasakhlisov, M. A. Mkrtchyan, H. A. Sarkisyan

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,

Dmitry G. Kvashnin

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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

Colloids and Surfaces A: Physicochemical and Engineering Aspects 2022 128681

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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

Physical Review E 2020 012502(1-14)

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Statistical mechanics of DNA-nanotube adsorption

Yevgeni Mamasakhlisov, Shushanik Tonoyan, Davit Khechoyan, 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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The double-stranded DNA stability in presence of a flexible polymer

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Sensitivity of DNA Sensors in the Presence of Charged Ligands

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Straight Calculations of Helix-Coil Transition Parameters in Heteropolymers

A.V. Asatryan, A.K. Andriasyan, A.A. Hakobyan, Sh.A. Tonoyan, Y.Sh. Mamasakhlisov, V.F. Morozov
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Переход порядок-беспорядок в гетерогенных биологических макромолекулах

A.B. Asatryan, A.K. Andriasyan, Sh.A. Tonoyan, E.Sh. Mamasakhlisov, V.F. Morozov

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

HRACHYA ASTSATRYAN, WAHI NARSISIAN, ELIZA GYULGYULYAN, VARDAN BAGHDASARYAN,
ARMEN POGHOSYAN, YEVGENI MAMASAKHLISOV, PETER WITTENBURG

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Effect of ligands binding on the isotherm of hybridization of the DNA-chip

H.L. Tsaturyan, Sh.A. Tonoyan, V.F. Morozov, Y.Sh. Mamasakhlisov

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Fluctuations in order-disorder transitions in the DNA-ligand complexes with various binding mechanisms

Y.Sh. Mamasakhlisov, A.P. Antonyan, A.Y. Mamasakhlisov, Sh.A. Tonoyan, P.H. Vardevanyan

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On the Performance and Energy Consumption of Molecular Dynamics Applications for Heterogeneous CPU-GPU Platforms Based on Gromacs

Armen Poghosyan, Hrachya Astsatryan, Wahi Narsisian, Yevgeni Mamasakhlisov

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Possible mechanism of non-monotone behavior of helix-coil transition temperature in two-component solvent

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Theoretical treatment of helix-coil transition of complexes DNA with two different ligands having different binding parameters

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Generalized model of polypeptide chain for helix-coil transition in two-component solvent

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Solvent effects in the helix-coil transition model can explain the unusual biophysics of intrinsically disordered proteins

A. Badasyan, Y. Sh. Mamasakhlisov, R. Podgornik, V. A. Parsegian

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External field influence on semiflexible macromolecules: geometric coupling

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Конференция

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

Sh.A. Tonoyan, A.V. Asatryan, S. Mirtavoosi, Y.Sh. Mamasakhlisov, V.F. Morozov

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Theoretical Description of ssDNA Adsorption on Carbon Nanotubes

Shushanik Tonoyan, Davit Khechoyan, 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
